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City of Auburn, Maine
Planning & Permitting Department
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

PLANNING BOARD AGENDA
May 13, 2025 – 6:00 p.m.
City Council Chambers, 60 Court Street

1. **ROLL CALL:**
2. **MINUTES:** Review the March 11, 2025, meeting minutes. All meetings are available live and after airing on YouTube https://www.youtube.com/c/CityofAuburnMaine
3. **PUBLIC HEARING/ SITE PLAN REVIEW:** Brickyard Commons: The Planning Board will host a Public Hearing for the application submitted by, JIG Investments, LLC, for a Site Plan Review application. The applicant is proposing a 96-unit apartment complex with associated site improvements and infrastructure. This project was previously approved in 2022 but has since expired, and no changes are proposed from the prior approval. The subject property is located on Brickyard Circle, Tax Map Lot 199-052-000, and is within the T-5.1 - Downtown Traditional Center Zoning District.

4. **EXTENSION REQUEST:** West Shore Village at Adamian Drive: The Planning Board will consider a one-year extension request submitted by Stoneybrook Land Use, Inc. on behalf of West Shore Village, LLC, for Site Plan and Special Exception approvals granted in July 2024. The previously approved project, located off Adamian Drive (City Assessor's Parcel I.D. 109-003 and 109-004), includes two (2) 9,153 S.F. 24-unit multi-family buildings and one (1) two-story 12,600 S.F. storage facility.

5. **SITE PLAN REVIEW:** Danville Corner Housing Development: The Planning Board will open this project, which was previously postponed at the April 08, 2025, meeting, postpone to the June 10, 2025, Planning Board meeting. The application, submitted by Terradyn Consultants LLC on behalf of Timothy Millet, proposes 21 two-unit homes, resulting in a total of 42 residential units. The project is located on property owned by Spurwink Services Incorporated, on Danville Corner Road, Tax Map 122-004, within the General Business (GB) District.

6. **PUBLIC COMMENT:**
7. **MISCELLANEOUS:**
   a. Upcoming Agenda Items
8. **ADJOURNMENT**

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PLANNING BOARD MINUTES - DRAFT
April 8, 2025 – 6:00 p.m.
City Council Chambers, 60 Court Street

1. **ROLL CALL:** Ed Bearor *(Elevated to Full Member*), Bob Hayes, Riley Bergeron, Paul Jacques (*Acting Chair*), Bilal Hussein (*Associate Member*), Darren Finnegan, Tim Deroche, Maureen Hopkins.
   Absent: Stacey LeBlanc – *Chair* and Adolphe Ngengele – *Student Representative*

2. **MINUTES:** Review the March 11, 2025, meeting minutes. All meetings are available live and after airing on YouTube https://www.youtube.com/c/CityofAuburnMaine

   Bob Hayes makes note of a typo on page 4.

   Motion to Approve with correction: Bob Hayes **Second**: Maureen Hopkins **Vote:** 6-0-1 (Ed Bearor Abstains) **Motion Carries**

3. **SITE PLAN REVIEW:** Danville Corner Housing Development: The Planning Board will open this project, which was previously postponed at the March 11, 2025, meeting, postpone to the May 13, 2025, Planning Board meeting. The application, submitted by Terradyn Consultants LLC on behalf of Timothy Millet, proposes 21 two-unit homes, resulting in a total of 42 residential units. The project is located on property owned by Spurwink Services Incorporated, on Danville Corner Road, Tax Map 122-004, within the General Business (GB) District.

Staff Report by Natalie Thomsen. Staff is asking to postpone this topic to the May 13th meeting.

Motion to re-open public hearing: Ed Bearor **Second**: Bob Hayes **Vote**: 7-0 **Motion Carries**

Motion to postpone this item to a date certain; May 13th: Tim DeRoche **Second**: Maureen Hopkins

Board Discussion: Bob Hayes asks about the different review standards that the Planning Board will need to review with the change in definition of the development from single family homes to a Planned Unit Development. Natalie Thomsen mentions that the developer will need to establish a Homeowners Association or a land lease agreement.

Vote: 7-0 **Motion Carries**

0:05:25

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4. **PUBLIC HEARING/ SITE PLAN REVIEW:** Brickyard Commons: The Planning Board will host a Public Hearing for the application submitted by, JIG Investments, LLC, for a Site Plan Review application. The applicant is proposing a 96-unit apartment complex with associated site improvements and infrastructure. This project was previously approved in 2022 but has since expired, and no changes are proposed from the prior approval. The subject property is located on Brickyard Circle, Tax Map Lot 199-052-000, and is within the T-5.1 - Downtown Traditional Center Zoning District.

Staff Report by Natlie Thomsen. DEP and Army Corps of Engineers issued permits for this development and those permits are still valid. The City approval has expired, but the development plan has not changed at all from the time of approval in 2022.

Mike Gotto, representing the applicant, got up to speak about the project and answer questions.

Tim DeRoche asks about proximity to the adjacent rail line property and potential hazards to a residential property going in this location. The Fire Department reviewed the plans and locations and did not indicate any concerns that would require action or prevent the development from being built on the proposed parcel.

Motion to Open Public Comment: Tim DeRoche **Second**: Bob Hayes **Vote**:7-0
Motion Carries

0:34:51

Carol Lane – Arbania Street – Speaks in opposition to the development.

Renee Cote – Dawes Avenue – Speaks in opposition to the development.

Leo Ouellette – 102 Bennet Avenue – Voiced concerns over drainage issues that currently exist as well as concerns over contaminating the ground water as a result of this development.

Steve Cox – Service Master, 29 Brickyard Circle – expressed concerns with having pedestrians along the road on Brickyard Circle since there are businesses on the road and it could be a dangerous area for pedestrians – even with a sidewalk.

Rhyanna LaRose – 164 Bennett Avenue – Speaks in opposition to the development and asks the board to table the application to have more time to consider the concerns presented.

Steven Beale – 575 Johnson Rd – References concerns with the Environmental Report and urges Planning Board members to read through the report carefully before making a decision.

Motion to Close Public Comment: Darren Finnegan **Second**: Bob Hayes **Vote**: 7-0 **Motion Carries**

1:03:05

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Board and Applicant address a few of the concerns raised during public comments including the lighting plan, environmental concerns, setbacks and future connectivity plans. Board members bring up the idea of conducting a site walk prior to the next meeting in order to see the property to gain a better understanding of the brook, the proximity to the Safe Handling facility and to understand the roadway better. Several Board members also expressed a desire for more time to consider the application and become familiar with the conditions in the reports.

Riley Bergeron makes a motion to postpone this agenda item to a date certain, May 13th, following a Site Walk by the Planning board that is open to the public at 4:00pm at the Brickyard Circle site.

Second: Maureen Hopkins **Vote**: 7-0 **Motion Carries**

1:41:59

5. **PUBLIC HEARING/ SITE PLAN REVIEW:** 65 Washington St North: The Planning Board will host a Public Hearing for the application submitted by, Terradyn Consultants, LLC, for a Site Plan Review application. The applicant is proposing a renovation of the existing building and infrastructure for a multi-use site of storage, office, and cannabis retail location The subject property is located at 65 Washington St North, Tax Map Lot 220-085 and is within the T-5.1 - Downtown Traditional Center Zoning District.

Staff Report by Natalie Thomsen. Although the development plan meets the zoning standards, it is missing a requirement for the licensing standard as it's located within 750 feet of a school.

Craig Sweet with Teradyne consultant speaks on behalf of the applicant. Craig requests that the Planning Board approve the project with the condition that it meets the licensing standards since the project meets the zoning standards. Business owner also speaks and asks for approval from the Board.

Motion to Open Public Comment: Tim DeRoche **Second**: Riley Bergeron **Vote**: 7-0 **Motion Carries**

No Public Comment

Motion to Close Public Comment: Tim DeRoche **Second**: Bob Hayes **Vote**: 7-0 **Motion Carries**

The Planning Board discusses the item.

Tim Deroche provides the following acknowledgement: "The Planning Board acknowledges the applicant's request for a waiver from the 750-foot separation requirement between marijuana establishments and preexisting schools. However, this requirement is established under Sec. 14-659(3) of the City Ordinance, which states that marijuana businesses must be located at least 750 feet from the property line of any preexisting public or private school serving grades K–12. This section does not provide the Planning Board with any authority to waive or

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modify this standard. Therefore, the Board cannot take action on the waiver request, as it lies outside the scope of our jurisdiction."

Riley Bergeron makes a motion that the proposal meets the requirements of Sections 60-1277 and 60- 1336 and approve the Site Plan by Terradyn Consultants LLC on behalf of Frank Berenyi for the reuse of the existing commercial building located at 65 Washington Street North, also identified as City Assessor's Parcel I.D. 220-085. The applicant intends to utilize the property for a multi-use site that includes storage, office space, and a cannabis retail location. The site is currently developed and no changes to the existing building footprint are proposed. The proposed project has met the standards pursuant to Chapter 60, Article XVI, Division 2- Site Plan Review and Division 3 – Special Exception with the following conditions:

A. *No development activity until any bonding or inspection fees are determined by the Auburn Engineering Department.*

B. *Blasting permit in advance of blasting from the City of Auburn, Planning, Permitting and Code Department.*

C. *The applicant shall receive all proper permitting from the City and State prior to any retail cannabis operations beginning.*

Second: Bob Hayes **Vote**: 7-0 **Motion Carries**

2:10:40

6. **WORKSHOP:** The Planning Board will host a workshop to discuss the formation of a subcommittee focused on reviewing and developing Planning Board policies and procedures.

   Ed Bearor volunteers to participate in the subcommittee. The subcommittee will consist of Stacey LeBlanc, Maureen Hopkins and Ed Bearor

7. **PUBLIC COMMENT:** No Public Present
8. **MISCELLANEOUS:**
   a. Upcoming Agenda Items – Danville Corner Project and Brickyard Commons Project
   b. Comments on Capital Improvement Plan – Maureen Hopkins asked if any of the changes with Federal Funding has had an impact on the Capital Improvement Plan.
9. **ADJOURNMENT**

Motion to adjourn: Bob Hayes **Second:** Riley Bergeron **Vote:** 7-0 **Meeting Adjourned**

2:16:06

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Channel 11). Following live broadcasts, Planning Board meetings are rebroadcast at 7:00AM, noon, and 7:00PM on Tuesdays on GFTV and are available anytime on our YouTube channel.

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City of Auburn, Maine
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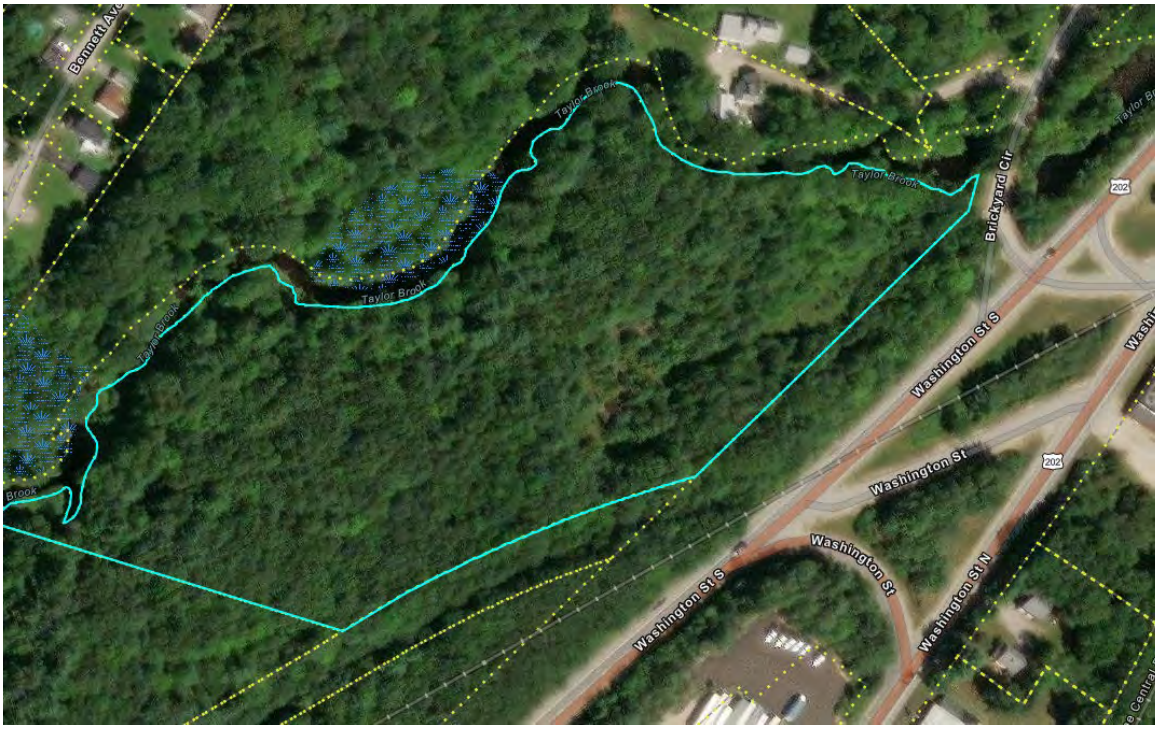
To: Auburn Planning Board
From: Natalie Thomsen, Planning Coordinator
Re: JIG Investments, LLC, for a Site Plan Review application for a 96-unit apartment complex with associated site improvements and infrastructure located on Brickyard Circle, Tax Map Lot 199-052-000. The proposed project should be considered pursuant to Chapter 60, Article XVI Division 2 – Site Plan Review, Article IV Subdivision, Article IV, Division 14 – Form Based Code
Date: May 13, 2025



I. PROPOSAL –

JIG Investments, LLC, has submitted a Site Plan Review application for a proposed residential development to be located on a 10.9-acre parcel off Brickyard Circle (Parcel ID 199-052-000). The project, known as Brickyard Commons, proposes the construction of a 96-unit apartment complex consisting of eight (8) three-story multifamily residential buildings. Each building will contain 12 two-bedroom units. Associated site improvements include interior roadways, sidewalks, parking areas, stormwater treatment facilities, landscaping, recreational amenities, and underground utilities.

This project was originally approved by the Planning Board in June 2022, with a minor revision in December 2022 and a one-year extension granted in 2023. However, all Planning Board approvals have fully expired as of June 28, 2024. As such, this application is now being reviewed as a new site plan application and must be evaluated in full compliance with current zoning and site plan review standards.

The applicant proposes to phase the development, with initial construction focusing on site improvements and Buildings 1 through 4, including Fire Brick Lane and Clay Court. The remaining site work for Buildings 5 through 8 and associated parking and stormwater infrastructure will be completed in subsequent phases. The proposed 193 parking spaces will also be constructed in phases, with 168 spaces built in Phase 1 and the remaining 25 guest spaces constructed in Phase 2 if needed to meet demand.

Utilities for the project will include:

- Public water and sewer service extended from Brickyard Circle, with separate domestic and fire service lines;
- Underground electric and communications utilities, beginning at new overhead poles near the entrance road;
- All utility designs have been reviewed by a Professional Engineer and will require final approval from the Auburn Water and Sewer District.

The development will be accessed by an improved 26-foot-wide private roadway extending from Brickyard Circle. Based on traffic analysis, the project does not require a Traffic Movement Permit (TMP) from the Maine Department of Transportation (MDOT), as it generates fewer than 100 peak-hour trips. However, the traffic assessment determined that the project meets MDOT warrants for a new turning movement and associated improvements. Specifically, the applicant will be required to create a new curb cut and install a left-turn lane on Washington Street northbound, located directly opposite the northern end of Brickyard Circle. This design will enable a more conventional left-turn movement and improve traffic operations. Additionally, the 40-foot-wide median at this location provides adequate space for turning vehicles to safely stage and align before crossing into Brickyard Circle, enhancing both maneuverability and visibility for drivers. The applicant has provided engineering plans for this offsite improvement and will be responsible for constructing the turning lane with MDOT design standards.

Additional offsite improvements include the construction of a 914-foot-long public sidewalk along the west side of Brickyard Circle, which will enhance pedestrian connectivity in the area.

The proposed buildings meet all dimensional and design standards of the T-5.1 Downtown Traditional Center zoning district and are designed to integrate with the surrounding neighborhood character while preserving open space along Taylor Brook. Approximately 6.89 acres (63.4%) of the site will remain as open space, and building coverage will be limited to 9.6% of the total lot area.

II. ZONING CONSIDERATIONS –

The proposed project is located in the T-5.1 Downtown Traditional Center Zoning District, as defined under Auburn's Form-Based Code (Sec. 60-556). This district is designed to encourage compact, walkable, and mixed-use neighborhoods that reinforce traditional urban development patterns. The T-5.1 zone permits multifamily residential buildings by right, subject to compliance with the district's form-based dimensional and design standards. The applicant's architect has submitted as memo as part of the application identifying and addressing the applicable requirements of the T-5.1 zone .

Unlike conventional zoning districts, the Form-Based Code does not regulate density through units per acre. Instead, density is inherently controlled by the building form, including regulations on building height, frontage, lot coverage, setbacks, and open space. As stated in the ordinance:

"The T-5.1 Downtown Traditional Center Zone is intended to reinforce the urban form and character of downtown neighborhoods through a mixture of building types, street types, and uses at a moderate-to-high intensity." (Sec. 60-556)

The applicant proposes eight (8) three-story apartment buildings, each containing twelve (12) dwelling units, for a total of 96 units. The site design conforms to all applicable dimensional standards, including a maximum front setback of 10 feet, building height limited to 3 stories, open space coverage exceeding 12%, and building coverage well below the 75% maximum. The project design promotes a street-oriented layout with pedestrian connectivity, consistent with the goals of the T-5.1 District.

III. PARKING & ACCESS MANAGEMENT STANDARDS -

Parking Requirements (Sec. 60-608)

For multifamily dwellings, the ordinance requires one parking space per dwelling unit and one guest space per four units, per: "Sec. 60-608 – Parking Requirements: For multifamily dwellings, 1 space per dwelling unit and 1 guest space per 4 units." With 96 units proposed, the development is required to provide a minimum of 120 parking spaces. The applicant proposes 193 spaces, including 168 to be constructed in Phase 1, with the remaining 25 guest spaces deferred to Phase 2 if tenant demand warrants.

✅ **Standard Met**

Driveway and Curb Cut Design (Sec. 60-800)

The project is accessed via an existing private drive off Brickyard Circle, originally constructed in 2010 and to be widened to 26 feet as part of this development. This exceeds the 20-foot minimum width required for two-way traffic, ensuring safe ingress and egress for residents, visitors, emergency vehicles, and service providers. Two internal private streets, Clay Court and Veneer Place, provide direct access to the residential buildings.

Sidewalks will run along both sides of all internal roads, and walkways will connect directly to each building entrance. The design prioritizes internal circulation and pedestrian connectivity consistent with the Form-Based Code.

✅ **Standard Met**

Sight Distance Requirements

Driveways and access points must be located to provide adequate sight distance. According to the traffic assessment prepared by Barton & Loguidice, all driveway locations meet or exceed MDOT sight distance standards, based on posted speed limits on Brickyard Circle and Washington Street North.

☑ **Standard Met**

Traffic Impact and Turn Lane Requirement
The traffic assessment, dated May 5, 2022, concludes the development will generate approximately 55 PM peak-hour trips, which is below the 100-trip threshold requiring a Traffic Movement Permit (TMP) per MDOT rules.

However, the traffic assessment determined that the project meets MDOT warrants for a new turning movement and associated improvements. Specifically, the applicant will be required to create a new curb cut and install a left-turn lane on Washington Street northbound, located directly opposite the northern end of Brickyard Circle. This design will enable a more conventional left-turn movement and improve traffic operations. Additionally, the 40-foot-wide median at this location provides adequate space for turning vehicles to safely stage and align before crossing into Brickyard Circle, enhancing both maneuverability and visibility for drivers.

☑ **Standard Met With Condition**

Landscaping and Buffering Requirements (Sec. 60-607 #10 & #16)
Parking areas containing more than 80 spaces are required to include appropriate landscaping features such as islands or perimeter buffers to minimize visual impacts, reduce heat gain, and improve overall site design. While the Brickyard Commons site plan does not include individual landscaped islands within each parking area, the site is designed such that parking is distributed across eight residential buildings, naturally breaking up large expanses of pavement. Additionally, the site includes over 6 acres of open space, with lawn areas and green buffers between buildings and around the site perimeter. In addition, the developer has provided a landscaping plan with specific plantings proposed for the site.

The layout avoids uninterrupted parking fields, enhances visual aesthetics, and supports the walkability goals of the T-5.1 District.

☑ **Standard Met**

Lighting Requirements (Sec. 60-607 #11)
Exterior lighting for parking areas and drive aisles must be designed to provide safe illumination while minimizing glare and light spillover onto adjacent properties or roadways. The Brickyard Commons project proposes the use of full cutoff, downcast, and LED-based fixtures, ensuring compliance with Auburn's lighting standards for shielding, efficiency, and nighttime visibility. The lighting plan supports both pedestrian safety and vehicular circulation while limiting light trespass beyond property boundaries.

☑ **Standard Met**

Pavement and Markings (Sec. 60-607 #12)
All parking areas must be constructed using impermeable paving materials, and must include proper drainage, striping, and signage to support safe vehicular circulation. The Brickyard Commons

project includes paved driveways and parking areas designed in accordance with Chapter 46 – Streets and Sidewalks and the City's engineering standards. All parking stalls will be clearly marked and properly drained through the site's engineered stormwater system, including catch basins and curbing to ensure long-term durability and function.

✅ **Standard Met**

IV. WETLANDS/STORMWATER/SITE LAW

The Auburn Zoning Ordinance requires that stormwater management systems be designed to control runoff, prevent flooding, and minimize erosion. All qualifying developments must comply with the Maine Department of Environmental Protection (MDEP) Chapter 500 Stormwater Management Standards, which ensure that post-development peak runoff rates do not exceed pre-development conditions. Soil erosion and sedimentation control measures must also be implemented throughout construction to protect surrounding natural resources.

The Brickyard Commons project complies with Sec. 46-209 and is subject to permitting under Auburn's delegated review authority from MDEP. The development will disturb over one acre of land and create approximately 4.01 acres of new impervious surface, triggering review under both Chapter 500 and the Site Location of Development Act (SLODA) for projects between three and seven acres. A complete Stormwater Management Plan has been submitted, which includes a detention pond for peak flow control and a Focal Point biofiltration system for water quality treatment. These systems are designed to handle runoff from impervious surfaces and promote infiltration to support downstream water quality and aquatic habitat health. The applicant currently has valid SLODA approval.

✅ **Standard Met**

Erosion and Sedimentation Control – Sec. 60-1069

Per Sec. 60-1069, development projects must implement erosion control measures to prevent soil loss and sedimentation into nearby water bodies. All erosion control practices must follow Best Management Practices (BMPs) from the Maine Stormwater Management Design Manual, ensuring that construction activities limit soil disturbance and mitigate erosion-related risks.

The Brickyard Commons project includes a comprehensive erosion and sedimentation control plan that features silt fencing, erosion control blankets, stabilized construction entrances, and temporary sediment basins to manage runoff during active construction. Long-term stabilization measures such as loaming, seeding, and riprap are proposed for permanent soil stabilization. Additionally, a Stormwater Operations & Maintenance Plan has been provided, outlining inspection schedules and maintenance responsibilities to ensure continued effectiveness of the stormwater infrastructure.

✅ **Standard Met**

OTHER PERTINENT ITEMS -

Sidewalk Improvements and Pedestrian Connectivity
As a condition of the original 2022 approval, the applicant will construct a 914-foot-long public sidewalk along the western side of Brickyard Circle. This sidewalk will connect the proposed development to the broader pedestrian network and enhance walkability in the neighborhood. The sidewalk will be located within the public right-of-way and constructed to City of Auburn specifications.

Public Utilities and Infrastructure Coordination
The development will be served by public water and sewer, extended from existing infrastructure in Brickyard Circle. The applicant has revised utility plans to include separate domestic and fire service lines, as required by the Auburn Water and Sewer District. Underground electric and communications will be extended to each building from new overhead poles near the site entrance.

Natural Resources Protection Act (NRPA) Permit Compliance
The applicant previously obtained a Natural Resources Protection Act (NRPA) permit from the Maine DEP and a wetlands permit from the U.S. Army Corps of Engineers for minor wetland impacts. These permits remain valid, and the applicant will be required to comply with all conditions of approval, including wetland buffer preservation, invasive species control, and compensatory mitigation through in-lieu fee payment.

Phasing of Construction
The project will be completed in two phases, as shown on the submitted site plan.

- **Phase 1** includes site grading, stormwater infrastructure, Fire Brick Lane, Clay Court, Buildings 1–4, and 168 parking spaces.
- **Phase 2** includes Buildings 5–8, Veneer Place, and 25 additional parking spaces if required based on actual tenant demand.

Each phase will implement required erosion control and utility measures to ensure orderly and code-compliant development.

IV. WAIVER REQUEST-

No Waivers are being requested

V. DEPARTMENT REVIEW-

a. **Police** - ✓
b. **Fire**- I have reviewed the information regarding the construction of a residential development at Brickyard circle and the relationship of this site to Savage Safe Handling. At this point I have been unable to identify any standard, within my jurisdiction, that would restrict or prohibit this development as it has been proposed.
c. **Auburn Water and Sewer** – ✓
d. **Code Enforcement** – ✓
e. **Engineering** –✓
f. **Public Services**- ✓

g. **Airport** – ✓

VI. PLANNING BOARD ACTION-

In considering a site plan, the planning board shall make findings that the development has made provisions for approval of the following sections:

A. Site Plan Review, Section 60-1277:

1. Does the site plan protect adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air?
2. Is the convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas adequately addressed?
3. Are the proposed methods of disposal for wastes adequately addressed?
4. Does the site plan provide adequate protection of environment features on the site and adjacent areas?

B. Subdivision, Sec. 60-1359:

1. Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:
    a. The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;
    b. The slope of the land and its effect on effluents;
    c. The availability of streams for disposal of effluents; and
    d. The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14);
2. Has sufficient water available for the reasonably foreseeable needs of the subdivision;
3. Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;
4. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;
5. Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;
6. Will provide for adequate sewage waste disposal;
7. Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized;
8. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;
9. Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any;
10. Is funded by a subdivider has adequate financial ^{and} technical capacity to meet the standards of this section;
11. Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application;
12. Has provisions for on site landscaping that are adequate to screen neighboring properties from unsightly features of the development;

13. Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;
14. Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;
15. Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision.

C. Form Based Code, Sec. 60-550: The planning board shall provide findings for approval or disapproval based on the application's meeting the purpose of the Form Based Code, Sec. 60-550.

D. Sec 60-1304: The Board shall provide a finding that shall consist of either:

A finding and determination that the proposed project will constitute a suitable development and will not result in a detriment to the neighborhood or the environment; or

A written denial of the application stating the reasons for such denial, upon a finding that:

a) The provisions for vehicular loading, unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets will create hazards to safety.
b) The bulk, location or operation of proposed buildings and structures will be detrimental to and adversely affect the use and values of existing development in the neighborhood or the health or safety of persons residing or working therein.
c) The provisions for on-site landscaping are inadequate to screen neighboring properties from unsightly features of the development.
d) The site plan does not adequately provide for the soil and drainage problems which the development may give rise to in accordance with section 60-1301(14).
e) The provisions for exterior lighting create safety hazards for motorists traveling on adjacent streets, or are inadequate for the safety or occupants or users of the site, or will create a nuisance affecting adjacent properties.
f) The proposed development will unduly burden off-site sewer drainage or water systems.
g) The proposed development will create a fire hazard by failing to provide adequate access to the site, or to buildings on the site, for emergency vehicles.
h) The proposed development violates provisions of the zoning regulations applicable to the site or other applicable laws, regulations or ordinances.
i) The proposed development will unduly impact the ability to provide municipal services.

VII. STAFF RECOMMENDATIONS -

Staff recommends the Planning Board find that the Site Plan for the proposed development meets the requirements of ,Sec. 60-550,Sec. 60-1277 and 60-1359, and APPROVE the project application. Staff recommends the following conditions:

- *No development activity may occur until any bonding or inspection fees are determined by the Auburn Engineering Department.*
- *A blasting permit is required in advance of blasting from the City of Auburn, Planning, Permitting and Code Department.*
- *The construction of the left turn lane on Washington Street-North to Brickyard Circle must be completed before the issuance of a certificate of occupancy for 24 units or by September 1, 2026, whichever comes first.*
- *A Manual on Uniform Traffic Control Devices (MUTCD) warning sign must be added to the Washington Street southbound approach to the existing crossover, identifying that vehicles are entering ahead, before the issuance of a certificate of occupancy for any dwelling units.*

Suggested Motions:

I make a motion that the proposal meets the requirements of Sections 60-550**,** 60-1277, and 60-1359 for a Site Plan review proposing 96-unit apartment complex with associated site improvements and infrastructure off Brickyard Circle, City Assessor's Parcel I.D. 199-052-000. The proposed project should be considered pursuant to Chapter 60, Article XVI Division 2 – Site Plan Review, Article IV Subdivision, Article IV, Division 14 – Form Based Code with the following conditions:

A. *No development activity until any bonding or inspection fees are determined by the Auburn Engineering Department.*
B. *Blasting permit in advance of blasting from the City of Auburn, Planning, Permitting and Code Department.*
C. The construction of the left turn lane on Washington Street-North to Brickyard Circle must be completed before the issuance of a certificate of occupancy for 24 units or by September 1, 2026, whichever comes first.
D. A Manual on Uniform Traffic Control Devices (MUTCD) warning sign must be added to the Washington Street southbound approach to the existing crossover, identifying that vehicles are entering ahead, before the issuance of a certificate of occupancy for any dwelling units.

Natalie Thomsen
Planning Coordinator

auburnmaine.gov

City of Auburn, Maine
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To: Planning Board
From: Natalie Thomsen, Planning Coordinator
Date: May 13, 2025
Subject: Zoning Status of Parcel ID 199-052 (Washington Street Gateway Area)

This memo is provided to clarify the current zoning designation of Parcel ID 199-052. The pending application before the Planning Board is being reviewed pursuant to the current zoning designation (T-5.1 Downtown Traditional Center), not the historical zoning of the site. This approach is consistent with standard municipal planning practices, and it ensures the project is reviewed under the ordinance in effect at the time of submission.

Further, as outlined in **30-A M.R.S. § 3007(7)**, "a proposed structure or use is considered legally existing and permitted as of the date of submission of a completed application for a building permit or land use approval." Therefore, any attempt to apply prior or alternative zoning standards retroactively to this project would be inconsistent with state law.

Summary of Zoning Change – Parcel ID 199-052

- **January 3, 2022 – City Council Order 05-01032022**
  The Auburn City Council initiated a zoning map amendment that included the rezoning of approximately 240 acres along Washington Street from General Business to the T-5.1 Form-Based Code District. Parcel ID 199-052 (±9.63 acres) (zoned industrial) was specifically added to the rezoning proposal by Council order.
- **February 8, 2022 – Planning Board Public Hearing and Recommendation**
  The Planning Board held a duly noticed public hearing and reviewed the proposed rezoning. The Board voted unanimously to recommend the rezoning of the full 240± acres, including Parcel 199-052, from General Business and Industrial to T-5.1 (Downtown Traditional Center). The Board's findings supported consistency with the 2021 Comprehensive Plan and existing infrastructure capacity.
- **March 7 and March 21, 2022 – City Council First and Second Reading**
  The City Council held two public meetings and approved the rezoning by ordinance after a first reading (4–3 vote) and a second reading (5–2 vote). The rezoning officially changed the designation of Parcel 199-052 from Industrial to T-5.1 Form-Based Code.

This process followed all requirements for public notice, hearings, and findings consistent with state and local law. The rezoning of Parcel 199-052 was therefore adopted legally and with due process.

City of Auburn, Maine
Planning Board
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

To: Auburn Mayor and City Council

From: Auburn Planning Board

Re: Findings and Reasons for the recommendation to the Council on a Proposed Amendment to the Washington Street Gateway Area: 240 +/- acres from General Business to Formed Based Code Downtown Traditional Center; T-5.1. and approximately 9.63 acres of Industrial Land to Downtown Traditional Center; T-5.1 for the inclusion of the specific lot PID 199-052.

Date: February 8, 2022 Planning Board Meeting Recommendation to City Council

The Planning board discussed the proposal and held a Public Hearing on February 8, 2022. The Planning Board voted unanimously to forward a positive recommendation to the Council supporting the proposed changes, That the proposed boundary be adjusted from General Business to Downtown Traditional Center; T-5.1. The total amendment includes 240 +/- acres shown on the attached map (exhibit B) based on the following findings.

FINDINGS AND REASONS:

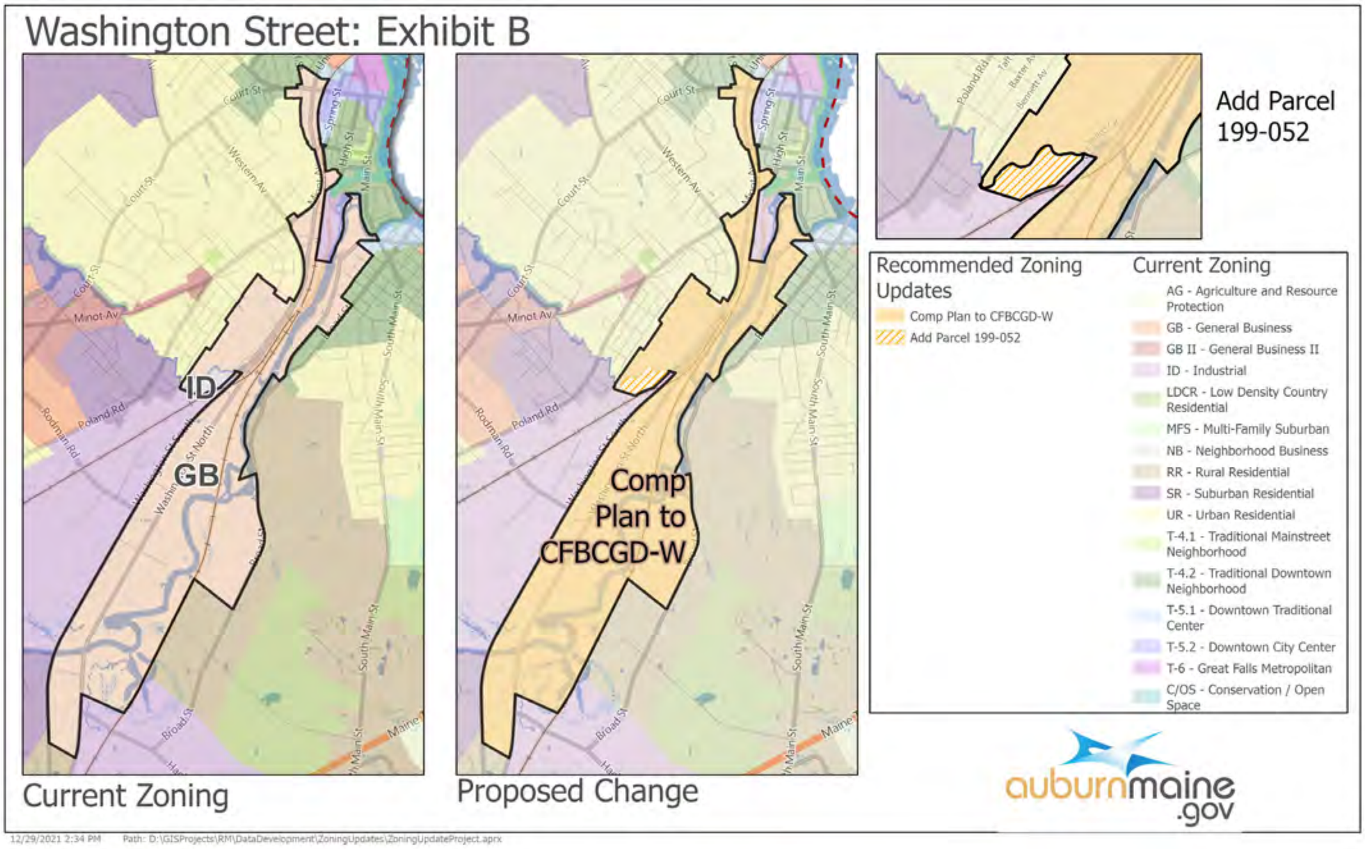
1. The 2021 Comprehensive Plan recommend expanding the Formed Base Code zoning in this area to include the area proposed on the map. This can be accomplished without creating a new district by using the existing T-5.1.
2. The area has available infrastructure in place. (Sewer, water, power, high speed internet, gas & roads).
3. The proposal can be implemented without detriment to city resources.
4. The 2021 Comprehensive Plan recommends this area as the gateway to the City of Auburn with a proposed revitalization of a welcoming, pedestrian friendly, business friendly and mixed-use area.

City of Auburn, Maine
Office of Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

To: Auburn Planning Board
From: John Blais, Deputy Director
Re: Public hearing Washington Street area zoning considerations from 2021 Updated Comprehensive Plan

Date: February 8, 2022

PROPOSAL: **Washington Street Area;** 240 +/- acres from General Business to Formed Based Code Downtown Traditional Center; T-5.1. Approximately 9.63 acres were not included in the FLU mapping. But approved in the order by the council for the approval of the specific lot PID 199-052. (See below Exhibit B.)

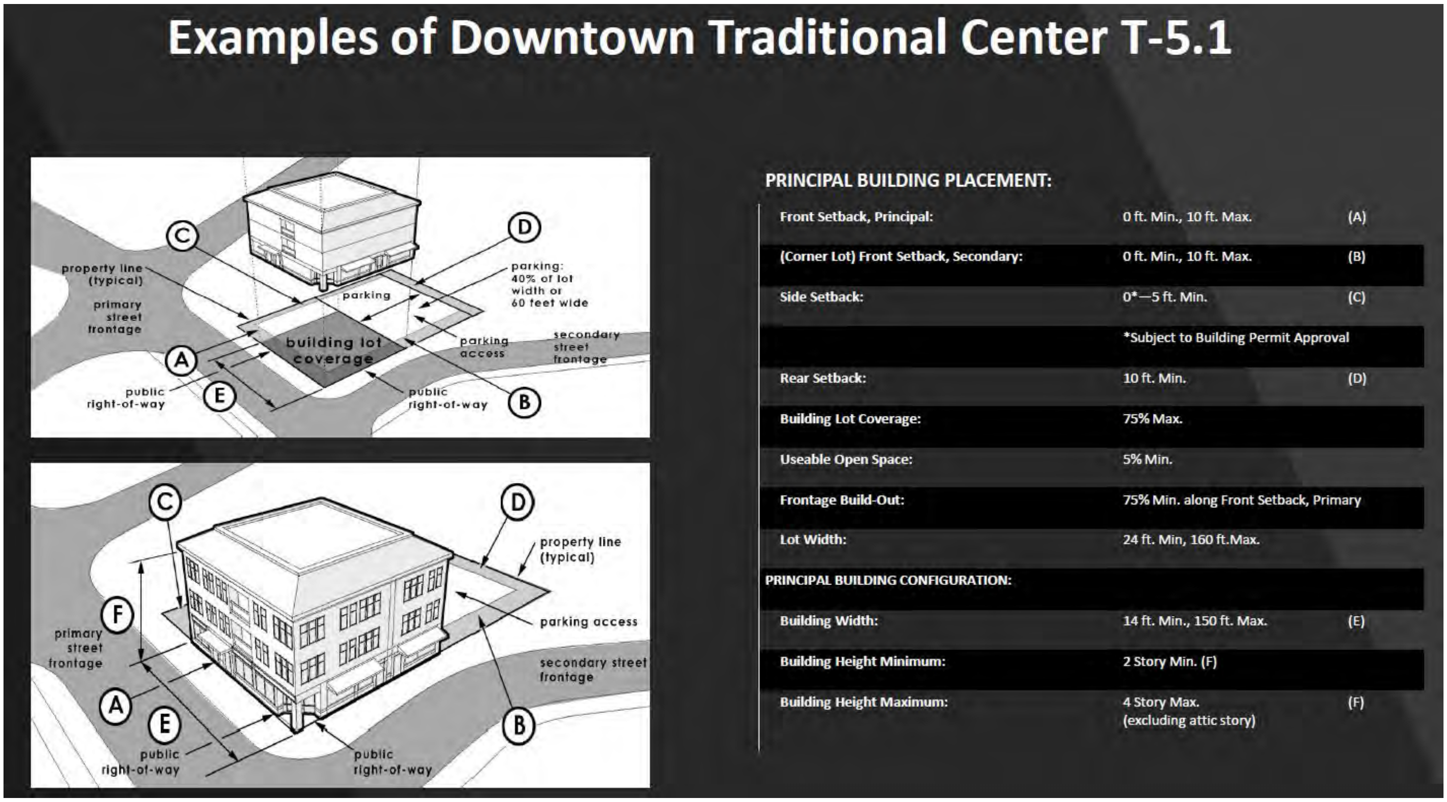

Washington Street: Exhibit B
ID
GB
Comp Plan to CFBCGD-W
Current Zoning
Proposed Change
Add Parcel 199-052
Recommended Zoning Updates
Comp Plan to CFBCGD-W
Add Parcel 199-052
Current Zoning
AG - Agriculture and Resource Protection
GB - General Business
GB II - General Business II
ID - Industrial
LDCR - Low Density Country Residential
MFS - Multi-Family Suburban
NB - Neighborhood Business
RR - Rural Residential
SR - Suburban Residential
UR - Urban Residential
T-4.1 - Traditional Mainstreet Neighborhood
T-4.2 - Traditional Downtown Neighborhood
T-5.1 - Downtown Traditional Center
T-5.2 - Downtown City Center
T-6 - Great Falls Metropolitan
C/OS - Conservation / Open Space
Court St
Western Av
Minot Av
Poland Rd
Rodman Rd
Washington St North
Spring St
High St
Main St
South Main St
Broad St
auburnmaine.gov
12/29/2021 2:34 PM Path: D:\GISProjects\RM\DataDevelopment\ZoningUpdates\ZoningUpdateProject.aprx

COMMERCIAL FORM-BASED CODE GATEWAY DEVELOPMENT DISTRICT (WASHINGTON STREET) (CFBCGD-W)T-5.1.

Objective – Without creating a new district staff proposes to use **Formed Based Code Downtown Traditional Center; T-5.1**, to allow for mixed use development while protecting and providing transitions to the abutting residential neighborhoods. Within this area attractive road fronts should be established that enhance a complete street city gateway and provide the essence of a welcoming, vibrant community, with neighborhood and community retail, business and service establishments that are oriented to and built close to the street. The zone is appropriate in areas where a more compact urban development pattern exists or where a neighborhood-compatible commercial district is established which exhibits a pedestrian scale and character. The CFBCGD-W should enhance development and design standards to allow this area to evolve into an attractive gateway into the city. Specifically, a portion of this designation pushes a transformation of Washington Street South/Routes 4 and 100 to a two-lane high-speed connector while Washington Street North Routes 4 and 100 becomes a local connector with future Form Based Code Commercial Development. Residential uses should be allowed at a density of up to 16 units per acre provided they are accessory to commercial uses.

Allowed Uses – The Commercial Form-Based Code Gateway Development District – W generally follows the boundaries of the existing General Business areas along Washington Street, in effect at the time of the 2021 Comprehensive Plan update. The Commercial Form-Based Code Gateway Development District – W should allow for medium-scale, multi dwelling development with up to three stories (plus attic space), with multiple commercial uses allowed that mirror existing form based code within the city to include, but not be limited to general offices, government uses, lab and research facilities, low impact industrial, studios, parks and open spaces, veterinary services, medical and dental clinics, general retail, restaurants, schools, churches, convenience stores with gas stations, specialty shops, auto service stations, care facilities, lodging, clinics and hotels.

Development Standards – New development, redevelopment and substantial expansions should be subject to an enhanced set of development and design standards to assure that this area evolves as an attractive gateway. These standards should maintain appropriate setbacks for new development, encouraging shallow or no front setbacks, screen parking areas from Washington Street and provide incentives for the use of shared driveways and curb-cuts. Provisions for on street parking should be encouraged. All uses in this district should be located, sited, and landscaped in such as manner as to preserve open space, control vehicle access and traffic and provide adequate buffering and natural screening from Washington Street. This designation is intended for areas near, in, along neighborhood corridors and for transit-supportive densities.



Examples of Downtown Traditional Center T-5.1

PRINCIPAL BUILDING PLACEMENT:		
Front Setback, Principal:	0 ft. Min., 10 ft. Max.	(A)
(Corner Lot) Front Setback, Secondary:	0 ft. Min., 10 ft. Max.	(B)
Side Setback:	0*—5 ft. Min.	(C)
	*Subject to Building Permit Approval	
Rear Setback:	10 ft. Min.	(D)
Building Lot Coverage:	75% Max.	
Useable Open Space:	5% Min.	
Frontage Build-Out:	75% Min. along Front Setback, Primary	
Lot Width:	24 ft. Min, 160 ft.Max.	
PRINCIPAL BUILDING CONFIGURATION:		
Building Width:	14 ft. Min., 150 ft. Max.	(E)
Building Height Minimum:	2 Story Min. (F)	
Building Height Maximum:	4 Story Max. (excluding attic story)	(F)

I. **PLANNING BOARD ACTION/STAFF SUGGESTIONS:** Staff suggests a planning board discuss the proposals and hold a Public Hearing on February 8, 2022. Staff then recommends that the Board forward a positive recommendation to the Council supporting the proposed changes, That the proposed boundary be adjusted from General Business to Downtown Traditional Center; T-5.1.

The total amendment includes 240 +/- acres shown on the map (exhibit B) based on the following findings.

SUGGESTED FINDINGS AND REASONS:

1. The 2010 and now 2021 Comprehensive Plan recommend expanding the Formed Base Code zoning in this area to include the area proposed on the map. This can be accomplished without creating a new district by using the existing T-5.1.
2. The area has available infrastructure in place. (Sewer, water, power, high speed internet, gas & roads).
3. The proposal can be implemented without detriment to city resources.
4. The 2010 and now 2020 Comprehensive Plan recommends this area as the gateway to the City of Auburn with a proposed revitalization of a welcoming, pedestrian friendly, business friendly and mixed-use area.

II. *Suggested Motion:* I make a motion to recommendation to City Council to amend the proposed boundary be adjusted from General Business to Downtown Traditional Center; T-5.1 the total amendment includes 240 +/- acres shown on the map as Exhibit B.

Stoneybrook
Land Use, Inc.

9172 SW 52nd Place Road
Ocala, FL 34481
(207) 513-6123

May 6, 2025

Mr. David Hediger, Director of Planning
Planning, Permitting and Code Division
City of Auburn
60 Court Street
Auburn, ME 04210

RE: Brickyard Commons
Brickyard Circle

Dear Mr. Hediger:

On behalf of JIG Investments LLC (JIG), I would like to offer this additional information to support approvals of our proposed Brickyard Commons project. I have attached two area graphics. One is based upon a 2018 aerial photo and the other is based upon City GIS mapping. Both graphics are provided to show the surrounding neighborhood in order to give the Planning Board a visual relationship between the project and abutting homes or facilities discussed during the last meeting.

The project is located in the T-5.1 Downtown Traditional Center district and is subject to provisions of both the Floodplain Overlay and the Shoreland Overlay Districts. The project is an allowed use and has been designed to meet all zoning requirements, including all setback requirements. The project already has approvals from Maine Department of Environmental Protection (MDEP) and the US Army Corp of Engineers (USACOE) for wetland impacts of 13,632 square feet, including impacts within 25' of Taylor Brook. These wetland impacts include impacts to 4,096 square feet of wetland of special significance located within the shoreland area or floodplain of Taylor Brook.

The only development activity proposed within the Floodplain area is the reconstruction of the existing access driveway and the installation of two outfall pipes required to meet State Stormwater Rules. These activities are allowed under the overlay rules and have also been approved by MDEP and USACOE. The access drive will be made wider to provide suitable access for the proposed development. Site engineering has placed a retaining wall along both sides of the access road to minimize wetland impacts and fill within the Floodplain. The existing culvert will be replaced with a new 36" HDPE pipe, filled 12" with gravel to allow amphibians a travel route between wetland areas on either end of the culvert. The outlet of the stormwater system, after stormwater treatment, will also be within the Floodplain. These improvements with dredging and filling activity will result in less than 100 cubic feet of total fill within the Floodplain to construct this project. No other improvements are proposed within the Floodplain areas.

The Shoreland Overlay regulates all areas within 75' of the normal high-water line of Taylor Brook, but this property is located within the General Development area. Development activities are allowed within 25' of the normal high-water line and the area between these 25' and 75' setbacks can include up to 70% of that area covered by impervious area. This would include buildings, pavement, patios or other non-pervious improvements. The access road from Brickyard Circle, a portion of Building #4, a portion of the stormwater detention pond and a portion of the retaining wall near Building #8 are the only improvements proposed within the 75' setback, measured from the normal high-water line of Taylor Brook. All of these improvements are set back more than 25' from the normal high-water line and construction of all of these improvements has already been approved by MDEP and USACOE.

Below, I have included the approval criteria from both your Site Plan Review and Subdivision Review ordinance sections and provided our response to each criterion. Some of those responses include information not previously discussed but will be necessary to complete construction and occupancy of this project.

A. Site Plan Review, Section 60-1277:

1. Does the site plan protect adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air?

The Applicant proposes 4.01 acres of new impervious area and 3.06 acres of new non-impervious area for a total of 7.07 acres of developed area. The City relies upon the Maine Department of Environmental Protection (MDEP) Chapter 500 stormwater rules which require that 95% of new impervious surfaces and 80% of new developed areas must be treated for stormwater quality. This project exceeds City and State requirements for treatment of surface water drainage. This proposal treats 98% and 82.1% of the impervious and developed areas respectively. The site is located in the T-5.1 District and is subject to the Shoreland Overlay District requirements of the General Development area. These districts allow 70%-75% of the parcel to be covered with buildings or other impervious areas. The Applicant has proposed only 36.6% coverage with impervious area and buildings and has provided 63.4% of open space. A landscape plan has been provided and forested buffers have been retained to screen neighbors from reflected light. A lighting plan has also been provided showing no spillover onto adjacent properties. The erosion control plans will protect the site from dust impacts and there is no permanent equipment proposed on-site that will create any vibrations. The project will not block the natural light or air flow to adjacent areas. This project constitutes a suitable residential development and will not result in a detriment to the neighborhood or to the environment as all of the above provisions have been addressed.

2. Is the convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas adequately addressed?

The Applicant has provided sidewalks connecting pedestrian movements from Brickyard Circle to the parking areas and buildings within the project. Although the project does not meet the Maine Department of Transportation threshold for a Traffic Movement Permit, they have provided a Traffic Assessment indicating that safe sight distances are provided at all intersections for entering and exiting vehicle movements. The Traffic Assessment noted that warrants for a dedicated left-turn lane for trips turning left from Washington Street Northbound into Brickyard Circle were met. The Applicant has provided engineering design plans for this off-site improvement and construction of those improvements will be completed prior to September 1, 2026, or before occupancy of 24 units. The Applicant will also construct a sidewalk along Brickyard Circle from the project to Washington Street Southbound. The Applicant has addressed convenient and safe pedestrian and vehicle movements within the project and surrounding neighborhood.

3. Are the proposed methods of disposal for wastes adequately addressed?

This project is proposing to construct a multifamily housing project. Construction is proposed in an existing wooded area. Grading will require the removal of trees to construct the proposed buildings and required improvements to support the development. This will generate stumps and grubbings which will be processed on-site and the grindings will be used for erosion controls during construction. Building construction is expected to generate construction waste. Metal, plastics and aluminum will be collected in dumpsters on the site for recycling. All waste materials will be trucked away by a licensed solid waste hauler for disposal at a licensed disposal or recycling facility. Once the buildings are occupied, trash will be collected at the dumpster area and trucked away by a licensed solid waste hauler for disposal at a licensed disposal or recycling facility. The project will be connected to the public sewer system for disposal of sewerage waste.

4. Does the site plan provide adequate protection of environment features on the site and adjacent areas?

Environmental features identified at the site include Taylor Brook, wetlands and the floodplain of Taylor Brook. The applicant has provided an Erosion and Sedimentation Control Plan consistent with City Ordinance requirements and the MDEP Stormwater Rules to protect these environmental features on site and in adjacent areas. MDEP and the US Army Corp of Engineers (USACOE) have approved wetland impacts of 13,632 square feet including impacts within 25' of the brook to replace an existing culvert in disrepair at the entrance road and to add a stormwater discharge pipe from the stormwater treatment system. Impacts to the flood area to construct the access road to the project have also been approved by MDEP & USACOE. As confirmed in the MDEP findings of fact, the Applicant has demonstrated their efforts to avoid, minimize and protect the environmental features on this site.

B. Subdivision, Sec. 60-1359:

1. Will not result in undue water, air or noise pollution. In making this determination it shall at least consider:
a. The elevation of land above sea level and its relation to the floodplains, the nature of soils and subsoils and their ability to adequately support waste disposal;
b. The slope of the land and its effect on effluents;
c. The availability of streams for disposal of effluents; and
d. The applicable state and local health and water resources regulations, including stormwater management requirements in accordance with section 60-1301(14);

The Applicant has designed stormwater treatment that exceeds the requirements of State and Local stormwater rules that are designed to protect local health and water resources. There is no waste disposal proposed on-site. The project will be connected to the public sewer system so there will be no effluent discharges to land or to the stream and the buildings and access road have been elevated above the 100-year flood level. This project will not result in undue water, air or noise pollution.

2. Has sufficient water available for the reasonably foreseeable needs of the subdivision;

The Applicant will extend public water service to the project. See the attached letter from the Auburn Water and Sewer Districts indicating their capacity to serve and the conditions of service.

3. Will not cause an unreasonable burden on an existing water supply, if one is to be utilized;

The Auburn Water District has the capacity to serve this project. See the attached letter from Auburn Water and Sewer Districts indicating their capacity to serve and the conditions of service.

4. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;

The Applicant has provided an erosion sediment control plan to prevent erosion during and after construction. Under the plan, there will be no reduction in the capacity of the land to hold water so dangerous or unhealthy conditions will not be created.

5. Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highways or public roads existing or proposed;

This project will not cause congestion or unsafe conditions with respect to the use of existing or proposed highways or public roads as confirmed in the Traffic Assessment provided with the application.

6. Will provide for adequate sewage waste disposal;

This project will be connected to the public sewer system. See the attached letter from Auburn Water and Sewer Districts indicating their capacity to serve and the conditions of service.

7. Will not cause an unreasonable burden on the ability of a municipality to dispose of solid waste and sewage if municipal services are to be utilized;

This project will not cause an unreasonable burden on the municipality's ability to dispose of solid waste or sewer. Solid waste will be hauled to a municipal disposal area by licensed commercial waste haulers paid for by the owner of the project. See the attached letter from Auburn Water and Sewer Districts indicating their capacity to serve and the conditions of service.

8. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas;

There are no historic sites (see attached letter from MHPC) or rare and irreplaceable natural areas on the project site. There will be no unreasonable adverse effect on the scenic or natural beauty of the area as confirmed in the MDEP findings of fact.

9. Is in conformance with a duly adopted subdivision regulation or ordinance, comprehensive plan, development plan, or land use plan, if any;

This project is consistent with the comprehensive plan and in conformance with all the zoning ordinance requirements applicable to this site and proposed use.

10. Is funded by a subdivider has adequate financial and technical capacity to meet the standards of this section;

The Applicant has the adequate financial and technical capacity to meet the standards of this section and to complete this project in accordance with the approved plans.

11. Will not adversely affect the character of the surrounding neighborhood and will not tend to depreciate the value of property adjoining the neighboring property under application;

This property is zoned for the proposed residential use and has been designed to meet all the requirements of the T-5.1 – Downtown Traditional Center district. This project will provide a transition of uses between the existing industrial uses, highway and existing residential homes. The project will not have an adverse effect on the character or depreciate the value of the neighboring properties.

12. Has provisions for on site landscaping that are adequate to screen neighboring properties from unsightly features of the development;

The zoning districts allow 70%-75% of the parcel to be covered with buildings or impervious area and require only 5% to be open space. The Applicant has proposed only 36.6% coverage of impervious area and buildings while providing 63.4% of open space. A landscape plan has been provided and the open spaces with forested buffers have been retained to screen neighbors to the extent possible. There are no unsightly features proposed by this Applicant.

13. Will not create a fire hazard and has provided adequate access to the site for emergency vehicles;

The proposed buildings will have sprinkler systems and fire hydrants have been provided on-site. This project will not create a fire hazard and access to emergency vehicles has been provided.

14. Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater;

There are no mapped aquifers in the project area. The site has been designed to meet State and Local stormwater regulations for water quantity and quality. The project will not adversely affect the quality or quantity of groundwater.

15. Does not have long-term cumulative effects of the proposed subdivision will that unreasonably increase a great pond phosphorus concentration during the construction phase and life of the proposed subdivision.

The project is not located in the watershed of a great pond.

I trust you will find this information helpful. Please let us know if you have any questions or need any additional information.

Respectfully Yours

STONEYBROOK LAND USE, INC.

Michael F. Gotto

Michael F. Gotto

cc: John Gendron

Section 60-1304. (2)

a. The provisions for vehicular loading, unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets will create hazards to safety.

Provisions have been provided for vehicle loading, unloading and parking and for vehicle and pedestrian circulation on site and onto adjacent public streets and will not create hazards to safety of those occupying the site or using adjacent public streets. See application materials and responses to Section 61-1277 (2) or Section 60-1359 (5) & (13).

b. The bulk, location or operation of proposed buildings and structures will be detrimental to and adversely affect the use and values of existing development in the neighborhood or the health or safety of persons residing or working therein.

The bulk, location or operation of proposed buildings and structures will not be detrimental to or adversely affect the use or values of existing development in the neighborhood or the health or safety of persons residing or working within the development. See application materials and responses to Section 61-1277 (1), (3) & (4) or Section 60-1359 (1), (2), (3), (4), (6), (8), (11) & (12).

c. The provisions for on-site landscaping are inadequate to screen neighboring properties from unsightly features of the development.

The provisions for on-site landscaping are adequate to screen neighboring properties and no unsightly features have been proposed at this development. See application materials and responses to Section 60-1277 (1) & (4) or Section 60-1359 (8), (11) & (12).

d. The site plan does not adequately provide for the soil and drainage problems which the development may give rise to in accordance with section 60-1301(14).

The site plan submissions meet all the standards outlined in Section 60-1301 (14) and will not cause any soil or drainage problems. See application materials and responses to Section 60-1277 (1) & (4) or Section 60-1359 (1) & (4).

e. The provisions for exterior lighting create safety hazards for motorists traveling on adjacent streets, or are inadequate for the safety or occupants or users of the site, or will create a nuisance affecting adjacent properties.

The proposed exterior lighting meets all of the ordinance standards and will not create safety hazards for motorists travelling on adjacent streets, is more than adequate for the safety of occupants and users of the site and will not create a nuisance affecting adjacent properties. See application materials and responses to Section 60-1277 (1) & (2) or Section 60-1359 (5).

f. The proposed development will unduly burden off-site sewer drainage or water systems.

As evidenced by the letter from Auburn Water and Sewer Districts, the proposed development will not burden their existing sewer drainage or water systems. See application materials and responses to Section 60-1277 (3) or Section 60-1359 (6) & (7).

g. The proposed development will create a fire hazard by failing to provide adequate access to the site, or to buildings on the site, for emergency vehicles.

The fire department has determined that adequate access to the site and buildings for emergency vehicles has been provided. See application materials and responses to Section 60-1277 (2) or Section 60-1359 (5) & (13).

h. The proposed development violates provisions of the zoning regulations applicable to the site or other applicable laws, regulations or ordinances.

The proposed project meets all the zoning regulations applicable to the site including Floodplain Overlay District, Shoreland Overlay District and the T-5.1 Form Based Code. All requirements of the City Site Plan Review and Subdivision standards have been addressed, and the project already has approvals from MDEP and USACOE. The project, as currently proposed, was previously approved by the Planning Board in 2022. See the application materials and responses to Section 60-1277 (All) or Section 60-1359 (All).

i. The proposed development will unduly impact the ability to provide municipal services.

This development will not impact the City's ability to provide municipal services. See application materials and responses to Section 60-1277 (2) or Section 60-1359 (5), (7) & (13).

Town	Spill Number	Status	Location	Last Name	Company	Address	Product	Volume	Spill Date	* MDEP Follow-up
AUBURN	P-601-2016	FR	123 RODMAN RD.		SAVAGE SAFE HANDLING, INC.	P. O. BOX 1567	SULFURIC ACID	1 G	7/28/2016	N
AUBURN	P-84-2016	FR	123 RODMAN ROAD		SAFE HANDLING, INC.	P. O. BOX 1567	SODIUM HYDROXIDE	600 G	1/29/2016	N
AUBURN	P-20-2016	FR	123 RODMAN ROAD		SAFE HANDLING, INC.	P. O. BOX 1567	HYDROCHLORIC ACID	2 G	1/10/2016	N
AUBURN	P-811-2015	FR	145 TWIN ROAD		SAFE HANDLING, INC.	P. O. BOX 1567	SULFURIC ACID	2 G	9/29/2015	N
AUBURN	P-627-2015	FR	123 RODMAN ROAD		SAVAGE SAFE HANDLING, INC.	P. O. BOX 1567, 123 RODMAN RD.	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	1 G	8/3/2015	N
AUBURN	P-370-2015	FR	123 RODMAN ROAD		SAVAGE SAFE HANDLING INCORPORATED	P. O. BOX 1567, 123 RODMAN ROAD	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	3 G	5/11/2015	N
AUBURN	P-111-2015	FR	123 RODMAN ROAD		SAFE HANDLING, INC.	P. O. BOX 1567	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	1 G	2/10/2015	N
AUBURN	P-8-2015	FR	123 RODMAN ROAD		SAVAGE SAFE HANDLING, INC.	P. O. BOX 1567	SULFURIC ACID	15 G	1/6/2015	N
AUBURN	P-1035-2014	FR	123 RODMAN RD.		SAFE HANDLING, INC.	P. O. BOX 1567	SULFURIC ACID	0.25 G	12/19/2014	N
AUBURN	P-354-2014	FR	123 RODMAN ROAD		SAVAGE SAFE HANDLING INC.	123 RODMAN ROAD, P O BOX 1567	SULFURIC ACID	2 O	5/5/2014	N
AUBURN	P-329-2014	FR	123 RODMAN ROAD		SAFE HANDLING, INCORPORATED	P. O. BOX 1567	HYDROCHLORIC ACID	1 G	4/25/2014	N
AUBURN	P-202-2014	FR	WASHINGTON AVENUE		SAFE HANDLING INCORPORATED	P. O. BOX 1567	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	1 G	3/14/2014	N
AUBURN	P-639-2013	FR	123 RODMAN ROAD		SAVAGE - SAFE HANDLING INCORPORATED	P. O. BOX 1567, 123 RODMAN ROAD	CHLORINE	0.5 G	8/19/2013	N
AUBURN	P-398-2013	FR	123 RODMAN ROAD		SAVAGE/SAFE HANDLING INC	PO BOX 1567, 123 RODMAN ROAD	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	2 G	6/3/2013	N
AUBURN	P-244-2013	FR	BULK YARD AT 123		SAFE HANDLING	P. O. BOX 1567	HAZARDOUS	2 G	3/29/2013	N
AUBURN	P-189-2013	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567	HAZARDOUS	0.5 G	2/14/2013	N
AUBURN	P-84-2013	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567	HAZARDOUS	5 G	1/29/2013	N
AUBURN	P-690-2012	FR	123 RODMAN ROAD		SAFE HANDLING INCORPORATED	P. O. BOX 1567	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	2 G	8/30/2012	N
AUBURN	P-1054-2009	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567	#6 FUEL OIL	600 G	12/30/2009	N
AUBURN	P-970-2009	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567	#2 FUEL OIL	2 G	12/11/2009	N
AUBURN	P-938-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#2 FUEL OIL	2.5 G	12/1/2009	N
AUBURN	P-694-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	UNLEADED GASOLINE	0.25 G	9/2/2009	N
AUBURN	P-643-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	4 G	8/10/2009	N
AUBURN	P-632-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	SULFURIC ACID	4 G	8/6/2009	N
AUBURN	P-630-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	SULFURIC ACID	0.5 G	8/5/2009	N
AUBURN	P-557-2009	FR	123 RODMAN RD		SAFE HANDLING	123 RODMAN RD	SULFURIC ACID	20 G	7/16/2009	N
AUBURN	P-537-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT		7/8/2009	Y
AUBURN	P-345-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDRAULIC OIL	3 G	4/5/2009	N

Town	Spill Number	Status	Location	Last Name	Company	Address	Product	Volume	Spill Date	* MDEP Follow-up
AUBURN	P-218-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	ASPHALT	5 G	3/30/2009	N
AUBURN	P-187-2009	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	0.5 G	3/20/2009	N
AUBURN	P-201-2009	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	0.5 G	3/20/2009	N
AUBURN	P-68-2009	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567	HYDROCHLORIC ACID	2 G	2/6/2009	N
AUBURN	P-1044-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL	40 G	11/18/2008	N
AUBURN	P-949-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	SULFURIC ACID	1 G	10/16/2008	N
AUBURN	P-894-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	15 G	9/28/2008	N
AUBURN	P-881-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	0.25 G	9/24/2008	N
AUBURN	P-891-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	1 G	9/23/2008	N
AUBURN	P-875-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDRAULIC OIL	0.75 G	9/22/2008	N
AUBURN	P-860-2008	FR	GANTRY 2 AREA		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	1 G	9/11/2008	N
AUBURN	P-807-2008	FR	GANTRY 5 BUILDING		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	SULFURIC ACID	1.5 G	9/1/2008	N
AUBURN	P-800-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	1 G	8/29/2008	N
AUBURN	P-717-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	0.5 G	8/11/2008	N
AUBURN	P-746-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	0.5 G	7/30/2008	N
AUBURN	P-664-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL		7/28/2008	N
AUBURN	P-621-2008	FR	SOLUTIONS WAREHOUSE, 123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT	0.01 G	7/18/2008	N
AUBURN	P-622-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	3 G	7/16/2008	N
AUBURN	P-615-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	4 G	7/12/2008	N
AUBURN	P-597-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	0.25 G	7/8/2008	N
AUBURN	P-492-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	OIL - OTHER -	0.1 G	4/25/2008	N
AUBURN	P-116-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123	HYDRAULIC OIL	1 G	4/23/2008	N
AUBURN	P-374-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567	HAZARDOUS	100 P	4/21/2008	N
AUBURN	P-319-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	SULFURIC ACID	98 G	4/5/2008	N
AUBURN	P-316-2008	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD	HYDROCHLORIC ACID	1 G	4/4/2008	N
AUBURN	P-280-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	BIO 1-74	4 G	3/27/2008	N
AUBURN	P-117-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123	LUBE OIL	1 G	3/14/2008	N
AUBURN	P-261-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123	HAZARDOUS	0.5 G	3/13/2008	N
AUBURN	P-219-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	2 G	3/7/2008	N
AUBURN	P-170-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	WASTE OIL/USED MOTOR OIL	1 G	2/21/2008	N

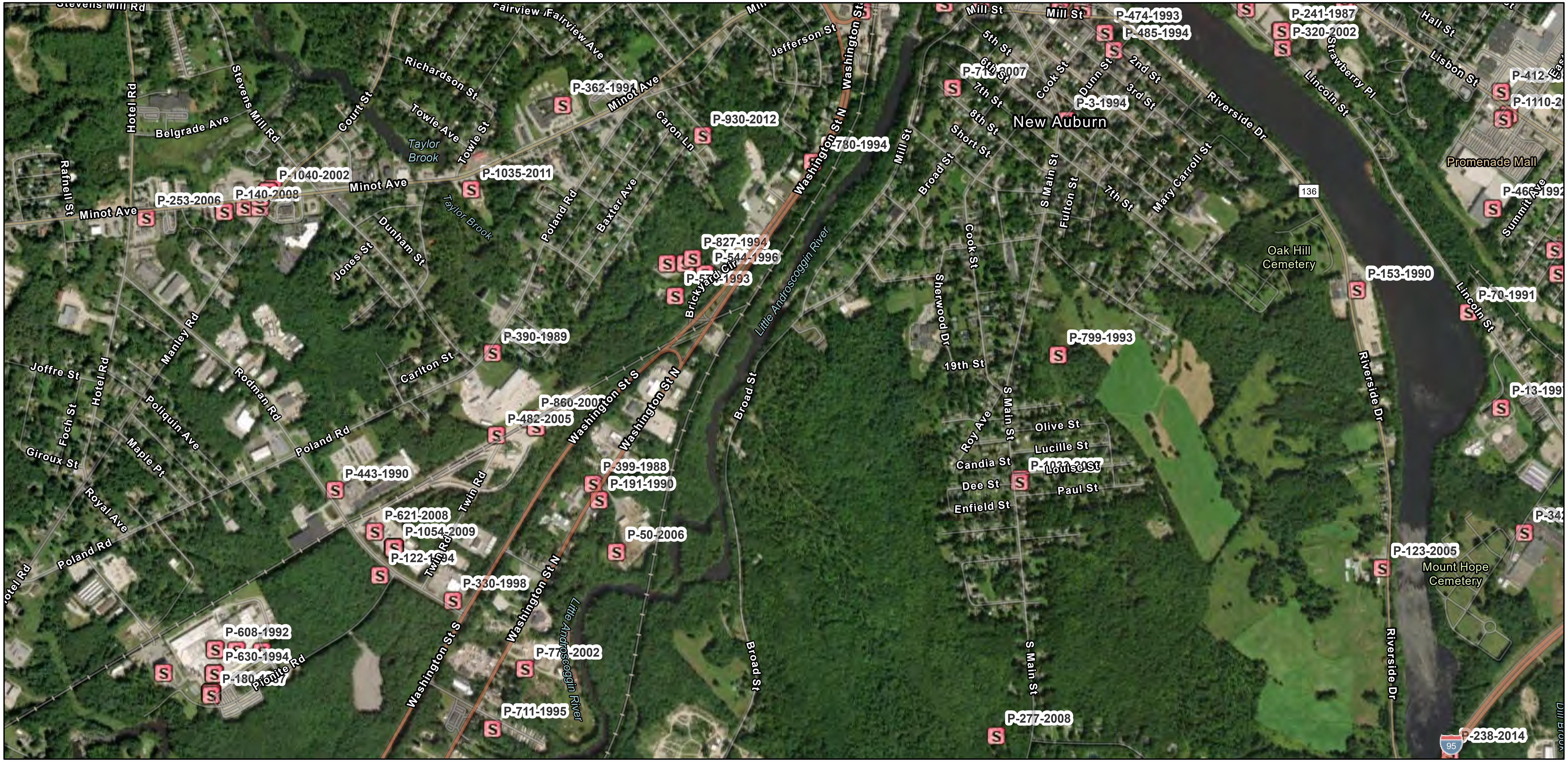
Town	Spill Number	Status	Location	Last Name	Company	Address	Product	Volume	Spill Date	* MDEP Follow-up
AUBURN	P-155-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	0.5 G	2/17/2008	N
AUBURN	P-160-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	CORROSIVE	5 P (50 G)	2/15/2008	N
AUBURN	P-60-2008	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL	2 G	1/22/2008	N
AUBURN	P-76-2008	FR	123 RODMAN RD (GANTRY 2 TRANSLOAD YARD)		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDROCHLORIC ACID	5 G	1/21/2008	N
AUBURN	P-59-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL	25 G	1/15/2008	N
AUBURN	P-42-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL	5 G	1/10/2008	N
AUBURN	P-25-2008	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	DIESEL	0.5 G	1/8/2008	N
AUBURN	P-928-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	0.25 G	12/28/2007	N
AUBURN	P-873-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	#6 FUEL OIL	0.25 G	11/13/2007	N
AUBURN	P-934-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HYDROCHLORIC ACID	3 G	11/13/2007	N
AUBURN	P-935-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HAZARDOUS	0.75 G	11/13/2007	N
AUBURN	P-805-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	SULFURIC ACID	5 G	11/7/2007	N
AUBURN	P-815-2007	FR	123 RODMAN RD, FUEL		SAFE HANDLING INC	PO BOX 1567, 123	DIESEL	1.5 G	11/4/2007	N
AUBURN	P-791-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HAZARDOUS	0.25 G	11/2/2007	N
AUBURN	P-814-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HAZARDOUS	2 G	11/2/2007	N
AUBURN	P-775-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HAZARDOUS	420 P	10/24/2007	N
AUBURN	P-962-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	SULFURIC ACID	0.1 G	10/12/2007	N
AUBURN	P-963-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123	HYDROCHLORIC ACID	0.5 G	10/12/2007	N
AUBURN	P-402-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDRAULIC OIL	3 G	6/4/2007	N
AUBURN	P-310-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	BIO 100	20 G	5/2/2007	N
AUBURN	P-31-2007	FR	123 RODMAN RD		SAFE HANDLING	123 RODMAN RD	#6 FUEL OIL	1 G	1/16/2007	N
AUBURN	P-24-2007	FR	123 RODMAN RD		SAFE HANDLING	123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	1 G	1/10/2007	N
AUBURN	P-11-2007	FR	123 RODMAN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	2 G	1/5/2007	N
AUBURN	P-1009-2006	FR	123 RODMAN RD @ SH-1 SH-3 AREA		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	#6 FUEL OIL	2 G	12/20/2006	N
AUBURN	P-1089-2006	FR	123 RODMAN RD & TWIN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	DIESEL	4 G	12/20/2006	N
AUBURN	P-1089-2006	FR	123 RODMAN RD & TWIN RD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	HYDRAULIC OIL	1 G	12/20/2006	N
AUBURN	P-1041-2006	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	2 G	12/19/2006	N
AUBURN	P-988-2006	FR	123 RODMAN RD		SAFE HANDLING	123 RODMAN RD	#4 FUEL OIL	0.25 G	12/14/2006	N
AUBURN	P-1037-2006	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	1 G	12/12/2006	N
AUBURN	P-1038-2006	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	DIESEL	0.5 G	12/12/2006	N
AUBURN	P-942-2006	FR	123 RODMAN ROAD		SAFE HANDLING	123 RODMAN ROAD, PO BOX 1567	OIL - OTHER - SPECIFIED IN REPORT	2 G	11/28/2006	N

Town	Spill Number	Status	Location	Last Name	Company	Address	Product	Volume	Spill Date	* MDEP Follow-up
AUBURN	P-867-2006	FR	123 RODMAN ROAD		SAFE HANDLING	123 RODMAN ROAD, PO BOX 1567	OIL - OTHER - SPECIFIED IN REPORT		11/2/2006	N
AUBURN	P-808-2006	FR	123 RODMAN RD		SAFE HANDLING	PO BOX 1567, 123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	1 G	10/12/2006	N
AUBURN	P-611-2006	FR	123 RODMAN ROAD		SAFE HANDLING INC	PO BOX 1567, 123 RODMAN RD	ASPHALT	675 G	6/13/2006	N
AUBURN	P-95-2006	FR	TWIN RD		SAFE HANDLING INC	123 RODMAN RD	WASTE OIL/USED MOTOR OIL	8 G	1/12/2006	N
AUBURN	P-930-2005	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD	DIESEL	68 G	11/17/2005	N
AUBURN	P-1080-2005	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD	WASTE OIL/USED MOTOR OIL	10 G	9/28/2005	N
AUBURN	P-839-2005	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	10 G	5/3/2005	N
AUBURN	P-192-2005	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	400 G	3/11/2005	N
AUBURN	P-467-2004	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD, PO BOX 1567	OIL - OTHER - SPECIFIED IN REPORT		3/11/2004	Y
AUBURN	P-467-2004	FR	123 RODMAN RD		SAFE HANDLING INC	123 RODMAN RD, PO BOX 1567	HAZARDOUS CHEMICAL - SPECIFIED IN REPORT		3/11/2004	Y
AUBURN	P-785-2002	FR	123 RODMAN RD		SAFE HANDLING	123 RODMAN RD	OIL - OTHER - SPECIFIED IN REPORT	120 G	10/20/2002	N

* N = No Follow-up by MDEP

* Y = Follow-up by MDEP with no issues reported

ArcGIS Web Map


P-474-1993
P-485-1994
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P-362-1994
P-930-2012
P-780-1994
P-3-1994
P-1040-2002
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P-253-2006
P-140-2008
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P-34
P-123-2005
P-330-1998
P-608-1992
P-630-1994
P-771-2002
P-711-1995
P-277-2008
P-238-2014
New Auburn
Promenade Mall
Oak Hill Cemetery
Mount Hope Cemetery
Taylor Brook
Little Androscoggin River
Minot Ave
Washington St N
Washington St S
Poland Rd
Riverside Dr
Broad St
S Main St
Mill St
Hotel Rd
Stevens Mill Rd
Belgrade Ave
Court St
Richardson St
Towle Ave
Towle St
Fairview Ave
Jefferson St
Caron Ln
Baxter Ave
Dunham St
Jones St
Manley Rd
Rodman Rd
Carlton St
Joffre St
Foch St
Poliquin Ave
Maple Pt
Giroux St
Royal Ave
Twin Rd
Pionite Rd
Rafnell St
Brickyard Cir
Sherwood Dr
Cook St
Fulton St
Mary Carroll St
19th St
Roy Ave
Olive St
Lucille St
Louise St
Candia St
Dee St
Paul St
Enfield St
Lincoln St
Strawberry Pl
Lisbon St
Hall St
Summit Ave
Short St
5th St
6th St
7th St
8th St
2nd St
3rd St
Dunn St
136
95

5/5/2025, 3:58:32 PM

S Response Spill Locations

1:18,056

0 0.15 0.3 0.6 mi

0 0.23 0.45 0.9 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar

ArcGIS Web AppBuilder

Maxar | Maine DEP | Maine Department of Environmental Protection | Maine DEP GIS | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS | MaineIT GIS, Maine GeoLibrary,

Auburn Water and Sewer Districts

MEMO

To: Eric Cousens, John Blais, Katherine Cook

From: Michael Broadbent, Assistant Water and Sewer Superintendent

CC: Sid Hazelton, Tanya Dunn

Date: May 19, 2022

Re: Brickyard Commons, 96 Unit apartment complex

After review of the plans dated 5/4/2022, I offer the following comments from the Water and Sewer District on a proposed development named; Brickyard Commons.

Water;

Because this development will have private roads and the proposed water mains have no potential to serve future developments/customers, the water infrastructure will be private from the gate on brickyard circle to the end users. The District will need a utility easement to access the individual service valves to each building. However, the District will not be responsible for the ownership or maintenance of those valves.

The 5/4/2022 plans show a 2" copper service into each building. If this is intended to serve both domestic and fire protection, there must be separate services with individual valves. The goal is the ability to operate the valves independently of each other before the services enters the buildings.

The plans show a 6" main serving this entire development in addition to two private hydrants within the development. We suggest that the private main be 8" to at least the second hydrant "T', the line can then reduce to 6" to serve the remaining buildings. If plastic pipe is used for the water mains, we also suggest installing tracer wire with the main to make it easier to locate.

The District will provide an estimate for the labor and materials to connect to our main on Brickyard circle. All of the new mains will have to be pressure and bacteria tested prior to activation. The District can provide an estimate for this service if needed otherwise we reserve the right to witness the tests and we require copies of the results. When the buildings are ready for water service and a meter size is determined the owner will be responsible for the cost of the meters, outside readers and the labor to install those devices.

Sewer;

The sewer mains within the development will also be considered private. This includes the service from each building to and including the connection to the District's main. The connection to our existing main must be made within a manhole structure. If it is not possible to connect to an existing structure then a new manhole will have to be set at the developers expence

There are sewer assessment fees that will have to be paid prior to activation of each building. Those fees are based off the size of the water meter and the capacity of the sewer system required to serve this development. These rates can be reviewed on the District's website.

Capacity;

The District has sufficient capacity to serve both the water and sewer needs of this development as it was proposed on 5/4/2022.

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

ENGINEERS, SURVEYORS, SCIENTISTS
P.O. BOX Q LIVERMORE FALLS, ME 04254
TEL: (207) 897-6752/FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

RECEIVED
MAR 24 2022
By 0484-22

March 22nd, 2022

Kirk F. Mohney
Maine Historic Preservation Commission
55 Capitol Street
State House Station 65
Augusta, ME 04333-0065

Subject: Project Review for Significant Archaeological or Historic Resources
21-342: Brickyard Commons – Auburn, ME

Dear Mr. Mohney,

Main-Land Development Consultants, Inc. is representing ***JIG Investments, LLC (JIG).*** with their City of Auburn, Maine Department of Environmental Protection, and the U.S. Army Corps of Engineers for its development project. The subject property is located off Brickyard Circle at Tax Map 199 Lot 52, in the town of Auburn, Maine. The property is approximately 10.9 acres in size with 135' of frontage on Brickyard Circle and 397' of frontage on Washington Street Southbound. Taylor Brook abuts the property to the North.

The proposed development plans to construct eight three-story buildings with each building containing 12-apartments. Each apartment will have two bedrooms, two baths and a small laundry area. Entrance will be through a center entry foyer with stairs leading to units on all three levels. Associated parking and stormwater devices will also be in the proposed development.

The property is currently undeveloped and vacant. Most of the area is forested other than a ½ acre cleared area. Natural resources were delineated on the subject property by Eric Whitney, SS, LSE. Wetlands on site are characterized as Palustrine Forested (PFO) and Palustrine Scrub-Shrub (PSS). There were no potential vernal pools observed. This project proposes impact to wetlands at approximately 14,400 S.F.

For the DEP review process, it is required that the Applicant provide a letter from your office discussing what, if any potential impacts this proposed development may present to any known ***Significant Archaeological or Historic Resources***. Our hope is that there would be a minimal impact generated by a project of this scope at this location.

Please review the attached material and respond in a letter to Main-Land, that will be presented to the appropriate review agencies. If you have any questions or require further information, please do not hesitate to contact Main-Land.

Sincerely,

Main-Land Development Consultants, Inc.

Eric Whitney

Eric R.T. Whitney S.S., L.S.E.

Encl: USGS Map
Aerial Location Map
W1.1 Impact Plan

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.

Kirk F. Mohney
Kirk F. Mohney,
State Historic Preservation Officer
Maine Historic Preservation Commission

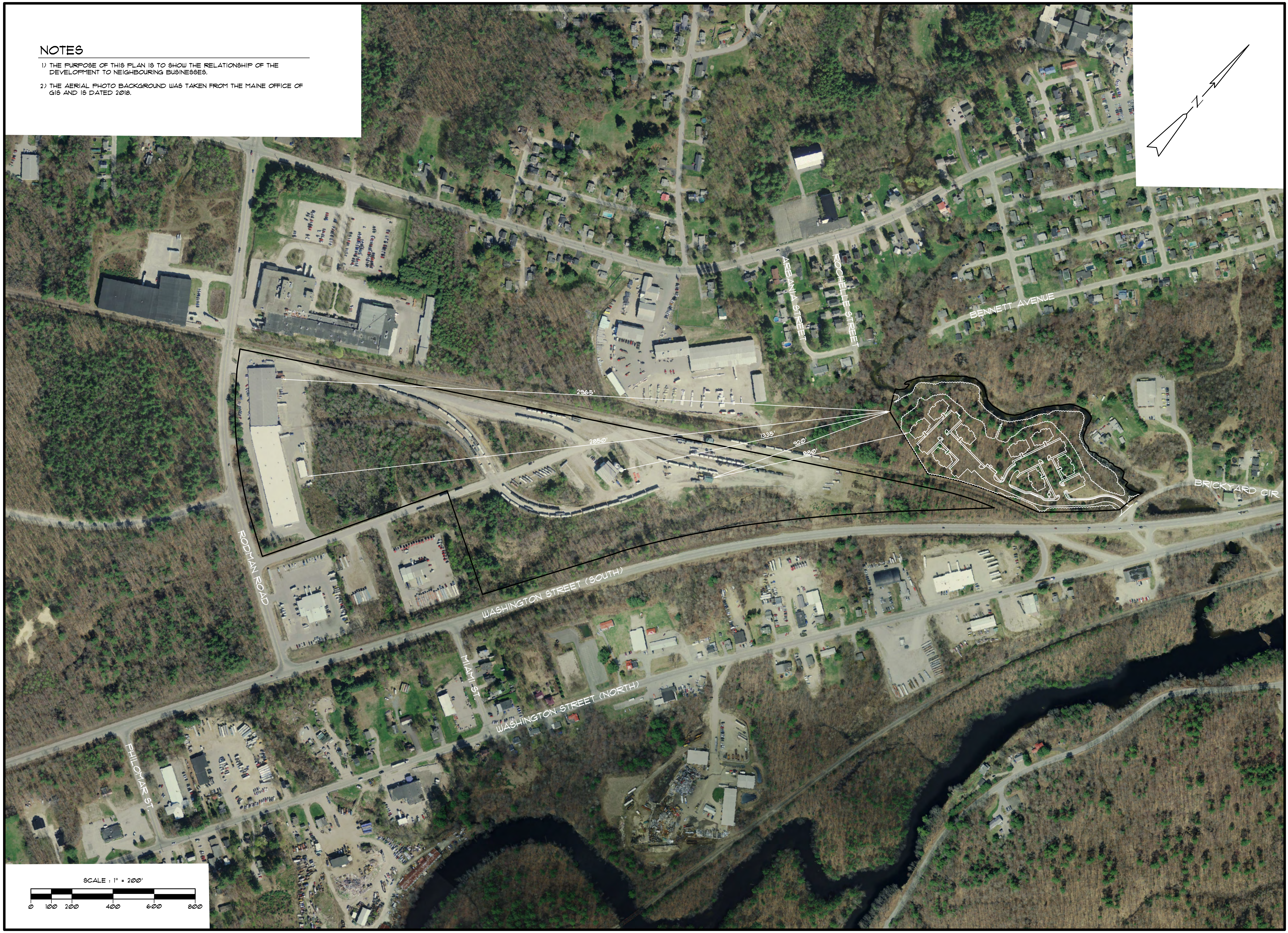
4/4/22
Date

MHPC # 0484-22

NOTES

1) THE PURPOSE OF THIS PLAN IS TO SHOW THE RELATIONSHIP OF THE DEVELOPMENT TO NEIGHBOURING BUSINESSES.

2) THE AERIAL PHOTO BACKGROUND WAS TAKEN FROM THE MAINE OFFICE OF GIS AND IS DATED 2018.


N
BENNETT AVENUE
ARBANIA STREET
ROCHELLE STREET
2965'
2850'
1335'
920'
980'
BRICKYARD CIR
RODMAN ROAD
WASHINGTON STREET (SOUTH)
WASHINGTON STREET (NORTH)
MIAMI ST
PHILOMAR ST
SCALE : 1" = 200'
0
100
200
400
600
800

Stoneybrook
Land Use, Inc.
9172 SW 52nd Place Road
Ocala, FL 34481

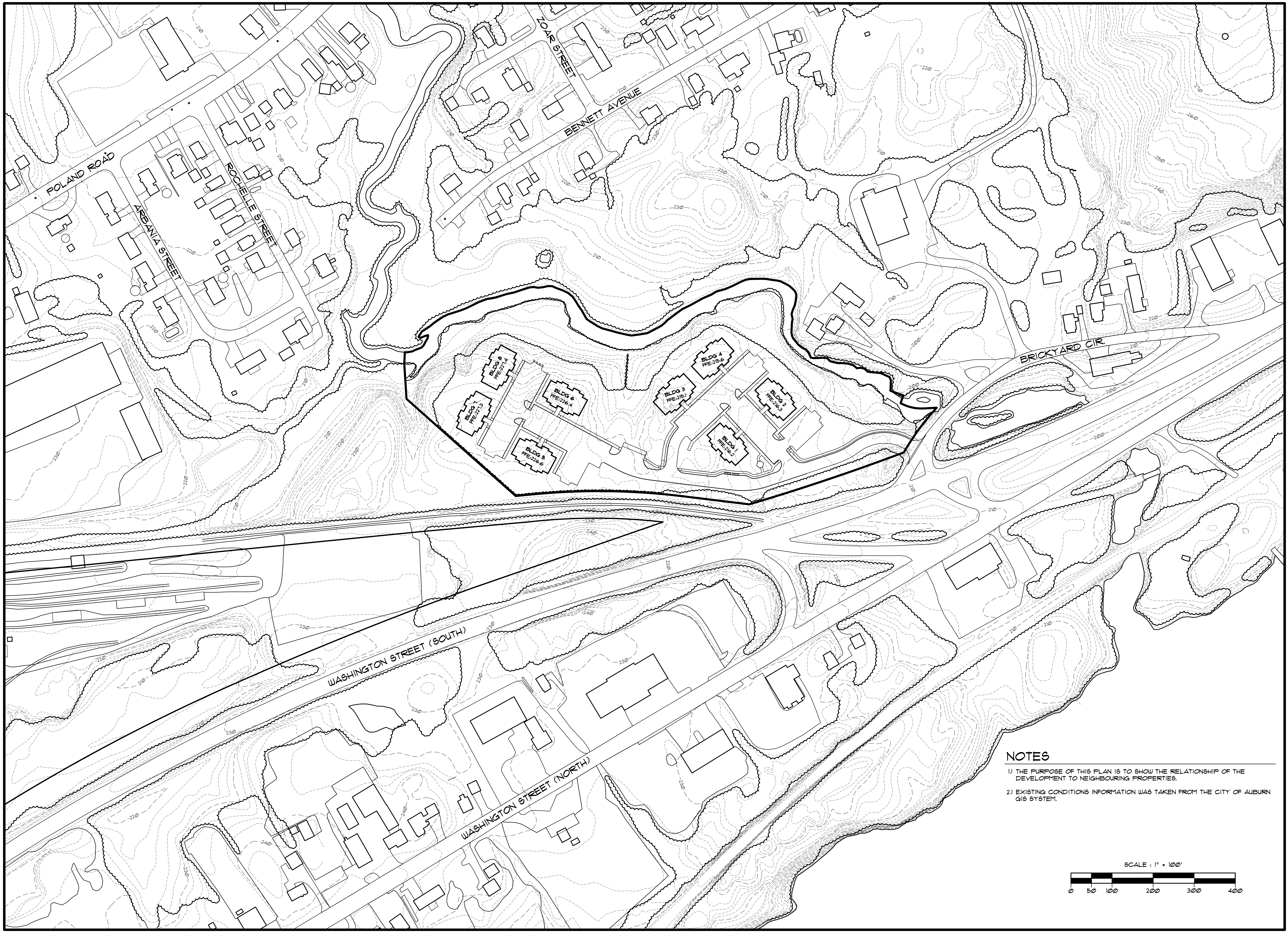
REV:	DATE:	CHANGES:

DO NOT MODIFY PLAN WITHOUT WRITTEN PERMISSION FROM STONEYBROOK LAND USE, INC.

2018 AERIAL GRAPHIC
BRICKYARD COMMONS
AUBURN, MAINE
PREPARED FOR
JIG INVESTMENTS, LLC
P.O. BOX 1913 - LEWISTON, ME 04241-1913

DATE	PROJECT
APRIL 2025	21-022
DRAWN BY	SCALE
BRJ	1" = 200'
FILE: 21-022 AER	

SHEET 1


POLAND ROAD
ARBANIA STREET
ROCHELLE STREET
ZOAR STREET
BENNETT AVENUE
BRICKYARD CIR
BLDG 8 FFE:227.4
BLDG 7 FFE:227.3
BLDG 6 FFE:226.4
BLDG 5 FFE:226.6
BLDG 4 FFE:215.6
BLDG 3 FFE:215.1
BLDG 2 FFE:216.3
BLDG 1 FFE:216.2
WASHINGTON STREET (SOUTH)
WASHINGTON STREET (NORTH)
SCALE : 1" = 100'
0
50
100
200
300
400

NOTES

1) THE PURPOSE OF THIS PLAN IS TO SHOW THE RELATIONSHIP OF THE DEVELOPMENT TO NEIGHBOURING PROPERTIES.

2) EXISTING CONDITIONS INFORMATION WAS TAKEN FROM THE CITY OF AUBURN GIS SYSTEM.

Stoneybrook
Land Use, Inc.
9172 SW 52nd Place Road
Ocala, FL 34481

REV:	DATE:	CHANGES:

DO NOT MODIFY PLAN WITHOUT WRITTEN PERMISSION FROM STONEYBROOK LAND USE, INC.

GIS GRAPHIC
BRICKYARD COMMONS
AUBURN, MAINE
PREPARED FOR
JIG INVESTMENTS, LLC
P.O. BOX 1913 - LEWISTON, ME 04241-1913

DATE	PROJECT
APRIL 2025	21-022
DRAWN BY	SCALE
BRJ	1" = 100'

FILE: 21-022 GIS 100

SHEET 1

Stoneybrook
Land Use, Inc.

9172 SW 52nd Place Road
Ocala, FL 34481
(207) 513-6123

February 27, 2025
Revised March 24, 2025

Mr. David Hediger
Planning, Permitting and Code Division
City of Auburn
60 Court Street
Auburn, ME 04210

RE: Brickyard Commons
Brickyard Circle

Dear Mr. Hediger:

On behalf of JIG Investments, LLC (JIG), I am pleased to submit this letter and attachments to secure approvals for Brickyard Commons, a 96-unit apartment complex to be located off Brickyard Circle. The parcel is located in the Downtown Traditional Center T-5.1 District and is shown on the City GIS system as Parcel ID 199-052-000. This project was first approved by the City on June 28, 2022. Those approvals were revised on December 21, 2022, to change requirements related to offsite improvements. A one-year extension was approved by the Planning Board in 2023, but the original project approvals expired on June 28, 2024.

The Maine Department of Environmental Protection (MDEP) approved a Natural Resource Protection Act application for wetland impacts on September 15, 2022. The US Army Corps of Engineers (USACOE) approved the same wetland impacts on June 13, 2022. Both permits are still valid. This application is submitted to secure City approvals for the same project previously approved with no changes proposed.

The property boundaries are shown on a plan entitled “Existing Conditions Boundary Plan of the Queen of Hearts Parcel” prepared by Sebago Technics, Inc. in 2008. By this survey, the lot contains about 10.9 acres and has about 135’ of frontage on Brickyard Circle. The lot also has about 397’ of frontage on Washington Street Southbound, but that frontage is subject to “control of access” rights purchased by the Maine Department of Transportation (MDOT) which will not allow driveway access along this frontage.

The property is currently vacant. Main-Land Development Consultants, Inc. (MLDC) has mapped wetland areas on the property. These wetland areas, existing conditions and proposed improvements are shown on the attached full set of site engineering plans also prepared by MLDC. The site engineering plans provide full details for the site improvements, utility connections and stormwater improvements. All these improvements have been designed to meet City and State standards.

All plans and documents are the same plans and documents that were previously submitted and reflect all of the changes requested by Local, State and Federal agencies during that review process to secure approvals. Plans are dated from February 3, 2022 – September 13, 2022, to document all of the changes made during that review. No changes to Local, State or Federal review requirements since the previous approvals impact the site design as presented and therefore, no changes have been made or are proposed for this approval.

JIG plans to construct eight three-story buildings with each building containing 12 apartments. Each apartment will have two bedrooms, two baths and a small laundry area. Entrance will be through a center entry foyer with stairs leading to units on all three levels. Entrance walkways will be set on grade to allow handicap accessibility to units on the first-floor level. Buildings are set back a maximum of 9.5' from the sidewalk access ways leading from the parking lots. Dirigo Architectural (Dirigo) has prepared plans showing preliminary floor layouts, roof and elevation views.

The existing site access way constructed in 2010 from Brickyard Circle will be upgraded to provide a single two-way 26' wide private street to serve this project. Two additional private streets will split off the main access and serve the first four apartment buildings. Mailboxes and dumpsters are provided between the two building clusters. Sidewalks are provided along the entire length of the private streets to promote walkability between buildings and the service areas. Outdoor recreational amenities are also shown on the site plans.

Parking requirements for the District, are 1 space per dwelling unit plus one guest parking space per four dwelling units. Therefore, this site requires a minimum of 120 spaces. We have shown 193 spaces to meet tenant requirements. These spaces are provided along the private streets or in separate parking areas adjacent to those streets. However, to address comments from abutters, these parking spaces will be constructed in two phases. A total of 168 spaces will be constructed in Phase 1 and the remaining 25 spaces will be constructed in Phase 2 only if the spaces are required to meet tenant demands for parking.

We have included a traffic assessment prepared by Barton & Loguidice, LLC. Trip generation shows a maximum of 55 weekday PM peak hour trips for this project. This traffic assessment demonstrates that this project will not exceed the 100-vehicle peak hour trip generation that would require a Traffic Movement Permit from the Maine Department of Transportation (MDOT). The site access road and the Washington Street/Brickyard Circle intersection both have sufficient sight distances and will operate safely for the proposed use.

The assessment indicates that no changes to the existing one-way traffic flow on Brickyard Circle will be necessary. However, this project meets traffic warrants for a left turn lane located on the Washington Street Northbound at the crossover approximately 340' north from Brickyard Circle's northern entrance. As required by prior approvals, JIG has provided a design for these offsite improvements. JIG will also be responsible for constructing a sidewalk along the western side of Brickyard Circle about 914'.

In the proposed condition, total impervious areas will be 4.01 acres. Stormwater improvements will be provided with a proposed pre-treatment system in series with a detention pond. MLDC has prepared a stormwater quantity analysis, erosion control narrative and provided plans with details showing how these improvements meet the requirements of Local and State stormwater rules.

At this level of development, this project will require permits from the MDEP for the Site Location of Development Act (SLODA) and Stormwater Law (Stormwater) projects. We request that you process this application under your expanded delegated authority and grant these MDEP permits as part of your review of this project

Sewer services will be extended from the existing public sewer main crossing the property. Water service will be extended along the access roads from the existing water main in Brickyard Circle. Power and communications will be extended overhead from the last power pole on Brickyard Circle with two new poles, one near the project entrance road and the other will extend into the site near the entrance road. From that second new pole, a new underground service will be installed along the project access roads.

The project will impact 13,632 square feet of wetland area. These impacts include impacts to 4,096 square feet of wetland of special significance located within the shoreland area or floodplain of Taylor Brook. These impacts have already been approved by MDEP and USACOE.

The buildings are set back 27' (building #7) from any property line. Building #1 is set back about 99' from the Washington Street right of way and Building #2 is set back about 270' from the Brickyard Circle right of way. Building #4 is set back about 63' from Taylor Brook. As required under the District standards, the front face of all buildings are set back 9.5' or within the maximum setback of 10' from the access way adjacent to the structure. Entrance walkways are all set at a maximum grade of 2% to allow handicap accessibility to the lower level of each structure.

Building Lot Coverage is 9.6%, where the District allows a maximum of 75%. Useable Open Space is 12.2% and the District requires 5%. All buildings are 3 stories high and the District requires a minimum of 2 stories and a maximum of 4 stories. Please refer to the letter from Dirigo outlining how the building architectural features meet the District design requirements.

As you can see, a large portion of the property has been preserved in its natural condition. Special attention has been made to keep the areas along the brook undisturbed. Unit density proposed is about 8.8 units per acre. Allowed density could be up to 16 units per acre. Total open space on the parcel is 6.89 acres or 63.4% of the total lot area. Amenities encourage enjoyment of these open space areas around the building areas. Total impervious area on the property is 174,755 square feet or 36.6% of the total lot area.

The original approvals listed three conditions of approval as follows:

1. *No development activity until any bonding or inspection fees are determined by the City of Auburn Engineering department.*

   JIG agrees to pay any bonding of inspection fees required.

2. *Separate water lines must be incorporated: One domestic and one fire. Size should be designed by the PE and confirmed by the Water District. Sewer should be tied into existing manhole or there should be a new manhole installed.*

   The Site Plans submitted with this application have been revised to show these utility connections sized by a PE. The Water and Sewer District needs to confirm these changes.

3. *Offsite improvements in the view of $320,000.00 be granted to the city.*

   This condition of approval was revised in December of 2022 to require JIG to construct a sidewalk along the western side of Brickyard Circle for about 914' and to provide engineering design for offsite traffic improvements. Plans for these offsite improvements are included with this application. JIG is also prepared to construct the sidewalk as required.

Site construction is expected to begin in May. All trees will be cut, and grading will begin for site improvements shown around Buildings 1 – 4. This will include the construction of Fire Brick Lane to Clay Court. Clay Court and Veneer Place, including utilities and stormwater improvements will be prepared to allow construction of these four buildings. While these buildings are constructed, site construction for the remainder of Fire Brick Lane, utility extensions, stormwater improvements and grading in the area of Buildings 5-8 will be prepared for building construction.

Building construction of all eight buildings will take 36 to 48 months. Site construction will be ongoing during this entire period. The current plan is to start at Building #1 and #2 and to always have at least two buildings under construction. Once the first building is complete, Building #3 will be started, when the second building is complete Building #4 will be started and so on until all eight buildings have been constructed. The first building should be ready for occupancy by the Summer of 2026.

Prior to occupying each building, final site work for that building will be completed. This includes final grading, loam and seed, pavement and parking space striping to meet zoning code requirements for the number of units occupied. Stormwater treatment to support that parking and building improvements will also be completed. Depending upon the time of year, final landscaping may not be completed but must be completed during the next planting season.

Total project costs are expected to be about $9.5 million. Please do not hesitate to call if you have any questions about the information provided or need additional information to complete your review of this project.

Respectfully Yours

STONEYBROOK LAND USE, INC.

Michael F. Gotto

cc: John Gendron

City of Auburn, Maine
Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Application

PROJECT NAME: Brickyard Commons

PROPOSED DEVELOPMENT ADDRESS: Brickyard Circle

PARCEL ID #: 199-052

REVIEW TYPE: Site Plan ☑ Subdivision ☐ Site Plan Amendment ☐ Subdivision Amendment ☐

PROJECT DESCRIPTION: See Cover Letter

CONTACT INFORMATION:

Applicant

Name: JIG Investments, LLC
Address: P.O. Box 1913
City / State Lewiston, ME
Zip Code 04241
Work #:
Cell #:
Fax #:
Home #:
Email:

Property Owner

Name: Same
Address:
City / State
Zip Code
Work #:
Cell #:
Fax #:
Home #:
Email:

Project Representative

Name: Mike Gotto - Stoneybrook Land Use, Inc.
Address: 9172 SW 52nd Place Road
City / State Ocala, FL
Zip Code 34481
Work #: (207) 513-6123
Cell #:
Fax #:
Home #:
Email: mike@stoneybrookllc.com

Other professional representatives for the project (surveyors, engineers, etc.),

Name: Main-Land Development Consultants
Address: 69 Main Street
City / State Livermore Falls, ME
Zip Code 04254
Work #: (207) 897-6752
Cell #:
Fax #:
Home #:
Email: michael.barnes@main-landdci.com

PROJECT DATA

The following information is required where applicable, in order complete the application

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area 0 sq. ft.
Proposed Total Paved Area 128,992 sq. ft.
Proposed Total Impervious Area 174,755 sq. ft.
Proposed Impervious Net Change 174,755 sq. ft.
Impervious surface ratio existing 0 % of lot area
Impervious surface ratio proposed 36.6 % of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint 0 sq. ft.
Proposed Building Footprint 45,763 sq. ft.
Proposed Building Footprint Net change 45,763 sq. ft.
Existing Total Building Floor Area 0 sq. ft.
Proposed Total Building Floor Area 137,289 sq. ft.
Proposed Building Floor Area Net Change 137,289 sq. ft
New Building Yes (yes or no)
Building Area/Lot coverage existing 0 % of lot area
Building Area/Lot coverage proposed 9.6 % of lot area

ZONING

Existing T-5.1
Proposed, if applicable N/A

LAND USE

Existing Vacant
Proposed Multi-family Housing

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units 0
Proposed Number of Residential Units 96
Subdivision, Proposed Number of Lots N/A

PARKING SPACES

Existing Number of Parking Spaces 0
Proposed Number of Parking Spaces 177
Number of Handicapped Parking Spaces 16
Proposed Total Parking Spaces 193

ESTIMATED COST OF PROJECT: $9.5 million

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area 0 sq. ft.
Proposed Disturbed Area 307,969 sq. ft.
Proposed Impervious Area 174,755 sq. ft.

1. ***If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.***
2. ***If the proposed impervious area is greater than one acre including any impervious area crated since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.***
3. ***If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.***
4. ***If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.***

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing (Since July 1, 1997) 0 passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) 55 passenger car equivalents (PCE)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary

1. Property is located in the T-5.1 zoning district.
2. Parcel Area: 10.9 acres / ____________ square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	N/A	10.9 acres
Street Frontage	24'	532'
Min Front Yard	0	9.5'
Min Rear Yard	10'	N/A
Min Side Yard	0	N/A
Max. Building Height	4 story	3 story
Use Designation	Multi-family	Multi-family
Parking Requirement	1 space/ per ______ square feet of floor area	
Total Parking:	120	193
Overlay zoning districts (if any):	Stream Protection	Floodplain

Urban impaired stream watershed? ~~YES~~/NO If yes, watershed name ____________

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative. (NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

To view the City of Auburn Zoning Ordinance, go to:
www.auburnmaine.gov under Government, select Departments of the City, then Planning, Permitting & Code. On the left menu, choose Subdivisions, Land Use, Zoning Ordinance. Or click HERE.

For additional information on Site Plan Review, please click HERE or scan code:

For additional information on Special Exceptions, please click HERE or scan code:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant:	**Date:** 2/27/2025

auburnmaine.gov

City of Auburn, Maine
Office of Planning & Permitting
Eric J. Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

Development Review Checklist

The following information is required where applicable to be submitted for an application to be complete

PROJECT NAME: Brickyard Commons
PROPOSED DEVELOPMENT ADDRESS: Brickyard Circle
PARCEL #: 199-052

Required Information		*Check when Submitted*		*Applicable Ordinance*
Site Plan		*Applicant*	*Staff*	
	Owner's Names/Address	✔	☐	
	Names of Development	✔	☐	
	Professionally Prepared Plan	✔	☐	
	Tax Map or Street/Parcel Number	✔	☐	
	Zoning of Property	✔	☐	
	Distance to Property Lines	✔	☐	
	Boundaries of Abutting land	✔	☐	
	Show Setbacks, Yards and Buffers	✔	☐	
	Airport Area of Influence	☐	☐	
	Parking Space Calcs	✔	☐	
	Drive Openings/Locations	✔	☐	
	Subdivision Restrictions	☐	☐	
	Proposed Use	✔	☐	
	PB/BOA/Other Restrictions	☐	☐	
	Fire Department Review	☐	☐	
	Open Space/Lot Coverage	✔	☐	

Required Information		*Check when Submitted*		*Applicable Ordinance*
Landscape Plan		*Applicant*	*Staff*	
	Greenspace Requirements	✔	☐	
	Setbacks to Parking	✔	☐	
	Buffer Requirements	N/A	☐	
	Street Tree Requirements	N/A	☐	
	Screened Dumpsters	✔	☐	
	Additional Design Guidelines	✔	☐	
	Planting Schedule	✔	☐	
Stormwater & Erosion Control Plan		*Applicant*	*Staff*	
	Compliance w/ chapter 500	✔	☐	
	Show Existing Surface Drainage	✔	☐	
	Direction of Flow	✔	☐	
	Location of Catch Basins, etc.	✔	☐	
	Drainage Calculations	✔	☐	
	Erosion Control Measures	✔	☐	
	Maine Construction General Permit	✔	☐	
	Bonding and Inspection Fees	☐	☐	
	Post-Construction Stormwater Plan	☐	☐	
	Inspection/monitoring requirements	☐	☐	
Lighting Plan		*Applicant*	*Staff*	
	Full cut-off fixtures	✔	☐	
	Meets Parking Lot Requirements	✔	☐	
Traffic Information		*Applicant*	*Staff*	
	Access Management	N/A	☐	
	Signage	✔	☐	
	PCE - Trips in Peak Hour	✔	☐	

Required Information		*Check when Submitted*		*Applicable Ordinance*
	Vehicular Movements	✔	☐	
	Safety Concerns	✔	☐	
	Pedestrian Circulation	✔	☐	
	Police Traffic	☐	☐	
	Engineering Traffic	☐	☐	
Utility Plan		*Applicant*	*Staff*	
	Water	✔	☐	
	Adequacy of Water Supply	☐	☐	
	Water main extension agreement	☐	☐	
	Sewer	✔	☐	
	Available city capacity	☐	☐	
	Electric	✔	☐	
	Natural Gas	☐	☐	
	Cable/Phone	✔	☐	
Natural Resources		*Applicant*	*Staff*	
	Shoreland Zone	✔	☐	
	Flood Plain	✔	☐	
	Wetlands or Streams	✔	☐	
	Urban Impaired Stream	N/A	☐	
	Phosphorus Check	N/A	☐	
	Aquifer/Groundwater Protection	N/A	☐	
	Applicable State Permits	N/A	☐	
	Lake Auburn Watershed	N/A	☐	
	Taylor Pond Watershed	N/A	☐	
Right, Title or Interest		*Applicant*	*Staff*	
	Verify	✔	☐	
	Document Existing Easements, Covenants, etc.	✔	☐	

Required Information		***Check when Submitted***		***Applicable Ordinance***
Technical & Financial Capacity		***Applicant***	***Staff***	
	Cost Est./Financial Capacity	✓	☐	
	Performance Guarantee	☐	☐	
State Subdivision Law		***Applicant***	***Staff***	
	Verify/Check	✓	☐	
	Covenants/Deed Restrictions	N/A	☐	
	Offers of Conveyance to City	N/A	☐	
	Association Documents	N/A	☐	
	Location of Proposed Streets & Sidewalks	✓	☐	
	Proposed Lot Lines, etc.	N/A	☐	
	Data to Determine Lots, etc.	✓	☐	
	Subdivision Lots/Blocks	N/A	☐	
	Specified Dedication of Land	N/A	☐	
Additional Subdivision Standards		***Applicant***	***Staff***	
	Mobile Home Parks	N/A	☐	
	PUD	N/A	☐	
A JPEG or PDF of the proposed site plan		***Applicant***	***Staff***	
		☐	☐	
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving		✓	☐	

JIG Investments, LLC
P.O. Box 1913
Lewiston, ME 04241-1913

To Whom It May Concern:

The signature below authorizes Stoneybrook Land Use, Inc. and Main-Land Development Consultants, Inc. to act as the applicant's agents in the processing of the enclosed application.

for JIG Investments, LLC, applicant

John M. Gendron, Member

(print name, title)

City of Auburn, Maine
Office of Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine
04210 www.auburnmaine.gov |
207.333.6601

Applicant:
JIG Investments
P.O. Box 1913
Lewiston ME 04341
Agent:
Stoneybrook Land Use, Inc. (C/O Mike Gotto)
4846 Sun City Center Blvd. #300
Sun City Center, FL 33573-6281
RE: Brickyard Commons/ Brickyard Circle

Dear Mr. Gotto,
I am pleased to issue this letter of conditional approval for Brickyard Commons. On June 28, 2022, the planning board approved the development of a 96-unit multifamily housing project consisting of eight 19,000 square foot buildings made up of eight three-story apartment buildings each containing 12 units with 168 parking spaces at Parcel I.D. 199-052 shown on Auburn's GIS system.

The planning board found that the proposal meets the requirements of Site Plan Ordinance, Sec. 60-45, Sec. 60-550 and Sec. 60-554 Multifamily Permitted Uses under Division 14, T-5.1 of the Form Based Code. The board voted to approve this project finding that the development has made provisions for the protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sound, dust and vibration; and the preservation of light and air; (2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas; (3) Adequacy of the methods of disposal for wastes; and (4) Protection of environmental features on the site and in adjacent areas. Board further finds that the development meets all Special Exception requirements (Sec. 60-45).

This approval is contingent upon the following conditions being met:

1. No development activity until any bonding or inspection fees are determined by the City of Auburn Engineering department.
2. Separate water lines must be incorporated: One domestic and one fire. Size should be designed by the PE and confirmed by the Water District. Sewer should be tied into existing manhole or there should be a new manhole installed.
3. Offsite improvements in the view of $320,000.00 be granted to the city.

This approval is also based on the following documents and plans:

1. Auburn Water and Sewer District Memo (5/19/22)
2. Half-size Brickyard Circle Conceptual Left-Turn Lane (6/8/22)

3. City Submittal (5/6/22) including 43 documents/ plans
4. Response Submittal (6/17/22) including 17 documents/ plans
5. Planning Board Motion RE: Brickyard Commons/ Brickyard Circle (6/28/22)
6. Brickyard Commons Staff Report (6/28/22)
7. Full Stormwater submittal (5/6/22)
8. Complete revised stormwater package (submitted 8/18/22) including 23 documents/ plans.
9. NRPA permit, # L-29856-2G-A-N/2F-B-N.
10. USACE Permit # NAE-2022-01096

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

Katherine Cook, Planning Coordinator

C: File

City of Auburn, Maine
Office of Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine
04210 www.auburnmaine.gov |
207.333.6601

December 21, 2022

Applicant:
JIG Investments
P.O. Box 1913
Lewiston, ME 04341
Agent:
Stoneybrook Land Use, Inc. (C/O Mike Gotto)
4846 Sun City Center Blvd. #300
Sun City Center, GL 33573-6281

RE: Brickyard Commons/ Brickyard Circle In-lieu payment revision for Condition of Approval

Dear Mr. Gotto,

I am pleased to issue this letter of approval for a modified conditional approval for Brickyard Commons. Originally , on June 28, 2022 the Planning Board approved the development of a 96-unit multifamily housing project consisting of building (8) eight 19,000 square foot buildings with 168 parking spaces at Parcel I.D. 199-052 shown on Auburn's GIS system. All conditions, plans set, and approvals still apply according to the June 28th, 2022 approval letter and application packet except for the following: **Condition item #3: Offsite improvements in-lieu payment of $320,000.** To meet the intent of the $320,000 in-lieu payment the following will be completed by the Applicant.

Construction by Applicant (JIG Investments)

- Developer will complete construction of a sidewalk on the western side of Brickyard Circle from the entrance to Brickyard Commons to the intersection of Washington Street South (914'+/-). Construction plans must follow city design standards for sidewalks.

Design by a Traffic Professional Engineer for Remaining Off-site Improvements by Applicant (JIG Investments)

- The addition of a left turn lane, accommodating for deceleration, on Washington Street North to provide access to the northern end of Brickyard Circle, as shown in attached sketch from Barton and Loguidice.
- The elimination of two crossovers, as shown in the attached sketch from Mike Gotto presented at planning board meeting on June 28th, 2022.
- Confirmation of site distances and turning radii for all movements within the project area by a Traffic Professional Engineer.

- A new wayfinding package design for Washington Street North and Washington Street South within project area including U-turn prohibitions, reverse direction signage, etc

Coordination and submission Details by Applicant

- All designs should be completed to MaineDOT specifications.
- Design engineering team will host a kickoff meeting and provide 25% and 75% plans for review by the City and MaineDOT
- Developer will provide the city with bid ready documents for construction of the improvements to include but not limited to plans, details specification and bid sheets to City/MaineDOT Standards.

This revision is effective the date of this letter.

Regards,

John A. Blais
Deputy Director of Planning & Permitting

Cc: Transportation & Community Development

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

JIG INVESTMENTS, LLC) NATURAL RESOURCES PROTECTION ACT
Auburn, Androscoggin County) WETLANDS OF SPECIAL SIGNIFICANCE
APARTMENT COMPLEX) ADJACENT TO A RIVER, STREAM, OR BROOK
L-29856-2G-A-N (approval)) WATER QUALITY CERTIFICATION
L-29856-2F-B-N (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. §§ 480-A–480-JJ, Section 401 of the Clean Water Act (33 U.S.C. § 1341), and Chapters 310 and 315 of Department rules, the Department of Environmental Protection (Department) has considered the application of JIG INVESTMENTS, LLC (applicant) with the supportive data, agency review comments, public comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to permanently fill a total of 13,632 square feet of freshwater wetlands, including 4,096 square feet within wetland areas considered wetlands of special significance (WOSS) due to their location within the 100-year floodplain of Taylor Brook. The proposed wetland alterations are associated with the construction of an apartment complex consisting of eight three-story buildings, each with 12 residential units, as well as an associated entrance drive, parking areas, and utility infrastructure. The proposed project includes a stormwater management system consisting of one grassed underdrained soil filter and one detention pond with a Focal Point biofiltration system. The majority of proposed WOSS impacts are due to the proposed access drive, which is located over an existing primitive access road and an existing culvert in disrepair. The applicant proposes to remove the existing culvert and replace it with a 36-inch-diameter culvert to maintain connectivity within the wetlands. The proposed development is located adjacent to approximately 0.3 miles of Taylor Brook. Portions of the proposed project are located within 25 feet of the brook. The proposed project is shown on a set of 17 plan sheets, the most relevant of which is titled, “W1.1 Impact Overview Plan,” all prepared by Main-Land Development Consultants, Inc. (MLDC) and last revised August 11, 2022, with the exception of Sheet C1.0, which were last revised on September 9, 2022, and Sheet C6.2, which was last revised on September 13, 2022. The project site is located off Brickyard Circle in the City of Auburn.

The proposed project will result in more than three acres of impervious area. The proposed project was reviewed under the Site Location of Development Act (Site Law) by the City of Auburn through its delegated review authority pursuant to 38 M.R.S. §

The proposed project will disturb more than one acre of land. Prior to the start of construction, the applicant must submit a Notice of Intent to comply with the requirements of the Maine Construction General Permit (MCGP) to the Department for review.

B. Current Use of the Site: The proposed project is located on a 10.9-acre parcel of land bordered by Taylor Brook to the north and west, railroad tracks to the south, and by Brickyard Circle and Washington Street S. to the east. The parcel is forested and undeveloped except for an overgrown access road and fill area on the eastern portion of the parcel. The parcel is identified as Lot 52 on Map 199 of the City of Auburn's tax maps.

C. Public Comments: While the application was being reviewed, the Department received comments from four interested persons who own property near or abutting the project site. The Department reviewed all comments from the interested persons. The Department did not receive any requests for a public hearing during the 20-day period specified in Chapter 2, *Rule Concerning the Processing of Applications and Other Administrative Matters* (06-096 Ch. 2, last amended June 9, 2018), governing the processing of applications.

One of the interested persons commented that not all abutters to the proposed project received a notice prior to the applicant filing the application, and that the public informational meeting for the proposed project was held on the same day as an Auburn City Planning Board meeting, which precluded interested residents from attending both meetings. As defined in Chapter 2, § 1(A), an "abutter" is a person who owns property that both adjoins and is within one mile of the delineated project boundary, including owners of property directly across a public or private right of way. The Department reviewed the evidence of public notices provided by the applicant, including certified mail receipts, and determined that the applicant met the public notice requirements specified in Chapter 2, § 14. The Department further determined that the applicant met the requirements for a public informational meeting as described in Chapter 2, § 13.

The interested persons expressed a range of concerns, including the visual impact of the proposed project, potential harm to wildlife and wildlife habitats, increased flooding, and degradation of water quality in Taylor Brook. Two of the interested persons were also concerned about the potential for the proposed development to degrade the quality of groundwater that feeds a nearby natural spring historically used as a source for bottled drinking water. The Department's assessment and the applicant's responses to these concerns are discussed in the Findings below. Visual impacts are discussed in Finding 2; wildlife and habitats are discussed in Finding 4; flooding is discussed in Finding 5; and surface and groundwater quality are discussed in Finding 6.

Some of the concerns raised by the interested persons do not fall within the scope of the NRPA review. These include concerns related to noise, water supply and wastewater infrastructure, traffic patterns, historic archaeological features, and safety fencing around stormwater basins and adjacent industrial properties. Some of these concerns are regulated by the City of Auburn through its municipal ordinance and delegated Site Law review authority. The Department forwarded the comments regarding historic archaeological features to the City of Auburn and the U.S. Army Corps of Engineers to address in their respective reviews of the proposed project, as applicable.

2. EXISTING SCENIC, AESTHETIC, RECREATIONAL OR NAVIGATIONAL USES:

The Natural Resources Protection Act (NRPA), in 38 M.R.S. § 480-D(1), requires the applicant to demonstrate that the proposed project will not unreasonably interfere with existing scenic, aesthetic, recreational and navigational uses.

In accordance with Chapter 315, *Assessing and Mitigating Impacts to Scenic and Aesthetic Uses*, the applicant submitted a copy of the Department's Visual Evaluation Field Survey Checklist as Appendix A to the application along with a description of the property and the proposed project. The applicant also submitted several photographs of the proposed project site and the surrounding area. Department staff visited the project site on August 11, 2022.

During the review, the Department received public comments regarding adverse impacts to the scenic character of the project area as seen from their private residences and from public ways. Chapter 315 states that an unreasonable adverse visual impact is one that is expected to unreasonably interfere with the general public’s visual enjoyment and appreciation of a scenic resource, or those that otherwise unreasonably impair the character or quality of such a place. To assess this review standard, the Department considers the viewshed of the proposed activity as viewed from the protected resource or other public lands.

The proposed project is partially located within an unnamed freshwater wetland adjacent to Taylor Brook. The wetlands are located on private property and are not accessible to the public. The proposed project is also located within 25 feet of Taylor Brook, which is a scenic resource visited by the general public for the use, observation, enjoyment, and appreciation of its natural and cultural visual qualities. The brook is wide enough for navigation by canoe and kayak; however, there are no public access points on the segment of the brook that runs adjacent to the project site, which is an approximately one-mile-long segment from Minot Avenue to U.S. Route 202 (Washington Street). Taylor Brook runs under Washington Street and into the Little Androscoggin River, which is also a scenic resource. The proposed project will not be visible from the river due to intervening vegetation and structures along Washington Street. The proposed project will be visible from the public way of Brickyard Circle and may be partially visible from Washington Street.

The surrounding area is developed with numerous commercial and residential structures. The commercial structures are concentrated around Washington Street to the southeast of the project site, but also include Hammond Lumber Company, a railroad yard, and Savage Safe Handling, all located to southwest of the project site. A residential neighborhood is located to the north, approximately 200 feet from the project site at the closest point. The parcel immediately across Taylor Brook from the project site is a privately owned residential lot that is largely forested. Additional small commercial and residential lots are located in the project vicinity on Brickyard Circle.

To reduce the visual impact of the proposed project, the applicant designed the development to retain a buffer, ranging in width from 25 to 130 feet of existing vegetation adjacent to Taylor Brook except at the proposed access drive and the proposed outfall pipe for the stormwater detention pond, where the proposed disturbance extends to the brook. The applicant stated that due to traffic restrictions, the only allowable entrance to the site is off Brickyard Circle, where the road frontage is only approximately 90 feet. The applicant located the access road as far from the brook as possible given site constraints and proposes a retaining wall on either side of the road to limit intrusion into the wetlands and towards the brook. At the proposed outfall pipe, the disturbance adjacent to the brook will be limited to an approximately 10-foot-wide clearing of shoreline vegetation and a small riprap apron at the pipe outlet.

In response to public comments and Department comments, the applicant submitted additional photographs of the surrounding area and elaborated on the visual impact of the proposed project. The applicant stated that vegetative screening is proposed near the project entrance, consisting of a 20-foot-wide buffer of retained vegetation along the property line adjacent to Washington Street. The applicant stated that the proposed project will not be visible from any sites on the National Register of Historic Places, nor from any public trails or parks. The applicant identified Baker Mill trail as the only public trail in the vicinity of the project site. The applicant stated that the proposed project, located approximately 0.3 miles from the trailhead, will not be visible from the trail due to intervening vegetation and structures. The applicant concluded that given the developed nature of the surrounding area, including the adjacent four-lane divided highway and numerous commercial businesses, and given the lack of public access to Taylor Brook at the project site, the proposed project is compatible with the character of the existing landscape.

The Department staff utilized the Department's Visual Impact Assessment Matrix in its evaluation of the proposed project. The Matrix is used to assess the visual impact severity of a proposed project based on the distance and visibility of the project from a natural landmark or other outstanding natural or cultural feature, State, National, or locally designated park or trail, and on the approximate number of people likely to view the project from the resource or a public way per day. The severity rating is also based on the visual elements of landscape compatibility, scale contrast, and spatial dominance as defined in Chapter 315, § 9. The Department determined that the proposed project is directly visible from several vantage points on Taylor Brook, Brickyard Circle, and Washington Street. Given the lack of public access, the Department determined that the project site is not viewed by more than 25 people per day from the scenic resource but may be viewed by more than 25 people per day from a public way. The proposed project would not be visible from any natural landmark or other natural or outstanding cultural feature or from any State, National, or locally designated park or trail. Given these considerations and the visual element ratings, the Matrix showed an acceptable potential visual impact rating for the proposed project. Based on the information submitted in the application and during the review, the visual impact rating and the site inspection by Department staff, the Department finds that the location and scale of the proposed activity is compatible with the existing visual quality and landscape characteristics found within the viewshed of the scenic resource in the project area.

The Department determined that based on the nature of the proposed project and its location, there are no existing recreational or navigational uses of the resource that would be unreasonably impacted. The Department finds that the proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses of the freshwater wetlands.

3. SOIL EROSION:

The NRPA, in 38 M.R.S. § 480-D(2), requires the applicant to demonstrate that the proposed project will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

The applicant submitted an erosion and sedimentation control plan prepared by MLDC and dated April 14, 2022. Additional notes and details are shown on the plans referenced in Finding 1. The plan is based on the Department's *Maine Erosion & Sedimentation Control Best Management Practices (BMP) Manual.* The applicant proposes that construction vehicles will access the site over a temporary stabilized construction entrance off Brickyard Circle. Prior to the start of ground disturbance, a double row of sediment barriers will be installed downgradient of the work area, as shown on Sheets C3.1 and C3.2 of the plan set. Temporary mulch will be applied to areas of exposed soil not being worked for seven consecutive days and prior to significant rain events. In areas within 75 feet of a stream or wetland, temporary mulch will be applied to areas of exposed soil after two consecutive days of inactivity, and prior to significant rain events. Slopes steeper than 15% will be stabilized with biodegradable netting or matting installed over mulch and seed. Stockpiles of erodible materials will be located at least 75 feet from delineated streams and wetlands. In the event that water must be pumped from trenches or stormwater basins during construction, the water will be directed through a filter bag or secondary containment structure in an upland location, as indicated on Sheet C1.0 of the plan set.

The applicant anticipates that construction will begin in the fall of 2022 and be completed by the spring of 2024. The sediment barriers and other temporary erosion control measures will be inspected and maintained throughout construction. Between November 1 and April 15, winter stabilization methods will be employed, including the doubling of hay mulch on all disturbed areas and maintenance of the double row of sediment barriers between disturbed areas and protected natural resources. During the winter period, no more than one acre of soil may be exposed at one time.

Upon project completion, all remaining disturbed areas will be loamed, seeded, and mulched in accordance with the notes and details in the above-referenced plan set. Upon final stabilization, sediment barriers will be removed from the site.

The proposed project was reviewed by the Department's Geology Unit. The Geology Unit recommended that any blasting, if necessary, should conform to the to the performance standards described in 38 M.R.S. § 490-Z(14). The applicant agreed to this recommendation.

As noted in Finding 1A above, prior to the start of construction, the applicant must submit a Notice of Intent to comply with the requirements of the MCGP to the Department for review.

The Department finds that the activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment provided that prior to the start of construction, the applicant submits a Notice of Intent to comply with the MCGP as described above.

4. HABITAT CONSIDERATIONS:

The NRPA, in 38 M.R.S. § 480-D(3), requires the applicant to demonstrate that the proposed project will not unreasonably harm significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life.

The applicant submitted a natural resource report prepared by MLDC and dated February 28, 2022, based on surveys of the project site conducted in November of 2021. The report was supplemented by additional surveys conducted in August of 2022. In the report, MLDC identified one perennial stream known as Taylor Brook, as well as one mixed scrub-shrub and forested wetland complex associated with the brook. No other streams or potential vernal pools were identified. MLDC noted invasive plant species present including oriental bittersweet (*Celastrus orbiculatus*) and common buckthorn (*Rhamnus cathartica*). Department staff visited the project site in August of 2022 and determined that the type and extent of natural resources on the project parcel are reasonably consistent with the boundaries shown on the plans referenced in Finding 1. Department staff noted the presence of additional invasive plant species, including Japanese barberry (*Berberis thunbergii*), Japanese knotweed (*Reynoutria japonica*), multiflora rose (*Rosa multiflora*), and winged euonymus (*Euonymus alatus*).

During the review, the interested persons expressed concerns regarding the impact of the proposed project on various wildlife species and habitat, including bat species listed as Threatened, Endangered, or of Special Concern. The comments also included concerns about vernal pools on adjacent properties.

The NRPA regulates activities within 250 feet of significant vernal pools located on a given project parcel, but not on adjacent parcels. The applicant's agent did not identify any vernal pools on the project parcel. At the site visit, Department staff confirmed that no potential vernal pools are present.

According to the Department's Geographic Information System (GIS) database, there are no mapped Essential or Significant Wildlife Habitats located at the project site. The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the proposed project and recommended, in comments dated August 23, 2022, that the applicant maintain a 100-foot buffer of undisturbed vegetation adjacent to Taylor Brook to protect water quality, maintain natural inputs of woody debris, and maintain suitable habitat conditions for fish and other aquatic life. MDIFW commented that there are no known state-listed Endangered, Threatened, or Special Concern species at the project site, although it is possible that one or more listed bat species occur in the project area. However, there are no known bat hibernacula or maternity roosts at the project site, and MDIFW does not anticipate that the proposed project will result in significant adverse impacts to bats. In accordance with the special conditions of a USACE permit for the proposed project (NAE-2022-01096), the applicant does not propose any tree clearing during the bat pup-rearing season of June 1 to July 31.

The applicant designed the proposed project with a vegetated buffer along the stream ranging from 25 to 130 feet wide, except at the proposed access road WOSS crossing and at the outfall pipe for the proposed detention pond. The applicant stated that a consistent 100-foot-wide buffer is not practicable given site constraints, and that the proposed project would not be financially viable if reduced to a smaller size. The applicant also noted that the NRPA only regulates activities within 75 feet of a river, stream, or brook, and stated that the proposed project minimizes impacts to the 75-foot riparian buffer to the greatest extent practicable.

The Department supports MDIFW's recommendation for a 100-foot-wide vegetated riparian buffer where possible but agrees with the applicant that the jurisdiction of the NRPA extends only 75 feet from a river, stream, or brook. Given the nature of the project site, the project design, and the lack of rare or sensitive habitat types and species in the project area, the Department determined that the proposed stream-adjacent activities will not result in unreasonable harm to fisheries or wildlife.

Given the presence of invasive plant species at the project site, any construction mats and equipment must be thoroughly cleaned and free of vegetation and soil before leaving the project site.

The Department finds that the activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life provided that the applicant cleans any construction mats and equipment of vegetation and soil before leaving the project site.

5. FLOODING:

The NRPA, in 38 M.R.S. § 480-D(6), requires the applicant to demonstrate that the proposed project will not unreasonably cause or increase flooding of the alteration area or adjacent properties.

The proposed access drive off Brickyard Circle crosses through the 100-year flood plain of Taylor Brook. During the review, the Department received comments from interested persons concerned that the project site, including the adjacent road (Brickyard Circle), frequently floods and that the proposed development will worsen flooding on the subject parcel and adjacent parcels.

The applicant responded that except for the proposed entrance road area, which is within the mapped floodplain, the elevation of the project parcel is significantly higher than the road. The applicant stated that based on its stormwater analysis of pre- and post-development conditions, which it conducted for the municipal review process, the proposed project will displace approximately 100 cubic feet of flood storage capacity, which the applicant stated is negligible. The applicant further stated that the proposed stormwater management structures have been designed to keep post-development peak flow rates at or below pre-development peak flow rates following storm events.

The proposed project was reviewed by the Maine Department of Agriculture, Conservation, and Forestry's Maine Flood Management Program (MFMP). In correspondence dated August 3, 2022, MFMP provided a map of the project site depicting the flood hazard area, which consists of a floodway and a floodplain. MFMP commented that the majority of the project parcel is located outside of the mapped flood hazard area, and that fill is allowed within the floodplain, provided that any buildings within the floodplain have the lowest floor elevated at least one foot above the base flood elevation. The applicant does not propose any fill within the floodway and does not propose any buildings within the floodplain.

Based on the project design and MFMP's review, the Department does not anticipate that the proposed project will not result in unreasonable flooding on the subject parcel or adjacent parcels.

6. WATER QUALITY CONSIDERATIONS:

The NRPA, in 38 M.R.S. § 480-D(5), requires the applicant to demonstrate that the proposed project will not unreasonably interfere with the natural flow of any surface or subsurface waters and that the proposed activity will not violate any state water quality law.

The proposed project is located adjacent to approximately 0.3 miles of Taylor Brook. As discussed in Finding 4, portions of the proposed project are located immediately adjacent to the brook, while the majority of the proposed project will be located between 25 and 130 feet from the brook. Taylor Brook is considered a Class B stream. The

Department's Bureau of Water Quality (BWQ) sampled the stream at the project site in 2003, 2008, and 2018. The sampling indicated the stream only met Class C in 2003 and attained Class B in 2008 and 2018.

The applicant does not propose any withdrawal from, or discharge to, the groundwater. The proposed project will be served by public water and sewer lines. The applicant stated that no hazardous materials will be stored on site, nor will any emergency generators powered by diesel or other liquid petroleum products be stored on site. No infiltration of stormwater is proposed.

The interested persons raised concerns regarding the effect of the proposed project on water quality in Taylor Brook due to an increase in stormwater runoff containing road salts and other contaminants. The interested persons claimed that the project site is located over several aquifers of state significance. Two of the interested persons own a natural spring, housed in a building on Brickyard Circle, which has been used to bottle drinking water in the past and which the owners plan to use for bottling drinking water again in the future. The owners of the spring expressed concerns that the proposed project will degrade water quality at the spring, compromising their ability to produce bottled water. The spring is located approximately 400 feet downstream and on the opposite side of Taylor Brook from the project site.

According to the Department's GIS database and the Maine Geological Survey's open data, the project site is not located over a significant sand and gravel aquifer.

BWQ staff reviewed the proposed project and commented, in correspondence dated August 17, 2022, that developments of this nature can result in an increase in non-point source pollutants such as road salts, heavy metals, petroleum products, nutrients, and sediment, which could adversely affect water quality in Taylor Brook. However, BWQ staff also commented that based on the project location and stream characteristics, the additional inputs would likely be sufficiently diluted to avoid harm to water quality, except at times when flow levels are significantly below baseline. Any inputs would be further diluted approximately 0.2 miles downstream, where Taylor Brook enters the Little Androscoggin River. To ensure protection of groundwater quality, BWQ recommended that the proposed stormwater structures be installed with an impermeable liner to prevent infiltration.

The Department's Geology Unit also reviewed the proposed project for potential impacts to water quality. In correspondence dated September 9, 2022, the Geology Unit commented that it is unclear whether the natural spring owned by the interested persons shares a subsurface aquifer with the project site. Based on the soil test pit data from the project site, a till-covered bedrock ridge beneath the site will direct much of the overburden subsurface flow toward Taylor Brook and the adjacent wetlands, rather than into any aquifer below. Given that the spring is located adjacent to several existing pollutant sources, including a major roadway which is closer to the spring than the proposed development, the effects of the proposed development on the spring, if any, would be difficult to distinguish from other sources. To maximize protection of groundwater quality, the Geology Unit recommended that the impermeable liner under the stormwater structures be at least 30 millimeters thick and extend under the proposed Focal Point as well as the detention pond and underdrained soil filter; that the applicant show on the plan sheets how the liner seams will be sealed; and that the applicant specify a location on the plan for a temporary dewatering basin and ensure that the area downgradient of the basin is stabilized prior to any dewatering activities.

In response to these comments, the applicant provided details of the proposed stormwater structures, as shown on Sheets C6.1 and C6.2 of the plans referenced in Finding 1, showing a 10-millimeter-thick impermeable liner under the proposed stormwater structures. The applicant revised the plans to extend the 10-millimeter liner under the Focal Point but stated that increasing the liner thickness to 30 millimeters would add a significant cost and is not feasible for the applicant. The applicant revised Sheet C6.2 to indicate how the seams of the liner will be sealed and provided a revised Sheet C1.0 to show the location of a temporary dewatering basin. The applicant confirmed that the downgradient area will be stabilized prior to use of the basin. As discussed in Finding 3, the applicant proposes to use erosion and sedimentation control measures during construction to minimize impacts to water quality from siltation.

The Department acknowledges that design specifications for stormwater management structures do not typically fall within the scope of a NRPA review, and that the proposed stormwater management structures were reviewed and approved by the City of Auburn under delegated Site Law review authority. The Department finds that the proposed 10-millimeter-thick impermeable liner, in conjunction with the proposed erosion and sedimentation control plan, will provide adequate protection for groundwater.

The Department evaluated the public comments, reviewer comments, the applicant's response to comments, and the information in the record. Based on the nature and location of the proposed project, the applicant's stormwater management plan, the erosion and sedimentation control plan, and the other considerations discussed above, the Department finds that the proposed project is unlikely to violate any state water quality law, including those governing the classification of the State's waters.

7. WETLANDS AND WATERBODIES PROTECTION RULES:

The applicant proposes to fill 13,632 square feet of mixed scrub-shrub and forested freshwater wetlands, including 4,096 square feet within floodplain wetland areas considered WOSS. The majority of proposed WOSS impacts (3,982 square feet) are due to the proposed access road, while the remainder (114 square feet) are due to the outfall pipe for the proposed stormwater detention pond. The non-WOSS impacts are due to the proposed access road and the grading of fill slopes around the apartment buildings and parking areas.

The *Wetlands and Waterbodies Protection Rules*, 06-096 C.M.R. ch. 310 (last amended November 11, 2018), interpret and elaborate on the NRPA criteria for obtaining a permit. The rules guide the Department in its determination of whether a project's impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it would cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a NRPA permit that involves a freshwater wetland alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. Avoidance. An applicant must submit an analysis of whether there is a practicable alternative to the project that would be less damaging to the environment and this analysis is considered by the Department in its assessment of the reasonableness of any impacts. Additionally, for activities proposed in, on, or over wetlands of special significance the activity must be among the types listed in Chapter 310, § 5(A) or a practicable alternative less damaging to the environment is considered to exist and the impact is unreasonable. Crossings by roads and utilities, such as the proposed access road and stormwater outfall pipe, are among the activities specifically provided for in Chapter 310, § 5(A)(1)(b). The applicant submitted an alternatives analysis prepared by MLDC and dated April 15, 2022, supplemented by an additional narrative dated June 16, 2022. The purpose of the proposed project is to develop the project parcel for a profitable use that also serves the City of Auburn's economic goals. The applicant considered taking no action to develop the parcel but determined that this would not meet the project purpose.

When the applicant acquired the project parcel, it was zoned for industrial and commercial uses. The applicant considered developing the property as a self-storage facility with 12 buildings and an office; however, the applicant determined that such a facility would occupy a large footprint and require grading in close proximity to Taylor Brook, resulting in approximately 19,000 square feet of wetland fill. The applicant also stated that the construction of a self-storage facility on the parcel would not be financially feasible for the applicant. The applicant considered developing the property as a site for heavy equipment sales, consisting of an entrance drive, 21,600-square-foot building, small parking lot, and 4.6-acre paved vehicle and equipment storage area. The applicant determined that the site was not suitable for access by large tractor trailers, and that modifying the site for tractor trailer access was not financially feasible. Further, the applicant stated that this alternative would have resulted in approximately 25,000 square feet of wetland fill.

The applicant consulted with City staff on the use of the project parcel. The City of Auburn subsequently rezoned the project area to allow for mixed uses, including residential development. The applicant determined that the development of an apartment complex would be financially feasible for the applicant and would help meet the City's goals for additional housing in Auburn. The applicant further determined that the proposed apartment complex would result in the least amount of disturbance adjacent to Taylor Brook and the least amount of wetland fill compared to the commercial use alternatives described above. The applicant considered multiple layouts of the apartment complex, including an alternate entrance point to avoid crossing the WOSS near Brickyard Circle. However, the applicant determined that an entrance off Washington

Street would not be possible based on traffic patterns, and the project parcel has only 90 feet of accessible frontage on Brickyard Circle, all of which is adjacent to WOSS. In light of these considerations, the applicant stated that there is no practicable alternative to the proposed project that meets the project purpose and avoids impacts to the resource.

B. Minimal Alteration. In support of an application and to address the analysis of the reasonableness of any impacts of a proposed project, an applicant must demonstrate that the amount of freshwater wetland to be altered will be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant designed the proposed project to maximize the use of available upland on the project parcel. The applicant incorporated retaining walls and side slopes of 2H:1V to minimize intrusion into the wetland and upland areas adjacent to Taylor Brook. The applicant designed the proposed access drive to follow the southern boundary of the project site, as far from Taylor Brook and the associated wetland as possible. The access drive over the WOSS was designed to the narrowest width practicable given the need for two-way traffic and a pedestrian walkway on one side. The applicant designed the crossing with retaining walls on either side to limit intrusion into the wetland.

During the review, the Department asked the applicant to elaborate on why the project footprint could not be further reduced by eliminating one or more buildings. The applicant responded that the proposed layout represents the smallest development footprint that is financially viable. The applicant considered adding a fourth story to the proposed three-story buildings to consolidate the project footprint. The zoning rules allow for a maximum of four stories; however, the applicant determined that adding the fourth story would require the installation of elevators, sprinkler systems, and other code requirements that would substantially increase construction costs. The applicant further stated that the proposed design is already reduced to approximately 50% of the maximum residential unit density allowed by the current municipal zoning rules, and that further reduction would limit the project's contribution towards the City's housing objectives. The applicant stated that the proposed project minimizes wetland impacts to the greatest extent practicable.

C. Compensation. In accordance with Chapter 310, § 5(C)(6)(a), compensation may be required to achieve the goal of no net loss of freshwater wetland functions and values. The threshold over which compensation is generally required is 500 square feet of alteration in a freshwater WOSS. The proposed project will permanently alter 13,632 square feet of freshwater wetlands, including 4,096 square feet of WOSS.

The applicant submitted a wetland functional assessment prepared by MLDC and dated March 2, 2022. In the assessment, MLDC identified flood-flow alteration and shoreline stabilization as the principal functions of the wetland affected by the proposed project. MLDC noted that the wetland is dominated by invasive plants such as oriental bittersweet (*Celastrus orbiculatus*) and common buckthorn (*Rhamnus cathartica*), and that the functions of the wetland are limited by its proximity to residential development and major roads.

To compensate for lost wetland functions and values, the applicant proposes to make a contribution into the In-Lieu Fee program of the Maine Natural Resource Conservation Program in the amount of $71,431.68. Prior to the start of construction, the applicant must submit a payment in the amount of $71,431.68, payable to “Treasurer, State of Maine,” and directed to the attention of the In-Lieu Fee Program Administrator at 17 State House Station, Augusta, Maine 04333. The submission of payment must include a cover letter the references the Department license number associated with the project.

The Department finds that the applicant has avoided and minimized freshwater wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that prior to project construction, the applicant submits the In-Lieu Fee payment as described above.

8. OTHER CONSIDERATIONS:

The Department finds, based on the design, proposed construction methods, and location, the proposed project will not inhibit the natural transfer of soil from the terrestrial to the marine environment and will not interfere with the natural flow of any surface or subsurface waters. The proposed project is not located in a coastal sand dune system, is not a crossing of an outstanding river segment, and does not involve dredge spoils disposal or the transport of dredge spoils by water.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 480-A–480-JJ and Section 401 of the Clean Water Act (33 U.S.C. § 1341):

A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.

B. The proposed activity will not cause unreasonable erosion of soil or sediment provided that prior to the start of construction, the applicant submits a Notice of Intent to comply with the MCGP as described in Finding 3 and the corresponding condition below.

C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided that the applicant washes construction mats and equipment prior to leaving the project site as described in Finding 4 and the corresponding condition below, and provided that the applicant submits the In-Lieu Fee payment as described in Finding 7 and the corresponding condition below.

E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.

F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.

H. The proposed activity is not on or adjacent to a sand dune.

I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S. § 480-P.

THEREFORE, the Department APPROVES the above noted application of JIG INVESTMENTS, LLC to construct an apartment complex and associated infrastructure as described in Finding 1, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.

2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. Prior to the start of construction, the applicant shall submit a Notice of Intent to comply with the requirements of the Maine Construction General Permit to the Department for review.

5. To prevent the spread of invasive plant species, any construction mats and equipment must be thoroughly cleaned and free of vegetation and soil before leaving the project site.

6. Prior to the start of construction, the applicant shall submit a payment in the amount of $71,431.68, payable to “Treasurer, State of Maine”, to the attention of the ILF Program Administrator at 17 State House Station, Augusta, Maine 04333. The submission of payment shall include a cover letter the references the Department license number associated with the project

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 15th DAY OF SEPTEMBER 2022.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Dawn Hallowell

For: Melanie Loyzim, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

JEM/L29856ANBN/ATS#89440,89693

FILED
September 15th, 2022
State of Maine
Board of Environmental Protection

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

MAINE GENERAL PERMITS (GPs)
AUTHORIZATION LETTER AND SCREENING SUMMARY

John Gendron
JIG Investments, LLC.
PO Box 1913
Lewiston, ME 04241

CORPS PERMIT # NAE-2022-01096
CORPS GP(s) # 8 & 22
STATE ID#

DESCRIPTION OF WORK:

To place approximately 13,632sf. of fill in freshwater wetland adjacent to Taylor Brook for the development of multi-unit apartment buildings "Brickyard Commons" off Brickyard Circle in Auburn, ME. This work is described on the attached plans entitled "Brickyard Commons" on two (2) sheets dated "4-18-2022" and "5-10-22". See Conditions

LAT/LONG COORDINATES: 44.078333 ° N -70.238862 ° W **USGS QUAD:** LEWISTON, MAINE

I. CORPS DETERMINATION:

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the Federal Permit, the Maine General Permit which can be found at: https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/ Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP(s) [including any attached Additional Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the GP(s) carefully, including the GP(s) conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GP(s) requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 45 of the GP(s) (page 19) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP(s) on October 14, 2025. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 14, 2026.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. **This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.**

II. STATE ACTIONS: PENDING [X], ISSUED [ ], DENIED [ ] DATE________

APPLICATION TYPE: PBR:____ TIER 1: X , TIER 2 :____, TIER 3:____: INDIV____ LURC:____ DMR LEASE:____ NA:____

III. FEDERAL ACTIONS:

JOINT PROCESSING MEETING: May 12, 2022 LEVEL OF REVIEW: Self-Verification:____ Pre-Construction Notification: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10____, 404 X 10/404____, 103____

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA NO , USF&WS NO , NMFS NO

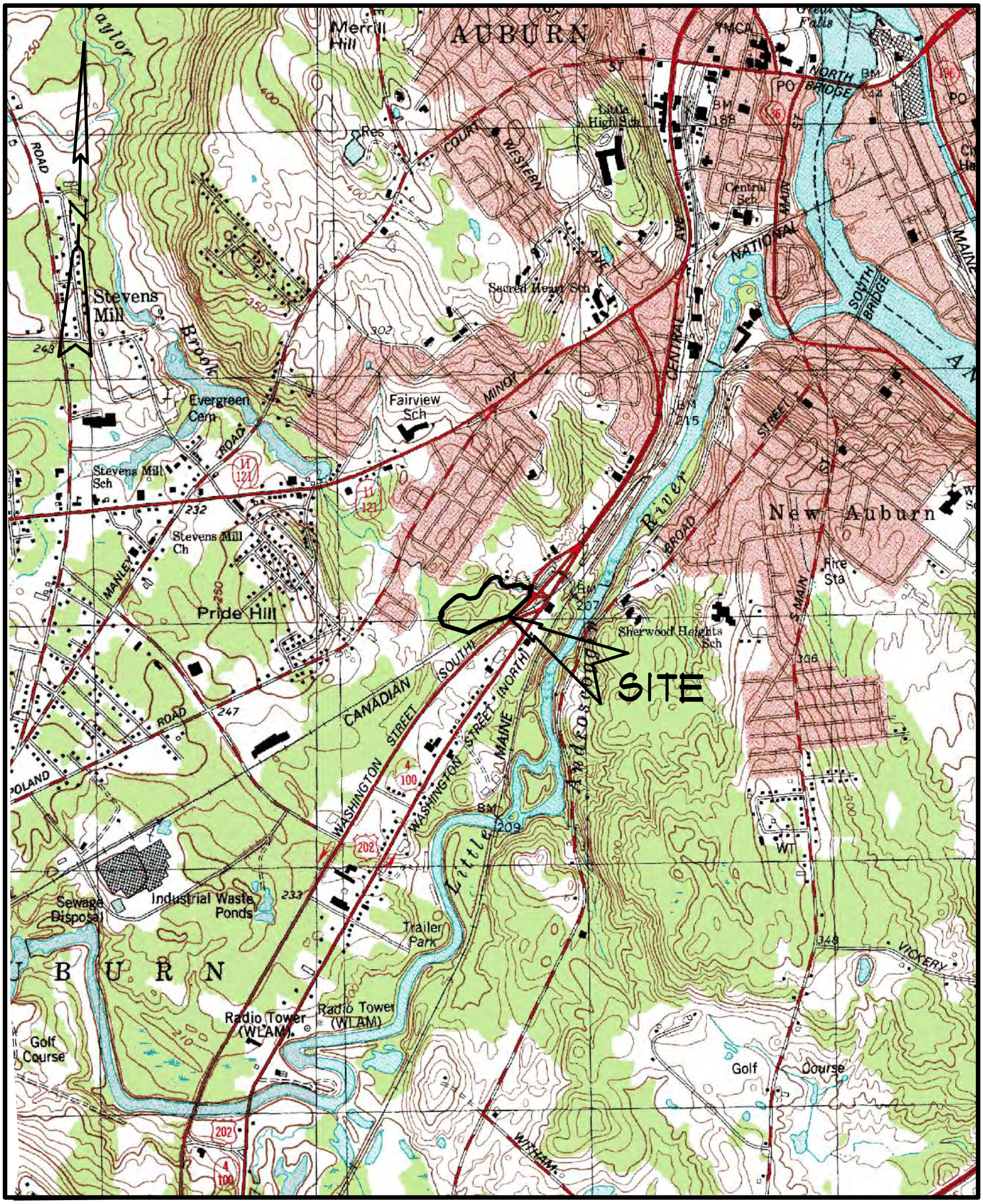
If you have any questions on this matter, please contact my staff at 207-623-8367 at our Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://per2.nwp.usace.army.mil/survey.html

Heather S. Stukas
Digitally signed by Heather S. Stukas
Date: 2022.06.13 11:20:50 -04'00'

HEATHER S. STUKAS
PROJECT MANAGER
MAINE PROJECT OFFICE

Frank J Del Giudice
Digitally signed by Frank J Del Giudice
Date: 2022.06.13 12:30:21 -04'00'

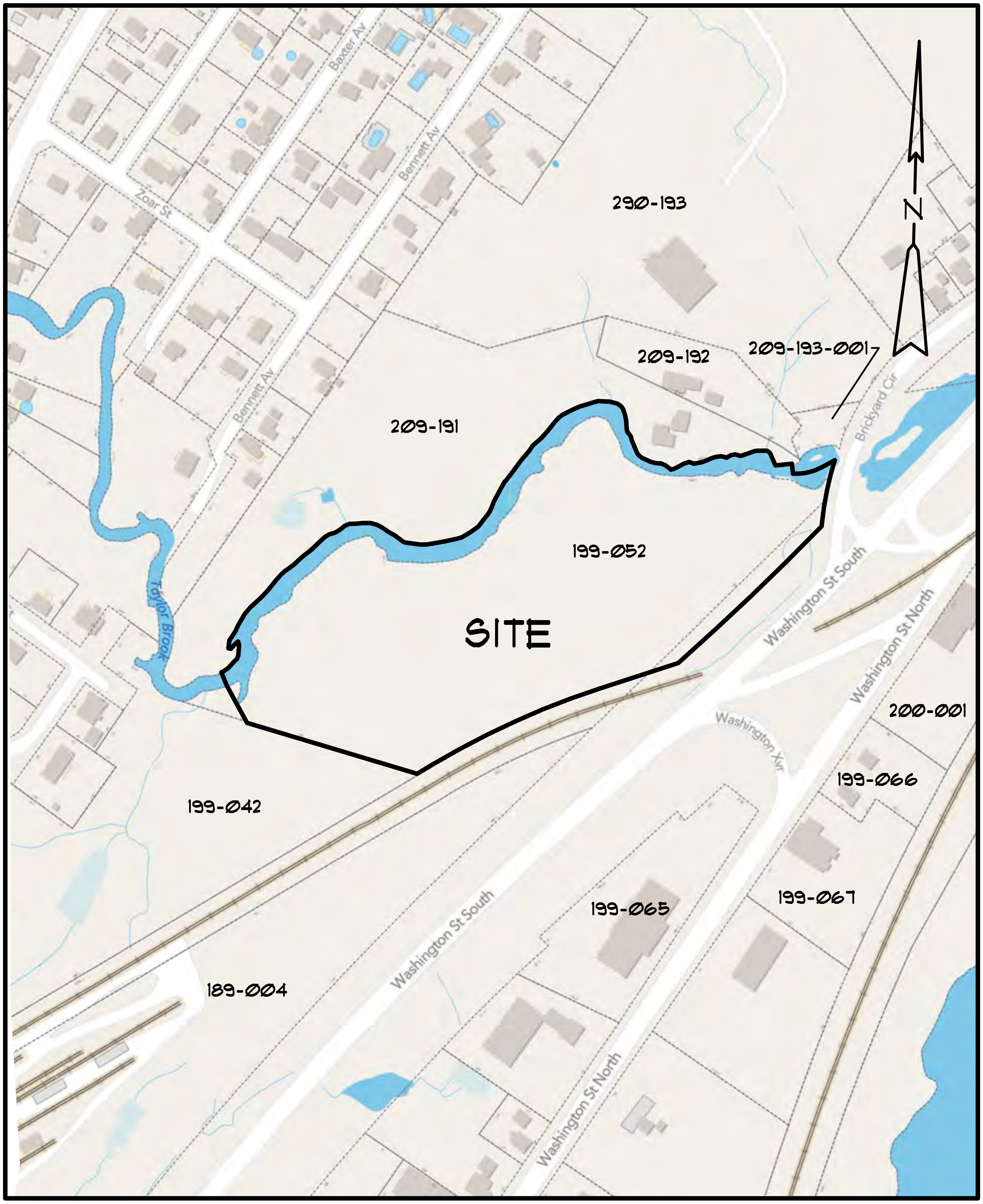
FRANK J. DEL GIUDICE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION


aylor
Merrill Hill
AUBURN
YMCA
Great Falls
NORTH BRIDGE
PO
BM 188
Little High Sch
COURT
WESTERN
Res
Central Sch
NATIONAL
MAIN
ST
SOUTH BRIDGE
Sacred Heart Sch
AVE
CENTRAL
Stevens Mill
Brook
350
302
MINOT
Fairview Sch
Evergreen Cem
ROAD
Stevens Mill Sch
11 121
232
Stevens Mill Ch
BM 215
River
BROAD
STREET
New Auburn
Fire Sta
MANLEY
Pride Hill
BM 207
Sherwood Heights Sch
SITE
CANADIAN
SOUTH
NORTH
STREET
MAINE
Androscoggin
306
ROAD
247
POLAND
WASHINGTON
4 100
202
BM 209
Little
WT
Sewage Disposal
Industrial Waste Ponds
233
Trailer Park
348
VICKERY
UBURN
Radio Tower (WLAM)
Radio Tower (WLAM)
210
Golf Course
Golf
Course
WITHAM
202
4 100

USGS LOCATION MAP

BRICKYARD COMMONS - BRICKYARD CIRCLE, AUBURN
OWNER: JIG INVESTMENTS, LLC
SCALE: 1" = 2,000'
DATE OF GRAPHIC: APRIL 14, 2022
SOURCE: MAINE OFFICE OF GIS
ORIGINAL PUBLICATION DATE: 1967

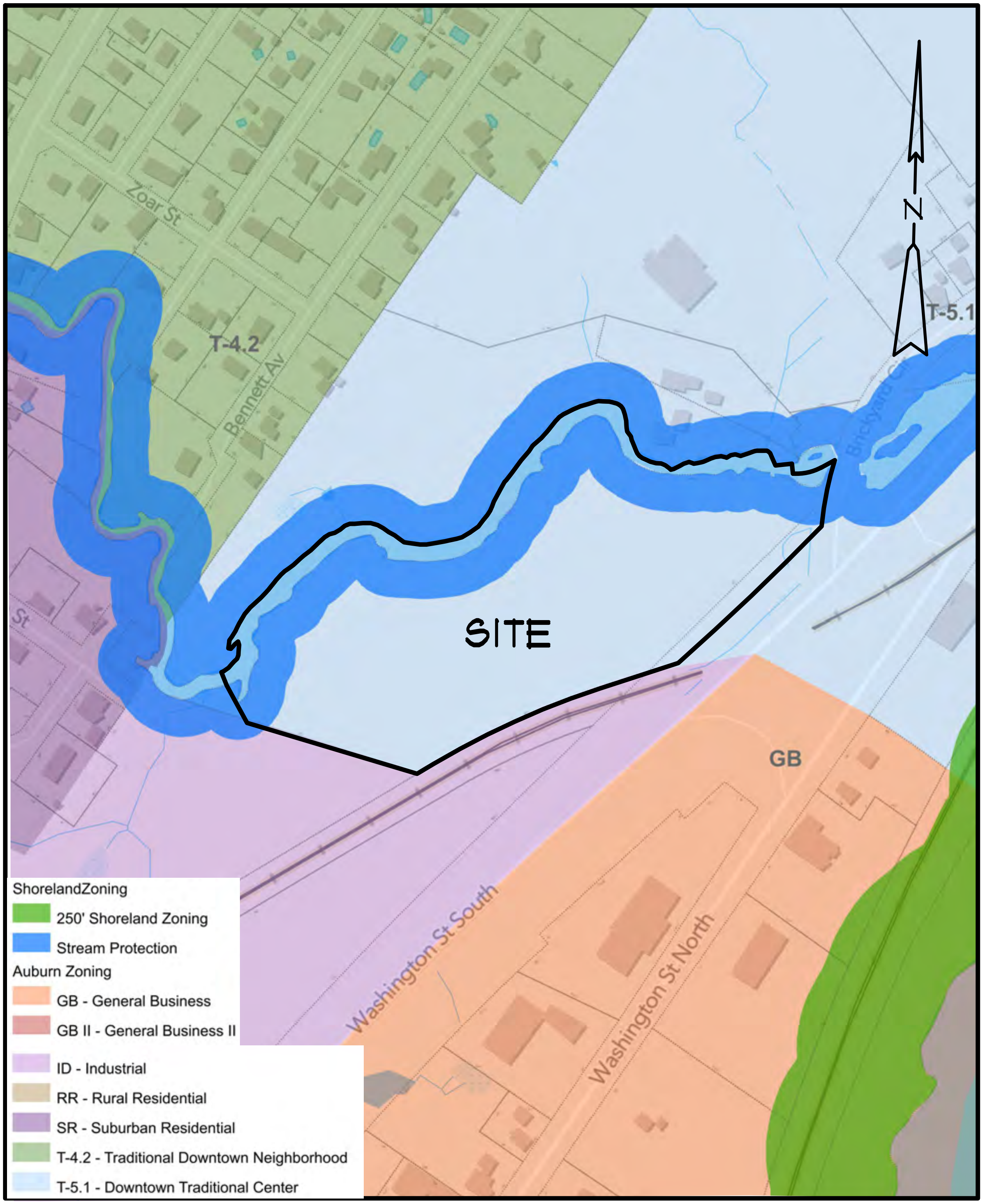
Stoneybrook
Land Use, Inc.


Baxter Av
Bennett Av
Zoar St
290-193
N
209-192
209-193-001
Brickyard Cir
209-191
Bennett Av
199-052
Taylor Brook
SITE
Washington St South
Washington St North
200-001
Washington Xvr
199-066
199-042
199-065
199-067
Washington St South
189-004
Washington St North

TAX MAP

BRICKYARD COMMONS - BRICKYARD CIRCLE, AUBURN
OWNER: JIG INVESTMENTS, LLC
SCALE: 1" = 300'
DATE OF GRAPHIC: APRIL 14, 2022
SOURCE: CITY OF AUBURN GIS
PUBLICATION DATE: 2021

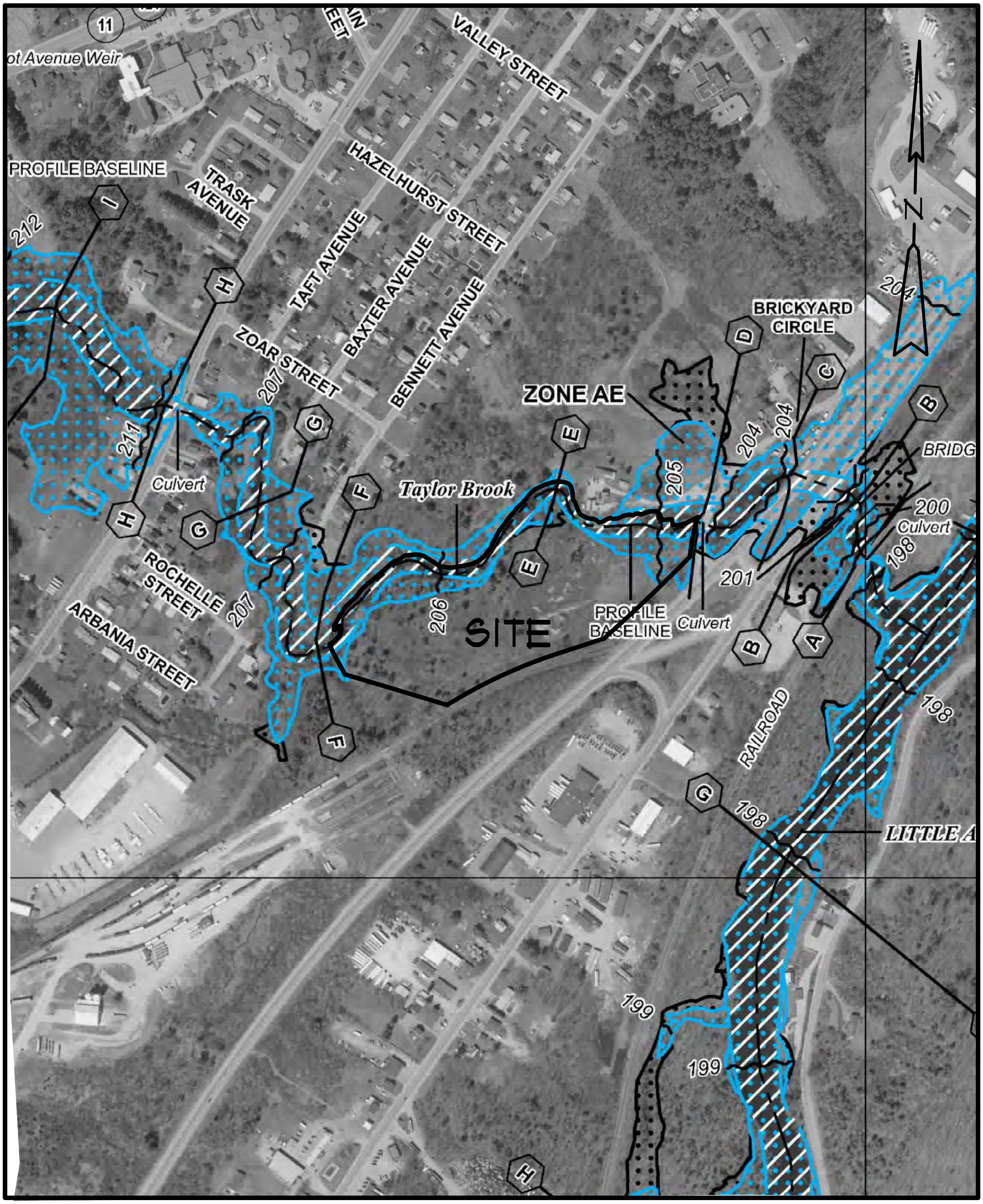
Stoneybrook
Land Use, Inc.


N
T-4.2
T-5.1
GB
SITE
Zoar St
Bennett Av
St
Brickyard Cir
Washington St South
Washington St North
ShorelandZoning
250' Shoreland Zoning
Stream Protection
Auburn Zoning
GB - General Business
GB II - General Business II
ID - Industrial
RR - Rural Residential
SR - Suburban Residential
T-4.2 - Traditional Downtown Neighborhood
T-5.1 - Downtown Traditional Center

ZONING MAP

BRICKYARD COMMONS - BRICKYARD CIRCLE, AUBURN
OWNER: JIG INVESTMENTS, LLC
SCALE: 1" = 300'
DATE OF GRAPHIC: APRIL 14, 2022
SOURCE: CITY OF AUBURN GIS
PUBLICATION DATE: 2021

Stoneybrook
Land Use, Inc.


11
ot Avenue Weir
VALLEY STREET
PROFILE BASELINE
TRASK AVENUE
HAZELHURST STREET
TAFT AVENUE
BAXTER AVENUE
BENNETT AVENUE
ZOAR STREET
212
I
H
G
F
E
D
C
B
A
N
204
BRICKYARD CIRCLE
ZONE AE
207
211
Culvert
Taylor Brook
205
204
204
BRIDG
200
Culvert
198
201
ROCHELLE STREET
ARBANIA STREET
207
206
SITE
PROFILE BASELINE
Culvert
198
RAILROAD
198
LITTLE A
199
199

FLOOD MAP

BRICKYARD COMMONS - BRICKYARD CIRCLE, AUBURN
OWNER: JIG INVESTMENTS, LLC
SCALE: 1" = 500'
DATE OF GRAPHIC: APRIL 14, 2022
SOURCE: FEMA FLOOD INSURANCE RATE MAP
PUBLICATION DATE: JULY 8, 2013

Stoneybrook
Land Use, Inc.

Bk 10865 Pg294 #20111
09-03-2021 @ 02:55p

DLN #1002140160896

MAINE SHORT FORM QUITCLAIM DEED WITH COVENANT

OTIS SOUTH, LLC, a Maine limited liability company of Freeport, Cumberland County, Maine, for consideration paid, hereby grants to **JIG INVESTMENTS, LLC**, a Maine limited liability company with a mailing address of 50 Alfred Plourde Parkway, P O Box 1913, Lewiston, Maine 04240, with **QUITCLAIM COVENANT**, a certain lot or parcel of land situated in **Auburn**, Androscoggin County, Maine, being more particularly described on the attached *Exhibit A*.

MAINE REAL ESTATE
TRANSFER TAX PAID

Being the same premises described in the deed of Port of Auburn, LLC to Otis South, LLC, and dated April 11, 2014, and recorded in the Androscoggin County Registry of Deeds in Book 8896, Page 131.

IN WITNESS whereof, the said Otis South, LLC, has caused this instrument to be signed and sealed this 20 day of September, 2021.

OTIS SOUTH, LLC

By:
Ford S. Reiche, Manager

Witness

STATE OF MAINE
COUNTY OF ANDROSCOGGIN, SS.

Personally appeared before me this 20 day of September, 2021, the above-named Ford S. Reiche, Manager of Otis South, LLC, and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of Otis South, LLC.

~~Notary Public~~/Maine Attorney-at-Law
William K. Skelton, Esq.
Type or Print Name Maine Attorney at Law
My commission expires: Bar No. 8589

DOCS\SKELTON\JIG Investments\Washington-Otis South\MSFQCCDEED.docx

EXHIBIT A

The land in Auburn, County of Androscoggin, State of Maine, described as follows:

Parcel 1
A certain lot or parcel of land situated northwesterly of Washington Street, bounded and described as follows:

Beginning at a point in the northerly side of Taylor Brook, said point also being on the apparent westerly sideline of Old Washington Street;

THENCE, South five degrees fifty minutes West (S 5° 50' W), along said sideline to a point on the southerly bank of Taylor Brook;

THENCE, South five degrees fifty minutes West (S 5° 50' W), continuing along said sideline one hundred seventy-seven (177) feet to a point on the apparent northerly sideline of Washington Street southbound;

THENCE, South sixty-five degrees thirty-seven minutes West (S 65° 37' W), along the apparent northerly sideline of Washington Street southbound three hundred sixteen (316) feet to a point on the northerly sideline of the railroad right-of-way now or formerly of the Grand Trunk Railway;

THENCE in a Westerly direction along said railroad five hundred forty-five (545) feet, more or less, to a point;

THENCE, North fifty-five degrees fifty-one minutes West (N 55° 51" W) three hundred fifty-six (356) feet to a point;

THENCE, North eleven degrees ten minutes zero seconds West (N 11° 10' 00" W) forty-eight (48) feet, more or less, to a point on the southerly side of Taylor Brook;

THENCE across said Brook to its northerly side;

THENCE, in an easterly direction along the northerly side of Taylor Brook to the point of beginning.

Parcel 2
A certain triangular-shape lot or parcel of land bounded and described as follows:

Bounded northerly and westerly by the apparent southerly and easterly sidelines of Old Washington Street and, bounded southeasterly by the apparent northwesterly sideline of what is now known as Brick Yard Circle. Containing less than one-quarter (1/4) of an acre.

Also conveying any rights, title and interest the Grantor may have to the Old Washington Street right-of-way assumed to be discontinued by abandonment, subject to the rights of others, public or private, to make use thereof.

Also conveying any flowage rights related to the dam which was formerly across Taylor Brook and located on the parcel herein described.

Excepting and reserving any flowage rights over and across the parcel herein described related to the dam across the Little Androscoggin River.

Excepting an easement to the Auburn Sewer District, dated April 13, 1972, recorded in the Androscoggin County Registry of Deeds in Book 1141, Page 335.

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

Camden
NATIONAL BANK

February 12, 2025

City of Auburn
60 Court Street
Auburn, ME 04210

RE: JIG Investments, LLC

To Whom It May Concern:

Please be advised that Camden National Bank is the Bank of account for JIG Investments, LLC. JIG Investments, LLC and John Gendron have always maintained a positive relationship with Camden National Bank since 2017. Given the strength of the relationship I can say without hesitation that JIG Investments has the funds and ability to complete this project. All accounts are and have been in good standing since inception.

If you have any questions, please feel free to contact me: Joshua D. Tainter, Vice President, Camden National Bank, 178 Court Street, Suite 3, Auburn, Maine 04210. Telephone: 207-897-8612 or email: jtainter@camdennational.com.

Sincerely,

Joshua D. Tainter
VP, Commercial Banking Officer

Traffic Assessment

Date: May 5, 2022

To: **Mike Gotto, Stoneybrook Land Use, Inc.**

From:
Jacob Sirois
Engineer 1
Barton & Loguidice, LLC.

John Q. Adams, P.E., PTOE
Associate, Senior Transportation Engineer
Barton & Loguidice, LLC.

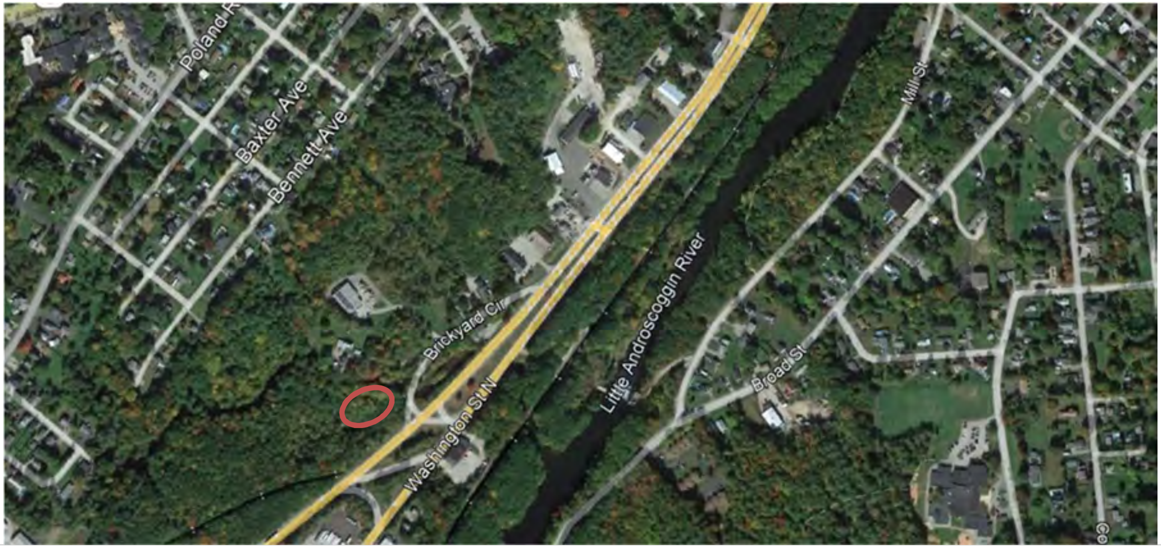
Re: **Proposed Brickyard Circle Development**
96-unit Residential Development, Brickyard Circle, Auburn, Maine

Introduction

JIG Investments, LLC, is proposing development of a 96-unit residential complex on Brickyard Circle in the City of Auburn (refer to Area Plan below for location of proposed project). The proposed site will be accessed via a proposed 26-foot wide driveway connecting to the western side of Brickyard Circle. The proposed development entrance will be located approximately 70-feet away from the intersection of Brickyard Circle and Washington Street South (Route 202).

The purpose of this traffic assessment is to evaluate and measure the level of impact on traffic operations and safety resulting with the development of the proposed project. Site generated trip projections are provided for "key" peak hour time-periods throughout a typical week. Road safety conditions were determined based upon a review of MaineDOT's latest road safety data. Intersection sight distance was field reviewed and measured to ensure safe and acceptable sight distance will be provided at the proposed and existing entrances on Brickyard Circle, and lastly, a left-turn treatment warrant analysis was performed to ensure safe turning operations for vehicles entering the site from Washington Street North.

Area Plan - Proposed Development Site



Site Access

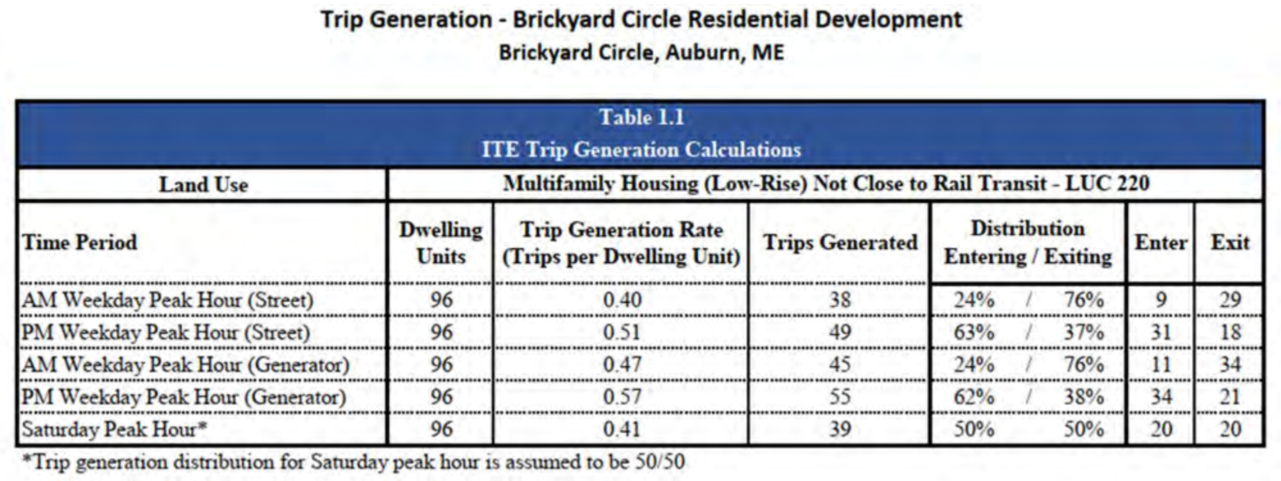
Washington Street in the vicinity of the proposed site is split into a northbound and southbound one-way pair, with each a 2-lane roadway with a median in-between, ranging from approximately 25-feet at the crossover north of the site and approximately 120-feet at the southern entrances Brickyard Circle crossover. Brickyard Crossover at the southern entrance provides one-way access for vehicles exiting out of Brickyard Circle onto Washington Street North.

Given the separated directional movements on Washington Street, vehicles on the northbound approach that want to enter the proposed site will need to enter Washington Street Southbound at the existing crossover approximately 340-feet north of Brickyard Circles northern entrance on Washington Street southbound.

Site Trip Generation

Daily and peak hour trip generation was determined for the proposed project based upon trip tables presented in the eleventh edition of the Institute of Transportation Engineers (ITE) "**TRIP GENERATION**" handbook. The ITE publication provides numerous land use categories and the average volume of trips generated by each category.

Site trip estimates for the Brickyard Circle Residential Development Apartment Project; are based upon LUC #220 – Multifamily Housing (Low-Rise); which is described in the ITE publication as: multi-family housing including apartments, townhouses, and/or condominiums located within the same building with at least three other dwelling units and that have between two or three levels. Calculation of the total number of trips generated per each corresponding time period are summarized below in Table 1.1.



Trip Generation - Brickyard Circle Residential Development
Brickyard Circle, Auburn, ME

Table 1.1
ITE Trip Generation Calculations

Land Use	Multifamily Housing (Low-Rise) Not Close to Rail Transit - LUC 220					
Time Period	**Dwelling Units**	**Trip Generation Rate (Trips per Dwelling Unit)**	**Trips Generated**	**Distribution Entering / Exiting**	**Enter**	**Exit**
AM Weekday Peak Hour (Street)	96	0.40	38	24% / 76%	9	29
PM Weekday Peak Hour (Street)	96	0.51	49	63% / 37%	31	18
AM Weekday Peak Hour (Generator)	96	0.47	45	24% / 76%	11	34
PM Weekday Peak Hour (Generator)	96	0.57	55	62% / 38%	34	21
Saturday Peak Hour*	96	0.41	39	50% 50%	20	20

*Trip generation distribution for Saturday peak hour is assumed to be 50/50

As presented in the preceding table, this development generate a maximum of **45** Weekday AM peak hour trips, **55** Weekday PM peak hour trips and **39** Saturday peak hour trips.

Vehicle Sight Distance

The Maine Department of Transportation's Highway Entrance and Driveway Rules require the following sight distances for a non-mobility roadway:

Sight Distance Standards

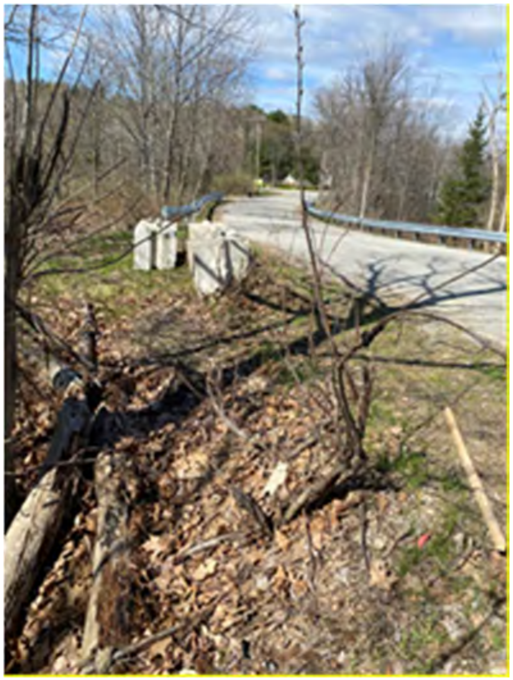
Speed Limit	Sight Distance
25 mph	**200 feet**
30 mph	250 feet
35 mph	305 feet
40 mph	360 feet
45 mph	**425 feet**
50 mph	495 feet

The section of Brickyard Circle fronting the proposed residential development is presently unposted. We assumed that the speed limit is 25mph, which requires an unobstructed sight distance of 200-feet. Washington Street at the southern entrance of Brickyard Circle presently has an official speed limit of 45mph, which requires an unobstructed sight distance of 425-feet for both Washington Street North and South entrances. MaineDOT's Rules and Regulations require sight distance to be measured in accordance with the following procedures: *"Sight distance is measured to and from the point on the centerline of the proposed access that is located 10-feet from the edge of traveled way. The height of the hypothetical person's view is considered to be 3½ feet above the pavement and the height of the object being viewed is considered to be 4¼ feet above the pavement."*

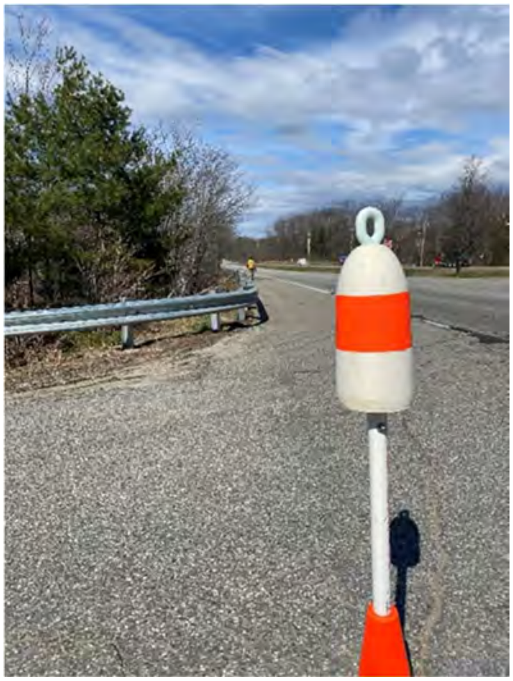
Our field measurements at the proposed site entrance on Brickyard Circle indicate that existing sight distances are in excess of the requirements based on an assumed speed limit of 25mph. Looking left, we measured a sight distance of 350-feet, satisfying the sight distance requirements for a speed limit of up to 35mph. Looking right, there is an unobstructed sight distance to the intersection at Washington Street.

Our field measurements looking left (north) from both the North and South entrance onto Washington Street from Brickyard Circle indicate that existing measurements are in excess of the requirements based on an official speed limit of 45mph. At both of the entrances we measured a sight distance of 690-feet, which is in excess of the required 425-feet sight distance. Below on the next page, we have included pictures of the sight distance measurements we recorded for the site entrance onto Brickyard Circle, and the Brickyard Circle Northbound and Southbound entrances on to Washington Street

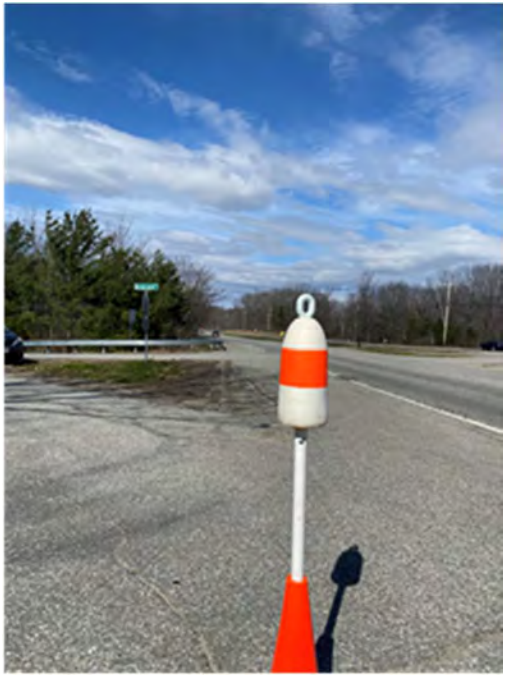
Looking Left out of Site Entrance onto Brickyard Circle



Looking Left out of Washington St NB Entrance



Looking Left out of Washington St SB Entrance



Existing Road Safety Conditions

The Maine Department of Transportation's (MaineDOT) Accident Records Section provided the latest three-year (2019 through 2021) crash data for the section of Route 202 (Washington Street North and South) between and including Sharlaines Crossover and Miami Avenue. The distance is approximately 0.65 miles to the north, and 0.60 miles to the south of the Brickyard Circle entrance.

Figure 1 - 2019 -2021 Traffic Accident Summary

Location	Total Crashes	Critical Rate Factor
1. North Washington Street @ Miami Avenue	3	0.66
2. North Washington Street @ Washington Crossover	1	0.24
3. North Washington Street @ Sharlaines Crossover	2	0.50
4. South Washington Street @ Miami Avenue	2	0.47
5. South Washington Street btw. Miami Avenue and Washington Crossover	6	0.33
6. South Washington Street btw. Washington Crossover and Washington NB Crossover	1	0.23
7. North Washington Street btw. Brickyard Crossover and Sharlaines Crossover	2	0.09
8. South Washington Street btw. Sharlaines Crossover and Markarlyn Street	4	0.32
9. South Washington Street btw. Markarlyn Street and Brickyard Circle	2	0.33
10. South Washington Street btw. Brickyard Circle and RD INV 2752183	3	0.45
11. South Washington Street btw. RD INV 2752183 and Brickyard Circle	1	0.69
12. South Washington Street btw. Washington Crossover and Miami Avenue	1	0.05

The MaineDOT considers any roadway intersection or segment a high crash location (HCLs) if both of the following criteria are met:

- ***8 or more accidents in a three-year period***
- ***A Critical Rate Factor greater than 1.00***

The data presented in the chart shows there are no identified HCLs within the defined study area.

Left-Turn Lane Warrant Assessment

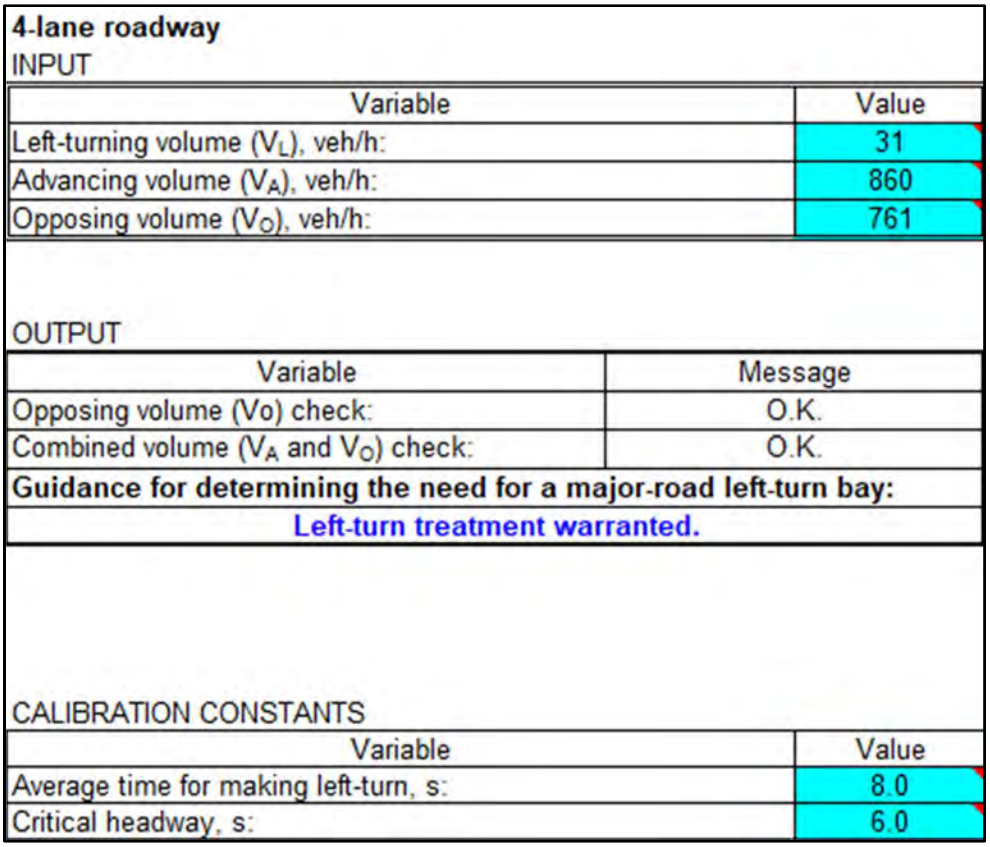
Given the separated directional movements on Washington Street, vehicles on the northbound approach that want to enter the proposed site will need to enter Washington Street Southbound at the existing crossover approximately 340-feet north of Brickyard Circles northern entrance. We have performed an analysis using Maine DOT procedures to determine if a formal left-turn lane is warranted at this crossover intersection. This potential left-turn lane would accommodate existing traffic making this movement as well as new trips for the Brickyard Circle making this movement.

MaineDOT and the National Cooperative Highway Research Program (NCHRP) Report 457 requires the determination of whether a dedicated left-turn lane is warranted for left-turn entry trips based on the "average" traffic conditions. Based on our review of the Maine DOT weekly mean adjustment factors, the "average" traffic conditions happens during the week that the Traffic counts were collected, November 10th 2021, therefore our traffic counts and the "average" traffic condition counts are the same. In addition, we anticipate a project completion date of 2023, so a 2% growth rate has been assumed and included based on an annual rate of 1% for 2022 and 2023. Figure 2 in the Appendix shows the 2023 average condition volumes at the site entrance for both the Washington Street north and south directions.

MaineDOT requires the use of the National Cooperative Highway Research Program (NCHRP) Report 457 for evaluating whether projected volumes warrant a dedicated left-turn for the proposed site. For our analysis, we combined the entering trips generated by the proposed site, as shown in Figure 1 in the Appendix B, and combined them with the 2023 average condition volumes to predict the 2023 post development volumes, shown in Figure 3 in the Appendix, that are used in the left-turn warrant assessment.

The analysis shows that the proposed project will generate 18 left-turns in the PM peak hour and along with the 13 left-turns generated by the existing Ness Oil during the PM peak hour. This analysis indicates that a left-turn treatment solution is warranted by the NCHRP Report 457. The NCHRP Report 457 analysis is summarized below in Chart 1. This is primarily due to the existing high traffic volumes on Washington Street. We also feel the higher traffic speeds on Washington Street contribute to the need for a left-turn treatment.

Chart 1 - NCHRP Report 457 Left-Turn Warrant Analysis – PM Peak Hour



4-lane roadway

INPUT

Variable	Value
Left-turning volume (V_L), veh/h:	31
Advancing volume (V_A), veh/h:	860
Opposing volume (V_O), veh/h:	761

OUTPUT

Variable	Message
Opposing volume (Vo) check:	O.K.
Combined volume (V_A and V_O) check:	O.K.

Guidance for determining the need for a major-road left-turn bay:

Left-turn treatment warranted.

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	8.0
Critical headway, s:	6.0

We feel some discussion with City staff should be held to decide how best to provide left-turn treatment and the optimal location for the left-turn treatment. We have considered a location at the existing cross over so that we do not create another curb cut in the median on Washington Street, however, because of the width of the median at this location (approx. 25-feet) a left-turn lane may create more of a U-turn type of movement rather than a left-turn movement. Another option would be to create a new curb cut and left-turn lane on Washington Street northbound opposite and across from the existing north end of Brickyard Circle. This would allow the movement to be a more typical left-turn movement. In addition, due to the width of the median at this location (approx. 40-feet) the turning vehicle has enough width to be better oriented to cross Washington Street to enter the north end of Brickyard Circle.

At this point, we are making an initial preliminary recommendation of an 11-ft wide, 100-ft left-turn lane, with a 165-ft bay taper (15:1 based on posted speed of 45mph). However, it is recommended that we discuss the location and details of this potential left-turn treatment with City staff, and based on that meeting we can quickly prepare a concept plan solution.

Summary

1. The expected trip generation for the proposed development is estimated to be a total of 45 trips during the weekday AM peak hour and 55 trips during the weekday PM. Overall, the project will be a low volume trip generator and will be well below the minimum MaineDOT threshold of 100 new peak hour trips ends that would require a Traffic Movement Permit.

2. A review of Maine DOT Crash data available for the latest three-year period (2019 – 2021) for the section of Route 202 (Washington Street North and South) between and including Sharlaines Crossover and Miami Avenue for a distance of approximately 1.25 miles. Our review indicates that there are no high crash locations in the study area.

3. Vehicle sight distance field measurements looking left of both the proposed site entrance and existing southern entrances of Brickyard Circle indicate existing sight distances are in excess of the requirements based on an assumed speed limit of 25mph and official speed limit of 45mph. Looking left of the proposed site entrance we measured a sight distance of 350-feet. Looking left of both southern existing entrances on Brickyard Circle we measured sight distances of 690-feet.

4. The left–turn analysis indicates that a left-turn lane treatment is warranted to accommodate left-turns from Washington Street Northbound. The analysis is based on Maine DOT procedures using the NCHRP Report 457. We feel some discussion with City staff should be held to decide how best to provide left-turn treatment and the optimal location for the left-turn treatment. We have considered a location at the existing cross over so that we do not create another curb cut in the median on Washington Street, however, because of the width of the median at this location (approx. 25-feet) a left-turn lane may create more of a U-turn type of movement rather than a left-turn movement. Another option would be to create a new curb cut and left-turn lane on Washington Street northbound opposite and across from the existing north end of Brickyard Circle. This would allow the movement to be a more typical left-turn movement. In addition, due to the width of the median at this location (approx. 40-feet) the turning vehicle has enough width to be better oriented to cross Washington Street to enter the north end of Brickyard Circle.

   At this point, we are making an initial preliminary recommendation of an 11-ft wide, 100-ft left-turn lane, with a 165-ft bay taper (15:1 based on posted speed of 45mph). However, it is recommended that we discuss the location and details of this potential left-turn treatment with City staff, and based on that meeting we can quickly prepare a concept plan.

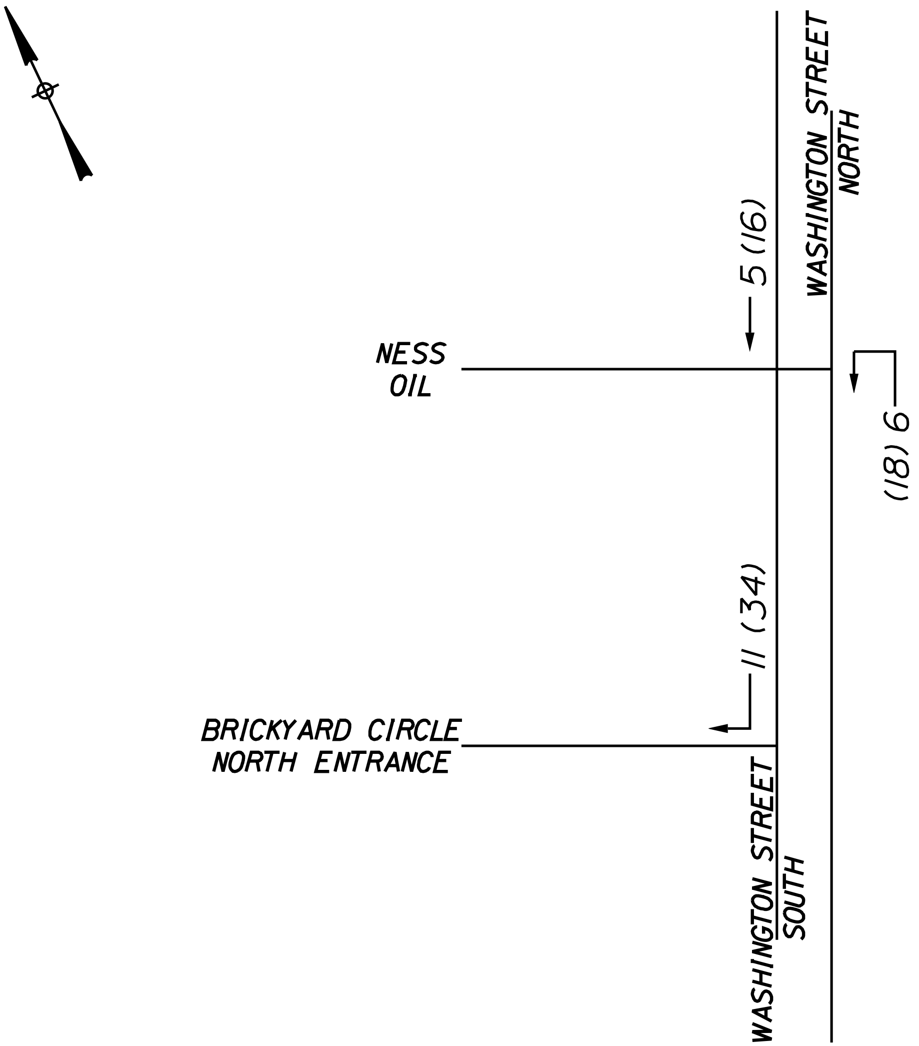
5. With the recommendations of this traffic assessment, it is our professional opinion that the proposed Brickyard Circle Residential development should not have any significant impact to traffic operations and safety on the area roadway network.

STATE OF MAINE
JOHN
QUENTIN
ADAMS
No. 11083
LICENSED
PROFESSIONAL ENGINEER

John Q. Adams, PE, PTOE, Date: 04/05/2022

APPENDIX

1. Traffic Figures (1-3)
2. Maine DOT Crash Data

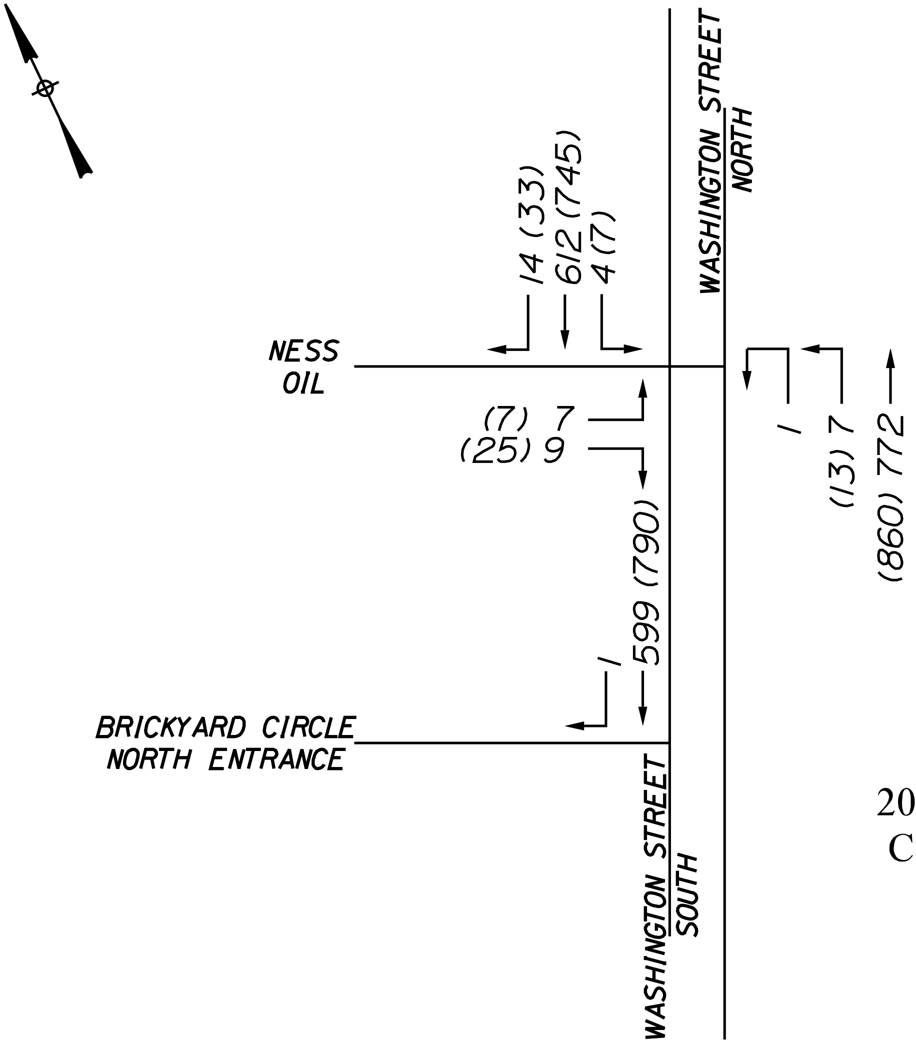

WASHINGTON STREET
NORTH
5 (16)
NESS
OIL
9 (18)
11 (34)
BRICKYARD CIRCLE
NORTH ENTRANCE
WASHINGTON STREET
SOUTH

SITE TRIP ASSIGNMENT
AT SITE ENTRANCE
AM & PM PEAK HOURS
FIGURE 1

LEGEND
XX = AM PEAK HOUR TRIPS
(XX) = PM PEAK HOUR TRIPS

BRICKYARD CIRCLE
RESIDENTIAL DEVELOPMENT
AUBURN, MAINE
DATE: MAY, 2022

Barton
&Loguidice

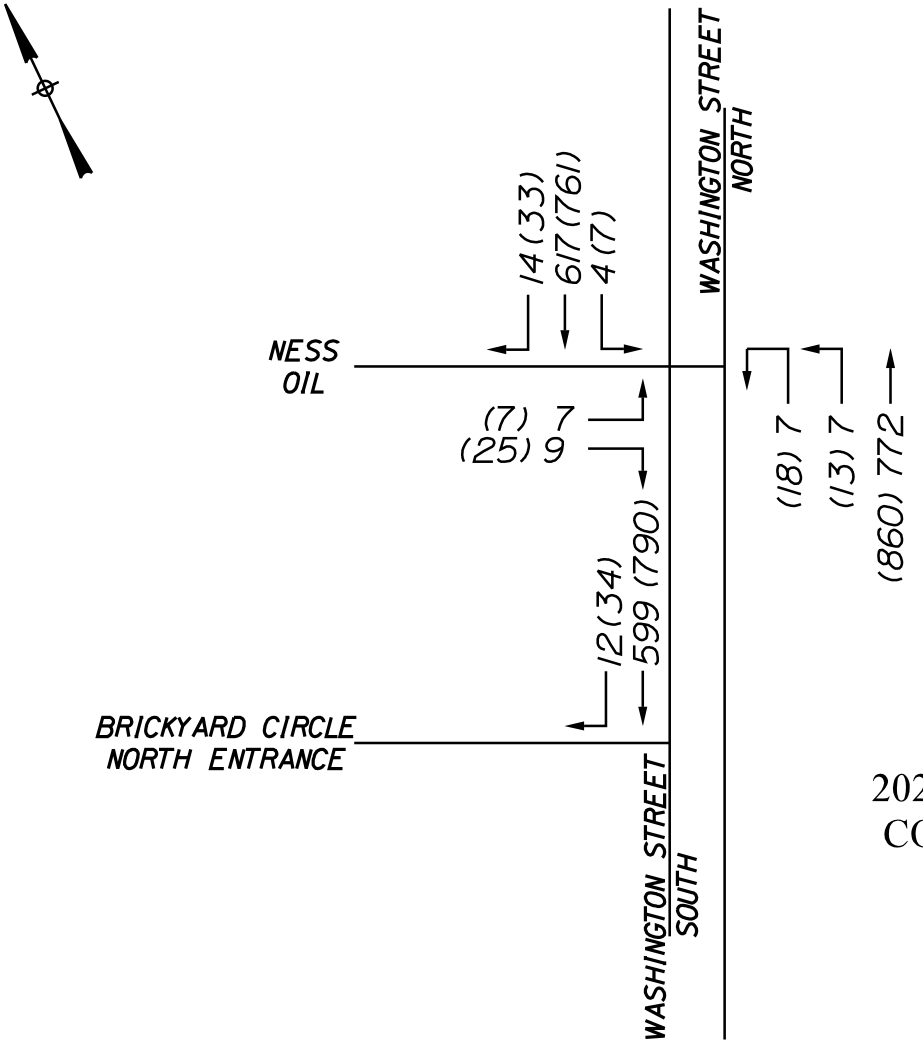

WASHINGTON STREET NORTH
14 (33)
612 (745)
4 (7)
NESS OIL
(7) 7
(25) 9
1
(13) 7
(860) 772
599 (790)
1
BRICKYARD CIRCLE NORTH ENTRANCE
WASHINGTON STREET SOUTH

2023 POST DEVELOPMENT AVERAGE CONDITION VOLUME ADJUSTMENT AM & PM PEAK HOURS
FIGURE 2

LEGEND
XX = AM PEAK HOUR TRIPS
(XX) = PM PEAK HOUR TRIPS

BRICKYARD CIRCLE RESIDENTIAL DEVELOPMENT
AUBURN, MAINE
DATE: MAY, 2022

Barton & Loguidice


WASHINGTON STREET NORTH
14 (33)
617 (761)
4 (7)
NESS OIL
(7) 7
(25) 9
(18) 7
(13) 7
(860) 772
12 (34)
599 (790)
BRICKYARD CIRCLE NORTH ENTRANCE
WASHINGTON STREET SOUTH

2023 POST DEVELOPMENT AVERAGE CONDITION VOLUME ADJUSTMENT & SITE TRIP ASSIGNMENT AM & PM PEAK HOURS

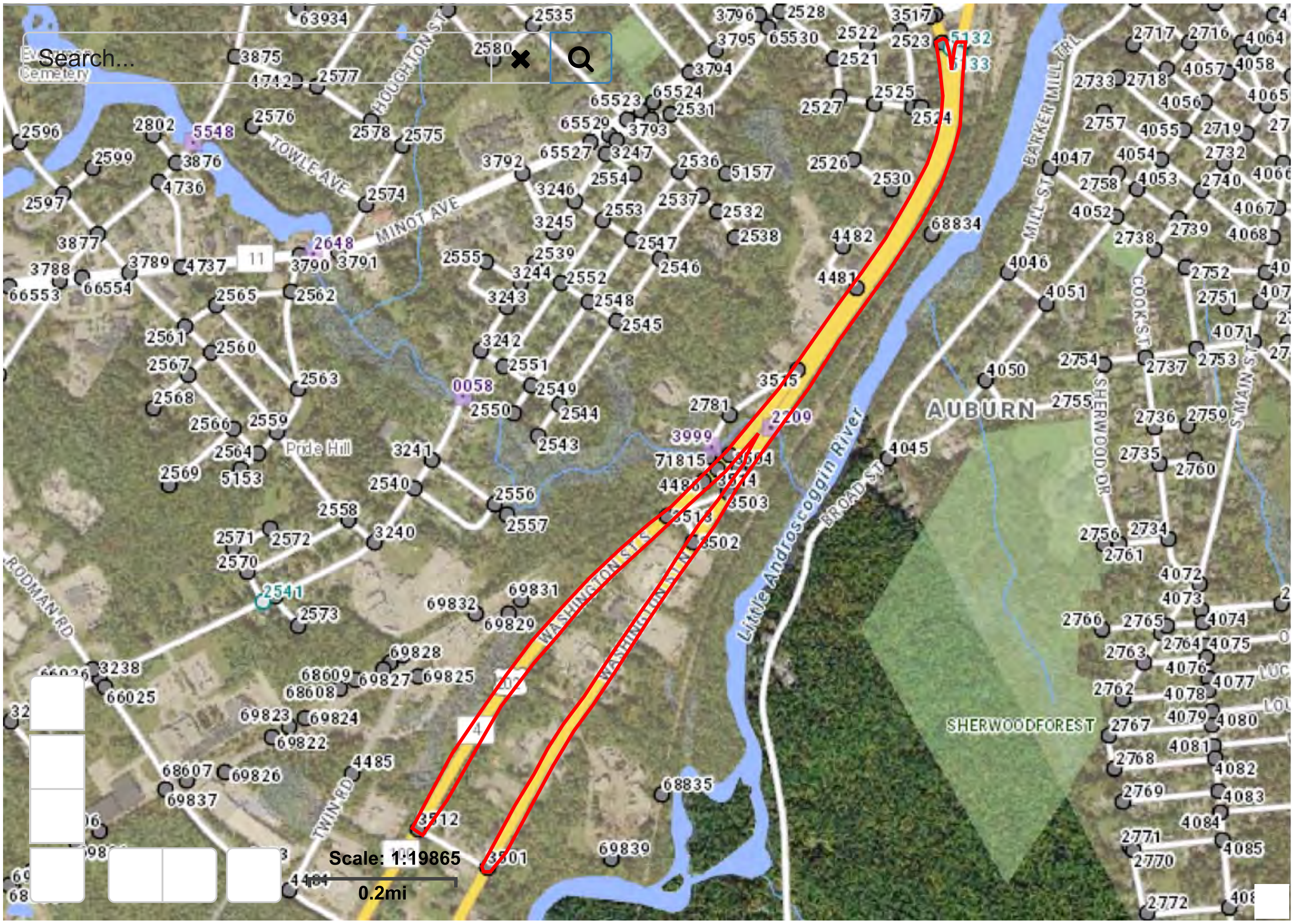
FIGURE 3

LEGEND
XX = AM PEAK HOUR TRIPS
(XX) = PM PEAK HOUR TRIPS

BRICKYARD CIRCLE RESIDENTIAL DEVELOPMENT
AUBURN, MAINE
DATE: MAY, 2022

Barton & Loguidice

2. MAINE DOT CRASH DATA


Search...
Scale: 1:19865
0.2mi
AUBURN
Little Androscoggin River
SHERWOOD FOREST
WASHINGTON ST S
WASHINGTON ST N
MINOT AVE
TOWLE AVE
HOUGHTON ST
RODMAN RD
TWIN RD
BROAD ST
MILL ST
BARKER MILL TRL
COOK ST
SHERWOOD DR
S MAIN ST
Pride Hill
11
4
202
5132
5133
3517
4482
4481
68834
3515
2209
3999
71815
3504
4486
3514
3503
2513
3502
3512
3501
0058
5548
2648
2541

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑Crash Summary I ☐Section Detail ☑Crash Summary II ☐1320 Public ☐1320 Private ☐1320 Summary

REPORT DESCRIPTION

Auburn
Rte. 4/100/202/Washington St. NB/SB from Washington XVR to Sharlaines XVR

REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: 0202X	Start Node: 3501	Start Offset: 0	☐Exclude First Node
	End Node: 3505	End Offset: 0	☐Exclude Last Node
Route: 0202S	Start Node: 3516	Start Offset: 0	☐Exclude First Node
	End Node: 3512	End Offset: 0	☐Exclude Last Node
Route: 3200840	Start Node: 3501	Start Offset: 0	☑Exclude First Node
	End Node: 3512	End Offset: 0	☑Exclude Last Node
Route: 01A0451	Start Node: 3502	Start Offset: 0	☑Exclude First Node
	End Node: 3513	End Offset: 0	☑Exclude Last Node
Route: 01B0452	Start Node: 3503	Start Offset: 0	☑Exclude First Node
	End Node: 3513	End Offset: 0	☑Exclude Last Node
Route: 01D0453	Start Node: 3504	Start Offset: 0	☑Exclude First Node
	End Node: 3514	End Offset: 0	☑Exclude Last Node
Route: 3201847	Start Node: 64937	Start Offset: 0	☑Exclude First Node
	End Node: 64938	End Offset: 0	☑Exclude Last Node
Route: 01C1274	Start Node: 3505	Start Offset: 0	☑Exclude First Node
	End Node: 3516	End Offset: 0	☑Exclude Last Node
Route: 01U0002	Start Node: 5132	Start Offset: 0	☑Exclude First Node
	End Node: 5133	End Offset: 0	☑Exclude Last Node

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes					Percent	Annual M	Crash Rate	Critical Rate	CRF
					K	A	B	C	PD	Injury	Ent-Veh			
3501	0202X - 70.53	Int of MIAMI AV N WASHINGTON ST	2	3	0	0	0	1	2	33.3	4.348	0.23 Statewide Crash Rate:	0.35 0.13	0.00
3502	0202X - 71.05	Int of N WASHINGTON ST WASHINGTON XVR	2	1	0	0	0	1	0	100.0	3.582	0.09 Statewide Crash Rate:	0.37 0.13	0.00
3503	0202X - 71.13	Int of N WASHINGTON ST WASH NB CR OVR	2	0	0	0	0	0	0	0.0	3.476	0.00 Statewide Crash Rate:	0.37 0.13	0.00
3504	0202X - 71.17	Int of BRICKYARD XVR N WASHINGTON ST	2	0	0	0	0	0	0	0.0	3.561	0.00 Statewide Crash Rate:	0.37 0.13	0.00
A5133	0202X - 71.81	Int of N WASHINGTON ST SHARLAINES XVR	2	0	0	0	0	0	0	0.0	0.000	0.00 Statewide Crash Rate:	0.00 0.13	0.00
P3505	0202X - 71.82	Int of N WASHINGTON ST SHARLAINES XVR	2	2	0	0	0	0	2	0.0	3.687	0.18 Statewide Crash Rate:	0.36 0.13	0.00
3516	0202S - 7.44	Int of S WASHINGTON ST SHARLAINES XVR	2	0	0	0	0	0	0	0.0	3.360	0.00 Statewide Crash Rate:	0.37 0.13	0.00
4481	0202S - 7.80	Int of MARKALYN ST S WASHINGTON ST	2	0	0	0	0	0	0	0.0	3.246	0.00 Statewide Crash Rate:	0.38 0.13	0.00
3515	0202S - 7.94	Int of BRICKYARD CIR S WASHINGTON ST	2	0	0	0	0	0	0	0.0	3.163	0.00 Statewide Crash Rate:	0.38 0.13	0.00
64937	0202S - 8.09	Int of RD INV 2752183 S WASHINGTON ST	2	0	0	0	0	0	0	0.0	3.342	0.00 Statewide Crash Rate:	0.37 0.13	0.00
3514	0202S - 8.11	Int of BRICKYARD CIR BRICKYARD XVR S WASHINGTON	2	0	0	0	0	0	0	0.0	3.345	0.00 Statewide Crash Rate:	0.37 0.13	0.00
4486	0202S - 8.14	Int of BRICKYARD CIR S WASHINGTON ST	2	0	0	0	0	0	0	0.0	3.387	0.00 Statewide Crash Rate:	0.37 0.13	0.00
3513	0202S - 8.21	Int of S WASHINGTON ST WASH NB CR OVR WASHINGTC	2	0	0	0	0	0	0	0.0	3.499	0.00 Statewide Crash Rate:	0.37 0.13	0.00
3512	0202S - 8.75	Int of MIAMI AV S WASHINGTON ST	2	2	0	0	0	0	2	0.0	3.814	0.17 Statewide Crash Rate:	0.36 0.13	0.00
64938	01D0453 - 0.01	Int of BRICKYARD XVR RD INV 2752183	2	0	0	0	0	0	0	0.0	0.094	0.00 Statewide Crash Rate:	0.10 0.13	0.00
A5132	01C1274 - 0.02	Non Int SHARLAINES XVR	2	0	0	0	0	0	0	0.0	0.000	0.00 Statewide Crash Rate:	0.00 0.13	0.00
Study Years: 3.00		NODE TOTALS:		8	0	0	0	2	6	25.0	45.904	0.06	0.21	0.28

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
3501 Int of MIAMI AV N WASHINGTON ST	3502	3123810	0 - 0.52	0202X - 70.53 US 202	0.52	2	6	0	0	0	0	6	0.0	0.01863	107.38 Statewide Crash Rate: 187.10	327.22	0.00
3502 Int of N WASHINGTON ST WASHINGTON XVR	3503	175830	0 - 0.08	0202X - 71.05 US 202	0.08	2	1	0	0	0	0	1	0.0	0.00278	119.87 Statewide Crash Rate: 187.10	512.95	0.00
3503 Int of N WASHINGTON ST WASH NB CR OVR	3504	3120492	0 - 0.04	0202X - 71.13 US 202	0.04	2	0	0	0	0	0	0	0.0	0.00139	0.00 Statewide Crash Rate: 187.10	613.19	0.00
3504 Int of BRICKYARD XVR N WASHINGTON ST	5133	3103913	0 - 0.64	0202X - 71.17 US 202	0.64	2	2	0	0	0	0	1	0.0	0.02279	29.25 Statewide Crash Rate: 187.10	314.53	0.00
3505 Int of N WASHINGTON ST SHARLAINES XVR	5133	3123698	0 - 0.01	0202X - 71.81 US 202	0.01	2	0	0	0	0	0	0	0.0	0.00036	0.00 Statewide Crash Rate: 187.10	796.88	0.00
3516 Int of S WASHINGTON ST SHARLAINES XVR	4481	3103921	0 - 0.36	0202S - 7.44 US 202 SB	0.36	2	4	0	0	0	2	2	50.0	0.01165	114.49 Statewide Crash Rate: 187.10	361.30	0.00
3515 Int of BRICKYARD CIR S WASHINGTON ST	4481	3117771	0 - 0.14	0202S - 7.80 US 202 SB	0.14	2	2	0	0	1	0	1	50.0	0.00438	152.37 Statewide Crash Rate: 187.10	456.56	0.00
64937 Int of RD INV 2752183 S WASHINGTON ST	3515	3116367	0 - 0.15	0202S - 7.94 US 202 SB	0.15	2	3	0	0	0	0	3	0.0	0.00501	199.48 Statewide Crash Rate: 187.10	441.18	0.00
3514 Int of BRICKYARD CIR BRICKYARD XVR S WASHINGTON ST	64937	3130292	0 - 0.02	0202S - 8.09 US 202 SB	0.02	2	1	0	0	0	0	1	0.0	0.00066	504.39 Statewide Crash Rate: 187.10	726.25	0.00
3514 Int of BRICKYARD CIR BRICKYARD XVR S WASHINGTON ST	4486	3103920	0 - 0.03	0202S - 8.11 US 202 SB	0.03	2	0	0	0	0	0	0	0.0	0.00099	0.00 Statewide Crash Rate: 187.10	665.10	0.00
3513 Int of S WASHINGTON ST WASH NB CR OVR WASHINGTON XVR	4486	3103919	0 - 0.07	0202S - 8.14 US 202 SB	0.07	2	0	0	0	0	0	0	0.0	0.00237	0.00 Statewide Crash Rate: 187.10	534.70	0.00
3512 Int of MIAMI AV S WASHINGTON ST	3513	3129171	0 - 0.54	0202S - 8.21 US 202 SB	0.54	2	1	0	0	0	0	1	0.0	0.01889	17.64 Statewide Crash Rate: 187.10	326.28	0.00
3501 Int of MIAMI AV N WASHINGTON ST	3512	3119793	0 - 0.11	3200840 - 0 RD INV 3200840	0.11	2	0	0	0	0	0	0	0.0	0.00069	0.00 Statewide Crash Rate: 187.10	719.55	0.00
3502 Int of N WASHINGTON ST WASHINGTON XVR	3513	3117455	0 - 0.06	01A0451 - 0 RD INV 01 A0451	0.06	2	0	0	0	0	0	0	0.0	0.00006	0.00 Statewide Crash Rate: 187.10	120.18	0.00
3503 Int of N WASHINGTON ST WASH NB CR OVR	3513	3117456	0 - 0.09	01B0452 - 0 RD INV 01 B0452	0.09	2	0	0	0	0	0	0	0.0	0.00001	0.00 Statewide Crash Rate: 187.10	-15307.23	0.00
3504 Int of BRICKYARD XVR N WASHINGTON ST	64938	3140513	0 - 0.01	01D0453 - 0 RD INV 01 D0453	0.01	2	0	0	0	0	0	0	0.0	0.00001	0.00 Statewide Crash Rate: 187.10	-10938.10	0.00
64938 Int of BRICKYARD XVR RD INV 2752183	3514	3140512	0 - 0.03	01D0453 - 0.01 RD INV 01 D0453	0.03	2	0	0	0	0	0	0	0.0	0.00002	0.00 Statewide Crash Rate: 187.10	-4742.49	0.00
64937 Int of RD INV 2752183 S WASHINGTON ST	64938	3116369	0 - 0.03	3201847 - 0 RD INV 3201847	0.03	2	0	0	0	0	0	0	0.0	0.00001	0.00 Statewide Crash Rate: 187.10	-8532.74	0.00
3505 Int of N WASHINGTON ST SHARLAINES XVR	5132	3117457	0 - 0.02	01C1274 - 0 RD INV 01 C1274	0.02	2	0	0	0	0	0	0	0.0	0.00002	0.00 Statewide Crash Rate: 187.10	-2867.86	0.00

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
3516	5132	3117458	0 - 0.01	01C1274 - 0.02	0.01	2	0	0	0	0	0	0	0.0	0.00001	0.00	-7375.98	0.00
Int of S WASHINGTON ST SHARLAINES XVR				RD INV 01 C1274											Statewide Crash Rate: 187.10		
5132	5133	3131386	0 - 0.01	01U0002 - 0	0.01	2	0	0	0	0	0	0	0.0	0.00000	0.00	-132579.06	0.00
Non Int SHARLAINES XVR				RD INV 01 U0002											Statewide Crash Rate: 187.10		
Study Years: 3.00				Section Totals:	2.97		20	0	0	1	2	16	15.0	0.09073	73.48	252.80	0.29
				Grand Totals:	2.97		28	0	0	1	4	22	17.9	0.09073	102.87	358.67	0.29

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
3501	3502	3123810	0 - 0.52	0202X - 70.53	6	0	0	0	0	6	2020-26451	11/01/2020	70.57	PD
											2020-31917	12/18/2020	70.72	PD
											2021-14929	06/16/2021	70.74	PD
											2021-5915	03/05/2021	70.81	PD
											2021-33508	11/25/2021	70.84	PD
											2020-22262	09/18/2020	70.95	PD
3502	3503	175830	0 - 0.08	0202X - 71.05	1	0	0	0	0	1	2019-54589	06/12/2019	71.07	PD
3503	3504	3120492	0 - 0.04	0202X - 71.13	0	0	0	0	0	0				
3504	5133	3103913	0 - 0.64	0202X - 71.17	2	0	0	0	0	1	2021-36616	12/22/2021	71.30	PD
											2019-49330	04/12/2019	71.56	
3505	5133	3123698	0 - 0.01	0202X - 71.81	0	0	0	0	0	0				
3516	4481	3103921	0 - 0.36	0202S - 7.44	4	0	0	0	2	2	2019-76167	12/17/2019	7.50	PD
											2020-9672	04/09/2020	7.60	C
											2021-4118	02/17/2021	7.70	C
											2020-25070	10/19/2020	7.74	PD
3515	4481	3117771	0 - 0.14	0202S - 7.80	2	0	0	1	0	1	2021-13393	06/02/2021	7.84	PD
											2019-42673	02/18/2019	7.88	B
64937	3515	3116367	0 - 0.15	0202S - 7.94	3	0	0	0	0	3	2019-45109	03/10/2019	8.03	PD
											2020-30254	12/05/2020	8.04	PD
											2019-43094	02/21/2019	8.07	PD
3514	64937	3130292	0 - 0.02	0202S - 8.09	1	0	0	0	0	1	2019-43126	02/21/2019	8.10	PD
3514	4486	3103920	0 - 0.03	0202S - 8.11	0	0	0	0	0	0				
3513	4486	3103919	0 - 0.07	0202S - 8.14	0	0	0	0	0	0				
3512	3513	3129171	0 - 0.54	0202S - 8.21	1	0	0	0	0	1	2021-12430	05/24/2021	8.25	PD
3501	3512	3119793	0 - 0.11	3200840 - 0	0	0	0	0	0	0				
3502	3513	3117455	0 - 0.06	01A0451 - 0	0	0	0	0	0	0				
3503	3513	3117456	0 - 0.09	01B0452 - 0	0	0	0	0	0	0				
3504	64938	3140513	0 - 0.01	01D0453 - 0	0	0	0	0	0	0				
64938	3514	3140512	0 - 0.03	01D0453 - 0.01	0	0	0	0	0	0				
64937	64938	3116369	0 - 0.03	3201847 - 0	0	0	0	0	0	0				
3505	5132	3117457	0 - 0.02	01C1274 - 0	0	0	0	0	0	0				
3516	5132	3117458	0 - 0.01	01C1274 - 0.02	0	0	0	0	0	0				
5132	5133	3131386	0 - 0.01	01U0002 - 0	0	0	0	0	0	0				
				Totals:	20	0	0	1	2	16				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM											Hour of Day										PM				
Day Of Week	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	Un	Tot
SUNDAY	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	4
MONDAY	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	3
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
WEDNESDAY	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	1	0	0	0	0	7
THURSDAY	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5
FRIDAY	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	6
SATURDAY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Totals	0	1	0	0	0	0	0	2	5	1	1	2	5	0	0	3	2	0	0	1	1	1	1	2	0	28

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	23	23-Bicyclist	0
2-(Sport) Utility Vehicle	11	24-Witness	2
3-Passenger Van	1	25-Other	0
4-Cargo Van (10K lbs or Less)	2	26-Construction	0
5-Pickup	5	27-Farm Vehicle	0
6-Motor Home	1	Total	49
7-School Bus	0		
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	1		
17-Medium/Heavy Trucks (More than 10,000 lbs)	3		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	3	15	0	0	0	0	18
Ran Off Roadway	1	0	0	0	0	0	1
Failed to Yield Right-of-Way	4	2	0	0	0	0	6
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	6	0	0	0	0	0	6
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	4	0	0	0	0	0	4
Failed to Keep in Proper Lane	3	0	0	0	0	0	3
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	2	0	0	0	0	0	2
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	1	0	0	0	0	0	1
Over-Correcting/Over-Steering	1	0	0	0	0	0	1
Other Contributing Action	1	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0
Total	26	17	0	0	0	0	43

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	26	17	0	0	0	0	43
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	26	17	0	0	0	0	43

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	5	0	0	0	0	5
20-24	6	0	0	0	0	6
25-29	8	0	0	0	0	8
30-39	9	0	0	0	0	9
40-49	5	0	0	0	0	5
50-59	6	0	0	0	0	6
60-69	2	0	0	0	0	2
70-79	1	0	0	0	0	1
80-Over	2	0	0	0	0	2
Unknown	3	0	0	0	0	3
Total	47	0	0	0	0	47

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total
1-Overturn / Rollover	1
2-Fire / Explosion	0
3-Immersion	0
4-Jackknife	0
5-Cargo / Equipment Loss Or Shift	0
6-Fell / Jumped from Motor Vehicle	0
7-Thrown or Falling Object	0
8-Other Non-Collision	0
9-Pedestrian	0
10-Pedalcycle	0
11-Railway Vehicle - Train, Engine	0
12-Animal	1
13-Motor Vehicle in Transport	35
14-Parked Motor Vehicle	3
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0
16-Work Zone / Maintenance Equipment	0
17-Other Non-Fixed Object	1
18-Impact Attenuator / Crash Cushion	0
19-Bridge Overhead Structure	0
20-Bridge Pier or Support	0
21-Bridge Rail	0
22-Cable Barrier	0
23-Culvert	0
24-Curb	0
25-Ditch	0
26-Embankment	2
27-Guardrail Face	2
28-Guardrail End	0
29-Concrete Traffic Barrier	0
30-Other Traffic Barrier	0
31-Tree (Standing)	0
32-Utility Pole / Light Support	2
33-Traffic Sign Support	0
34-Traffic Signal Support	0
35-Fence	0
36-Mailbox	0
37-Other Post, Pole, or Support	0
38-Other Fixed Object (wall, building, tunnel, etc.)	0
39-Unknown	0
40-Gate or Cable	0
41-Pressure Ridge	0
Total	47

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	0
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	0
5-Stop Signs - Other	1
6-Yield Sign	1
7-Curve Warning Sign	0
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	26
14-Other	0
Total	28

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	1	1
C	4	8
PD	22	0
Total	27	9

Road Character

Road Grade	Total
1-Level	18
2-On Grade	6
3-Top of Hill	1
4-Bottom of Hill	3
5-Other	0
Total	28

Light

Light Condition	Total
1-Daylight	21
2-Dawn	1
3-Dusk	1
4-Dark - Lighted	2
5-Dark - Not Lighted	3
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	28

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2019	2020	2021	Total
JANUARY	0	1	0	1
FEBRUARY	3	0	1	4
MARCH	2	0	1	3
APRIL	1	1	0	2
MAY	0	0	2	2
JUNE	2	0	2	4
JULY	0	0	0	0
AUGUST	1	1	0	2
SEPTEMBER	0	2	0	2
OCTOBER	0	1	0	1
NOVEMBER	0	1	1	2
DECEMBER	1	2	2	5
Total	**10**	**9**	**9**	**28**

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	9	1	6	0	0	2	0	0	0	0	0	0	0	0	18
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	7	0	1	0	0	0	0	0	0	0	0	0	0	0	8
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	17	1	8	0	0	2	0	0	0	0	0	0	0	0	28

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	0	1	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	1	1
Daylight	12	0	0	0	0	0	0	1	0	0	0	13
Dusk	1	0	0	0	0	0	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	1	0	0	0	0	0	0	0	0	0	1	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	1	0	0	0	0	0	0	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	1	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	5	0	0	0	5
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15	2	0	0	0	0	0	7	0	0	4	28

STONEYBROOK LAND USE

BRICKYARD CIRCLE LEFT TURN LANE AND PAVEMENT REMOVAL

ROUTE 100/202 AT BRICKYARD CIRCLE
AUBURN, ANDROSCOGGIN COUNTY, MAINE

PLAN LEGEND

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed
Culvert-Existing
Culvert Proposed
Curbing Existing Proposed
Type 1
Type 3
Type 5
Outline of Bodies of Water
Exposed Bedrock
Buildings
Trees Conifer Deciduous
Tree Line
Clearing Limit Line
Railroad

Boring HB-XXX-###
Pavement Core ● PC-#
Test Pit TP-XXX-###

Catch Basins Existing ■ Proposed
Manholes Existing ● Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utility Poles Existing ● Proposed
Fire Hydrants Existing Proposed
Existing Water Line
Existing San. Sewer
Existing San. Sewer Manhole ◎
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other
Centerline-Existing
Centerline-Proposed 10+00
Travelway-Existing
Travelway-Proposed

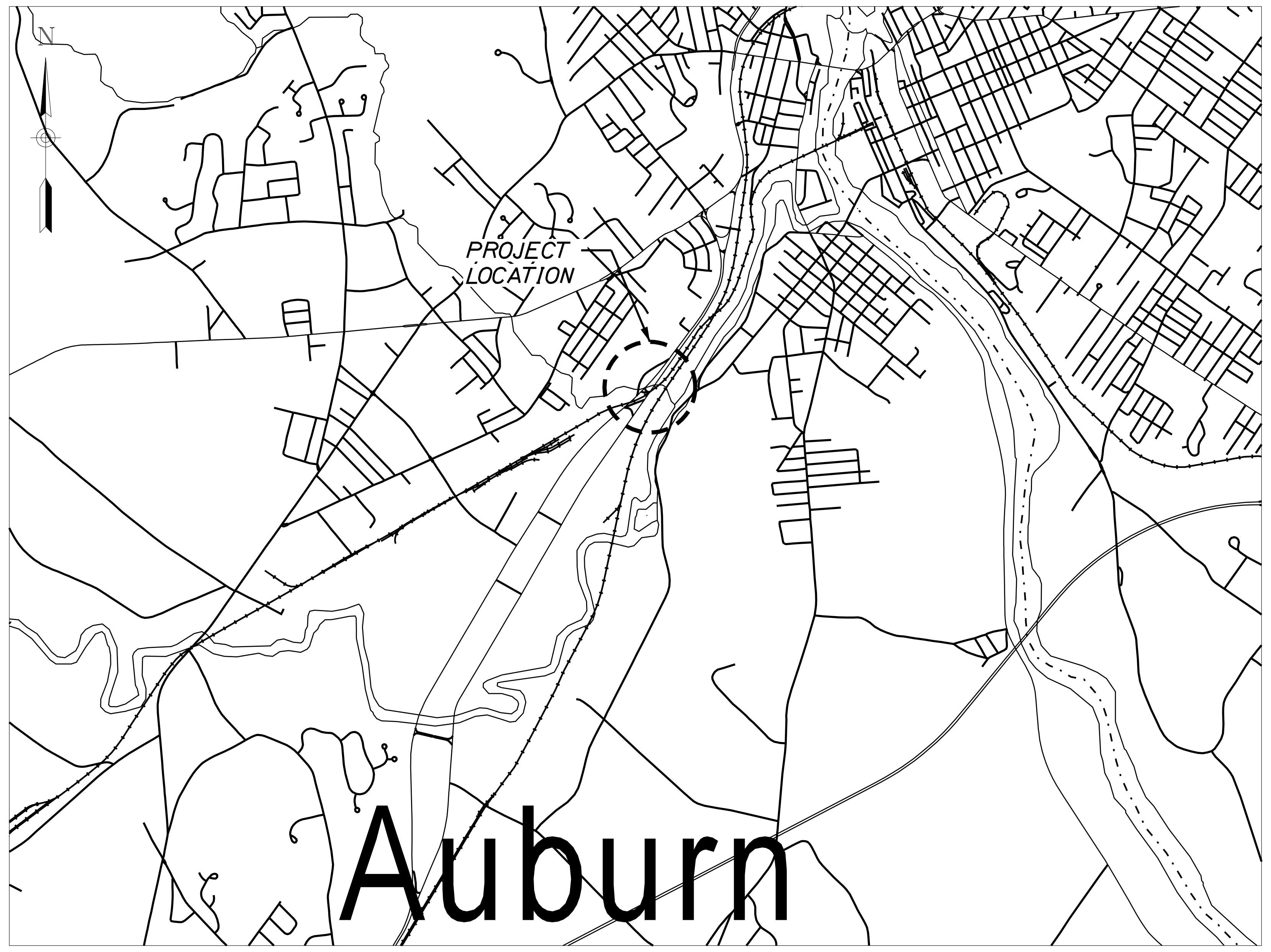
Probe P-#.#X
#.# = Depth
X = W (Weathered Rock)
R (Refusal)
NR (No Refusal)

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Typical Sections	2
Estimated Quantities	3
General Notes	4
Plan - Pavement Removal	5
Plan/Profile - Left Turn Lane	6
Striping/Signing Plan	7-8
Cross Sections	9-13

MAY 2023

FINAL DESIGN



PROJECT LOCATION MAP
1" = 0.5 mile

Barton & Loguidice

SCOPE OF WORK: WIDEN ROUTE 100/202 TO INCLUDE A 100' LEFT TURN LANE WITH A 180' BAY TAPER AND 265' DECELERATION LENGTH. REMOVE TWO PAVED AREAS FOR REVERSING DIRECTION AND REVISE SIGNING.

PREPARED AND APPROVED BY

JOHN QUENTIN ADAMS
No. 11083

JOHN Q. ADAMS, P.E.
MAINE
P.E. NUMBER
11083

DATE SIGNED
05/09/23

Sheet Number
1

Project Number
2453.008.001

ACHANDLER
...\Plot\pentable.tbl
...\pltcfg\pdf_full.pltcfg

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TIME = 5:28:57 PM

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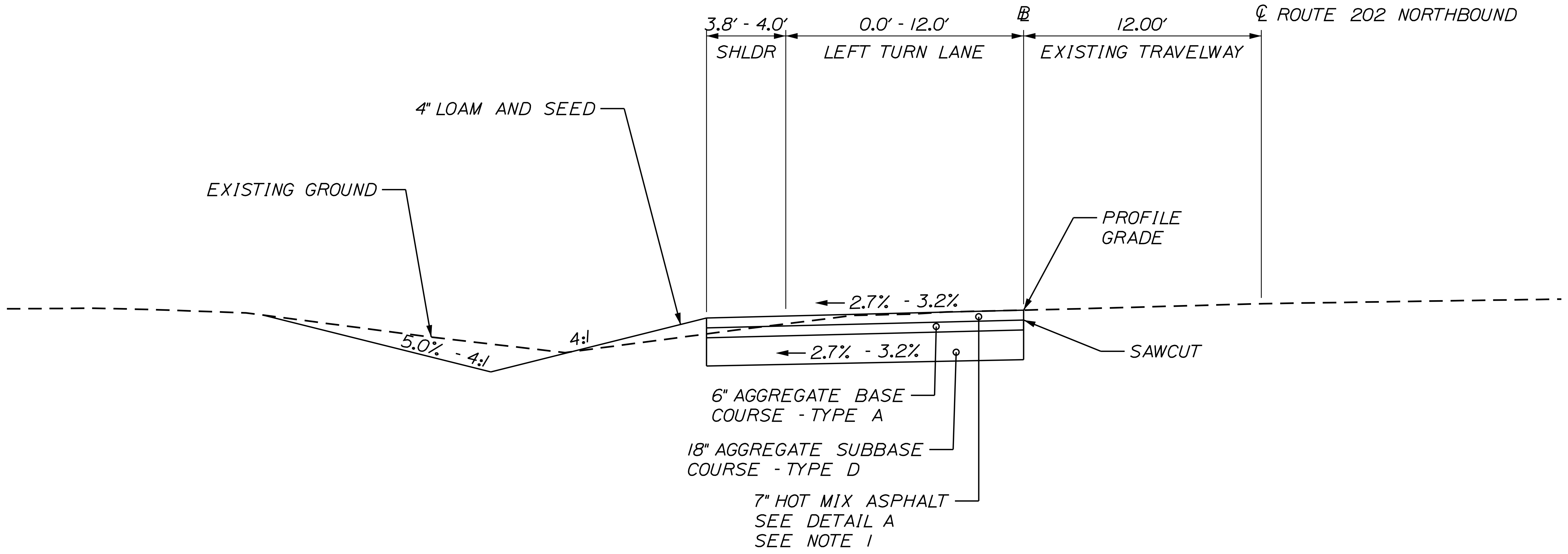
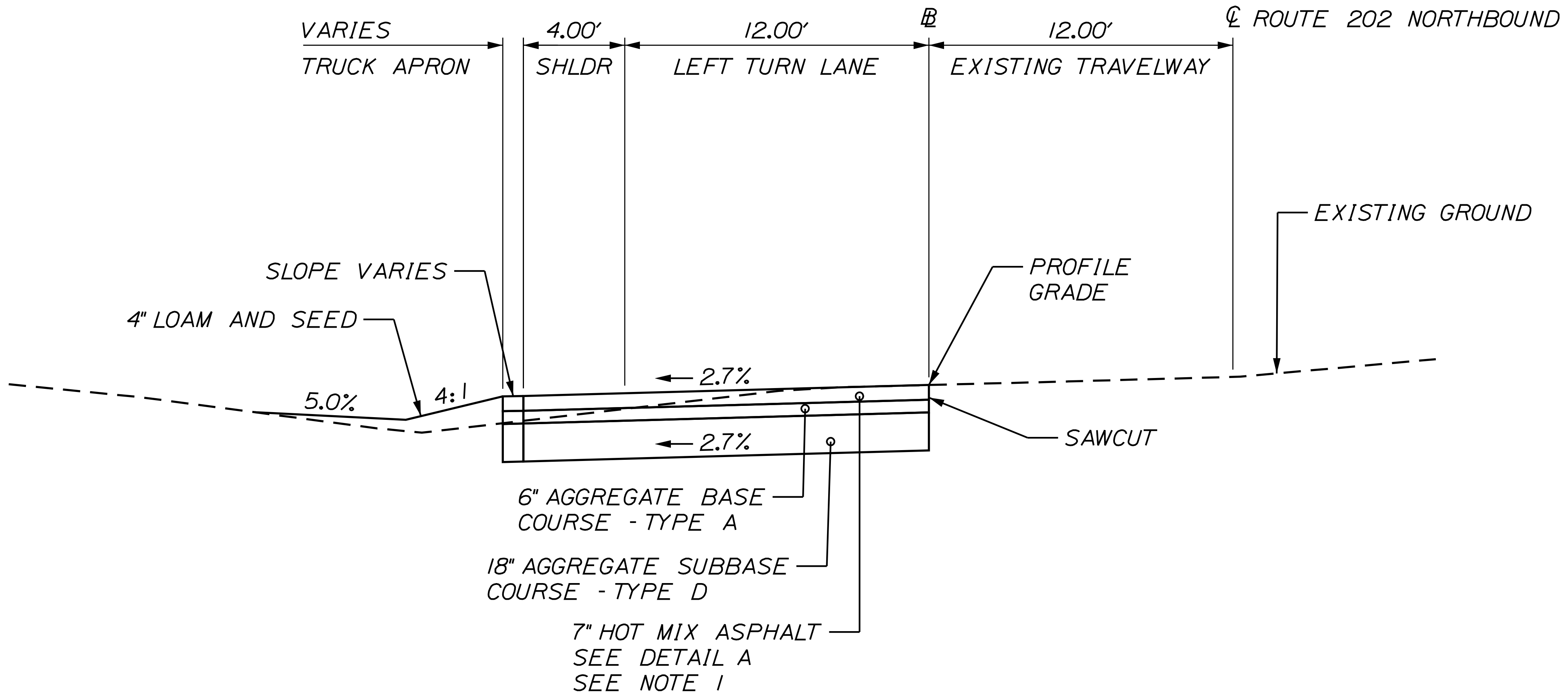
Username: ACHANDLER

Date:5/9/2023


3.8' - 4.0'
SHLDR
0.0' - 12.0'
LEFT TURN LANE
B
12.00'
EXISTING TRAVELWAY
℄ ROUTE 202 NORTHBOUND
4" LOAM AND SEED
EXISTING GROUND
PROFILE GRADE
2.7% - 3.2%
5.0% - 4:1
4:1
2.7% - 3.2%
SAWCUT
6" AGGREGATE BASE COURSE - TYPE A
18" AGGREGATE SUBBASE COURSE - TYPE D
7" HOT MIX ASPHALT
SEE DETAIL A
SEE NOTE 1

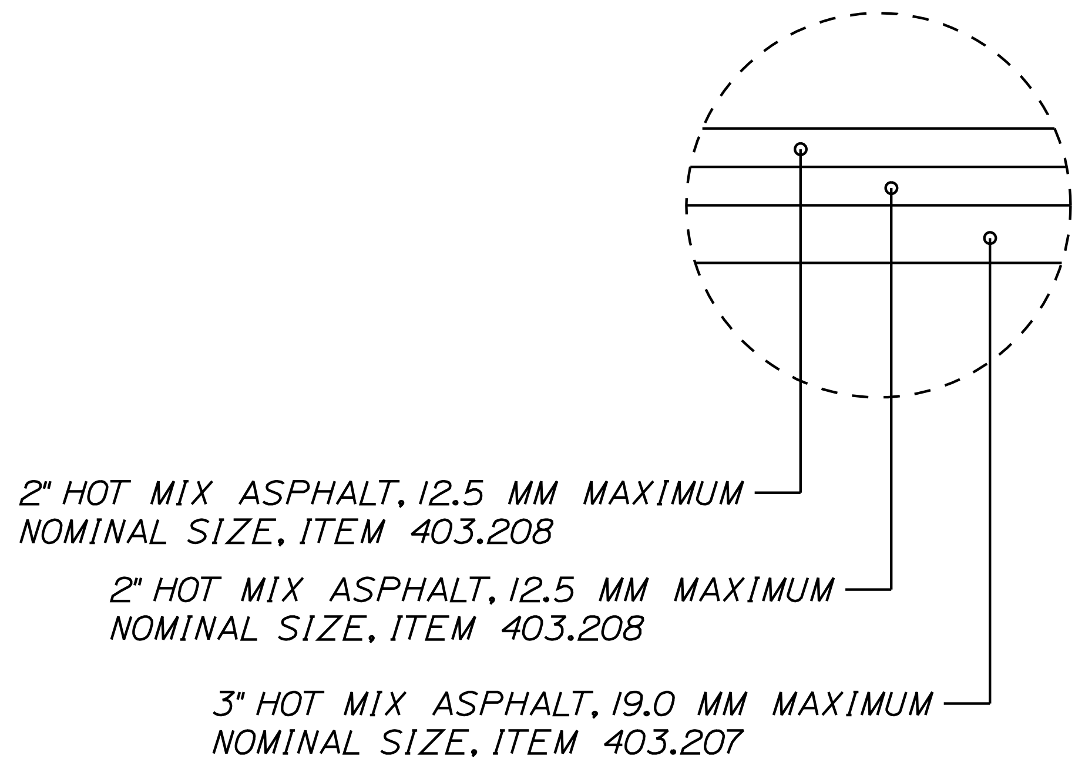
TYPICAL SECTION - TURN LANE

STA 1+00 TO STA 4+44
NOT TO SCALE


VARIES
TRUCK APRON
4.00'
SHLDR
12.00'
LEFT TURN LANE
B
12.00'
EXISTING TRAVELWAY
℄ ROUTE 202 NORTHBOUND
EXISTING GROUND
SLOPE VARIES
4" LOAM AND SEED
PROFILE GRADE
2.7%
5.0%
4:1
2.7%
SAWCUT
6" AGGREGATE BASE COURSE - TYPE A
18" AGGREGATE SUBBASE COURSE - TYPE D
7" HOT MIX ASPHALT
SEE DETAIL A
SEE NOTE 1

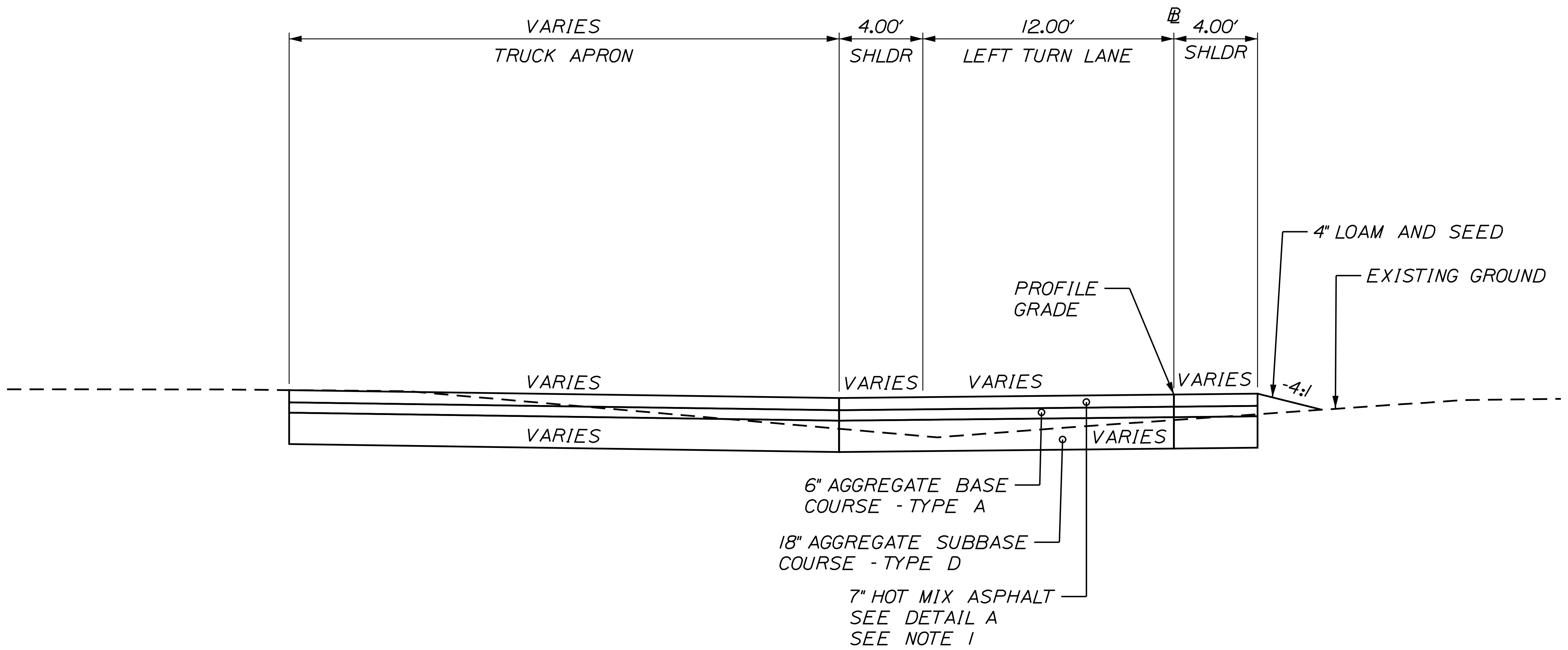
TYPICAL SECTION - TURN LANE WITH TRUCK APRON

STA 4+44 TO STA 4+68
NOT TO SCALE


2" HOT MIX ASPHALT, 12.5 MM MAXIMUM NOMINAL SIZE, ITEM 403.208
2" HOT MIX ASPHALT, 12.5 MM MAXIMUM NOMINAL SIZE, ITEM 403.208
3" HOT MIX ASPHALT, 19.0 MM MAXIMUM NOMINAL SIZE, ITEM 403.207

DETAIL A

NOT TO SCALE


VARIES
TRUCK APRON
4.00'
SHLDR
12.00'
LEFT TURN LANE
B
4.00'
SHLDR
4" LOAM AND SEED
EXISTING GROUND
PROFILE GRADE
VARIES
VARIES
VARIES
VARIES
4:1
VARIES
VARIES
6" AGGREGATE BASE COURSE - TYPE A
18" AGGREGATE SUBBASE COURSE - TYPE D
7" HOT MIX ASPHALT
SEE DETAIL A
SEE NOTE 1

TYPICAL SECTION - TURN LANE WITH TRUCK APRON AND RIGHT SHOULDER

STA 4+68 TO STA 5+31
NOT TO SCALE

NOTE:

1. RECORD DRAWINGS INDICATE 7" HMA DEPTH. CONTRACTOR TO MATCH EXISTING PAVEMENT DEPTH.
2. THE PAVEMENT AND BASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
3. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
4. 4" OF LOAM AND SEED SHALL BE USED ON ALL DISTURBED SLOPES.

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

TYPICAL SECTIONS

SHEET NUMBER
2
OF 13

Filename: ...\003_Quantities01.dgn

Username: ACHANDLER

Date:5/9/2023

QUANTITIES:

Item No.	Item Description	Unit	Quantity
201.23	Remove Single Tree Top Only	EA	1
201.24	Removing Stump	EA	1
203.20	Common Excavation (Left Turn Lane)	CY	670
203.20	Common Excavation (Crossovers Pavement Removal)	CY	380
304.10	Aggregate Subbase Course - Gravel	CY	410
304.14	Aggregate Base Course - Type A	CY	140
403.207	Hot Mix Asphalt, 19 MM Maximum Nominal Size	T	120
403.208	Hot Mix Asphalt, 12.5 MM Maximum Nominal Size	T	160
409.15	Bituminous Tack Coat	Gal	36
615.07	Loam	CY	220
618.14	Seeding, Method Number 2	Unit	18
619.12	Mulch	Unit	18
627.733	4 inch White or Yellow Pavement Marking Line	LF	850
627.75	White or Yellow Pavement and Curb Marking	SF	72
627.77	Removing Existing Pavement Marking	SF	370
645.106	Demount Regulatory, Warning, Confirmation, and Route Marker Assembly Sign	EA	3
645.271	Regulatory, Warning, Confirmation, and Route Assembly Sign, Type I	SF	15
645.291	Roadside Guide Signs Type II	SF	75
652.XX	Maintenance of Traffic	LS	1
656.75	Temporary Soil Erosion and Water Pollution Control	LS	1
659.10	Mobilization	LS	1

EARTHWORKS SUMMARY (LEFT TURN LANE):

COMMON EXCAVATION FOR ESTIMATE			
COMMON EXCAVATION (FROM MODEL OR PLANS)	670		
TOTAL COMMON EXCAVATION		670	
FILL FOR BORROW CALCULATIONS			
COMMON FILL (FROM MODEL OR PLANS)	30		
TOTAL FILL		30	
AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS			
ALL DEDUCTIONS:			
GRUBBING IN CUT		350	
TOTAL DEDUCTIONS			350
TOTAL AVAILABLE COMMON EXCAVATION (-) TOTAL DEDUCTIONS		320	
TOTAL AVAILABLE NON-ROCK EXCAVATION			320
COMPUTATION OF WASTE STORAGE & WASTE MATERIAL			
TOTAL AVAILABLE WASTE STORAGE AREA (FROM CROSS SECTIONS)		0	
GRUBBING IN CUT		350	
TOTAL WASTE MATERIAL		350	
TOTAL WASTE MATERIAL TO BE UTILIZED*			0
TOTAL WASTE MATERIAL TO BE WASTED			350
COMPUTATION FOR SURPLUS MATERIAL OR COMMON BORROW FOR ESTIMATE			
TOTAL AVAILABLE NON-ROCK EXCAVATION	320 x 0.90	= 288	
TOTAL AVAILABLE EXCAVATION			288
IF NO BORROW IS NEEDED, SURPLUS MATERIAL = AVAILABLE EXCAVATION (-) TOTAL FILL, (+) TOTAL WASTE MATERIAL TO BE WASTED			608
SURPLUS MATERIAL			**608 CY**

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

QUANTITIES & EARTHWORKS

SHEET NUMBER
3
OF 13

GENERAL NOTES:

1. THIS PROJECT TO BE COMPLETED IN ACCORDANCE WITH THE MAINEDOT STANDARD SPECIFICATIONS AND STANDARD DETAILS.
2. WHERE DEEMED NECESSARY BY THE CITY AND MAINEDOT, UNSUITABLE EXCESS MATERIAL SHALL BE REMOVED FROM THE EDGES OF SHOULDERS AND PLACED IN DESIGNATED AREAS OR DISPOSED OF. PAYMENT WILL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.
3. ALL INSLOPE AND DITCHES IN CUT AREAS SHALL BE GRADED AS SHOWN ON THE TYPICALS OR FLATTER, OR AS DIRECTED BY THE CITY AND MAINEDOT.
4. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE CITY AND MAINEDOT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.
5. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR. COST FOR ALL LABOR AND MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.
6. LOAM HAS BEEN ESTIMATED FOR DISTURBED LAWN AREAS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE CITY AND MAINEDOT.
7. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.
8. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING OPERATIONAL BUSINESS DIRECTIONAL SIGNS (OBDS) TO ENSURE THAT THEY ARE VISIBLE TO THE TRAVELING PUBLIC. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
11. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY AND MAINEDOT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.
12. TRIM ALL TREE BRANCHES TO 20 FEET ABOVE THE PAVEMENT. A TREE SPECIALIST SHALL BE SUBCNTRACTED FOR THIS WORK AND PAYMENT WILL BE MADE BY INVOICE PLUS 5%. ANY TREE BRANCHES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION WILL BE TRIMMED AT THE CONTRACTOR'S EXPENSE.
13. CLEARING LIMITS SHALL BE 10 FEET BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS AUTHORIZED BY THE CITY AND MAINEDOT.
14. ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPERATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE CITY AND MAINEDOT.
15. PRIOR TO REMOVING ANY PAVEMENT OR PLACING SHIM, THE ROADWAY WILL BE INSPECTED FOR POSSIBLE SUBSURFACE BOULDERS, WHICH WILL BE REMOVED AS DIRECTED BY THE CITY AND MAINEDOT. PAYMENT WILL BE MADE UNDER APPROPRIATE CONTRACT EXCAVATION ITEMS. BACKFILL WILL BE PLACED TO SUBGRADE WITH MATERIAL CONSISTENT WITH SURROUNDING MATERIAL. AGGREGATE SUBBASE COURSE GRAVEL WILL BE PLACED FROM SUBGRADE TO FINISH GRADE AND WILL BE PAID UNDER THE APPROPRIATE ITEM.
16. THE CONTRACTOR SHALL PLAN AND CONDUCT WORK SO THAT UPON COMPLETION OF THE PROJECT THRE IS NO DROP OFF FROM THE EDGE OF SHOULDER PAVEMENT.
17. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING (OR MILLING) SHALL BE INCIDENTAL TO THE RELATED PAVING (OR MILLING) ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.
18. CROSS SLOPES FOR NORMAL AND SUPERELEVATED SECTIONS WILL BE STRAIGHT UNLESS OTHERWISE DIRECTED BY THE CITY AND MAINEDOT.
19. CONTRACTOR TO REMOVE ALL CONFLICTING SIGNS AND PAVEMENT MARKINGS.
20. THE CITY OF AUBURN AND MAINEDOT SHALL HAVE THE RIGHT AND AUTHORITY TO DETERMINE THE ACCEPTABILITY OF WORK AND MATERIALS IN PROGRESS OR COMPLETED AND SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIALS WHICH DO NOT CONFORM, IN THEIR SOLE OPINION, TO THE PLANS OR SPECIFICATIONS.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING RED-LINE AS-BUILT DRAWINGS OF THE FINAL WORK TO THE CITY AND MAINEDOT. THOSE DRAWINGS SHALL BE A CLEAN SET OF PLANS SHOWING ALL SHANGES, MODIFICATIONS, AND ELEVATIONS TO THE BID PLANS.
22. THE CONTRACTOR SHALL USE A MAINEDOT APPROVED LAB FOR ALL FIELD SAMPLING AND TESTING. SAMPLING AND TESTING FREQUENCY AND METHODS SHALL FOLLOW MAINEDOT STANDARD SPECIFICATIONS 2020 EDITION.
23. CONTRACTOR SHALL SUBMIT A SUMMARY OF ALL TESTING AND SAMPLING RESULTS TO THE CITY OF AUBURN AND MAINEDOT.

GENERAL NOTES (CONT):

24. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING LAYOUT IN THE CONTRACT DOCUMENTS OR AS PROVIDED BY THE CITY. PAYMENT SHALL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.
25. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS.
26. EXISTING GROUND INFORMATION WAS DEVELOPED FROM SURVEY DATA COLLECTED BY MAIN-LAND DEVELOPMENT CONSULTANTS. ACTUAL CONDITIONS MAY VARY FROM THOSE INDICATED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
27. EROSION AND SEDIMENTATION CONTROL SHALL MEET CURRENT MAINE DEP STANDARDS AND BEST MANAGEMENT PLAN AND SHALL BE INSTALLED PRIOR TO WORK AND SHALL BE INSPECTED ON A DAILY BASIS.
28. THE CITY RESERVES THE RIGHT TO ADJST BID ITEM QUANTITIES BASED ON BID RESULTS AND BUDGET LIMITATIONS.
29. CONTRACTOR SHALL CONFIRM THAT ALL SIGNS REMOVED AND RESET WITHIN THE CLEAR ZONE AND ALL SIGNS TO REMAIN WITHIN THE CLEAR ZONE SHALL BE INSTALLED ON A BREAKAWAY POST, AND SHALL PROVIDE A BREAKAWAY DEVICE FOR ANY SIGN POST NOT MEETING BREAKAWAY REQUIREMENTS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 645.116, REINSTALL REGULATORY, WARNING, CONFIRMATION, AND ROUTE MARKER ASSEMBLY SIGN.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR WASTING ALL SURPLUS MATERIAL.
31. STATIONS REFERENCED ARE APPROXIMATE.

TEMPORARY TRAFFIC CONTROL NOTES:

1. CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC CONTROL AS NECESSARY AND PERFORM REQUIRED WORK IN A MANNER THAT WILL CAUSE MINIMAL DISRUPTION TO TRAFFIC.
2. CONTRACTOR TO SUBMIT TRAFFIC CONTROL PLANS MEETING MAINEDOT AND MUTCD STANDARDS TO THE CITY FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
3. ALL CONSTRUCTION/TRAFFIC CONTROL SIGNS SHALL CONFORM TO REQUIREMENTS OF MAINE DOT AND MUTCD., AND WILL BE INSTALLED PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR TO COORDINATE WITH CITY AND SCHOOL DEPARTMENTS AND LOCAL EMERGENCY SERVICES TO NOTIFY OF ROAD CLOSURE, IF REQUIRED, ONE WEEK AND 2 DAYS PRIOR.
5. CONTRACTOR RESPONSIBLE FOR MAINTAINING SAFE TRAFFIC OPERATIONS AT ALL TIMES DURING CONSTRUCTION.
6. CONTRACTOR TO REGULARLY REVIEW TEMPORARY CONSTRUCTION SIGNS AND ENSURE ALL ARE MAINTAINED AND IN PLACE OR ARE REPLACED IF MISSING.
7. SIGNS TO BE PLACED IN LOCATIONS THAT MAXIMIZE VISIBILITY. CONTRACTOR TO INSTALL SIGNS WITHIN R.O.W. AND NOT BLOCKING PRIVATE PROPERTY ACCESS.

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATIONS OF THE EXISTING UTILITIES SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR SHALL COMPLETE TEST PITS IN AREAS WHERE POTENTIAL UTILITY CONFLICTS MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE OR ADJUST ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE THIS WORK WITH UTILITIES AS NECESSARY.
2. PRIOR TO CONSTRUCTION, EXCAVATION, BORING, ETC., THE CONTRACTOR MUST NOTIFY DIGSAFE AND A SITE IDENTIFICATION NUMBER AND DIGSAFE DATE MUST BE OBTAINED.
3. CONTRACTOR SHALL CONTACT AND COORDINATE WITH UTILITIES UPON AWARD OF THE CONTRACT. CONTRACTOR SHALL COORDINATE WITH UTILITIES COMPANIES SO THAT THE REQUIRED UTILITIES HAVE BEEN RELOCATED BY THE RESPECTIVE UTILITY COMPANIES.
4. CONTRACTOR TO CONTACT AND NOTIFY UTILITIES OF PLANNED CONSTRUCTION ACTIVITIES PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND UTILITIES AND SHALL VERIFY ALL UTILITIES AND THEIR LOCATION PRIOR TO COMMENCING WORK.
5. DAMAGE TO ANY UTILITIES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE AT THEIR COST.
6. CONTACT INFORMATION FOR RELEVANT UTILITIES:

AT & T (Portland Office)
Coughlan, Alice
Covers from Portland to Farmingdale
45 Forest Avenue
Portland, ME 04101
(207)879-5050
acoughlan@att.com

Auburn Water & Sewerage District
Hazelton, Sid, Superintenent
P. O. Box 414 Auburn, ME 04212-0414
(207)784-6469
shazelton@awsd.org

Auburn, City of
Goyette, Dan, Director of Public Services
60 Court Street Auburn, Maine 04210
(207)333-6601
dgoyette@auburnmaine.gov

Brookfield Renewable Energy Partners, L.P.
DeLuca, Ernest, Land Use/Compliance Specialist
150 Main Street
Lewiston, ME
(207)755-5619
ernest.deluca@brookfieldrenewable.com

Buckeye Partners LP
Wing, Steven, Operation Manager
170 Lincoln Street
South Portland, Maine 04106
(207)808-4506
swing@buckeye.com

Central Maine Power Company
Laney, Timothy, Project Manager
57 Old Winthrop Road
Augusta, Maine 04330
(207)629-9555
timothy.laney@cmpco.com

Charter Communications,Inc.
Charter Letter 1, Email Address Letter 1
118 Johnson Road
Portland, ME 04102
(207)620-3410
dlpormeconstleadership@charter.com

Consolidated Communications of Northern
New England Company LLC
Consolidated Letter 1, Email address Letter 1
5 Davis Farm Road
Portland, ME 04103
(207)878-0854
mdot_requests@fairpoint.com

OTT Communications (South)
Knight, Jim, Outside Plant Supervisor/Engineer
56 Campus Drive
New Gloucester, ME 04260
(207)688-8284
jim.knight@otelco.com

Oxford Networks
Ellingwood, Michael, Engineering Manager
491 Lisbon Street
Lewiston, ME 04240
(207)333-3471
mellingwood@firstlight.net

Revolution Networks (aka NECAP)
Ellingwood, Michael, Engineering Manager
(207)333-3471
mellingwood@firstlight.net

Revolution Networks (aka
NECAP) dba Firstlight
Ellingwood, Michael, Engineering Manager
(207)333-3471
mellingwood@firstlight.net

Springfield Terminal Railway
Higgins, Shawn, Project Engineer
1700 Iron Horse Park
North Billerica, MA 01862
(978)663-1127
shiggins@panam.com

St. Lawrence & Atlantic Railroad Co.
Birkel, Jason, Project Manager
225 First Flight Drive
Suite 201
Auburn, ME 04210
(207)753-4229
jbirkel@gwrr.com

Unitil Corp.
Giroux, Derick, Project Leader
P.O. Box 3586
Portland, ME 04104
(207)536-5663
girouxd@unitil.com

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

GENERAL NOTES

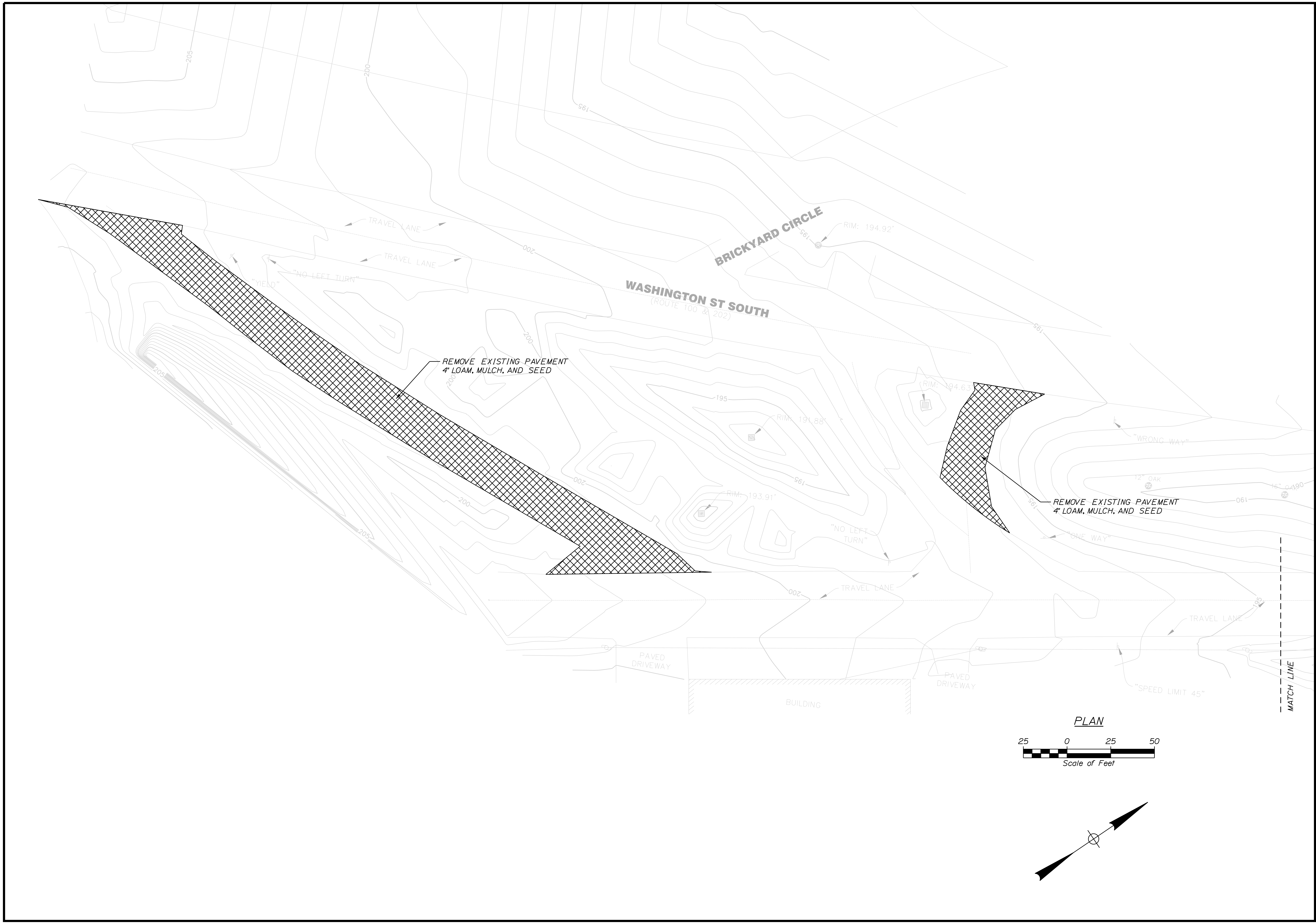
SHEET NUMBER
4
OF 13

Filename: ...\004_GeneralNotes.dgn
Username: ACHANDLER
Date: 5/9/2023

Filename: ...\Microstation\005_HDPlan01.dgn

Username: ACHANDLER

Date:5/9/2023


BRICKYARD CIRCLE
WASHINGTON ST SOUTH
(ROUTE 100 & 202)
TRAVEL LANE
TRAVEL LANE
"YIELD"
"NO LEFT TURN"
REMOVE EXISTING PAVEMENT
4" LOAM, MULCH, AND SEED
RIM: 194.92'
RIM: 194.63'
RIM: 191.88'
RIM: 193.91'
"NO LEFT TURN"
"WRONG WAY"
12" OAK
REMOVE EXISTING PAVEMENT
4" LOAM, MULCH, AND SEED
"ONE WAY"
TRAVEL LANE
TRAVEL LANE
PAVED DRIVEWAY
BUILDING
PAVED DRIVEWAY
"SPEED LIMIT 45"
MATCH LINE
205
200
195
190
PLAN
25
0
25
50
Scale of Feet

Barton & Loguidice

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 11083
LICENSED PROFESSIONAL ENGINEER

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

CITY OF AUBURN
BRICKYARD CIRCLE

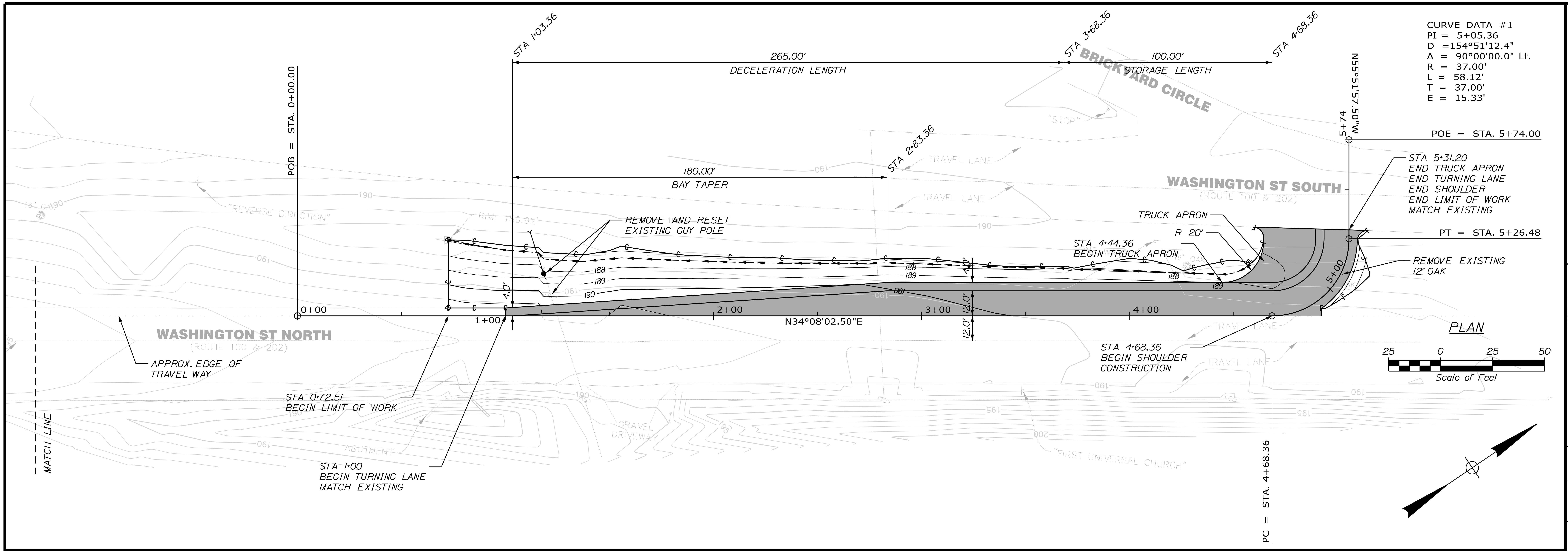
PLAN - PAVEMENT REMOVAL

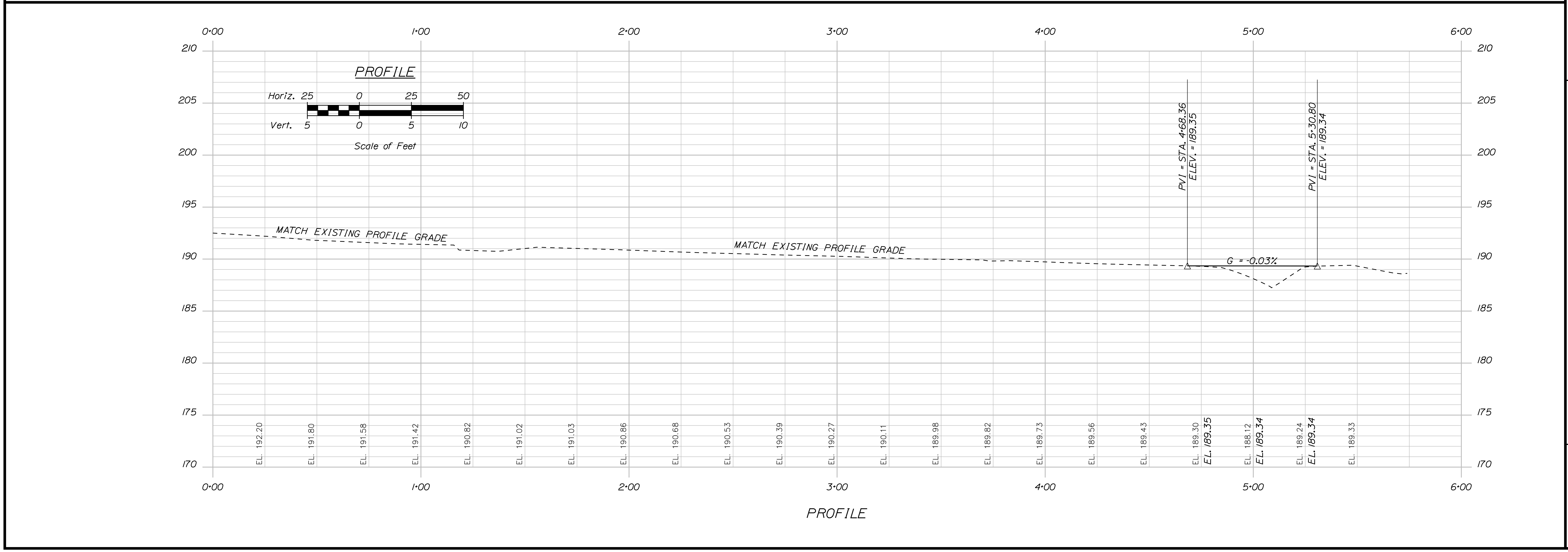
SHEET NUMBER
5
OF 13

Date:5/9/2023

Username: ACHANDLER

Filename: ...\Microstation\005_HDPlan02.dgn


CURVE DATA #1
PI = 5+05.36
D = 154°51'12.4"
Δ = 90°00'00.0" Lt.
R = 37.00'
L = 58.12'
T = 37.00'
E = 15.33'
PLAN
Scale of Feet
25 0 25 50
STA 1+03.36
STA 3+68.36
STA 4+68.36
STA 2+83.36
265.00'
DECELERATION LENGTH
100.00'
STORAGE LENGTH
180.00'
BAY TAPER
POB = STA. 0+00.00
BRICKYARD CIRCLE
WASHINGTON ST SOUTH
(ROUTE 100 & 202)
WASHINGTON ST NORTH
(ROUTE 100 & 202)
5+74
N55°51'57.50"W
POE = STA. 5+74.00
STA 5+31.20
END TRUCK APRON
END TURNING LANE
END SHOULDER
END LIMIT OF WORK
MATCH EXISTING
PT = STA. 5+26.48
TRUCK APRON
R 20'
STA 4+44.36
BEGIN TRUCK APRON
REMOVE EXISTING 12" OAK
REMOVE AND RESET EXISTING GUY POLE
0+00
1+00
2+00
3+00
4+00
5+00
N34°08'02.50"E
4.0'
12.0'
188
189
190
"REVERSE DIRECTION"
TRAVEL LANE
"STOP"
APPROX. EDGE OF TRAVEL WAY
STA 0+72.51
BEGIN LIMIT OF WORK
STA 1+00
BEGIN TURNING LANE
MATCH EXISTING
STA 4+68.36
BEGIN SHOULDER CONSTRUCTION
MATCH LINE
PC = STA. 4+68.36
GRAVEL DRIVEWAY
ABUTMENT
"FIRST UNIVERSAL CHURCH"
195
200



Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	AGC	AGC 05/09/23
CHECKED-REVIEWED	JQA	05/09/23

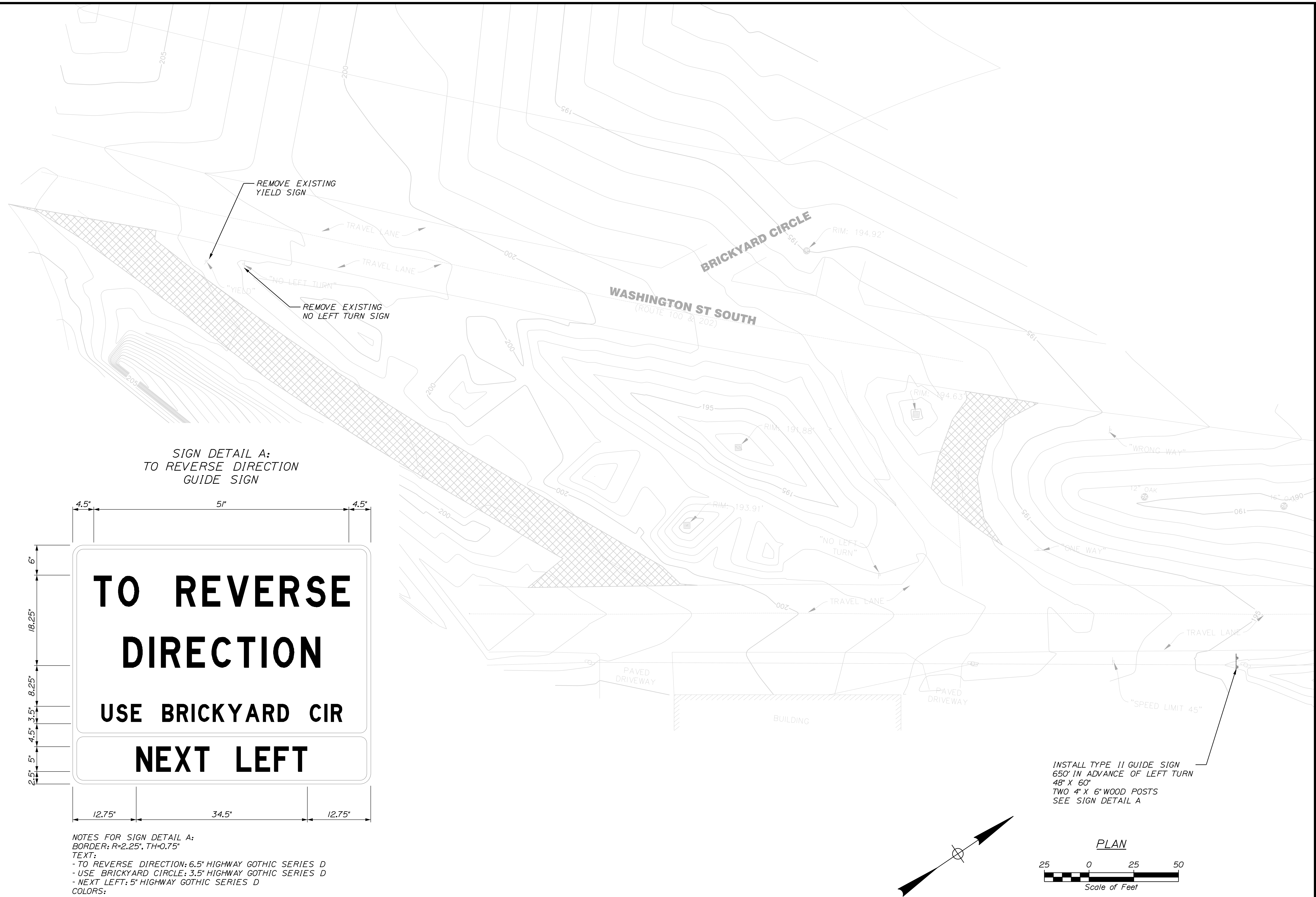
SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

CITY OF AUBURN
BRICKYARD CIRCLE

PLAN/PROFILE - TURN LANE

SHEET NUMBER
6
OF 13

Filename: ...\006_StripingPlan01.dgn
Username: ACHANDLER
Date: 5/9/2023


REMOVE EXISTING
YIELD SIGN
REMOVE EXISTING
NO LEFT TURN SIGN
TRAVEL LANE
TRAVEL LANE
"NO LEFT TURN"
"YIELD"
BRICKYARD CIRCLE
RIM: 194.92'
WASHINGTON ST SOUTH
(ROUTE 100 & 202)
RIM: 194.63'
RIM: 191.88'
RIM: 193.91'
"WRONG WAY"
12" OAK
16" OAK
"ONE WAY"
"NO LEFT TURN"
TRAVEL LANE
TRAVEL LANE
PAVED DRIVEWAY
PAVED DRIVEWAY
BUILDING
"SPEED LIMIT 45"
205
200
195
190
4.5"
51"
4.5"
6"
18.25"
8.25"
3.5"
4.5"
5"
2.5"
TO REVERSE DIRECTION
USE BRICKYARD CIR
NEXT LEFT
12.75"
34.5"
12.75"
INSTALL TYPE II GUIDE SIGN
650' IN ADVANCE OF LEFT TURN
48" X 60"
TWO 4" X 6" WOOD POSTS
SEE SIGN DETAIL A
PLAN
25
0
25
50
Scale of Feet

SIGN DETAIL A:
TO REVERSE DIRECTION
GUIDE SIGN

NOTES FOR SIGN DETAIL A:
BORDER: R=2.25", TH=0.75"
TEXT:
- TO REVERSE DIRECTION: 6.5" HIGHWAY GOTHIC SERIES D
- USE BRICKYARD CIRCLE: 3.5" HIGHWAY GOTHIC SERIES D
- NEXT LEFT: 5" HIGHWAY GOTHIC SERIES D
COLORS:
- LEGEND: WHITE (RETROREFLECTIVE)
- BACKGROUND: GREEN (RETROREFLECTIVE)

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

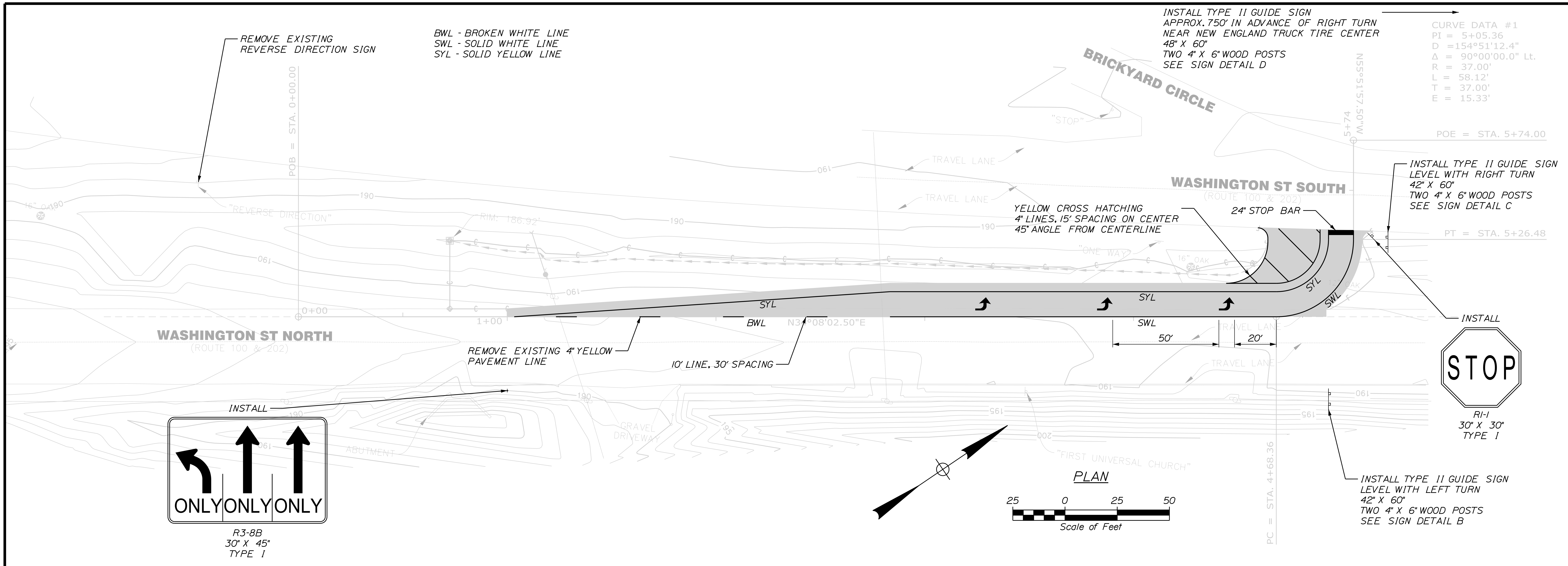
PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

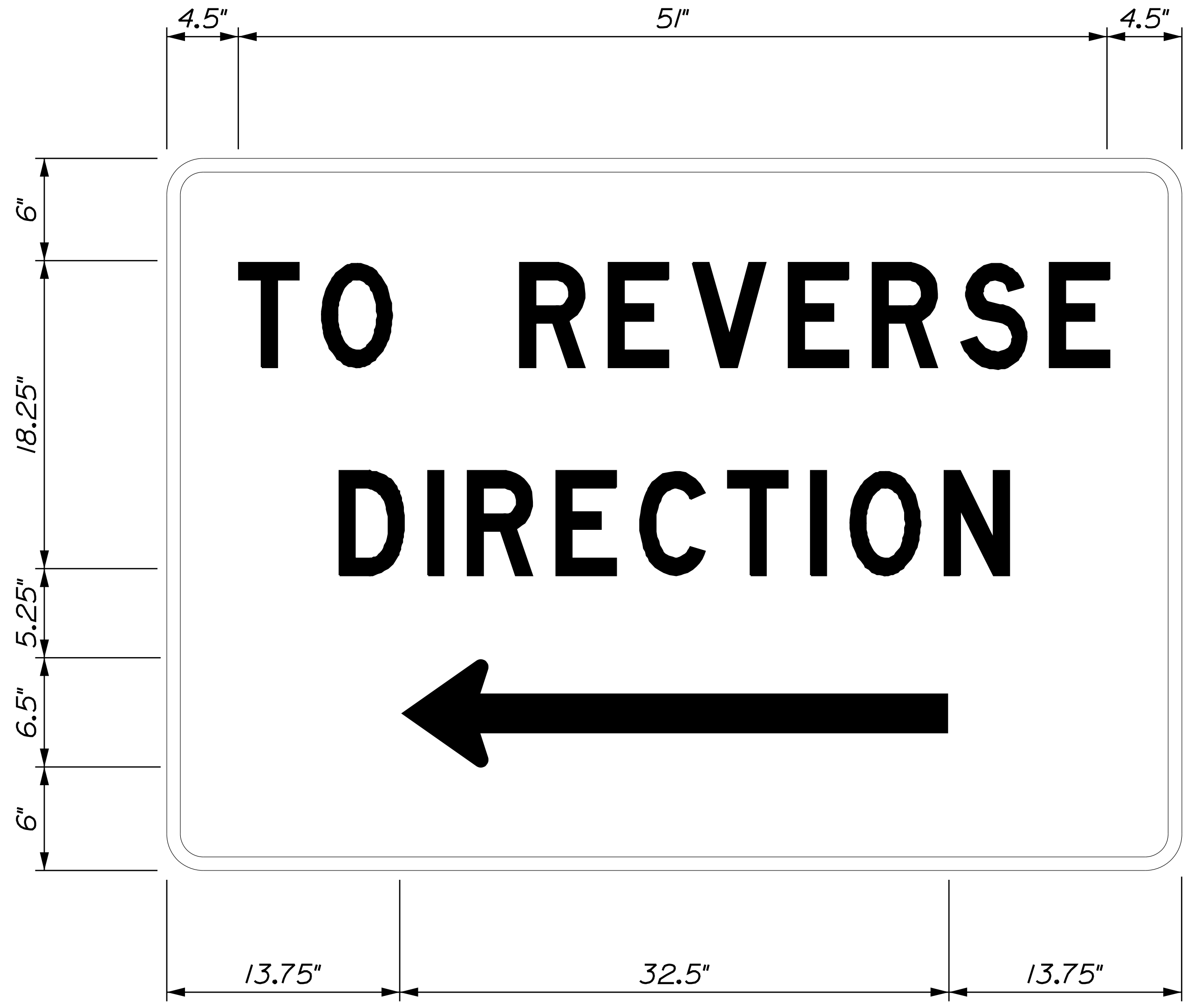
CITY OF AUBURN
BRICKYARD CIRCLE

SIGNING/STRIPING (1 OF 2)

SHEET NUMBER
7
OF 13

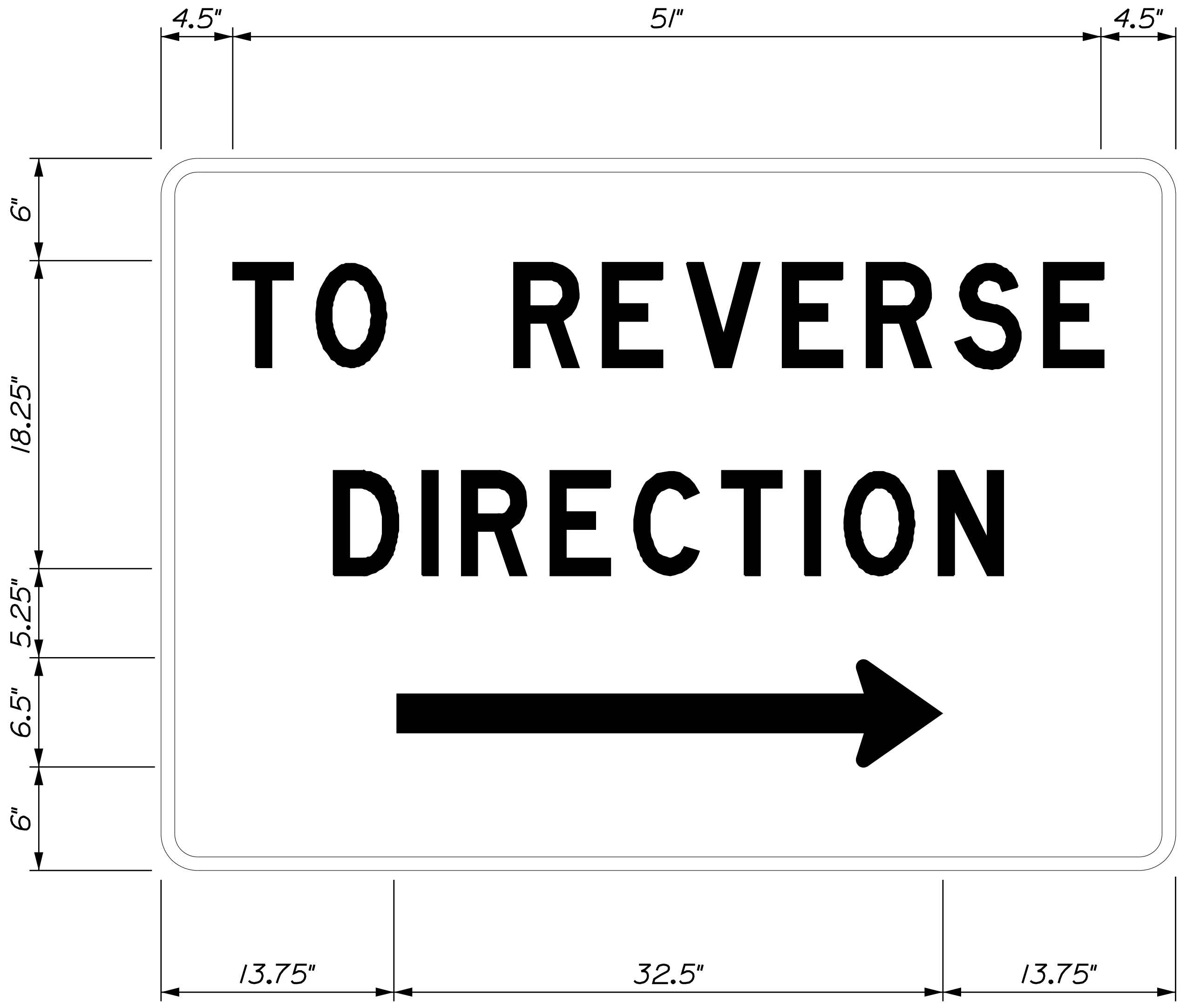

REMOVE EXISTING
REVERSE DIRECTION SIGN
BWL - BROKEN WHITE LINE
SWL - SOLID WHITE LINE
SYL - SOLID YELLOW LINE
INSTALL TYPE II GUIDE SIGN
APPROX. 750' IN ADVANCE OF RIGHT TURN
NEAR NEW ENGLAND TRUCK TIRE CENTER
48" X 60"
TWO 4" X 6" WOOD POSTS
SEE SIGN DETAIL D
CURVE DATA #1
PI = 5+05.36
D =154°51'12.4"
Δ = 90°00'00.0" Lt.
R = 37.00'
L = 58.12'
T = 37.00'
E = 15.33'
POE = STA. 5+74.00
PT = STA. 5+26.48
BRICKYARD CIRCLE
"STOP"
N55°51'57.50"W
5+74
POB = STA. 0+00.00
TRAVEL LANE
TRAVEL LANE
WASHINGTON ST SOUTH
(ROUTE 100 & 202)
INSTALL TYPE II GUIDE SIGN
LEVEL WITH RIGHT TURN
42" X 60"
TWO 4" X 6" WOOD POSTS
SEE SIGN DETAIL C
YELLOW CROSS HATCHING
4" LINES, 15' SPACING ON CENTER
45° ANGLE FROM CENTERLINE
24" STOP BAR
"REVERSE DIRECTION"
RIM: 186.92'
"ONE WAY"
16" OAK
12" OAK
0+00
1+00
SYL
SYL
SYL
SWL
SWL
BWL
N34°08'02.50"E
50'
20'
INSTALL
WASHINGTON ST NORTH
(ROUTE 100 & 202)
REMOVE EXISTING 4" YELLOW
PAVEMENT LINE
10' LINE, 30' SPACING
TRAVEL LANE
TRAVEL LANE
STOP
R1-1
30" X 30"
TYPE I
INSTALL
ONLY ONLY ONLY
R3-8B
30" X 45"
TYPE I
GRAVEL DRIVEWAY
ABUTMENT
"FIRST UNIVERSAL CHURCH"
PC = STA. 4+68.36
PLAN
25 0 25 50
Scale of Feet
INSTALL TYPE II GUIDE SIGN
LEVEL WITH LEFT TURN
42" X 60"
TWO 4" X 6" WOOD POSTS
SEE SIGN DETAIL B
190
195
200

SIGN DETAIL B:
TO REVERSE DIRECTION
GUIDE SIGN


4.5"
51"
4.5"
6"
18.25"
5.25"
6.5"
6"
TO REVERSE
DIRECTION
13.75"
32.5"
13.75"

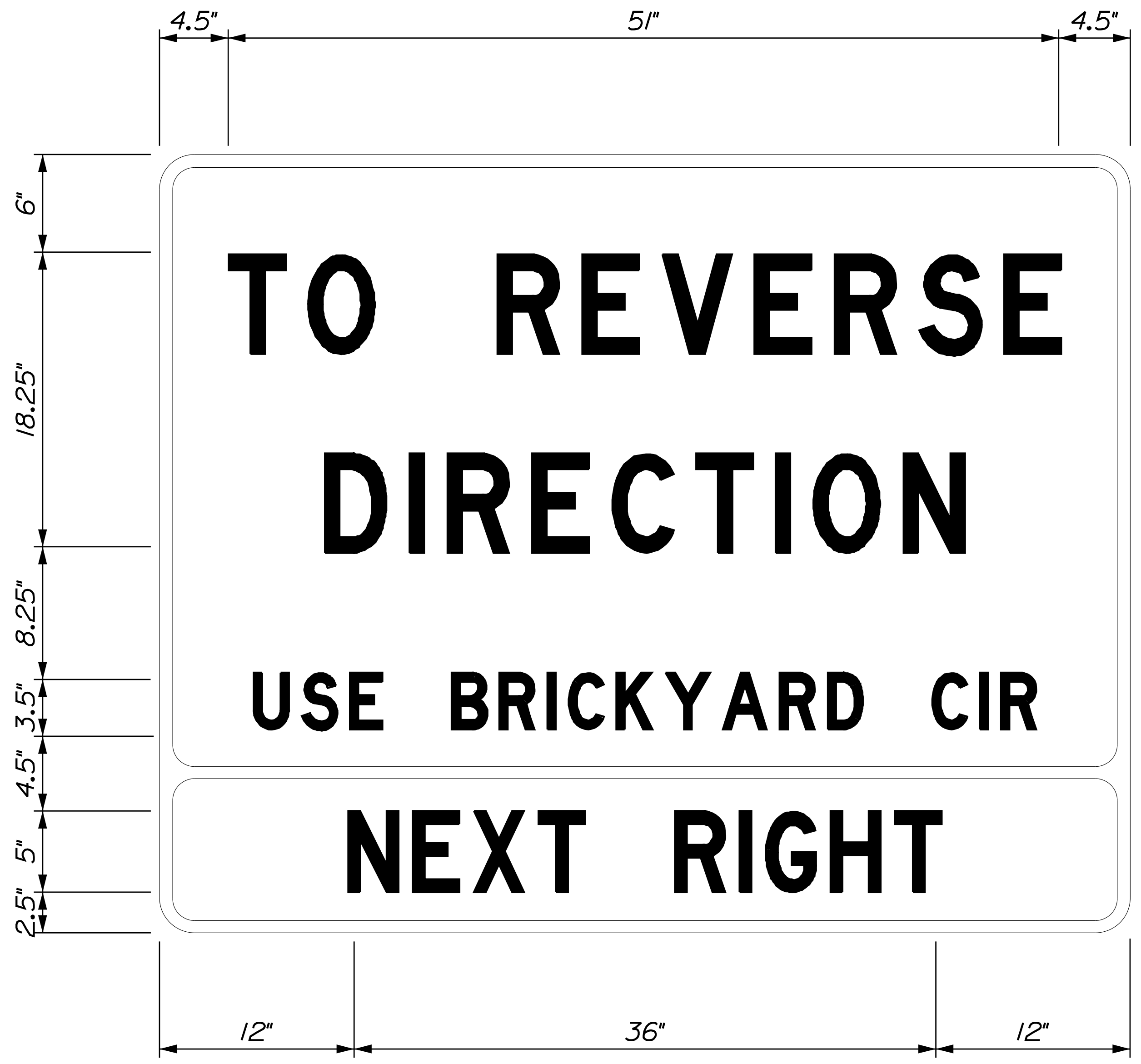
NOTES FOR SIGN DETAIL B:
BORDER: R=2.25", TH=0.75"
TEXT: 6.5" HIGHWAY GOTHIC SERIES D
COLORS:
- LEGEND: WHITE (RETROREFLECTIVE)
- BACKGROUND: GREEN (RETROREFLECTIVE)

SIGN DETAIL C:
TO REVERSE DIRECTION
GUIDE SIGN


4.5"
51"
4.5"
6"
18.25"
5.25"
6.5"
6"
TO REVERSE
DIRECTION
13.75"
32.5"
13.75"

NOTES FOR SIGN DETAIL C:
BORDER: R=2.25", TH=0.75"
TEXT: 6.5" HIGHWAY GOTHIC SERIES D
COLORS:
- LEGEND: WHITE (RETROREFLECTIVE)
- BACKGROUND: GREEN (RETROREFLECTIVE)

SIGN DETAIL D:
TO REVERSE DIRECTION
GUIDE SIGN


4.5"
51"
4.5"
6"
18.25"
8.25"
3.5"
4.5"
5"
2.5"
TO REVERSE
DIRECTION
USE BRICKYARD CIR
NEXT RIGHT
12"
36"
12"

NOTES FOR SIGN DETAIL D:
BORDER: R=2.25", TH=0.75"
TEXT:
- TO REVERSE DIRECTION: 6.5" HIGHWAY GOTHIC SERIES D
- USE BRICKYARD CIRCLE: 3.5" HIGHWAY GOTHIC SERIES D
- NEXT LEFT: 5" HIGHWAY GOTHIC SERIES D
COLORS:
- LEGEND: WHITE (RETROREFLECTIVE)
- BACKGROUND: GREEN (RETROREFLECTIVE)

Barton & Loguidice

STATE OF MAINE
JOHN QUENTIN ADAMS
No. 11083
LICENSED PROFESSIONAL ENGINEER

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

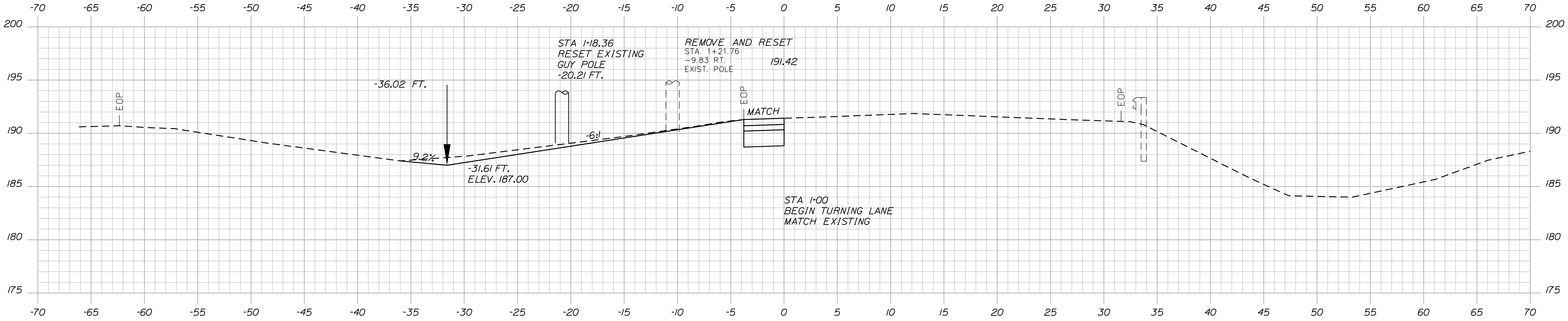
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

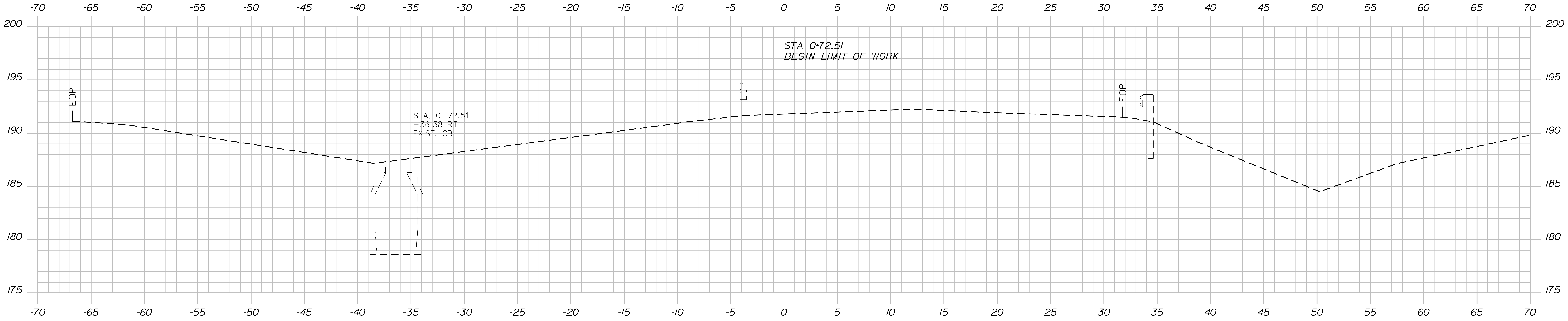
SIGNING/STRIPING (2 OF 2)

SHEET NUMBER
8
OF 13

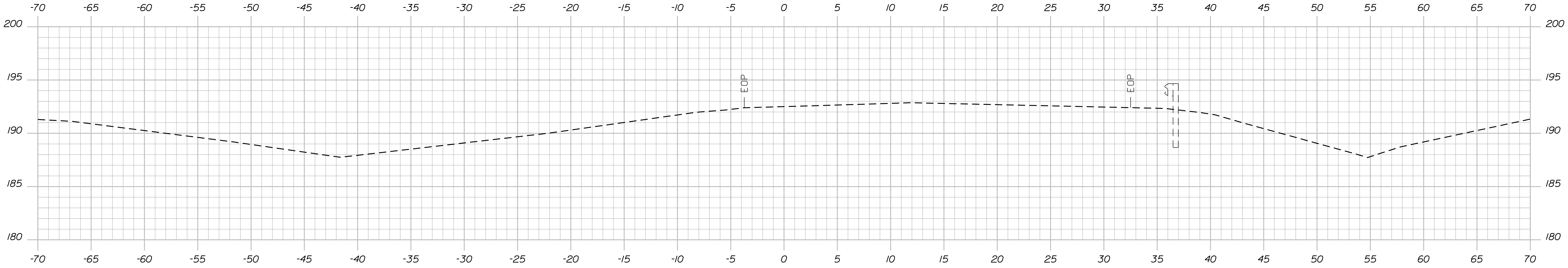
Date: 5/9/2023
Username: ACHANDLER
Filename: ...\006_StripingPlan02.dgn


-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70
200
195
190
185
180
175
STA 1+18.36
RESET EXISTING
GUY POLE
-20.21 FT.
REMOVE AND RESET
STA. 1+21.76
-9.83 RT.
EXIST. POLE
191.42
-36.02 FT.
EOP
EOP
EOP
MATCH
-6:1
9.2%
-31.61 FT.
ELEV. 187.00
STA 1+00
BEGIN TURNING LANE
MATCH EXISTING

1+00.00


-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70
200
195
190
185
180
175
STA 0+72.51
BEGIN LIMIT OF WORK
EOP
EOP
EOP
STA. 0+72.51
-36.38 RT.
EXIST. CB

0+50.00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200
195
190
185
180
EOP
EOP

0+00.00

Barton & Loguidice

STATE OF MAINE
JOHN
QUENTIN
ADAMS
No. 11083
LICENSED
PROFESSIONAL ENGINEER

SIGNATURE	P.E. NUMBER	DATE
	11083	05/09/23

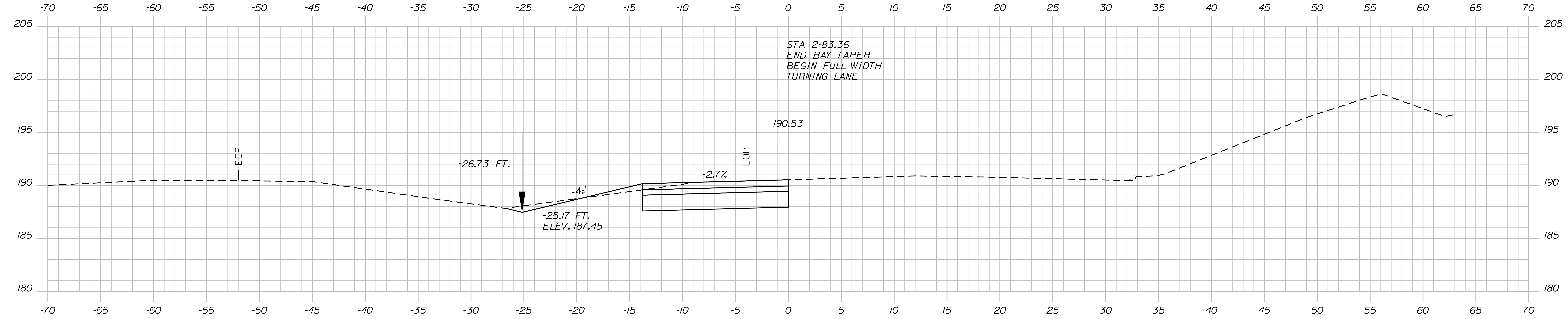
		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

CROSS SECTIONS

SHEET NUMBER
9
OF 13

Sta. 0+00.00 to Sta. 1+00.00



STA 2+83.36
END BAY TAPER
BEGIN FULL WIDTH
TURNING LANE
190.53
EOP
-26.73 FT.
-2.7%
4:1
-25.17 FT.
ELEV. 187.45
EOP
205
200
195
190
185
180
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
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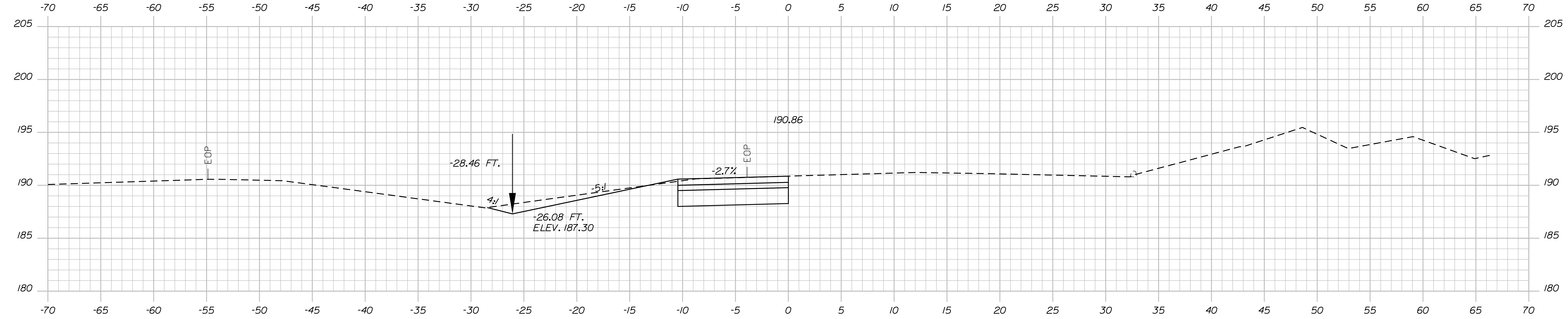
55
60
65
70

2+50.00



190.86
EOP
-28.46 FT.
-2.7%
5:1
4:1
-26.08 FT.
ELEV. 187.30
EOP
205
200
195
190
185
180
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
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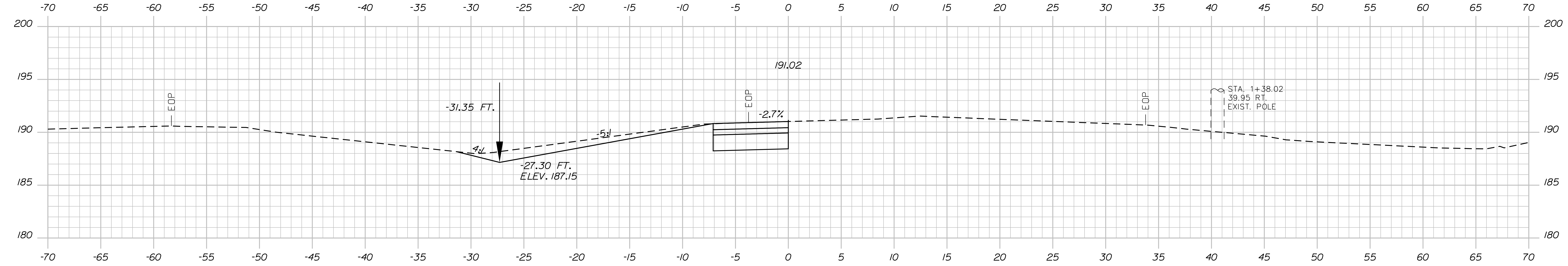
50
55
60
65
70

2+00.00



191.02
EOP
-31.35 FT.
EOP
-2.7%
5:1
4:1
-27.30 FT.
ELEV. 187.15
EOP
STA. 1+38.02
39.95 RT.
EXIST. POLE
200
195
190
185
180
-70
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70

1+50.00

Filename: ...\Microstation\CrossSections.dgn

Username: ACHANDLER

Date:5/9/2023

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

CROSS SECTIONS

SHEET NUMBER
10
OF 13

Sta. 1+50.00 to Sta. 2+50.00

Date:5/9/2023

Username: ACHANDLER

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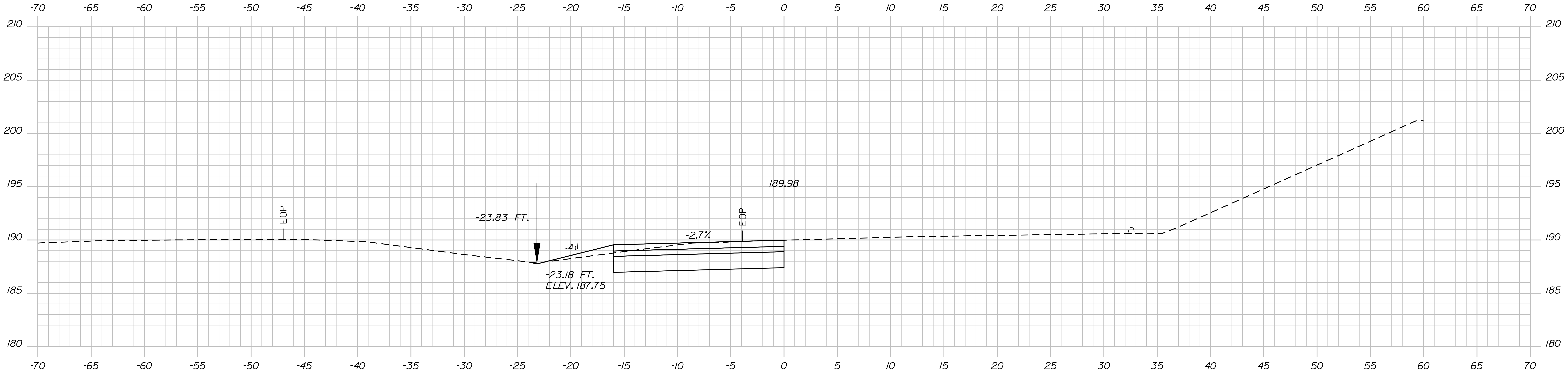
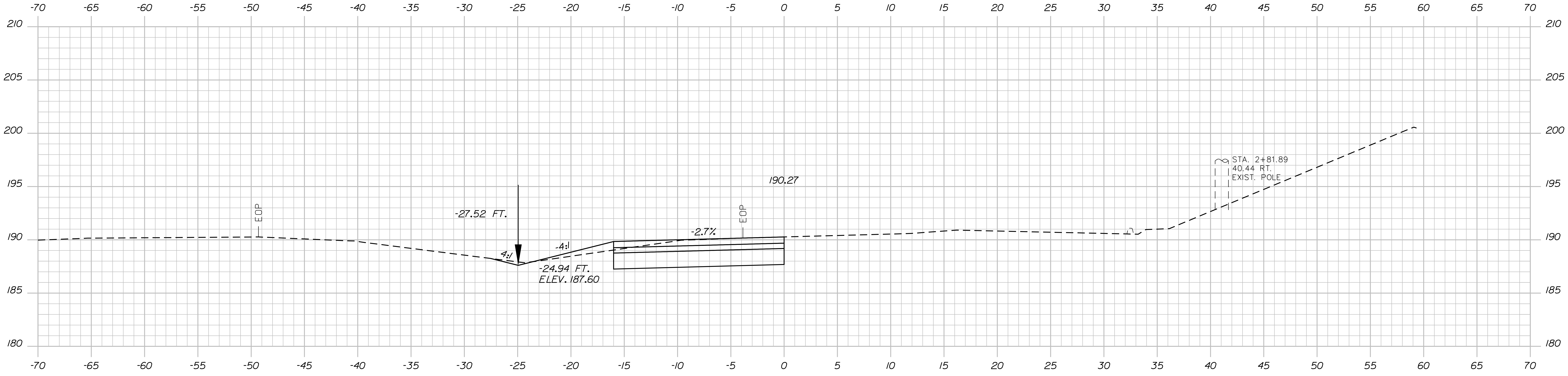


EOP
-23.83 FT.
-4:1
-2.7%
189.98
EOP
-23.18 FT.
ELEV. 187.75
210
205
200
195
190
185
180
-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

3+50.00



EOP
-27.52 FT.
4:1
-4:1
-2.7%
190.27
EOP
-24.94 FT.
ELEV. 187.60
STA. 2+81.89
40.44 RT.
EXIST. POLE
210
205
200
195
190
185
180
-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

3+00.00

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

CITY OF AUBURN
BRICKYARD CIRCLE

CROSS SECTIONS

SHEET NUMBER

11

OF 13

Sta. 3+00.00 to Sta. 3+50.00

Date:5/9/2023

Username: ACHANDLER

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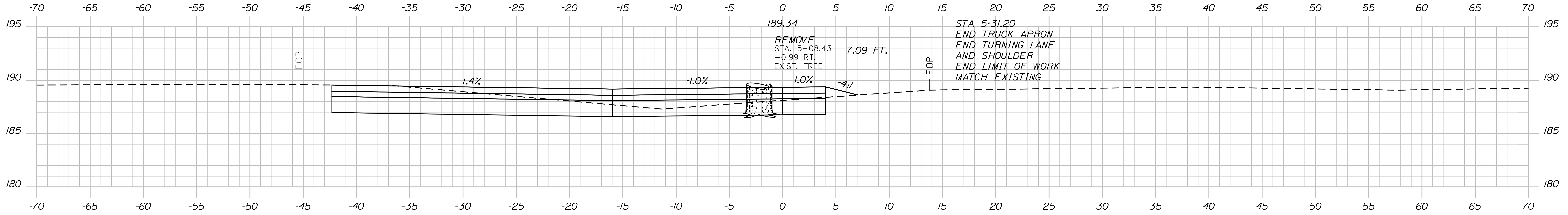
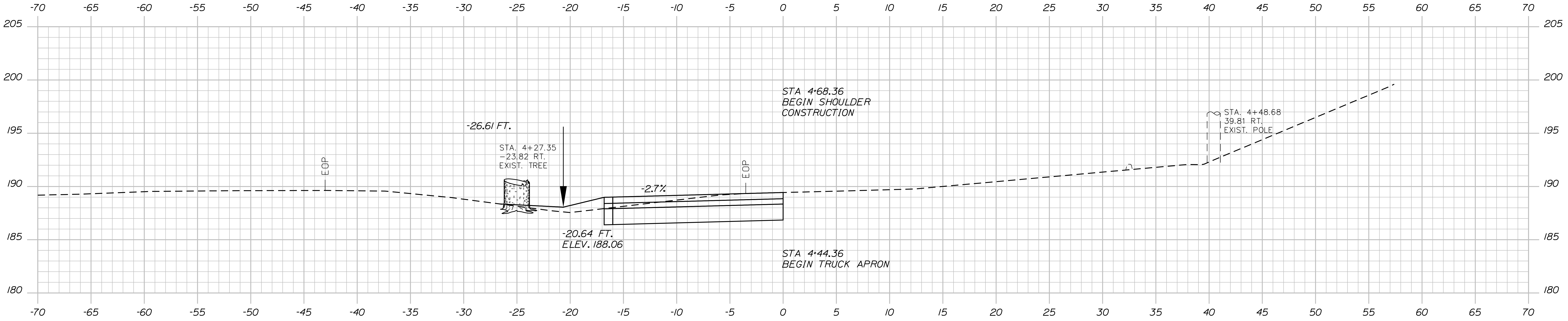

189.34
REMOVE
STA. 5+08.43
−0.99 RT.
EXIST. TREE
7.09 FT.
STA 5+31.20
END TRUCK APRON
END TURNING LANE
AND SHOULDER
END LIMIT OF WORK
MATCH EXISTING
EOP
EOP
1.4%
-1.0%
1.0%
-4:1
195
190
185
180
-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

5+00.00


STA 4+68.36
BEGIN SHOULDER
CONSTRUCTION
-26.61 FT.
STA. 4+27.35
−23.82 RT.
EXIST. TREE
STA. 4+48.68
39.81 RT.
EXIST. POLE
EOP
EOP
-2.7%
-20.64 FT.
ELEV. 188.06
STA 4+44.36
BEGIN TRUCK APRON
205
200
195
190
185
180
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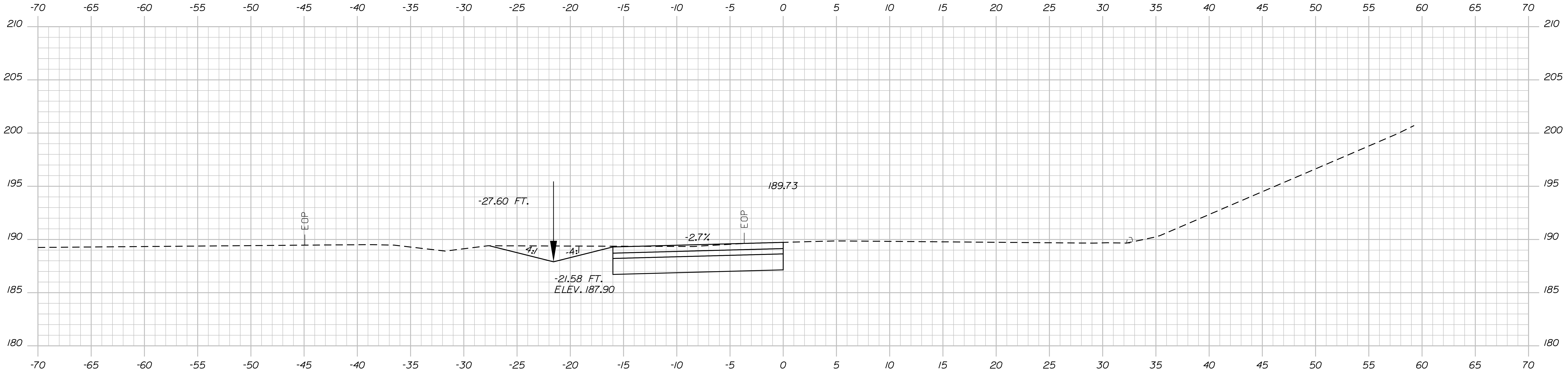
4+50.00


189.73
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EOP
EOP
-2.7%
4:1
-4:1
-21.58 FT.
ELEV. 187.90
210
205
200
195
190
185
180
-70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

4+00.00

Barton & Loguidice

JOHN QUENTIN ADAMS
No. 11083

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	AGC	AGC	05/09/23
CHECKED-REVIEWED	JQA		05/09/23

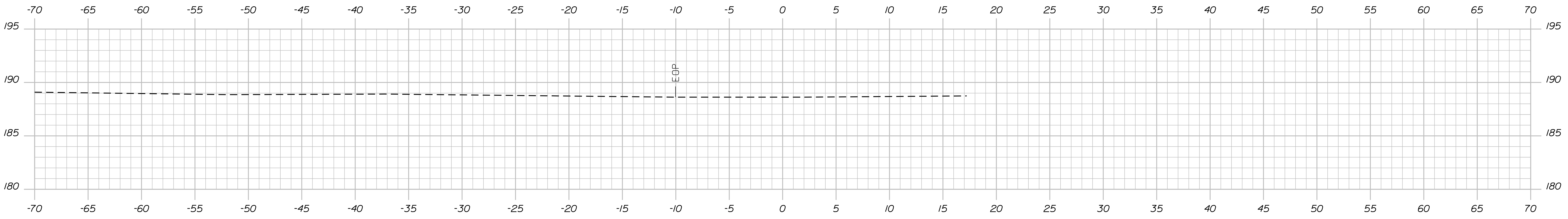
CITY OF AUBURN
BRICKYARD CIRCLE

CROSS SECTIONS

SHEET NUMBER
12
OF 13

Sta. 4+00.00 to Sta. 5+00.00

Filename: ...\Microstation\CrossSections.dgn Username: ACHANDLER Date:5/9/2023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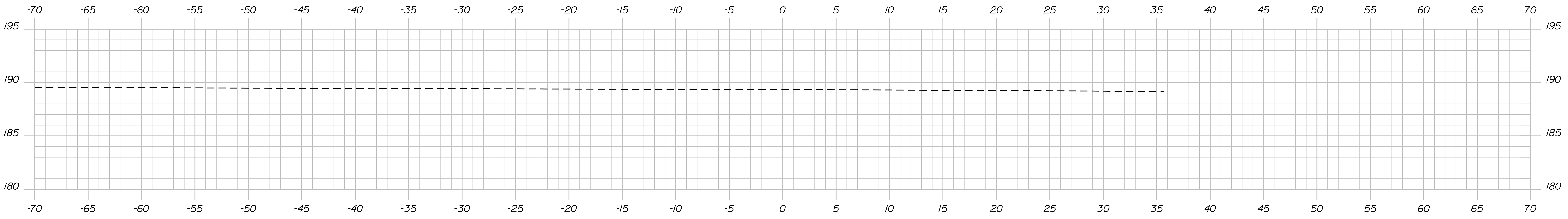
195
190
185
180
EOP

5+74.00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195
190
185
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5+50.00

Barton & Loguidice

JOHN QUENTIN ADAMS No. 11083

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	AGC	AGC 05/09/23
CHECKED-REVIEWED	JQA	05/09/23

SIGNATURE
11083
P.E. NUMBER
05/09/23
DATE

CITY OF AUBURN
BRICKYARD CIRCLE

CROSS SECTIONS

SHEET NUMBER
13
OF 13

Sta. 5+50.00 to Sta. 5+74.00

Stormwater Management

(Partial Copy)

STORMWATER MANAGEMENT NARRATIVE

Rev: February 20, 2025

RICHARD W.
DUNTON
No. 12485

A. Narrative:

The subject property is located on Brickyard Circle in Auburn, Maine. The intent of this project is to construct 8, 12-unit apartment buildings along with access roads, parking , and recreational areas. In total, this project proposes **4.01** acres of new impervious area and **3.06** acres of new non-impervious area for a total of **7.07** acres of developed area.

The site, in its existing condition, is nearly entirely wooded. The project proposes to create impervious area and as such, stormwater design for quality and quantity treatment is proposed. Two stormwater Best Management Practices and one proprietary device are utilized to manage both stormwater quality and quantity. Two stormwater ponds were designed using Maine DEP Best Management Practice methods as outline in the *Maine Stormwater Management Design Manual, Technical Design Manual Volume III.*

To address stormwater peak flow rates, the site was modeled in the pre-development and post-development conditions. This analysis shows that stormwater run-off rates decrease as a result of the project. Main-Land identified two Watershed Analysis Points (WAP A & B) in the pre-development condition and three Watershed Analysis Points (WAP A, B & C) in the post-development condition where stormwater runoff leaves the subject parcel.

The following is a description of the areas flowing to each Watershed Analysis Point (WAP) in the pre- and post-development conditions. HydroCAD version 10.0, was used to model both conditions. As described below, the proposed stormwater peak flow rates leaving the project site are generally less than the existing condition. Following the descriptions, a table summarizing pre and post development flowrates is included. D1.1 Pre-Development and D2.1 Post-Development Plan show these WAP's and their associated flow paths.

Stormwater Management

Pre-Development:

The project parcel in the pre-development condition, is nearly entirely wooded except for an open meadow area near the existing entrance off Brickyard Circle. The site generally slopes north toward Taylor Brook.

Two Watershed Analysis Points (WAPs) were identified in the pre-development condition. WAP A is located on Taylor Brook, just before the culvert under Brickyard Circle. WAP B is located on the southeastern side of the site and flows to the adjacent railroad tracks, is picked up by the drainage ditch, flows under the existing access culvert and into Taylor Brook.

Post-Development:

Post-Development stormwater quality goals for this project were derived from Maine DEP's Chapter 500 rules. Based on the standard, **95%** of new impervious area and **80%** of new developed area must be treated for quality. Per the stormwater design, integral to and included with this narrative, **98.0%** and **82.1%** of the impervious and developed areas respectfully, are treated.

In the post-development condition, an additional WAP, "C", was identified. This WAP was created by the proposed access drive sloping up into the site, resulting in runoff from the only untreated impervious area of the site. Runoff from this small segment of road flows over Brickyard Circle and into Taylor Brook.

WAP B in post-development no longer will have runoff flowing to it. Instead, runoff from developed area will be captured through ditching and treated.

WAP A in post-development is the point to which most of the site drains. As mentioned previously, 98% of impervious and 82.1% of developed area are treated. This treatment percentage is accomplished through the use of a Grassed Underdrained Soil Filter and a proprietary FocalPoint device that drains to a Detention Pond. The Grassed Underdrained Soil Filter treats Subcatchment series "3" along with roof runoff from building 2. The other treatment area, which includes Subcatchment series "4" along with roof runoff from the other 7 buildings, is comprised of a proprietary filter media bed called FocalPoint designed by *Ferguson Waterworks*. Treated water from that system discharges to a Detention Pond to control flooding volume. Details regarding the drainage network which captures and channels stormwater to the treatment ponds can be found on the Grading, Utilities, and Stormwater Plans which are included as part of this application.

Along with the quality treatment percentages, peak stormwater flow attenuation was designed to ensure the peak stormwater flowrate in the post-development condition does not exceed that of the pre-development condition. A summary of peak stormwater flows in pre- & post-development is shown below. Units are in cubic feet per second (cfs).

WAP	Storm Event	Pre-Develop.	Post-Develop.	Change
A	2-year	5.79	5.38	-0.41
	10-year	11.05	9.45	-1.60
	25-year	15.8	15.48	-0.32
B	2-year	0.23	0	-0.23
	10-year	0.45	0	-0.45
	25-year	0.65	0	-0.65
C	2-year	0	0.14	0.14
	10-year	0	0.21	0.21
	25-year	0	0.26	0.26

Total Flow From Site		
	Pre	Post
2-year	6.02	5.52
10-year	11.50	9.66
25-year	16.45	15.74

Figure 1: Drainage Summary Tables

As shown in the tables above, WAP A and B see a decrease in peak stormwater runoff flows in the post-development condition. WAP C doesn't exist in the pre-development condition and comprises of a small portion of entrance drive that is not able to be attenuated due to the physical restraints of the site. The entire site flows to Taylor Brook and the overall peak flow of stormwater runoff is decreased by the project so the project meets the requirements of the Town of Auburn's stormwater ordinance.

The following is an address to Maine DEP Site Location of Development Act (SLODA) Section 12 requirements.

1. Development Location: The proposed project is located near the intersection of Washington St. and Brickyard Circle. This project is located within the watershed of Taylor Brook.

2. Surface Water on or Abutting the Site: A hydrologic analysis of the upstream watershed of Taylor brook was not performed as part of the stormwater analysis.

3. Downstream Ponds and Lakes: Taylor Brook flows into the Little Androscoggin River and onto the Androscoggin River.

4. General Topography: As stated the project parcel generally flows north to Taylor Brook. The site is gently sloping in upland areas and drops steeply to the brook.

5. Flooding: The 100-yr flood zone boundary is shown on the plan set included as part of this application.

6. Alterations to Natural Drainage Ways: The proposed drainage design closely follows the existing drainage patterns as the runoff flows to Taylor Brook.

7. Alterations to Land Cover: Alteration to existing land cover will include the construction of buildings, paved parking areas, and landscaped grassed areas.

8. Modeling Assumptions: As stated above no hydrologic analysis of Taylor Brook was performed as part of the stormwater analysis. TR-55 modeling methodology was utilized as this is a "small watershed" analysis.

9. Water Quantity Control: Two stormwater ponds are proposed which reduce peak runoff to near pre-development condition.

10. Water Quality Treatment: Stormwater quality treatment is achieved through the use of a Grassed Underdrained Soil Filter Pond and "Focal Point" treatment system.

11. Off-site Credits: Not Applicable

12. Compensation Fees: Not Applicable for stormwater related impacts. In lieu compensation is intended for mitigation of wetland impacts.

13. Development Impacts: Impacts to Natural Resources are included as part of this application.

B. Maps:

1. Topographic Map: Existing Topography is show on C1.0 Existing Conditions and Demolition.

2. Soils Map: The site is comprised of Hydrologic Soils Group (HSG) C and D soils. Soils boring logs are included as part of this application.

C. Drainage Plans:

Please see D1.1 Pre-Development and D2.1 Post-Development Stormwater Plan included as part of this application.

1. Contours: Existing conditions contours provided by topographic survey, see Survey reference plan. Proposed contours are shown on the stormwater plans.

2. Plan Elements: The Plan shows all of the required elements, including a legend, north arrow, title block, revision block and areas for professional stamps.

3. Land Cover Types and Boundaries: Included as part of this application.

4. Soil Group Boundaries: Please see boring logs provided as part of this application.

5. Stormwater Quantity Subwatershed Boundaries: Watershed boundary lines are shown on the plan.

6. Stormwater Quality Subwatershed Boundaries: Watershed boundary lines are shown on the plan.

7. Watershed Analysis Points: Shown of the Plans.

8. Hydrologic Flow Lines: Shown of the Plans.

9. Runoff Storage Areas: Shown on the Plans.

10. Roads and Drives: Shown on the Plans.

11. Facilities: Existing and proposed buildings and parking areas are shown on the Site Plans included in this application.

12. Drainage Systems: The closed drainage system of stormdrains and catch basins is shown on the Site Utilities plans.

13. Natural and Man-Made Drainage Ways: Design plans and stormwater model depict natural and proposed drainage ways.

14. Wetlands: The Site Plans included in the application show wetlands on site.

15. Flooded Areas: The 100-Year Flood Zone Boundary is shown the Plans.

16. Benchmark: N/A

17. Stormwater Detention, Retention and Infiltration Facilities: See narrative and accompanying documents. These elements are detailed on the plans and supporting documents.

18. Stormwater Treatment Facilities: See narrative and accompanying documents.

19. Drainage Easements: No drainage easements are proposed.

D. Runoff Analysis:

Please see the accompanying document included as part of this application. TR-55 analysis was performed using HydroCAD version 10 software.

1. Curve Number Computations: Included as part of this application.

2. Time of Concentration Calculations: Included as part of this application.

3. Travel Time Calculations: Included as part of this application.

4. Peak Discharge Calculations: Included as part of this application.

5. Reservoir Routing Calculations: Included as part of this application.

E. Flooding Standard Submissions:

See calculations and plans provided.

F. General Standards Submissions:

See calculations and plans provided.

1. Narrative.

Included as part of the application.

2. Drainage Plans.

Included as part of the application.

3. Calculations.

Included as part of the application.

4. Details, Designs, and Specifications.

   a. Ponds. Provided as part of this application.

   b. Underdrained Vegetated (Soil) Filters. Provided as part of this application.

   c. Infiltration N/A

   d. Buffers. N/A

5. Phosphorus Removal. N/A

G. Responsible Party for Long-Term Maintenance. The Maintenance Plan included as part of this application. The responsible party is the Applicant until such time as the property and permits are conveyed.

H. Components of the Maintenance Plan: The Maintenance Plan is included as part of this application.

1. Responsible Party: Applicant is the responsible party.

2. Transfer Mechanism: Transfer of the responsibility to conform with the Maintenance Plan will follow with the ownership of the parcel.

3. Facilities to be maintained: The facilities include the drives, drainage ditches, culverts, FocalPoint, Grassed Underdrained Soil Filter, and Detention Pond.

4. Inspection and Maintenance Tasks: The Plan (attached to this section) provides details as to the frequency of inspections, and the potential tasks that may be associated with this Plan.

5. Deed Restrictions and Covenants: No deed covenants or restrictions are proposed.

6. Maintenance Log: A description and a sample of a maintenance log is included as part of the Maintenance Plan.

7. Contracts: There are no proposed contracts for third party maintenance for this project.

I. Maintenance by a Homeowner Association: N/A

J. Maintenance of Facilities by a Municipality: N/A

K. General Inspection and Maintenance Requirements: A Maintenance Plan for the overall project site is included as part of this Section.

1. Drainage Easements: N/A

2. Ditches and Culverts: The Plan includes inspections and maintenance schedules of all culverts and ditches as described.

3. Roadways and parking surfaces: The Plan describes the maintenance necessary on the roads and parking, including resurfacing.

4. Stormwater Detention and Retention Facilities: The Plan describes the maintenance necessary for the stormwater facilities proposed by the project.

5. Runoff Infiltration Facilities: N/A

6. Proprietary Devices: “FocalPoint Treatment System”

7. Buffers: N/A

8. Other Practices and measures: N/A

Post-Development Area Summary		
	Ac	Notes
Impervious	**4.01**	Including Treatment Exempt Area
Developed	**7.07**	Impervious + Non-Impervious Developed. Including Exempt Area
Non-Impervious Developed	**3.06**	Developed Re-Vegetated Area
Undeveloped	**3.88**	Including Brook Surface Area

Proposed Treatment Percentages		
	Non-Linear	
	Impervious	Developed
Proposed	3.92	6.87
Treated	3.84	5.64
Percent Treated	**98.0%**	**82.1%**
Percent Required	95%	80%

DRAINAGE SUMMARY TABLE

WAP	Storm Event	Pre-Develop.	Post-Develop.	Change
A	2-year	5.79	5.38	-0.41
	10-year	11.05	9.45	-1.6
	25-year	15.80	15.48	-0.32
B	2-year	0.23	0	-0.23
	10-year	0.45	0	-0.45
	25-year	0.65	0	-0.65
C	2-year	0	0.14	0.14
	10-year	0	0.21	0.21
	25-year	0	0.26	0.26

Total Flow From Site		
	Pre	Post
2-year	6.02	5.52
10-year	11.5	9.66
25-year	16.45	15.74

Project:	**Brickyard Commons**
Proj Number:	21-342

DRAINAGE AREA CALCULATIONS

PRE-DEVELOPMENT AREAS

SUB	TOTAL	WOODS D	MEADOW D	GRAVEL D	PAVED D	ROOF D	GRASS D	WATER/ BROOK	
1	5.79	5.42	0.37						OKAY
2	0.34	0.34							OKAY
5	4.82	3.59	0.02					1.21	OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
									OKAY
	10.95	9.35	0.39	0		0	0		10.95

POST-DEVELOPMENT AREAS

		EXISTING AREAS							PROPOSED AREAS							
SUB	TOTAL	WOODS D	MEADOW D	GRAVEL D	PAVED D	ROOF D	GRASS D	WATER BROOK	PAVED D	GRAVEL D	ROOF IMPERV	PAVED EXEMPT	GRASS D	GRASS EXEMPT		
1.0	0.05								0.04				0.01			OKAY
2.0	0.36	0.16										0.09		0.11		OKAY
3.0	0.37								0.18				0.19			OKAY
3.1	0.07								0.06				0.01			OKAY
3.2	0.23								0.14				0.09			OKAY
3.3	0.1								0.08				0.02			OKAY
3.4	0.18	0.07							0.07				0.04			OKAY
3.5	0.09								0.08				0.01			OKAY
4.0	0.44												0.44			OKAY
4.1	0.04								0.04							OKAY
4.2	0.52								0.45		0.01		0.06			OKAY
4.3	0.13								0.08				0.05			OKAY
4.4	0.08								0.07				0.01			OKAY
4.5	0.18								0.02				0.16			OKAY
4.6	0.05								0.04				0.01			OKAY
4.7	0.13	0.01							0.09				0.03			OKAY
4.8	0.63								0.12				0.51			OKAY
4.9	0.02								0.02							OKAY
4.10	0.24								0.20				0.04			OKAY
4.11	0.2								0.17				0.03			OKAY
4.12	0.20								0.15				0.05			OKAY
4.13	0.18								0.16				0.02			OKAY
4.14	0.2								0.17				0.03			OKAY
5.0	4.82	2.43						1.21	0.04				1.14			OKAY
6.1	0.18									0.05	0.13					OKAY
6.2	0.18									0.05	0.13					OKAY
6.3	0.18									0.05	0.13					OKAY
6.4	0.18									0.05	0.13					OKAY
6.5	0.18									0.05	0.13					OKAY
6.6	0.18									0.05	0.13					OKAY
6.7	0.18									0.05	0.13					OKAY
6.8	0.18									0.05	0.13					OKAY
	10.95	2.67	0	0	0	0	0	1.21	2.47	0.4	1.05	0.09	2.95	0.11	0	10.95

WORKSHEET FOR EVALUATING STORMWATER BMP's

FILTER DESIGNS

filter 1

Channel Protection Volume	acres:		
Impervious Area	0.79	1" Volume=	2868 cf
Developed non-impervious area	0.36	0.4" Volume=	523 cf
		Total Volume=	**3390** cf

Area Sizing	sq. ft:	
5% of the Impervious Area	1721	
2% of the Developed non-impervious Area	314	
Total surface area of the filter media top:	**2034**	square feet

Sediment Forebay		
Impervious area to be sanded:	0.79	acres
Sand Application Rate, per storm	500	lbs per acre
Sand Desity, +/-	90	pcf
Number of Storms	10	annually
Forebay Size	**44**	cf

Design Forebay Size	**84**	cf
Designed Volume:	3618	cf
Designed Filter Area:	2076	sf

FERGUSON
WATERWORKS

FOCALPOINT DESIGN SHEET

HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM

MAINE CHAPTER 500 PROJECTS

1. **Determine FocalPoint bed area (minimum 174 sf/acre of impervious area - ex: 0.2 acres = 35 sf) See step 2 to determine if minimum size is appropriate.**
   - Tributary impervious area: = See Cover Letter ac **(A)**
   - Tributary pervious area: = ________ ac **(B)**
   - Minimum FocalPoint bed area required: **= ((A x 1.0) + (B x 0.4)) * 174** = 631 sf
   - FocalPoint bed area provided*: = 645 sf
   - Dimensions of proposed FocalPoint: = 15 ft x 43 ft

2. **A 0.95 in Type III 24-hr rainfall event shall be modelled to demonstrate the entire storm volume is treated prior to activation of the overflow (typically set at 6 - 12 in above the mulch)**
   - Temporary storage depth provided: = 6 in (typically 6 - 12 in)
   - Temporary storage volume provided at above depth: = 399 ft^3
   - Peak ponding depth from 0.95” 24 hr storm event: = BELOW MULCH in

3. **Ratio of the surface area of the filter media (sf) to the temporary ponding volume (cf) shall be no less than 1:5**
   - Ratio of FocalPoint bed area: = ________ : ________

4. **Subsurface R-Tank or chamber treatment row must be sized to treat the peak flow from a 1 yr - 24-hr storm event.**
   - 1 yr 24-hr peak flowrate: = 7.87 cfs
   - Chamber/module selected:
     - Cultec 330 XLHD (1 chamber per 0.227 cfs) ☐
     - Cultec 150 XLHD (1 chamber per 0.185 cfs) ☐
     - R-Tank modules (WHAT TYPE)(1 module per 0.02 cfs) ☑
   - Number of chamber/modules required: = 394

5. **Controlled release of the channel protection over 24 - 48 hrs**
   - Controlled realease of the channel protection volume is being achieved by:
     - Expanded subsurface storage basin with outlet control structure (OCS) ☐
     - Surface detention basin with OCS ☑

6. **A landscape plan for the FocalPoint bed area has been prepared** ☐

7. **Design review and installation oversight by manufacturer’s representative**
   - The design has been reviewed by Ferguson ☐
   - Engineer will coordinate installation inspection with Ferguson ☐

Contact Loren Joyce - Stormwater Engineer
Cell: 207.272.9743 | Email: loren.joyce@ferguson.com

FERGUSON
WATERWORKS

DESIGNING WITH FOCALPOINT IN MAINE

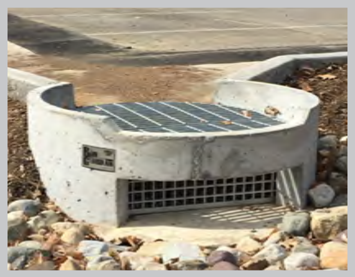
The Maine Department of Environmental Protection has approved the FocalPoint (High Performance Modular Biofiltration System) for use on Chapter 500 site development projects in the State of Maine.

SIZING CRITERIA SUMMARY

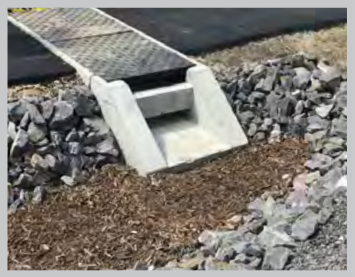
- The surface area of the media within the FocalPoint must be sized using a ratio of 174 sf to 1 are of impervious area (ex. 26 sf to 0.15 acres).
- The system must be modelled in HydroCAD (or similar TR-55 modeling software) to demonstrate that the entire volume of a 0.95-in Type II or III 24-hr storm is treated prior to activation of the bypass/overflow (typically set at 6 - 12 in above the mulch surface).
- The system must be placed in-line with a subsurface chamber based treatment row that is approved by the department. The treatment row will be sized to treat the peak flow from a 1-year, 24-hour storm event.
- Additional storage downstream of the FocalPoint and treatment row will be required to store at least the sum of 1.0 in of runoff from the impervious areas and 0.4 in of runoff from the landscaped areas that drain to the system (unless attenuation of the channel protection volume is not required) and control to release to drain between 24 - 48 hrs.

FOCALPOINT SYSTEMS:

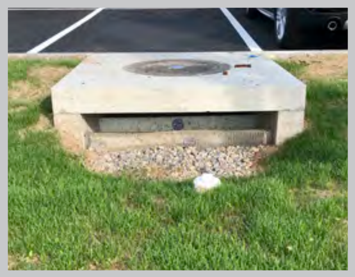
FOCALPOINT ACCESSORIES:



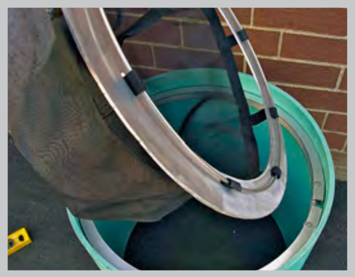
Pretreatment - Rain Guardian Turret



Pretreatment - Rain Guardian Foxhole



Pretreatment - PreTx



Bypass protection - Domed overflow with filter insert

For additional information please visit: acfenvironmental.com

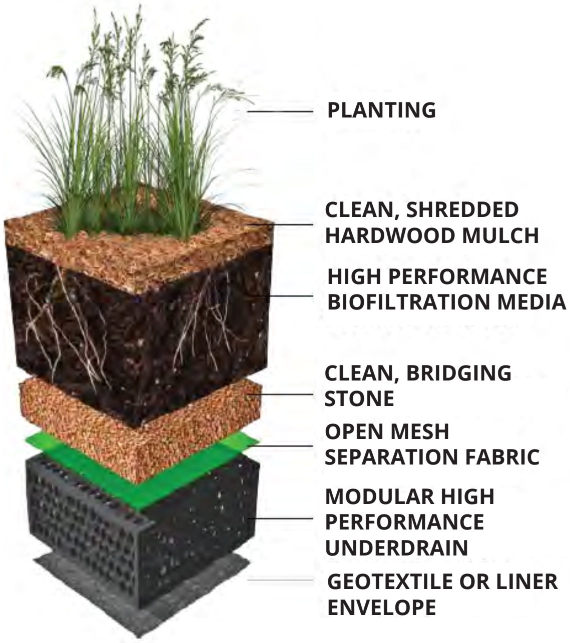
Contact Loren Joyce - Stormwater Engineer
Cell: 207.272.9743 | Email: loren.joyce@ferguson.com

FOCALPOINT

BIOFILTRATION SYSTEM

STORMWATER MANAGEMENT

HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM FOR FILTRATION OF STORMWATER


PLANTING
CLEAN, SHREDDED HARDWOOD MULCH
HIGH PERFORMANCE BIOFILTRATION MEDIA
CLEAN, BRIDGING STONE
OPEN MESH SEPARATION FABRIC
MODULAR HIGH PERFORMANCE UNDERDRAIN
GEOTEXTILE OR LINER ENVELOPE

FocalPoint is an ultra-efficient, modular biofiltration system that treats and drains large volumes of stormwater runoff in a small footprint to meet post-construction stormwater treatment requirements. The biofiltration system utilizes the physical, chemical and biological mechanisms of a soil, plant and microbe complex to remove pollutants typically found in urban stormwater runoff. The system can be installed along the edge of a roadway behind curb lines, in landscaped stormwater basins and can be incorporated into an urban green infrastructure streetscapes. Infiltration flow rates for the system's standard media exceed 100" per hour. It is a complete, integrated system with a demanding specification that ensures functionality, performance and maintainability.

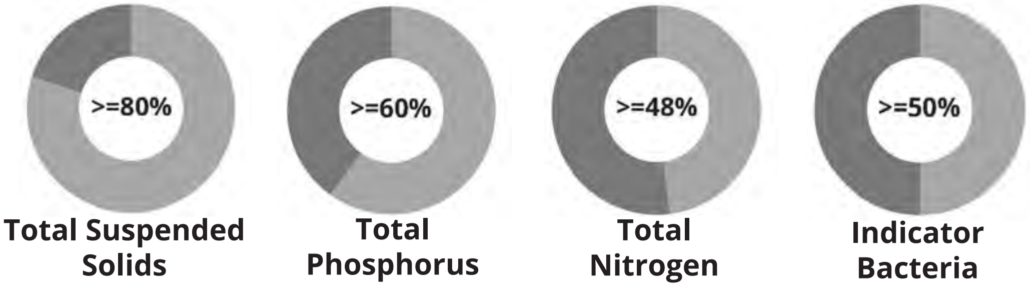
ADVANTAGES:

- Gain usable square footage
- Reduce material requirements and cost
- Improve property aesthetic and value
- 100"+ per hour infiltration rate
- Treat the same amount of water in <10% of the area required for traditional bioretention
- ACF provides 1st year of maintenance on system

For more information about Stormwater Management, contact Inside Sales at 800.448.3636
email at info@acfenv.com

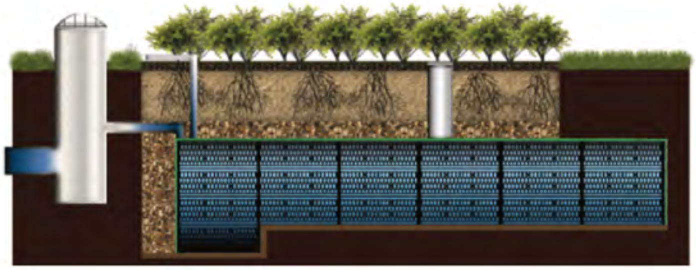
POLLUTANT REMOVAL

FocalPoint achieves pollutant removal rates consistent with traditional bioretention, and the option of increased removal characteristics for specific pollutant targets. The system is 3rd party field tested under TAPE (Technology Assessment Protocol – Ecology), independently field tested by the North Carolina State University, and has numerous agencies' approvals that meet state water quality standards for post construction BMPs.

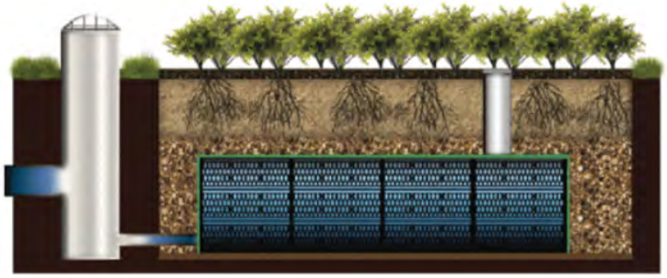


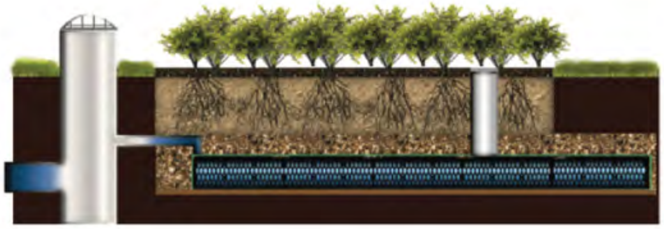
MODULAR UNDERDRAIN

FocalPoint's modular open cell underdrain system, unlike traditional underdrains, not only supports the flow rate of the media, but can be expanded beyond the footprint of the media bed to provide unlimited underground detention, infiltration and/or storage for water reuse. This can help meet channel protection, infiltration and flood control requirements.



R-Tank underdrain can be extended beyond FocalPoint footprint as shown above





ENVIRONMENTAL

LET'S GET IT DONE

800.448.3636
acfenvironmental.com

ACCESSORY PRODUCTS

Beehive Overflow Filter Riser
for collection of gross solids during major storm events

Rain Guardian Turret
for curbline pretreatment and energy dissipation

Summary for Pond 1P: Detention Pond

Inflow Area = 4.620 ac, 66.23% Impervious, Inflow Depth = 3.38" for 10-yr event
Inflow = 17.26 cfs @ 12.08 hrs, Volume= 1.303 af
Outflow = 4.56 cfs @ 12.45 hrs, Volume= 0.571 af, Atten= 74%, Lag= 21.9 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af ← Primary Plugged
Secondary = 4.56 cfs @ 12.45 hrs, Volume= 0.571 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 211.84' @ 12.45 hrs Surf.Area= 8,516 sf Storage= 33,035 cf

Plug-Flow detention time= 290.4 min calculated for 0.571 af (44% of inflow)
Center-of-Mass det. time= 155.7 min (934.1 - 778.4)

Volume	Invert	Avail.Storage	Storage Description
#1	203.00'	46,069 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
203.00	647	0	0
204.00	1,117	882	882
205.00	1,653	1,385	2,267
206.00	2,254	1,954	4,221
207.00	2,919	2,587	6,807
208.00	3,651	3,285	10,092
209.00	4,832	4,242	14,334
210.00	6,026	5,429	19,763
211.00	7,279	6,653	26,415
212.00	8,755	8,017	34,432
213.20	10,640	11,637	46,069

← Top of Berm

Device	Routing	Invert	Outlet Devices
#1	Primary	203.00'	**24.0" Round Culvert X 0.00** L= 129.9' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 203.00' / 202.00' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	210.30'	**15.0" W x 5.0" H Vert. Orifice/Grate** C= 0.600
#3	Device 1	211.40'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	203.25'	**4.0" Round Culvert** L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 203.25' / 203.25' S= 0.0000 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.09 sf
#5	Secondary	211.70'	**25.0' long (Profile 9) Broad-Crested Rectangular Weir** Head (feet) 1.97 2.46 2.95 3.94 4.92 Coef. (English) 3.55 3.55 3.57 3.60 3.66

Summary for Pond FP:

```
[80] Warning: Exceeded Pond SD3.5 by 1.35' @ 16.62 hrs (3.96 cfs 2.183 af)

Inflow Area =      1.220 ac, 64.75% Impervious, Inflow Depth =  3.37"   for  10-yr event
Inflow      =    3.69 cfs @  12.08 hrs, Volume=         0.343 af
Outflow     =    0.34 cfs @  13.38 hrs, Volume=         0.110 af, Atten= 91%, Lag= 77.7 min
Primary     =    0.00 cfs @   0.00 hrs, Volume=         0.000 af  ← Primary Plugged
Secondary   =    0.34 cfs @  13.38 hrs, Volume=         0.110 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 208.55' @ 13.38 hrs   Surf.Area= 3,824 sf   Storage= 10,351 cf

Plug-Flow detention time= 368.2 min calculated for 0.110 af (32% of inflow)
Center-of-Mass det. time= 217.6 min ( 1,005.8 - 788.3 )

Volume     Invert   Avail.Storage  Storage Description
  #1       205.00'      16,607 cf  Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation       Surf.Area      Inc.Store      Cum.Store
   (feet)         (sq-ft)   (cubic-feet)   (cubic-feet)
   205.00           2,075              0              0
   206.00           2,522          2,299          2,299
   206.50           2,756          1,320          3,618
   207.00           3,005          1,440          5,058
   208.00           3,521          3,263          8,321
   209.00           4,069          3,795         12,116
   210.00           4,913          4,491         16,607  ← Top of Berm

Device   Routing        Invert   Outlet Devices
  #1     Device 2       205.00'  2.410 in/hr Exfiltration over Surface area
                                 Conductivity to Groundwater Elevation = 201.50'
  #2     Primary        203.00'  4.0" Round Culvert X 0.00
                                 L= 40.0'  CPP, projecting, no headwall,  Ke= 0.900
                                 Inlet / Outlet Invert= 203.00' / 202.00'   S= 0.0250 '/'   Cc= 0.900

                                 n= 0.020  Corrugated PE, corrugated interior,  Flow Area=
                                 0.09 sf
  #3     Secondary      208.50'  8.0' long  (Profile 9) Broad-Crested Rectangular Weir
                                 Head (feet)  1.97  2.46  2.95  3.94  4.92
                                 Coef. (English)  3.55  3.55  3.57  3.60  3.66

Primary OutFlow  Max=0.00 cfs @ 0.00 hrs  HW=205.00'  TW=199.00'  (Dynamic Tailwater)
  2=Culvert  ( Controls 0.00 cfs)
    1=Exfiltration  (Passes 0.00 cfs of 0.12 cfs potential flow)

Secondary OutFlow  Max=0.34 cfs @ 13.38 hrs  HW=208.55'  TW=199.05'  (Dynamic Tailwater)
  3=Broad-Crested Rectangular Weir  (Weir Controls 0.34 cfs @ 0.82 fps)
```

Ferguson Waterworks
94 Pleasant Ave
South Portland, ME 04106

Shane Howley, E.I.
Staff Engineer
69 Main Street
Livermore Falls, ME 04254
May 2, 2022

SUBJECT: Brickyard Commons – Washington St., Auburn, ME
Design Review of SWM Systems – FocalPoint Biofiltration System

Dear Shane,

Thank you for forwarding the Submission 1 Plans for the proposed Brickyard Commons development site in Auburn, Maine to Ferguson Waterworks for review. Our team has reviewed the plans dated January 4th, 2022 as well as HydroCAD modeling, which shows the following FocalPoint system:

- FocalPoint Biofiltration System – 615 SF footprint with
  - 24" dia. domed overflow structure with filter insert
  - 360 Expanded R-Tank^{HD} Treatment Row Modules

System Review:

- The FocalPoint system is set in a recessed vegetated 'bowl' area.
- Runoff flows into the system from the surrounding pavement, developed areas and through a network of storm drains.
- The typical FocalPoint section appears to consist of 3" mulch, 18" media, 6" bridging stone and 1.44' modular underdrain.
- A 24" dia. domed overflow riser with filter insert is specified to convey larger storm events – essentially as a bypass.
- A landscape plan should be prepared for the site including the FocalPoint bed areas.

Overall, Ferguson takes no exceptions to the location and application of the FocalPoint system for this project to provide WQ treatment. Ferguson will review/provide comments for plan revisions and final system detail sheets as received.

With regard to the installation, Ferguson Waterworks will host a preconstruction meeting with the site contractor and will be on-site during the entire installation to ensure that the installation is being conducted in accordance with our standard installation procedures. Ferguson Waterworks will also provide maintenance consultation for the first year following install consisting of typical maintenance procedures and overview of system condition.

Please review and contact me with any questions from your office. We look forward to working with you on this project.

Sincerely,

Loren Joyce,
Stormwater Engineer
Ferguson Waterworks

Cc: Robert J Woodman, Ferguson Waterworks

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

May 16, 2016

Stormwater Systems ACF-Convergent Water Technologies Alliance
23 Faith Drive
Gorham, ME 04038
ATTN: Robert Woodman and Scott Gorneau

Dear Mr. Woodman and Mr. Gorneau:

This letter is to inform you that the Department of Environmental Protection (Department) has determined the FocalPoint system (a high performance modular biofiltration system), when installed in series with a subsurface chamber-based treatment row, meets the requirements of the General Standards (Section 4.C.) of the Stormwater Management Rules (Chapter 500), provided that the system is filled with the FocalPoint engineered filter media; it is sized to meet the requirements of the General Standards (Section 4.B.); and it is installed, operated and maintained in accordance with the following provisions:

1. The FocalPoint system must be sized in accordance with the manufacturer's latest field test results with the goal of treating 90% of the annual runoff volume. To accomplish this, the system must be modelled in HydroCAD (or similar TR-55 modelling software) to demonstrate that the entire volume of a 0.95 inch Type III 24-hr storm is treated prior to activation of the bypass/overflow (typically set at 6" to 12" above the mulch surface).

2. The surface area of the media within the FocalPoint must be a minimum of 174 square feet per 1 acre of impervious area treated (26 sq. ft. per 0.15 acres). The thickness of the media is to be no less than 1.5 ft (18 inches) and the ratio of the surface area of the filter media bed in square feet to the ponding volume in cubic feet must be no less than 1 to 5.

3. The FocalPoint system consists of five components that include: 1) an open cell underdrain; 2) a wide aperture separation mesh wrap around the underdrain; 3) a layer of clean washed, 3/8" diameter bridging stone; 4) advanced high flow rate engineered media with an infiltration rate of 100 inches per hour; and 5) double shredded hardwood mulch. These components are built from the bottom up to create a mostly permeable profile that measures 3 feet from bottom of underdrain to top of mulch. The ponding depth above the mulch surface is typically 6 to 12 inches and varies based on site conditions. An overflow outlet should be placed above the ponding depth.

4. The FocalPoint system requires the establishment of vegetation that is tolerant of wet and dry conditions. Plants that are not performing as desired should be replaced as needed. A list of appropriate plants for use in the FocalPoint system is provided at: http://www.acfenvironmental.com/products/stormwater-management/filtration/focal-point/.

5. The FocalPoint biofiltration system must be placed in-line with a subsurface chamber-based treatment row that is approved by the Department such that both the treated discharge and the bypass discharge from the FocalPoint system drain to the treatment row. The treatment row must be sized to treat the peak flow from a 1-year, 24-hour storm event. The treatment row structure must be continuous and without obstacle for cleaning, and must have access at both ends for the removal of accumulated sediment and debris. The treatment row must be underlain with a bottom surface consisting of 2 layers of woven geotextile (e.g., ACF S300) that extends 18 to 24 inches beyond all sides of the bottom of the structure.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

BANGOR
106 HOGAN ROAD, SUITE 6
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312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

6. Additional storage downstream of the FocalPoint and treatment row will be required to store at least the sum of 1.0 inch of runoff from the impervious areas and 0.4 inches of runoff from the lawn and landscaped areas that drain to the system unless attenuation of the channel protection volume is not required (i.e. direct discharge to a lake, tidal waters, or a major river). An external outlet control structure must control the flow out of a downstream storage system, sized for the entire channel protection volume, and drain in no less than 24 hours or more than 48 hours.

7. If required for flooding control, the storage system can be sized to provide for the storage and release of the peak flow with a regulated flow rate from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows from the project site do not exceed the peak flow prior to undertaking the project.

8. The applicant must demonstrate that the design meets all the manufacturer's specifications and shall be reviewed by the manufacturer prior to submission to the Department for approval. Review and approval of the design by the manufacturer will be sufficient to demonstrate conformance with the manufacturer's specifications. The FocalPoint system must be installed by a manufacturer's certified installer or under the supervision of a manufacturer's representative.

9. Components of the system that are delivered in bulk (i.e., mulch, high flow media and clean washed bridging stone), should be contained in nylon super sacks to promote ease of storage and protection during on-site construction activities.

10. The FocalPoint and treatment row system should be inspected and maintained if necessary at least once every six months to maintain the established efficiency for pollutant removal. Prior to construction, a five-year binding inspection and maintenance contract must be provided prior to the Department for review and approval, and must be renewed before contract expiration. The contract will be with a professional with knowledge of erosion and stormwater control, including experience with the proposed system.

11. The overall stormwater management design must meet all Department criteria and sizing specifications and will be reviewed and approved by the Department prior to use.

12. This approval is conditional on full-scale, cold climate field testing results, performed in accordance with the Department's protocols, confirming that the pollutant removal efficiency and sizing of the FocalPoint system are appropriate. The "permit shield" provision (Section 14) of the Chapter 500 rules will apply, and the Department will not require the replacement of the system if, with proper maintenance, pollutant removals do not satisfy the General Standard Best Management Practices.

We look forward to working with you as these stormwater management systems are installed on new projects. Questions concerning this decision should be directed to Marianne Hubert at (207) 215-6485 or Jeff Dennis at (207) 215-6376.

Sincerely,

Mark Bergeron, P.E.
Director
Bureau of Land Resources

C: Don Witherill, Maine DEP

SPECIFICATION
HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS)
Material, Performance and Installation Specification

I. Summary

The following general specifications describe the components and installation requirements for a volume based High Performance Modular Biofiltration System (HPMBS) that utilizes physical, chemical and biological mechanisms of a soil, plant and microbe complex to remove pollutants typically found in urban storm water runoff. The modular treatment system in which the biologically active biofiltration media is used shall be a complete, integrated system designed to be placed in Square Foot or Linear Foot increments per the approved drawings to treat contaminated runoff from impervious surfaces.

The High Performance Modular Biofiltration System (HPMBS) is comprised of the following components:

A. Plant Component

1. Manufacturer shall provide a regionalized list of acceptable plants.
2. Plants, as specified in the approved drawings/manufacturer's plant list, shall be installed at the time the HPMBS is commissioned for use.
3. Plants and planting are typically included in landscape contract.

B. Biofilter Component

1. This component employs a high performance cross-section in which each element is highly dependent on the others to meet the performance specification for the complete system. It is important that this entire cross-section be provided as a complete system, and installed as such.

2. As indicated in the approved drawings, the elements of the Biofilter include:

   A. *A mulch protective layer (if specified).*

   B. *An advanced high infiltration rate biofiltration planting media bed which utilizes physical, chemical and biological mechanisms of the soil, plant, and microbe complex, to remove pollutants found in storm water runoff.*

   C. *A separation layer which utilizes the concept of 'bridging' to separate the biofiltration media from the underdrain without the use of geotextile fabrics.*

D. *A wide aperture mesh layer utilized to prevent bridging stone from entering the underdrain/storage element.*

E. *A modular, high infiltration rate 'flat pipe' style underdrain/storage system which is designed to directly infiltrate or exfiltrate water through its surface. The modular underdrain must provide a minimum of 95% void space.*

C. Energy Dissipation Component

1. An Energy Dissipation Component is typically specified to slow and spread out water as it enters the system. This component is dependent upon the design in the approved drawings, but typically consists of a rock gabion, rock filter dam or dense vegetation element, such as native grasses, either surrounding the Biofiltration Component or located immediately upstream of it.

D. Pretreatment Component

1. Pretreatment, when specified, is typically accomplished by locating the Biofiltration Component within a traditional vegetated BMP such as a vegetated swale, vegetated depression, traditional bioretention system, vegetated filter strip, sediment forebay, etc. These BMPs provide primary TSS removal when desirable.

E. Observation and Maintenance Component

1. An Observation and Maintenance Port shall be installed per the approved drawings to provide for easy inspection of the underdrain/storage element, and cleanout access if needed.

F. Extreme Event Overflow (by others)

1. An Extreme Event Overflow should be located external to, but near the Biofiltration element to provide bypass when needed. This may be an overland flow bypass structure, beehive overflow grate structure, or equivalent that serves the purpose. If beehive overflow structures is utilized it should include a removable filter insert to provide a minimum of 50% TSS removal and control of gross pollutants, trash and floatables.

II. Quality Assurance and Performance Specifications

The quality and composition of all system components and all other appurtenances and their assembly process shall be subject to inspection upon delivery of the system to the work site.

Installation is to be performed only by skilled work people with satisfactory record of performance on earthworks, pipe, chamber, or pond/landfill construction projects of comparable size and quality.

A. Plants

1. Plants must be compatible with the HPMBS media and the associated highly variable hydrologic regime. Plants are typically facultative with fibrous roots systems such a native grasses and shrubs.

2. Manufacturer shall provide a regionalized list of acceptable plants.

3. All plant material shall comply with the type and size required by the approved drawings and shall be alive and free of obvious signs of disease.

B. Mulch

1. Mulch, typically double shredded hardwood (non-floatable), shall comply with the type and size required by the approved drawings, and shall be screened to minimize fines.

C. Biofiltration Media

1. Biologically active biofiltration media shall be visually inspected to ensure appropriate volume, texture and consistency with the approved drawings, and must bear a batch number marking from the manufacturer which certifies performance testing of the batch to meet or exceed the required infiltration rate (100 in/hr). A third party laboratory test must be provided to certify the 100 in/hr rate.

2. Manufacturer shall provide, at no additional cost to the project owner/operator, maintenance of the biofiltration system for a period of one year.

3. Pollutant Removal performance, composition and characteristics of the Biofiltration Media must meet or exceed the following minimum standards as demonstrated by testing acceptable to the project engineer:

Pollutant	Removal Efficiency
TSS	91%
Phosphorus	66%
Nitrogen	48%
Composition and Characteristics	
Sand - Fine	< 5%
Sand – Medium	10% - 15%
Sand – Coarse	15% - 25%
Sand – Very Coarse	40% - 45%
Gravel	10% - 20%
Infiltration Rate	>100 inches per hour
Peat Moss*	5% - 15%

* Peat Moss Specification
Listed by Organic Materials Review Institute 100% natural peat (no composted, sludge, yard or leaf waste) Total Carbon >85% Carbon to Nitrogen Ratio 15:1 to 23:1 Lignin Content 49% to 52% Humic Acid >18% pH 6.0 to 7.0 Moisture Content 30% to 50% 95% to 100% passing 2.0mm sieve > 80% passing 1.0mm sieve

D. Underdrain/Storage System

1. Underdrain/storage components shall be manufactured in an ISO certified facility and be manufactured from at least 90% post consumer recycled materials.

2. Underdrain/storage components shall meet or exceed the following characteristics:

Property	Value
Surface Void Area	≥ 85%
Unit Weight	3.25 lbs/cf
Service Temperature	-14° to 167°
Unconfined Crush Strength	32.48 psi
180 Day Creep Test	
Load Applied – Initial and Sustained	11.16 psi
• Creep Sustained – After 180 Days	0.20 inches
• Creep Sustained – After 180 Days	1.13 %
• Projected Creep – 40 years	1.72%

E. Separation Mesh

1. Separation Mesh shall be composed of high-tenacity monofilament polypropylene yarns that are woven together to produce an open mesh geotextile which shall be inert to biological degradation and resistant to naturally encountered chemicals, alkalis and acids. The mesh shall meet or exceed the following characteristics:

Properties	Test Method	Unit	Min Ave Roll Value	
			MD	CD
Tensile Strength	ASTM D4595	kN/m (lbs/ft)	21 (1440)	25.3 (1733)
Creep Reduced Strength	ASTM D5262	kN/m (lbs/ft)	6.9 (471)	8.3 (566)
Long Term Allowable Design Load	GRI GG-4	kN/m (lbs/ft)	5.9 (407)	7.2 (490)

UV Resistance (at 500 hours)	-	% strength retained	90
Aperture Size (machine direction)	-	mm (in)	2 (0.08)
Aperture Size (cross machine direction)	-	mm (in)	2 (0.08)
Mass/Unit Area	ASTM D5261	g/m^2 (oz/yd^2)	197 (5.8)

F. Bridging Stone

1. Bridging Stone shall be 3/8” pea gravel, or other diameter sized to prevent migration of filter media, as specified by manufacturer.

2. Stone must be washed and free from sediment, soil and contaminants.

III. Delivery, Storage and Handling

A. Protect all materials from damage during delivery and store UV sensitive materials under tarp to protect from sunlight including all plastics, when time from delivery to installation exceeds one week. Storage should occur on smooth surfaces, free from dirt, mud and debris.

B. Biofiltration media shall be segregated from any other aggregate materials and shall be protected against contamination, including contamination from any stormwater runoff from areas of the site which are not stabilized.

IV. Submittals

A. Product Data

1. Submit manufacturer’s product data and approved Installation Manual as well as manufacturer’s Operations and Maintenance Manual for the system. It will be the responsibility of the system owner/operator or their contractor to ensure the system is operated and maintained in accordance with the manual.

B. Certification

1. Manufacturer shall submit a letter of certification that the complete system meets or exceeds all technical and packaging requirements. Biofiltration media packaging must bear a batch number marking from the manufacturer which matches a letter from the manufacturer certifying performance testing of the batch to meet or exceed the required infiltration rate.

C. Drawings

1. Manufacturer shall provide dimensional drawings including details for construction, materials, specifications and pipe connections.

D. Manufacturer’s Warranty

1. Manufacturer shall provide a warranty for all components of the HPMBS for a period of one year provided the unit is installed, operated and maintained in accordance with the manual. Improper operation, maintenance or accidental or illegal activities (i.e. dumping of pollutants, vandalism, etc.) will void the warranty. Biofiltration media shall be warranted to pass the post-installation infiltration test described in this document.

E. Design Computations

1. The HPMBS must be sized using a volume based sizing criteria and demonstrate, using a SCS stormwater modelling software/spreadsheet calculator that the required water quality volume (defined by the Engineer of Record) passes through the HPMBS prior to activation of the overflow device (set no higher than twelve (12) inches above the top elevation of the HPMBS (typically defined as top of mulch). Design computations must be provided as part of the submittal process. If local regulations have the system approved based on an alternative sizing criteria the larger of the two computed sizes will govern.

F. Substitutions

1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening. Review package should include third party reviewed performance data for both flow rate and pollutant removal of biofiltration media. Pollutant removal data must follow specified protocols. All components must meet or exceed Quality Assurance and Performance Criteria indicated herein.

V. Project Conditions

A. Review manufacturer’s recommended installation procedures and coordinate installation with other work affected, such as grading, excavation, utilities, construction access and erosion control to prevent all non- installation related construction traffic over the completed HPMBS.

B. Cold Weather

1. Do not use frozen materials or materials mixed or coated with ice or frost.
2. Do not build on frozen ground or wet, saturated or muddy subgrade.
3. Care must be taken when handling plastics when air temperature is at 40 degrees or below as plastic becomes brittle.

C. Protect partially completed installation against damage from other construction traffic when work is in progress and following completion of backfill by establishing a perimeter with highly visible construction tape, fencing, or other means until construction is complete.

D. Soil stabilization of the surrounding site must be complete before the Biofiltration System can be brought online. Soil stabilization occurs when 90% of the site has been paved or vegetated. Temporary erosion control and/or sedimentation prevention measures shall be implemented to reduce the possibility of sediments being transported into the Biofiltration System prior to full stabilization of the site. Significant sediment loads can damage the HPBMS and lead to failure if not prevented or remediated promptly.

VI. PRODUCTS

A. Acceptable HPBMS

FocalPoint High Performance Biofiltration System

B. Acceptable Beehive Overflow Grate Structure (Optional)

Beehive Overflow Grate Structure with removable StormSack

C. Acceptable Manufacturer

Manufacturer:

Convergent Water Technologies, Inc.
(800) 711-5428
www.convergentwater.com

D. Authorized Value Added Reseller

ACF Environmental
(800) 448 3636
www.acfenvironmental.com

VII. Packaging

A. HPMBS is assembled on site.

B. Modular underdrain/storage unit is shipped flat and modules are assembled prior to installation.

C. Biofiltration media is delivered in one ton super sacks each labeled with manufacturer’s batch number and/or in bulk with accompanying manufacturer’s certification.

D. Other components are delivered in bulk or super sacks

VIII. Execution

A. Excavation and Backfill

1. Base of excavation shall be smooth, level and free of lumps or debris, and compacted unless infiltration of storm water into subgrade is desired. A thin layer (3”) of compacted base material is recommended to establish a level working platform (may not be needed in sandy soils). If the base of the excavation is pumping or appears excessively soft, a geotechnical engineer should be consulted for advice. In many cases, a stabilization geotextile and 6” of compactable material that drains well will be sufficient to amend the bearing capacity of the soil.

2. Most applications require 8 oz Non-Woven Geotextile or equivalent nonwoven geotextile with a nominal weight of 8 oz per square yard to line the excavation to separate in situ soils and the HPMBS. (Applications requiring water to infiltrate the in situ sub-soils should use a bridging stone rather than geotextile to provide a separation layer between the HPMBS and the in situ soils). Geotextile, when utilized, should be placed on the bottom and up the sides of the excavation. Absolutely no geotextiles should be used in the water column. If an impermeable liner is specified, it shall be installed according to manufacturer’s instructions and recommendations.

3. Specified backfill material must be free from lumps, debris and any sharp objects that could penetrate the geotextile. Material is used for backfill along the sides of the system as indicated in engineering detail drawings.

B. Inspection

1. Examine prepared excavation for smoothness, compaction and level. Check for presence of high water table, which must be kept at levels below the bottom of the under drain structure at all times. If the base is pumping or appears excessively soft, a geotechnical engineer should be consulted for advice.

2. Installation commencement constitutes acceptance of existing conditions and responsibility for satisfactory performance. If existing conditions are found to be unsatisfactory, contact Project Manager or Engineer for resolution prior to installation.

IX. Cleanup and Protection during Ongoing Construction Activity

A. Perform cleaning during the installation and upon completion of the work.

B. Remove from site all excess materials, debris, and equipment. Repair any damage to adjacent materials and surfaces resulting from installation.

C. If surrounding drainage area is not fully stabilized, a protective covering of geotextile fabric should be securely placed to protect the Biofiltration Media.

D. Construction phase erosion and sedimentation controls shall be placed to protect the inlet(s) to the Biofiltration System. Excessive sedimentation, particularly prior to establishment of plants may damage the HPMBS.

E. Strictly follow manufacturer’s guidelines with respect to protection of the HPMBS between Installation and Commissioning phases.

X. Commissioning

A. Commissioning should only be carried out once the contributing drainage area is fully stabilized. If Commissioning must be carried out sooner, it is imperative that appropriate erosion and sediment controls be placed to prevent the entry of excessive sediment/pollutant loads into the system.

B. Commissioning entails removing the protective covering from the Biofiltration Media, planting the plant material in accordance with the approved drawings, and placing mulch if specified.

1. Dig planting holes the depth of the root ball and two to three times as wide as the root ball. Wide holes encourage horizontal root growth that plants naturally produce.

2. With trees, you must ensure you are not planting too deep. Don’t dig holes deeper than root balls. The media should be placed at the root collar, not above the root collar. Otherwise the stem will be vulnerable to disease.

3. Strictly follow manufacturer’s planting guidance.

C. Cover the exposed root ball top with mulch. Mulch should not touch the plant base because it can hold too much moisture and invite disease and insects. Evenly place 3 inches of double-shredded hardwood mulch (if specified) on the surface of the media.

D. Plantings shall be watered-in at installation and temporary irrigations shall be provided, if specified.

XI. Using the HPMBS

A. Maintenance Requirements

1. Each correctly installed HPMBS is to be maintained by the manufacturer for a minimum period of one year. The cost of this service is to be included in the manufacturer’s price of the system.
2. Annual maintenance consists of two (2) scheduled visits unless otherwise specified.
3. Each maintenance visit consists of the following:

1. *Complete system inspection*
2. *Removal of foreign debris, silt, plant material, trash and mulch (if needed)*
3. *Evaluation of biofiltration media*
4. *Evaluation of plant health*
5. *Inspection of underdrain/storage system via Observation/Maintenance Port*
6. *Properly dispose of all maintenance refuse items (trash, mulch, etc.)*
7. *Take photographs documenting plant growth and general system health*
8. *Update and store maintenance records*
9. *To ensure long term performance of the HPMBS, continuing annual maintenance should be performed per the manufacturer's Operations and Maintenance Manual.*

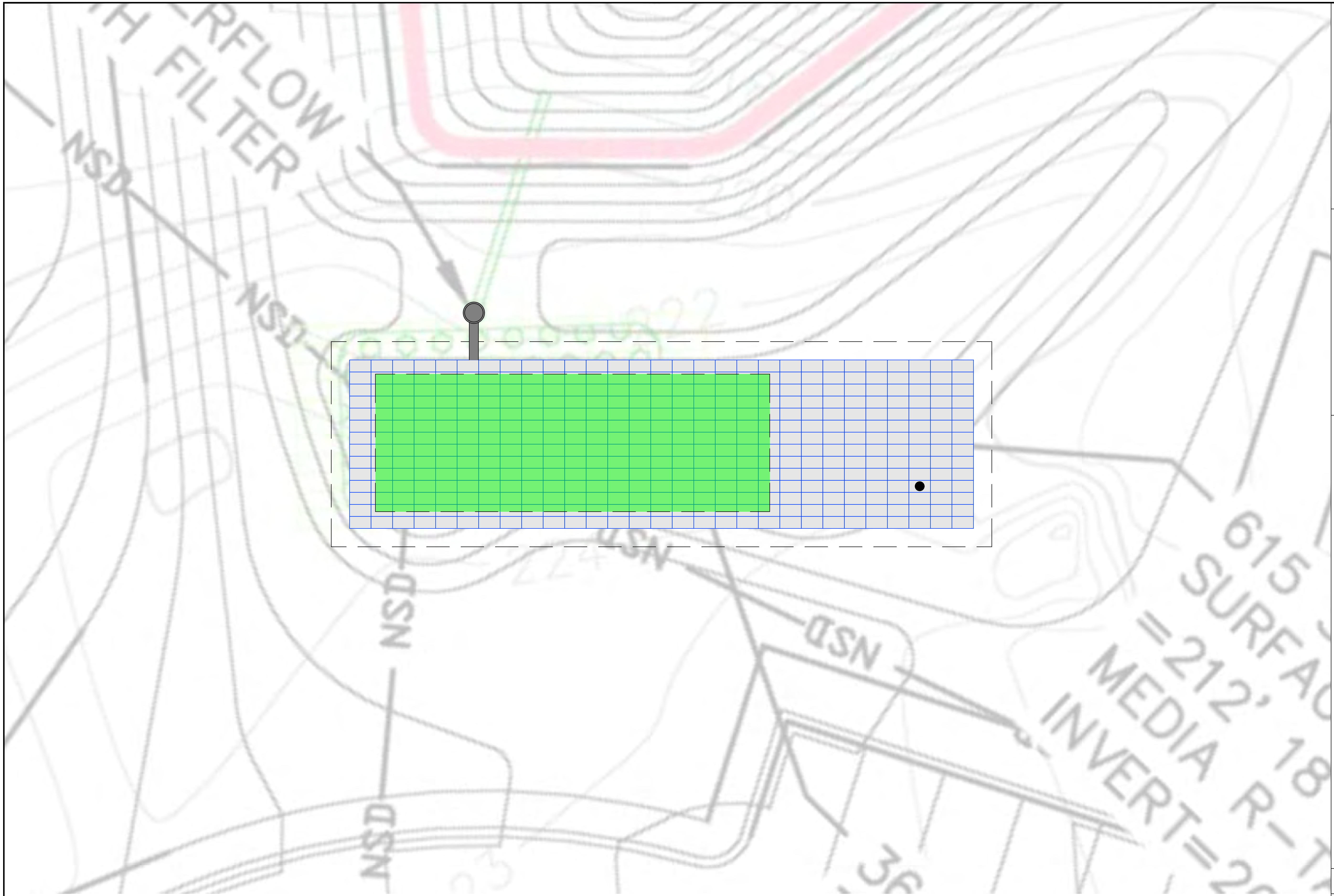
4. If sediment accumulates beyond an acceptable level in the underdrain/storage system, it will be necessary to flush the underdrain. This can be done by pumping water into the Observation/Maintenance Port or adjacent overflow structure, allowing the turbulent flows through the underdrain to re- suspend the fine sediments. If multiple Observation/Maintenance Ports have been installed, water should be pumped into each port to maximize flushing efficiency.

Sediment-laden water can be pumped out and either captured for disposal or filtered through a Dirtbag filter bag, if permitted by the locality.

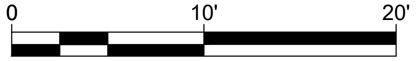
XII. Measurement and Payment

Given the integrated nature of the HPMBS, measurement and payment will be based not on the individual component prices, but on the size of the Biofiltration Media bed. The external dimension as indicated in the approved plans and executed in the installation will be measured in Square Feet and payment will be made per HPMBS system.

Measurement and payment of beehive overflow grate structure with removable filter insert will be based on per unit price.


RFLOW
H FILTER
NSD
NSD
NSD
NSD
NSD
NSD
615 SURFAC
=212', 18
MEDIA R-T
INVERT=22

FOCALPOINT SYSTEM OVERLAY
SCALE: 1" = 10'



SCALE 1" = 10'

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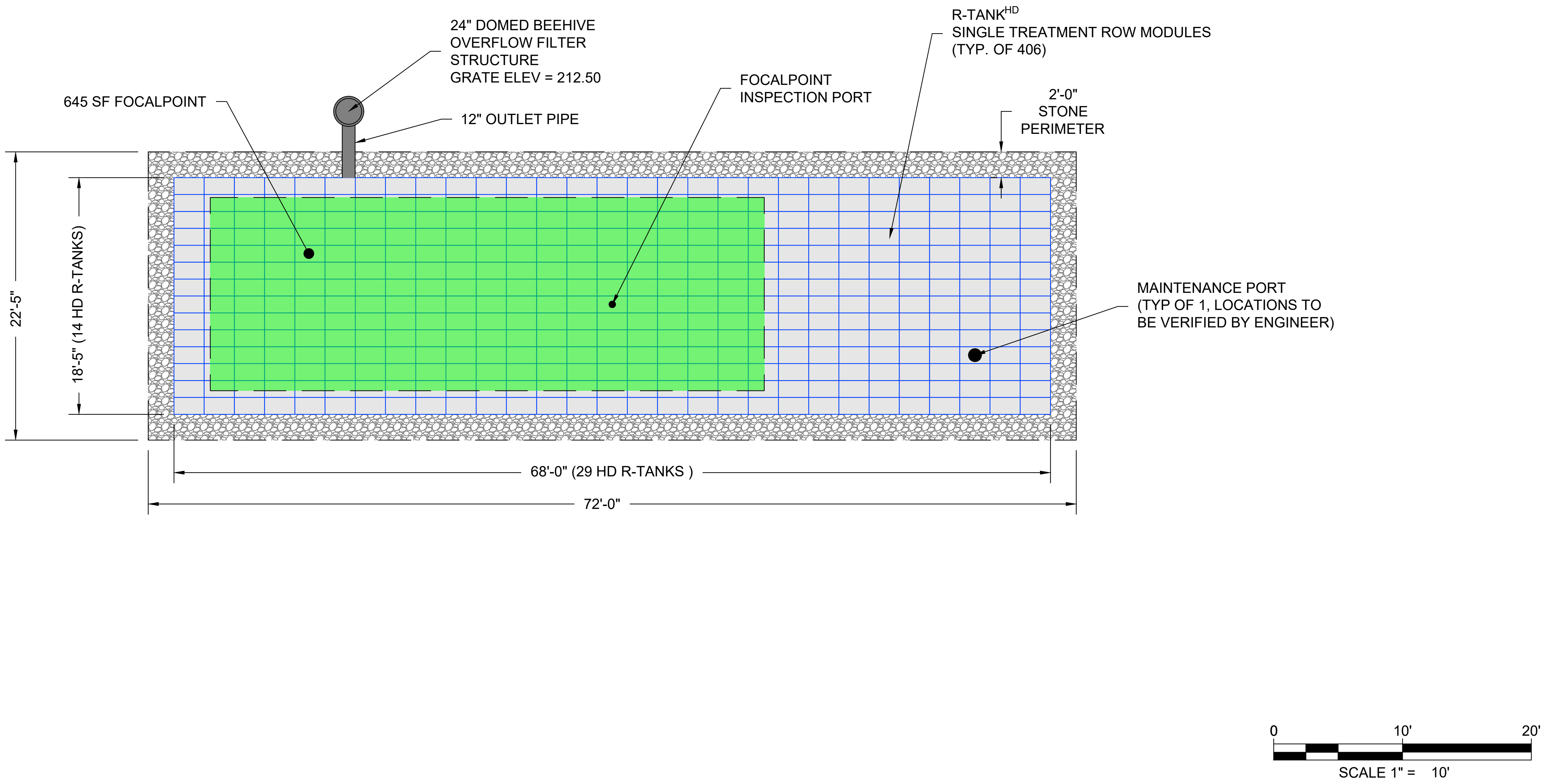
FOCALPOINT SYSTEM OVERLAY
WASHINGTON STREET
AUBURN, ME
SITE DESIGNATION: FP-1

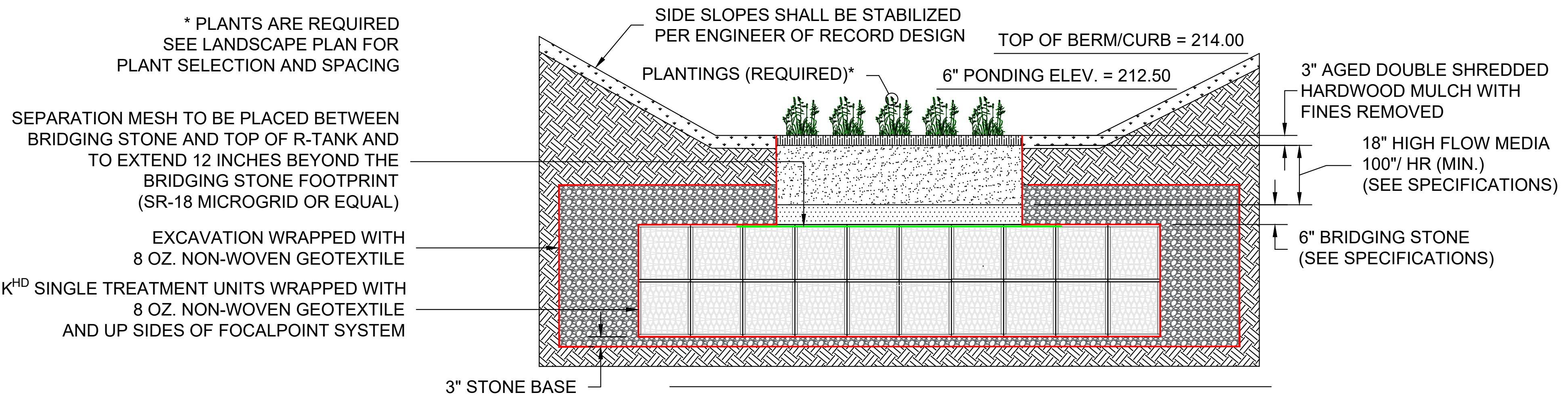
DRAWN BY
LTJ

DATE
05/02/22

SHEET NO.
1 of 9


24" DOMED BEEHIVE OVERFLOW FILTER STRUCTURE GRATE ELEV = 212.50
645 SF FOCALPOINT
12" OUTLET PIPE
FOCALPOINT INSPECTION PORT
R-TANK^{HD} SINGLE TREATMENT ROW MODULES (TYP. OF 406)
2'-0" STONE PERIMETER
MAINTENANCE PORT (TYP OF 1, LOCATIONS TO BE VERIFIED BY ENGINEER)
22'-5"
18'-5" (14 HD R-TANKS)
68'-0" (29 HD R-TANKS)
72'-0"
0
10'
20'
SCALE 1" = 10'

LAYOUT SCALE	1" = 10'
FOCALPOINT FILTER SURFACE AREA	645 SF
TOP OF MULCH ELEVATION	212
TOP OF MEDIA ELEVATION	211.75
DEPTH OF MEDIA	18"
TOP OF BRIDGING STONE ELEVATION	210.25
TOP OF R-TANK UNDERDRAIN ELEV.	209.75
R-TANK UNDERDRAIN INVERT	208.31
INVERT OF STONE BASE (3")	208.06
R-TANK^{HD} MODULE TYPE	SINGLE TREATMENT
# OF SINGLE TREATMENT R-TANKS	406
TOTAL R-TANK SYSTEM STORAGE	2,735 CF
R-TANK STORAGE VOLUME	1,713 CF
STONE STORAGE VOLUME (40% VOID RATIO)	1,022 CF


* PLANTS ARE REQUIRED SEE LANDSCAPE PLAN FOR PLANT SELECTION AND SPACING
SEPARATION MESH TO BE PLACED BETWEEN BRIDGING STONE AND TOP OF R-TANK AND TO EXTEND 12 INCHES BEYOND THE BRIDGING STONE FOOTPRINT (SR-18 MICROGRID OR EQUAL)
EXCAVATION WRAPPED WITH 8 OZ. NON-WOVEN GEOTEXTILE
R-TANK^{HD} SINGLE TREATMENT UNITS WRAPPED WITH 8 OZ. NON-WOVEN GEOTEXTILE AND UP SIDES OF FOCALPOINT SYSTEM
3" STONE BASE
SIDE SLOPES SHALL BE STABILIZED PER ENGINEER OF RECORD DESIGN
TOP OF BERM/CURB = 214.00
PLANTINGS (REQUIRED)*
6" PONDING ELEV. = 212.50
3" AGED DOUBLE SHREDDED HARDWOOD MULCH WITH FINES REMOVED
18" HIGH FLOW MEDIA 100"/ HR (MIN.) (SEE SPECIFICATIONS)
6" BRIDGING STONE (SEE SPECIFICATIONS)

TYPICAL FOCALPOINT WITH EXPANDED R-TANK DETAIL

(ACTUAL MODULE HEIGHT VARIES)

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FOCALPOINT SYSTEM LAYOUT
WASHINGTON STREET
AUBURN, ME
SITE DESIGNATION: FP-1

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05/02/22

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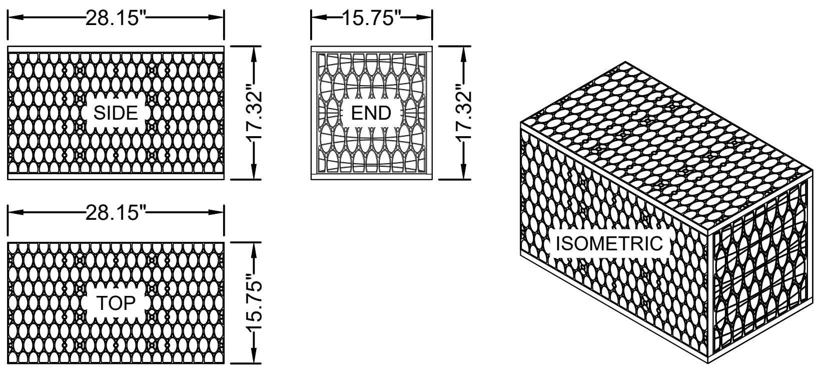
2 of 9


28.15"
17.32"
SIDE
15.75"
17.32"
END
28.15"
15.75"
TOP
ISOMETRIC

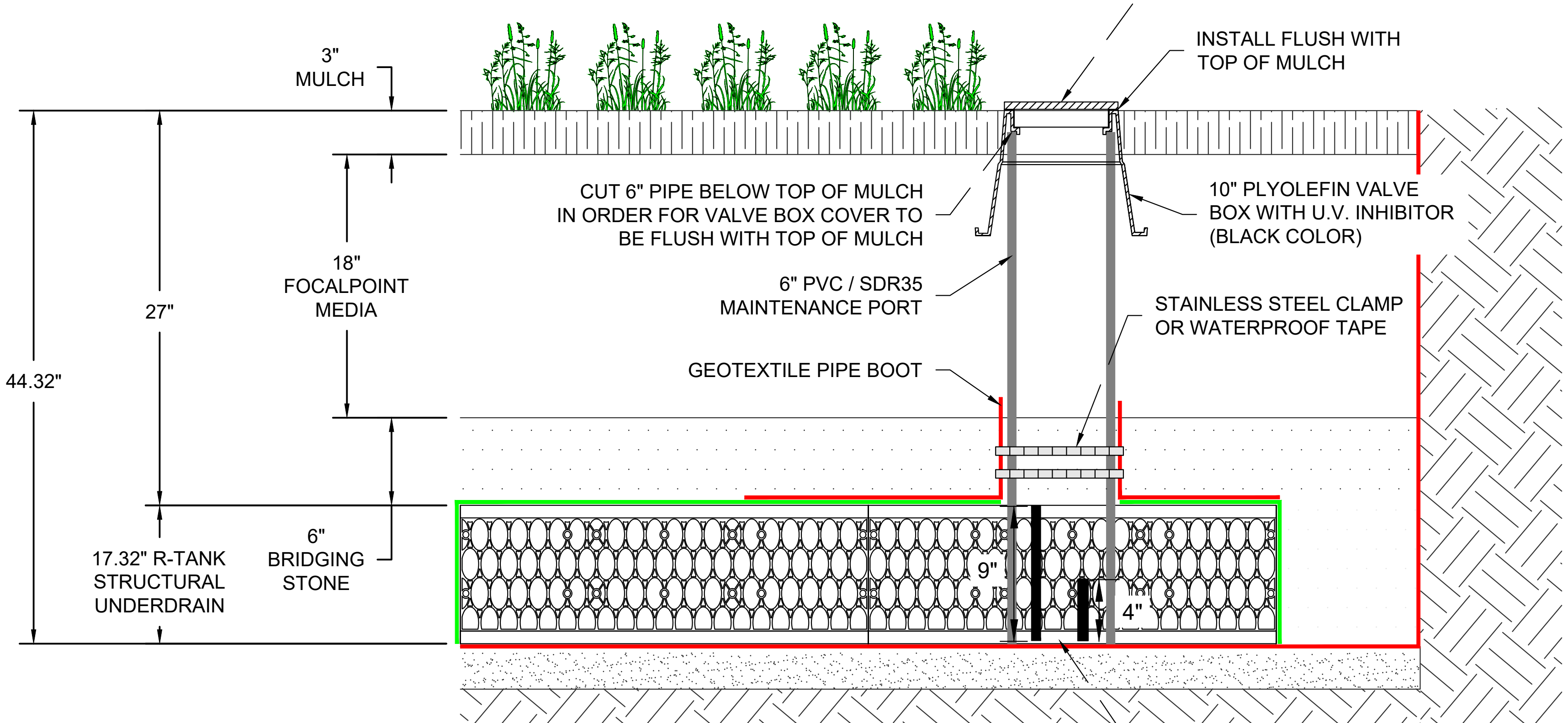
MODULE DATA

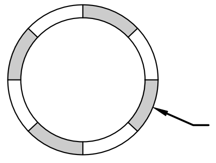
GEOMETRY:
LENGTH = 28.15 IN. (715 MM)
WIDTH = 15.75 IN. (400 MM)
HEIGHT = 17.32 IN. (440 MM)
TANK VOLUME = 4.44 CF
STORAGE VOLUME = 4.22 CF
VOID INTERNAL VOLUME: 95%
VOID SURFACE AREA: 90%

LOAD RATING:
33.4 PSI, (MODULE ONLY)
HS20, (WITH ACF COVER SYSTEM)
MATERIAL:
100% RECYCLED POLYPROPYLENE
SMALL PLATES PER
SEGMENT/TOTAL:
5/5

SINGLE R-TANK^{HD} - MODULE DETAIL

NOTE:
PORT USED FOR INSPECTION PURPOSES AND FOR SYSTEM MAINTENANCE AS REQUIRED. WATER SHALL BE PUMPED INTO THE SYSTEM AND RESUSPEND ACCUMULATED SEDIMENT. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION FOR THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER, FLUSH AS NEEDED.

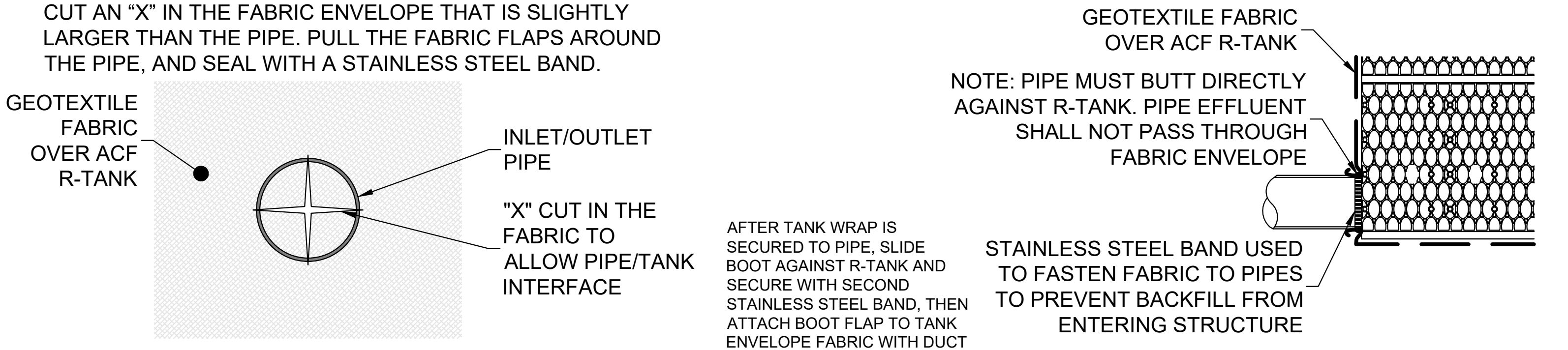

POLYOLEFIN VALVE BOX COVER WITH U.V. INHIBITOR (GREEN COLOR) BY OTHERS. FOCALPOINT MARKER CAP SUPPLIED BY MANUFACTURER.
INSTALL FLUSH WITH TOP OF MULCH
3" MULCH
18" FOCALPOINT MEDIA
27"
44.32"
6" BRIDGING STONE
17.32" R-TANK STRUCTURAL UNDERDRAIN
CUT 6" PIPE BELOW TOP OF MULCH IN ORDER FOR VALVE BOX COVER TO BE FLUSH WITH TOP OF MULCH
10" PLYOLEFIN VALVE BOX WITH U.V. INHIBITOR (BLACK COLOR)
6" PVC / SDR35 MAINTENANCE PORT
STAINLESS STEEL CLAMP OR WATERPROOF TAPE
GEOTEXTILE PIPE BOOT
9"
4"
NOTCH PATTERN AT BOTTOM OF PIPE (SEE NOTCH PATTERN DETAIL)


4"-9" CUT IN SHADED AREAS

PIPE NOTCH PATTERN DETAIL

FOCALPOINT OBSERVATION & MAINTENANCE PORT DETAIL

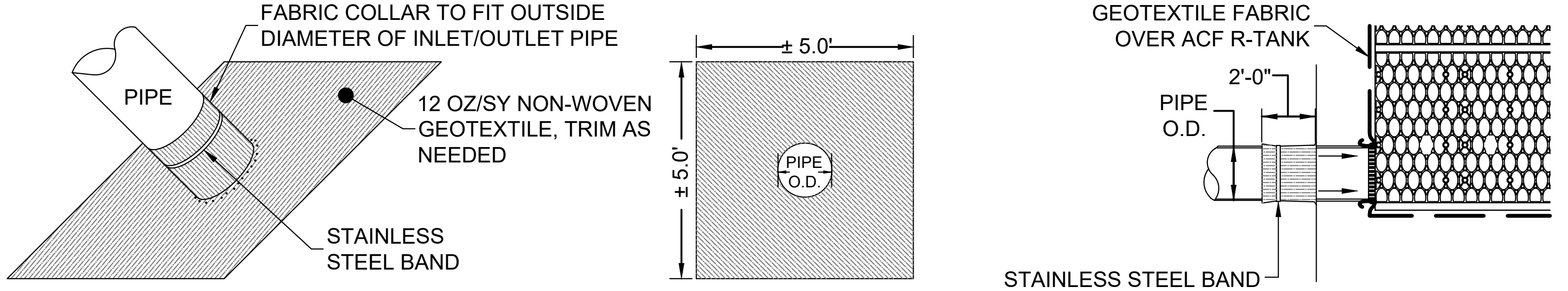
CUT AN "X" IN THE FABRIC ENVELOPE THAT IS SLIGHTLY LARGER THAN THE PIPE. PULL THE FABRIC FLAPS AROUND THE PIPE, AND SEAL WITH A STAINLESS STEEL BAND.


GEOTEXTILE FABRIC OVER ACF R-TANK
INLET/OUTLET PIPE
"X" CUT IN THE FABRIC TO ALLOW PIPE/TANK INTERFACE
GEOTEXTILE FABRIC OVER ACF R-TANK
NOTE: PIPE MUST BUTT DIRECTLY AGAINST R-TANK. PIPE EFFLUENT SHALL NOT PASS THROUGH FABRIC ENVELOPE
STAINLESS STEEL BAND USED TO FASTEN FABRIC TO PIPES TO PREVENT BACKFILL FROM ENTERING STRUCTURE

END VIEW OF PIPE/FABRIC CONNECTION

SIDE VIEW OF PIPE/FABRIC CONNECTION

AFTER TANK WRAP IS SECURED TO PIPE, SLIDE BOOT AGAINST R-TANK AND SECURE WITH SECOND STAINLESS STEEL BAND, THEN ATTACH BOOT FLAP TO TANK ENVELOPE FABRIC WITH DUCT TAPE OR OTHER ADHESIVE.


FABRIC COLLAR TO FIT OUTSIDE DIAMETER OF INLET/OUTLET PIPE
PIPE
12 OZ/SY NON-WOVEN GEOTEXTILE, TRIM AS NEEDED
STAINLESS STEEL BAND
± 5.0'
± 5.0'
PIPE O.D.
GEOTEXTILE FABRIC OVER ACF R-TANK
2'-0"
PIPE O.D.
STAINLESS STEEL BAND

GEOTEXTILE BOOT

FRONT VIEW OF GEOTEXTILE BOOT

SIDE VIEW OF GEOTEXTILE BOOT

R-TANK^{HD} TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL

R-TANK^{HD} QUANTITIES	
R-TANK^{HD} MODULE TYPE	SINGLE TREATMENT
# OF SINGLE TREATMENT R-TANKS	406
TOTAL SYSTEM STORAGE	2,735 CF
R-TANK STORAGE VOLUME	1,713 CF
STONE STORAGE VOLUME (40% VOID RATIO)	1,022 CF
STONE BED FOOTPRINT	1,620 SF
STONE QUANTITY	95 CY
SR-18 MICROGRID (UNDER FOCALPOINT)	0 SF (## SY)
8 OZ. NON-WOVEN GEOTEXTILE TANK WRAP	1,000 SF (111 SY)
8 OZ. NON-WOVEN GEOTEXTILE EXCAVATION WRAP	2,000 SF (222 SY)
8 OZ. NON-WOVEN GEOTEXTILE LINER PROTECTION	4,000 SF (444 SY)
6" FOCALPOINT INSPECTION PORT	1
12" MAINTENANCE PORTS	1
PIPE BOOTS (UNKNOWN SIZE)	2
NOTE: STONE QUANTITY INCLUDES 6" OF COVER AND 3" OF BASE.	
NOTE: GEOTEXTILE / LINER QUANTITIES INCLUDE A 15% WASTE FACTOR.	

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FOCALPOINT SYSTEM DETAILS
WASHINGTON STREET
AUBURN, ME
SITE DESIGNATION: FP-1

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DATE
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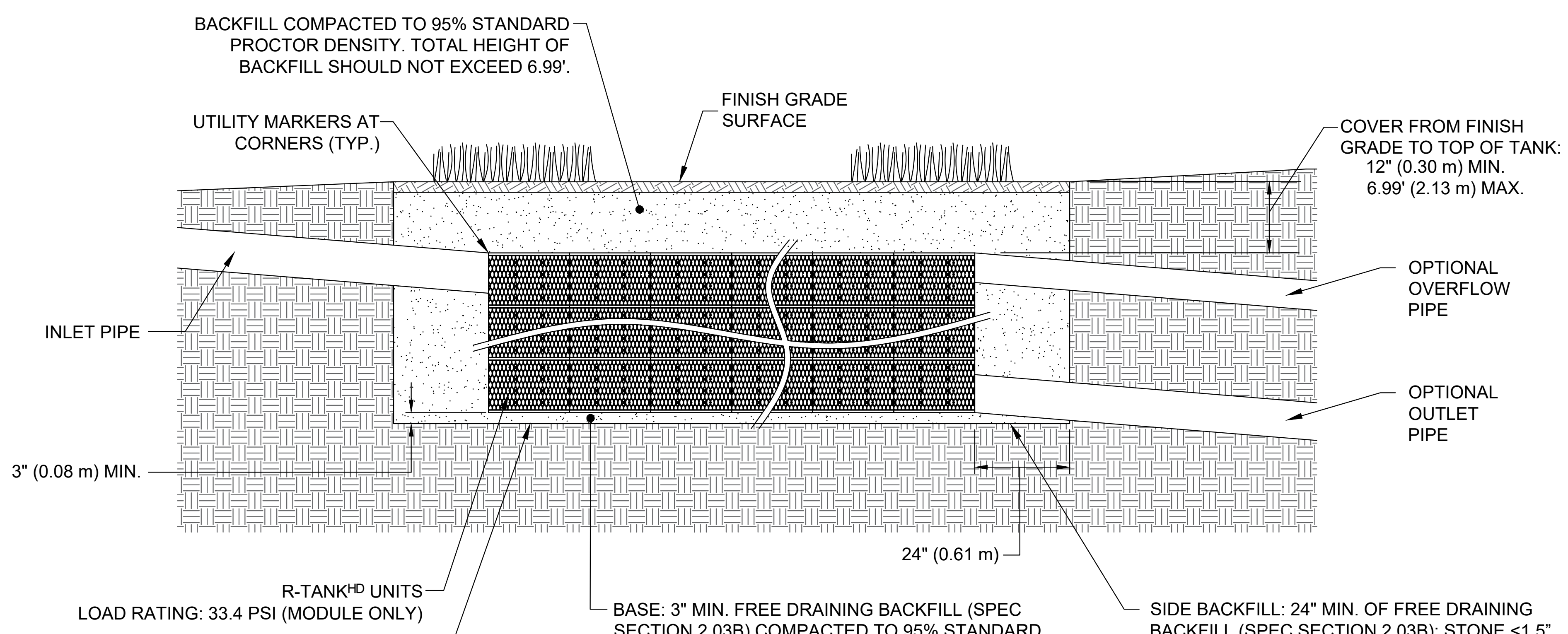
SHEET NO.
3 of 9

NOTES:

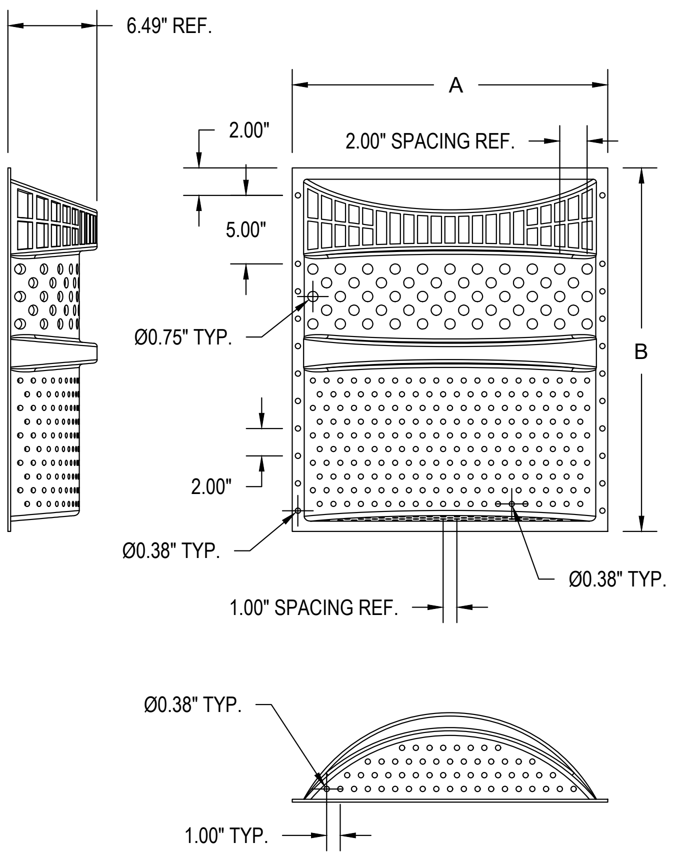
1. FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^{HD} SHEET (MINI MODULE, SINGLE MODULE, DOUBLE MODULE, TRIPLE MODULE, QUAD MODULE, OR PENTA MODULE).
2. PRE-TREATMENT STRUCTURES NOT SHOWN.
3. FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^{HD} FOOTPRINT.


BACKFILL COMPACTED TO 95% STANDARD PROCTOR DENSITY. TOTAL HEIGHT OF BACKFILL SHOULD NOT EXCEED 6.99'.
UTILITY MARKERS AT CORNERS (TYP.)
FINISH GRADE SURFACE
COVER FROM FINISH GRADE TO TOP OF TANK: 12" (0.30 m) MIN. 6.99' (2.13 m) MAX.
OPTIONAL OVERFLOW PIPE
INLET PIPE
OPTIONAL OUTLET PIPE
3" (0.08 m) MIN.
24" (0.61 m)
R-TANK^HD UNITS
LOAD RATING: 33.4 PSI (MODULE ONLY)
EXCAVATION LINE

BASE: 3" MIN. FREE DRAINING BACKFILL (SPEC SECTION 2.03B) COMPACTED TO 95% STANDARD PROCTOR DENSITY IS REQUIRED TO PROVIDE A LEVEL BASE SURFACE. MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^{HD} FOOTPRINT. A BEARING CAPACITY OF 2,000 PSF MUST BE ACHIEVED PRIOR TO INSTALLING R-TANK^{HD}. NATIVE SOILS MAY BE ACCEPTABLE IF DETERMINED TO BE STABLE BY OWNER'S ENGINEER. (SEE NOTE #3)

SIDE BACKFILL: 24" MIN. OF FREE DRAINING BACKFILL (SPEC SECTION 2.03B): STONE <1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). MUST BE FREE FROM LUMPS, DEBRIS AND OTHER SHARP OBJECTS. SPREAD EVENLY TO PREVENT R-TANK^{HD} MOVEMENT. COMPACT SIDE BACKFILL WITH POWERED MECHANICAL COMPACTOR IN 12" LIFTS.

R-TANK^{HD} GREEN SPACE - SECTION VIEW


6.49" REF.
A
2.00"
2.00" SPACING REF.
5.00"
Ø0.75" TYP.
B
2.00"
Ø0.38" TYP.
Ø0.38" TYP.
1.00" SPACING REF.
Ø0.38" TYP.
1.00" TYP.

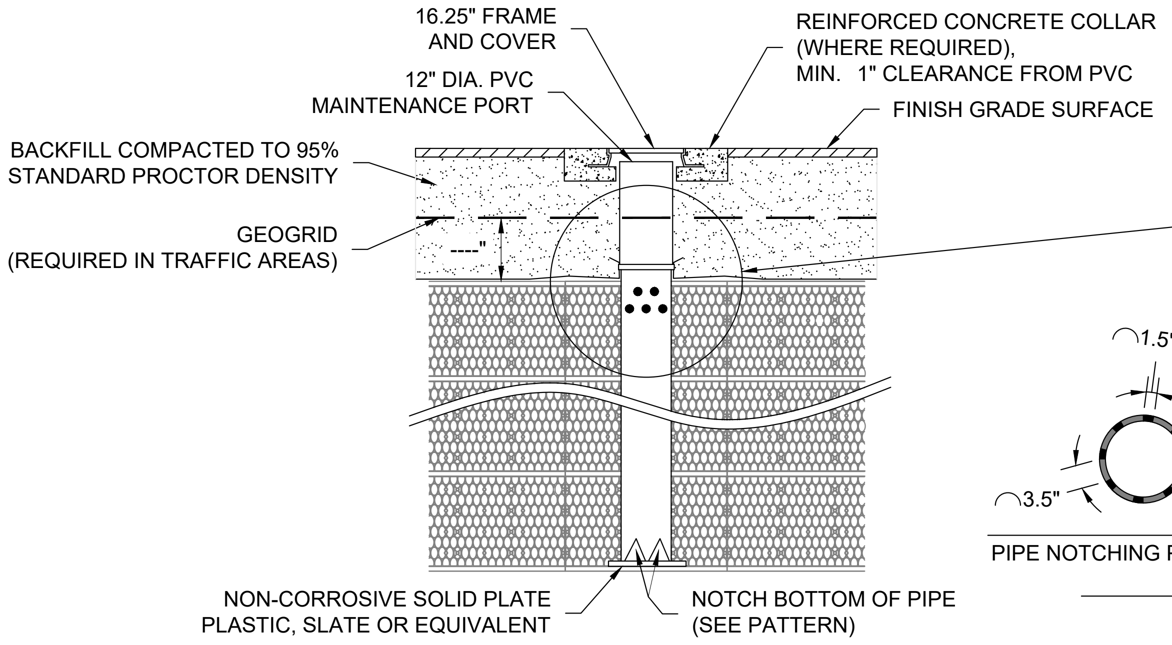
SIZE	A	B
23" x 24"	23"	26.51"
28" x 30"	28"	33.15"
34" x 36"	34"	38.69"

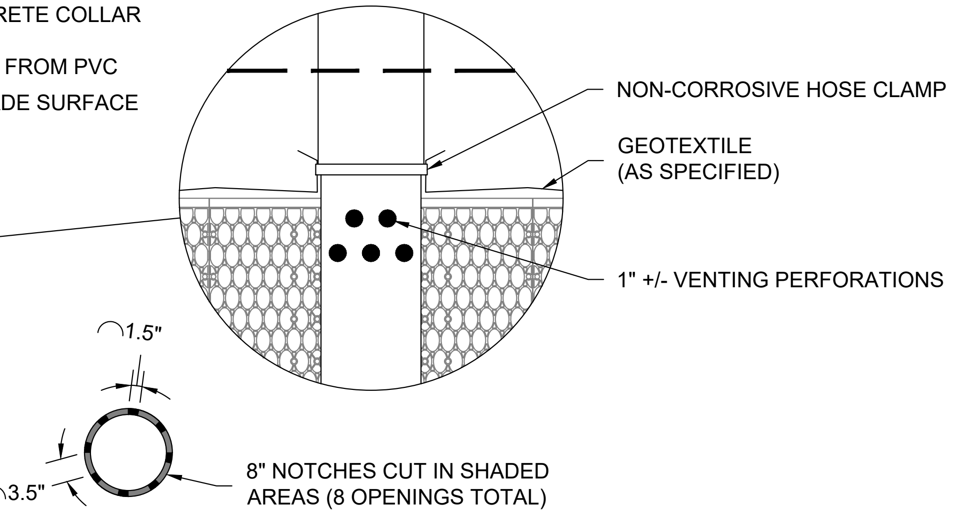
±0.25" TOLERANCE ON DIMENSIONS

TRASHGUARD PLUS PRETREATMENT DETAIL

NOTES

1. THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
2. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
3. ONLY R-TANK^{HD} AND R-TANK^{SD} MAY BE USED IN TRAFFIC APPLICATIONS.
4. SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.


16.25" FRAME AND COVER
12" DIA. PVC MAINTENANCE PORT
BACKFILL COMPACTED TO 95% STANDARD PROCTOR DENSITY
GEOGRID (REQUIRED IN TRAFFIC AREAS)
REINFORCED CONCRETE COLLAR (WHERE REQUIRED), MIN. 1" CLEARANCE FROM PVC
FINISH GRADE SURFACE
NON-CORROSIVE SOLID PLATE PLASTIC, SLATE OR EQUIVALENT
NOTCH BOTTOM OF PIPE (SEE PATTERN)


NON-CORROSIVE HOSE CLAMP
GEOTEXTILE (AS SPECIFIED)
1" +/- VENTING PERFORATIONS
1.5"
3.5"
8" NOTCHES CUT IN SHADED AREAS (8 OPENINGS TOTAL)

PIPE NOTCHING PATTERN

R-TANK^{HD} TYPICAL MAINTENANCE PORT

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FOCALPOINT SYSTEM DETAILS
WASHINGTON STREET
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SITE DESIGNATION: FP-1

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NOTES:
1. MATERIAL:
   - A) SUPPORT FLANGE: ALUMINUM ALLOY PLATE, 5000 SERIES
   - B) STORMSOK: WOVEN POLYPROPYLENE GEOTEXTILE
   - C) EXPANSION RING: ALUMINUM ALLOY CHANNEL, 6000 SERIES
   - D) HARDWARE: STAINLESS STEEL
2. RECOMMENDED MINIMUM VAULT DEPTH: 2-IN BELOW STORMSOK
3. USE ONLY WITH FABCO REPLACEABLE STORMSOK

GENERAL INSTALLATION:
ADJUST THE TURNBUCKLE DOWN TO GIVE THE SMALLEST RING DIAMETER AND LOCATE THE EXPANSION RING INTO THE HARCO STRUCTURE MINIMUM OF 6-IN DOWN FROM THE TOP OPENING AS SHOWN. BEGIN OPENING THE TURNBUCKLE UNTIL THE EXPANSION RING IS SELF SUPPORTING, THEN VERIFY THE RING IS LEVEL AND PLUMB TO THE HARCO STRUCTURE. USING A CALIBRATED TORQUE WRENCH, CONTINUE TO OPEN THE TURNBUCKLE TO GIVEN TORQUE (MODEL-SPECIFIC). DO NOT OVER TIGHTEN. INSTALL THE STORMSACK ASSEMBLY DIRECTLY ON THE SUPPORT RING.

STRUCTURE DIA. (IN.)	DEBRIS CAPACITY (CU. FT.)	FILTERED FLOWRATE (CFS)	BYPASS FLOWRATE (CFS)
12	0.66	1.70	1.00
15	1.00	2.10	1.30
18	1.20	2.30	1.40
24	2.80	3.90	2.20
30	2.80	3.90	2.22

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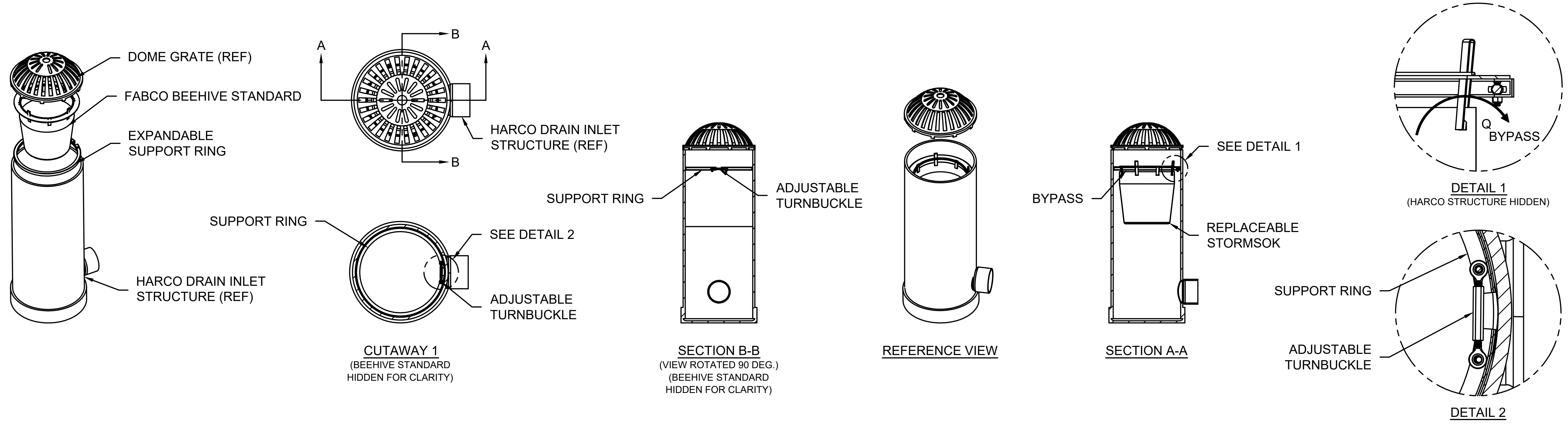
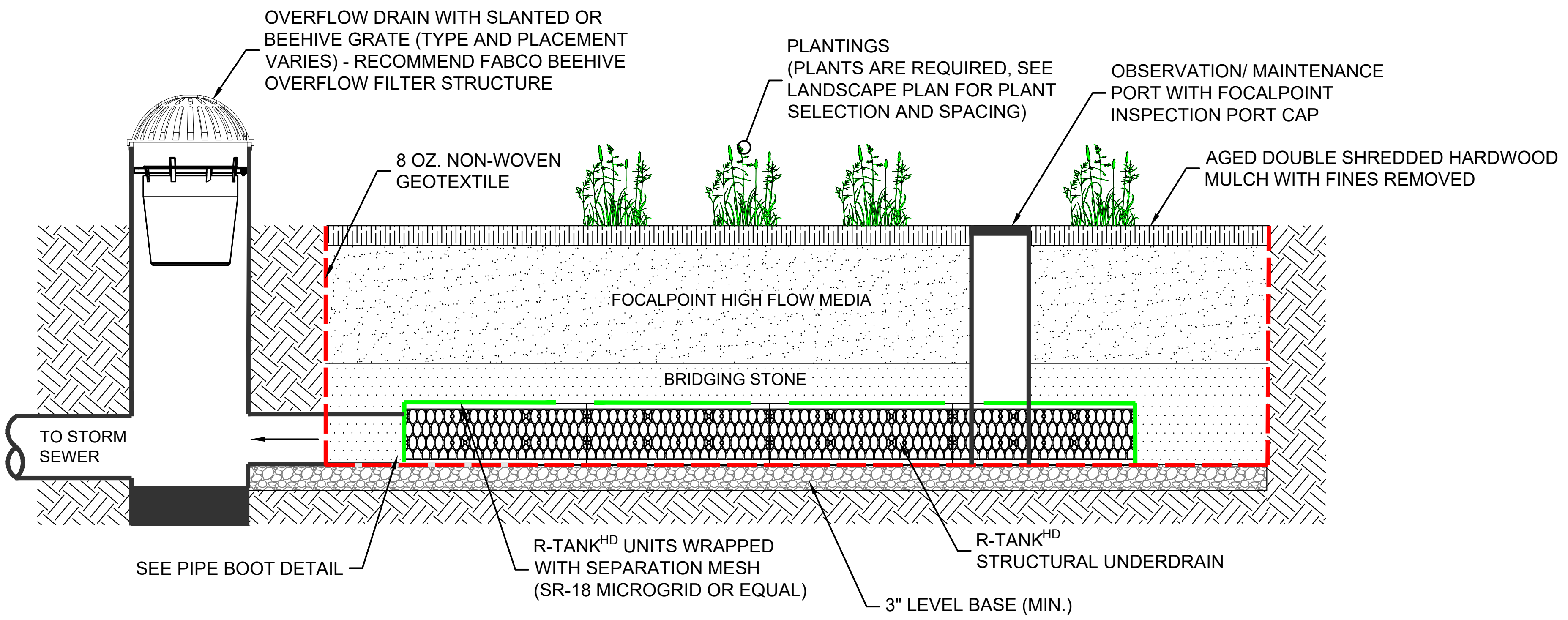

DOME GRATE (REF)
FABCO BEEHIVE STANDARD
EXPANDABLE SUPPORT RING
SUPPORT RING
HARCO DRAIN INLET STRUCTURE (REF)
A
B
A
B
HARCO DRAIN INLET STRUCTURE (REF)
SEE DETAIL 2
ADJUSTABLE TURNBUCKLE
CUTAWAY 1
(BEEHIVE STANDARD HIDDEN FOR CLARITY)
SUPPORT RING
ADJUSTABLE TURNBUCKLE
SECTION B-B
(VIEW ROTATED 90 DEG.)
(BEEHIVE STANDARD HIDDEN FOR CLARITY)
REFERENCE VIEW
BYPASS
SEE DETAIL 1
REPLACEABLE STORMSOK
SECTION A-A
Q
BYPASS
DETAIL 1
(HARCO STRUCTURE HIDDEN)
SUPPORT RING
ADJUSTABLE TURNBUCKLE
DETAIL 2

FABCO BEEHIVE STANDARD OVERFLOW FILTER STRUCTURE


OVERFLOW DRAIN WITH SLANTED OR BEEHIVE GRATE (TYPE AND PLACEMENT VARIES) - RECOMMEND FABCO BEEHIVE OVERFLOW FILTER STRUCTURE
PLANTINGS (PLANTS ARE REQUIRED, SEE LANDSCAPE PLAN FOR PLANT SELECTION AND SPACING)
OBSERVATION/ MAINTENANCE PORT WITH FOCALPOINT INSPECTION PORT CAP
8 OZ. NON-WOVEN GEOTEXTILE
AGED DOUBLE SHREDDED HARDWOOD MULCH WITH FINES REMOVED
FOCALPOINT HIGH FLOW MEDIA
BRIDGING STONE
TO STORM SEWER
SEE PIPE BOOT DETAIL
R-TANK^{HD} UNITS WRAPPED WITH SEPARATION MESH (SR-18 MICROGRID OR EQUAL)
R-TANK^{HD} STRUCTURAL UNDERDRAIN
3" LEVEL BASE (MIN.)

TYPICAL FOCALPOINT SECTION WITH OVERFLOW STRUCTURE

FOCALPOINT OVERFLOW STRUCTURE DETAILS
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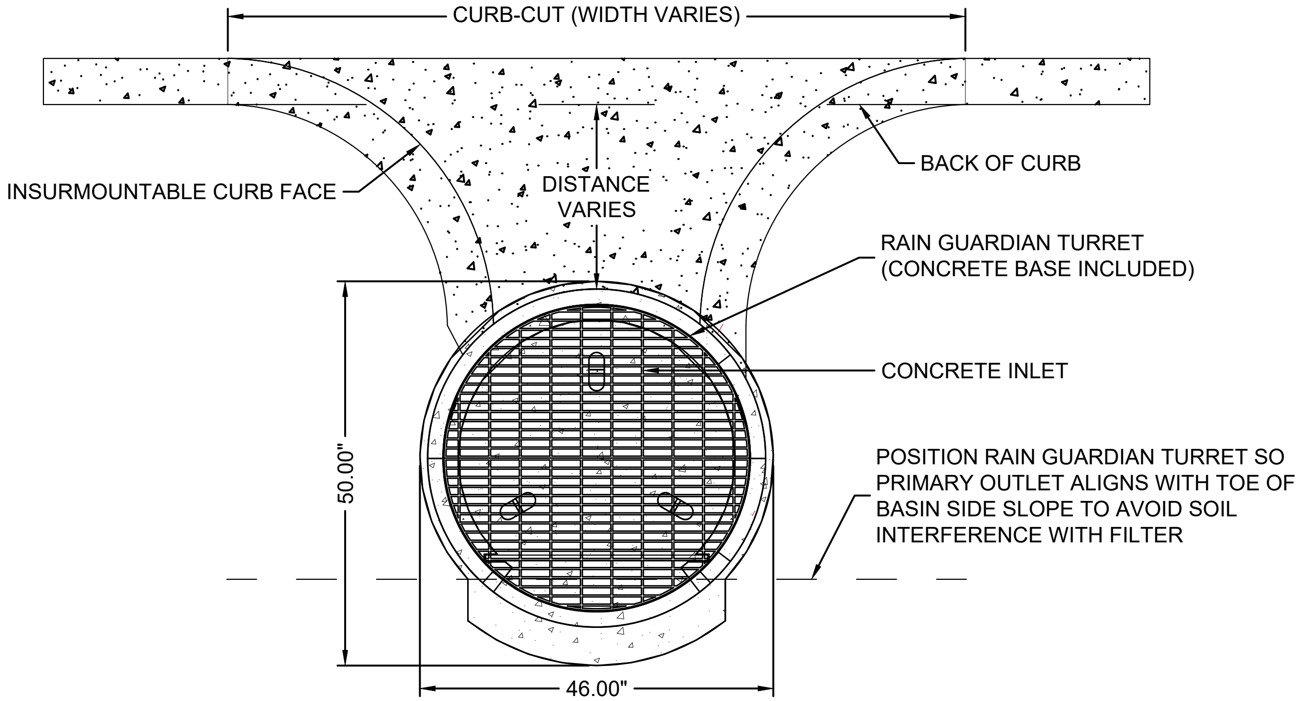
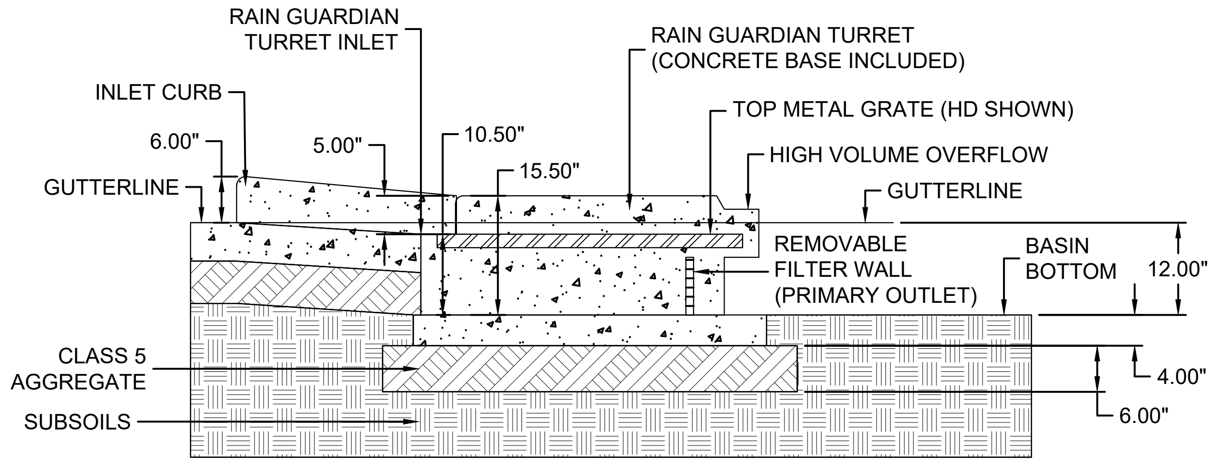

CURB-CUT (WIDTH VARIES)
BACK OF CURB
INSURMOUNTABLE CURB FACE
DISTANCE VARIES
RAIN GUARDIAN TURRET (CONCRETE BASE INCLUDED)
CONCRETE INLET
POSITION RAIN GUARDIAN TURRET SO PRIMARY OUTLET ALIGNS WITH TOE OF BASIN SIDE SLOPE TO AVOID SOIL INTERFERENCE WITH FILTER
50.00"
46.00"

RAIN GUARDIAN TURRET - PLAN VIEW

U.S. PATENT 8,501,016


RAIN GUARDIAN TURRET INLET
RAIN GUARDIAN TURRET (CONCRETE BASE INCLUDED)
INLET CURB
TOP METAL GRATE (HD SHOWN)
6.00"
5.00"
10.50"
15.50"
HIGH VOLUME OVERFLOW
GUTTERLINE
GUTTERLINE
REMOVABLE FILTER WALL (PRIMARY OUTLET)
BASIN BOTTOM
12.00"
CLASS 5 AGGREGATE
SUBSOILS
4.00"
6.00"

RAIN GUARDIAN TURRET - CROSS-SECTION

SPECIFICATIONS:

1. STEEL REINFORCED, COLD JOINT SECURED MONOLITHIC CONCRETE STRUCTURE (1,030 LBS).
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. CONCRETE AIR ENTRAINED (4 PERCENT TO 8 PERCENT BY VOLUME).
3. MANUFACTURED AND DESIGNED TO ASTM C858.
4. THREE-POINT PICK USING RECESSED LIFTING POCKETS WITH A STANDARD HOOK.
5. SOIL UNDER BASE TO BE COMPACTED TO 95 PERCENT STANDARD PROCTOR.
6. TWO-PIECE LIGHT-DUTY GALVANIZED GRATE (34.5 LBS/PIECE) FOR 541 LB CONCENTRATED LOAD OR 309 LB/SQFT UNIFORM LOAD.
7. TWO-PIECE HEAVY-DUTY GALVANIZED GRATE (77.5 LBS/PIECE) FOR 2,456 LB CONCENTRATED LOAD OR 1,404 LB/SQFT UNIFORM LOAD.
8. USE EXPANSION JOINT MATERIAL BETWEEN TURRET AND BIORETENTION INLET.

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FOCALPOINT INLET STRUCTURE DETAILS
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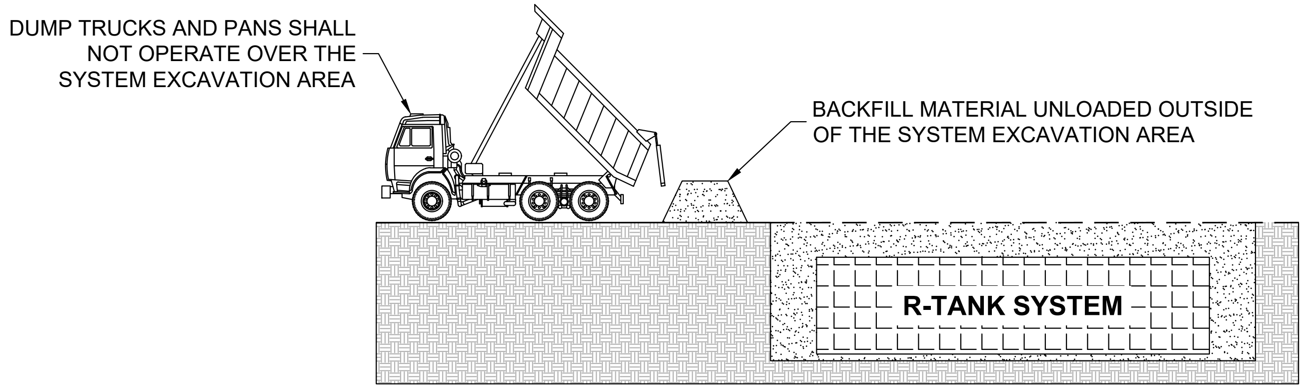
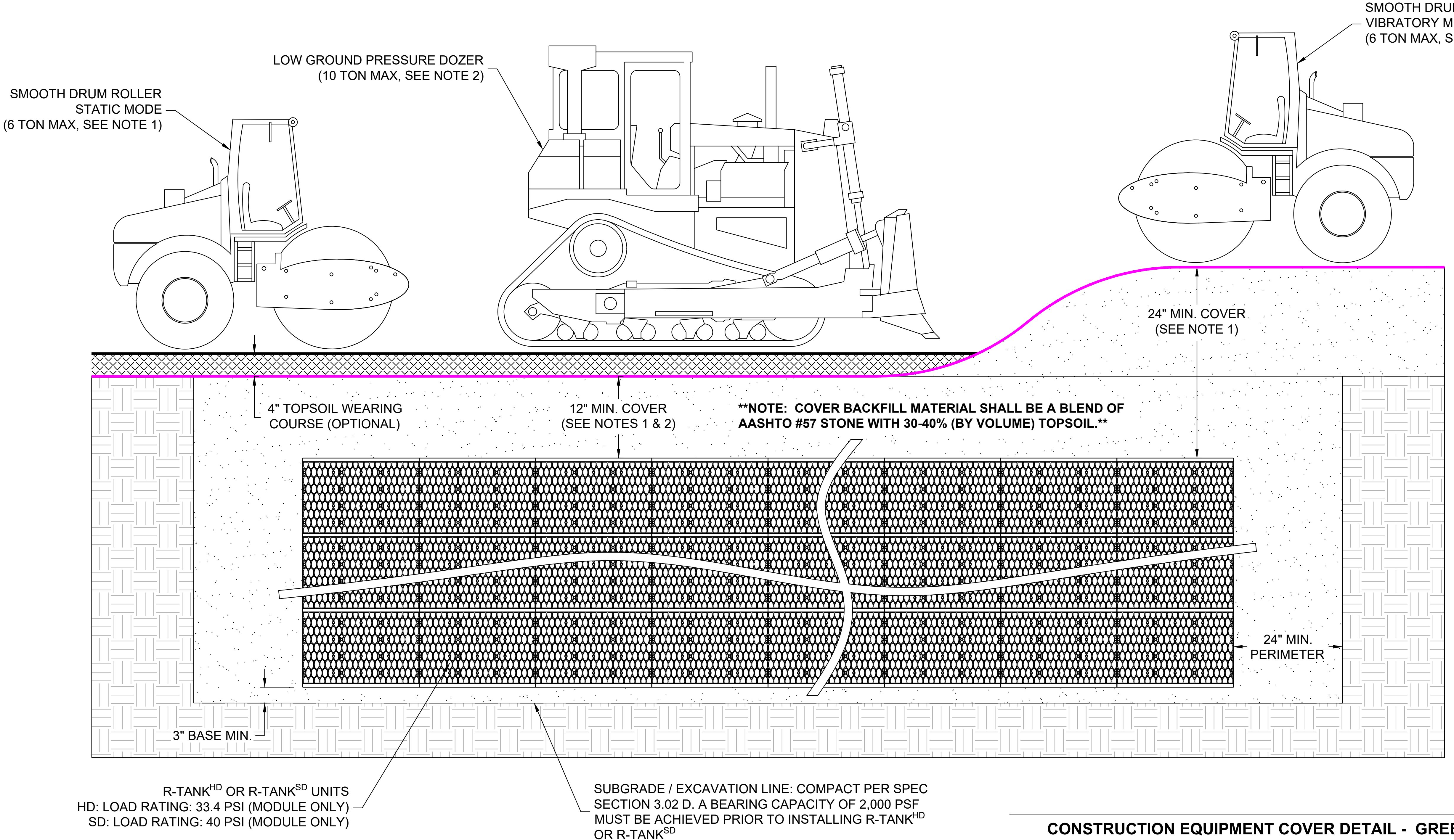

DUMP TRUCKS AND PANS SHALL NOT OPERATE OVER THE SYSTEM EXCAVATION AREA
BACKFILL MATERIAL UNLOADED OUTSIDE OF THE SYSTEM EXCAVATION AREA
R-TANK SYSTEM

DUMP TRUCK DETAIL (SEE NOTE 3)

NOTES:

1. FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12” LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.03 B) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A WALK-BEHIND TRENCH ROLLER. ALTERNATELY, A ROLLER (MAXIMUM GROSS VEHICLE WEIGHT OF 6 TONS) MAY BE USED. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24” OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. **SPEC SECTION 3.05 A**
2. ONLY LOW PRESSURE TIRE OR TRACK VEHICLES (LESS THAN 7 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS) SHALL BE OPERATED OVER THE R-TANK SYSTEM DURING CONSTRUCTION. **SPEC SECTION 3.05 B**
3. DUMP TRUCKS AND PANS SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHERE NECESSARY, THE HEAVY EQUIPMENT SHOULD UNLOAD IN AN AREA ADJACENT TO THE R-TANK SYSTEM AND THE MATERIAL SHOULD BE MOVED OVER THE SYSTEM WITH TRACKED EQUIPMENT. **SPEC SECTION 3.05 B**
4. ENSURE THAT ALL UNRELATED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. NO NON-INSTALLATION RELATED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). **SPEC SECTION 3.05 C**
5. SEE R-TANK INSTALLATION GUIDE OR CONTACT YOUR LOCAL ACF REPRESENTATIVE FOR ADDITIONAL INFORMATION.


SMOOTH DRUM ROLLER STATIC MODE (6 TON MAX, SEE NOTE 1)
LOW GROUND PRESSURE DOZER (10 TON MAX, SEE NOTE 2)
SMOOTH DRUM ROLLER VIBRATORY MODE (6 TON MAX, SEE NOTE 1)
24" MIN. COVER (SEE NOTE 1)
4" TOPSOIL WEARING COURSE (OPTIONAL)
12" MIN. COVER (SEE NOTES 1 & 2)
NOTE: COVER BACKFILL MATERIAL SHALL BE A BLEND OF AASHTO #57 STONE WITH 30-40% (BY VOLUME) TOPSOIL.
24" MIN. PERIMETER
3" BASE MIN.
R-TANK^{HD} OR R-TANK^{SD} UNITS HD: LOAD RATING: 33.4 PSI (MODULE ONLY) SD: LOAD RATING: 40 PSI (MODULE ONLY)
SUBGRADE / EXCAVATION LINE: COMPACT PER SPEC SECTION 3.02 D. A BEARING CAPACITY OF 2,000 PSF MUST BE ACHIEVED PRIOR TO INSTALLING R-TANK^{HD} OR R-TANK^{SD}

CONSTRUCTION EQUIPMENT COVER DETAIL - GREEN SPACE
(FOR AREAS OUTSIDE OF FOCALPOINT FOOTPRINT)

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R-TANK CONSTRUCTION EQUIPMENT COVER DETAIL
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FOCALPOINT SPECIFICATION

I. SUMMARY

THE FOLLOWING GENERAL SPECIFICATIONS DESCRIBE THE COMPONENTS AND INSTALLATION REQUIREMENTS FOR A VOLUME BASED HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS) THAT UTILIZES PHYSICAL, CHEMICAL AND BIOLOGICAL MECHANISMS OF A SOIL, PLANT AND MICROBE COMPLEX TO REMOVE POLLUTANTS TYPICALLY FOUND IN URBAN STORM WATER RUNOFF. THE MODULAR TREATMENT SYSTEM IN WHICH THE BIOLOGICALLY ACTIVE BIOFILTRATION MEDIA IS USED SHALL BE A COMPLETE, INTEGRATED SYSTEM DESIGNED TO BE PLACED IN SQUARE FOOT OR LINEAR FOOT INCREMENTS PER THE APPROVED DRAWINGS TO TREAT CONTAMINATED RUNOFF FROM IMPERVIOUS SURFACES.

THE HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS) IS COMPRISED OF THE FOLLOWING COMPONENTS:

A. PLANT COMPONENT

1. MANUFACTURER SHALL PROVIDE A REGIONALIZED LIST OF ACCEPTABLE PLANTS.
2. PLANTS, AS SPECIFIED IN THE APPROVED DRAWINGS/MANUFACTURER'S PLANT LIST, SHALL BE INSTALLED AT THE TIME THE HPMBS IS COMMISSIONED FOR USE.
3. PLANTS AND PLANTING ARE TYPICALLY INCLUDED IN LANDSCAPE CONTRACT.

B. BIOFILTER COMPONENT

1. THIS COMPONENT EMPLOYS A HIGH PERFORMANCE CROSS-SECTION IN WHICH EACH ELEMENT IS HIGHLY DEPENDENT ON THE OTHERS TO MEET THE PERFORMANCE SPECIFICATION FOR THE COMPLETE SYSTEM. IT IS IMPORTANT THAT THIS ENTIRE CROSS-SECTION BE PROVIDED AS A COMPLETE SYSTEM AND INSTALLED AS SUCH.
2. AS INDICATED IN THE APPROVED DRAWINGS, THE ELEMENTS OF THE BIOFILTER INCLUDE:

A. A MULCH PROTECTIVE LAYER (IF SPECIFIED).

B. AN ADVANCED HIGH INFILTRATION RATE BIOFILTRATION PLANTING MEDIA BED WHICH UTILIZES PHYSICAL, CHEMICAL AND BIOLOGICAL MECHANISMS OF THE SOIL, PLANT, AND MICROBE COMPLEX, TO REMOVE POLLUTANTS FOUND IN STORM WATER RUNOFF.

C. A SEPARATION LAYER WHICH UTILIZES THE CONCEPT OF 'BRIDGING' TO SEPARATE THE BIOFILTRATION MEDIA FROM THE UNDERDRAIN WITHOUT THE USE OF GEOTEXTILE FABRICS.

D. A WIDE APERTURE MESH LAYER UTILIZED TO PREVENT BRIDGING STONE FROM ENTERING THE UNDERDRAIN/STORAGE ELEMENT.

E. A MODULAR, HIGH INFILTRATION RATE 'FLAT PIPE' STYLE UNDERDRAIN/STORAGE SYSTEM WHICH IS DESIGNED TO DIRECTLY INFILTRATE OR EXFILTRATE WATER THROUGH ITS SURFACE. THE MODULAR UNDERDRAIN MUST PROVIDE A MINIMUM OF 95% VOID SPACE.

C. ENERGY DISSIPATION COMPONENT

1. AN ENERGY DISSIPATION COMPONENT IS TYPICALLY SPECIFIED TO SLOW AND SPREAD OUT WATER AS IT ENTERS THE SYSTEM. THIS COMPONENT IS DEPENDENT UPON THE DESIGN IN THE APPROVED DRAWINGS, BUT TYPICALLY CONSISTS OF A ROCK GABION, ROCK FILTER DAM OR DENSE VEGETATION ELEMENT, SUCH AS NATIVE GRASSES, EITHER SURROUNDING THE BIOFILTRATION COMPONENT OR LOCATED IMMEDIATELY UPSTREAM OF IT.

D. PRETREATMENT COMPONENT

1. PRETREATMENT, WHEN SPECIFIED, IS TYPICALLY ACCOMPLISHED BY LOCATING THE BIOFILTRATION COMPONENT DOWNSTREAM OF A SWALE, CURB CUT/ROCK APRON, SEDIMENT FOREBAY, DEEP OR SHALLOW SUMP WATER QUALITY MANHOLE, ETC. THESE BMPS SHOULD TARGET TRASH AND DEBRIS AND MEDIUM TO COARSE SEDIMENT.

E. OBSERVATION AND MAINTENANCE COMPONENT

1. AN OBSERVATION AND MAINTENANCE PORT SHALL BE INSTALLED PER THE APPROVED DRAWINGS TO PROVIDE FOR EASY INSPECTION OF THE UNDERDRAIN/STORAGE ELEMENT, AND CLEANOUT ACCESS IF NEEDED.

F. EXTREME EVENT OVERFLOW (BY OTHERS)

1. AN EXTREME EVENT OVERFLOW SHOULD BE LOCATED EXTERNAL TO, BUT NEAR THE BIOFILTRATION ELEMENT TO PROVIDE BYPASS WHEN NEEDED. THIS MAY BE AN OVERLAND FLOW BYPASS STRUCTURE, BEEHIVE OVERFLOW GRATE STRUCTURE, OR EQUIVALENT THAT SERVES THE PURPOSE. IF BEEHIVE OVERFLOW STRUCTURES IS UTILIZED IT SHOULD INCLUDE A REMOVABLE FILTER INSERT TO PROVIDE A MINIMUM OF 50% TSS REMOVAL AND CONTROL OF GROSS POLLUTANTS, TRASH AND FLOATABLES.

II. QUALITY ASSURANCE AND PERFORMANCE SPECIFICATIONS

THE QUALITY AND COMPOSITION OF ALL SYSTEM COMPONENTS AND ALL OTHER APPURTENANCES AND THEIR ASSEMBLY PROCESS SHALL BE SUBJECT TO INSPECTION UPON DELIVERY OF THE SYSTEM TO THE WORK SITE.

INSTALLATION IS TO BE PERFORMED ONLY BY SKILLED WORK PEOPLE WITH SATISFACTORY RECORD OF PERFORMANCE ON EARTHWORKS, PIPE, CHAMBER, OR POND/LANDFILL CONSTRUCTION PROJECTS OF COMPARABLE SIZE AND QUALITY.

A. PLANTS

1. PLANTS MUST BE COMPATIBLE WITH THE HPMBS MEDIA AND THE ASSOCIATED HIGHLY VARIABLE HYDROLOGIC REGIME. PLANTS ARE TYPICALLY FACULTATIVE WITH FIBROUS ROOTS SYSTEMS SUCH A NATIVE GRASSES AND SHRUBS.
2. MANUFACTURER SHALL PROVIDE A REGIONALIZED LIST OF ACCEPTABLE PLANTS.
3. ALL PLANT MATERIAL SHALL COMPLY WITH THE TYPE AND SIZE REQUIRED BY THE APPROVED DRAWINGS AND SHALL BE ALIVE AND FREE OF OBVIOUS SIGNS OF DISEASE.

B. MULCH

1. MULCH, TYPICALLY DOUBLE SHREDDED HARDWOOD (NON-FLOATABLE), SHALL COMPLY WITH THE TYPE AND SIZE REQUIRED BY THE APPROVED DRAWINGS, AND SHALL BE SCREENED TO MINIMIZE FINES. ROCK MULCH IS AN ALTERNATIVE TO WOOD BASED MULCH AND TYPICALLY CONSISTS OF CLEAN, ROUNDED RIVER ROCK (3-4” DIAM IN SIZE).

C. BIOFILTRATION MEDIA

1. BIOLOGICALLY ACTIVE BIOFILTRATION MEDIA SHALL BE VISUALLY INSPECTED TO ENSURE APPROPRIATE VOLUME, TEXTURE AND CONSISTENCY WITH THE APPROVED DRAWINGS, AND MUST BEAR A BATCH NUMBER MARKING FROM THE MANUFACTURER WHICH CERTIFIES PERFORMANCE TESTING OF THE BATCH TO MEET OR EXCEED THE REQUIRED INFILTRATION RATE (100 IN/HR). A THIRD-PARTY LABORATORY TEST MUST BE PROVIDED TO CERTIFY THE 100 IN/HR RATE.
2. AT NO ADDITIONAL COST AND WITHIN THE FIRST YEAR FOLLOWING INSTALLATION, AUTHORIZED VALUE-ADDED RESELLER SHALL PROVIDE ONE SITE VISIT/MAINTENANCE TRAINING AT THE REQUEST OF OWNER OR OWNERS REPRESENTATIVE. THE OWNER OR OWNERS’ REP WILL BE SUPPLIED WITH THE FIRST ROUND OF REPLACEMENT MULCH BY THE RESELLER AT NO COST, SO LONG AS IT OCCURS IN THE FIRST YEAR FOLLOWING INSTALLATION.
3. POLLUTANT REMOVAL PERFORMANCE, COMPOSITION AND CHARACTERISTICS OF THE BIOFILTRATION MEDIA MUST MEET OR EXCEED THE FOLLOWING MINIMUM STANDARDS AS DEMONSTRATED BY TESTING ACCEPTABLE TO THE PROJECT ENGINEER:

Pollutant	Removal Efficiency
TSS	91%
Phosphorus	66%
Nitrogen	48%
Composition and Characteristics	
Sand - Fine	< 5%
Sand – Medium	10% - 15%
Sand – Coarse	15% - 25%
Sand – Very Coarse	40% - 45%
Gravel	10% - 20%
Infiltration Rate	>100 inches per hour
Peat Moss*	5% - 15%
* Peat Moss Specification	
Listed by Organic Materials Review Institute 100% natural peat (no composted, sludge, yard or leaf waste) Total Carbon >85% Carbon to Nitrogen Ratio 15:1 to 23:1 Lignin Content 49% to 52% Humic Acid >18% pH 6.0 to 7.0 Moisture Content 30% to 50% 95% to 100% passing 2.0mm sieve > 80% passing 1.0mm sieve	

D. UNDERDRAIN/STORAGE SYSTEM

1. UNDERDRAIN/STORAGE COMPONENTS SHALL BE MANUFACTURED IN AN ISO CERTIFIED FACILITY AND BE MANUFACTURED FROM AT LEAST 90% RECYCLED MATERIALS.
2. UNDERDRAIN/STORAGE COMPONENTS SHALL MEET OR EXCEED THE FOLLOWING CHARACTERISTICS:

Property	Value
Surface Void Area	≥ 85%
Unit Weight	3.25 lbs/cf
Service Temperature	-14° to 167°
Unconfined Crush Strength	32.48 psi
180 Day Creep Test	
Load Applied – Initial and Sustained	11.16 psi
* Creep Sustained – After 180 Days	0.20 inches
* Creep Sustained – After 180 Days	1.13%
* Projected Creep – 40 years	1.72%

E. SEPARATION MESH

1. SEPARATION MESH SHALL BE COMPOSED OF HIGH-TENACITY MONOFILAMENT POLYPROPYLENE YARNS THAT ARE WOVEN TOGETHER TO PRODUCE AN OPEN MESH GEOTEXTILE WHICH SHALL BE INERT TO BIOLOGICAL DEGRADATION AND RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS, ALKALIS AND ACIDS. THE MESH SHALL MEET OR EXCEED THE FOLLOWING CHARACTERISTICS:

Properties	Test Method	Unit	Min Avg Roll Value	
			MD	CD
Tensile Strength	ASTM D4595	kN/m (lbs/ft)	21 (1440)	25.3 (1733)
Creep Reduced Strength	ASTM D5262	kN/m (lbs/ft)	6.9 (471)	8.3 (566)
Long Term Allowable Design Load	GRI GG-4	kN/m (lbs/ft)	5.9 (407)	7.2 (490)
UV Resistance (at 500 hours)	-	% strength retained	90.00	
Aperture Size (machine direction)	-	mm (in)	2 (0.08)	
Aperture Size (cross machine direction)	-	mm (in)	2 (0.08)	
Mass/Unit Area	ASTM D5261	g/m2 (oz/yd2)	197 (5.8)	

F. BRIDGING STONE

1. BRIDGING STONE SHALL BE 3/8” PEA GRAVEL, OR OTHER DIAMETER SIZED TO PREVENT MIGRATION OF FILTER MEDIA, AS SPECIFIED BY MANUFACTURER.
2. STONE MUST BE WASHED AND FREE FROM SEDIMENT, SOIL AND CONTAMINANTS.

III. DELIVERY, STORAGE AND HANDLING

A. PROTECT ALL MATERIALS FROM DAMAGE DURING DELIVERY AND STORE UV SENSITIVE MATERIALS UNDER TARP TO PROTECT FROM SUNLIGHT INCLUDING ALL PLASTICS, WHEN TIME FROM DELIVERY TO INSTALLATION EXCEEDS ONE WEEK. STORAGE SHOULD OCCUR ON SMOOTH SURFACES, FREE FROM DIRT, MUD AND DEBRIS.

B. BIOFILTRATION MEDIA SHALL BE SEGREGATED FROM ANY OTHER AGGREGATE MATERIALS AND SHALL BE PROTECTED AGAINST CONTAMINATION, INCLUDING CONTAMINATION FROM ANY STORMWATER RUNOFF FROM AREAS OF THE SITE WHICH ARE NOT STABILIZED.

IV. SUBMITTALS

A. PRODUCT DATA

1. SUBMIT MANUFACTURER'S PRODUCT DATA AND APPROVED INSTALLATION MANUAL AS WELL AS MANUFACTURER'S OPERATIONS AND MAINTENANCE MANUAL FOR THE SYSTEM. IT WILL BE THE RESPONSIBILITY OF THE SYSTEM OWNER/OPERATOR OR THEIR CONTRACTOR TO ENSURE THE SYSTEM IS OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUAL.

B. CERTIFICATION

1. MANUFACTURER SHALL SUBMIT A LETTER OF CERTIFICATION THAT THE COMPLETE SYSTEM MEETS OR EXCEEDS ALL TECHNICAL AND PACKAGING REQUIREMENTS. BIOFILTRATION MEDIA PACKAGING MUST BEAR A BATCH NUMBER MARKING FROM THE MANUFACTURER WHICH MATCHES A LETTER FROM THE MANUFACTURER CERTIFYING PERFORMANCE TESTING OF THE BATCH TO MEET OR EXCEED THE REQUIRED INFILTRATION RATE.

C. DRAWINGS

1. MANUFACTURER SHALL PROVIDE DIMENSIONAL DRAWINGS INCLUDING DETAILS FOR CONSTRUCTION, MATERIALS, SPECIFICATIONS, AND PIPE CONNECTIONS. THESE DIMENSIONAL DRAWINGS SHALL INDICATE THE HPMBS FILTER BED AREA (SQ. FT) AND CORRESPOND WITH AN APPROVED SET PLANS OR DRAINAGE/STORMWATER MANAGEMENT REPORT STAMPED BY THE ENGINEER OF RECORD.

D. MANUFACTURER'S WARRANTY

1. MANUFACTURER SHALL PROVIDE A WARRANTY FOR ALL COMPONENTS OF THE HPMBS FOR A PERIOD OF ONE YEAR PROVIDED THE UNIT IS INSTALLED, OPERATED AND MAINTAINED IN ACCORDANCE WITH THE MANUAL. IMPROPER OPERATION, MAINTENANCE OR ACCIDENTAL OR ILLEGAL ACTIVITIES (I.E. DUMPING OF POLLUTANTS, VANDALISM, ETC.) WILL VOID THE WARRANTY.

E. SUBSTITUTIONS

1. ANY PROPOSED EQUAL ALTERNATIVE PRODUCT SUBSTITUTION TO THIS SPECIFICATION MUST BE SUBMITTED FOR REVIEW AND APPROVED PRIOR TO BID OPENING. REVIEW PACKAGE SHOULD INCLUDE THIRD PARTY REVIEWED PERFORMANCE DATA FOR BOTH FLOW RATE AND POLLUTANT REMOVAL OF BIOFILTRATION MEDIA. POLLUTANT REMOVAL DATA MUST FOLLOW SPECIFIED PROTOCOLS. ALL COMPONENTS MUST MEET OR EXCEED QUALITY ASSURANCE AND PERFORMANCE CRITERIA INDICATED HEREIN.

V. PROJECT CONDITIONS

A. REVIEW MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND COORDINATE INSTALLATION WITH OTHER WORK AFFECTED, SUCH AS GRADING, EXCAVATION, UTILITIES, CONSTRUCTION ACCESS AND EROSION CONTROL TO PREVENT ALL NON-INSTALLATION RELATED CONSTRUCTION TRAFFIC OVER THE COMPLETED HPMBS.

B. COLD WEATHER

1. DO NOT USE FROZEN MATERIALS OR MATERIALS MIXED OR COATED WITH ICE OR FROST.
2. DO NOT BUILD ON FROZEN GROUND OR WET, SATURATED OR MUDDY SUBGRADE.
3. CARE MUST BE TAKEN WHEN HANDLING PLASTICS WHEN AIR TEMPERATURE IS AT 40 DEGREES OR BELOW AS PLASTIC BECOMES BRITTLE.

C. PROTECT PARTIALLY COMPLETED INSTALLATION AGAINST DAMAGE FROM OTHER CONSTRUCTION TRAFFIC WHEN WORK IS IN PROGRESS AND FOLLOWING COMPLETION OF BACKFILL BY ESTABLISHING A PERIMETER WITH HIGHLY VISIBLE CONSTRUCTION TAPE, FENCING, OR OTHER MEANS UNTIL CONSTRUCTION IS COMPLETE.

D. SOIL STABILIZATION OF THE SURROUNDING SITE MUST BE COMPLETE BEFORE THE BIOFILTRATION SYSTEM CAN BE BROUGHT ONLINE. SOIL STABILIZATION OCCURS WHEN 90% OF THE SITE HAS BEEN PAVED OR VEGETATED. TEMPORARY EROSION CONTROL AND/OR SEDIMENTATION PREVENTION MEASURES SHALL BE IMPLEMENTED TO REDUCE THE POSSIBILITY OF SEDIMENTS BEING TRANSPORTED INTO THE BIOFILTRATION SYSTEM PRIOR TO FULL STABILIZATION OF THE SITE. SIGNIFICANT SEDIMENT LOADS CAN DAMAGE THE HPBMS AND LEAD TO FAILURE IF NOT PREVENTED OR REMEDIATED PROMPTLY.

VI. PRODUCTS

A. ACCEPTABLE HPBMS

FOCALPOINT HIGH PERFORMANCE BIOFILTRATION SYSTEM

B. ACCEPTABLE BEEHIVE OVERFLOW GRATE STRUCTURE (OPTIONAL)

BEEHIVE OVERFLOW GRATE STRUCTURE WITH REMOVABLE STORMSACK

C. ACCEPTABLE MANUFACTURER

MANUFACTURER:
CONVERGENT WATER TECHNOLOGIES, INC.
(800) 711-5428
WWW.CONVERGENTWATER.COM

D. AUTHORIZED VALUE ADDED RESELLER

ACF ENVIRONMENTAL
(800) 448-3636
WWW.ACFENVIRONMENTAL.COM
OR
FERGUSON WATERWORKS
(800) 448-3636
WWW.FERGUSON.COM

VII. PACKAGING

A. HPMBS IS ASSEMBLED ON SITE.

B. MODULAR UNDERDRAIN/STORAGE UNIT IS SHIPPED FLAT AND MODULES ARE ASSEMBLED PRIOR TO INSTALLATION.

C. BIOFILTRATION MEDIA IS DELIVERED IN ONE TON SUPER SACKS EACH LABELED WITH MANUFACTURER'S BATCH NUMBER AND/OR IN BULK WITH ACCOMPANYING MANUFACTURER'S CERTIFICATION.

D. OTHER COMPONENTS ARE DELIVERED IN BULK OR SUPER SACKS

VIII. EXECUTION

A. EXCAVATION AND BACKFILL

1. BASE OF EXCAVATION SHALL BE SMOOTH, LEVEL AND FREE OF LUMPS OR DEBRIS, AND COMPACTED UNLESS INFILTRATION OF STORM WATER INTO SUBGRADE IS DESIRED. A THIN LAYER (3”) OF COMPACTED BASE MATERIAL IS RECOMMENDED TO ESTABLISH A LEVEL WORKING PLATFORM (MAY NOT BE NEEDED IN SANDY SOILS). IF THE BASE OF THE EXCAVATION IS PUMPING OR APPEARS EXCESSIVELY SOFT, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED FOR ADVICE. IN MANY CASES, A STABILIZATION GEOTEXTILE AND 6” OF COMPACTABLE MATERIAL THAT DRAINS WELL WILL BE SUFFICIENT TO AMEND THE BEARING CAPACITY OF THE SOIL.
2. MOST APPLICATIONS REQUIRE 8 OZ NON-WOVEN GEOTEXTILE OR EQUIVALENT NONWOVEN GEOTEXTILE WITH A NOMINAL WEIGHT OF 8 OZ PER SQUARE YARD TO LINE THE EXCAVATION TO SEPARATE IN SITU SOILS AND THE HPMBS. (APPLICATIONS REQUIRING WATER TO INFILTRATE THE IN SITU SUB-SOILS SHOULD USE A BRIDGING STONE RATHER THAN GEOTEXTILE TO PROVIDE A SEPARATION LAYER BETWEEN THE HPMBS AND THE IN SITU SOILS). GEOTEXTILE, WHEN UTILIZED, SHOULD BE PLACED ON THE BOTTOM AND UP THE SIDES OF THE EXCAVATION. ABSOLUTELY NO GEOTEXTILES SHOULD BE USED IN THE WATER COLUMN. IF AN IMPERMEABLE LINER IS SPECIFIED, IT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
3. SPECIFIED BACKFILL MATERIAL MUST BE FREE FROM LUMPS, DEBRIS AND ANY SHARP OBJECTS THAT COULD PENETRATE THE GEOTEXTILE. MATERIAL IS USED FOR BACKFILL ALONG THE SIDES OF THE SYSTEM AS INDICATED IN ENGINEERING DETAIL DRAWINGS.

B. INSPECTION

1. EXAMINE PREPARED EXCAVATION FOR SMOOTHNESS, COMPACTION AND LEVEL. CHECK FOR PRESENCE OF HIGH WATER TABLE, WHICH MUST BE KEPT AT LEVELS BELOW THE BOTTOM OF THE UNDER DRAIN STRUCTURE AT ALL TIMES. IF THE BASE IS PUMPING OR APPEARS EXCESSIVELY SOFT, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED FOR ADVICE.
2. INSTALLATION COMMENCEMENT CONSTITUTES ACCEPTANCE OF EXISTING CONDITIONS AND RESPONSIBILITY FOR SATISFACTORY PERFORMANCE. IF EXISTING CONDITIONS ARE FOUND TO BE UNSATISFACTORY, CONTACT PROJECT MANAGER OR ENGINEER FOR RESOLUTION PRIOR TO

INSTALLATION.

IX. CLEANUP AND PROTECTION DURING ONGOING CONSTRUCTION ACTIVITY

A. PERFORM CLEANING DURING THE INSTALLATION AND UPON COMPLETION OF THE WORK.

B. REMOVE FROM SITE ALL EXCESS MATERIALS, DEBRIS, AND EQUIPMENT. REPAIR ANY DAMAGE TO ADJACENT MATERIALS AND SURFACES RESULTING FROM INSTALLATION.

C. IF SURROUNDING DRAINAGE AREA IS NOT FULLY STABILIZED, A PROTECTIVE COVERING OF GEOTEXTILE FABRIC SHOULD BE SECURELY PLACED TO PROTECT THE BIOFILTRATION MEDIA.

D. CONSTRUCTION PHASE EROSION AND SEDIMENTATION CONTROLS SHALL BE PLACED TO PROTECT THE INLET(S) TO THE BIOFILTRATION SYSTEM. EXCESSIVE SEDIMENTATION, PARTICULARLY PRIOR TO ESTABLISHMENT OF PLANTS MAY DAMAGE THE HPMBS.

E. STRICTLY FOLLOW MANUFACTURER'S GUIDELINES WITH RESPECT TO PROTECTION OF THE HPMBS BETWEEN INSTALLATION AND COMMISSIONING PHASES.

X. COMMISSIONING

A. COMMISSIONING SHOULD ONLY BE CARRIED OUT ONCE THE CONTRIBUTING DRAINAGE AREA IS FULLY STABILIZED. IF COMMISSIONING MUST BE CARRIED OUT SOONER, IT IS IMPERATIVE THAT APPROPRIATE EROSION AND SEDIMENT CONTROLS BE PLACED TO PREVENT THE ENTRY OF EXCESSIVE SEDIMENT/POLLUTANT LOADS INTO THE SYSTEM.

B. COMMISSIONING ENTAILS REMOVING THE PROTECTIVE COVERING FROM THE BIOFILTRATION MEDIA, PLANTING THE PLANT MATERIAL IN ACCORDANCE WITH THE APPROVED DRAWINGS, AND PLACING MULCH IF SPECIFIED.

1. DIG PLANTING HOLES THE DEPTH OF THE ROOT BALL AND TWO TO THREE TIMES AS WIDE AS THE ROOT BALL. WIDE HOLES ENCOURAGE HORIZONTAL ROOT GROWTH THAT PLANTS NATURALLY PRODUCE.

2. WITH TREES, YOU MUST ENSURE YOU ARE NOT PLANTING TOO DEEP. DON'T DIG HOLES DEEPER THAN ROOT BALLS. THE MEDIA SHOULD BE PLACED AT THE ROOT COLLAR, NOT ABOVE THE ROOT COLLAR. OTHERWISE THE STEM WILL BE VULNERABLE TO DISEASE.

3. STRICTLY FOLLOW MANUFACTURER'S PLANTING GUIDANCE.

C. COVER THE EXPOSED ROOT BALL TOP WITH MULCH. MULCH SHOULD NOT TOUCH THE PLANT BASE BECAUSE IT CAN HOLD TOO MUCH MOISTURE AND INVITE DISEASE AND INSECTS. EVENLY PLACE 3 INCHES OF DOUBLE-SHREDDED HARDWOOD MULCH (IF SPECIFIED) ON THE SURFACE OF THE MEDIA.

D. PLANTINGS SHALL BE WATERED-IN AT INSTALLATION AND TEMPORARY IRRIGATIONS SHALL BE PROVIDED, IF SPECIFIED.

XI. USING THE HPMBS

A. MAINTENANCE REQUIREMENTS

1. ANNUAL MAINTENANCE GENERALLY CONSISTS OF TWO (2) SCHEDULED VISITS UNLESS OTHERWISE SPECIFIED.
2. EACH MAINTENANCE VISIT CONSISTS OF THE FOLLOWING:
   1. COMPLETE SYSTEM INSPECTION
   2. REMOVAL OF FOREIGN DEBRIS, SILT, PLANT MATERIAL, TRASH AND MULCH (IF NEEDED)
   3. EVALUATION OF BIOFILTRATION MEDIA
   4. EVALUATION OF PLANT HEALTH
   5. INSPECTION OF UNDERDRAIN/STORAGE SYSTEM VIA OBSERVATION/MAINTENANCE PORT
   6. PROPERLY DISPOSE OF ALL MAINTENANCE REFUSE ITEMS (TRASH, MULCH, ETC.)
   7. TAKE PHOTOGRAPHS DOCUMENTING PLANT GROWTH AND GENERAL SYSTEM HEALTH
   8. UPDATE AND STORE MAINTENANCE RECORDS
   9. TO ENSURE LONG TERM PERFORMANCE OF THE HPMBS, CONTINUING ANNUAL MAINTENANCE SHOULD BE PERFORMED PER THE MANUFACTURER'S OPERATIONS AND MAINTENANCE MANUAL.
3. IF SEDIMENT ACCUMULATES BEYOND AN ACCEPTABLE LEVEL IN THE UNDERDRAIN/STORAGE SYSTEM, IT WILL BE NECESSARY TO FLUSH THE UNDERDRAIN. THIS CAN BE DONE BY PUMPING WATER INTO THE OBSERVATION/MAINTENANCE PORT OR ADJACENT OVERFLOW STRUCTURE, ALLOWING THE TURBULENT FLOWS THROUGH THE UNDERDRAIN TO RE-SUSPEND THE FINE SEDIMENTS. IF MULTIPLE OBSERVATION/MAINTENANCE PORTS HAVE BEEN INSTALLED, WATER SHOULD BE PUMPED INTO EACH PORT TO MAXIMIZE FLUSHING EFFICIENCY.

   SEDIMENT-LADEN WATER CAN BE PUMPED OUT AND EITHER CAPTURED FOR DISPOSAL OR FILTERED THROUGH A DIRTBAG FILTER BAG, IF PERMITTED BY THE LOCALITY.

XII. MEASUREMENT AND PAYMENT

GIVEN THE INTEGRATED NATURE OF THE HPMBS, MEASUREMENT AND PAYMENT WILL BE BASED NOT ON THE INDIVIDUAL COMPONENT PRICES, BUT ON THE SIZE OF THE BIOFILTRATION MEDIA BED. THE EXTERNAL DIMENSION AS INDICATED IN THE APPROVED PLANS AND EXECUTED IN THE INSTALLATION WILL BE MEASURED IN SQUARE FEET AND PAYMENT WILL BE MADE PER HPMBS SYSTEM.

MEASUREMENT AND PAYMENT OF BEEHIVE OVERFLOW GRATE STRUCTURE WITH REMOVABLE FILTER INSERT WILL BE BASED ON PER UNIT PRICE.

FocalPoint
BIOFILTRATION SYSTEMS

ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON WATERWORKS

FOR ADDITIONAL INFORMATION PLEASE CONTACT:
FERGUSON WATERWORKS,
1-800-448-3636, www.ferguson.com

FOCALPOINT SPECIFICATION
WASHINGTON STREET
AUBURN, ME
SITE DESIGNATION: FP-1

DRAWN BY
LTJ

DATE
05/02/22

SHEET NO.
8 of 9

R-TANK SPECIFICATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings, technical specification and general provisions of the Contract as modified herein apply to this section.

1.02 DESCRIPTION OF WORK INCLUDED

A. Provide excavation and base preparation per geotechnical engineer's recommendations and/or as shown on the design drawings, to provide adequate support for project design loads and safety from excavation sidewall collapse. Excavations shall be in accordance with the owner's and OSHA requirements.
B. Provide and install R-TankLD/, R-TankHD/, R-TankSD/, or R-TankU/D/ system (hereafter called R-Tank) and all related products including fill materials, geotextiles, geogrids, inlet and outlet pipe with connections per the manufacturer's installation guidelines provided in this section.
C. Provide and construct the cover of the R-Tank system including; stone backfill, structural fill cover, and pavement section as specified.
D. Protect R-Tank system from construction traffic after installation until completion of all construction activity in the installation area.

1.03 QUALITY CONTROL

A. All materials shall be manufactured in ISO certified facilities.
B. Installation Contractor shall demonstrate the following experience:
  1. A minimum of three R-Tank or equivalent projects completed within 2 years; and,
  2. A minimum of 25,000 cubic feet of storage volume completed within 2 years.
  3. Contractor experience requirement may be waived if the manufacturer's representative provides on-site training and review during construction.
C. Installation Personnel: Performed only by skilled workers with satisfactory record of performance on bulk earthworks, pipe, chamber, or pond/landfill construction projects of comparable size and quality.
D. Contractor must have manufacturer's representative available for site review if requested by Owner.

1.04 SUBMITTALS

A. Submit proposed R-Tank layout drawings. Drawings shall include typical section details as well as the required base elevation of stone and tanks, minimum cover requirements and tank configuration.
B. Submit manufacturer's product data, including compressive strength and unit weight.
C. Submit manufacturer's installation instructions.
D. Submit R-Tank sample for review. Reviewed and accepted samples will be returned to the Contractor.
E. Submit material certificates for geotextile, geogrid, base course and backfill materials.
F. Submit required experience and personnel requirements as specified in Section 1.03.
G. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening. Review package should include third party reviewed performance data that meets or exceeds criteria in Table 2.01 B.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Protect R-Tank and other materials from damage during delivery, and store UV sensitive materials under tarp to protect from sunlight when time from delivery to installation exceeds two weeks. Storage of materials should be on smooth surfaces, free from dirt, mud and debris.
B. Handling is to be performed with equipment appropriate to the materials and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.
C. Cold weather:
  1. Care must be taken when handling plastics when air temperature is 40 degrees or below as plastic becomes brittle.
  2. Do not use frozen materials or materials mixed or coated with ice or frost.
  3. Do not build on frozen ground or wet, saturated or muddy subgrade.

1.06 PREINSTALLATION CONFERENCE.

A. Prior to the start of the installation, a preinstallation conference shall occur with the representatives from the design team, the general contractor, the excavation contractor, the R-Tank installation contractor, and the manufacturer's representative.

1.07 PROJECT CONDITIONS

A. Coordinate installation for the R-Tank system with other on-site activities to eliminate all non-installation related construction traffic over the completed R-Tank system. No loads heavier than the design loads shall be allowed over the system, and in no case shall loads higher than a standard AASHTO HS20 (or HS25, depending on design criteria) load be allowed on the system at any time.
B. Protect adjacent work from damage during R-Tank system installation.
C. All pre-treatment systems to remove debris and heavy sediments must be in place and functional prior to operation of the R-Tank system. Additional pretreatment measures may be needed if unit is operational during construction due to increased sediment loads.
D. Contractor is responsible for any damage to the system during construction.

PART 2 - PRODUCTS

2.01 R-TANK UNITS

A. R -Tank - Injection molded plastic tank plates assembled to form a 95% void modular structure of predesigned height (custom for each project).
B. R-Tank units shall meet the following Physical & Chemical Characteristics:

PROPERTY	DESCRIPTION	R-Tank^{LD} VALUE	R-Tank^{HD} VALUE	R-Tank^{SD} VALUE	R-Tank^{UD} VALUE
Void Area	Volume available for water storage	95%	95%	95%	95%
Surface Void Area	Percentage of exterior available for infiltration	90%	90%	90%	90%
Vertical Compressive Strength	ASTM D 2412 / ASTM F 2418	30.0 psi	33.4 psi	42.9 psi	134.2 psi
Lateral Compressive Strength	ASTM D 2412 / ASTM F 2418	20.0 psi	22.4 psi	28.9 psi	N/A
HS-20 Minimum Cover	Cover required to support HS-20 loads	N/A	20”	18”	12” (STONE BACKFILL)
HS-25 Minimum Cover	Cover required to support HS-25 loads	N/A	24”	19”	15” (STONE BACKFILL)
Maximum Cover	Maximum allowable cover depth	3 feet	< 7 feet	< 10 feet	5 feet
Unit Weight	Weight of plastic per cubic foot of tank	3.29 lbs / cf	3.62 lbs/cf	3.96 lbs / cf	4.33 lbs / cf
Rib Thickness	Thickness of load-bearing members	0.18 inches	0.18 inches	0.18 inches	N/A
Service Temperature	Safe temperature range for use	-14 – 167° F	-14 – 167° F	-14 – 167° F	-14 – 167° F

C. Supplier: Ferguson Waterworks 2831 Cardwell Road Richmond, VA 23234 (T): 800-448-3636; (F): 804-743-7779 www.ferguson.com

2.02 GEOSYNTHETICS

A. Geotextile. A geotextile envelope is required to prevent backfill material from entering the R-Tank modules.
  1. Standard Application: The standard geotextile shall be an 8 oz per square yard nonwoven geotextile (ACF N080 or equivalent).
  2. Infiltration Applications: When water must infiltrate/exfiltrate through the geotextile as a function of the system design, a woven monofilament (ACF M200 or equivalent) shall be used.
B. Geogrid. For installations subject to traffic loads and/or when required by project plans, install geogrid (ACF BX12 or equivalent) to reinforce backfill above the R-Tank system. Geogrid is not always required for R-TankUD/ installations, and is often not required for non-traffic load applications.

2.03 BACKFILL & COVER MATERIALS

A. Bedding Materials: Stone (angular and smaller than 1.5” in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System) shall be used below the R-Tank system (3” minimum). Material must be free from lumps, debris, and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation. For infiltration applications bedding material shall be free draining.
B. Side and Top Backfill: Material must be free from lumps, debris and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.
  1. Traffic Applications - Free draining material shall be used adjacent to (24” minimum) and above (for the first 12”) the R-Tank system.
  a. For HD, and SD modules, backfill materials shall be free draining stone (angular and smaller than 1.5” in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System).
  b. For UD modules with less than 14” of top cover, backfill materials shall be free draining stone (angular and smaller than 1.5” in diameter). The use of soil backfill on the sides and top of the UD module is not permitted unless the modules are installed outside of traffic areas or with cover depths of 14” or more. Top backfill material (from top of module to bottom of pavement base or 12” maximum) must be consistent with side backfill.
  2. Non-Traffic / Green Space Applications - For all R-Tank modules installed in green spaces and not subjected to vehicular loads, backfill materials may either follow the guidelines for Traffic Applications above, or the top backfill layer (12” minimum) may consist of AASHTO #57 stone blended with 30-40% (by volume) topsoil to aid in establishing vegetation.
C. Additional Cover Materials: Structural Fill shall consist of granular materials meeting the gradational requirements of SM, SP, SW, GM, GP or GW as classified by the Unified Soil Classification System. Structural fill shall have a maximum of 25 percent passing the No. 200 sieve, shall have a maximum clay content of 10 percent and a maximum Plasticity Index of 4. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.

2.04 OTHER MATERIALS

A. Utility Marker: Install metallic tape at corners of R-Tank system to mark the area for future utility detection.

PART 3 - EXECUTION

3.01 ASSEMBLY OF R-TANK UNITS

A. Assembly of modules shall be performed in accordance with the R-Tank Installation Manual, Section 2.

3.02 LAYOUT AND EXCAVATION

A. Installer shall stake out, excavate, and prepare the subgrade area to the required plan grades and dimensions, ensuring that the excavation is at least 2 feet greater than R-Tank dimensions in each direction allowing for installation of geotextile filter fabric, R-Tank modules, and free draining backfill materials.
B. All excavations must be prepared with OSHA approved excavated sides and sufficient working space.
C. Protect partially completed installation against damage from other construction traffic by establishing a perimeter with high visibility construction tape, fencing, barricades, or other means until construction is complete.
D. Base of the excavation shall be uniform, level, and free of lumps or debris and soft or yielding subgrade areas. A minimum 2,000 pounds per square foot bearing capacity is required.
  1. Standard Applications: Compact subgrade to a minimum of 95% of Standard Proctor (ASTM D698) density or as required by the Owner's engineer.
  2. Infiltration Applications: Subgrade shall be prepared in accordance with the contract documents. Compaction of subgrade should not be performed in infiltration applications.
E. Unsuitable Soils or Conditions: All questions about the base of the excavation shall be directed to the owner's engineer, who will approve the subgrade conditions prior to placement of stone. The owner's engineer shall determine the required bearing capacity of the R-Tank subgrade; however in no case shall a bearing capacity of less than 2,000 pounds per square foot be provided.
  1. If unsuitable soils are encountered at the subgrade, or if the subgrade is pumping or appears excessively soft, repair the area in accordance with contract documents and/or as directed by the owner's engineer.
  2. If indications of the water table are observed during excavation, the engineer shall be contacted to provide recommendations.
  3. Do not start installation of the R-Tank system until unsatisfactory subgrade conditions are corrected and the subgrade conditions are accepted by the owner's engineer.

3.03 PREPARATION OF BASE

A. Place a thin layer (3” unless otherwise specified) of bedding material (Section 2.03 A), over the subgrade to establish a level working platform for the R-Tank modules. Level to within ½” (+/- ¼”) or as shown on the plans. Native subgrade soils or other materials may be used if determined to meet the requirements of 2.03 A and are accepted by the owner's engineer.
  1. Standard Applications: Static roll or otherwise compact bedding materials until they are firm and unyielding.
  2. Infiltration Applications: Bedding materials shall be prepared in accordance with the contract documents.
B. Outline the footprint of the R-Tank system on the excavation floor using spray paint or chalk line to ensure a 2' perimeter is available around the R-Tank system for proper installation and compaction of backfill.

3.04 INSTALLATION OF THE R-TANKS

A. Where a geotextile wrap is specified on the stone base, cut strips to length and install in excavation, removing wrinkles so material lays flat. Overlap geotextile a minimum 12” or as recommended by manufacturer. Use tape, special adhesives, sandbags or other ballast to secure overlaps. As geotextiles can be damaged by extreme heat, smoking is not permissible on/near the geotextile, and tools using a flame to tack the overlaps, such as propane torches, are prohibited.
B. Where an impervious liner (for containment) is specified, install the liner per manufacturer's recommendations and the contract documents. The R-Tank units shall be separated from impervious liner by a non-woven geotextile fabric installed accordance with Section 3.04A.
C. Install R-Tank modules by placing side by side, in accordance with the design drawings. No lateral connections are required. It is advisable to use a string line to form square corners and straight edges along the perimeter of the R-Tank system. The modules are to be oriented as per the design drawing with required depth as shown on plans.
  1. For LD, HD, and SD installations, the large side plate of the tank should be placed on the perimeter of the system. This will typically require that the two ends of the tank area will have a row of tanks placed perpendicular to all other tanks. If this is not shown in the construction drawings, it is a simple field adjustment that will have minimal effect on the overall system footprint. Refer to R-Tank Installation Guide for more details
  2. For UD installations, there is no perpendicular end row required.
D. Wrap the R-Tank top and sides in specified geotextile. Cut strips of geotextile so that it will cover the sides and top, encapsulating the entire system to prevent backfill entry into the system. Overlap geotextile 12” or as recommended by manufacturer. Take great care to avoid damage to geotextile (and, if specified, impervious liner) during placement.
E. Identify locations of inlet, outlet and any other penetrations of the geotextile (and optional liner). These connections should be installed flush (butted up to the R-Tank) and the geotextile fabric shall be cut to enable hydraulic continuity between the connections and the R-Tank units. These connections shall be secured using pipe boots with stainless steel pipe clamps. Support pipe in trenches during backfill operations to prevent pipe from settling and damaging the geotextile, impervious liner (if specified) or pipe. Connecting pipes at 90 degree angles facilitates construction, unless otherwise specified. Ensure end of pipe is installed snug against R-Tank system.
F. Install Inspection and Maintenance Ports in locations noted on plans. At a minimum one maintenance port shall be installed within 10' of each inlet & outlet connection, and with a maximum spacing of one maintenance port for every 2,500 square feet. Install all ports as noted in the R-Tank Installation Guide.
G. If required, install ventilation pipes and vents as specified on drawings to provide ventilation for proper hydraulic performance. The number of pipes and vents will depend on the size of the system. Vents are often installed using a 90 degree elbow with PVC pipe into a landscaped area with 'U" bend or venting bollard to inhibit the ingress of debris. A ground level concrete or steel cover can be used.

3.05 BACKFILLING OF THE R-TANK UNITS

A. Backfill and fill with recommended materials as follows:
  1. Place freely draining backfill materials (Section 2.03 B) around the perimeter in lifts with a maximum thickness of 12”. Each lift shall be placed around the entire perimeter such that each lift is no more than 24” higher than the side backfill along any other location on the perimeter of the R-Tank system. No fill shall be placed over top of tanks until the side backfill has been completed.
  2. Each lift shall be compacted at the specified moisture content to a minimum of 95% of the Standard Proctor Density until no further densification is observed (for self-compacting stone materials). The side lifts must be compacted with walk behind compaction equipment. Even when “self-compacting” backfill materials are selected, a walk behind vibratory compactor must be used.
  3. Take care to ensure that the compaction process does not allow the machinery to come into contact with the modules due to the potential for damage to the geotextile and R-Tank units.
  4. No compaction equipment is permissible to operate directly on the R-Tank modules.
  5. Top Backfill: Only low pressure track vehicles shall be operated over the R-Tank system during construction. Dump Trucks and Pans shall not be operated within the R-Tank system footprint at any time. Heavy equipment should unload in an area adjacent to the R-Tank system and the material should be moved over the system using tracked equipment with an operating weight of less than 10 tons.
    a. Typical Applications: Install a 12” (or as shown on plans) lift of freely draining material (Section 2.03 B) over the R-Tank Units, maintaining 12” between equipment tracks and R-Tank System. Lightly compacted using a walk-behind trench roller. Alternately, a roller (maximum gross vehicle weight of 6 tons) may be used. Roller must remain in static mode until a minimum of 24” of cover has been placed over the modules. Sheep foot rollers should not be used.
    b. Shallow Applications (< 18” total cover): Install top backfill in accordance with plans.
  6. If required, install a geogrid as shown on plans. Geogrid shall extend a minimum of 3 feet beyond the limits of the excavation wall.
  7. Following placement and compaction of the initial cover, subsequent lifts of structural fill (Section 2.03 C) shall be placed at the specified moisture content and compacted to a minimum of 95% of the Standard Proctor Density and shall cover the entire footprint of the R-Tank system. During placement of fill above the system, unless otherwise specified, a uniform elevation of fill shall be maintained to within 12” across the footprint of the R-Tank system. Do not exceed maximum cover depths listed in Table 2.01 B.
  8. Place additional layers of geotextile and/or geogrid at elevations as specified in the design details. Each layer of geosynthetic reinforcement placed above the R-Tank system shall extend a minimum of 3 feet beyond the limits of the excavation wall.
B. Ensure that all unrelated construction traffic is kept away from the limits of excavation until the project is complete and final surface materials are in place. No non-installation related loading should be allowed over the R-Tank system until the final design section has been constructed (including pavement).
C. Place surfacing materials, such as groundcovers (no large trees), or paving materials over the structure with care to avoid displacement of cover fill and damage to surrounding areas.
D. Backfill depth over R-Tank system must be within the limitations shown in the table in Section 2.01 B. If the total backfill depth does not comply with this table, contact engineer or manufacturer's representative for assistance.

3.06 MAINTENANCE REQUIREMENTS

A. A routine maintenance effort is required to ensure proper performance of the R-Tank system. The Maintenance program should be focused on pretreatment systems. Ensuring these structures are clean and functioning properly will reduce the risk of contamination of the R-Tank system and stormwater released from the site. Pre-treatment systems shall be inspected yearly, or as directed by the regulatory agency and by the manufacturer (for proprietary systems). Maintain as needed using acceptable practices or following manufacturer's guidelines (for proprietary systems).
B. All inlet pipes and Inspection and/or Maintenance Ports in the R-Tank system will need to be inspected for accumulation of sediments at least quarterly through the first year of operation and at least yearly thereafter.
C. If sediment has accumulated to the level noted in the R-Tank Maintenance Guide or beyond a level acceptable to the Owner's engineer, the R-Tank system should be flushed.
D. All inspection and maintenance activities should be performed in accordance with the R-Tank Operation, Inspection & Maintenance Manual.

FocalPoint
BIOFILTRATION SYSTEMS

ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

FERGUSON
WATERWORKS

FOR ADDITIONAL INFORMATION PLEASE CONTACT:
FERGUSON WATERWORKS,
1-800-448-3636, www.ferguson.com

R-TANK SPECIFICATION
WASHINGTON STREET
AUBURN, ME
SITE DESIGNATION: FP-1

DRAWN BY
LTJ

DATE
05/02/22

SHEET NO.
9 of 9

EROSION AND SEDIMENTATION CONTROL PLAN

Brickyard Commons
Auburn, Maine

Prepared By:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC.
Livermore Falls, Maine
May 03, 2022

1. INTRODUCTION:

"A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. §480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken." – Maine DEP Chapter 500 Rules, Appendix A.

This Plan has been developed to ensure that construction activities on this project site utilize sound erosion and sedimentation control measures. These measures will prevent or reduce the potential for the deposition of sediments down stream of site. The methods of control consist of preventive measures and remedial measures. Preventive measures are aimed at keeping the soils in their present location through mulching and through the reestablishment of vegetation. Remedial measures deal with the trapping and/or filtering of sediment laden stormwater run-off. Both types of measures will be utilized on this project.

The Erosion and Sedimentation Control Plan is best broken down into Temporary Measures, Winter Stabilization, and Permanent Measures.

2. TEMPORARY EROSION CONTROL:

Temporary control measures may consist of a combination of measures where appropriate and/or as shown on the plans.

A. Sediment Filter Berms:

Sediment Filter Berms are the preferred filtering device but may not be used in wetland areas. The berms shall be placed down slope of all earth moving activities, where water from these disturbed areas will run off. These berms will be placed along an even contour, be at least 24 inches tall, and 3 feet wide at the base. Turn the ends of the berm up-grade to avoid runoff flowing around the berm. In areas of high erosion potential, the berm will be backed by hay bales or silt fencing, as shown on the filter berm detail.

B. Silt Fencing:

Silt fencing may be used in place of, or together with, the sediment filter barriers. The silt fencing will also be anchored at least four inches into the ground and placed along an even contour. Turn the ends of the fence up-grade to avoid runoff flowing around the fence. During frozen conditions, furnish and install Sediment Filter Berms in lieu of silt fencing or hay bales if frozen soil prevents the proper installation of silt fences and hay bales.

C. Stone Check dams:

Stone check dams shall be placed in the center of ditches immediately following excavation to provide a means of trapping sediments. (If the ditch has been immediately armored with rip-rap, check dams are not necessary.) The dams shall consist of small stone placed across the ditch, with a depression at the top of the dam to allow water over the top of the dam, should it become clogged with sediment. See the specifications on the Typical Details Plan for construction details of this measure.

D. Temporary Mulch:

Temporary mulch shall be placed on all disturbed areas where seeding, construction or stabilization activities will not take place for over 7 consecutive days. Temporary mulch will also be placed on areas within 75 feet of a natural resource (wetland, stream, etc.) where seeding will not take place for over 48 hours, and on all bare soils outside the road base prior to any predicted significant rain event. A significant rain event is considered to be at least ½ inch of rain or more. Temporary mulch may be hay and shall be applied at a rate of two bales per 1,000 square feet. Soil must not be visible upon completion of application, regardless of rate of application.

E. Topsoil Stockpiles:

Topsoil, removed as part of the construction, will be stockpiled on site for use in areas to be re-vegetated. The location of topsoil stockpiles must not be within 75 feet of a defined natural resource (wetland, stream, etc.), or within 75 feet of a swale or ditch.

Stockpiles shall be mulched with hay at two bales per 1,000 square feet. The area down slope from any stockpile areas will be protected by a sediment filter berm or silt fence placed directly below or down gradient from the stockpile. If the stockpile must be left for more than 30 days, the pile will be seeded with rye grass at a rate of two pounds per 1,000 square feet and mulched in accordance with this paragraph.

F. Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a proprietary product filter bag or secondary containment structure (e.g. hay bale and fabric lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

G. Catch Basins.

Catch basin inlets must be protected with a sediment trap until contributing areas, including paved and grassed island areas, are fully stabilized with pavement or grass. Temporary sediment traps shall be Dandy Bags or approved equal, with appropriate overflow slots. Geotextile cut to fit under the catch basin grate shall not be acceptable.

H. Maintenance of Temporary Measures:

All temporary measures described above shall be inspected weekly and before/after every significant storm event (1/2 inch of rain or greater) throughout the construction of the project. Repairs or replacements of temporary measures will be made as necessary. Once the site is stable, all temporary devices such as hay bale barriers and silt fencing will be removed.

A log shall be kept summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

3. WINTER STABILIZATION:

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with a combination of pavement, a road gravel base, 90% mature vegetation cover or riprap by November 1 then the site needs to be protected with winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is denuded at any one time. Limit the exposed area to those areas in which work is expected to be undertaken during the following 15 days. Exposed area shall not be so large that it cannot be mulched in one day prior to any snow event.

Areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed and mulched. Hay and straw mulch rate shall be a minimum of 200 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

1. Soil Stockpiles

    Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 200 lbs/1,000 s.f. (3 tons per acre) or with a four-inch layer of woodwaste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

    Any new soil stockpile will not be placed (even covered with hay or straw) within 100 feet of any natural resources.

2. Natural Resource Protection

    Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 90 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

    During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Silt fencing may not be placed on frozen ground.

    Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

3. Mulching

    Areas shall be considered denuded until loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 200 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

An area shall be considered stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 200 lb. per 1,000 square feet and adequately anchored, such that the ground surface is not visible though the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, or wood cellulose fiber. The ground surface shall not be visible though the mulch.

After November 1th, mulch and anchoring of all bare soil shall occur at the end of each final grading work day.

4. Mulching on Slopes and Ditches

Slopes shall not be left exposed for more than 7 days unless fully mulched and anchored. Slopes within 75 feet of a natural resource shall not be left exposed for more than 48 hours. Mulching shall be applied at a rate of 300 lbs/1,000 sq ft on all slopes greater than 8%. Erosion Control mesh shall be used to anchor mulch in all drainage ways and ditches, for slopes exposed to direct winds, and for all other slopes greater that 8 %. Erosion control blanket and check dams (or permanent Rip-Rap) shall be used in lieu of mulch in all drainage ways with slopes of 8 % or more.

A six inch layer of erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

5. Seeding

Between the dates of October 15 and April 1st, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded (see table below) and mulched until such time as the final treatment can be applied. If after November 1st the exposed area has been final graded and loamed, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

TEMPORARY SEED MIX

TYPE	% BY WEIGHT	% PURITY	% GERMINATION
Domestic Rye Grass	60	69.75	90
Perennial Rye Grass	20	28.00	85
Aroostook Rye Grass	20	28.00	85

Dormant seeding may be placed prior to the placement of mulch and fabric netting anchored with staples.

If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter will be inspected in the spring for adequate catch. Areas not sufficiently vegetated (less than 90 % catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used, all disturbed areas shall be revegetated in the spring.

6. Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

7. Inspection and Monitoring

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function.

In the spring, following the temporary/final seeding and mulching, the contractor shall inspect and repair any damages and/ or un-established spots. Established vegetative cover means a minimum of 90 % of areas vegetated with vigorous growth.

8. Standard for the timely stabilization of ditches and channels

All stone-lined ditches and channels shall be constructed and stabilized by November 1. All grass-lined ditches and channels shall be constructed and stabilized by September 1. Failure to stabilize a ditch or channel to be grass-lined by September 1, will require one of the following actions to stabilize the ditch for late fall and winter.

Install a sod lining in the ditch – Sod lining shall be installed in ditches by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

Install a stone lining in the ditch –Ditches shall be lined with stone riprap by November 1, as presented below. If necessary, the applicant will regrade the ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

9. Standard for the timely stabilization of disturbed slopes

Construct and stabilize stone-covered slopes by November 1. The applicant will Seed and mulch all slopes to be vegetated by September 1. Slopes will be considered any area having a grade greater than 15% (6H:1V). If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats -- Seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope October 1. The applicant will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed slope by November 1, cover the slope with a layer of wood waste compost or with stone riprap as described below.

Stabilize the slope with sod -- Stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Sod stabilization shall not be used late-season to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost (erosion control mix) --Place a six-inch layer of wood waste compost on the slope by November 1. Prior to placing the wood waste compost, remove any snow accumulation on the disturbed slope. Wood waste compost will not be used to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

Stabilize the slope with stone riprap -- Place a layer of stone riprap on the slope by November 1, similar to the Stone Lined Ditch the permanent erosion control section.

10. Standard for the timely stabilization of disturbed soils

Seed and mulch all disturbed soils on areas having a slope less than 15% by September 1. Failure to stabilize these soils by this date will require one of the following actions to stabilize the soil for late fall and winter.

Stabilize the soil with temporary vegetation -- Seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting by October 1. Growth of the rye will require monitoring over the following 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed soil before November 1, then mulch the area for over-winter protection as described below.

Stabilize the soil with sod -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch -- Mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch by November 1. Prior to applying the mulch, remove any snow accumulation on the disturbed area. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

4. PERMANENT EROSION CONTROL:

Permanent measures will consist of the placement of culverts; culvert inlet/outlet stabilization; the construction of grass/stone lined ditches; and the re-vegetation of all areas outside the traveled way of the road, and those areas designated as stone lined ditches.

A. Culverts:

All culverts have been sized to handle the peak flows generated by a 25-year, 24-hour rainstorm. The locations and sizes of the culverts are shown on the Site Plans.

The inlets and outlets of the culverts will be armored with riprap to prevent scouring. This armoring will consist of placing stone possessing a D50 of 6 inches to a depth of 18 inches to the following dimensions: width equal to twice the diameter of the culvert; length equal to three times the diameter of the culvert, unless noted otherwise.

B. Ditches:

Ditches on the project have been designed based on expected flow rates and velocities for the 25-year, 24-hour storm event and the slope of the ditch. Where water velocities are expected to exceed 3.5 feet per second, the ditch has been designed to be stone lined. Ditches with water velocities of less than 3.5 feet per second have been designed to be grass lined.

Stone Lined Ditches:

Stone lined ditches will first be lined with a non-woven filter fabric, and then lined with riprap possessing a D50 of approximately 6 inches in diameter. This means that approximately half the stones by weight will be smaller than 6 inches and half will be larger. The minimum stone size should be 1 inch with the largest stone being 9 inches in diameter. The depth of stone in the ditch should average 15 inches.

The final shape of the ditch will consist of the following dimensions: a bottom width of two feet; side slopes possessing a 3:1 horizontal to vertical; and a total depth of 2 feet.

In lieu of stone rip-rap, the ditch may be lined with a permanent erosion control blanket, such as North American Green P300 or approved equal.

Grass Lined Ditches:

Grass lined ditches will possess the same final dimensions as the stone lined ditches. The flow area of the ditch will be armored by placing a biodegradable matting or netting (such as American Excelsior Curlex Blanket or equal) in the bottom of the ditch. Placement of this material must take place after seeding. Install according to the manufacturers' recommendations.

Seeding and mulching of grass lined ditches will follow the specifications stated below for re-vegetation.

C. Re-vegetation Measures:

All areas to be permanently re-vegetated with grass will first be covered with loam and then fertilized.

Loam will be placed on all areas to be re-vegetated. Loam will be placed to a minimum depth of 4 inches. Loam will be the stockpiled topsoil, if possible.

Test the loam samples for nutrients at a proficient testing laboratory (The University of Maine provides this service). Request that the testing laboratory provide a recommended fertilizer mix. The areas with loam will then be fertilized with the recommended application rate. Lime will also be applied at a rate of 50 pounds per 1,000 square feet. Both the lime and the fertilizer will be mixed thoroughly with the soil.

All areas to be re-vegetated with permanent grass are to be seeded with the seed mix shown on the table below. This mixture will be applied at a rate of 2 pounds per 1,000 square feet.

General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

Mulch will then be spread on all seeded areas at a rate of two bales per 1,000 square feet. Regardless of application rate the soil shall not be visible through the mulch.

Seed and mulch will be placed within five days of final grading of topsoil. Seeded areas will be inspected after 30 days to determine the success of the seeding. If the ground cover is less than 90%, the area will be reseeded.

D. Critical Areas:

Slopes in excess of 15% will require the placement of a biodegradable netting or matting over the mulch and seed (if the netting has no mulch in it). If stabilization is to take place after October 1, slopes over 8% will be treated with the matting.

E. Maintenance of Permanent Measures:

All measures will be inspected weekly and before and after every significant storm event during construction, and then at least once annually to insure proper function. Any damaged areas will be repaired or replaced as necessary. Any ditches or culverts not functioning as designed will be redesigned and reconstructed according to specifications prepared by a Professional Engineer.

In any event, seeding should take place either between May 1 and June 15, or August 15 and September 1.

POST-CONSTRUCTION STORMWATER INSPECTION & MAINTENANCE PLAN

Brickyard Commons
Auburn, Maine

Narrative

The following outlines the proposed BMP's and their required inspection, maintenance, and reporting.

Inspections and maintenance will be the responsibility of the Property Owner/Applicant. Written reports of inspections and maintenance work will be kept to show the work has been completed as proposed. These reports will be kept by the Owner/Applicant, along with other relevant City of Auburn documentation.

Contacts:

Design Engineer:	Richard Dunton, P.E. Main-Land Development Consultants, INC P.O. Box Q, 69 Main Street Livermore Falls, Maine 04254
Applicant:	JIG Investments, LLC (JIG) P.O. 1776 Lewiston, ME
Owner:	JIG Investments, LLC
Focal Point Consultant:	Loren Joyce, P.E. Ferguson Waterworks 207-272-9743

Post Construction Stormwater Inspector:

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____
____

Contractors:

____
____
____

Inspection

The applicant, JIG Investments, LLC, is responsible for complying with the City Stormwater Law Permit. The Applicant will be responsible for inspection and maintenance during construction and post-construction. The Applicant is also responsible for upkeep and compliance post-construction. The development is also subject to State Stormwater Management Law and will be subject to a "Five-year Recertification for Long-Term Maintenance of Stormwater Management Systems" as well as City requirements for stormwater maintenance as a MS4 community.

Purpose

The purpose of this Plan is to ensure proper function of the infrastructure constructed as part of this project. The infrastructure will include the stormwater control devices including but not limited to: drives and parking; catch basins and stormdrains; drainage ditches; Focal Point, filter pond, and detention pond. The tasks detailed in this Plan are the responsibility of the applicant.

Definitions

Significant Period of Rain: 1" or more of rain in a 24-hour period.

Inspection Scope

All areas of the site shall be inspected based on the criteria discussed for each site item or stormwater control measure as found later in the plan. See the Inspection and Maintenance Plan identifying locations of measures requiring inspection. Inspection activities listed herein are to be considered at minimum. Stormwater inspector shall use his or her judgement as to additional inspection or maintenance activities.

Inspection Frequency

Complete site inspections at the frequency listed in the following Inspection Summary.

Inspection Qualifications

For Post-Development Inspections, the qualified post-construction stormwater inspector with knowledge of erosion and stormwater control, including the standards and conditions of the project permit shall be retained by the Applicant.

Inspection/Maintenance Responsibility

It shall be the responsibility of the Applicant to retain the services of a Post-Construction Stormwater Inspector and provide for the repair and maintenance noted by inspections, if any. When maintenance is required by inspection, the Applicant shall perform the required maintenance and/or repairs in a timely fashion and notify the Inspector when the maintenance is complete. The Applicant shall maintain detailed records for the inspections and maintenance performed.

Documentation

Post Construction inspection forms and documentation of corrective actions shall be maintained for at least (5) years.

Inspection and Maintenance Plan

The site will be inspected and maintained according to the following schedule and procedures.

INSPECTION SUMMARY
Brickyard Commons

Inspections of	Schedule
- **Drives & Parking**	Annual
- **Drainage Ditches**	Annual
- **Catch basins and Stormdrains**	Annual
- **Grassed Underdrain Soil Filter**	Semi-Annual
- **Detention Pond**	Annual
- **Focal Point**	Semi-Annual
- **Embankments**	Annual

Drives & Parking:

Inspection:

The roads will be inspected at least annually to ensure proper function and to ensure structural integrity. This inspection will take place in September. Road inspections will be simple visual inspections, looking at the drive or parking surface for cracking, puddling, sedimentation, heaving, potholing, or other signs of degradation.

Maintenance:

Maintenance will include sweeping and cleanup of sediments and debris, spot corrections when necessary, crack sealing, and eventual resurfacing insure safe drivability and long lifespan. This should be performed once a year at a minimum and shall occur in April or May.

Drainage Ditches:

Inspection:

Inspect drainage ditches annually to look for erosion, obstruction, debris, or damage to erosion armoring, such as rip-rap.

Maintenance:

The drainage ditches shall be re-shaped and re-stabilized if found to be eroding. Accumulated sediment should also be removed from the flow line of the ditch, if it exists.

Catch Basins and Storm Drains:

Inspection:

The stormwater collection and conveyance devices will be inspected on an annual basis in April or May of each year. The inspection will include a review of the structural integrity and function of each device, a review of the inlets and outlets storm drains, and a review of the downstream discharge areas of all pipes and channels.

Maintenance:

The inlets and outlets of the culverts and storm drains should be cleaned on a regular basis to ensure that sediment and debris does not discharge downstream or does not clog the pipe. Catch basin sumps shall be cleaned of debris and sediments.

Grassed Underdrain Soil Filter:

Inspection:

The inspection will include a review of the structural integrity of each device, a review of the inlet and outlet of the pond, and a review of the downstream discharge areas of all pipes and channels. Inspections should include a check for signs of snow storage and prohibited vehicle traffic including ATV's and tractors.

For the first three months after construction, inspect the filter bed monthly to verify the filter bed is draining within 24 - 48 hours. Thereafter, inspect semi-annually in May and October.

Maintenance:

If water ponds on the filter bed surface for more than 72 hours following a rain event, replace the top three inches of filter media. Dispose of clogged filter media soil according to the erosion and sedimentation control plan.

Remove sediments annually in October.

If mowing is desired, only hand-held string trimmers or push-mowers are allowed on the filter (no tractors).

Detention Pond:

Inspections:

Inspection by a professional engineer will consist of weekly visits to the site to inspect the installation of each pond's embankment construction, stormwater inlet, outlet control structure and emergency spillway construction from initial ground disturbance to final stabilization of the pond.

Monthly inspections of the ponds will take place for two years after construction is completed. Inspections will occur through the months of March to November and will be conducted immediately after a significant rain event, causing discharge from the pond's outlet structure.

The monthly inspections will include but not be limited to:

> Inspection of the inlet pipe and outlet structure to determine if the structure is clogged, and to insure proper function. Blockages or obstructions will be removed. If the structure does not appear to be functioning as designed, a Professional Engineer will be retained to determine if corrective measures are required. Any recommended corrective measures would then be implemented as soon as practical.

Inspection of upstream and downstream drainage channels and structures to confirm proper flow of water into and out of the ponds, and to insure proper sizing of these channels. Litter and debris will be removed from all flow areas to assure continued flow. If the channels or structures appear unable to adequately handle actual flows, a Professional Engineer will be consulted as above. Any areas that exhibit signs of erosion or are otherwise inadequately stabilized will be repaired as necessary.

Long Term Inspections:

At the completion of the two years of monthly inspections, the ponds will be inspected on a semi-annual basis, in the spring and the fall of each year. The long-term inspections will include:

Inspection of the pond embankments to determine if there is evidence of erosion, cracking, slumping, leaking, tree growth, or other similar adverse conditions which would undermine the structural integrity of the embankments. Corrective measures, including re-shaping of the berms, will be undertaken where necessary to insure or restore structural integrity/stability of the embankments, and/or to maintain the design capacity of the pond.

A determination of whether the accumulation of sediment in the pond has reached the point, as described below, where removal of the sediment from the pond is necessary. This should be done by measuring the actual depth of water in the pond, and comparing this depth to the design depth.

Sediment Removal:

The ponds should be cleaned of sediment at that point when the design capacity of the pond has been reduced by 15%. Based upon studies in Washington D.C. and Canada, the expected volume-lost-to sediment rate is 0.5% to 1.0% per year. It is expected that the pond will require sediment removal every 15 to 20 years. Based upon these assumptions, the sediment removal schedule will be every 15 years, except where:

Intervening annual sediment accumulation inspections indicate that more frequent cleaning will occur, or;

A thorough 15th-year sediment accumulation inspection indicates that the scheduled cleaning is not yet necessary.

When sediment removal is required, it will be undertaken during dry weather conditions when inflow to the pond is at or near its annual low level. Accumulated sediments will be removed by first draining the pond. The sediments will then be excavated and then placed at the toe of the down gradient pond embankment, seeded and mulched in accordance with the Permanent Revegetation Measures in the Erosion Control Plan. This disposal site will then be monitored until stable.

Inlets and Outlets: The inlets and outlets of the ponds will be inspected for stability; blockage by debris; uneven settling around any structures; excessive sediment around the outlet. These inspections may need to be more frequent if debris proves to be a problem. If problems are identified, they will be corrected by the end of October, if possible.

Downstream Areas: To ensure that the ponds are not causing erosion problems or other difficulties to downstream areas, these areas will be inspected for erosion and instability. If problems are identified, they will be corrected by the end of October, if possible.

Maintenance:

To insure proper functioning of the pond, some routine maintenance is required.

Mowing: The pond embankments and pond bottom are to be mowed at least twice annually to prevent the establishment of woody vegetation, and to promote healthy vegetative growth.

Sediment removal: If sediment deposition in the pond is found to be significant, regular removal of sediment may be required to maintain pond volume, and to prevent clogging or blocking of the primary outlet. Sediment will be spread on a relatively flat area, seeded with grass and mulched with hay in accordance with the Erosion Control Plan developed for this project.

Focal Point:

All Inspection and Maintenance activities should also be in accordance with the "Specification – High Performance Modular Biofiltration System (HPMBS)" located at the end of this document.

Inspection:

The inspection will include a review of the integrity of the bioflraition media, plant health, underlying storage system, a review of the inlet and outlet of the pond.

Inspect semi-annually in May and October.

Maintenance:

Remove any foreign debris, silt material, trash and replenish mulch if needed.

Embankments:

Inspection:

Embankments and steep slopes will be inspected at least annually to look for erosion rill and proper vegetation growth. This inspection will take place in September.

Maintenance:

Embankment maintenance includes: mowing where grass is preferred to woody vegetation; repair of erosion where applicable; and reseeding and mulching where bare soil is encountered.

RE-CERTIFICATION

Within three months of the 5-year anniversary of the permit date of issuance, and every 5-year anniversary, thereafter, submit a certification to the City of Auburn that contains:

- A statement that the site has been inspected for erosion problems and such problem areas have been appropriately repaired and permanently stabilized.
- A statement that all aspects of the stormwater management system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system.
- A statement that the erosion control plan and the stormwater management plan are being implemented as written, approved, and amended (if applicable) by City of Auburn.

INSPECTION AND MAINTENANCE LOG
Brickyard Commons
Post Construction Stormwater
Inspection & Maintenance Log

Date of Inspection: ____
Inspected by: ____

Purpose of Inspection: Monthly, Yearly, Significant Rainfall (circle one)

Drives & Parking

Description of Conditions:
____
____
____
____

Maintenance & Date of Repairs:
____
____
____
____

Follow Up Needed:
____
____
____
____

Drainage Ditches

Description of Conditions:

Maintenance & Date of Repairs:

Follow Up Needed/Additional Comments:

Catch Basins & Stormdrains

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed/Additional Comments:

Grassed Underdrain Soil Filter

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor Cleaning:

Follow Up Needed/Additional Comments:

Detention Pond

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed/Additional Comments:

Focal Point

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed/Additional Comments:

Embankments

Description of Conditions:

Maintenance & Date of Repairs:

Sediment Inspection & Removal:

Date & Contractor for Sump Cleaning:

Follow Up Needed/Additional Comments:

HOUSEKEEPING PLAN

Brickyard Commons
Auburn, Maine

Prepared by:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC.
P.O. Box Q, Livermore Falls, Maine

August 11, 2022

The purpose of this Plan is to ensure construction activities protect against and do not create or result in materials that could become a source of pollution. These standards apply to spill prevention, groundwater protection, sediment and dust, debris and other materials, excavation de-watering, authorized non-stormwater discharges and unauthorized non-stormwater discharges.

Spill Prevention:

A SPCC plan is unnecessary. No hazardous materials will be stored on site. The site will primarily be utilized for parking, loading/unloading and storage of non-hazardous material.

Groundwater Protection:

No stormwater infiltration areas are proposed on this site. Additionally, the site is not located over a Significant Sand and Gravel Aquifer.

Fugitive Sediment and Dust:

A stabilized construction exit will be maintained for the duration of construction to minimize the tracking of mud and sediment off site. Application of water will be utilized for dust prevention during construction. Application of other chemicals to reduce dust shall not be allowed without Maine DEP approval due to the Taylor Brook watershed.

Debris and Other Materials:

Construction debris shall be contained within roll-off dumpsters and hauled to a licensed waste facility. The site shall be kept in a tidy condition, free of trash and litter.

Excavation De-Watering:

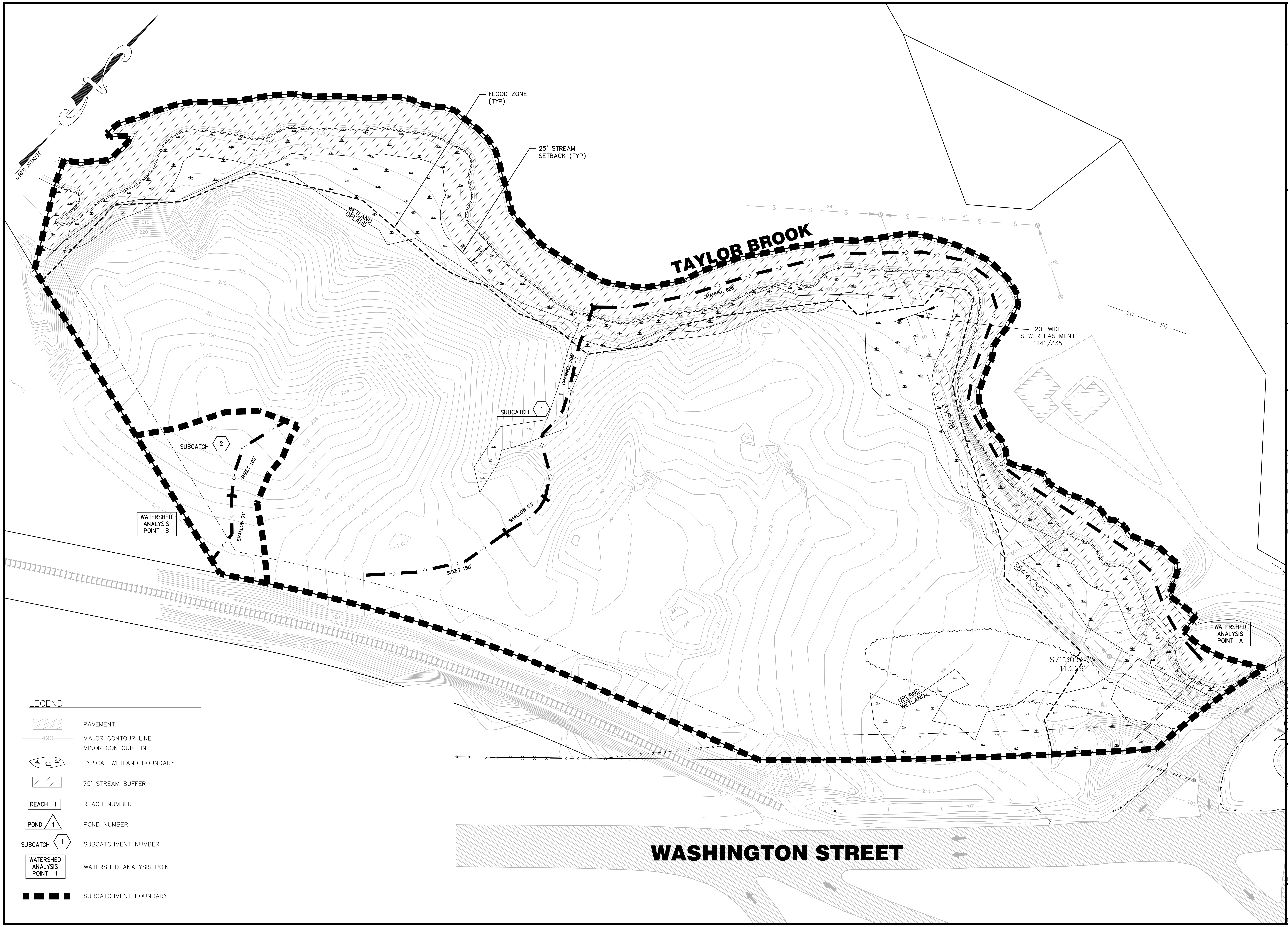
If excavation dewatering is warranted, discharge of water from the excavation shall be through an approved filter as noted in the Erosion and Sedimentation Control Plan. The discharge shall be at minimum 100 feet from Taylor Brook and allow flow through a vegetated area prior to confluence with wetland or stream flows.

Authorized Non-Stormwater Discharges:

There are no authorized non-stormwater discharges existing or proposed for this site.

Unauthorized Non-Stormwater Discharges:

There are no unauthorized non-stormwater discharges existing or proposed for this site.


GRID NORTH
FLOOD ZONE (TYP)
25' STREAM SETBACK (TYP)
25'
TAYLOR BROOK
WETLAND
UPLAND
CHANNEL 896'
CHANNEL 205'
20' WIDE SEWER EASEMENT 1141/335
SUBCATCH 1
SUBCATCH 2
SHEET 100'
SHALLOW 71'
SHALLOW 53'
SHEET 150'
WATERSHED ANALYSIS POINT B
WATERSHED ANALYSIS POINT A
336.68'
S84°47'55"E
S71°30'53"W
113.29'
UPLAND
WETLAND
WASHINGTON STREET
24"
8"
S
SD

LEGEND

▨	PAVEMENT
490	MAJOR CONTOUR LINE
	MINOR CONTOUR LINE
	TYPICAL WETLAND BOUNDARY
▨	75' STREAM BUFFER
REACH 1	REACH NUMBER
POND 1	POND NUMBER
SUBCATCH 1	SUBCATCHMENT NUMBER
WATERSHED ANALYSIS POINT 1	WATERSHED ANALYSIS POINT
■ ■ ■	SUBCATCHMENT BOUNDARY

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:

40 0 20 40
(IN FEET)
1 INCH = 40 FT

SUBMISSION NOTES:
SUBMISSION 1: 2022-02-02 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022-05-03 SDH
ISSUED FOR PERMITTING.

SUBMISSION 3: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 4: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	4
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

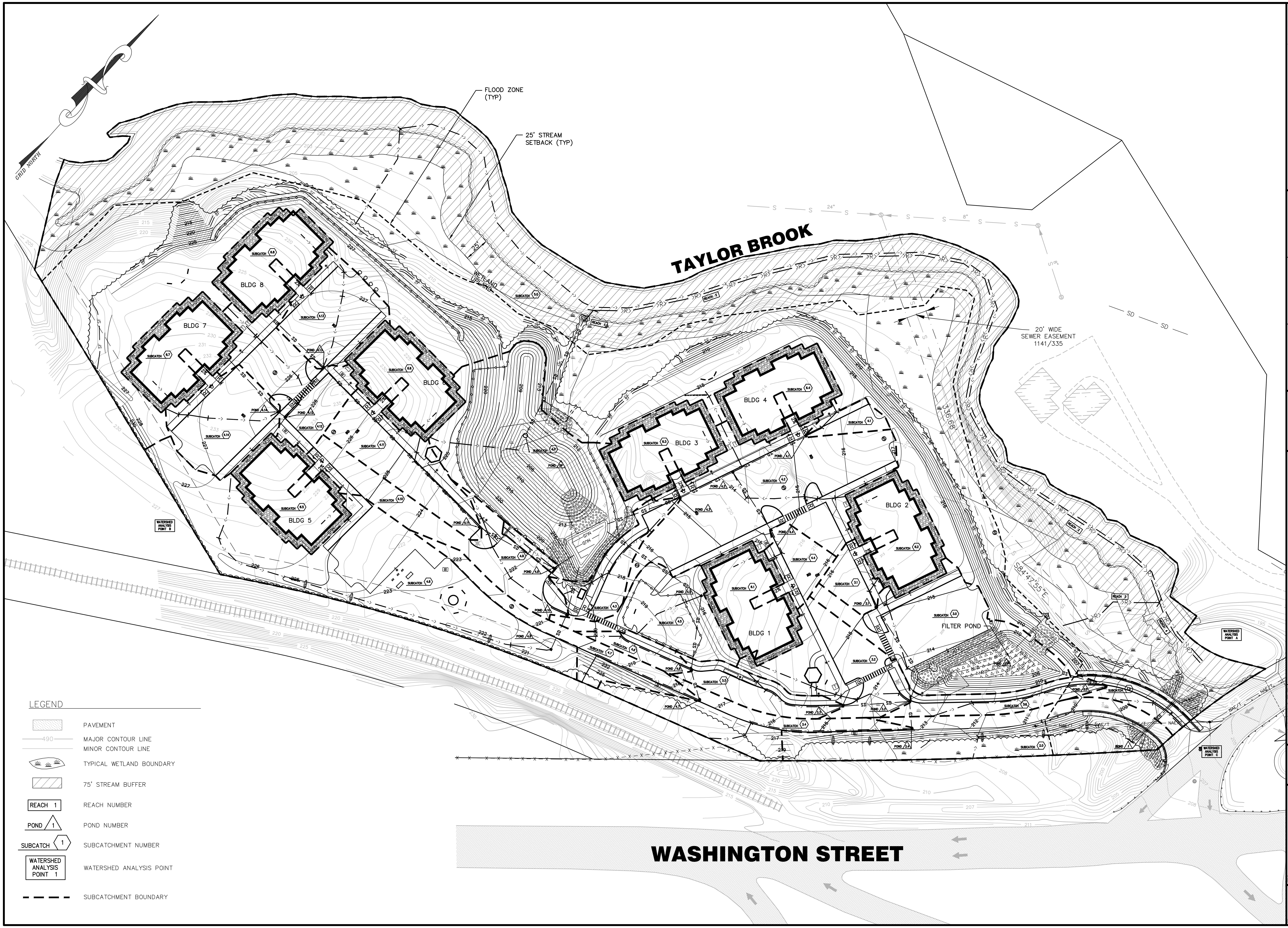
NOT FOR CONSTRUCTION

PRE-DEVELOPMENT STORMWATER

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.
D1.1
MLDC NO. 21-342 1 OF 1


GRID NORTH
FLOOD ZONE (TYP)
25' STREAM SETBACK (TYP)
TAYLOR BROOK
WETLAND UPLAND
20' WIDE SEWER EASEMENT 1141/335
BLDG 8
BLDG 7
BLDG 6
BLDG 5
BLDG 4
BLDG 3
BLDG 2
BLDG 1
FILTER POND
S84°47'55"E
336.68
WATERSHED ANALYSIS POINT B
WATERSHED ANALYSIS POINT A
WATERSHED ANALYSIS POINT C
REACH 1
REACH 2
REACH 3
WASHINGTON STREET

LEGEND

▨	PAVEMENT
490	MAJOR CONTOUR LINE MINOR CONTOUR LINE
	TYPICAL WETLAND BOUNDARY
▨	75' STREAM BUFFER
REACH 1	REACH NUMBER
POND 1	POND NUMBER
SUBCATCH 1	SUBCATCHMENT NUMBER
WATERSHED ANALYSIS POINT 1	WATERSHED ANALYSIS POINT
— — —	SUBCATCHMENT BOUNDARY

MAIN-LAND
DEVELOPMENT
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69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
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PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

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LEWISTON, MAINE 04241

MADE FOR

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LEWISTON, MAINE 04241

DRAWING SCALE:
40 0 20 40
(IN FEET)
1 INCH = 40 FT

SUBMISSION NOTES:

SUBMISSION 1: 2022-02-18 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022-05-03 SDH
ISSUED FOR PERMITTING.

SUBMISSION 3: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 4: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 5: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	5
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

POST-DEVELOPMENT STORMWATER

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.
D2.1
MLDC NO. 21-342 1 OF 1

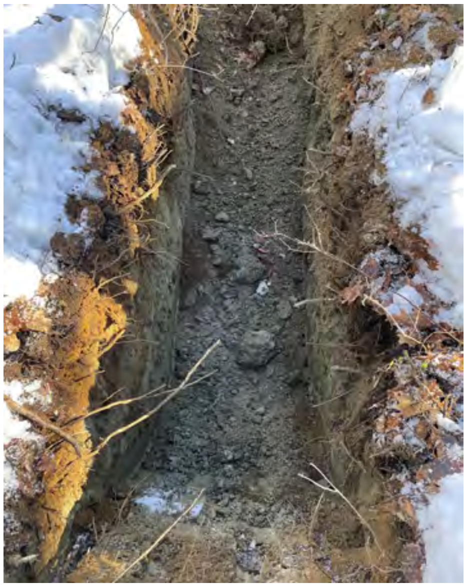
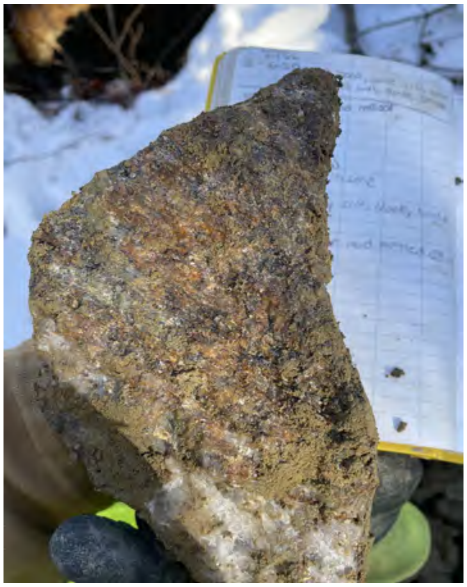
SUMMIT GEOENGINEERING SERVICES	**TEST PIT LOG**	Test Pit # **TP-1**
	Project: New Housing & Site Development Washington Street Auburn, ME 04210	Project #: 22066
		Groundwater: 9-ft (open ~0.5-hr)
Contractor: Gendron & Gendron	Ground Surface Elevation: 230 +/-	
Equipment: Volvo EC160EL Tracked Excavator	Reference: DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*	
Summit Staff: Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4 5 6 7 8	Olive brown SILT, with Sand seams, trace Clay, blocky, firm, humid, ML *Note: Slight seepage at 3-ft *Note: Increasing blockiness & moderately mottled starting at 6-ft *Note: Left excavation open for ~0.5-hr for groundwater measurement	GLACIAL MARINE
∇ 9	Light brown SAND, some Gravel, v. dense, humid, SP	GLACIAL TILL
10 11 12 13 14 15 16 17	End of Test Pit at 9-ft, refusal on Bedrock 	BEDROCK

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Test Pit #	**TP-2**
		Project #:	22066
		Groundwater:	None Observed (open ~1-hr)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	228.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown Silty SAND, frequent leaves & rootlets, loose, humid, SM	FOREST DUFF
2	Gray Sandy SILT, blocky, firm, humid, ML	STREAM ALLUVIUM
3		
4		
5		
6		
7		
8	*Note: Increasing blockiness & moderately mottled at 8-ft	
9	*Note: Hard digging starting at 8.5-ft	
10	End of Test Pit at 9-ft, refusal on Bedrock 	BEDROCK 
11		
12		
13		
14		
15		
16		
17		

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

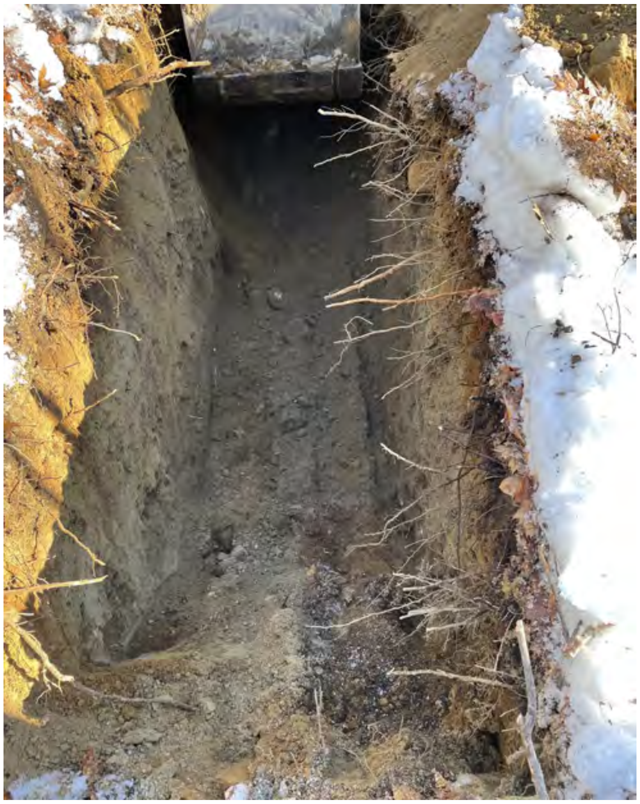
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Test Pit #	**TP-3**
		Project #:	22066
		Groundwater:	9-ft (open ~1.5-hr)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	218 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	**DESCRIPTION** **ENGINEERING**	 **GEOLOGIC/GENERAL**
	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
1		
	Light brown SAND, trace Silt, loose, humid, SP	STREAM ALLUVIUM
2		
3		
4		
5		
6		
	Olive brown & gray SILT, some Sand seams, blocky, moderately mottled, firm, humid, ML	
7		
8		
▽ 9	*Note: Slight seepage at 9-ft. Left excavation open ~1.5-hr	
	Olive brown Silty CLAY, some Sand seams, moderately mottled, blocky, stiff, humid, CL	GLACIAL MARINE
10		
11		
12		
13		
	*Note: Density decrease and moisture content transition to damp at 13-ft	
14		
15		
16		
17	End of Test Pit at 16.5-ft, no refusal	

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-4**
Project:	New Housing & Site Development Washington Street Auburn, ME 04210
Project #:	22066
Groundwater:	None Observed (open ~2hrs)
Contractor:	Gendron & Gendron
Equipment:	Volvo EC160EL Tracked Excavator
Summit Staff:	Faith Thomas, P.E.
Ground Surface Elevation:	216 +/-
Reference:	DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Date:	2/18/2022
Weather:	Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3	Brown fine to medium SAND, some Silt & Gravel, occasional Cobbles, loose, humid, SP-SM	STREAM ALLUVIUM
4	Pale brown Gravelly SAND, little Silt, occasional Cobbles, compact, humid, GP *Note: Hard digging starting at 4.5-ft	GLACIAL TILL
5 6 7 8 9 10 11 12 13 14 15 16 17	End of Test Pit at 5-ft, refusal on Bedrock 	BEDROCK

SUMMIT GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-5**	Project #:	22066
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Groundwater:	None Observed (open ~0.75-hr)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	232.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	DESCRIPTION GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4 5 6 7 8 9	Olive brown SILT, with Sand seams, trace Clay, blocky, firm, humid, ML *Note: Increasing blockiness, moderately mottled & wet Sand seams at 6-ft. *Note: Hard digging starting at 8-ft	GLACIAL MARINE
10	Light brown SAND, some Gravel, v. dense, humid, SP	GLACIAL TILL
11 12 13 14 15 16 17	End of Test Pit at 10.5-ft, refusal on Bedrock 	BEDROCK

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

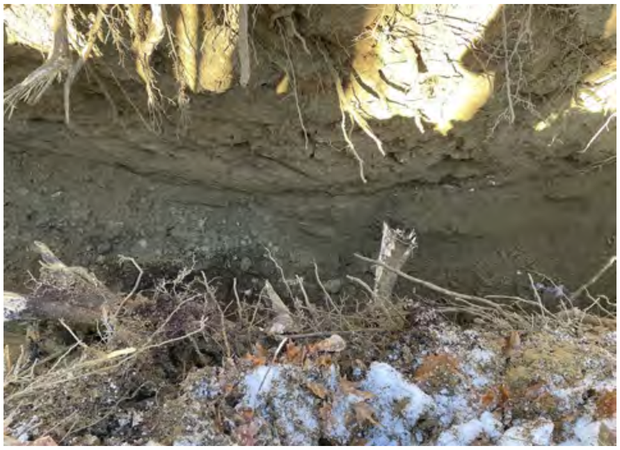
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Test Pit #	**TP-6**
		Project #:	22066
		Groundwater:	None Observed (open < 0.5hr)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	222.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4	Brown Sandy SILT, soft, moist, ML	STREAM ALLUVIUM
5 6	Olive brown SILT, with Sand seams, trace Clay, blocky, moderately mottled, firm, moist, ML	
7 8 9 10	*Note: Hard digging & Cobbles starting at 6.5-ft	GLACIAL TILL
11 12 13 14 15 16 17	End of Test Pit at 10.5-ft, very dense (no refusal) 	

TEST PIT LOG

Test Pit #	**TP-7**	
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	
Project #:	22066	
Groundwater:	7-ft (open ~0.75-hr)	
Contractor:	Gendron & Gendron	
Equipment:	Volvo EC160EL Tracked Excavator	
Summit Staff:	Faith Thomas, P.E.	
Ground Surface Elevation:	226 +/-	
Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*	
Date: 2/18/2022	Weather: Partly Cloudy, 30's F	

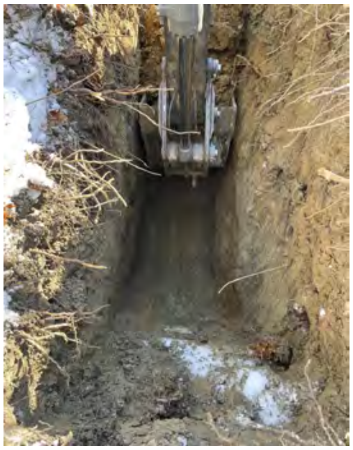
DESCRIPTION

Depth (ft)	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4 5	Light brown Silty SAND, trace Gravel, occasional Cobbles, compact, humid, SM	STREAM ALLUVIUM
6 ▽7 8	*Note: Increased Cobbles & Gravel with depth, starting at 5-ft *Note: Slight seepage at 7-ft. Left excavation open for ~0.75-hr for groundwater measurement.	GLACIAL TILL
9 10 11 12 13 14 15 16 17	End of Test Pit at 8.5-ft, refusal on Bedrock 	BEDROCK 

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

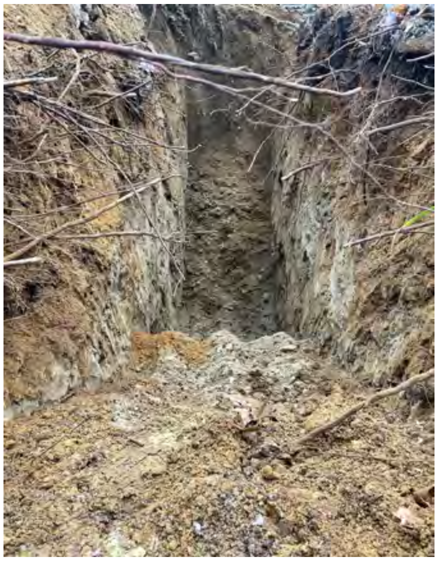
Test Pit #	**TP-8**	Project #:	22066
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Groundwater:	7-ft (open for ~3hrs)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	212.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4	Brown Silty SAND, isolated Boulder, loose, damp, SM *Note: Moderate seepage at 3-ft	STREAM ALLUVIUM
5 6	Grayish brown SAND, some Silt seams & Gravel, moderately mottled, few Cobbles, compact, moist, SM *Note: Increased mottling & Cobbles with depth	
∇ 7 8 9 10 11	Yellow Silty SAND, occasional to frequent Cobbles, compact, moist, SM *Note: Left excavation open for ~3hrs for groundwater measurement	
12 13 14 15 16 17	End of Test Pit at 11-ft, refusal on Bedrock 	BEDROCK

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

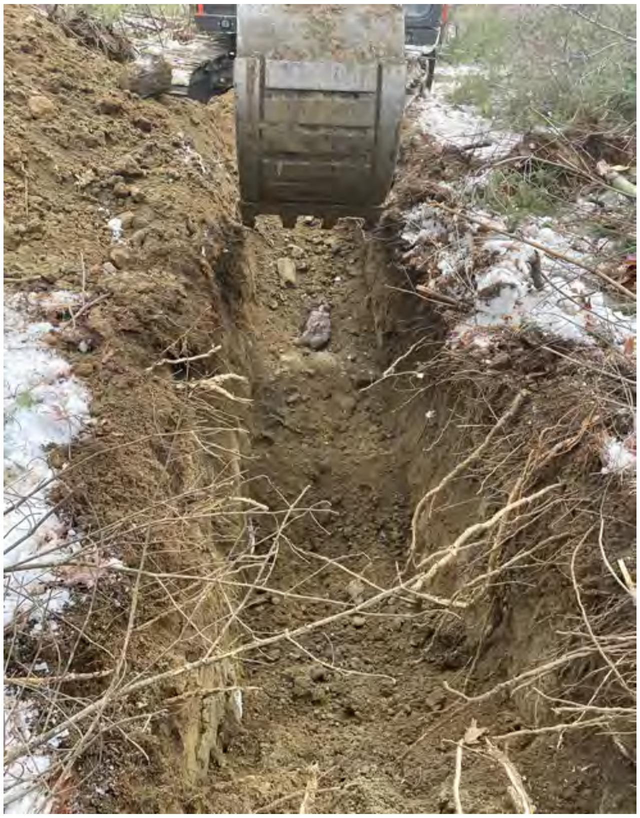
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Test Pit #	**TP-9**
		Project #:	22066
		Groundwater:	7.5-ft (open for ~4.5hrs)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	213 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth	DESCRIPTION	
(ft)	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
2 3 4	Yellow very fine SAND, trace to little Silt, compact, humid, SP-SM *Note: Slight seepage at 4-ft	STREAM ALLUVIUM
5 6 7 ∇ 8 9	Pale brown medium SAND, some to little Gravel, little Silt, frequent Cobbles, dense, humid, SP *Note: Left excavation open for ~4.5hrs for groundwater measurement	GLACIAL TILL
10 11 12 13 14 15 16 17	End of Test Pit at 9.5-ft, refusal on Bedrock 	BEDROCK 

TEST PIT LOG

Test Pit #	**TP-10**	
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	
Project #:	22066	
Groundwater:	5-ft (open for ~5hrs)	
Contractor:	Gendron & Gendron	
Equipment:	Volvo EC160EL Tracked Excavator	
Summit Staff:	Faith Thomas, P.E.	
Ground Surface Elevation:	212.5 +/-	
Reference:	DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*	
Date: 2/18/2022	Weather: Partly Cloudy, 30's F	

DESCRIPTION

Depth (ft)	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Sandy SILT, frequent leaves & rootlets, loose, humid, ML	FOREST DUFF
1		
2	Light brown Silty fine to medium SAND, trace to little Clay, occasional Cobbles, frequent Cobbles, dense, humid, SM	GLACIAL TILL
3		
	*Note: Hard digging starting at 3-ft	
4		
∇ 5	*Note: Weathered bedrock encountered at 5-ft. Left excavation open for ~5hrs for groundwater measurement.	
6	End of Test Pit at 5.5-ft, refusal on Bedrock	BEDROCK
7		
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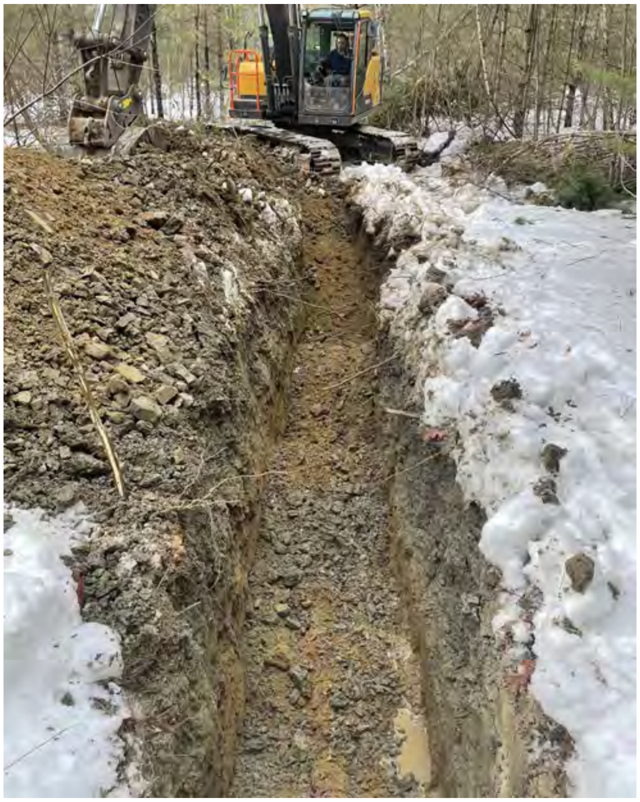
SUMMIT GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-11**	Project #:	22066
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Groundwater:	5-ft (open < 0.5-hr)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	210.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
	Dark brown Sandy SILT, frequent leaves, loose, humid, ML	FOREST DUFF
1	Olive brown Clayey SILT, some Sand seams, stiff, moist, ML *Note: Moderate mottling at 1-ft	GLACIAL MARINE
2		
3		
4	*Note: Pocket penetrometer reading: >4.5-tsf at 4-ft *Note: Hard digging at 4.5-ft	
∇ 5	Light brown Silty SAND, trace to little Gravel, occasional Boulders, dense, humid, SM	GLACIAL TILL
6	End of Test Pit at 5.5-ft, refusal on Bedrock	BEDROCK
7		
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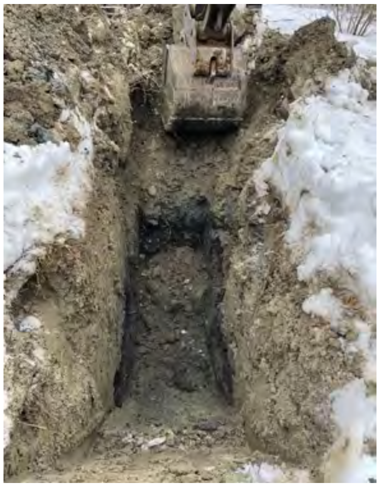
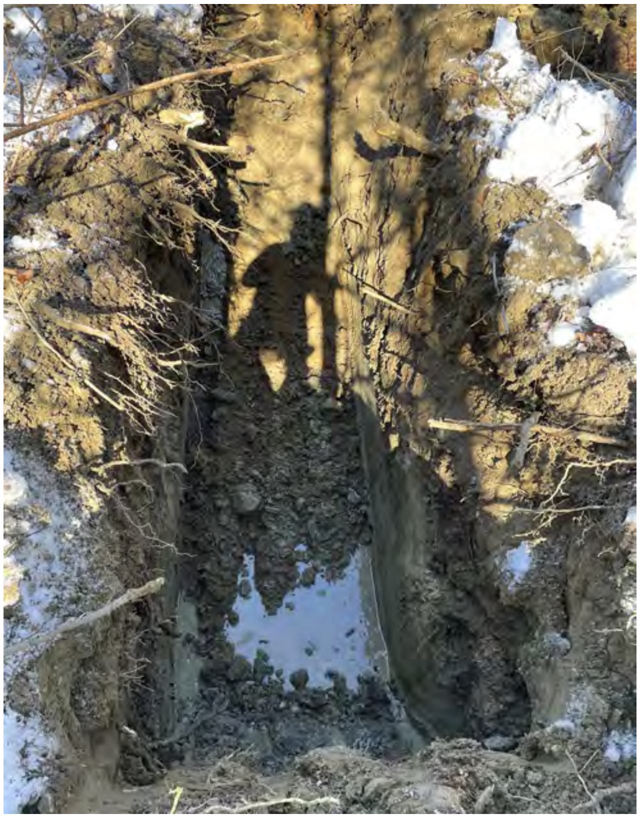
SUMMIT GEOENGINEERING SERVICES	**TEST PIT LOG**	Test Pit # **TP-12**
	Project: New Housing & Site Development Washington Street Auburn, ME 04210	Project #: 22066
		Groundwater: 5.5 ft (open ~6hrs)
Contractor: Gendron & Gendron	Ground Surface Elevation: 207 +/-	
Equipment: Volvo EC160EL Tracked Excavator	Reference: DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*	
Summit Staff: Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION	
	ENGINEERING	**GEOLOGIC/GENERAL**
1	Brown Silty SAND, frequent rootlets, frequent Cobbles, compact, damp, SM	TOPSOIL
2 3 4 5	Olive brown Silty CLAY, some Sand seams, occasional Cobbles, isolated brick debris, soft, damp, CL *Note: Pocket penetrometer reading: 0.5-tsf *Note: Pocket penetrometer reading: 1-tsf at 4-ft *Note: Slight mottling at 4-ft	FILL
▽ 6 7	Gray Silty CLAY, some Sand seams, firm, damp, CL *Note: Pocket penetrometer reading: 1.5-tsf *Note: Left excavation open for ~6hrs for groundwater measurement *Note: Moderate seepage at 7-ft between layers	REWORKED
8 9	Brown Sandy SILT, frequent organics (rootlets & tree limbs), isolated Boulder, soft, wet, ML	
10	Gray Sandy SILT, trace to little Clay, firm, damp, ML *Note: Pocket penetrometer reading: 2.5 to 4-tsf at 10.5-ft	GLACIAL MARINE
11 12 13 14 15 16 17	End of Test Pit at 10.5-ft, no refusal 	

SUMMIT
GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-13**	Project #:	22066
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Groundwater:	4-ft (open ~4hrs)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	215.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
	Dark brown Sandy SILT, frequent leaves, loose, humid, ML	FOREST DUFF
1		
	Brown SILT, with Sand seams, blocky, firm, humid, ML	STREAM ALLUVIUM
2		
3		
▽4	*Note: Left excavation open for ~4hrs for groundwater measurement	
5		
	*Note: Moderately mottled & hard digging starting at 5-ft	
6		
	End of Test Pit at 6-ft, refusal on Bedrock 	BEDROCK
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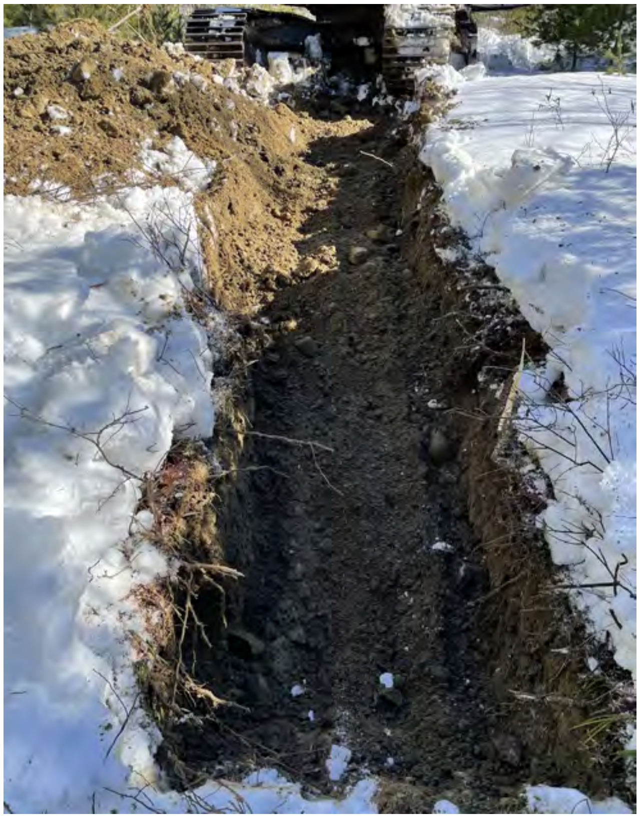
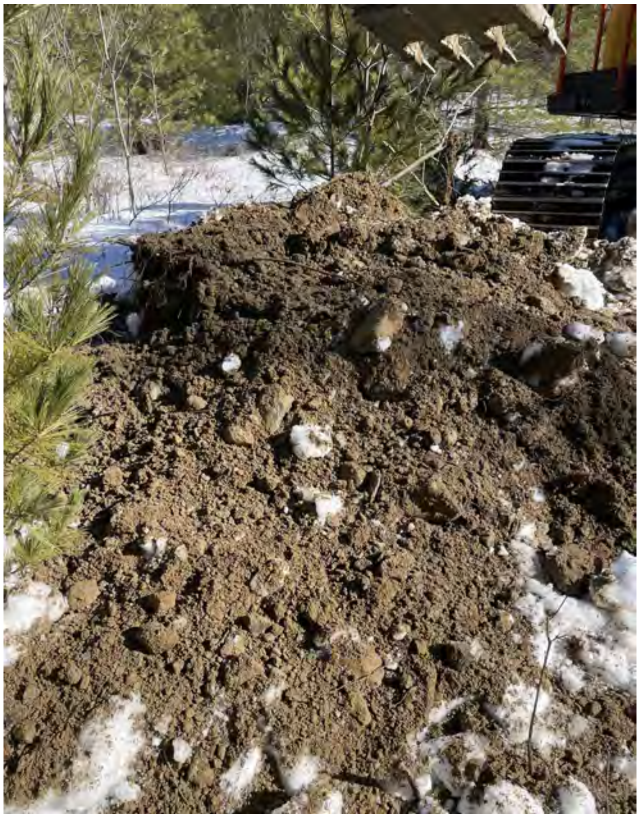
SUMMIT GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-14**
Project:	New Housing & Site Development Washington Street Auburn, ME 04210
Project #:	22066
Groundwater:	2.5-ft (open for ~4hrs)
Contractor:	Gendron & Gendron
Equipment:	Volvo EC160EL Tracked Excavator
Summit Staff:	Faith Thomas, P.E.
Ground Surface Elevation:	220 +/-
Reference:	DWG File Titled *“1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Date:	2/18/2022
Weather:	Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves, loose, humid, ML	FOREST DUFF
2	Brown Sandy SILT, some Gravel, frequent Cobbles, humid, dense, ML	GLACIAL TILL
∇		
3	*Note: Left excavation open for ~4hrs for groundwater measurement	
4	End of Test Pit at 3-ft, refusal on Bedrock 	BEDROCK 
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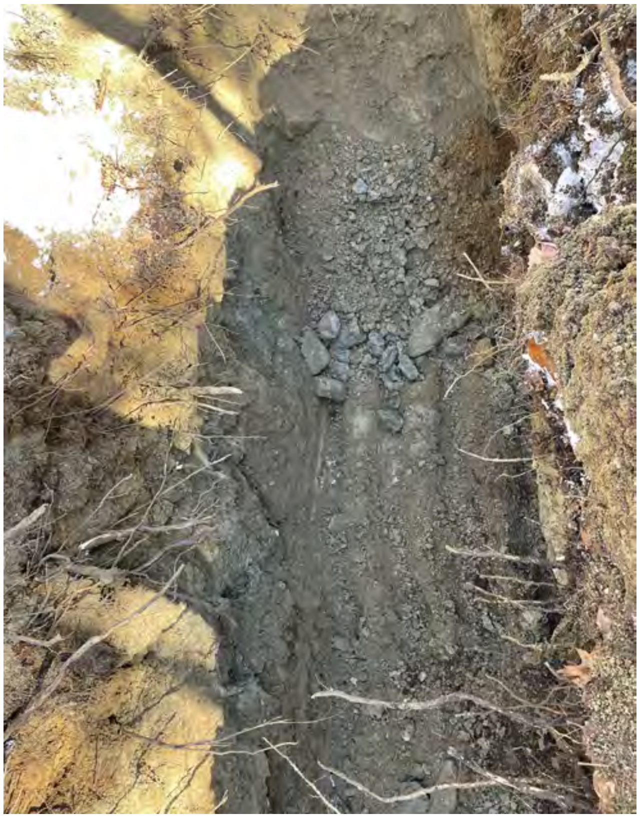
SUMMIT GEOENGINEERING SERVICES

TEST PIT LOG

Test Pit #	**TP-15**	Project #:	22066
Project:	New Housing & Site Development Washington Street Auburn, ME 04210	Groundwater:	5-ft (open for ~4.5hrs)
Contractor:	Gendron & Gendron	Ground Surface Elevation:	214.5 +/-
Equipment:	Volvo EC160EL Tracked Excavator	Reference:	DWG File Titled *"1wrk-existing & layout," received 2/24/22 by Main-Land Development*
Summit Staff:	Faith Thomas, P.E.	Date: 2/18/2022	Weather: Partly Cloudy, 30's F

Depth (ft)	DESCRIPTION ENGINEERING	 GEOLOGIC/GENERAL
1	Dark brown Sandy SILT, frequent leaves, loose, humid, ML	FOREST DUFF
2 3 4	Olive brown SILT, with Sand seams, blocky, isolated Boulder, firm, humid, ML *Note: Isolated Boulder at 4-ft	GLACIAL MARINE
▽ 5	*Note: Hard digging, increasing Gravel & Cobbles at 4.5-ft. Left excavation open for ~4.5hrs for groundwater measurement.	GLACIAL TILL
6 7 8 9 10 11 12 13 14 15 16 17	End of Test Pit at 5-ft, refusal on Bedrock	BEDROCK



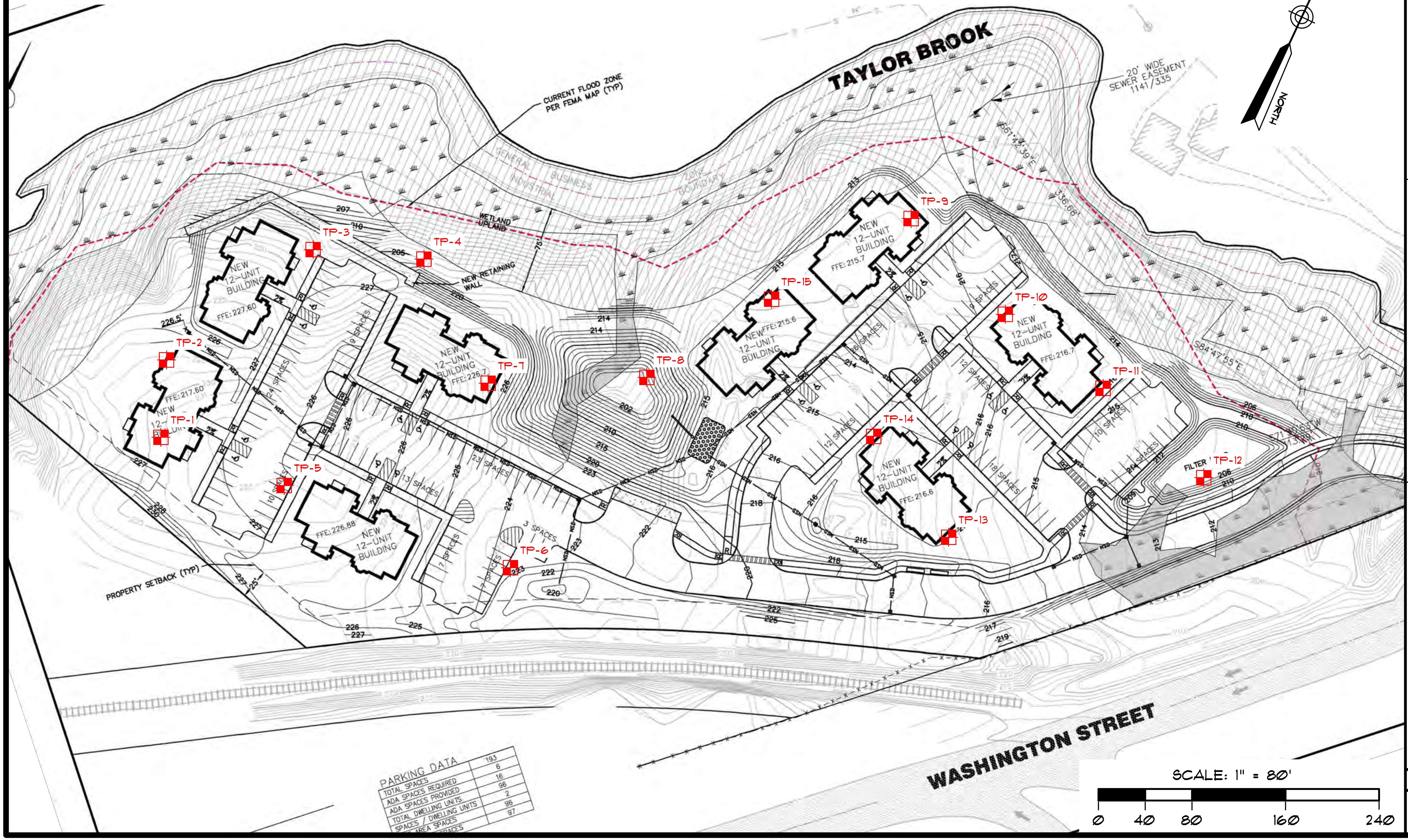
LEGEND

🟥 TP-1 SUMMIT TEST PIT (OBSERVED 2/18/2022). FIELD-LOCATED BY GENDRON & GENDRON

PLAN REFERENCES

1) PLAN TITLED "REVISED LAYOUT CONCEPT," DATED 2/3/2022, PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC.

2) DWG FILE TITLED "IWRK-EXISTING & LAYOUT, RECEIVED 2/24/2022, PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC.


N
NORTH
TAYLOR BROOK
WASHINGTON STREET
CURRENT FLOOD ZONE PER FEMA MAP (TYP)
20' WIDE SEWER EASEMENT 1141/335
GENERAL BUSINESS INDUSTRIAL ZONE BOUNDARY
WETLAND UPLAND
NEW RETAINING WALL
PROPERTY SETBACK (TYP)
TP-1
TP-2
TP-3
TP-4
TP-5
TP-6
TP-7
TP-8
TP-9
TP-10
TP-11
TP-12
TP-13
TP-14
TP-15
NEW 12-UNIT BUILDING
FFE: 227.60
FFE: 217.60
FFE: 226.7
FFE: 226.88
FFE: 215.7
FFE: 215.6
FFE: 216.7
FFE: 216.6
FILTER
S84°47'55"E
336.68'
PARKING DATA
TOTAL SPACES 193
ADA SPACES REQUIRED 6
ADA SPACES PROVIDED 16
TOTAL DWELLING UNITS 96
SPACES / DWELLING UNITS 2
96
97
SCALE: 1" = 80'
0
40
80
160
240

PROJECT: NEW HOUSING & SITE DEVELOPMENT
WASHINGTON STREET, AUBURN, ME 04210

CLIENT: GENDRON CORP.
50 ALFRED A. PLOURDE PARKWAY, LEWISTON ME 04241

TITLE: EXPLORATION LOCATION PLAN

SCALE: 1" = 80'
DRAWN BY: FRT
DATE: FEB. 23, 2022
APPR. BY: WMP

145 LISBON ST. - SUITE 701
LEWISTON, ME 04240
Tel.: (207) 576-3313

113 PLEASANT STREET
ROCKLAND, ME 04841
Tel.: (207) 318-7761

SUMMIT
GEOENGINEERING SERVICES

PROJ.#: 22066

FIGURE: 1

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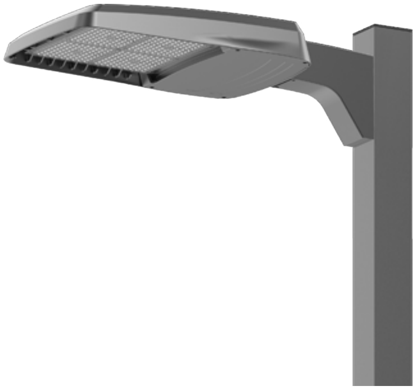
DATE: 2/27/2025 | LOCATION:
TYPE: | PROJECT:
CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE | OPTICS STRIKE



FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, wiSCAPE and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped

c UL us IP65 BUY AMERICAN SOLUTIONS
See Certification Specifications

CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE™ wiSCAPE™

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles.
- All mounting hardware included

INSTALLATION (CONTINUED)

- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40˚C to 40˚C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0- 10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard

CONTROLS (CONTINUED)

- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

CERTIFICATIONS

- Meets the qualifications for DLC Premium
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40˚C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions.

WARRANTY

- 5 year warranty
- See HLI Commercial and Industrial Outdoor Lighting Warranty for additional information

KEY DATA	
Lumen Range	5,000–80,000
Wattage Range	36–600
Efficacy Range (LPW)	92–155
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)

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HUBBELL Lighting

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DATE: 2/27/2025 | LOCATION:
TYPE: | PROJECT:
CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE OPTICS – ORDERING GUIDE

Example: VP–2–320L-145–3K7–2–R–UNV–A3–BLT

CATALOG #

Series	
VP	Viper

–

Optic Platform
Micro Strike

–

Size		**Light Engine**	
1	Size 1	**160L-35** [6]	5500 lumens
		160L-50 [6]	7500 lumens
		160L-75	10000 lumens
		160L-100	12500 lumens
		160L-115	15000 lumens
		160L-135	18000 lumens
		160L-160	21000 lumens
2	Size 2	**320L-145**	21000 lumens
		320L-170	24000 lumens
		320L-185	27000 lumens
		320L-210	30000 lumens
		320L-235	33000 lumens
		320L-255	36000 lumens
		320L-315 [6]	40000 lumens
3	Size 3	**480L-285**	40000 lumens
		480L-320	44000 lumens
		480L-340	48000 lumens
		480L-390	52000 lumens
		480L-425	55000 lumens
		480L-470	60000 lumens
4	Size 4	**720L-435**	60000 lumens
		720L-475	65000 lumens
		720L-515	70000 lumens
		720L-565 [6]	75000 lumens
		720L-600 [6]	80000 lumens
		CLO	Custom Lumen Output [1]

–

CCT/CRI	
AP	AP-Amber Phosphor Converted
27K8	2700K, 80 CRI
3K7	3000K, 70 CRI
3K8	3000K, 80 CRI
35K8	3500K, 80 CRI
3K9	3000K, 90 CRI
4K7	4000K, 70 CRI
4K8	4000K, 80 CRI
4K9	4000K, 90 CRI
5K7	5000K, 70 CRI
5K8	5000K, 80 CRI

–

Distribution	
2	Type 2
3	Type 3
4F	Type 4 Forward
4W	Type 4 Wide
5QM	Type 5 Square Medium
5QW	Type 5 Square Wide

–

Optic Rotation	
L	Optic rotation left
R	Optic rotation right

–

Voltage	
UNV	120-277V
120	120V
208	208V
240	240V
277	277V
347	347V
480	480V

–

Mounting	
A	Arm mount for square pole/flat surface
A_	Arm mount for round pole [2]
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole [2]
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole [2]
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole [2]
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative upswept arm
WA	Wall mount bracket with adjustable arm

–

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Gloss Textured
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

–

Options	
F	Fusing
2PF	Dual Power Feed
2DR	Dual Driver
TE	Tooless Entry
BC	Backlight Control
TB	Terminal Block

–

Network Control Options	
NXSPW-14F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' [1,3,4]
NXSPW-40F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' [1,3,4]
NXSP-14F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' [3,4]
NXSP-40F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' [3,4]
NXWE	NX Wireless Enabled (module + radio) [3,4]
WIR	wiSCAPE® In-Fixture Module [3,4]
WIRSC	wiSCAPE® Module and Occupancy Sensor [3,4]
Stand Alone Sensors	
BTS-14F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor [4]
BTS-40F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor [4]
BTSO-12F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height [4]
7PR	7-Pin Receptacle [4]
7PR-SC	7-Pin Receptacle with shorting cap [4]
3PR	3-Pin twist lock [4]
3PR-SC	3-Pin receptacle with shorting cap [4]
3PR-TL	3-Pin PCR with photocontrol [4]
Programmed Controls	
ADD	AutoDim Timer Based Dimming [4]
ADT	AutoDim Time of Day Dimming [4]
Photocontrols	
PC	Button Photocontrol [4,7]

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Replace "_" with "2" for 2.5"-3.4" OD pole, "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
3 – Networked Controls cannot be combined with other control options
4 – Not available with 2PF option
5 – Not available with Dual Driver option
6 – Some voltage restrictions may apply when combined with controls
7 – Not available with 480V

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DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

STRIKE OPTIC – ORDERING GUIDE

Example: VP–ST–1–36L-39–3K7–2–UNV–A–BLT

CATALOG #

VP

Series	
VP	Viper

Optic Platform	
ST	Strike

Size	
1	Size 1
2	Size 2
3	Size 3
4	Size 4

Light Engine	
36L-39 [8]	5500 lumens
36L-55 [8]	7500 lumens
36L-85	10000 lumens
36L-105	12500 lumens
36L-120	14000 lumens
72L-115	15000 lumens
72L-145	18000 lumens
72L-180	21000 lumens
72L-210	24000 lumens
72L-240	27000 lumens
108L-215 [8]	27000 lumens
108L-250	30000 lumens
108L-280	33000 lumens
108L-325	36000 lumens
108L-365	40000 lumens
162L-320	40000 lumens
162L-365 [10]	44000 lumens
162L-405	48000 lumens
162L-445	52000 lumens
162L-485	55000 lumens
162L-545 [8]	60000 lumens
CLO	Custom Lumen Output [1]

CCT/CRI	
AM	monochromatic amber, 595nm
27K8	2700K, 80 CRI
3K7	3000K, 70 CRI
3K8	3000K, 80 CRI
3K9	3000K, 90 CRI
35K8	3500K, 80 CRI
4K7	4000K, 70 CRI
4K8	4000K, 80 CRI
4K9	4000K, 90 CRI
5K7	5000K, 70 CRI
5K8	5000K, 80 CRI

Distribution	
FR	Auto Front Row
2	Type 2
3	Type 3
4F	Type 4 Forward
4W	Type 4 Wide
5QN	Type 5 Square Narrow
5QM	Type 5 Square Medium
5QW	Type 5 Square Wide
5W	Type 5 Wide (Round)
5RW	Type 5 Rectangular
C	Corner Optic
TC	Tennis Court Optic

Optic Rotation	
L	Optic rotation left
R	Optic rotation right

Voltage	
UNV	120-277V
120	120V
208	208V
240	240V
277	277V
347	347V
480	480V

Mounting	
A	Arm mount for square pole/flat surface
A_	Arm mount for round pole [3]
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole [3]
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole [3]
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole [3]
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative upswept arm
WA	Wall mount bracket with adjustable arm

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Gloss Textured
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

Options	
F	Fusing
E	Battery Backup [1,2,7,8,9]
2PF	Dual Power Feed
2DR	Dual Driver
TE	Tooless Entry
BC	Backlight Control
TB	Terminal Block

Network Control Options	
NXSPW-14F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' [1,4,5]
NXSPW-40F	NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40') [1,4,5]
NXSP-14F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 14' [4,5]
NXSP-40F	NX, PIR Occupancy Sensor, Dimming Daylight Harvesting, 40' [4,5]
NXWE	NX Wireless Enabled [4,5]
WIR	wiSCAPE® In-Fixture Module [4,5]
WIRSC	wiSCAPE® Module and Occupancy Sensor [4,5]
Stand Alone Sensors	
BTS-14F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor [5]
BTS-40F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor [5]
BTSO-12F	Bluetooth® Programmable, PIR Occupancy/Daylight Sensor, up to 12' mounting height [5]
7PR	7-Pin Receptacle [5]
7PR-SC	7-Pin Receptacle with shorting cap [5]
3PR	3-Pin twist lock [5]
3PR-SC	3-Pin receptacle with shorting cap [5]
3PR-TL	3-Pin PCR with photocontrol [5]
Programmed Controls	
ADD	AutoDim Timer Based Dimming [5]
ADT	AutoDim Time of Day Dimming [5]
Photocontrols	
PC	Button Photocontrol [5,6]

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Battery temperature rating -20C to 55C
3 – Replace "_" with "2" for 2.5"-3.4" OD pole, "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
4 – Networked Controls cannot be combined with other control options
5 – Not available with 2PF option
6 – Not available with 480V
7 – Not available with 347 or 480V
8 – Not available with Dual Driver option
9 – Only available in Size 1 housing
10 – Some voltage restrictions may apply when combined with controls

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HUBBELL Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

ORDERING GUIDE (CONTINUED)

CATALOG #

Accessory Type	
SHD	Shield
MTG	Mounting

–

Size	
1	Size 1
2	Size 2
3	Size 3
4	Size 4

–

Option	
HSS-90-B	House Side Shield 90º Back
HSS-90-F	House Side Shield 90º Front
HSS-90-S	House Side Shield 90º Side
HSS-270-BSS	House Side Shield 270º Back/Side/Side
HSS-270-FSS	House Side Shield 270º Front/Side/Side
HSS-270-FSB	House Side Shield 270º Front/Side/Back
HSS-360	House Side Shield 360º
BC	Back Light Control
A	Arm Mount for square pole/flat surface
ASQU	Universal Arm Mount for square pole
AAU	Adjustable Arm for pole mounting
ADU	Decorative upswept Arm
RPA	Round Pole Adapter
MAF	Mast Arm Fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket (compatible with universal arm mounts)

–

Color	
BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphite Matte Textured
LGS	Light Gray Gloss Smooth
PSS	Platinum Silver Smooth
WHS	White Gloss Smooth
WHT	White Matte Textured
VGT	Green Landscape Decorative
LEG	Legacy Colors

Color Option	
CC	Custom Color

Accessory Type	
MSC	Miscellaneous

–

Option	
BIRD SPK	Bird Spike

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence™

☐	**NXOFM-1R1D-UNV**	On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120–480VAC

wiSCAPE® Lighting Control

☐	**WIR-RME-L**	On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110–480VAC
☐	**SCP-REMOTE**	Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor

For additional information related to these accessories please visit www.hubbellcontrolsolutions.com. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

CONTROLS

wiSCAPE™ NX DISTRIBUTED™ INTELLIGENCE

Control Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	On/Off Control	Programming	Pair with Sensor	Sensor Mounting Height
NXWE	–	✓	✓	–	–	✓	✓	–	–
NXSPW_F	NXSM-P	✓	✓	✓	✓	✓	✓	–	14ft, 40ft
NXSP_F	NXSM-P	–	–	✓	✓	✓	–	–	14ft, 40ft
BTSO12F	BTSMP-OMNI	–	–	✓	✓	✓	Bluetooth	–	12ft
BTS_F	BTSMP	–	–	✓	✓	–	–	–	14ft, 40ft
ADD	–	–	✓	–	–	✓	–	✓	–
ADT	–	–	✓	–	–	✓	–	✓	–
7PR	–	Paired with external control	Paired with external control	–	Paired with external control	Paired with external control	–	✓	–
7PR-SC	–	–	–	–	–	–	–	✓	–
3PR	–	–	–	–	–	Paired with external control	–	✓	–
3PR-SC	–	–	–	–	–	–	–	✓	–
3PR-TL	–	–	–	–	✓	✓	–	✓	–
WIR	–	✓	✓	–	✓	✓	Gateway	–	–
WIRSC	BTSMP	✓	✓	✓	✓	✓	Gateway	–	14ft, 40ft

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DATE: 2/27/2025	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER Area/Site

VIPER LUMINAIRE

DELIVERED LUMENS

For delivered lumens, please see Lumens Data PDF on www.hubbelllighting.com

PROJECTED LUMEN MAINTENANCE

Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L_{70} (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98
50°C	122°F	0.97

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
Monochromatic Amber Multiplier			
Amber	0.250		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.859	–
3000K	0.941	0.912	0.703
3500K	–	0.906	–
4000K	1	0.894	0.734
5000K	1	0.879	0.711
Monochromatic Amber Multiplier			
Amber	0.255		

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ELECTRICAL DATA: MICRO STRIKE

# OF LEDS	160						
NOMINAL WATTAGE	35	50	75	100	115	135	160
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33

# OF LEDS	320						
NOMINAL WATTAGE	145	170	185	210	235	255	315
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91
480	0.30	0.35	0.39	0.44	0.49	0.53	0.66

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25

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DATE:
LOCATION:
TYPE:
PROJECT:
CATALOG #:

ELECTRICAL DATA: STRIKE

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	115
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	113.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.33	0.46	0.71	0.88	1.00
208	0.19	0.26	0.41	0.50	0.58
240	0.16	0.23	0.35	0.44	0.50
277	0.14	0.20	0.31	0.38	0.43
347	0.11	0.16	0.24	0.30	0.35
480	0.08	0.11	0.18	0.22	0.25

# OF LEDS	72				
NOMINAL WATTAGE	120	145	180	210	215
SYSTEM POWER (W)	120.9	143.2	179.4	210.2	214.8
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.96	1.21	1.50	1.75	2.00
208	0.55	0.70	0.87	1.01	1.15
240	0.48	0.60	0.75	0.88	1.00
277	0.42	0.52	0.65	0.76	0.87
347	0.33	0.42	0.52	0.61	0.69
480	0.24	0.30	0.38	0.44	0.50

# OF LEDS	108				
NOMINAL WATTAGE	240	250	280	320	325
SYSTEM POWER (W)	241.7	250.8	278.3	322.1	324.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.79	2.08	2.33	2.71	3.04
208	1.03	1.20	1.35	1.56	1.75
240	0.90	1.04	1.17	1.35	1.52
277	0.78	0.90	1.01	1.17	1.32
347	0.62	0.72	0.81	0.94	1.05
480	0.45	0.52	0.58	0.68	0.76

# OF LEDS	162				
NOMINAL WATTAGE	365	405	445	485	545
SYSTEM POWER (W)	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.67	3.38	3.71	4.04	4.54
208	1.54	1.95	2.14	2.33	2.62
240	1.33	1.69	1.85	2.02	2.27
277	1.16	1.46	1.61	1.75	1.97
347	0.92	1.17	1.28	1.40	1.57
480	0.67	0.84	0.93	1.01	1.14

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

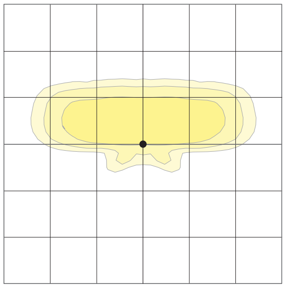
VIPER Area/Site

VIPER LUMINAIRE

MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

Type 2



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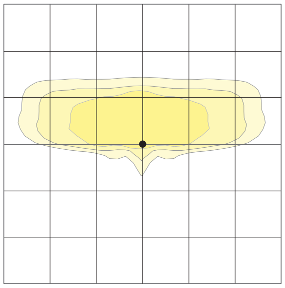
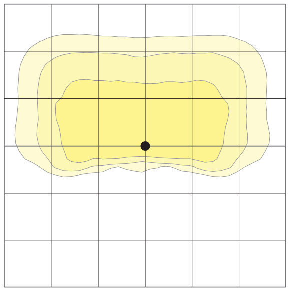


Type 4 Wide



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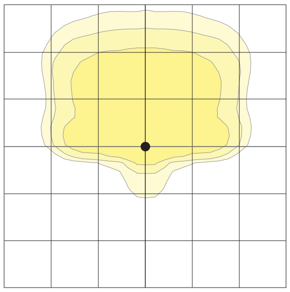
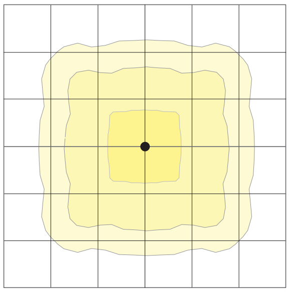


Type 5QM



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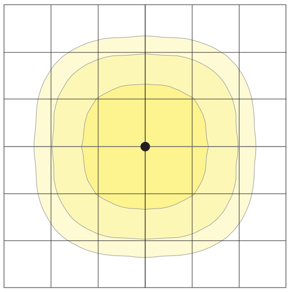

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BEACON
design . performance . technology

DATE: 2/27/2025 | LOCATION:
TYPE: | PROJECT:
CATALOG #:

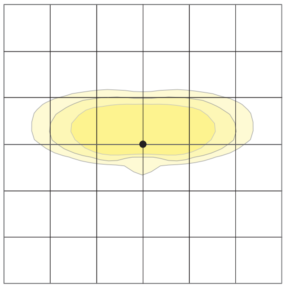
VIPER Area/Site

VIPER LUMINAIRE

OPTIC STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

Type FR – Front Row/Auto Optic



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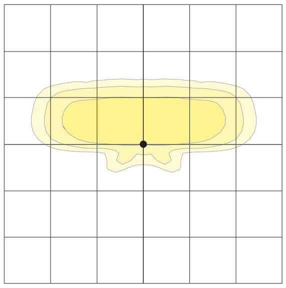

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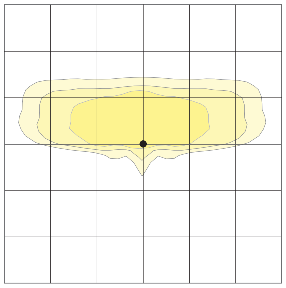
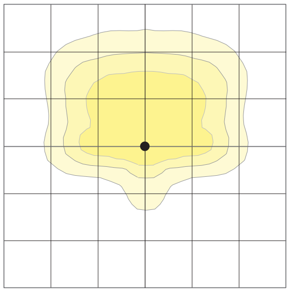
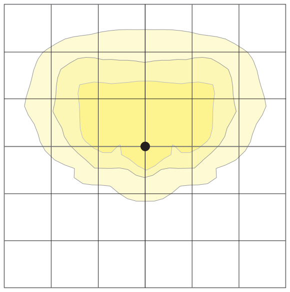


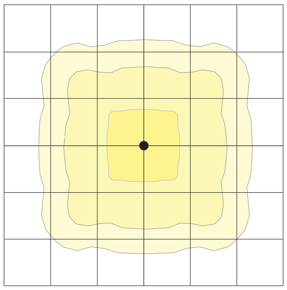
Type 4 Forward



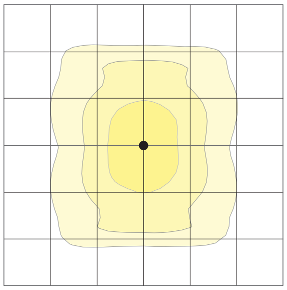
Type 4 Wide



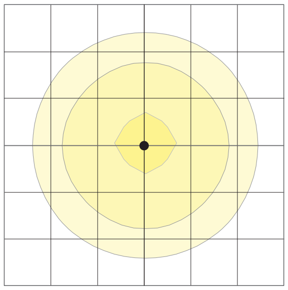
Type 5QM



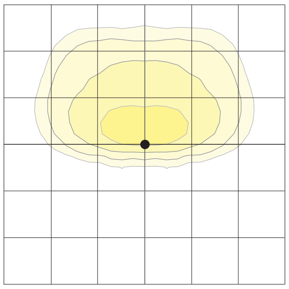
Type 5R (rectangular)



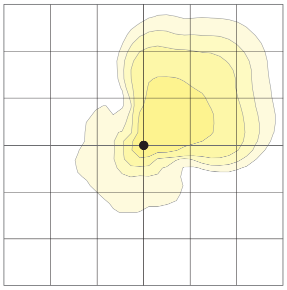
Type 5W (round wide)



Type TC



Type Corner



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DATE: 2/27/2025 | LOCATION:

TYPE: | PROJECT:

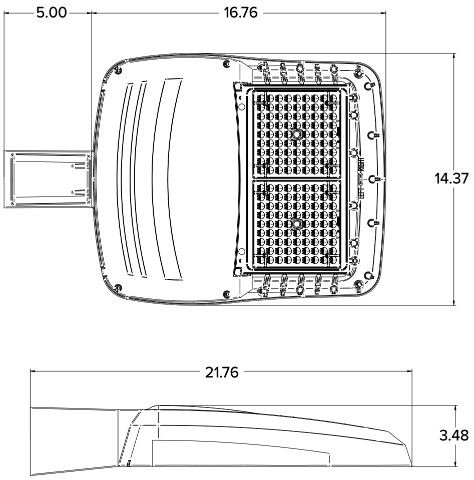
CATALOG #:

VIPER Area/Site

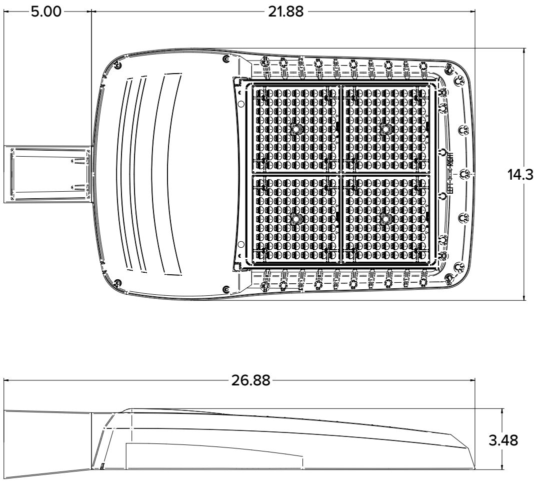
VIPER LUMINAIRE

DIMENSIONS

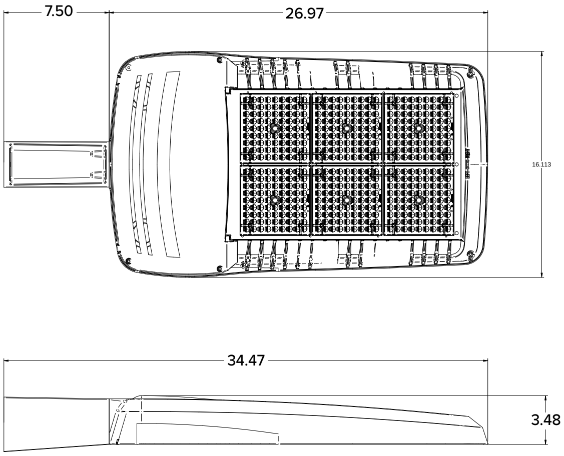
SIZE 1


5.00
16.76
14.37
21.76
3.48

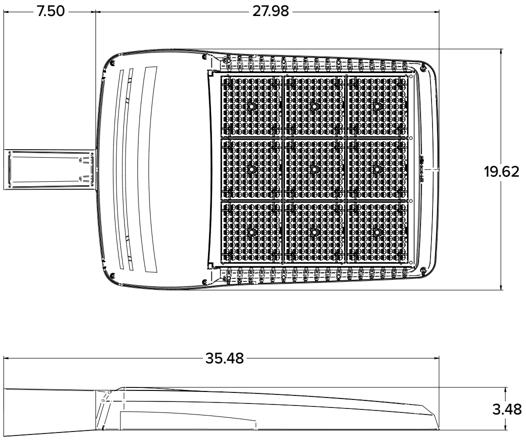
SIZE 2

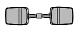
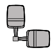
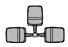
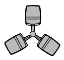
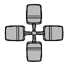

5.00
21.88
14.37
26.88
3.48

SIZE 3


7.50
26.97
16.113
34.47
3.48

SIZE 4


7.50
27.98
19.62
35.48
3.48

	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9

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VIPER Area/Site

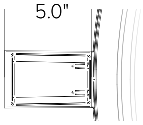
VIPER LUMINAIRE

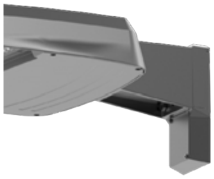
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

MOUNTING

ASQ–STRAIGHT ARM MOUNT

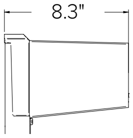
Fixture ships with integral arm for ease of installation. Compatible with Hubbell Outdoor B3 drill pattern. For round poles add applicable suffix (2/3/4/5)

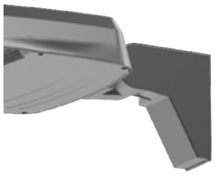




ASQU–UNIVERSAL ARM MOUNT

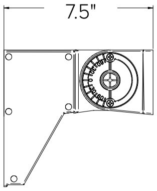
Universal mounting block for ease of installation. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5)

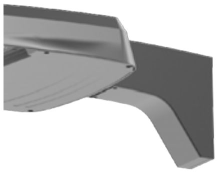




AAU–ADJUSTABLE ARM FOR POLE MOUNTING

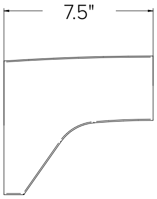
Rotatable arm mounts directly to pole. Compatible with drill patterns from 2.5" to 4.5" and Hubbell drill pattern S2. For round poles add applicable suffix (2/3/4/5). Rotatable in 15° aiming angle increments. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.

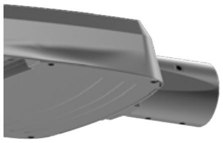




ADU–DECORATIVE UPSWEPT ARM

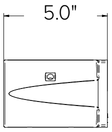
Upswept Arm compatible with drill patterns from 2.5" to 4.5". For round poles add applicable suffix (2/3/4/5).

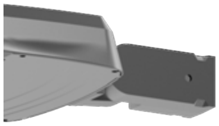




MAF–MAST ARM FITTER

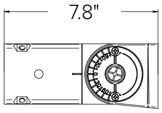
Fits 2-3/8" OD horizontal tenons.

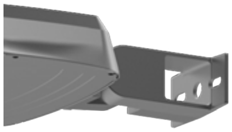




K–KNUCKLE

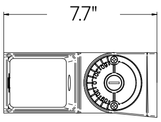
Knuckle mount 15° aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





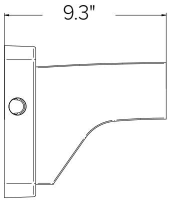
T–TRUNNION

Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.



WM–WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.



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DATE: 2/27/2025 LOCATION:

TYPE: PROJECT:

CATALOG #:

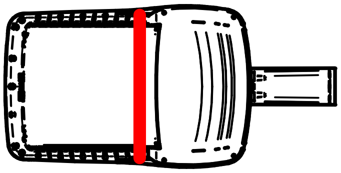
VIPER Area/Site

VIPER LUMINAIRE

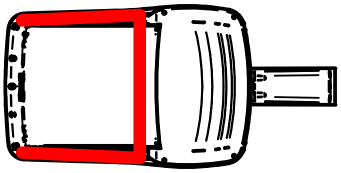
ADDITIONAL INFORMATION (CONTINUED)

HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

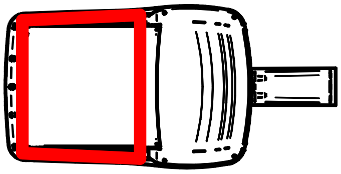
VPR2x HSS-90-B-xx



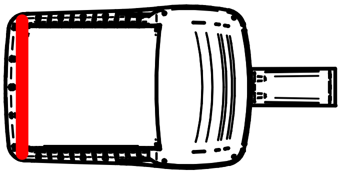
VPR2x HSS-270-BSS-xx



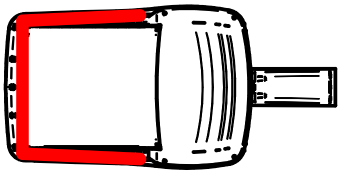
VPR2x HSS-360-xx



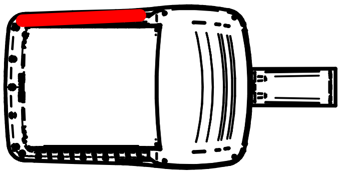
VPR2x HSS-90-F-xx



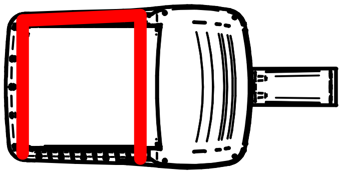
VPR2x HSS-270-FSS-xx



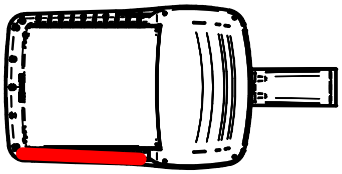
VPR2x HSS-90-S-xx



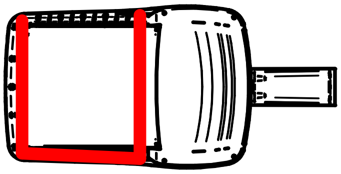
VPR2x HSS-270-FSB-xx



VPR2x HSS-90-S-xx



VPR2x HSS-270-FSB-xx



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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER Area/Site

VIPER LUMINAIRE

ADDITIONAL INFORMATION (CONTINUED)

PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

- Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

EX: ADD-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option

- Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM

USE OF TRADEMARKS AND TRADE NAMES

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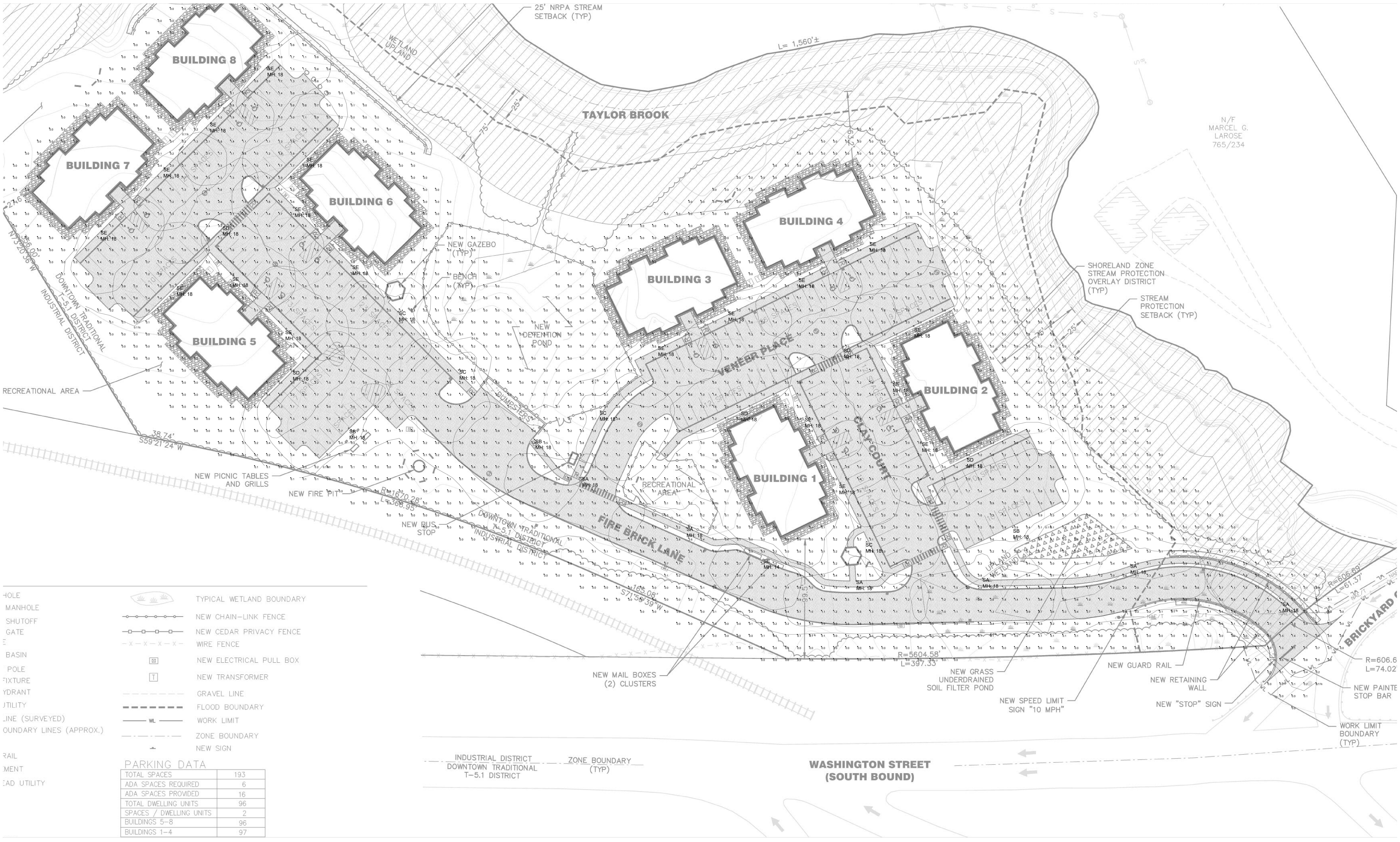
Calculation Summary

Room Name	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.61	3.6	0.0	N.A.	N.A.

Luminaire Schedule (note fixture cataloge numbers are not complete)

Tag	Qty	Lum. Lumens	LLF	Lum. Watts	Mounting Height	Description
SA	6	6771	0.900	56.8	18	VP-1-36L-55-3K7-3
SB	3	5944	0.900	56.8	18	VP-1-36L-55-3K7-4W
SC	4	6636	0.900	56.8	18	VP-1-36L-55-3K7-4F
SD	5	4650	0.900	55	18	VP-S-36L-65-3K7-3-BC
SE	20	4205	0.900	55	14, 18	VP-1-36L-55-3K7-4W-BC

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
2) CALCULATIONS MAY or MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE.
3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES TAKEN AS SHOWN IN CALCULATION SUMMARY UNLESS OTHERWISE INDICATED.
4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE.
5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.


25' NRPA STREAM SETBACK (TYP)
WETLAND
UPLAND
L= 1,560'±
TAYLOR BROOK
N/F MARCEL G. LAROSE 765/234
BUILDING 8
BUILDING 7
BUILDING 6
BUILDING 5
BUILDING 4
BUILDING 3
BUILDING 2
BUILDING 1
NEW GAZEBO (TYP)
BENCH (TYP)
NEW DETENTION POND
SHORELAND ZONE STREAM PROTECTION OVERLAY DISTRICT (TYP)
STREAM PROTECTION SETBACK (TYP)
VENEER PLACE
CLAY COURT
FIRE BRICK LANE
BRICKYARD C
DUMPSTERS
RECREATIONAL AREA
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
INDUSTRIAL DISTRICT
N73°20'06"W
38.74'
S59°21'24"W
NEW PICNIC TABLES AND GRILLS
NEW FIRE PIT
R=1670.28'
L=368.95'
NEW BUS STOP
165.08'
S71°56'39"W
UPLAND
WETLAND
R=606.69'
L=61.37'
R=5604.58'
L=397.33'
R=606.6
L=74.02'
NEW MAIL BOXES (2) CLUSTERS
NEW GRASS UNDERDRAINED SOIL FILTER POND
NEW SPEED LIMIT SIGN "10 MPH"
NEW GUARD RAIL
NEW RETAINING WALL
NEW "STOP" SIGN
NEW PAINTE STOP BAR
WORK LIMIT BOUNDARY (TYP)
INDUSTRIAL DISTRICT
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
ZONE BOUNDARY (TYP)
WASHINGTON STREET (SOUTH BOUND)
SA MH: 18
SB MH: 18
SC MH: 18
SD MH: 18
SE MH: 18
SE MH: 14

HOLE
MANHOLE
SHUTOFF
GATE
E
BASIN
POLE
FIXTURE
YDRANT
UTILITY
LINE (SURVEYED)
OUNDARY LINES (APPROX.)
RAIL
MENT
EAD UTILITY

TYPICAL WETLAND BOUNDARY
NEW CHAIN-LINK FENCE
NEW CEDAR PRIVACY FENCE
WIRE FENCE
NEW ELECTRICAL PULL BOX
NEW TRANSFORMER
GRAVEL LINE
FLOOD BOUNDARY
WORK LIMIT
ZONE BOUNDARY
NEW SIGN

PARKING DATA

TOTAL SPACES	193
ADA SPACES REQUIRED	6
ADA SPACES PROVIDED	16
TOTAL DWELLING UNITS	96
SPACES / DWELLING UNITS	2
BUILDINGS 5-8	96
BUILDINGS 1-4	97

PLAN VIEW

REF. NO. site 4-6-22.AGI

TITLE
BRICKYARD COMMONS
AUBURN, ME
SITE LIGHTING LAYOUT

GENERATED FOR:
CED AUBURN

SCALE AS SHOWN

Date:4/5/2022

Page 1 of 1

GENERATED BY SWANEY LIGHTING, SCARBOROUGH ME - 207-883-7100 - swaneylighting.com

SWANEY LIGHTING ASSOCIATES, INC.

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NOTICE: THE INTENT OF THIS LIGHTING LAYOUT IS TO SUGGEST THE BEST UTILIZATION OF LIGHTING FIXTURES INCLUDED IN THIS DRAWING. IT IS PROVIDED USING FIXTURE PHOTOMETRICS FURNISHED BY THE MANUFACTURER. ANY VARIATION IN FIXTURE PERFORMANCE FROM PERFORMANCE SHOWN IN IES FILE IS NOT THE RESPONSIBILITY OF THE MANUFACTURER. IT'S USE FOR ANY OTHER PURPOSE IS NOT AUTHROIZED BY SWANEY LIGHTING ASSOCIATES.

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ENGINEERING • CONSTRUCTION MANAGEMENT

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207.433.1075
www.dirigoae.com

Mr. John A. Blais
Planning, Permitting and Code Division
City of Auburn
60 Court Street
Auburn, ME 04210
Date: May 3, 2022

RE: Brickyard Commons at Brickyard Circle
Town of Auburn, Code Ordinance District Regulations
Architectural Intent and Purpose: Downtown Traditional Center (T-5.1)

Dear Mr. Blais:

Brickyard Commons is a 96-unit apartment complex to be located off Brickyard Circle that will maintain an urban environment with eight 3 story multifamily buildings. There will be active street connection with a paved walk from the accessways. The buildings have large front facades with many windows bringing sunlight into the units. The buildings will be wood framed with vinyl siding and brick accent, and the design has a garden style feel with an open connection to the outside space.

Sec. 60-550.1. Building Placement and Configuration T-5.1.

This project meets the building placement section with all new buildings set 9.5' from the sidewalk access ways. Side and rear setbacks, building lot coverage, and useable open space comply with city requirements. The principal building configuration meets all city requirements for building width, height, and story maximums.

Building Placement Dimensions:	Allowable	Actual
(A) Front Setback, Principal:	0-10' Max	9.5'
(B) (Corner Lot) Front Setback, Secondary:	0-10' Max	10'
(C) Side Setback	0*- 5' Min	N/A
(D) Rear Setback	0-10' Max	N/A
Building Lot Coverage	75% Max	9.6%
Useable Open Space	5% min.	12.2%
Frontage Build-Out	75% @ front setback	N/A
Lot width	24'Min-160'Max.	N/A

(Continued)

Building Placement Dimensions:	Allowable	Actual
Principal Building Configuration:		
(E) Building Width :	14'Min. – 150'Max.	N/A
Building Height Minimum	2 Story Min.	3 Story
(F) Building Height Maximum	4 Story Max	3 Story

Sec. 60-550.2. Building frontages T-5.1.

All new buildings will be interior to the site, and blocked by landscaping from Washington St. The buildings will have flush entrances at entry grade level for ADA accessibility. The buildings ground story entries will face paved accessways and have been recessed to promote handicap accessibility. The building envelope on ground and upper floors meet all window coverage requirements.

Building Envelope Articulation:

Façade window + door areas:	Requirement	Proposed
Ground Story Building Frontage Façade:	25%Min – 60%Max	32%
Upper Story Building Frontage Façade:	20%Min – 40%Max	31%
Ground Story Fin. Floor elevation	2'Min – 6' Max Below avg. grade	Waiver to meet ADA requirements
Front Façade Wall blank length	10' Max.	5' Max.

Sec. 60-550.3. External elements T-5.1.

Paved Parking on site will be provided with direct access to each apartment via ADA accessible routes. View of the parking will be blocked from Washington Street with existing and new screening. All building elements and accessory structures comply with setback requirements set forth in Sec. 60.550.3 Table for External elements T-5.1:

Feature	Requirements	Proposed
Front Yard Fence:	2' Min. – 4" Max. encouraged	N/A
Street Wall/Wall Opening:	20' (res.) – 24' (comm.)Max Width, Pedestrian = 6' Max.	N/A
Building Projections:	Stoop encroachments	N/A
Garages	Detached setback 20' Min.	N/A
Driveways:	On secondary frontage	N/A
Parking:	Residential designated/driveway	Met
Accessory Structures	20' from street r.o.w.	Met
Landscaping:	Encouraged/ limited extents	Provided
Foundation Planting:	Encouraged, w/clearance	Provided

Respectfully,

David Berry

David L. Berry, Project Manager
Dirigo Architectural Engineering, LLC

Cc: Michael F. Gotto

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SHEET SIZE: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

May 03, 2022 - 4:56pm
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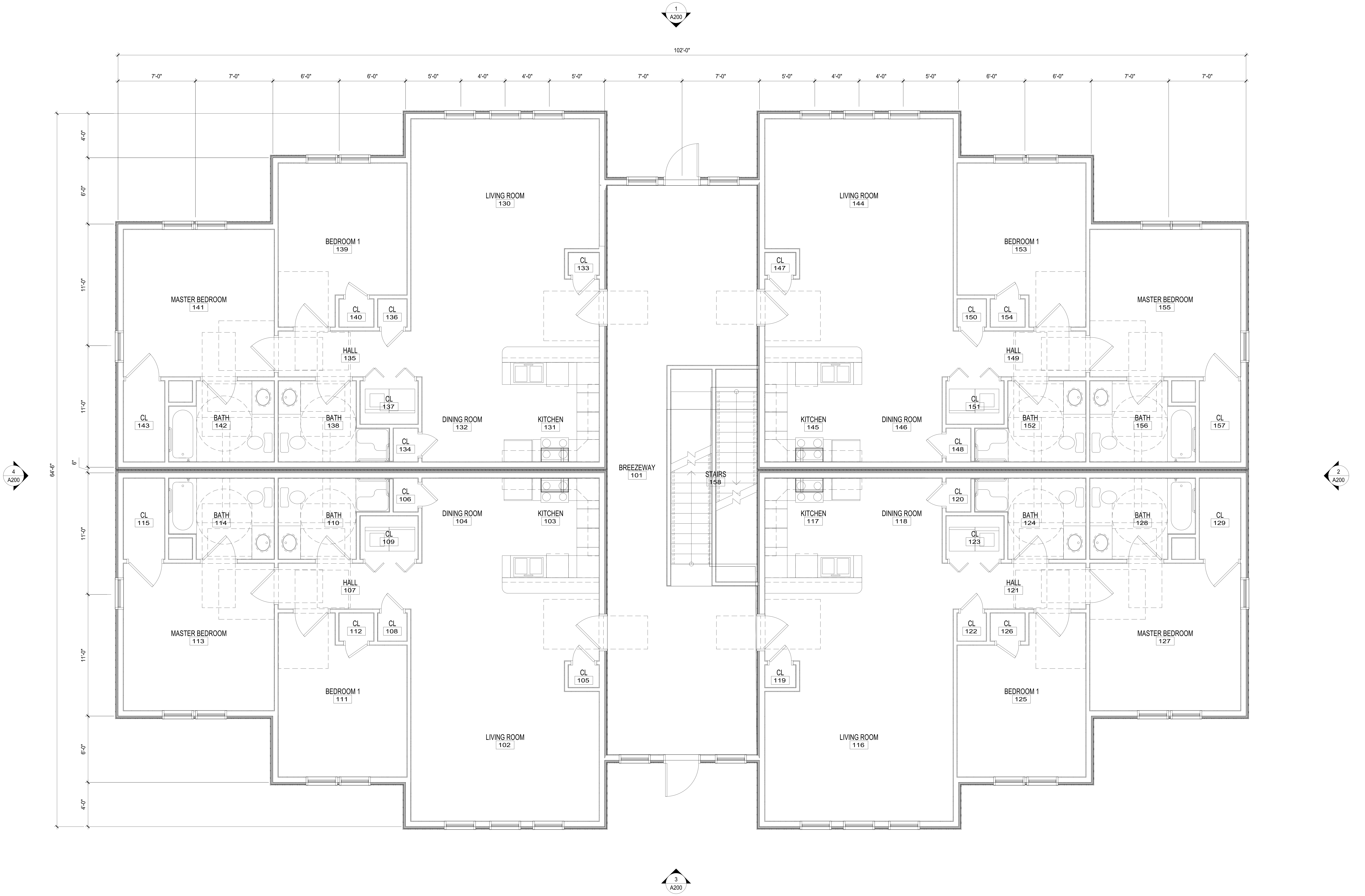
1
A200
102'-0"
7'-0"
7'-0"
6'-0"
6'-0"
5'-0"
4'-0"
4'-0"
5'-0"
7'-0"
7'-0"
5'-0"
4'-0"
4'-0"
5'-0"
6'-0"
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7'-0"
4'-0"
6'-0"
11'-0"
11'-0"
6"
11'-0"
11'-0"
6'-0"
4'-0"
64'-6"
4
A200
2
A200
LIVING ROOM
130
BEDROOM 1
139
CL
133
MASTER BEDROOM
141
CL
140
CL
136
HALL
135
CL
137
CL
143
BATH
142
BATH
138
CL
134
DINING ROOM
132
KITCHEN
131
LIVING ROOM
144
BEDROOM 1
153
CL
147
MASTER BEDROOM
155
CL
150
CL
154
HALL
149
CL
151
KITCHEN
145
DINING ROOM
146
CL
148
BATH
152
BATH
156
CL
157
BREEZEWAY
101
STAIRS
158
CL
115
BATH
114
BATH
110
CL
106
CL
109
DINING ROOM
104
KITCHEN
103
HALL
107
CL
112
CL
108
MASTER BEDROOM
113
CL
105
BEDROOM 1
111
LIVING ROOM
102
CL
120
KITCHEN
117
DINING ROOM
118
CL
123
BATH
124
BATH
128
CL
129
HALL
121
CL
122
CL
126
MASTER BEDROOM
127
CL
119
BEDROOM 1
125
LIVING ROOM
116
3
A200

1 FIRST FLOOR PLAN
A100 SCALE: 1/4" = 1'-0"

Brickyard Apartments

Washington St. Auburn, Maine
FOR
Gendron Corp.
50 Alfred A. Plourde Parkway PO Box 1913, Lewiston, Maine 04241

DIRIGO
ARCHITECTURAL
ENGINEERING ▲ CONSTRUCTION MANAGEMENT
7 COBBLESTONE WAY, SUITE 2
TURNER, MAINE 04282
PH: (207) 225-3040
WS: DIRIGOAE.COM

SIGNED COPY OF DRAWING ON FILE AT DIRIGO A/E OFFICE

DRAFT

NOT FOR CONSTRUCTION

FIRST FLOOR PLAN

REV.	DATE	DESCRIPTION
0	5/3/22	ISSUED FOR PERMIT REVIEW

DRAWN BY: DLB & CJL
CHECKED BY: TWP

SCALE:	AS NOTED
DATE:	2/11/22
PROJECT:	22-005

SHEET NO.

A100

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SHEET SIZE: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

May 03, 2022 - 4:56pm
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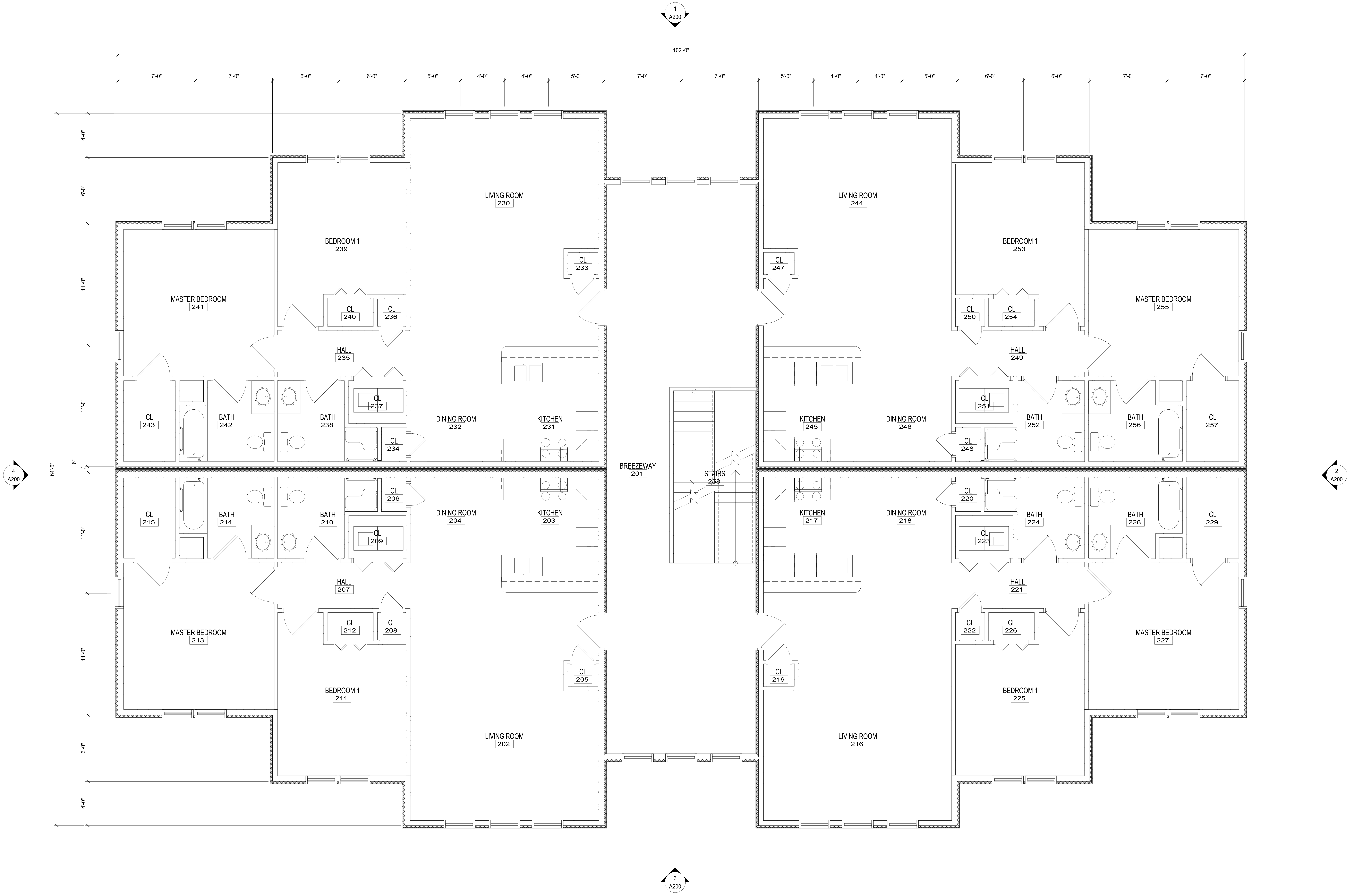
H G F E D C B A

1 2 3 4 5 6 7 8


1
A200
102'-0"
7'-0"
7'-0"
6'-0"
6'-0"
5'-0"
4'-0"
4'-0"
5'-0"
7'-0"
7'-0"
5'-0"
4'-0"
4'-0"
5'-0"
6'-0"
6'-0"
7'-0"
7'-0"
4'-0"
6'-0"
11'-0"
11'-0"
6"
11'-0"
11'-0"
6'-0"
4'-0"
64'-6"
4
A200
2
A200
LIVING ROOM 230
BEDROOM 1 239
MASTER BEDROOM 241
CL 233
CL 240
CL 236
HALL 235
CL 243
BATH 242
BATH 238
CL 237
CL 234
DINING ROOM 232
KITCHEN 231
LIVING ROOM 244
CL 247
BEDROOM 1 253
MASTER BEDROOM 255
CL 250
CL 254
HALL 249
KITCHEN 245
DINING ROOM 246
CL 251
CL 248
BATH 252
BATH 256
CL 257
BREEZEWAY 201
STAIRS 258
CL 215
BATH 214
BATH 210
CL 206
CL 209
DINING ROOM 204
KITCHEN 203
HALL 207
CL 212
CL 208
MASTER BEDROOM 213
BEDROOM 1 211
CL 205
LIVING ROOM 202
KITCHEN 217
DINING ROOM 218
CL 220
CL 223
BATH 224
BATH 228
CL 229
HALL 221
CL 222
CL 226
MASTER BEDROOM 227
BEDROOM 1 225
CL 219
LIVING ROOM 216
3
A200

1
A101
SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

Brickyard Apartments
Washington St. Auburn, Maine
FOR
Gendron Corp.
50 Alfred A. Plourde Parkway PO Box 1913, Lewiston, Maine 04241

DIRIGO
ARCHITECTURAL
ENGINEERING • CONSTRUCTION MANAGEMENT
7 COBBLESTONE WAY, SUITE 2
TURNER, MAINE 04282
PH: (207) 225-3040
WS: DIRIGOAE.COM

SIGNED COPY OF DRAWING ON FILE AT DIRIGO A/E OFFICE

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SECOND FLOOR PLAN

REV.	DATE	DESCRIPTION
0	5/3/22	ISSUED FOR PERMIT REVIEW

DRAWN BY: DLB & CJL
CHECKED BY: TWP

SCALE:	AS NOTED
DATE:	2/11/22
PROJECT:	22-005

SHEET NO.
A101

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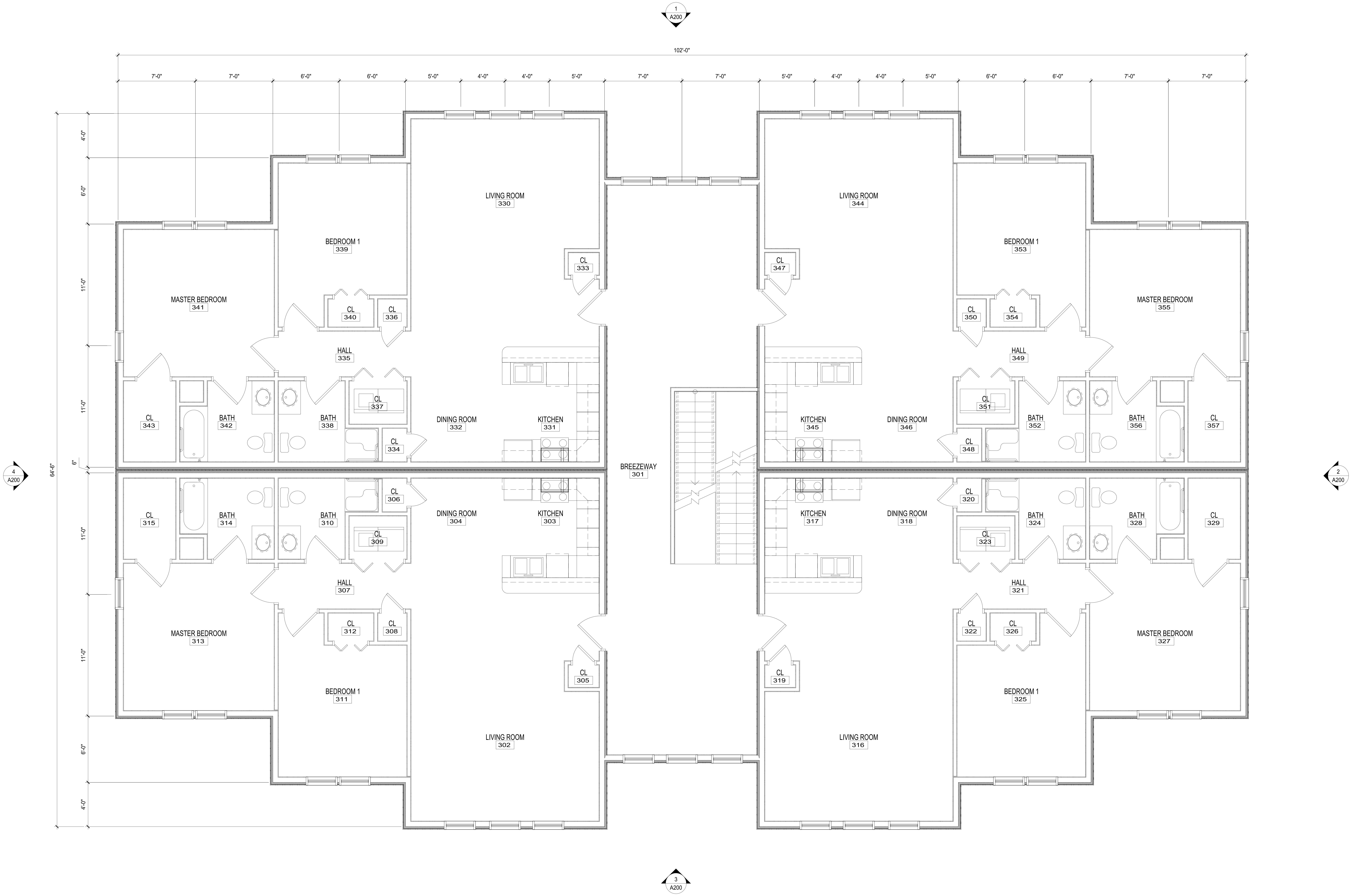
SHEET SIZE: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

May 03, 2022 - 4:56pm
S:\CAD Projects\22-005 Brickyard Apartments\22-005 Brickyard Apartments\Sheets\A102 THIRD FLOOR PLAN.dwg


1
A200
102'-0"
7'-0"
7'-0"
6'-0"
6'-0"
5'-0"
4'-0"
4'-0"
5'-0"
7'-0"
7'-0"
5'-0"
4'-0"
4'-0"
5'-0"
6'-0"
6'-0"
7'-0"
7'-0"
4'-0"
6'-0"
11'-0"
11'-0"
6"
11'-0"
11'-0"
6'-0"
4'-0"
64'-6"
4
A200
2
A200
3
A200
LIVING ROOM 330
BEDROOM 1 339
CL 333
MASTER BEDROOM 341
CL 340
CL 336
HALL 335
CL 343
BATH 342
BATH 338
CL 337
CL 334
DINING ROOM 332
KITCHEN 331
LIVING ROOM 344
BEDROOM 1 353
CL 347
MASTER BEDROOM 355
CL 350
CL 354
HALL 349
KITCHEN 345
DINING ROOM 346
CL 351
CL 348
BATH 352
BATH 356
CL 357
BREEZEWAY 301
CL 315
BATH 314
BATH 310
CL 306
CL 309
DINING ROOM 304
KITCHEN 303
HALL 307
MASTER BEDROOM 313
CL 312
CL 308
BEDROOM 1 311
CL 305
LIVING ROOM 302
KITCHEN 317
DINING ROOM 318
CL 320
CL 323
BATH 324
BATH 328
CL 329
HALL 321
CL 322
CL 326
MASTER BEDROOM 327
CL 319
BEDROOM 1 325
LIVING ROOM 316

1 THIRD FLOOR PLAN
A102 SCALE: 1/4" = 1'-0"

Brickyard Apartments
Washington St. Auburn, Maine
FOR
Gendron Corp.
50 Alfred A. Plourde Parkway PO Box 1913, Lewiston, Maine 04241

DIRIGO
ARCHITECTURAL
ENGINEERING • CONSTRUCTION MANAGEMENT
7 COBBLESTONE WAY, SUITE 2
TURNER, MAINE 04282
PH: (207) 225-3040
WS: DIRIGOAE.COM

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DRAFT

NOT FOR CONSTRUCTION

THIRD FLOOR PLAN

REV.	DATE	DESCRIPTION
0	5/3/22	ISSUED FOR PERMIT REVIEW

DRAWN BY: DLB & CJL | CHECKED BY: TWP

SCALE:	AS NOTED
DATE:	2/11/22
PROJECT:	22-005

SHEET NO.

A102

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SHEET SIZE: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

May 03, 2022 - 4:56pm
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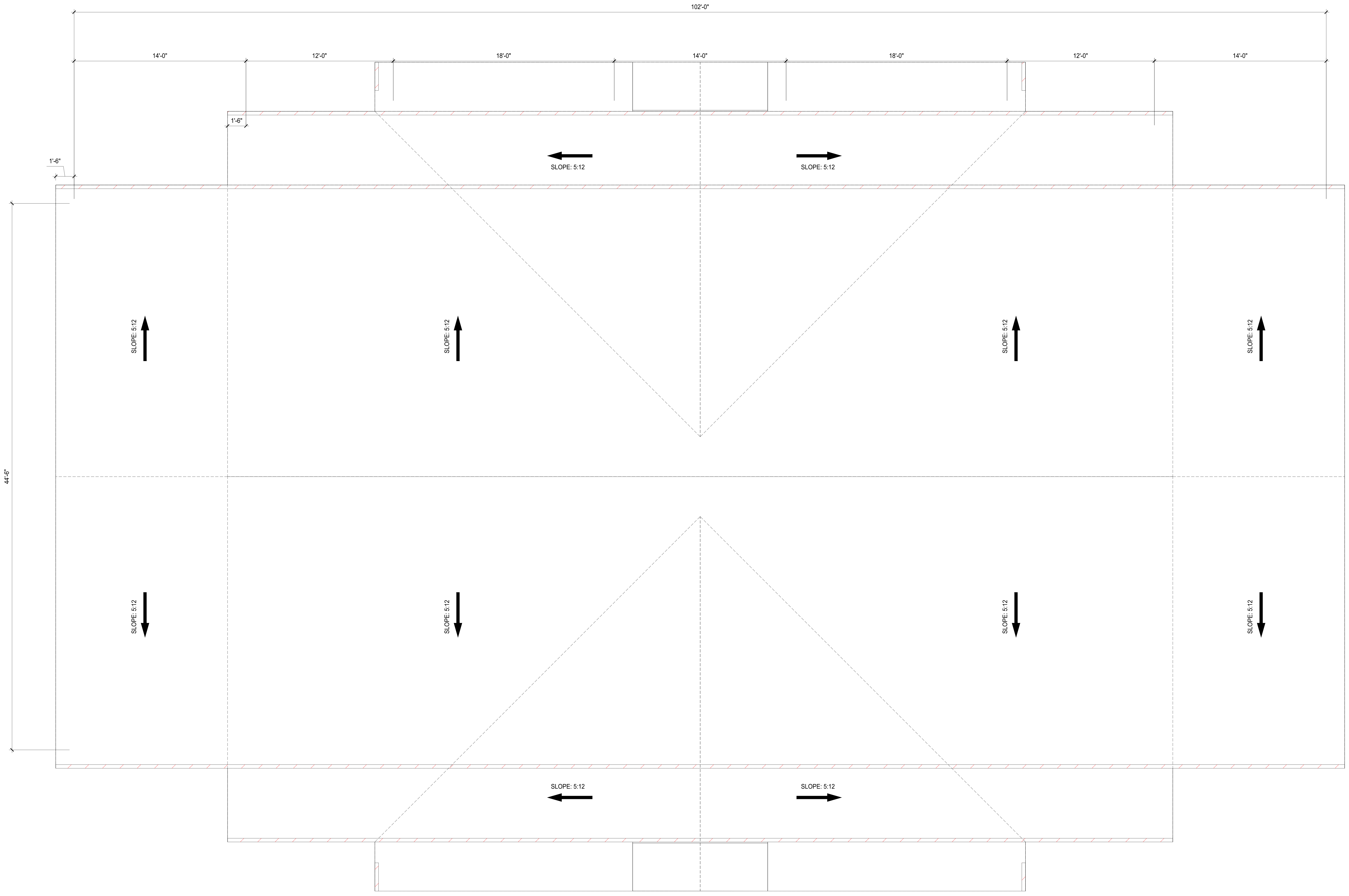
102'-0"
14'-0"
12'-0"
18'-0"
14'-0"
18'-0"
12'-0"
14'-0"
1'-6"
1'-6"
44'-6"
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12
SLOPE: 5:12

1 ROOF PLAN
A103 SCALE: 1/4" = 1'-0"

Brickyard Apartments

Washington St. Auburn, Maine
FOR
Gendron Corp.
50 Alfred A. Plourde Parkway PO Box 1913, Lewiston, Maine 04241

DIRIGO
ARCHITECTURAL
ENGINEERING ▲ CONSTRUCTION MANAGEMENT
7 COBBLESTONE WAY, SUITE 2
TURNER, MAINE 04282
PH: (207) 225-3040
WS: DIRIGOAE.COM

SIGNED COPY OF DRAWING ON FILE AT DIRIGO A/E OFFICE

ROOF PLAN

REV.	DATE	DESCRIPTION

DRAWN BY: DLB & CJL
CHECKED BY: TWP

SCALE: AS NOTED
DATE: 2/11/22
PROJECT: 22-005

SHEET NO.
A103

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SHEET SIZE: ARCH FULL BLEED D (36.00 X 24.00 INCHES)

May 03, 2022 - 4:57pm
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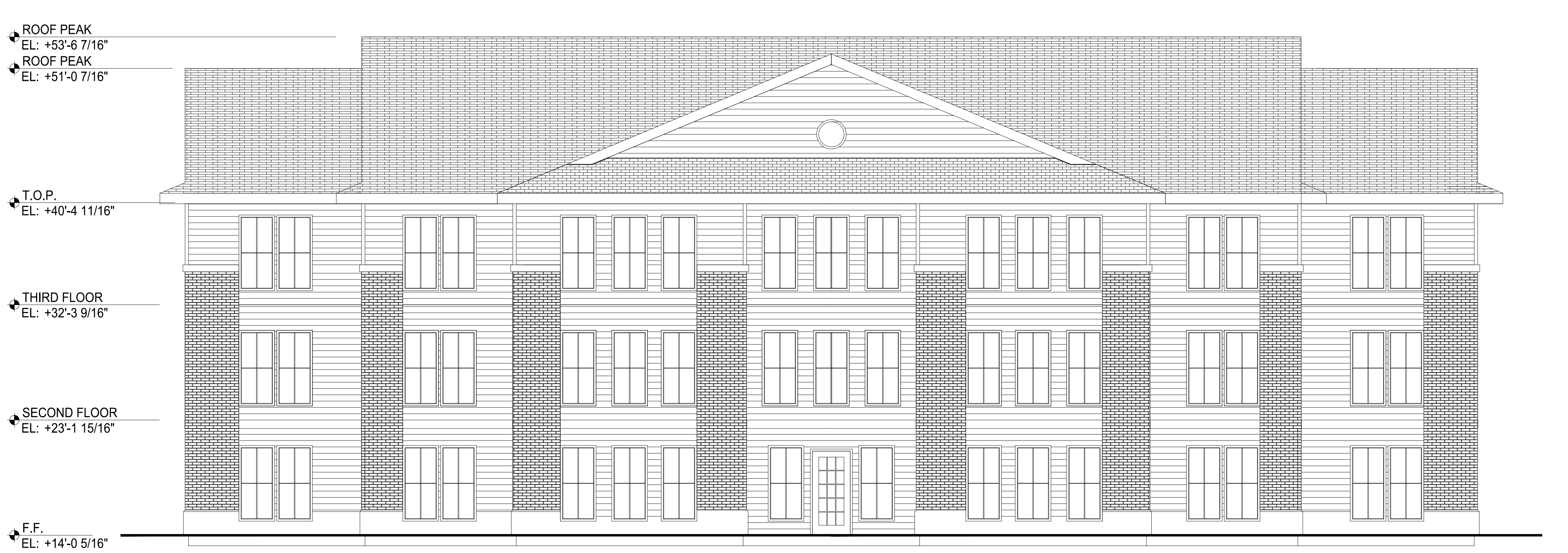
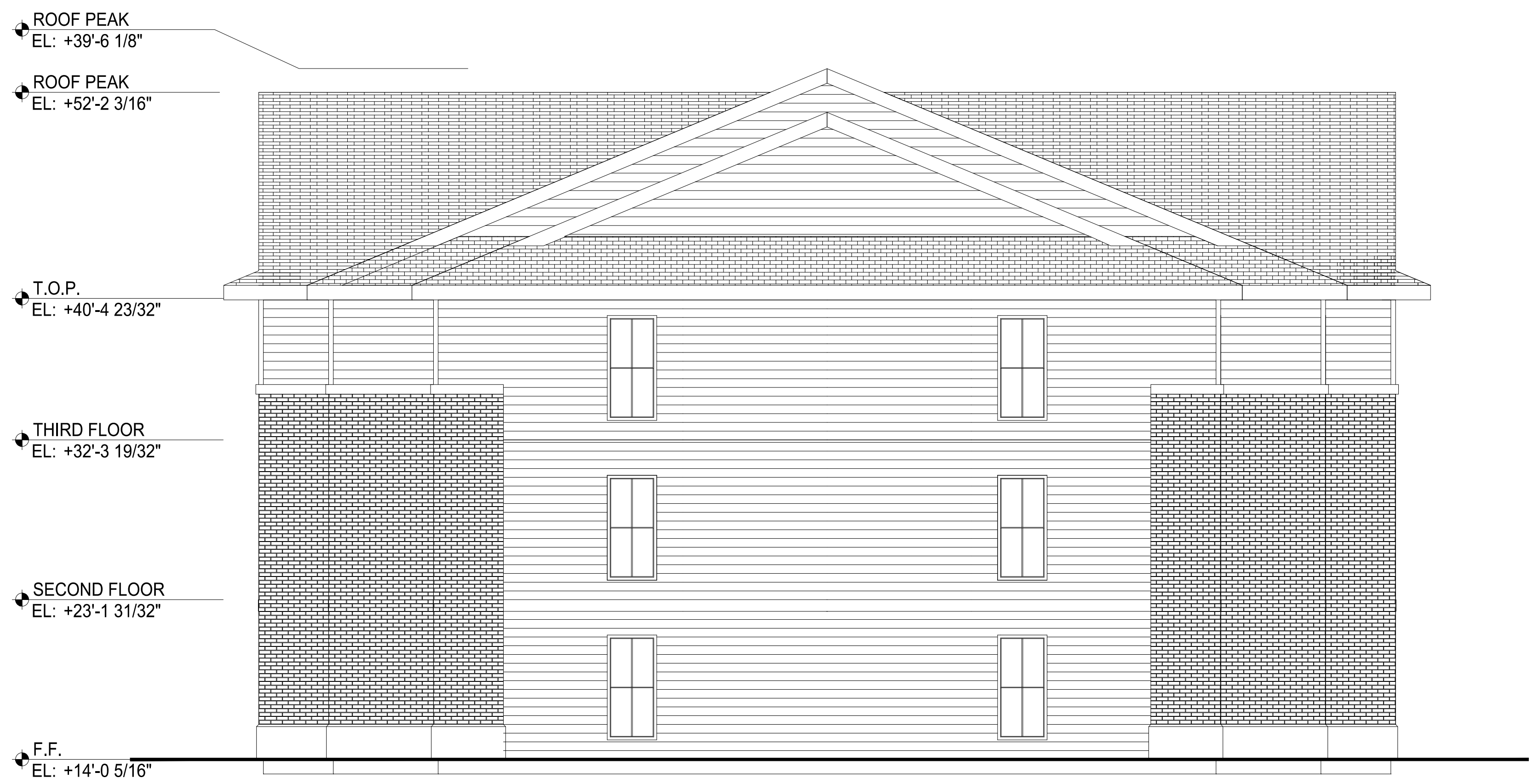
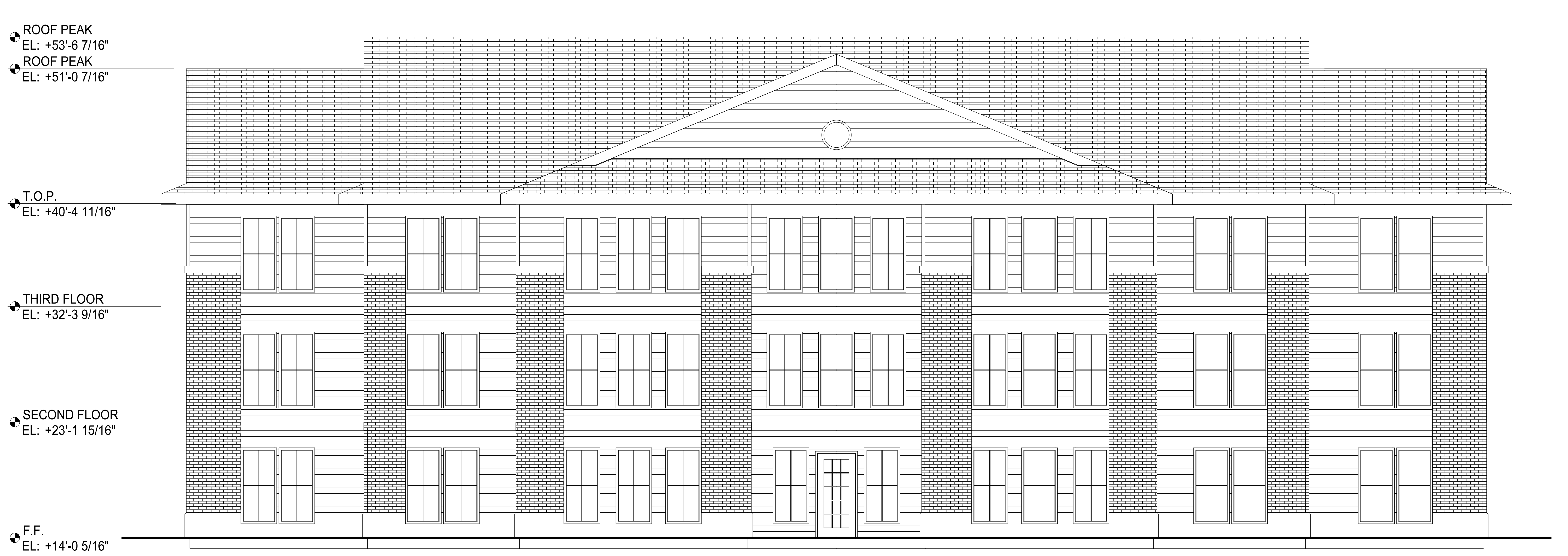

ROOF PEAK
EL: +53'-6 7/16"
ROOF PEAK
EL: +51'-0 7/16"
T.O.P.
EL: +40'-4 11/16"
THIRD FLOOR
EL: +32'-3 9/16"
SECOND FLOOR
EL: +23'-1 15/16"
F.F.
EL: +14'-0 5/16"

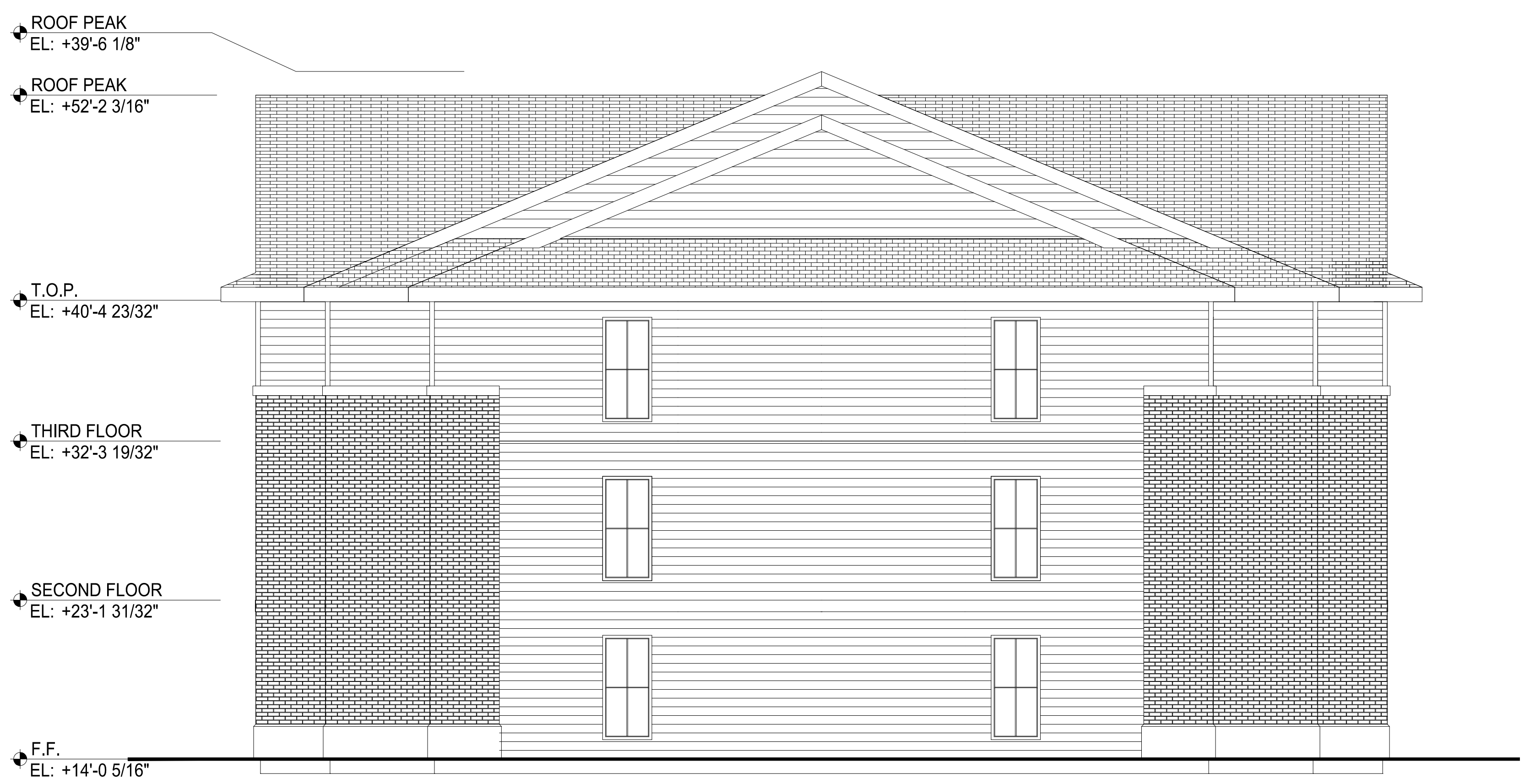
1 A200 NORTH ELEVATION
SCALE: 1/8" = 1'-0"


ROOF PEAK
EL: +39'-6 1/8"
ROOF PEAK
EL: +52'-2 3/16"
T.O.P.
EL: +40'-4 23/32"
THIRD FLOOR
EL: +32'-3 19/32"
SECOND FLOOR
EL: +23'-1 31/32"
F.F.
EL: +14'-0 5/16"

2 A200 EAST ELEVATION
SCALE: 1/8" = 1'-0"


ROOF PEAK
EL: +53'-6 7/16"
ROOF PEAK
EL: +51'-0 7/16"
T.O.P.
EL: +40'-4 11/16"
THIRD FLOOR
EL: +32'-3 9/16"
SECOND FLOOR
EL: +23'-1 15/16"
F.F.
EL: +14'-0 5/16"

3 A200 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"


ROOF PEAK
EL: +39'-6 1/8"
ROOF PEAK
EL: +52'-2 3/16"
T.O.P.
EL: +40'-4 23/32"
THIRD FLOOR
EL: +32'-3 19/32"
SECOND FLOOR
EL: +23'-1 31/32"
F.F.
EL: +14'-0 5/16"

4 A200 WEST ELEVATION
SCALE: 1/8" = 1'-0"

Brickyard Apartments
Washington St. Auburn, Maine
FOR
Gendron Corp.
50 Alfred A. Plourde Parkway PO Box 1913, Lewiston, Maine 04241

DIRIGO
ARCHITECTURAL
ENGINEERING ▴ CONSTRUCTION MANAGEMENT
7 COBBLESTONE WAY, SUITE 2
TURNER, MAINE 04282
PH: (207) 225-3040
WS: DIRIGOAE.COM

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EXTERIOR ELEVATIONS

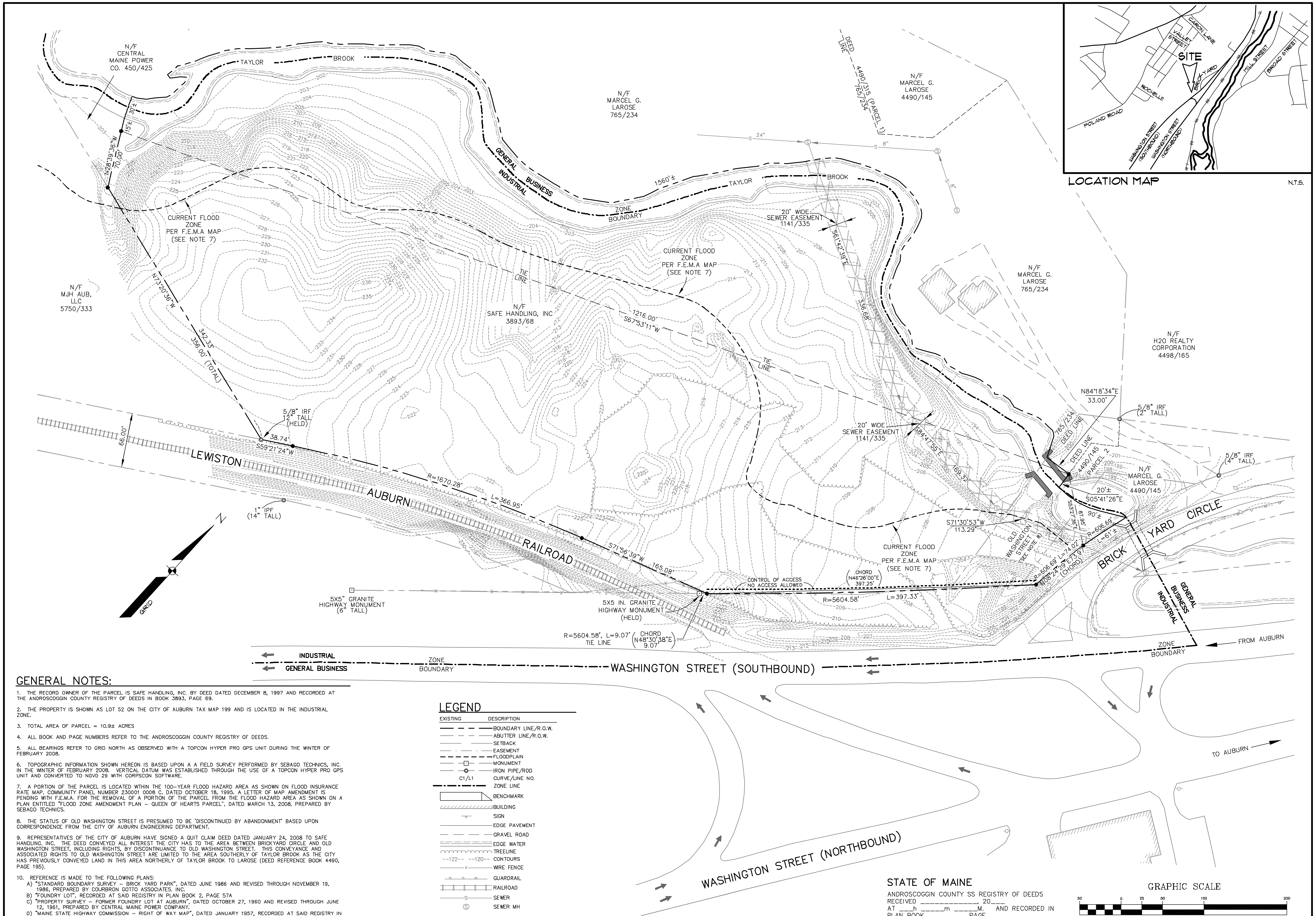
REV.	DATE	DESCRIPTION
0	5/3/22	ISSUED FOR PERMIT REVIEW

DRAWN BY: DLB & CJL
CHECKED BY: TWP

SCALE:	AS NOTED
DATE:	5/3/22
PROJECT:	22-005

SHEET NO.

A200


N/F
CENTRAL
MAINE POWER
CO. 450/425
TAYLOR
BROOK
N/F
MARCEL G.
LAROSE
765/234
DEED LINE
4490/315 (PARCEL 1)
765/234
N/F
MARCEL G.
LAROSE
4490/145
24"
8"
1560'±
ZONE BOUNDARY
GENERAL BUSINESS
INDUSTRIAL
20' WIDE
SEWER EASEMENT
1141/335
S61°42'39"E
336.68'
30'±
15'±
N28°39'36"W
70.00'
CURRENT FLOOD
ZONE
PER F.E.M.A MAP
(SEE NOTE 7)
N/F
MJH AUB,
LLC
5750/333
N73°20'36"W
342.33'
356.00' (TOTAL)
N/F
SAFE HANDLING, INC
3893/68
TIE
LINE
1216.00'
S67°53'11"W
N/F
MARCEL G.
LAROSE
765/234
N/F
H20 REALTY
CORPORATION
4498/165
N84°18'34"E
33.00'
5/8" IRF
(2" TALL)
765/234
DEED LINE
DEED LINE
4490/145
PARCEL 2
N/F
MARCEL G.
LAROSE
4490/145
20'±
S05°41'26"E
5/8" IRF
(4" TALL)
S84°47'55"E
169.32'
S53°27'36"E
87.95'
90'±
S71°30'53"W
113.29'
OLD
WASHINGTON
STREET
(SEE NOTE 8)
R=606.69'
L=61'±
R=606.69' L=74.02'
N08°24'29"E 73.97'
(CHORD)
BRICK
YARD
CIRCLE
GENERAL
BUSINESS
INDUSTRIAL
5/8" IRF
12" TALL
(HELD)
38.74'
S59°21'24"W
66.00'
LEWISTON
AUBURN
RAILROAD
R=1670.28'
L=366.95'
S71°56'39"W
165.08'
1" IPF
(14" TALL)
N
GRID
5X5" GRANITE
HIGHWAY MONUMENT
(6" TALL)
5X5 IN. GRANITE
HIGHWAY MONUMENT
(HELD)
CONTROL OF ACCESS
NO ACCESS ALLOWED
CHORD
N46°26'00"E
397.25'
R=5604.58'
L=397.33'
R=5604.58', L=9.07'
TIE LINE
CHORD
N48°30'38"E
9.07'
INDUSTRIAL
GENERAL BUSINESS
ZONE
BOUNDARY
WASHINGTON STREET (SOUTHBOUND)
ZONE
BOUNDARY
FROM AUBURN
TO AUBURN
WASHINGTON STREET (NORTHBOUND)
CARON LANE
VALLEY STREET
SITE
BRICK YARD
MILL STREET
BROAD STREET
ROCHELLE
POLAND ROAD
WASHINGTON STREET (SOUTHBOUND)
WASHINGTON STREET (NORTHBOUND)
LOCATION MAP
N.T.S.
LEGEND
EXISTING
DESCRIPTION
BOUNDARY LINE/R.O.W.
ABUTTER LINE/R.O.W.
SETBACK
EASEMENT
FLOODPLAIN
MONUMENT
IRON PIPE/ROD
C1/L1
CURVE/LINE NO.
ZONE LINE
BENCHMARK
BUILDING
SIGN
EDGE PAVEMENT
GRAVEL ROAD
EDGE WATER
TREELINE
--122-- --120--
CONTOURS
WIRE FENCE
GUARDRAIL
RAILROAD
SEWER
SEWER MH
UTILITY POLE
GRAPHIC SCALE
50
0
25
50
100
200
(IN FEET)
1 inch = 50 ft.

GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS SAFE HANDLING, INC. BY DEED DATED DECEMBER 8, 1997 AND RECORDED AT THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS IN BOOK 3893, PAGE 69.

2. THE PROPERTY IS SHOWN AS LOT 52 ON THE CITY OF AUBURN TAX MAP 199 AND IS LOCATED IN THE INDUSTRIAL ZONE.

3. TOTAL AREA OF PARCEL = 10.9± ACRES

4. ALL BOOK AND PAGE NUMBERS REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS.

5. ALL BEARINGS REFER TO GRID NORTH AS OBSERVED WITH A TOPCON HYPER PRO GPS UNIT DURING THE WINTER OF FEBRUARY 2008.

6. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A A FIELD SURVEY PERFORMED BY SEBAGO TECHNICS, INC. IN THE WINTER OF FEBRUARY 2008. VERTICAL DATUM WAS ESTABLISHED THROUGH THE USE OF A TOPCON HYPER PRO GPS UNIT AND CONVERTED TO NGVD 29 WITH CORPSCON SOFTWARE.

7. A PORTION OF THE PARCEL IS LOCATED WTHIN THE 100-YEAR FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 230001 0008 C, DATED OCTOBER 18, 1995. A LETTER OF MAP AMENDMENT IS PENDING WITH F.E.M.A. FOR THE REMOVAL OF A PORTION OF THE PARCEL FROM THE FLOOD HAZARD AREA AS SHOWN ON A PLAN ENTITLED "FLOOD ZONE AMENDMENT PLAN – QUEEN OF HEARTS PARCEL", DATED MARCH 13, 2008, PREPARED BY SEBAGO TECHNICS.

8. THE STATUS OF OLD WASHINGTON STREET IS PRESUMED TO BE 'DISCONTINUED BY ABANDONMENT' BASED UPON CORRESPONDENCE FROM THE CITY OF AUBURN ENGINEERING DEPARTMENT.

9. REPRESENTATIVES OF THE CITY OF AUBURN HAVE SIGNED A QUIT CLAIM DEED DATED JANUARY 24, 2008 TO SAFE HANDLING, INC. THE DEED CONVEYED ALL INTEREST THE CITY HAS TO THE AREA BETWEEN BRICKYARD CIRCLE AND OLD WASHINGTON STREET, INCLUDING RIGHTS, BY DISCONTINUANCE TO OLD WASHINGTON STREET. THIS CONVEYANCE AND ASSOCIATED RIGHTS TO OLD WASHINGTON STREET ARE LIMITED TO THE AREA SOUTHERLY OF TAYLOR BROOK AS THE CITY HAS PREVIOUSLY CONVEYED LAND IN THIS AREA NORTHERLY OF TAYLOR BROOK TO LAROSE (DEED REFERENCE BOOK 4490, PAGE 195).

10. REFERENCE IS MADE TO THE FOLLOWING PLANS:
   A) "STANDARD BOUNDARY SURVEY – BRICK YARD PARK", DATED JUNE 1986 AND REVISED THROUGH NOVEMBER 19, 1986, PREPARED BY COURBRON GOTTO ASSOCIATES, INC.
   B) "FOUNDRY LOT", RECORDED AT SAID REGISTRY IN PLAN BOOK 2, PAGE 57A
   C) "PROPERTY SURVEY – FORMER FOUNDRY LOT AT AUBURN", DATED OCTOBER 27, 1960 AND REVISED THROUGH JUNE 12, 1961, PREPARED BY CENTRAL MAINE POWER COMPANY.
   D) "MAINE STATE HIGHWAY COMMISSION – RIGHT OF WAY MAP", DATED JANUARY 1957, RECORDED AT SAID REGISTRY IN PLAN BOOK 15, PAGES 33 & 34.
   E) "PLAN OF LOTS OWNED BY MR. J.R. LEARNED", DATED APRIL 1897, RECORDED AT SAID REGISTRY IN PLAN VOLUME 2, BOOK 1, PAGE 9.
   F) "BOUNDARY PLAN – HAMMOND LUMBER PARCEL", DATED DECEMBER 1, 2006, PREPARED BY SEBAGO TECHNICS, INC.

STATE OF MAINE

ANDROSCOGGIN COUNTY SS REGISTRY OF DEEDS
RECEIVED _____________, 20___
AT ___h ______m ______M. AND RECORDED IN
PLAN BOOK _________ PAGE ____________

ATTEST __________________________ REGISTRAR

NOT VALID UNLESS
EMBOSSED HERE

REV:	BY:	DATE:	STATUS:
1	KRF	4-10-08	REVISED BOUNDARY DATA IN OLD WASHINGTON ST. & TIE LINES
1	KRF	3-27-08	RELEASED TO CLIENT

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

Sebago Technics
Engineering Expertise You Can Build On
One Chabot Street
Westbrook, Me 04098-1339
Tel (207) 856-0277

PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN
08018	N/A	N/A	KRF	ATA

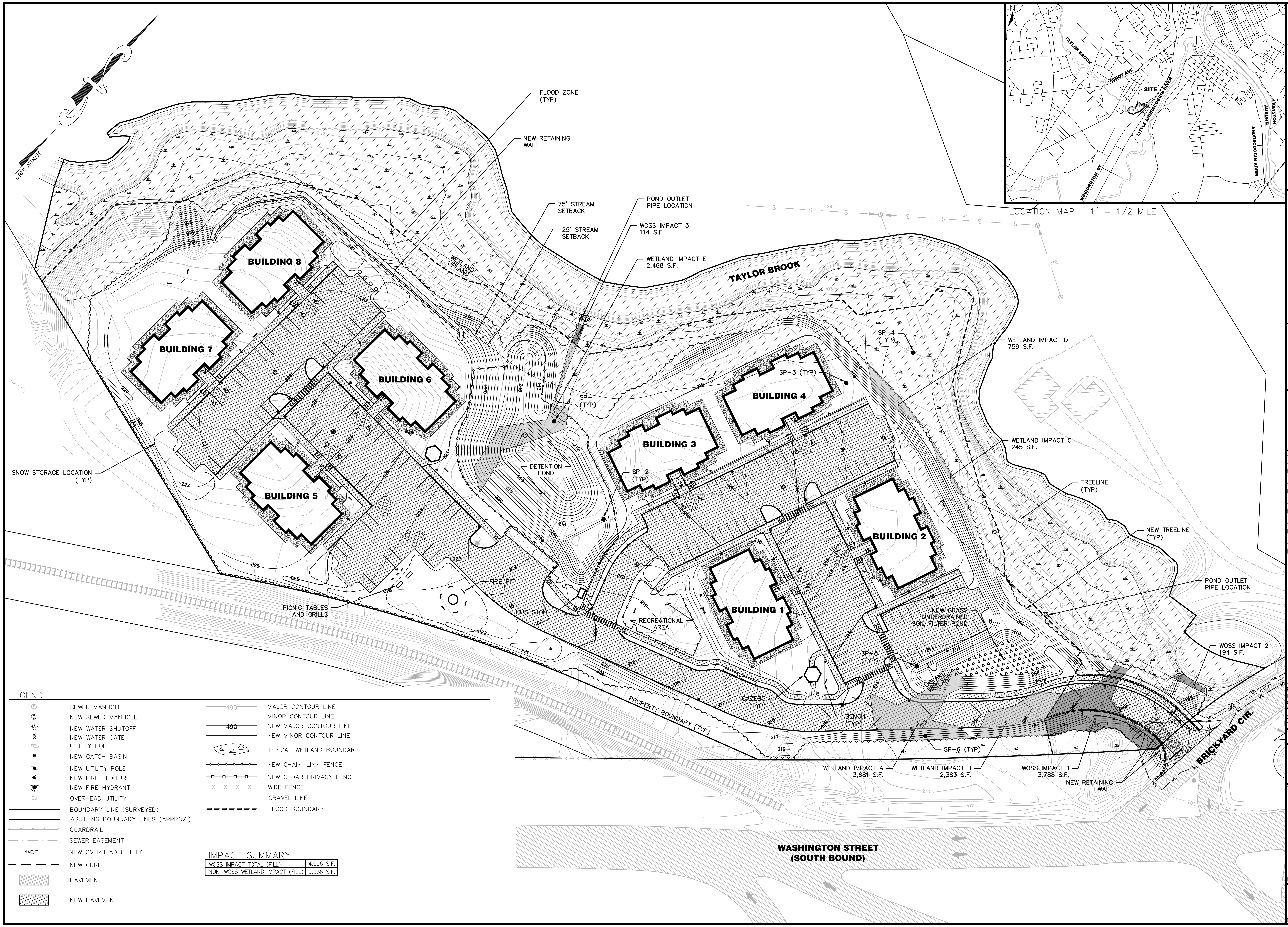
EXISTING CONDITIONS BOUNDARY PLAN
OF:
QUEEN OF HEARTS PARCEL
BRICKYARD CIRCLE
AUBURN, MAINE

FOR:
SAFE HANDLING, INC.
P.O. BOX 1567 – AUBURN, MAINE 04211-1567

DATE	SCALE
3-13-08	1"=50'

SHEET 1 OF 1

08018EC.dwg, TAB: STI 24X36


GRID NORTH
FLOOD ZONE (TYP)
NEW RETAINING WALL
75' STREAM SETBACK
25' STREAM SETBACK
POND OUTLET PIPE LOCATION
WOSS IMPACT 3 114 S.F.
WETLAND IMPACT E 2,468 S.F.
TAYLOR BROOK
WETLAND
UPLAND
BUILDING 8
BUILDING 7
BUILDING 6
BUILDING 5
BUILDING 4
BUILDING 3
BUILDING 2
BUILDING 1
SP-1 (TYP)
SP-2 (TYP)
SP-3 (TYP)
SP-4 (TYP)
SP-5 (TYP)
SP-6 (TYP)
DETENTION POND
WETLAND IMPACT D 759 S.F.
WETLAND IMPACT C 245 S.F.
TREELINE (TYP)
NEW TREELINE (TYP)
POND OUTLET PIPE LOCATION
WOSS IMPACT 2 194 S.F.
NEW GRASS UNDERDRAINED SOIL FILTER POND
SNOW STORAGE LOCATION (TYP)
FIRE PIT
PICNIC TABLES AND GRILLS
BUS STOP
RECREATIONAL AREA
GAZEBO (TYP)
BENCH (TYP)
PROPERTY BOUNDARY (TYP)
WETLAND IMPACT A 3,681 S.F.
WETLAND IMPACT B 2,383 S.F.
WOSS IMPACT 1 3,788 S.F.
NEW RETAINING WALL
BRICKYARD CIR.
WASHINGTON STREET (SOUTH BOUND)
LOCATION MAP 1" = 1/2 MILE
N
TAYLOR BROOK
MINOT AVE.
SITE
LITTLE ANDROSCOGGIN RIVER
WASHINGTON ST.
LEWISTON
AUBURN
ANDROSCOGGIN RIVER

LEGEND

Ⓢ	SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
WSO	NEW WATER SHUTOFF
WG ⊗	NEW WATER GATE
	UTILITY POLE
■	NEW CATCH BASIN
	NEW UTILITY POLE
	NEW LIGHT FIXTURE
	NEW FIRE HYDRANT
— OU —	OVERHEAD UTILITY
━━━	BOUNDARY LINE (SURVEYED)
———	ABUTTING BOUNDARY LINES (APPROX.)
○—○—○	GUARDRAIL
— · — · —	SEWER EASEMENT
— NAE/T —	NEW OVERHEAD UTILITY
— — — —	NEW CURB
▨	PAVEMENT
▨	NEW PAVEMENT
—490—	MAJOR CONTOUR LINE
———	MINOR CONTOUR LINE
—490—	NEW MAJOR CONTOUR LINE
———	NEW MINOR CONTOUR LINE
	TYPICAL WETLAND BOUNDARY
—o—o—o—	NEW CHAIN-LINK FENCE
—□—□—□—	NEW CEDAR PRIVACY FENCE
— x — x — x — x —	WIRE FENCE
— — — — — — —	GRAVEL LINE
▬ ▬ ▬ ▬	FLOOD BOUNDARY

IMPACT SUMMARY

WOSS IMPACT TOTAL (FILL)	4,096 S.F.
NON-WOSS WETLAND IMPACT (FILL)	9,536 S.F.

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
40 0 20 40
(IN FEET)
1 INCH = 40 FT

SUBMISSION NOTES:
SUBMISSION 1: 2022-03-22 SDH
ISSUED FOR REVIEW.

SUBMISSION 2: 2022-04-18 SDH
ISSUED FOR PERMITTING.

SUBMISSION 3: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 4: 2022-08-25 TLB
ISSUED FOR PERMITTING.

SUBMISSION 5: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	5
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

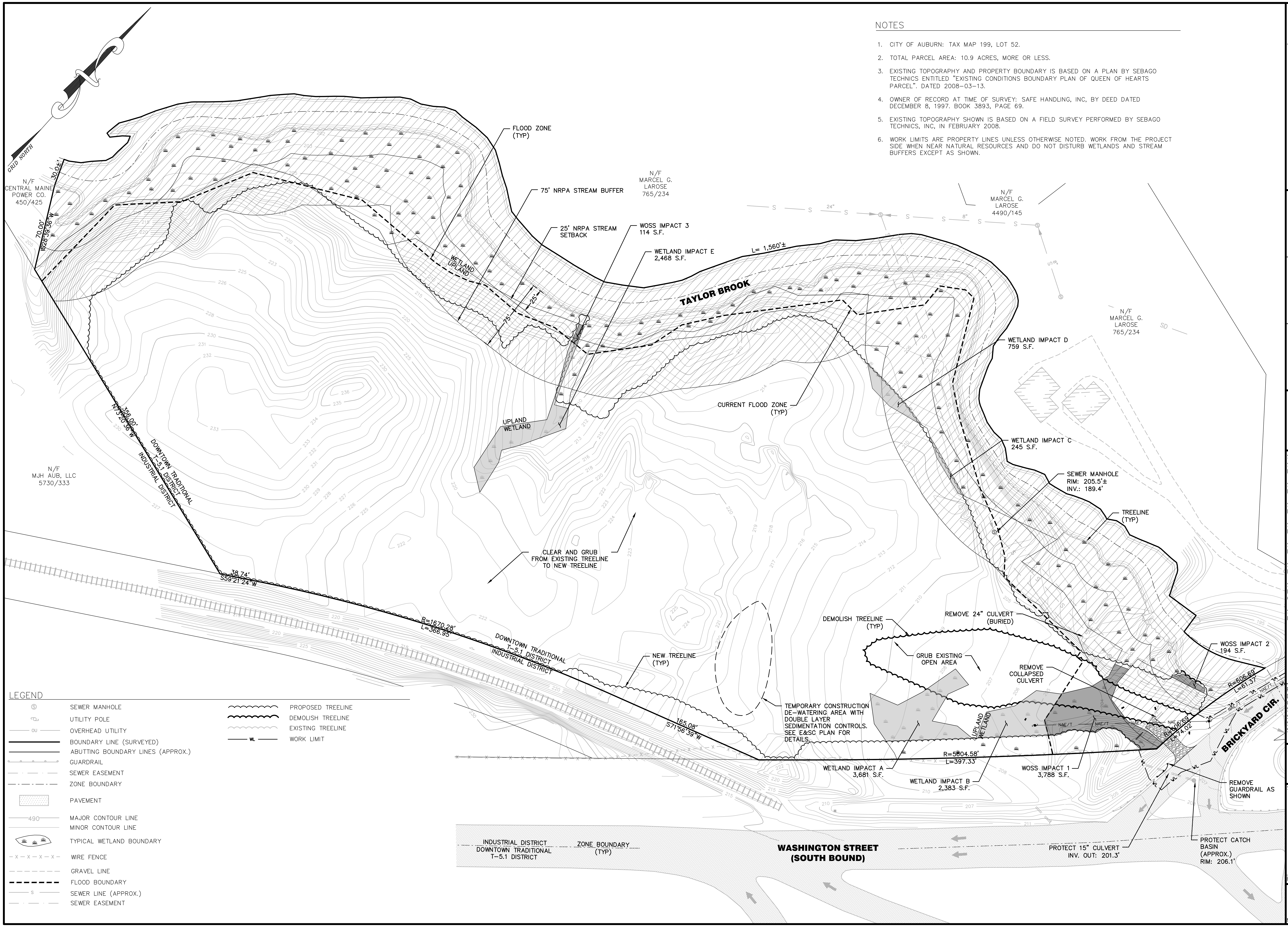
IMPACT OVERVIEW PLAN

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.
W1.1

MLDC NO. 21-342 1 OF 1


GRID NORTH
N/F
CENTRAL MAINE
POWER CO.
450/425
30.04'
70.00'
N28°39'36"W
FLOOD ZONE
(TYP)
75' NRPA STREAM BUFFER
N/F
MARCEL G.
LAROSE
765/234
25' NRPA STREAM
SETBACK
WOSS IMPACT 3
114 S.F.
WETLAND IMPACT E
2,468 S.F.
L= 1,560'±
TAYLOR BROOK
WETLAND
UPLAND
75
25
N/F
MARCEL G.
LAROSE
4490/145
24"
8"
N/F
MARCEL G.
LAROSE
765/234
WETLAND IMPACT D
759 S.F.
CURRENT FLOOD ZONE
(TYP)
UPLAND
WETLAND
358.00'
N73°20'36"W
DOWNTOWN TRADITIONAL
T-5.1 DISTRICT
INDUSTRIAL DISTRICT
N/F
MJH AUB, LLC
5730/333
WETLAND IMPACT C
245 S.F.
SEWER MANHOLE
RIM: 205.5'±
INV.: 189.4'
TREELINE
(TYP)
CLEAR AND GRUB
FROM EXISTING TREELINE
TO NEW TREELINE
38.74'
S59°21'24"W
R=1670.28'
L=368.95'
DOWNTOWN TRADITIONAL
T-5.1 DISTRICT
INDUSTRIAL DISTRICT
DEMOLISH TREELINE
(TYP)
REMOVE 24" CULVERT
(BURIED)
WOSS IMPACT 2
194 S.F.
GRUB EXISTING
OPEN AREA
REMOVE
COLLAPSED
CULVERT
NEW TREELINE
(TYP)
R=606.69'
L=61.37'
TEMPORARY CONSTRUCTION
DE-WATERING AREA WITH
DOUBLE LAYER
SEDIMENTATION CONTROLS.
SEE E&SC PLAN FOR
DETAILS.
165.08'
S71°56'39"W
UPLAND
WETLAND
NAE/T
R=606.69'
L=74.02'
BRICKYARD CIR.
R=5804.58'
L=397.33'
WETLAND IMPACT A
3,681 S.F.
WETLAND IMPACT B
2,383 S.F.
WOSS IMPACT 1
3,788 S.F.
REMOVE
GUARDRAIL AS
SHOWN
INDUSTRIAL DISTRICT
DOWNTOWN TRADITIONAL
T-5.1 DISTRICT
ZONE BOUNDARY
(TYP)
WASHINGTON STREET
(SOUTH BOUND)
PROTECT 15" CULVERT
INV. OUT: 201.3'
PROTECT CATCH
BASIN
(APPROX.)
RIM: 206.1'

NOTES

1. CITY OF AUBURN: TAX MAP 199, LOT 52.
2. TOTAL PARCEL AREA: 10.9 ACRES, MORE OR LESS.
3. EXISTING TOPOGRAPHY AND PROPERTY BOUNDARY IS BASED ON A PLAN BY SEBAGO TECHNICS ENTITLED "EXISTING CONDITIONS BOUNDARY PLAN OF QUEEN OF HEARTS PARCEL". DATED 2008-03-13.
4. OWNER OF RECORD AT TIME OF SURVEY: SAFE HANDLING, INC, BY DEED DATED DECEMBER 8, 1997. BOOK 3893, PAGE 69.
5. EXISTING TOPOGRAPHY SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY SEBAGO TECHNICS, INC, IN FEBRUARY 2008.
6. WORK LIMITS ARE PROPERTY LINES UNLESS OTHERWISE NOTED. WORK FROM THE PROJECT SIDE WHEN NEAR NATURAL RESOURCES AND DO NOT DISTURB WETLANDS AND STREAM BUFFERS EXCEPT AS SHOWN.

LEGEND

- SEWER MANHOLE
- UTILITY POLE
- OVERHEAD UTILITY
- BOUNDARY LINE (SURVEYED)
- ABUTTING BOUNDARY LINES (APPROX.)
- GUARDRAIL
- SEWER EASEMENT
- ZONE BOUNDARY
- PAVEMENT
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- TYPICAL WETLAND BOUNDARY
- WIRE FENCE
- GRAVEL LINE
- FLOOD BOUNDARY
- SEWER LINE (APPROX.)
- SEWER EASEMENT
- PROPOSED TREELINE
- DEMOLISH TREELINE
- EXISTING TREELINE
- WORK LIMIT

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
40 0 20 40
(IN FEET)
1 INCH = 40 FT

SUBMISSION NOTES:

SUBMISSION 1: 2022-03-18 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022-03-24 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022-03-31 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 4: 2022-05-03 SDH
ISSUED FOR PERMITTING.

SUBMISSION 5: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022-09-09 RWD
ISSUED DEP REVIEW GEOLOGY COMMENTS.

SUBMISSION 8: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	8
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

EXISTING CONDITIONS AND DEMOLITION

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C1.0

MLDC NO. 21-342 1 OF 14

ANDROSCOGGIN COUNTY SS REGISTRY OF DEEDS

RECEIVED: ______________________

AT ___ H ___ M ___ M ___

RECORDED IN PLAN BOOK _____, PAGE _______

ATTEST: ______________________
REGISTER

APPROVAL

APPROVED BY THE CITY OF AUBURN PLANNING BOARD

______________________ CHAIRMAN ________ DATE

______________________ CITY CLERK ________ DATE

NOTES

1. AUBURN'S MUNICIPAL SITE PLAN AND SPECIAL EXCEPTION REVIEW SETS FORTH A PROCESS FOR DETERMINING WHETHER A DEVELOPMENT MEETS CERTAIN SPECIFIED CRITERIA, WHICH INCLUDE CRITERIA REGARDING STORMWATER MANAGEMENT, SEWAGE DISPOSAL, WATER SUPPLY AND VEHICULAR ACCESS AND OTHER ENVIRONMENTAL EFFECTS, LAYOUT, SCALE, APPEARANCE, AND SAFETY TO MEET THE REQUIREMENTS OF MAINE REVISED STATUTES SECTION 4402.6.
2. CITY OF AUBURN: TAX MAP 199, LOT 52.
3. TOTAL PARCEL AREA: 10.9 ACRES, MORE OR LESS.
4. EXISTING TOPOGRAPHY AND PROPERTY BOUNDARY IS BASED ON A PLAN BY SEBAGO TECHNICS ENTITLED "EXISTING CONDITIONS BOUNDARY PLAN OF QUEEN OF HEARTS PARCEL". DATED 2008-03-13.
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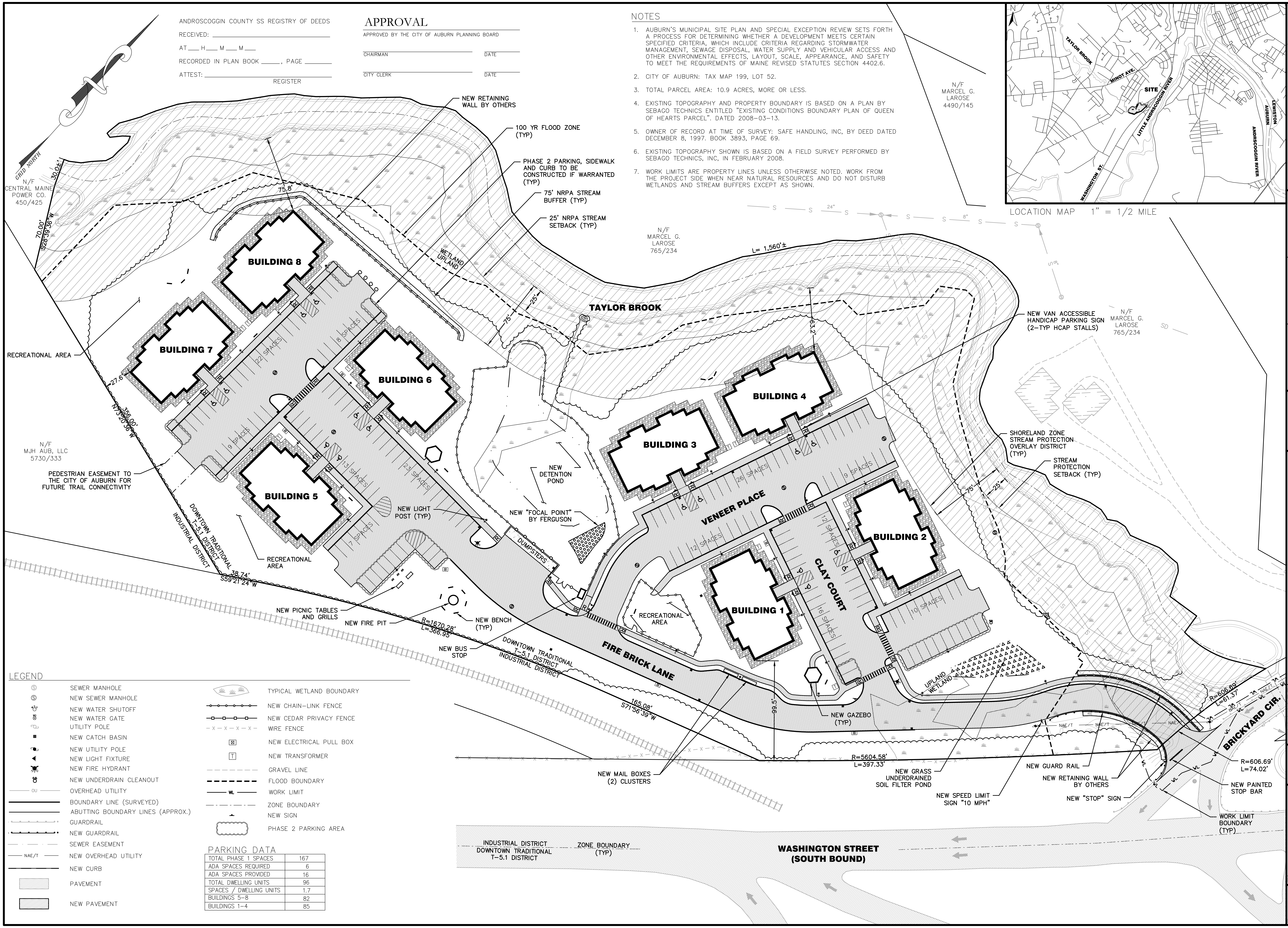

GRID NORTH
N/F
CENTRAL MAINE
POWER CO.
450/425
30.0'±
70.00'
S28°39'36"W
75.8'
NEW RETAINING WALL BY OTHERS
100 YR FLOOD ZONE (TYP)
PHASE 2 PARKING, SIDEWALK AND CURB TO BE CONSTRUCTED IF WARRANTED (TYP)
75' NRPA STREAM BUFFER (TYP)
25' NRPA STREAM SETBACK (TYP)
N/F
MARCEL G.
LAROSE
4490/145
N/F
MARCEL G.
LAROSE
765/234
L= 1,560'±
WETLAND
UPLAND
75'
25'
TAYLOR BROOK
63.2'
BUILDING 8
BUILDING 7
BUILDING 6
BUILDING 5
BUILDING 4
BUILDING 3
BUILDING 2
BUILDING 1
RECREATIONAL AREA
27.6'
356.00'
N73°20'36"W
22 SPACES
8 SPACES
9 SPACES
13 SPACES
23 SPACES
7 SPACES
26 SPACES
9 SPACES
12 SPACES
12 SPACES
16 SPACES
10 SPACES
N/F
MJH AUB, LLC
5730/333
PEDESTRIAN EASEMENT TO THE CITY OF AUBURN FOR FUTURE TRAIL CONNECTIVITY
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
INDUSTRIAL DISTRICT
38.74'
S59°21'24"W
RECREATIONAL AREA
NEW LIGHT POST (TYP)
NEW DETENTION POND
NEW "FOCAL POINT" BY FERGUSON
DUMPSTERS
NEW PICNIC TABLES AND GRILLS
NEW FIRE PIT
NEW BENCH (TYP)
R=1670.28'
L=366.95'
NEW BUS STOP
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
INDUSTRIAL DISTRICT
FIRE BRICK LANE
VENEER PLACE
CLAY COURT
RECREATIONAL AREA
165.08'
S71°56'39"W
99.5'
NEW GAZEBO (TYP)
NEW MAIL BOXES (2) CLUSTERS
R=5604.58'
L=397.33'
NEW GRASS UNDERDRAINED SOIL FILTER POND
NEW SPEED LIMIT SIGN "10 MPH"
NEW GUARD RAIL
NEW RETAINING WALL BY OTHERS
NEW "STOP" SIGN
NEW VAN ACCESSIBLE HANDICAP PARKING SIGN (2-TYP HCAP STALLS)
SHORELAND ZONE STREAM PROTECTION OVERLAY DISTRICT (TYP)
STREAM PROTECTION SETBACK (TYP)
UPLAND
WETLAND
R=606.69'
L=61.37'
BRICKYARD CIR.
R=606.69'
L=74.02'
NEW PAINTED STOP BAR
WORK LIMIT BOUNDARY (TYP)
INDUSTRIAL DISTRICT
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
ZONE BOUNDARY (TYP)
WASHINGTON STREET (SOUTH BOUND)
TAYLOR BROOK
MINOT AVE.
SITE
LITTLE ANDROSCOGGIN RIVER
WASHINGTON ST.
ANDROSCOGGIN RIVER
AUBURN
LEWISTON

LOCATION MAP 1" = 1/2 MILE

LEGEND

SEWER MANHOLE
NEW SEWER MANHOLE
NEW WATER SHUTOFF
NEW WATER GATE
UTILITY POLE
NEW CATCH BASIN
NEW UTILITY POLE
NEW LIGHT FIXTURE
NEW FIRE HYDRANT
NEW UNDERDRAIN CLEANOUT
OVERHEAD UTILITY
BOUNDARY LINE (SURVEYED)
ABUTTING BOUNDARY LINES (APPROX.)
GUARDRAIL
NEW GUARDRAIL
SEWER EASEMENT
NEW OVERHEAD UTILITY
NEW CURB
PAVEMENT
NEW PAVEMENT
TYPICAL WETLAND BOUNDARY
NEW CHAIN-LINK FENCE
NEW CEDAR PRIVACY FENCE
WIRE FENCE
NEW ELECTRICAL PULL BOX
NEW TRANSFORMER
GRAVEL LINE
FLOOD BOUNDARY
WORK LIMIT
ZONE BOUNDARY
NEW SIGN
PHASE 2 PARKING AREA

PARKING DATA

TOTAL PHASE 1 SPACES	167
ADA SPACES REQUIRED	6
ADA SPACES PROVIDED	16
TOTAL DWELLING UNITS	96
SPACES / DWELLING UNITS	1.7
BUILDINGS 5-8	82
BUILDINGS 1-4	85

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
40 0 20 40
(IN FEET)
1 INCH = 40 FT

SUBMISSION NOTES:
SUBMISSION 3: 2022-02-18 SDH ISSUED FOR CLIENT REVIEW.
SUBMISSION 4: 2022-02-26 SDH ISSUED FOR CLIENT REVIEW.
SUBMISSION 5: 2022-03-18 SDH ISSUED FOR CLIENT REVIEW.
SUBMISSION 6: 2022-03-28 SDH ISSUED FOR 75% REVIEW.
SUBMISSION 7: 2022-03-31 SDH ISSUED FOR 75% REVIEW.
SUBMISSION 8: 2022-05-03 SDH ISSUED FOR REVIEW.
SUBMISSION 9: 2022-05-03 SDH ISSUED FOR REVIEW.
SUBMISSION 10: 2022-05-04 SDH ISSUED FOR PERMITTING.
SUBMISSION 11: 2022-06-16 SDH ISSUED FOR PERMITTING.
SUBMISSION 12: 2022-08-11 SDH ISSUED FOR PERMITTING.
SUBMISSION 13: 2025-02-19 MJB ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	13
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

OVERVIEW PLAN

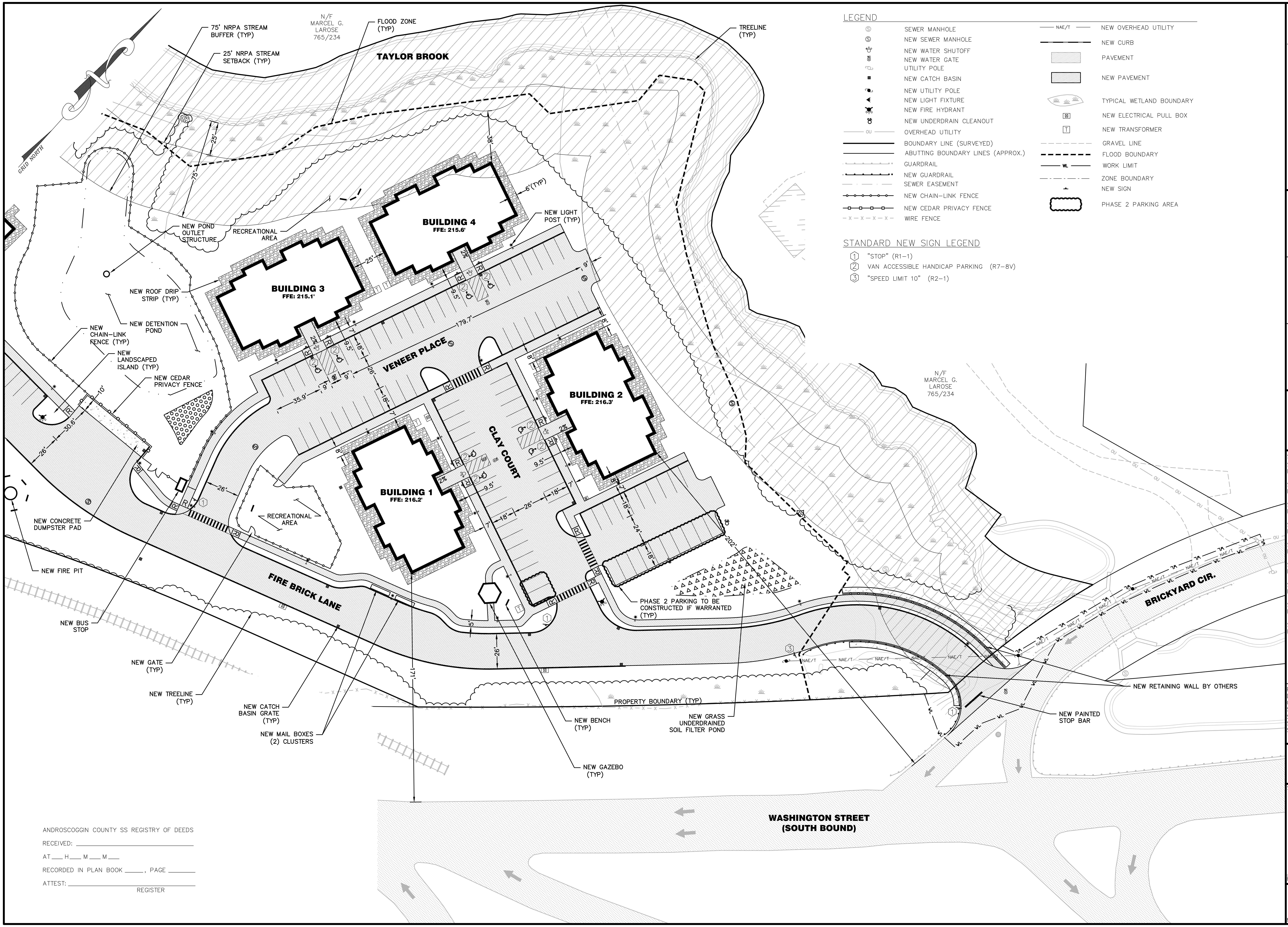
SEAL:
RICHARD W. DUNTON
No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

C2.0

MLDC NO. 21-342 2 OF 14


GRID NORTH
75' NRPA STREAM BUFFER (TYP)
25' NRPA STREAM SETBACK (TYP)
N/F MARCEL G. LAROSE 765/234
FLOOD ZONE (TYP)
TAYLOR BROOK
TREELINE (TYP)
25'
75'
38'
6'(TYP)
NEW LIGHT POST (TYP)
BUILDING 4
FFE: 215.6'
BUILDING 3
FFE: 215.1'
BUILDING 2
FFE: 216.3'
BUILDING 1
FFE: 216.2'
NEW POND OUTLET STRUCTURE
RECREATIONAL AREA
NEW ROOF DRIP STRIP (TYP)
NEW DETENTION POND
NEW CHAIN-LINK FENCE (TYP)
NEW LANDSCAPED ISLAND (TYP)
NEW CEDAR PRIVACY FENCE
VENEER PLACE
CLAY COURT
179.7'
35.9'
9.5'
26'
18'
24'
9'
8'
7'
2%
10'
30.6'
26'
202'
171'
5'
N/F MARCEL G. LAROSE 765/234
NEW CONCRETE DUMPSTER PAD
NEW FIRE PIT
RECREATIONAL AREA
FIRE BRICK LANE
NEW BUS STOP
NEW GATE (TYP)
NEW TREELINE (TYP)
NEW CATCH BASIN GRATE (TYP)
NEW MAIL BOXES (2) CLUSTERS
NEW BENCH (TYP)
NEW GAZEBO (TYP)
PROPERTY BOUNDARY (TYP)
NEW GRASS UNDERDRAINED SOIL FILTER POND
PHASE 2 PARKING TO BE CONSTRUCTED IF WARRANTED (TYP)
BRICKYARD CIR.
NEW RETAINING WALL BY OTHERS
NEW PAINTED STOP BAR
WASHINGTON STREET (SOUTH BOUND)
NAE/T
WL
OU

LEGEND

Ⓢ	SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
WSO	NEW WATER SHUTOFF
WG ⊗	NEW WATER GATE
	UTILITY POLE
▦	NEW CATCH BASIN
	NEW UTILITY POLE
	NEW LIGHT FIXTURE
HYD	NEW FIRE HYDRANT
CO	NEW UNDERDRAIN CLEANOUT
—— OU ——	OVERHEAD UTILITY
	BOUNDARY LINE (SURVEYED)
	ABUTTING BOUNDARY LINES (APPROX.)
	GUARDRAIL
	NEW GUARDRAIL
	SEWER EASEMENT
—o—o—o—	NEW CHAIN-LINK FENCE
—□—□—□—	NEW CEDAR PRIVACY FENCE
—x—x—x—x—	WIRE FENCE
—— NAE/T ——	NEW OVERHEAD UTILITY
	NEW CURB
▨	PAVEMENT
▨	NEW PAVEMENT
	TYPICAL WETLAND BOUNDARY
⊠	NEW ELECTRICAL PULL BOX
T	NEW TRANSFORMER
	GRAVEL LINE
	FLOOD BOUNDARY
—— WL ——	WORK LIMIT
	ZONE BOUNDARY
	NEW SIGN
	PHASE 2 PARKING AREA

STANDARD NEW SIGN LEGEND

① "STOP" (R1–1)
② VAN ACCESSIBLE HANDICAP PARKING (R7–8V)
③ "SPEED LIMIT 10" (R2–1)

ANDROSCOGGIN COUNTY SS REGISTRY OF DEEDS
RECEIVED: ____________________
AT ___ H ___ M ___ M ___
RECORDED IN PLAN BOOK _____, PAGE _______
ATTEST: ____________________
REGISTER

MAIN-LAND
DEVELOPMENT CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT
BRICKYARD COMMONS
AUBURN, MAINE 04210

OWNER OF RECORD
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
30 0 15 30
(IN FEET)
1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2022–03–18 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022–03–28 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022–03–31 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 4: 2022–05–03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022–05–03 SDH
ISSUED FOR REVIEW.

SUBMISSION 6: 2022–05–04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022–06–16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2022–08–11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 9: 2025–02–19 MJB
ISSUED FOR PERMITTING

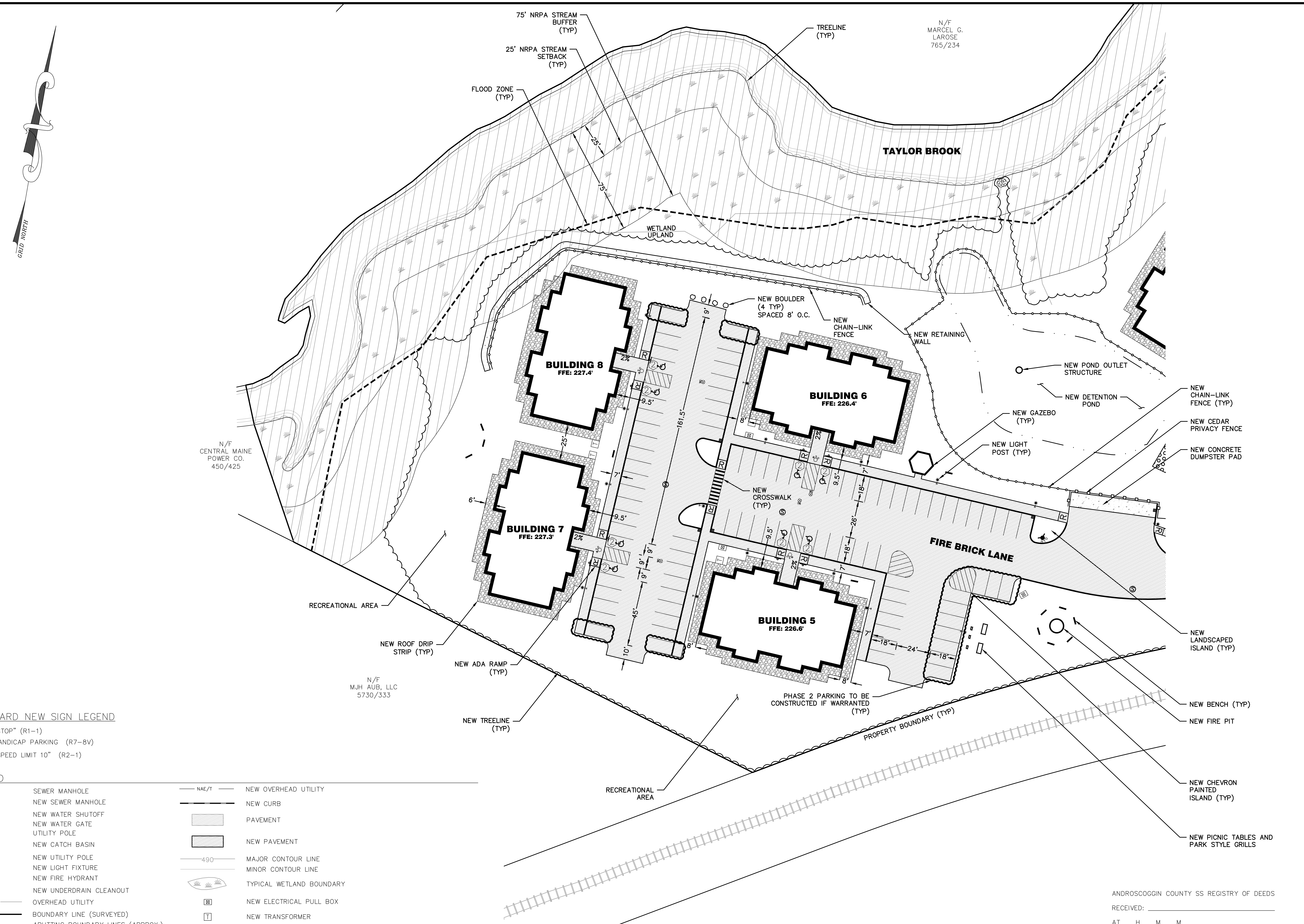
PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025–02–19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

SITE LAYOUT PLAN BUILDINGS 1–4

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19
RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C2.1
MLDC NO. 21–342 3 OF 14


GRID NORTH
75' NRPA STREAM BUFFER (TYP)
25' NRPA STREAM SETBACK (TYP)
FLOOD ZONE (TYP)
TREELINE (TYP)
N/F MARCEL G. LAROSE 765/234
TAYLOR BROOK
25'
75'
WETLAND
UPLAND
NEW BOULDER (4 TYP) SPACED 8' O.C.
NEW CHAIN-LINK FENCE
NEW RETAINING WALL
NEW POND OUTLET STRUCTURE
NEW DETENTION POND
NEW CHAIN-LINK FENCE (TYP)
NEW CEDAR PRIVACY FENCE
NEW CONCRETE DUMPSTER PAD
NEW GAZEBO (TYP)
NEW LIGHT POST (TYP)
BUILDING 8
FFE: 227.4'
BUILDING 6
FFE: 226.4'
BUILDING 7
FFE: 227.3'
BUILDING 5
FFE: 226.6'
FIRE BRICK LANE
NEW CROSSWALK (TYP)
N/F CENTRAL MAINE POWER CO. 450/425
161.5'
9'
9.5'
25'
7'
6'
2%
8'
18'
26'
24'
45'
10'
RECREATIONAL AREA
NEW ROOF DRIP STRIP (TYP)
NEW ADA RAMP (TYP)
N/F MJH AUB, LLC 5730/333
NEW TREELINE (TYP)
PHASE 2 PARKING TO BE CONSTRUCTED IF WARRANTED (TYP)
PROPERTY BOUNDARY (TYP)
RECREATIONAL AREA
NEW LANDSCAPED ISLAND (TYP)
NEW BENCH (TYP)
NEW FIRE PIT
NEW CHEVRON PAINTED ISLAND (TYP)
NEW PICNIC TABLES AND PARK STYLE GRILLS

STANDARD NEW SIGN LEGEND

①	"STOP" (R1-1)
②	HANDICAP PARKING (R7-8V)
③	"SPEED LIMIT 10" (R2-1)

LEGEND

Ⓢ	SEWER MANHOLE	—NAE/T—	NEW OVERHEAD UTILITY
Ⓢ	NEW SEWER MANHOLE	━━	NEW CURB
	NEW WATER SHUTOFF	░	PAVEMENT
	NEW WATER GATE	▨	NEW PAVEMENT
	UTILITY POLE	—490—	MAJOR CONTOUR LINE
■	NEW CATCH BASIN		MINOR CONTOUR LINE
	NEW UTILITY POLE		TYPICAL WETLAND BOUNDARY
◀	NEW LIGHT FIXTURE	⊠	NEW ELECTRICAL PULL BOX
	NEW FIRE HYDRANT	T	NEW TRANSFORMER
	NEW UNDERDRAIN CLEANOUT		GRAVEL LINE
—OU—	OVERHEAD UTILITY	- - -	FLOOD BOUNDARY
	BOUNDARY LINE (SURVEYED)		PHASE 2 PARKING AREA
	ABUTTING BOUNDARY LINES (APPROX.)	—x—x—x—x—	WIRE FENCE
	GUARDRAIL		
	NEW GUARDRAIL		
	SEWER EASEMENT		
	NEW CHAIN-LINK FENCE		
	NEW CEDAR PRIVACY FENCE		

ANDROSCOGGIN COUNTY SS REGISTRY OF DEEDS

RECEIVED: ____________________

AT ___ H ___ M ___ M ___

RECORDED IN PLAN BOOK _____, PAGE _______

ATTEST: ____________________

REGISTER

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DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:

30 0 15 30

(IN FEET)

1 INCH = 30 FT

SUBMISSION NOTES:

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SUBMISSION 2: 2022-03-28 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022-03-31 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 4: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 6: 2022-05-04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 9: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

SITE LAYOUT PLAN BUILDINGS 5-8

SEAL:

RICHARD W. DUNTON No. 12485

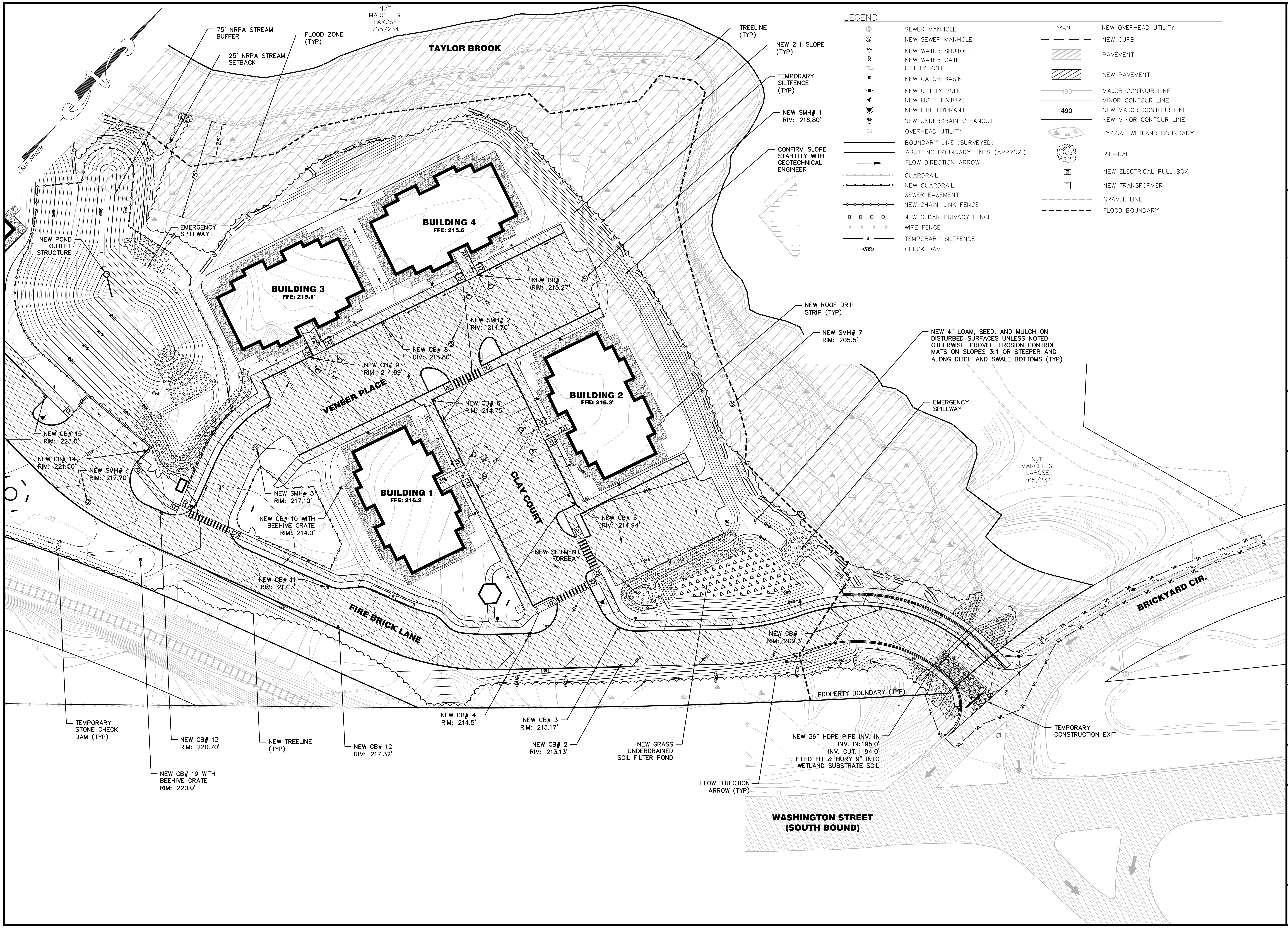
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

C2.2

MLDC NO. 21-342 4 OF 14


GRID NORTH
N/F
MARCEL G.
LAROSE
765/234
TAYLOR BROOK
75' NRPA STREAM BUFFER
25' NRPA STREAM SETBACK
FLOOD ZONE (TYP)
25'
75'
TREELINE (TYP)
NEW 2:1 SLOPE (TYP)
TEMPORARY SILTFENCE (TYP)
NEW SMH# 1 RIM: 216.80'
CONFIRM SLOPE STABILITY WITH GEOTECHNICAL ENGINEER
EMERGENCY SPILLWAY
NEW POND OUTLET STRUCTURE
BUILDING 4
FFE: 215.6'
BUILDING 3
FFE: 215.1'
BUILDING 2
FFE: 216.3'
BUILDING 1
FFE: 216.2'
VENEER PLACE
CLAY COURT
FIRE BRICK LANE
BRICKYARD CIR.
WASHINGTON STREET (SOUTH BOUND)
NEW CB# 7 RIM: 215.27'
NEW SMH# 2 RIM: 214.70'
NEW CB# 8 RIM: 213.80'
NEW CB# 9 RIM: 214.89'
NEW CB# 6 RIM: 214.75'
NEW CB# 5 RIM: 214.94'
NEW ROOF DRIP STRIP (TYP)
NEW SMH# 7 RIM: 205.5'
NEW 4" LOAM, SEED, AND MULCH ON DISTURBED SURFACES UNLESS NOTED OTHERWISE. PROVIDE EROSION CONTROL MATS ON SLOPES 3:1 OR STEEPER AND ALONG DITCH AND SWALE BOTTOMS (TYP)
EMERGENCY SPILLWAY
N/F
MARCEL G.
LAROSE
765/234
NEW CB# 15 RIM: 223.0'
NEW CB# 14 RIM: 221.50'
NEW SMH# 4 RIM: 217.70'
NEW SMH# 3 RIM: 217.10'
NEW CB# 10 WITH BEEHIVE GRATE RIM: 214.0'
NEW SEDIMENT FOREBAY
NEW CB# 11 RIM: 217.7'
NEW CB# 1 RIM: 209.3'
PROPERTY BOUNDARY (TYP)
TEMPORARY CONSTRUCTION EXIT
TEMPORARY STONE CHECK DAM (TYP)
NEW CB# 13 RIM: 220.70'
NEW CB# 19 WITH BEEHIVE GRATE RIM: 220.0'
NEW TREELINE (TYP)
NEW CB# 12 RIM: 217.32'
NEW CB# 4 RIM: 214.5'
NEW CB# 3 RIM: 213.17'
NEW CB# 2 RIM: 213.13'
NEW GRASS UNDERDRAINED SOIL FILTER POND
FLOW DIRECTION ARROW (TYP)
NEW 36" HDPE PIPE INV. IN
INV. IN:195.0'
INV. OUT: 194.0'
FILED FIT & BURY 9" INTO WETLAND SUBSTRATE SOIL
2%
R
T
SF
NAE/T
WL
OU
S
200
195
205
210
212
213
214
215
220
222
230

LEGEND

Ⓢ	SEWER MANHOLE	— NAE/T —	NEW OVERHEAD UTILITY
Ⓢ	NEW SEWER MANHOLE	— — — —	NEW CURB
	NEW WATER SHUTOFF	▨	PAVEMENT
⊗	NEW WATER GATE	▨	NEW PAVEMENT
	UTILITY POLE	— 490 —	MAJOR CONTOUR LINE
■	NEW CATCH BASIN	——	MINOR CONTOUR LINE
	NEW UTILITY POLE	— 490 —	NEW MAJOR CONTOUR LINE
◀	NEW LIGHT FIXTURE	——	NEW MINOR CONTOUR LINE
	NEW FIRE HYDRANT		TYPICAL WETLAND BOUNDARY
	NEW UNDERDRAIN CLEANOUT		RIP-RAP
— OU —	OVERHEAD UTILITY	⊠	NEW ELECTRICAL PULL BOX
——	BOUNDARY LINE (SURVEYED)	T	NEW TRANSFORMER
——	ABUTTING BOUNDARY LINES (APPROX.)	- - - - - -	GRAVEL LINE
→	FLOW DIRECTION ARROW	▬ ▬ ▬ ▬	FLOOD BOUNDARY
·—·—·—·	GUARDRAIL		
·—·—·—·	NEW GUARDRAIL		
— · — · —	SEWER EASEMENT		
—o—o—o—	NEW CHAIN-LINK FENCE		
—□—□—□—	NEW CEDAR PRIVACY FENCE		
— X — X — X —	WIRE FENCE		
— SF —	TEMPORARY SILTFENCE		
	CHECK DAM		

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

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PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
30 0 15 30
(IN FEET)
1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2022-03-18 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022-03-28 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022-03-31 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 4: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022-05-04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022-06-28 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 9: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

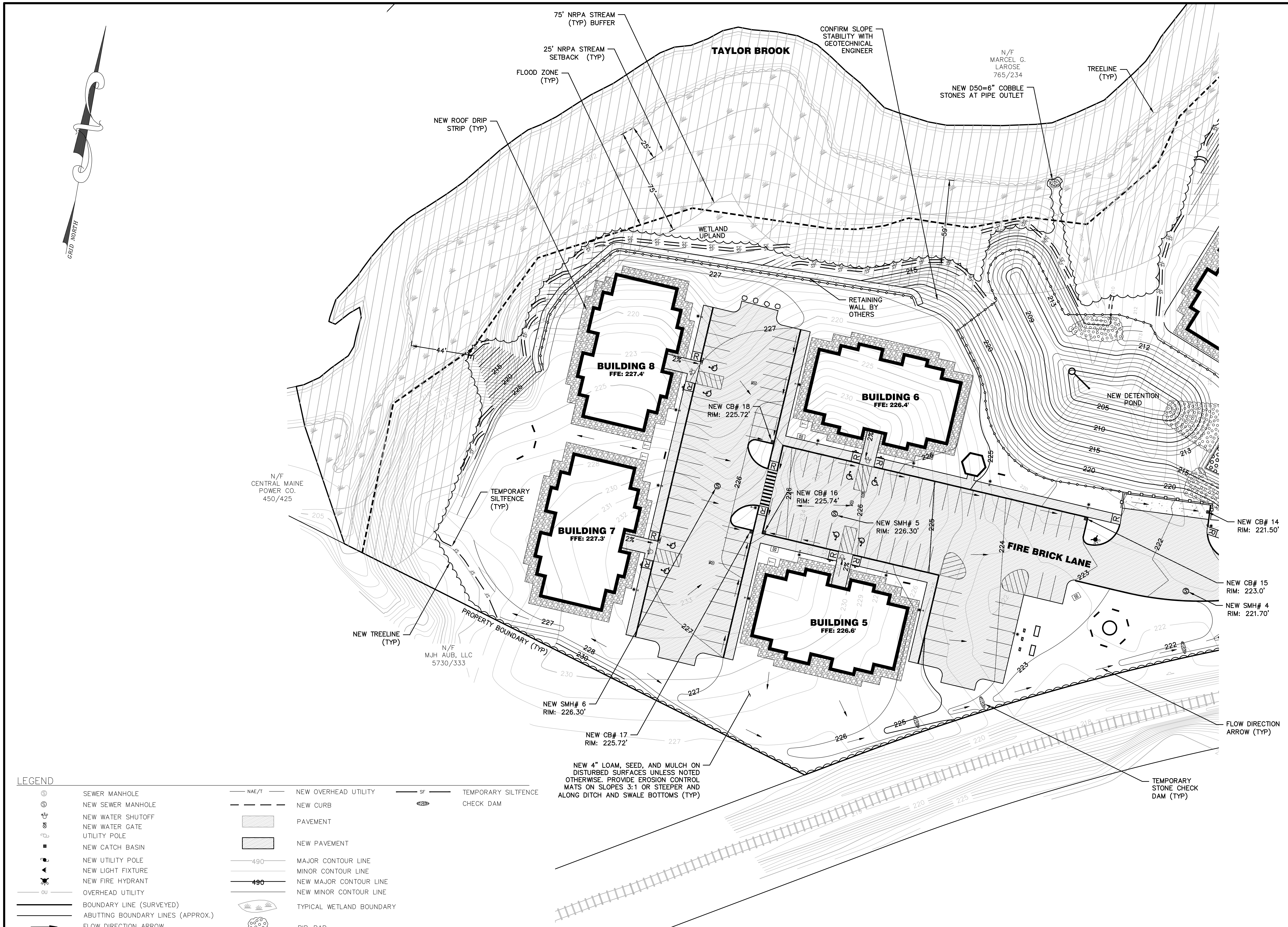
SITE GRADING PLAN BUILDINGS 1-4

SEAL:
RICHARD W. DUNTON
No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C3.1

MLDC NO. 21-342 5 OF 14


GRID NORTH
75' NRPA STREAM (TYP) BUFFER
25' NRPA STREAM SETBACK (TYP)
FLOOD ZONE (TYP)
NEW ROOF DRIP STRIP (TYP)
TAYLOR BROOK
CONFIRM SLOPE STABILITY WITH GEOTECHNICAL ENGINEER
N/F MARCEL G. LAROSE 765/234
NEW D50=6" COBBLE STONES AT PIPE OUTLET
TREELINE (TYP)
25'
75'
59'
44'
WETLAND
UPLAND
RETAINING WALL BY OTHERS
BUILDING 8
FFE: 227.4'
BUILDING 6
FFE: 226.4'
BUILDING 7
FFE: 227.3'
BUILDING 5
FFE: 226.6'
NEW DETENTION POND
NEW CB# 18 RIM: 225.72'
NEW CB# 16 RIM: 225.74'
NEW SMH# 5 RIM: 226.30'
NEW CB# 14 RIM: 221.50'
NEW CB# 15 RIM: 223.0'
NEW SMH# 4 RIM: 221.70'
FIRE BRICK LANE
N/F CENTRAL MAINE POWER CO. 450/425
TEMPORARY SILTFENCE (TYP)
NEW TREELINE (TYP)
N/F MJH AUB, LLC 5730/333
PROPERTY BOUNDARY (TYP)
NEW SMH# 6 RIM: 226.30'
NEW CB# 17 RIM: 225.72'
NEW 4" LOAM, SEED, AND MULCH ON DISTURBED SURFACES UNLESS NOTED OTHERWISE. PROVIDE EROSION CONTROL MATS ON SLOPES 3:1 OR STEEPER AND ALONG DITCH AND SWALE BOTTOMS (TYP)
FLOW DIRECTION ARROW (TYP)
TEMPORARY STONE CHECK DAM (TYP)
R
2%
209
205
210
212
213
215
220
222
223
224
225
226
227
228
229
230

LEGEND

Ⓢ	SEWER MANHOLE	— NAE/T —	NEW OVERHEAD UTILITY	— SF —	TEMPORARY SILTFENCE
Ⓢ	NEW SEWER MANHOLE	— — — —	NEW CURB		CHECK DAM
	NEW WATER SHUTOFF	▨	PAVEMENT		
⊗	NEW WATER GATE	▨	NEW PAVEMENT		
	UTILITY POLE	—490—	MAJOR CONTOUR LINE		
■	NEW CATCH BASIN	———	MINOR CONTOUR LINE		
	NEW UTILITY POLE	—490—	NEW MAJOR CONTOUR LINE		
	NEW LIGHT FIXTURE	———	NEW MINOR CONTOUR LINE		
	NEW FIRE HYDRANT		TYPICAL WETLAND BOUNDARY		
— OU —	OVERHEAD UTILITY		RIP-RAP		
———	BOUNDARY LINE (SURVEYED)	⊠	NEW ELECTRICAL PULL BOX		
———	ABUTTING BOUNDARY LINES (APPROX.)	T	NEW TRANSFORMER		
——►	FLOW DIRECTION ARROW	- - - - - - -	GRAVEL LINE		
·—•—•—•—	GUARDRAIL	▬ ▬ ▬ ▬	FLOOD BOUNDARY		
·—•—•—•—	NEW GUARDRAIL				
— · — · —	SEWER EASEMENT				
—o—o—o—	NEW CHAIN-LINK FENCE				
—□—□—□—	NEW CEDAR PRIVACY FENCE				
—x—x—x—x—	WIRE FENCE				

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ISSUED FOR REVIEW.

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ISSUED FOR REVIEW.

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ISSUED FOR PERMITTING.

SUBMISSION 9: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 10: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	10
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

SITE GRADING PLAN BUILDINGS 5-8

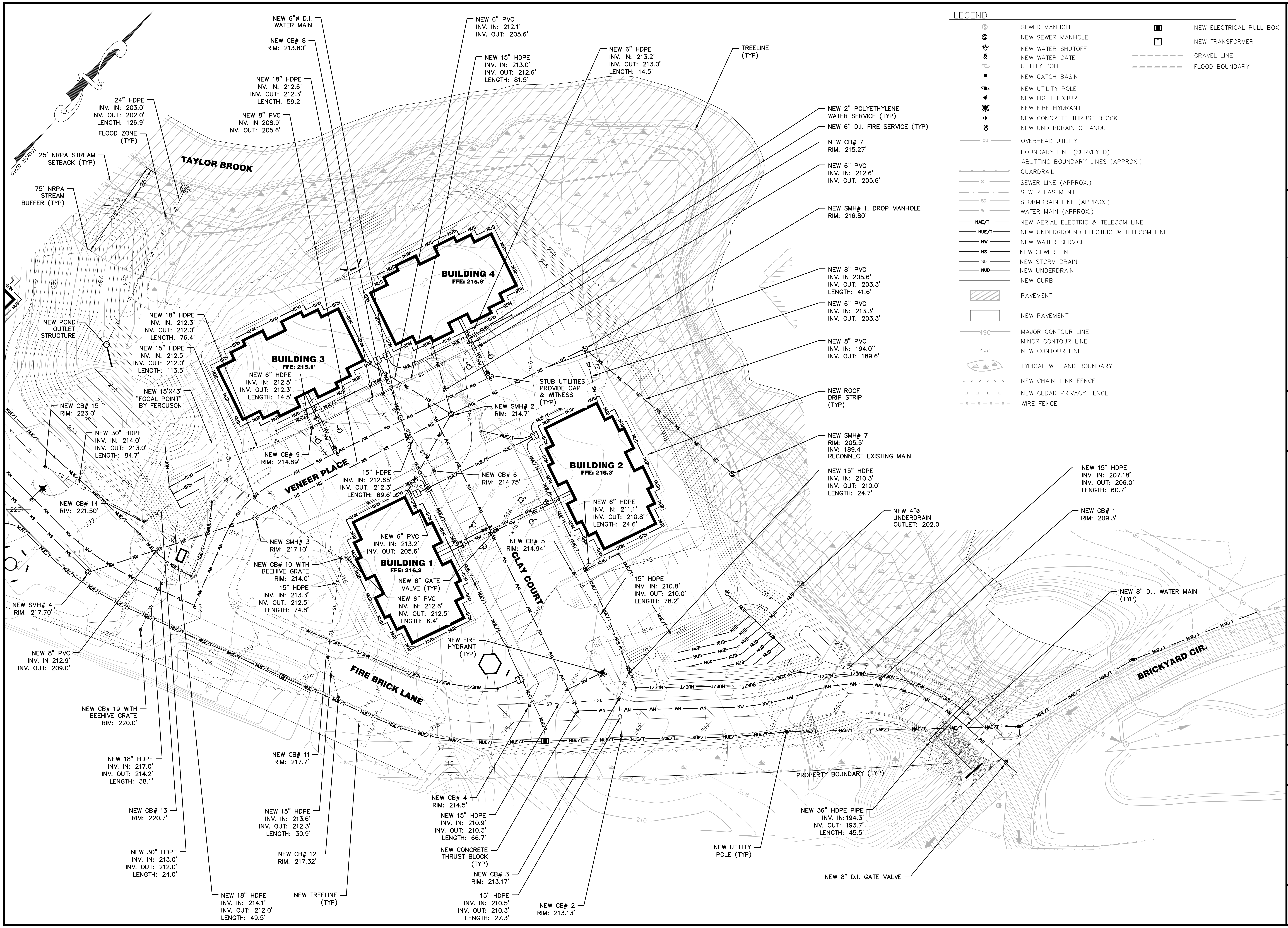
SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

C3.2

MLDC NO. 21-342 6 OF 14


GRID NORTH
TAYLOR BROOK
NEW 6"ø D.I. WATER MAIN
NEW CB# 8 RIM: 213.80'
NEW 6" PVC INV. IN: 212.1' INV. OUT: 205.6'
NEW 15" HDPE INV. IN: 213.0' INV. OUT: 212.6' LENGTH: 81.5'
NEW 6" HDPE INV. IN: 213.2' INV. OUT: 213.0' LENGTH: 14.5'
TREELINE (TYP)
NEW 18" HDPE INV. IN: 212.6' INV. OUT: 212.3' LENGTH: 59.2'
NEW 8" PVC INV. IN 208.9' INV. OUT: 205.6'
24" HDPE INV. IN: 203.0' INV. OUT: 202.0' LENGTH: 126.9'
FLOOD ZONE (TYP)
25' NRPA STREAM SETBACK (TYP)
75' NRPA STREAM BUFFER (TYP)
NEW 2" POLYETHYLENE WATER SERVICE (TYP)
NEW 6" D.I. FIRE SERVICE (TYP)
NEW CB# 7 RIM: 215.27'
NEW 6" PVC INV. IN: 212.6' INV. OUT: 205.6'
NEW SMH# 1, DROP MANHOLE RIM: 216.80'
BUILDING 4 FFE: 215.6'
BUILDING 3 FFE: 215.1'
BUILDING 2 FFE: 216.3'
BUILDING 1 FFE: 216.2'
NEW POND OUTLET STRUCTURE
NEW 18" HDPE INV. IN: 212.3' INV. OUT: 212.0' LENGTH: 76.4'
NEW 15" HDPE INV. IN: 212.5' INV. OUT: 212.0' LENGTH: 113.5'
NEW 6" HDPE INV. IN: 212.5' INV. OUT: 212.3' LENGTH: 14.5'
NEW 15'X43' "FOCAL POINT" BY FERGUSON
NEW CB# 15 RIM: 223.0'
NEW 30" HDPE INV. IN: 214.0' INV. OUT: 213.0' LENGTH: 84.7'
NEW CB# 9 RIM: 214.89'
STUB UTILITIES PROVIDE CAP & WITNESS (TYP)
NEW SMH# 2 RIM: 214.7'
NEW 8" PVC INV. IN 205.6' INV. OUT: 203.3' LENGTH: 41.6'
NEW 6" PVC INV. IN: 213.3' INV. OUT: 203.3'
NEW 8" PVC INV. IN: 194.0" INV. OUT: 189.6'
NEW ROOF DRIP STRIP (TYP)
NEW SMH# 7 RIM: 205.5' INV: 189.4 RECONNECT EXISTING MAIN
NEW 15" HDPE INV. IN: 210.3' INV. OUT: 210.0' LENGTH: 24.7'
VENEER PLACE
15" HDPE INV. IN: 212.65' INV. OUT: 212.3' LENGTH: 69.6'
NEW CB# 6 RIM: 214.75'
NEW 6" HDPE INV. IN: 211.1' INV. OUT: 210.8' LENGTH: 24.6'
NEW CB# 14 RIM: 221.50'
NEW SMH# 3 RIM: 217.10'
NEW 6" PVC INV. IN: 213.2' INV. OUT: 205.6'
NEW CB# 5 RIM: 214.94'
CLAY COURT
NEW 4"ø UNDERDRAIN OUTLET: 202.0
NEW 15" HDPE INV. IN: 207.18' INV. OUT: 206.0' LENGTH: 60.7'
NEW CB# 1 RIM: 209.3'
NEW CB# 10 WITH BEEHIVE GRATE RIM: 214.0'
15" HDPE INV. IN: 213.3' INV. OUT: 212.5' LENGTH: 74.8'
NEW 6" GATE VALVE (TYP)
NEW 6" PVC INV. IN: 212.6' INV. OUT: 212.5' LENGTH: 6.4'
15" HDPE INV. IN: 210.8' INV. OUT: 210.0' LENGTH: 78.2'
NEW SMH# 4 RIM: 217.70'
NEW 8" D.I. WATER MAIN (TYP)
NEW 8" PVC INV. IN 212.9' INV. OUT: 209.0'
NEW FIRE HYDRANT (TYP)
FIRE BRICK LANE
BRICKYARD CIR.
NEW CB# 19 WITH BEEHIVE GRATE RIM: 220.0'
NEW 18" HDPE INV. IN: 217.0' INV. OUT: 214.2' LENGTH: 38.1'
NEW CB# 11 RIM: 217.7'
PROPERTY BOUNDARY (TYP)
NEW CB# 13 RIM: 220.7'
NEW 15" HDPE INV. IN: 213.6' INV. OUT: 212.3' LENGTH: 30.9'
NEW CB# 4 RIM: 214.5'
NEW 15" HDPE INV. IN: 210.9' INV. OUT: 210.3' LENGTH: 66.7'
NEW 36" HDPE PIPE INV. IN:194.3' INV. OUT: 193.7' LENGTH: 45.5'
NEW 30" HDPE INV. IN: 213.0' INV. OUT: 212.0' LENGTH: 24.0'
NEW CB# 12 RIM: 217.32'
NEW CONCRETE THRUST BLOCK (TYP)
NEW UTILITY POLE (TYP)
NEW CB# 3 RIM: 213.17'
NEW 8" D.I. GATE VALVE
NEW 18" HDPE INV. IN: 214.1' INV. OUT: 212.0' LENGTH: 49.5'
NEW TREELINE (TYP)
15" HDPE INV. IN: 210.5' INV. OUT: 210.3' LENGTH: 27.3'
NEW CB# 2 RIM: 213.13'

LEGEND

Ⓢ	SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
	NEW WATER SHUTOFF
	NEW WATER GATE
	UTILITY POLE
■	NEW CATCH BASIN
	NEW UTILITY POLE
◀	NEW LIGHT FIXTURE
	NEW FIRE HYDRANT
	NEW CONCRETE THRUST BLOCK
	NEW UNDERDRAIN CLEANOUT
OU	OVERHEAD UTILITY
	BOUNDARY LINE (SURVEYED)
	ABUTTING BOUNDARY LINES (APPROX.)
	GUARDRAIL
S	SEWER LINE (APPROX.)
	SEWER EASEMENT
SD	STORMDRAIN LINE (APPROX.)
W	WATER MAIN (APPROX.)
NAE/T	NEW AERIAL ELECTRIC & TELECOM LINE
NUE/T	NEW UNDERGROUND ELECTRIC & TELECOM LINE
NW	NEW WATER SERVICE
NS	NEW SEWER LINE
SD	NEW STORM DRAIN
NUD	NEW UNDERDRAIN
	NEW CURB
▨	PAVEMENT
☐	NEW PAVEMENT
490	MAJOR CONTOUR LINE
	MINOR CONTOUR LINE
490	NEW CONTOUR LINE
	TYPICAL WETLAND BOUNDARY
	NEW CHAIN-LINK FENCE
	NEW CEDAR PRIVACY FENCE
—X—X—X—	WIRE FENCE
⊠	NEW ELECTRICAL PULL BOX
T	NEW TRANSFORMER
	GRAVEL LINE
	FLOOD BOUNDARY

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DEVELOPMENT CONSULTANTS, INC.

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PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

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LEWISTON, MAINE 04241

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ISSUED FOR 75% REVIEW.

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ISSUED FOR REVIEW.

SUBMISSION 4: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022-05-04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022-06-28 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 9: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

SITE UTILITIES PLAN BUILDINGS 1-4

SEAL:

RICHARD W. DUNTON No. 12485

2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

C4.1

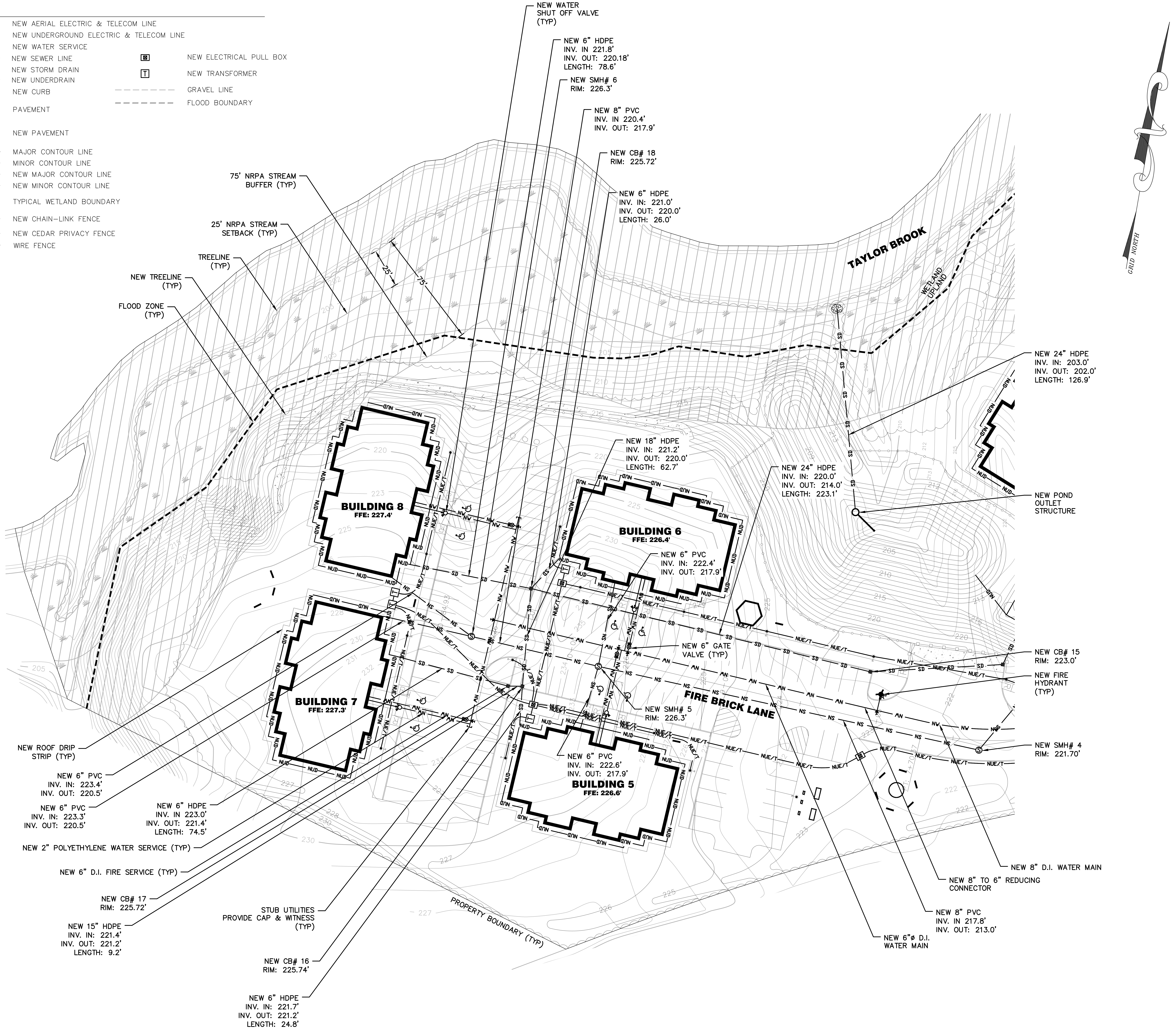
MLDC NO. 21-342 7 OF 14

LEGEND

- SEWER MANHOLE
- NEW SEWER MANHOLE
- NEW WATER SHUTOFF
- NEW WATER GATE
- UTILITY POLE
- NEW CATCH BASIN
- NEW UTILITY POLE
- NEW LIGHT FIXTURE
- NEW FIRE HYDRANT
- NEW CONCRETE THRUST BLOCK
- OU OVERHEAD UTILITY
- BOUNDARY LINE (SURVEYED)
- ABUTTING BOUNDARY LINES (APPROX.)
- GUARDRAIL
- S SEWER LINE (APPROX.)
- SEWER EASEMENT
- SD STORMDRAIN LINE (APPROX.)
- W WATER MAIN (APPROX.)

- NAE/T NEW AERIAL ELECTRIC & TELECOM LINE
- NUE/T NEW UNDERGROUND ELECTRIC & TELECOM LINE
- NW NEW WATER SERVICE
- NS NEW SEWER LINE
- SD NEW STORM DRAIN
- NUD NEW UNDERDRAIN
- NEW CURB
- PAVEMENT
- NEW PAVEMENT
- 490 MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- 490 NEW MAJOR CONTOUR LINE
- NEW MINOR CONTOUR LINE
- TYPICAL WETLAND BOUNDARY
- NEW CHAIN-LINK FENCE
- NEW CEDAR PRIVACY FENCE
- X WIRE FENCE

- ⊠ NEW ELECTRICAL PULL BOX
- T NEW TRANSFORMER
- GRAVEL LINE
- FLOOD BOUNDARY


NEW WATER
SHUT OFF VALVE
(TYP)
NEW 6" HDPE
INV. IN 221.8'
INV. OUT: 220.18'
LENGTH: 78.6'
NEW SMH# 6
RIM: 226.3'
NEW 8" PVC
INV. IN 220.4'
INV. OUT: 217.9'
NEW CB# 18
RIM: 225.72'
NEW 6" HDPE
INV. IN: 221.0'
INV. OUT: 220.0'
LENGTH: 26.0'
75' NRPA STREAM
BUFFER (TYP)
25' NRPA STREAM
SETBACK (TYP)
TREELINE
(TYP)
NEW TREELINE
(TYP)
FLOOD ZONE
(TYP)
25'
75'
TAYLOR BROOK
WETLAND
UPLAND
GRID NORTH
NEW 24" HDPE
INV. IN: 203.0'
INV. OUT: 202.0'
LENGTH: 126.9'
NEW 18" HDPE
INV. IN: 221.2'
INV. OUT: 220.0'
LENGTH: 62.7'
NEW 24" HDPE
INV. IN: 220.0'
INV. OUT: 214.0'
LENGTH: 223.1'
NEW POND
OUTLET
STRUCTURE
BUILDING 8
FFE: 227.4'
BUILDING 6
FFE: 226.4'
NEW 6" PVC
INV. IN: 222.4'
INV. OUT: 217.9'
NEW 6" GATE
VALVE (TYP)
NEW CB# 15
RIM: 223.0'
NEW FIRE
HYDRANT
(TYP)
BUILDING 7
FFE: 227.3'
FIRE BRICK LANE
NEW SMH# 5
RIM: 226.3'
NEW SMH# 4
RIM: 221.70'
NEW 6" PVC
INV. IN: 222.6'
INV. OUT: 217.9'
BUILDING 5
FFE: 226.6'
NEW ROOF DRIP
STRIP (TYP)
NEW 6" PVC
INV. IN: 223.4'
INV. OUT: 220.5'
NEW 6" PVC
INV. IN: 223.3'
INV. OUT: 220.5'
NEW 6" HDPE
INV. IN 223.0'
INV. OUT: 221.4'
LENGTH: 74.5'
NEW 2" POLYETHYLENE WATER SERVICE (TYP)
NEW 6" D.I. FIRE SERVICE (TYP)
NEW CB# 17
RIM: 225.72'
STUB UTILITIES
PROVIDE CAP & WITNESS
(TYP)
NEW 15" HDPE
INV. IN: 221.4'
INV. OUT: 221.2'
LENGTH: 9.2'
PROPERTY BOUNDARY (TYP)
NEW CB# 16
RIM: 225.74'
NEW 6" HDPE
INV. IN: 221.7'
INV. OUT: 221.2'
LENGTH: 24.8'
NEW 8" D.I. WATER MAIN
NEW 8" TO 6" REDUCING
CONNECTOR
NEW 8" PVC
INV. IN 217.8'
INV. OUT: 213.0'
NEW 6"ø D.I.
WATER MAIN

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ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 4: 2022-05-03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022-05-04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022-06-16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022-06-28 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2022-08-11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 9: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

SITE UTILITIES PLAN BUILDINGS 5–8

SEAL:

RICHARD W. DUNTON No. 12485

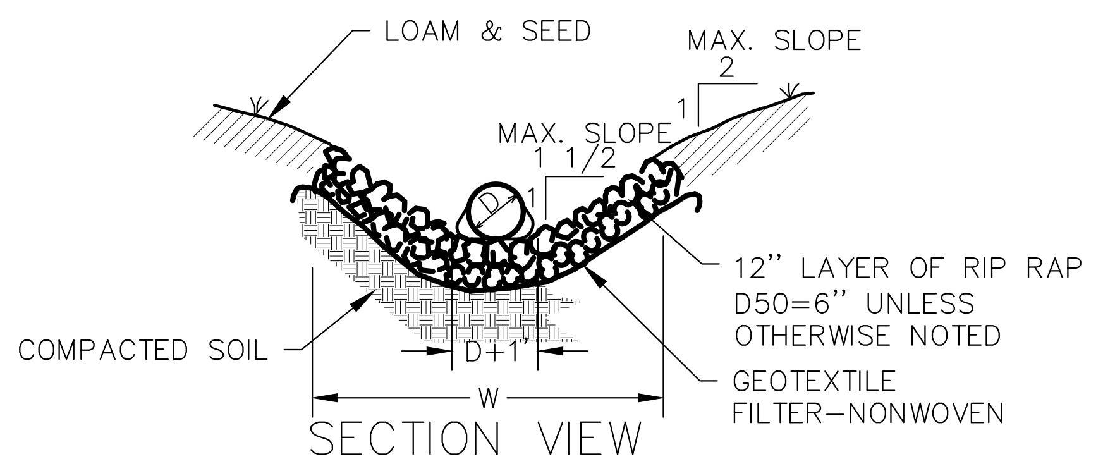
2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

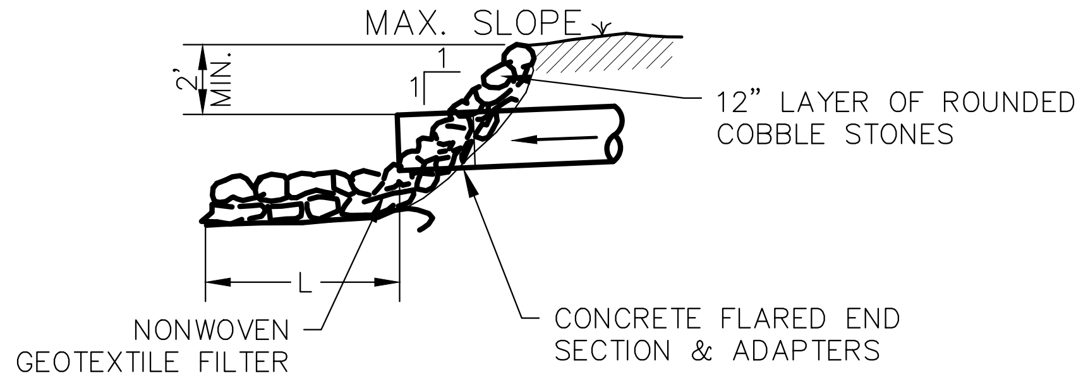
C4.2

MLDC NO. 21-342 8 OF 14


LOAM & SEED
MAX. SLOPE
2
1
MAX. SLOPE
1 1/2
1
12" LAYER OF RIP RAP
D50=6" UNLESS
OTHERWISE NOTED
COMPACTED SOIL
D+1'
W
GEOTEXTILE
FILTER–NONWOVEN

SECTION VIEW

PIPE DIAMETER (IN)	APRON WIDTH W (FT)	APRON LENGTH L (FT)
12	5	10
15	6	12
18	8	15
24	10	20
30	15	30
36	17	35


MAX. SLOPE
1
1
2' MIN.
12" LAYER OF ROUNDED
COBBLE STONES
L
NONWOVEN
GEOTEXTILE FILTER
CONCRETE FLARED END
SECTION & ADAPTERS

PROFILE VIEW

STORM DRAIN OUTET APRON

NOT TO SCALE

B3

TABLE 1
SOIL FILTER MEDIA

Filter Media	Mixture by Volume	Specifications
Coarse Loamy Sand	70%–80%	Required to meet the Sieve Analysis specified in Table 2, below.
Mulch	20%–30%	Moderatley fine, shredded bark or wood fiber mulch with less than 5% passing the #200 sieve
No LESS than 8% passing the #200 sieve. Optimum 12%.		

TABLE 2
COARSE LOAMY SAND SIEVE ANALYSIS SPEC.

Sieve Size	% by Weight
#10	85–100
#20	70–100
#60	15–40
#200	8–15

TABLE 3
MEDOT Specifications for UNDERDRAINS

Sieve Size	% by Weight
Underdrain Type B	
1"	95–100
1/2"	75–100
#4	50–100
#20	15–80
#50	0–15
#200	0–5

GENERAL NOTES

1. AVOID COMPACTING UNDERDRAIN BEDDING AND SOIL FILTER MEDIA DURING CONSTRUCTION. OVER–COMPACTED SOILS WILL NOT ALLOW PROPER WATER MIGRATION THROUGH THE SOIL SECTION; FILTER BEDS ARE INTENDED TO DRAIN DRY WITHIN 24 TO 48 HOURS.

2. SEED FILTER AREA WITH THE SEED MIX SHOWN ON TABLE 4.

3. DO NOT INSTALL AND STABILIZE THE SOIL FILTER MEDIA IN THE BASIN UNTIL AFTER CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED.

UNDERDRAIN BEDDING

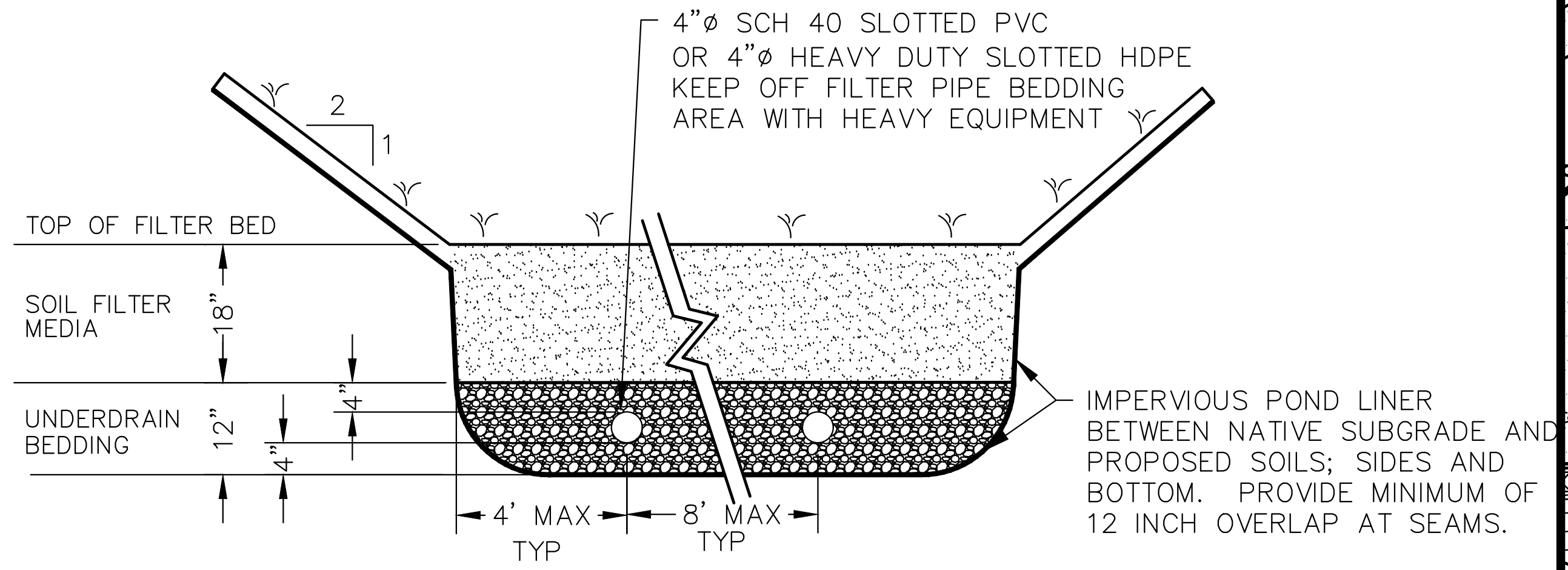
1. UNDERDRAIN GRANULAR MATERIAL SHALL BE WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYP B FOR UNDERDRAIN BACKFILL (SEE TABLE 3).

2. UNDERDRAINS SHALL BE PLACED NO FURTHER THAN 8 FEET APART.

3. UNDERDRAINS SHALL MAINTAIN A MINIMUM OF 1% FOR POSITIVE DRAINAGE.

TABLE 4
CONSERVATION SEED MIX

SPECIES	LBS/1000 SF
CREEPING RED FESCUE	.46
REDTOP	.05
TALL FESCUE	.46
TOTAL	.97


4"ø SCH 40 SLOTTED PVC
OR 4"ø HEAVY DUTY SLOTTED HDPE
KEEP OFF FILTER PIPE BEDDING
AREA WITH HEAVY EQUIPMENT
2
1
TOP OF FILTER BED
SOIL FILTER
MEDIA
18"
UNDERDRAIN
BEDDING
12"
4"
4"
IMPERVIOUS POND LINER
BETWEEN NATIVE SUBGRADE AND
PROPOSED SOILS; SIDES AND
BOTTOM. PROVIDE MINIMUM OF
12 INCH OVERLAP AT SEAMS.
4' MAX
TYP
8' MAX
TYP

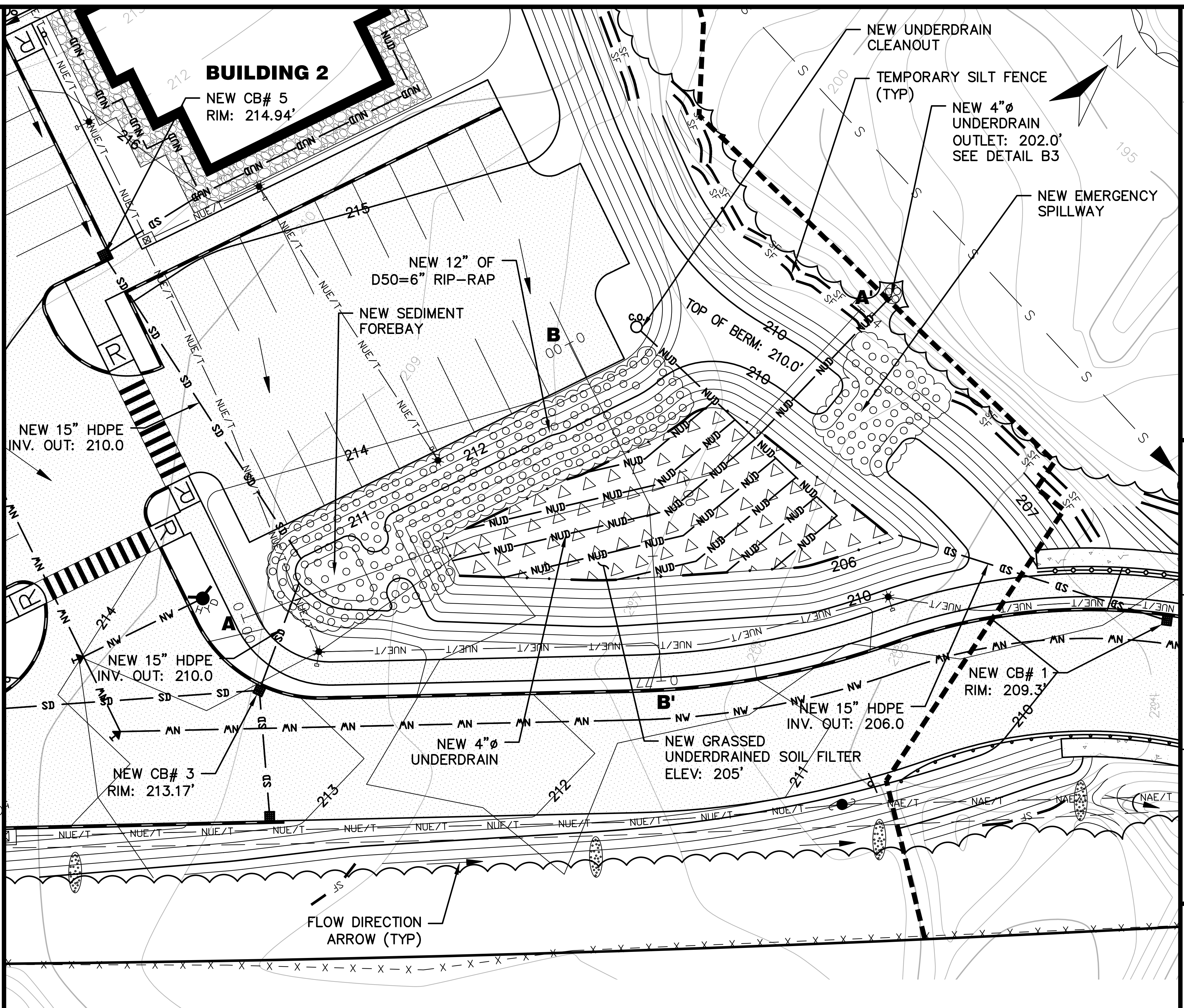
NOTE: MAINE DEP REQUIRES (PER CHAPTER 7.1 OF STORMWATER BMP DESIGN MANUAL), THE INSPECTION OF THE UNDERDRAINED FILTER BY THE DESIGN ENGINEER DURING CONSTRUCTION AT THE STAGES OF GENERAL SHAPE COMPLETED, UNDERDRAIN PIPE IN PLACE BUT NOT COVERED, DRAINAGE MEDIA IN PLACE, AND FINISHED WITH FILTER MEDIA AND SEED IN PLACE. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER 48 HOURS IN ADVANCE OF THE ESTIMATED TIME OF CONSTRUCTION INSPECTION TO ARRANGE AN INSPECTION.

ADDITIONALLY, THE MAINE DEP REQUIRES AN INSPECTION TO BE PERFORMED BY THE DESIGN ENGINEER TO VERIFY THE STRUCTURE'S FUNCTION, ONE YEAR FOLLOWING COMPLETION OF THE STRUCTURE. THE APPLICANT SHALL RETAIN THE SERVICES OF THE DESIGN ENGINEER TO PERFORM THE INSPECTION AND REPORT INSPECTION RESULTS TO THE MAINE DEP.

VEGETATED FILTER BED DETAIL

NOT TO SCALE

B2


BUILDING 2
NEW CB# 5
RIM: 214.94'
NEW UNDERDRAIN
CLEANOUT
TEMPORARY SILT FENCE
(TYP)
NEW 4"ø
UNDERDRAIN
OUTLET: 202.0'
SEE DETAIL B3
NEW EMERGENCY
SPILLWAY
NEW 12" OF
D50=6" RIP–RAP
NEW SEDIMENT
FOREBAY
TOP OF BERM: 210.0'
B
A'
A
B'
NEW 15" HDPE
INV. OUT: 210.0
NEW 15" HDPE
INV. OUT: 210.0
NEW CB# 3
RIM: 213.17'
NEW 4"ø
UNDERDRAIN
NEW GRASSED
UNDERDRAINED SOIL FILTER
ELEV: 205'
NEW 15" HDPE
INV. OUT: 206.0
NEW CB# 1
RIM: 209.3'
FLOW DIRECTION
ARROW (TYP)
215
214
213
212
211
210
207
206
200
195
HYD
C.O.
SD
NUD
NUE/T
NAE/T
NW
MN
SF
S
R

FILTER POND 1 PLAN

SCALE: 1"=20'

B1

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR

JIG INVESTMENTS, LLC

PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:

VARIES

SUBMISSION NOTES:
SUBMISSION 1: 2022–05–03 SDH
ISSUED FOR REVIEW.

SUBMISSION 2: 2022–05–03 SDH
ISSUED FOR REVIEW.

SUBMISSION 3: 2022–05–04 SDH
ISSUED FOR PERMITTING.

SUBMISSION 4: 2022–06–16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 5: 2022–06–28 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022–08–11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2025–02–19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	7
SURVEY DATE:	N/A
SUBMISSION DATE:	2025–02–19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

FILTER POND PLAN AND SECTIONS

SEAL:

RICHARD W. DUNTON No. 12485

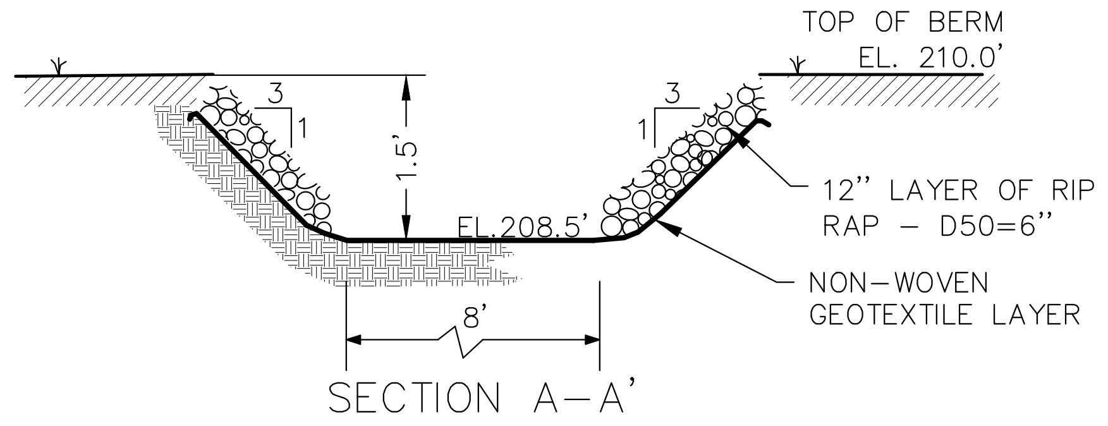
2025-02-19

RICHARD W. DUNTON ME PE #12485

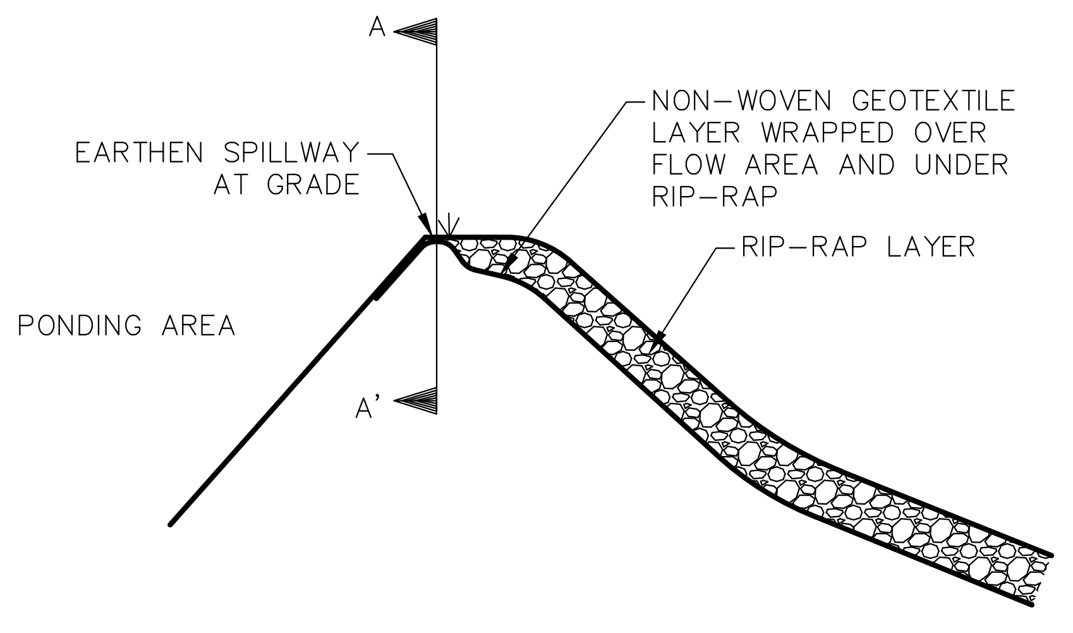
DRAWING NO.

C6.1

MLDC NO. 21–342 9 OF 14


3
1
1.5'
3
1
TOP OF BERM
EL. 210.0'
12" LAYER OF RIP
RAP – D50=6"
EL.208.5'
8'
NON–WOVEN
GEOTEXTILE LAYER

SECTION A–A'

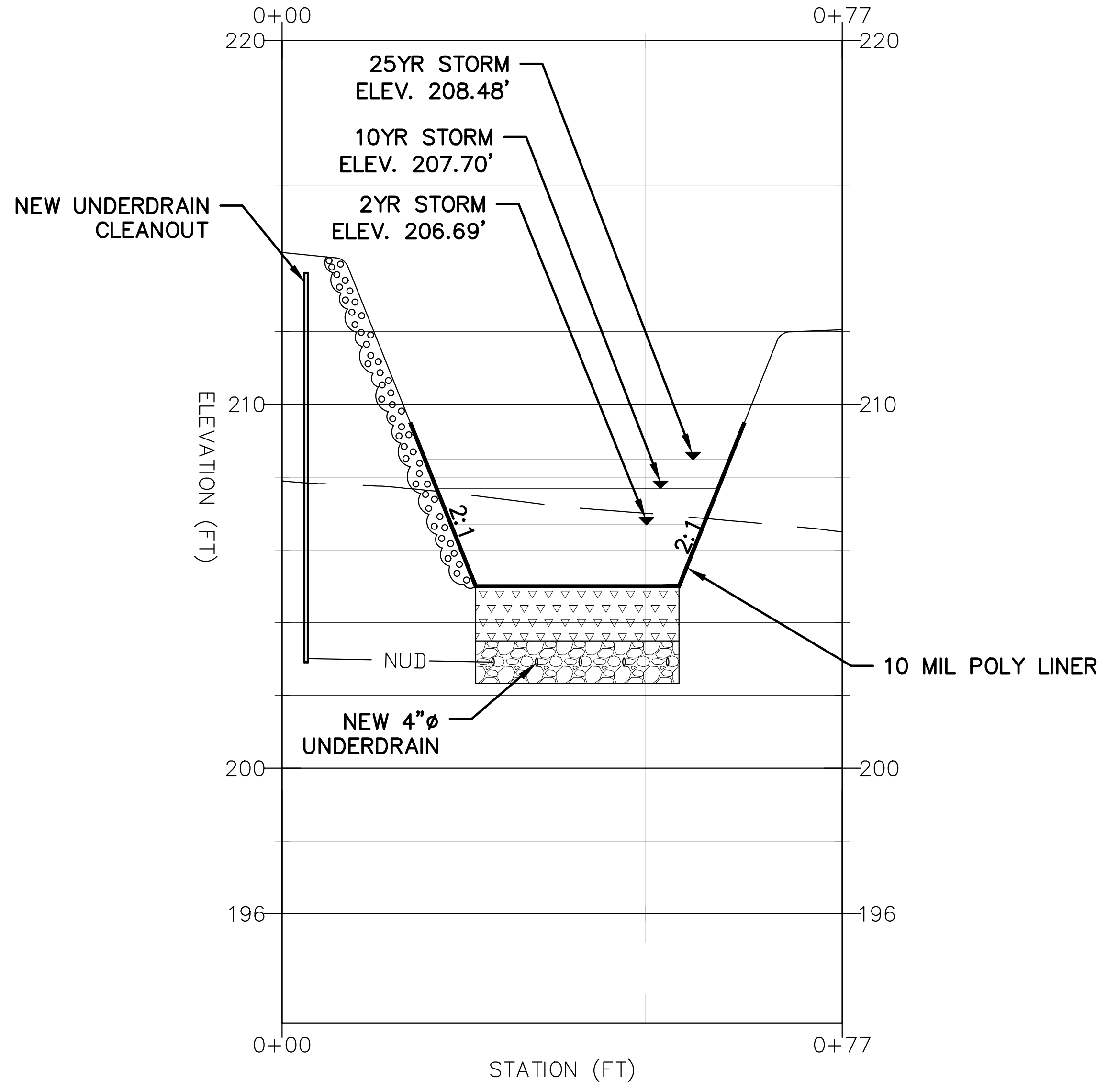

A
A'
EARTHEN SPILLWAY
AT GRADE
NON–WOVEN GEOTEXTILE
LAYER WRAPPED OVER
FLOW AREA AND UNDER
RIP–RAP
RIP–RAP LAYER
PONDING AREA

SPILLWAY PROFILE

PONDING AREA SPILLWAY

NOT TO SCALE

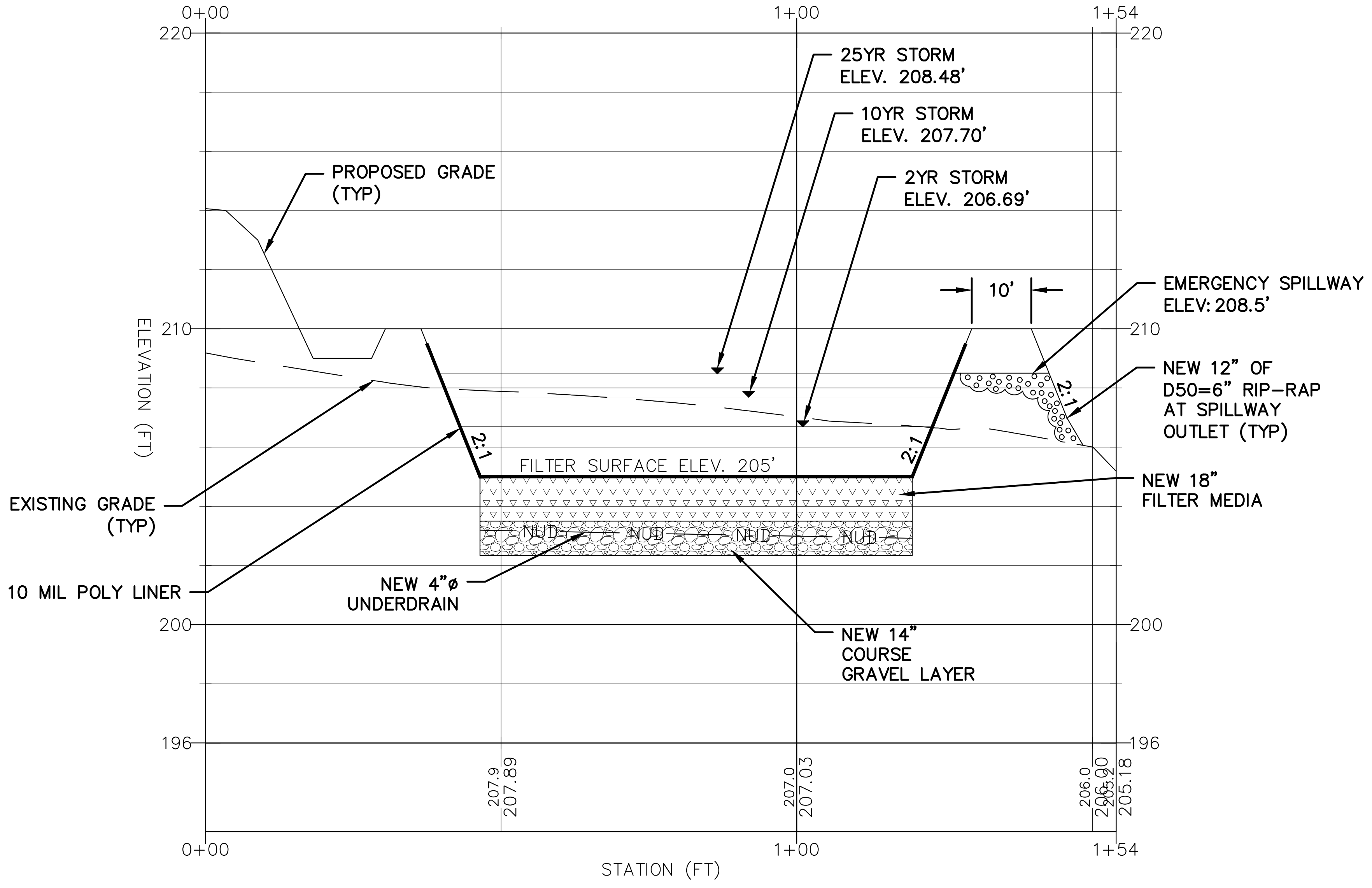
A3


0+00
0+77
220
210
200
196
ELEVATION (FT)
STATION (FT)
25YR STORM
ELEV. 208.48'
10YR STORM
ELEV. 207.70'
2YR STORM
ELEV. 206.69'
NEW UNDERDRAIN
CLEANOUT
2:1
2:1
NUD
NEW 4"ø
UNDERDRAIN
10 MIL POLY LINER

POND 1 SECTION B–B'

SCALE: HORIZONTAL 1"=20', VERTICAL 1"=4'

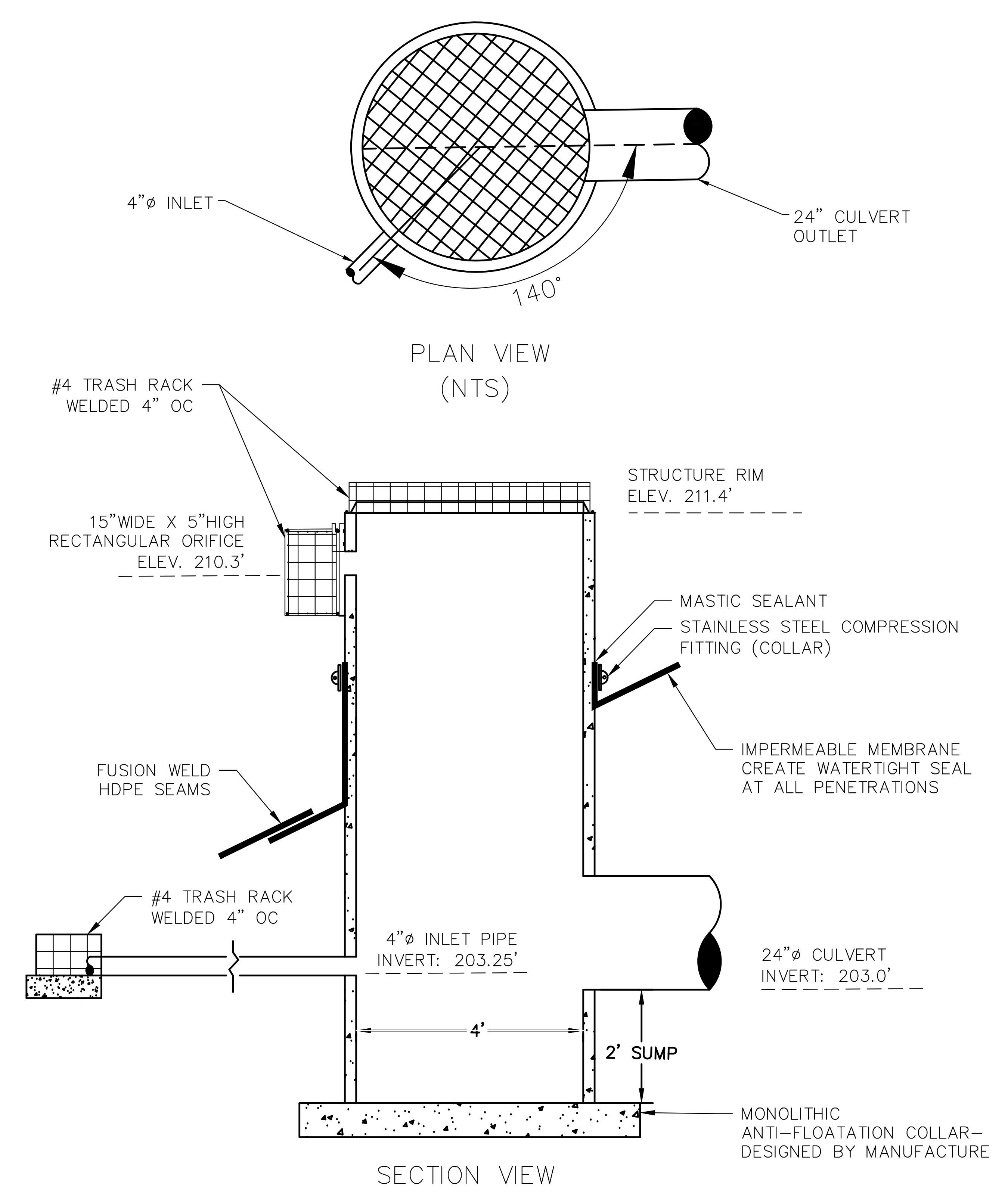
A2


0+00
1+00
1+54
220
210
200
196
ELEVATION (FT)
STATION (FT)
PROPOSED GRADE
(TYP)
25YR STORM
ELEV. 208.48'
10YR STORM
ELEV. 207.70'
2YR STORM
ELEV. 206.69'
10'
EMERGENCY SPILLWAY
ELEV: 208.5'
NEW 12" OF
D50=6" RIP–RAP
AT SPILLWAY
OUTLET (TYP)
NEW 18"
FILTER MEDIA
EXISTING GRADE
(TYP)
10 MIL POLY LINER
NEW 4"ø
UNDERDRAIN
FILTER SURFACE ELEV. 205'
NUD
2:1
2:1
NEW 14"
COURSE
GRAVEL LAYER
207.9
207.89
207.0
207.03
206.0
206.00
205.18

POND 1 SECTION A–A'

SCALE: HORIZONTAL 1"=20', VERTICAL 1"=4'

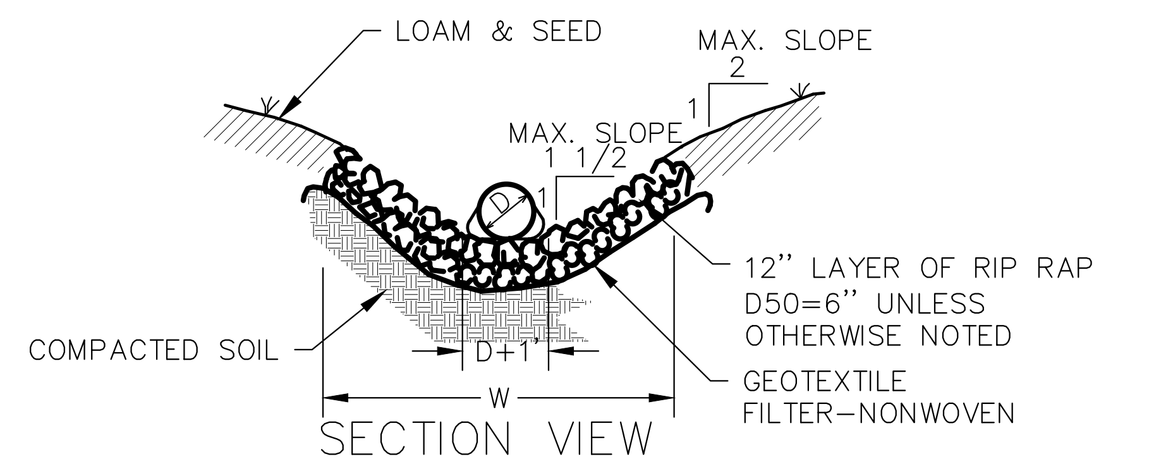
A1


4"ø INLET
24" CULVERT OUTLET
140°
PLAN VIEW
(NTS)
#4 TRASH RACK WELDED 4" OC
STRUCTURE RIM ELEV. 211.4'
15"WIDE X 5"HIGH RECTANGULAR ORIFICE ELEV. 210.3'
MASTIC SEALANT
STAINLESS STEEL COMPRESSION FITTING (COLLAR)
IMPERMEABLE MEMBRANE CREATE WATERTIGHT SEAL AT ALL PENETRATIONS
FUSION WELD HDPE SEAMS
#4 TRASH RACK WELDED 4" OC
4"ø INLET PIPE INVERT: 203.25'
24"ø CULVERT INVERT: 203.0'
4'
2' SUMP
MONOLITHIC ANTI-FLOATATION COLLAR- DESIGNED BY MANUFACTURE
SECTION VIEW

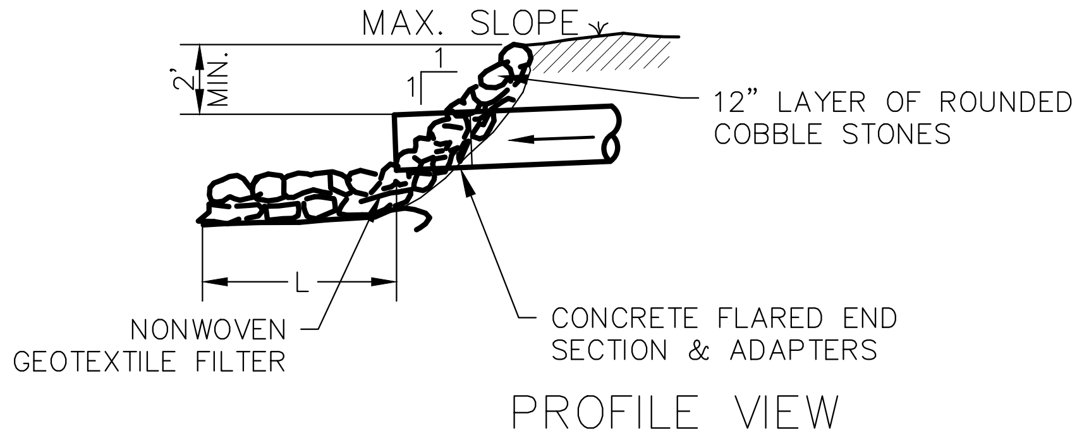
POND OUTLET STRUCTURE

SCALE: 1"=2'

B3


LOAM & SEED
MAX. SLOPE 1 2
MAX. SLOPE 1 1/2
COMPACTED SOIL
D+1'
W
12" LAYER OF RIP RAP D50=6" UNLESS OTHERWISE NOTED
GEOTEXTILE FILTER-NONWOVEN
SECTION VIEW

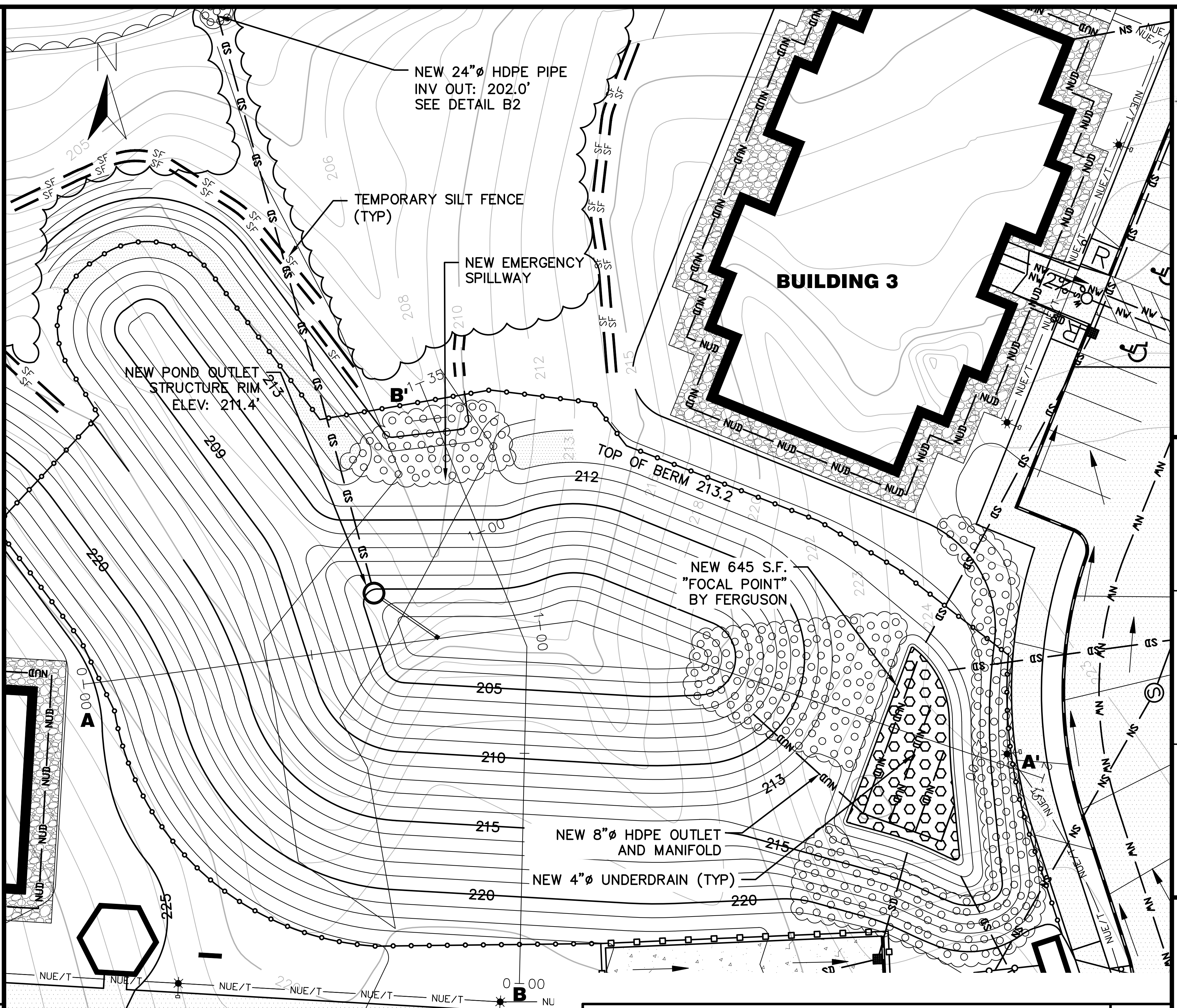
PIPE DIAMETER (IN)	APRON WIDTH W (FT)	APRON LENGTH L (FT)
12	5	10
15	6	12
18	8	15
24	10	20
30	15	30
36	17	35


MAX. SLOPE
1 1
2' MIN.
12" LAYER OF ROUNDED COBBLE STONES
L
NONWOVEN GEOTEXTILE FILTER
CONCRETE FLARED END SECTION & ADAPTERS
PROFILE VIEW

STORM DRAIN OUTET APRON

NOT TO SCALE

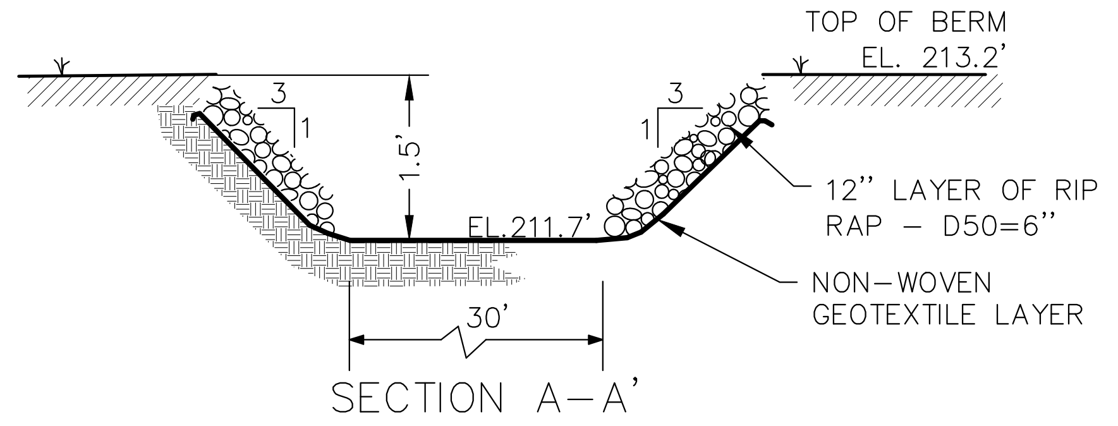
B2

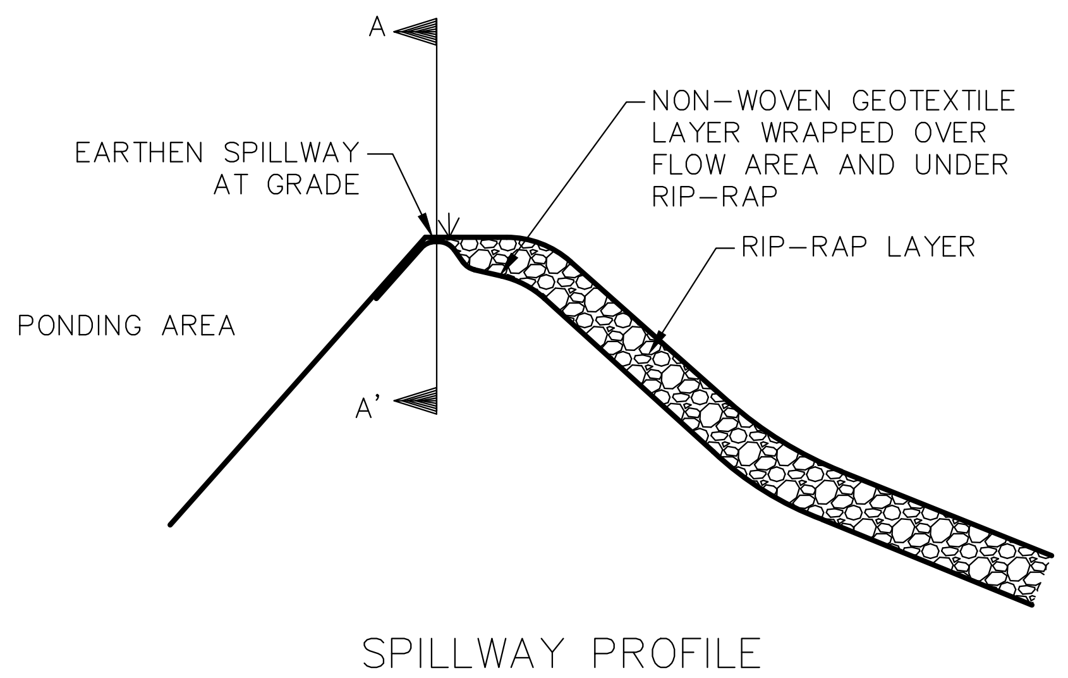

N
NEW 24"ø HDPE PIPE INV OUT: 202.0' SEE DETAIL B2
TEMPORARY SILT FENCE (TYP)
NEW EMERGENCY SPILLWAY
BUILDING 3
NEW POND OUTLET STRUCTURE RIM ELEV: 211.4'
B'
TOP OF BERM 213.2
NEW 645 S.F. "FOCAL POINT" BY FERGUSON
A
A'
NEW 8"ø HDPE OUTLET AND MANIFOLD
NEW 4"ø UNDERDRAIN (TYP)
B
205
206
208
209
210
212
213
215
220
225

POND 2 PLAN

SCALE: 1"=20'

B1

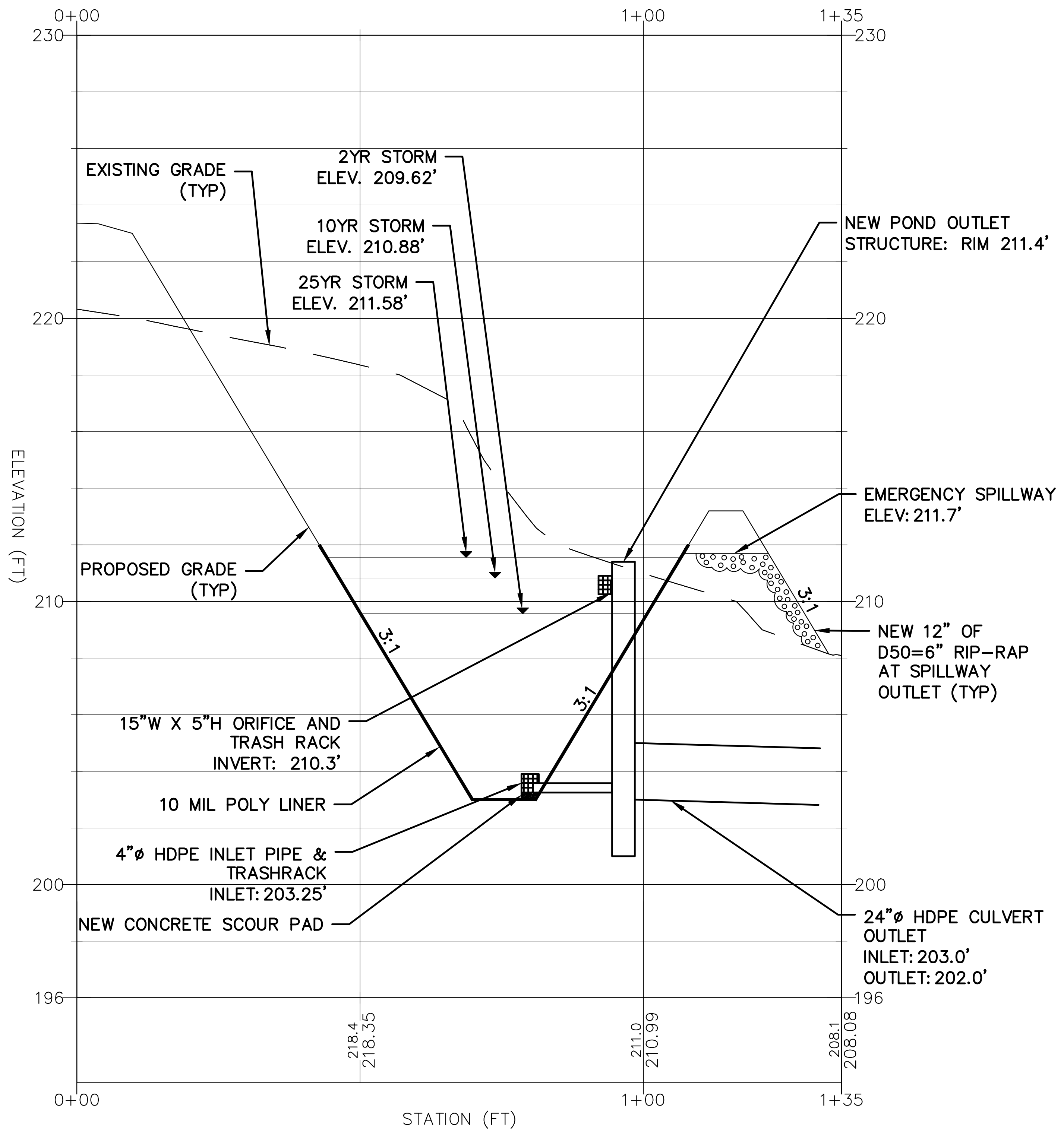

TOP OF BERM EL. 213.2'
3 1
1.5'
EL.211.7'
30'
12" LAYER OF RIP RAP - D50=6"
NON-WOVEN GEOTEXTILE LAYER
SECTION A-A'


A
A'
EARTHEN SPILLWAY AT GRADE
NON-WOVEN GEOTEXTILE LAYER WRAPPED OVER FLOW AREA AND UNDER RIP-RAP
RIP-RAP LAYER
PONDING AREA
SPILLWAY PROFILE

PONDING AREA SPILLWAY

NOT TO SCALE

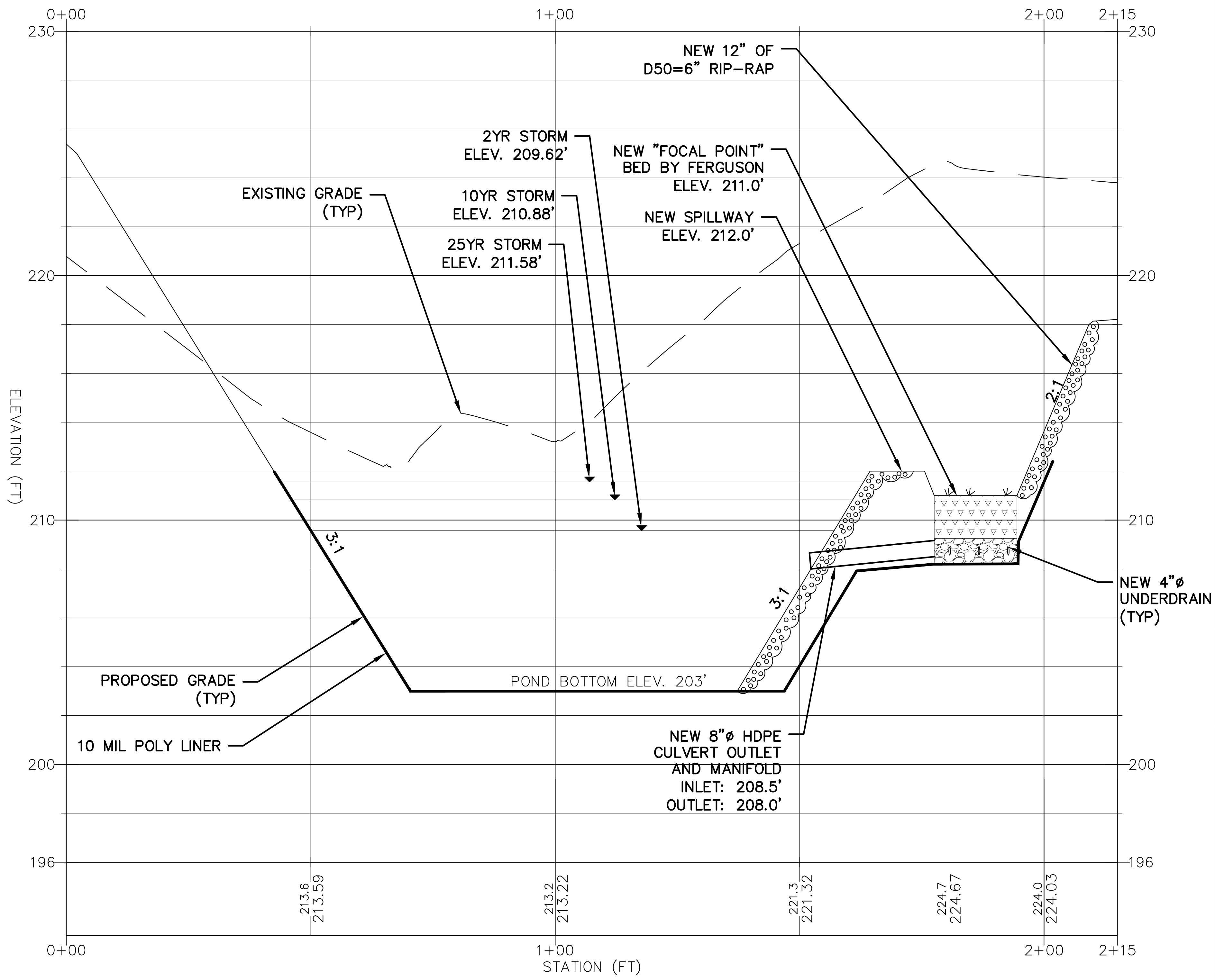
A3


0+00
1+00
1+35
230
220
210
200
196
ELEVATION (FT)
STATION (FT)
EXISTING GRADE (TYP)
2YR STORM ELEV. 209.62'
10YR STORM ELEV. 210.88'
25YR STORM ELEV. 211.58'
NEW POND OUTLET STRUCTURE: RIM 211.4'
EMERGENCY SPILLWAY ELEV: 211.7'
NEW 12" OF D50=6" RIP-RAP AT SPILLWAY OUTLET (TYP)
PROPOSED GRADE (TYP)
3:1
3:1
15"W X 5"H ORIFICE AND TRASH RACK INVERT: 210.3'
10 MIL POLY LINER
4"ø HDPE INLET PIPE & TRASHRACK INLET: 203.25'
NEW CONCRETE SCOUR PAD
24"ø HDPE CULVERT OUTLET INLET: 203.0' OUTLET: 202.0'
218.4
218.35
211.0
210.99
208.1
208.08

POND 2 SECTION B-B'

SCALE: HORIZONTAL 1"=20', VERTICAL 1"=4'

A2


0+00
1+00
2+00
2+15
230
220
210
200
196
ELEVATION (FT)
STATION (FT)
NEW 12" OF D50=6" RIP-RAP
EXISTING GRADE (TYP)
2YR STORM ELEV. 209.62'
10YR STORM ELEV. 210.88'
25YR STORM ELEV. 211.58'
NEW "FOCAL POINT" BED BY FERGUSON ELEV. 211.0'
NEW SPILLWAY ELEV. 212.0'
2:1
3:1
3:1
NEW 4"ø UNDERDRAIN (TYP)
PROPOSED GRADE (TYP)
10 MIL POLY LINER
POND BOTTOM ELEV. 203'
NEW 8"ø HDPE CULVERT OUTLET AND MANIFOLD INLET: 208.5' OUTLET: 208.0'
213.6
213.59
213.2
221.3
221.32
224.7
224.67
224.0
224.03

POND 2 SECTION A-A'

SCALE: HORIZONTAL 1"=20', VERTICAL 1"=4'

A1

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT
BRICKYARD COMMONS
AUBURN, MAINE 04210

OWNER OF RECORD
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
VARIES

SUBMISSION NOTES:
SUBMISSION 1: 2022-05-03 SDH ISSUED FOR REVIEW.
SUBMISSION 2: 2022-05-03 SDH ISSUED FOR REVIEW.
SUBMISSION 3: 2022-05-04 SDH ISSUED FOR PERMITTING.
SUBMISSION 4: 2022-06-16 SDH ISSUED FOR PERMITTING.
SUBMISSION 5: 2022-06-28 SDH ISSUED FOR PERMITTING.
SUBMISSION 6: 2022-08-11 SDH ISSUED FOR PERMITTING.
SUBMISSION 7: 2022-09-09 RWD ISSUED FOR DEP REVIEW OF GEOLOGY COMMENTS.
SUBMISSION 8: 2022-09-13 RWD ISSUED FOR DEP POND COMMENT
SUBMISSION 9: 2025-02-19 MJB ISSUED FOR PERMITTING

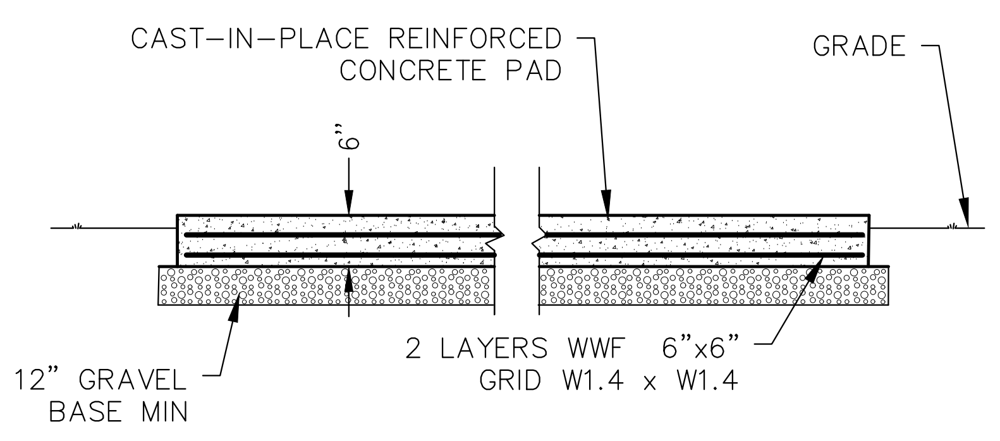
PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	9
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

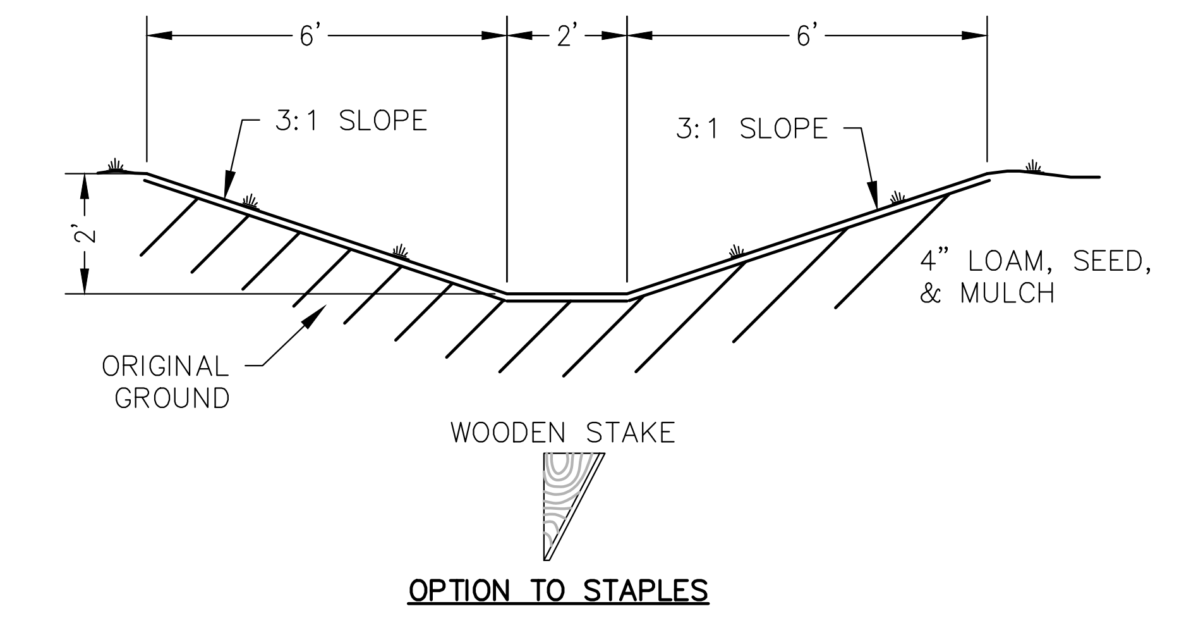
DETENTION POND PLAN AND SECTIONS

SEAL:
RICHARD W. DUNTON No. 12485
2025-02-19
RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C6.2
MLDC NO. 21-342 10 OF 14

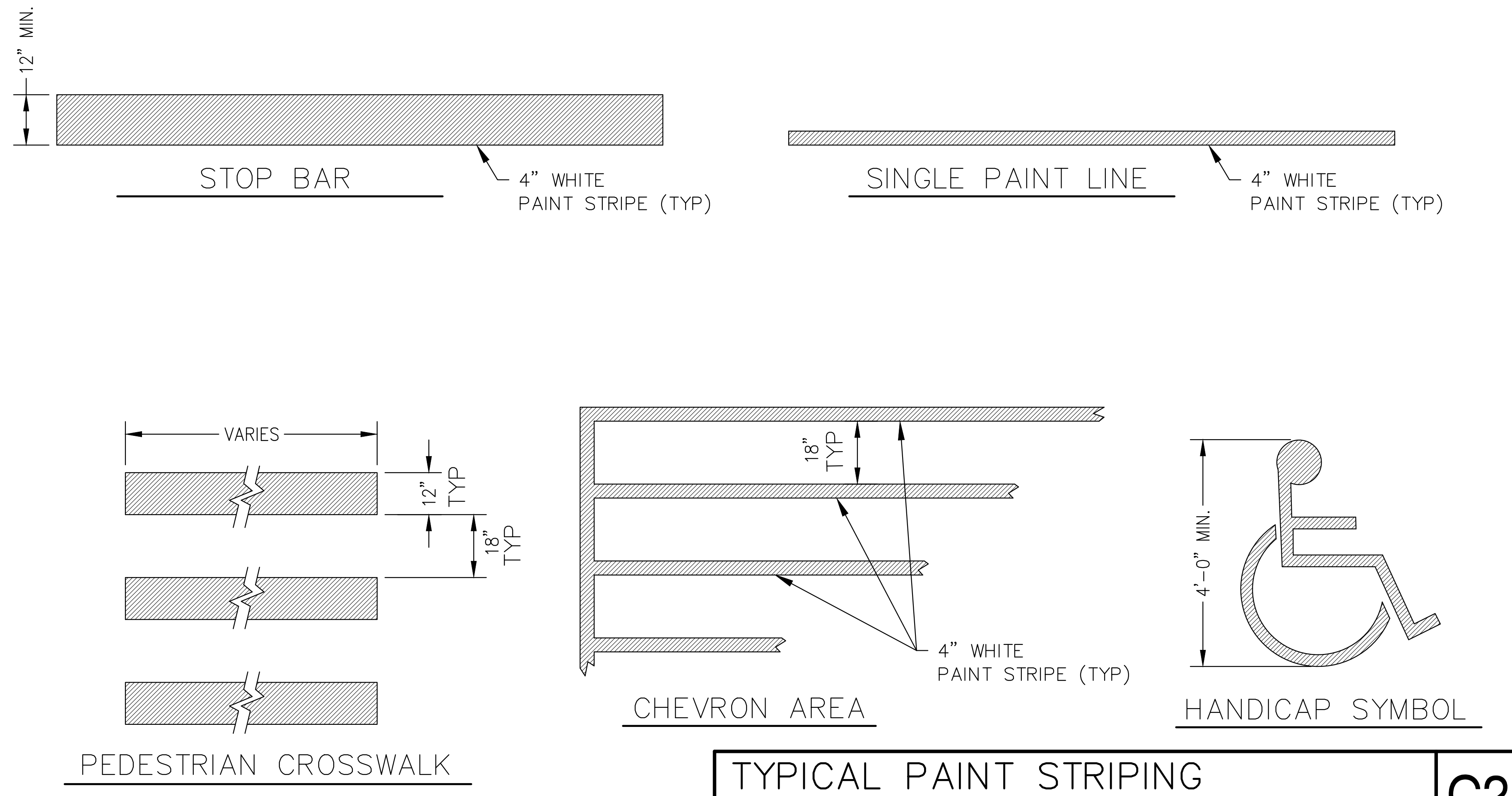

CAST-IN-PLACE REINFORCED CONCRETE PAD
GRADE
6"
12" GRAVEL BASE MIN
2 LAYERS WWF 6"x6" GRID W1.4 x W1.4

DUMPSTER PAD
NOT TO SCALE
C5

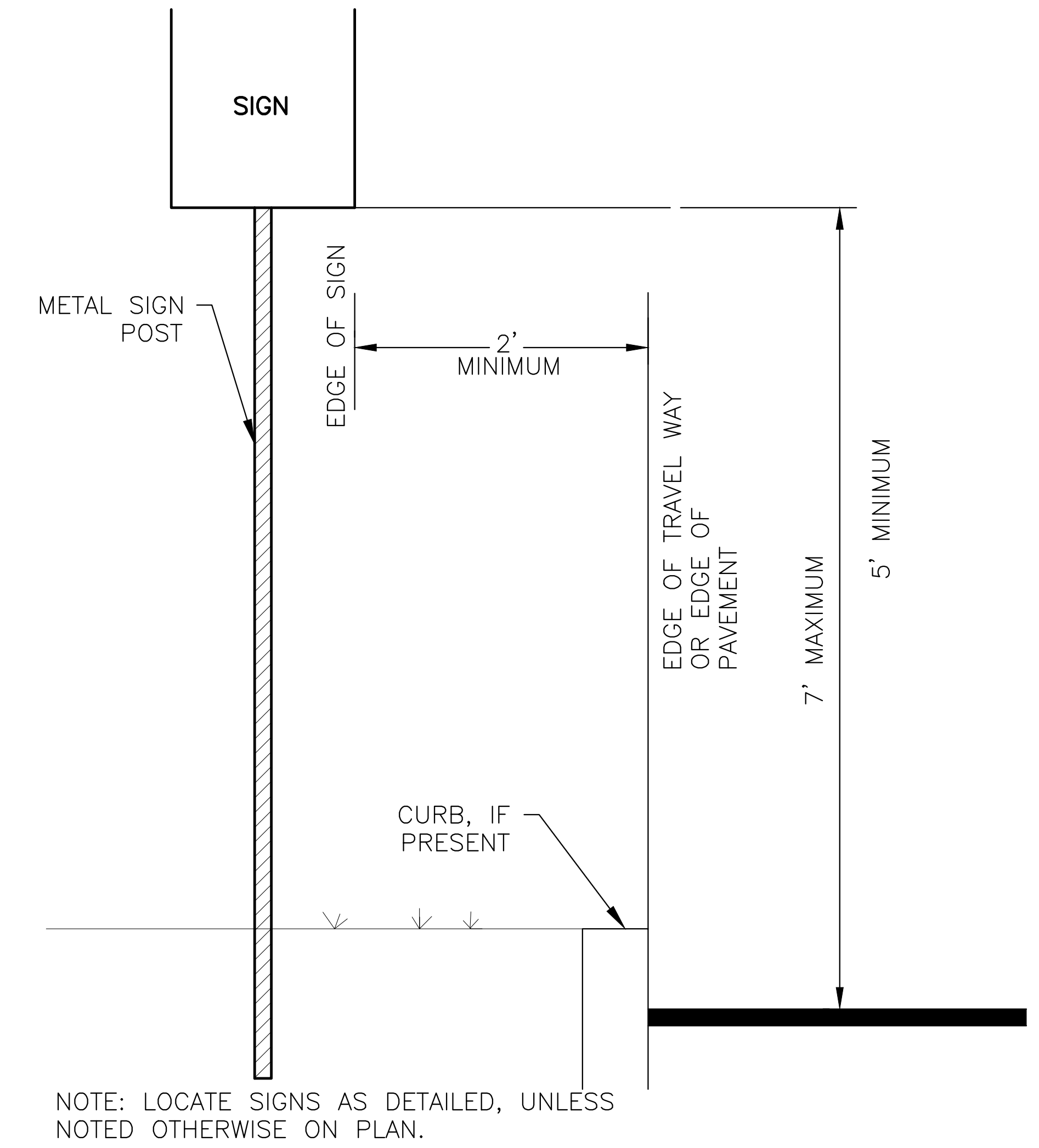

6'
2'
6'
3:1 SLOPE
3:1 SLOPE
2'
4" LOAM, SEED, & MULCH
ORIGINAL GROUND
WOODEN STAKE
OPTION TO STAPLES

NOTES:
1. FLOW AREA OF GRASS DITCH TO BE LINED WITH AMERICAN EXCELSIOR CURLEX BANKMENT OR EQUAL, INSTALLED PER MANUFACTURER'S RECOMMENDATION WITHIN 48 HOURS OF FINAL DITCH GRADING.
2. BURY THE TOP OF THE NETTING IN A TRENCH 6" OR MORE DEEP.
3. TAM TRENCH FULL OF SOIL, SECURE WITH ROW OF STAPLES (OR WOOD STAKES), 12" SPACING, 4" DOWN FROM THE TRENCH.
4. OVERLAP-BURY UPPER END OF LOWER STRIP AS IN "A" & "B" OVERLAP END OF TOP STRIP 4" AND STAPLE OR WOOD STAKE.
5. CHECK SLOT-FOLD OF NETTING BURIED IN SLIT TRENCH TAMPED; DOUBLE ROW OF STAPLES (OR WOOD STAKES) AT 12" SPACING, USE CHECK SLOTS AT 15" SPACING IN DITCHES OR STEEP SLOPES.

TYPICAL GRASS DITCH
NOT TO SCALE
C4

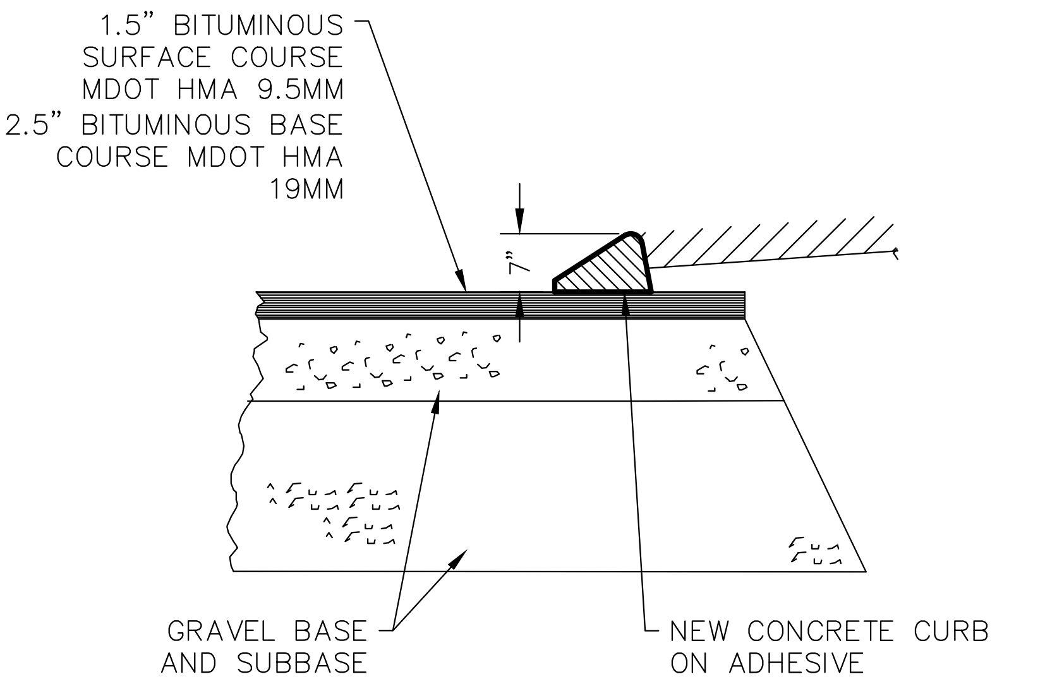

12" MIN.
STOP BAR
4" WHITE PAINT STRIPE (TYP)
SINGLE PAINT LINE
4" WHITE PAINT STRIPE (TYP)
VARIES
12" TYP
18" TYP
PEDESTRIAN CROSSWALK
18" TYP
4" WHITE PAINT STRIPE (TYP)
CHEVRON AREA
4'-0" MIN.
HANDICAP SYMBOL

TYPICAL PAINT STRIPING
NOT TO SCALE
C2

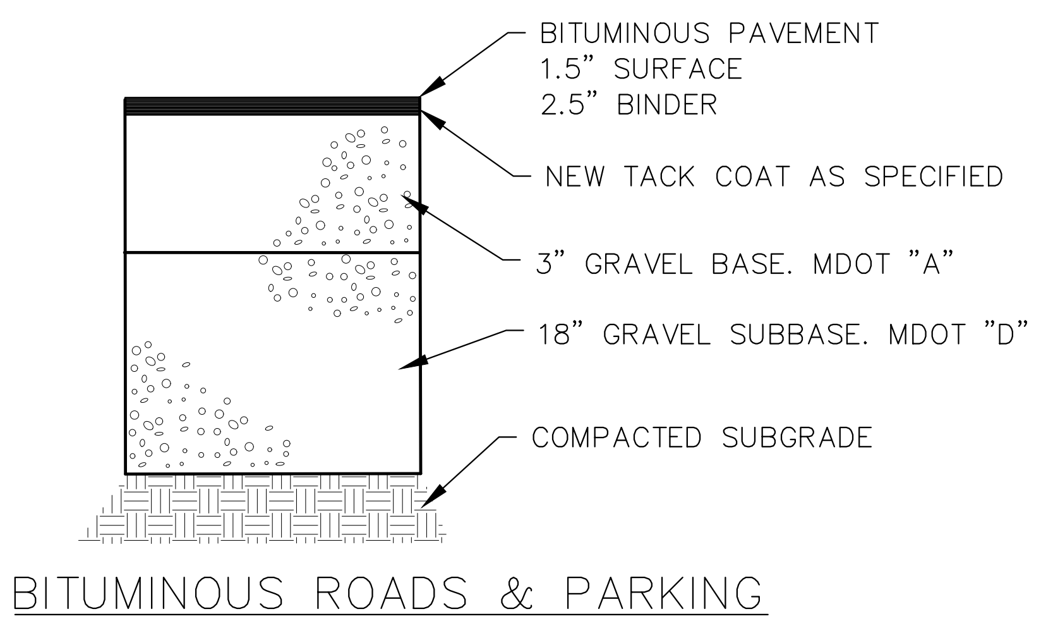

SIGN
METAL SIGN POST
EDGE OF SIGN
2' MINIMUM
EDGE OF TRAVEL WAY OR EDGE OF PAVEMENT
7' MAXIMUM
5' MINIMUM
CURB, IF PRESENT

NOTE: LOCATE SIGNS AS DETAILED, UNLESS NOTED OTHERWISE ON PLAN.

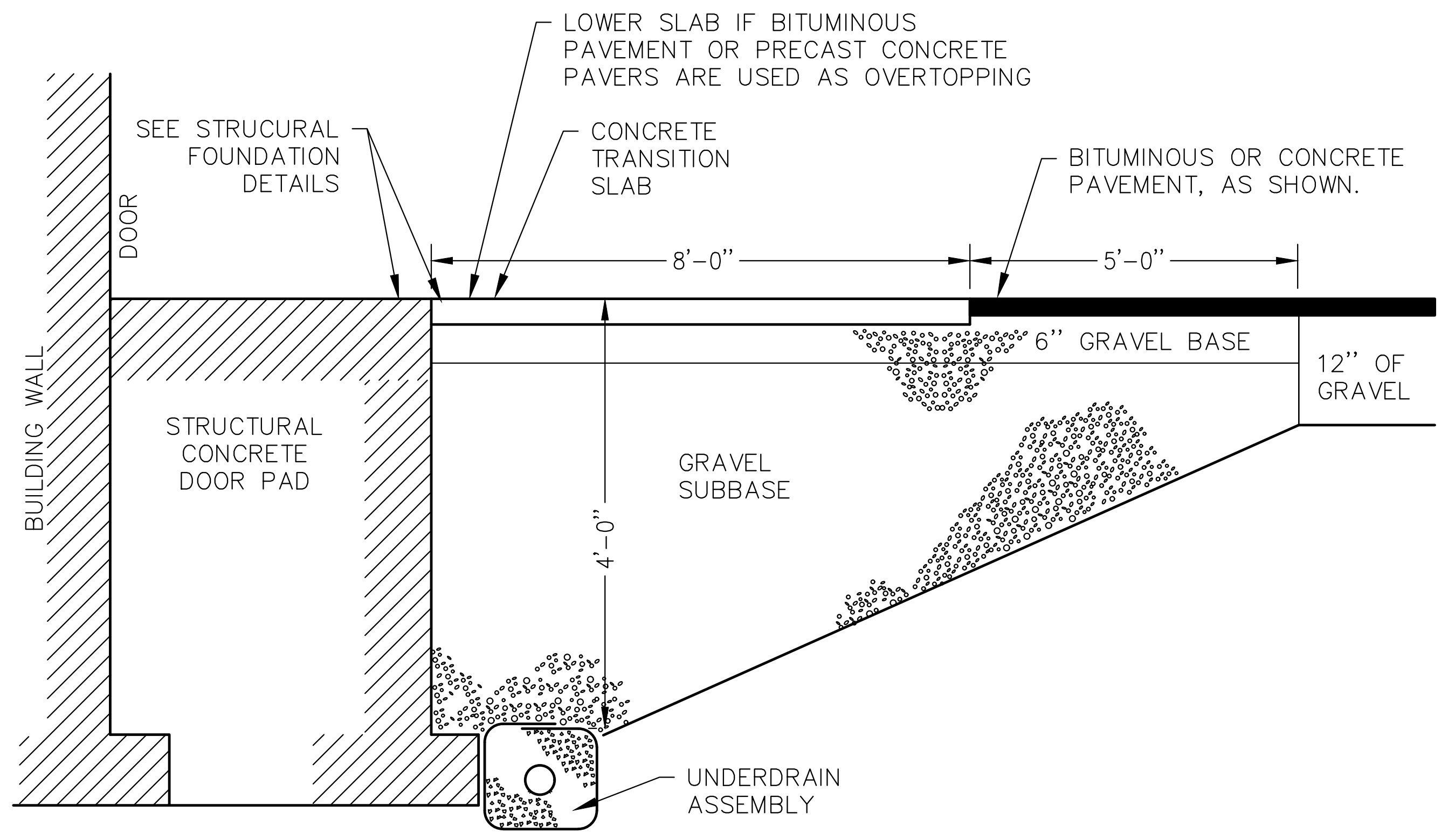
TRAFFIC SIGN DETAIL
NOT TO SCALE
C1


1.5" BITUMINOUS SURFACE COURSE MDOT HMA 9.5MM
2.5" BITUMINOUS BASE COURSE MDOT HMA 19MM
7"
GRAVEL BASE AND SUBBASE
NEW CONCRETE CURB ON ADHESIVE

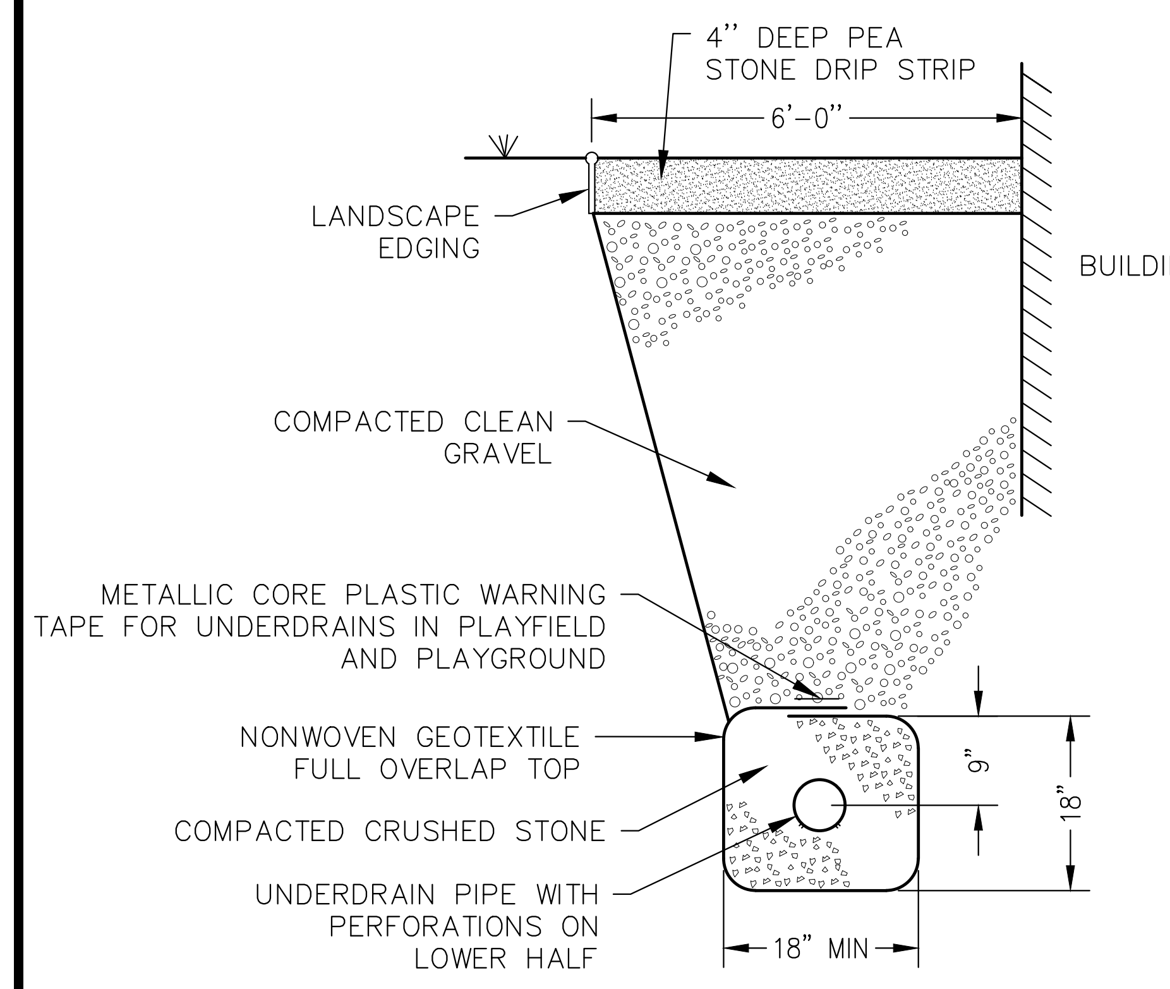
CONCRETE CURB
NOT TO SCALE
MDOT TYPE 3: MOLD 2
B5


BITUMINOUS PAVEMENT
1.5" SURFACE
2.5" BINDER
NEW TACK COAT AS SPECIFIED
3" GRAVEL BASE. MDOT "A"
18" GRAVEL SUBBASE. MDOT "D"
COMPACTED SUBGRADE
BITUMINOUS ROADS & PARKING

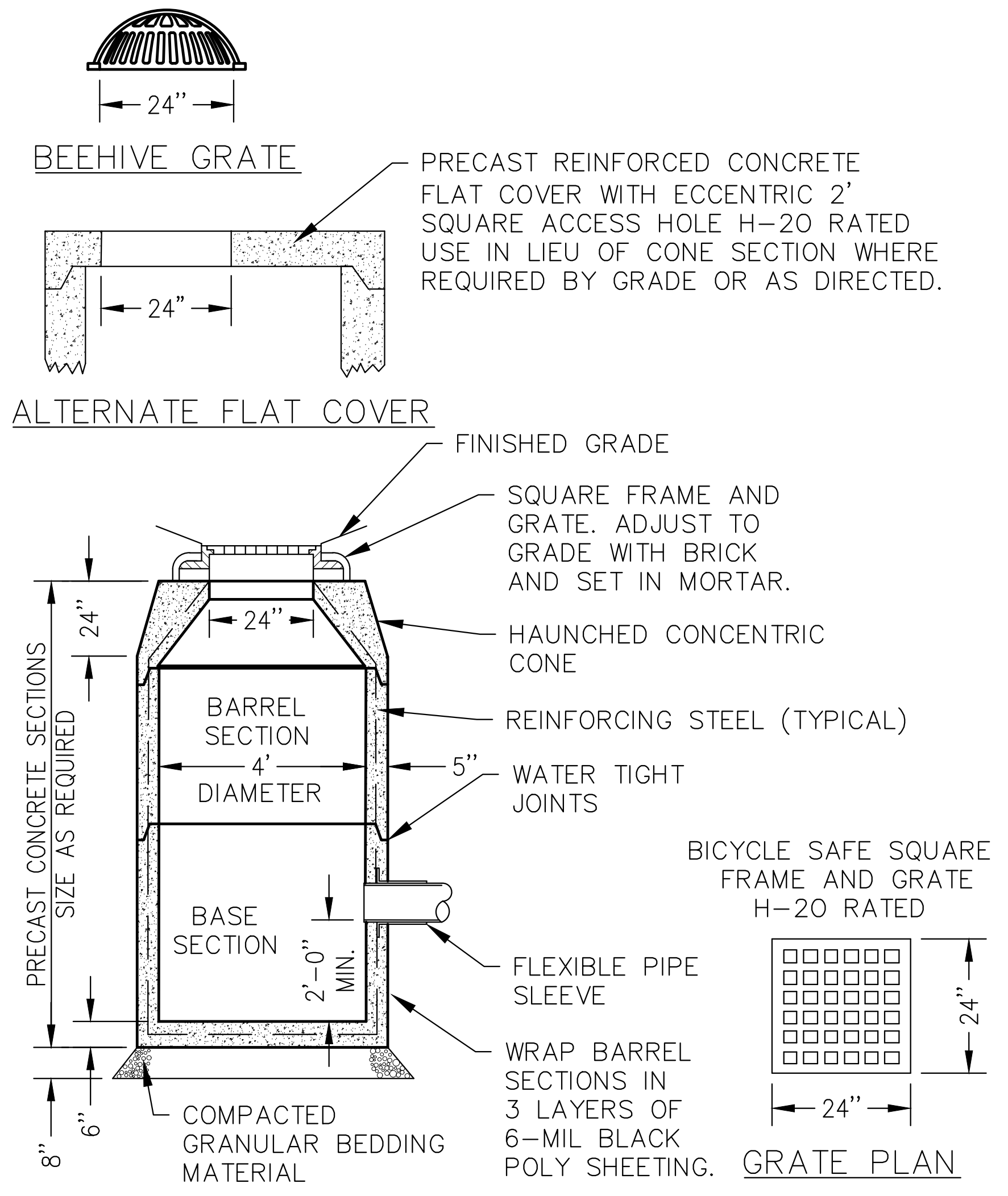
BITUMINOUS PAVEMENT DETAIL
NOT TO SCALE
B4


LOWER SLAB IF BITUMINOUS PAVEMENT OR PRECAST CONCRETE PAVERS ARE USED AS OVERTOPPING
SEE STRUCURAL FOUNDATION DETAILS
CONCRETE TRANSITION SLAB
BITUMINOUS OR CONCRETE PAVEMENT, AS SHOWN.
DOOR
BUILDING WALL
8'-0"
5'-0"
6" GRAVEL BASE
12" OF GRAVEL
STRUCTURAL CONCRETE DOOR PAD
GRAVEL SUBBASE
4'-0"
UNDERDRAIN ASSEMBLY

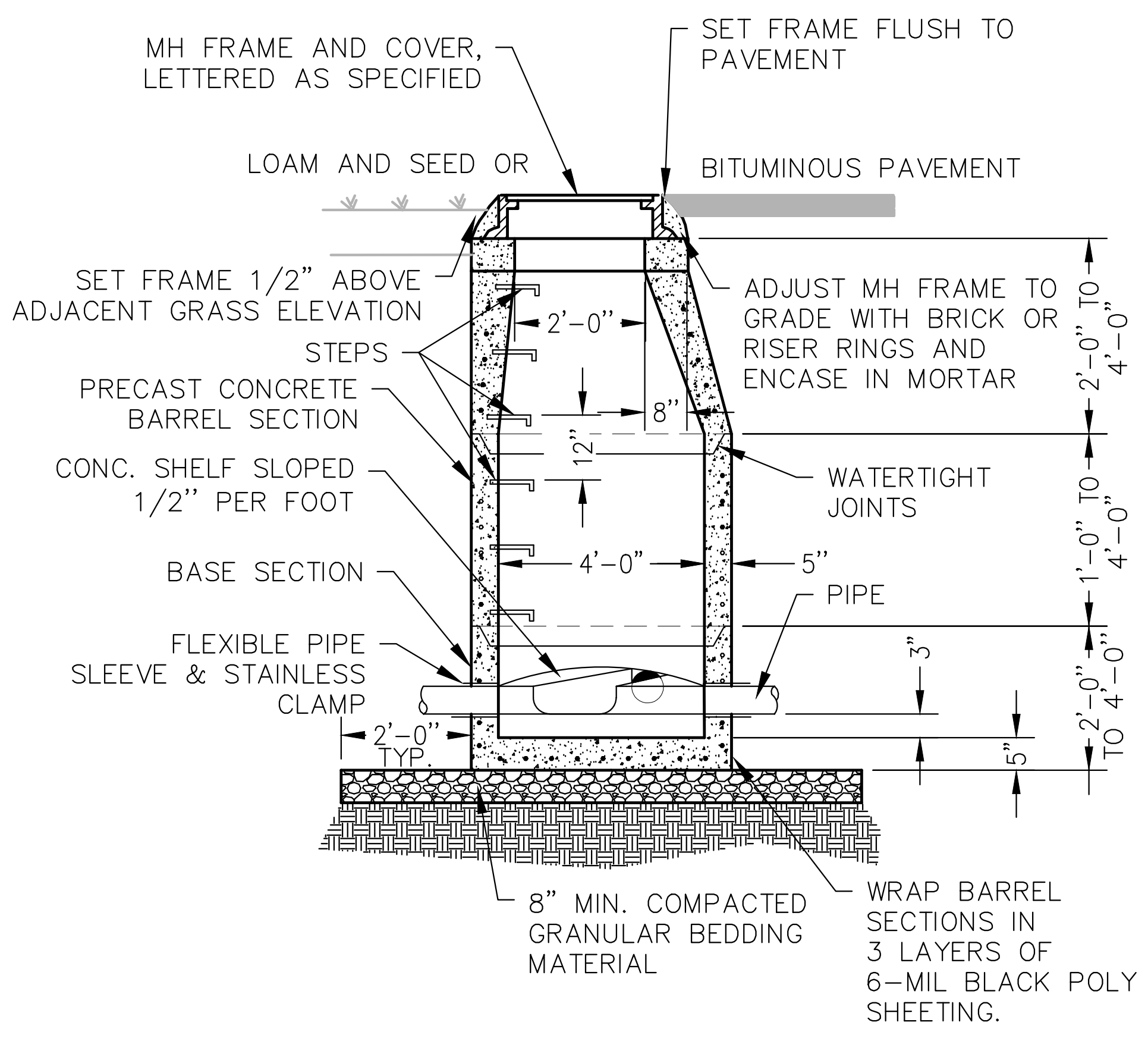
CONCRETE STRUCTRUAL SLAB DOORWAY
NOT TO SCALE
B2


4" DEEP PEA STONE DRIP STRIP
6'-0"
LANDSCAPE EDGING
BUILDING
COMPACTED CLEAN GRAVEL
METALLIC CORE PLASTIC WARNING TAPE FOR UNDERDRAINS IN PLAYFIELD AND PLAYGROUND
NONWOVEN GEOTEXTILE FULL OVERLAP TOP
COMPACTED CRUSHED STONE
UNDERDRAIN PIPE WITH PERFORATIONS ON LOWER HALF
9"
18"
18" MIN

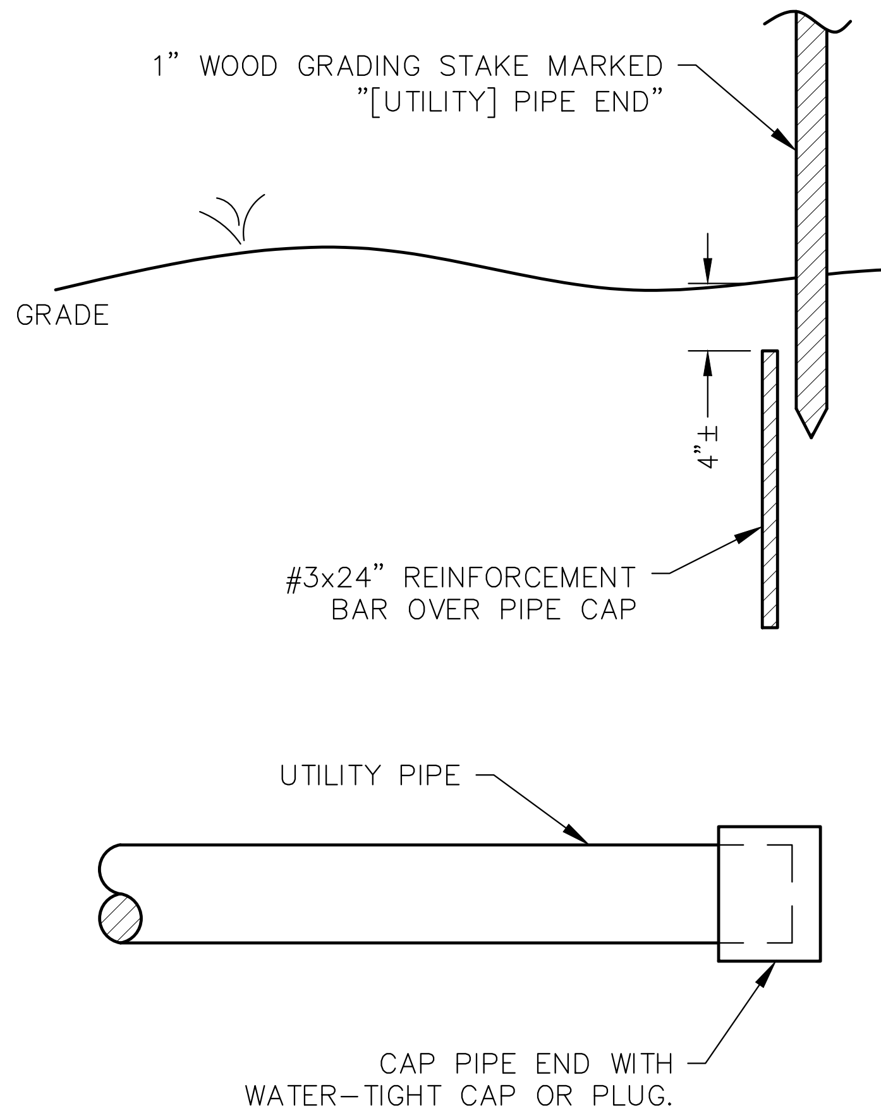
FOUNDATION UNDERDRAIN DETAIL
NOT TO SCALE
B1


24"
BEEHIVE GRATE
PRECAST REINFORCED CONCRETE FLAT COVER WITH ECCENTRIC 2' SQUARE ACCESS HOLE H-20 RATED USE IN LIEU OF CONE SECTION WHERE REQUIRED BY GRADE OR AS DIRECTED.
24"
ALTERNATE FLAT COVER
FINISHED GRADE
SQUARE FRAME AND GRATE. ADJUST TO GRADE WITH BRICK AND SET IN MORTAR.
HAUNCHED CONCENTRIC CONE
REINFORCING STEEL (TYPICAL)
WATER TIGHT JOINTS
24"
24"
BARREL SECTION
4' DIAMETER
5"
PRECAST CONCRETE SECTIONS SIZE AS REQUIRED
BASE SECTION
2'-0" MIN.
FLEXIBLE PIPE SLEEVE
BICYCLE SAFE SQUARE FRAME AND GRATE H-20 RATED
24"
24"
GRATE PLAN
WRAP BARREL SECTIONS IN 3 LAYERS OF 6-MIL BLACK POLY SHEETING.
COMPACTED GRANULAR BEDDING MATERIAL
8"
6"

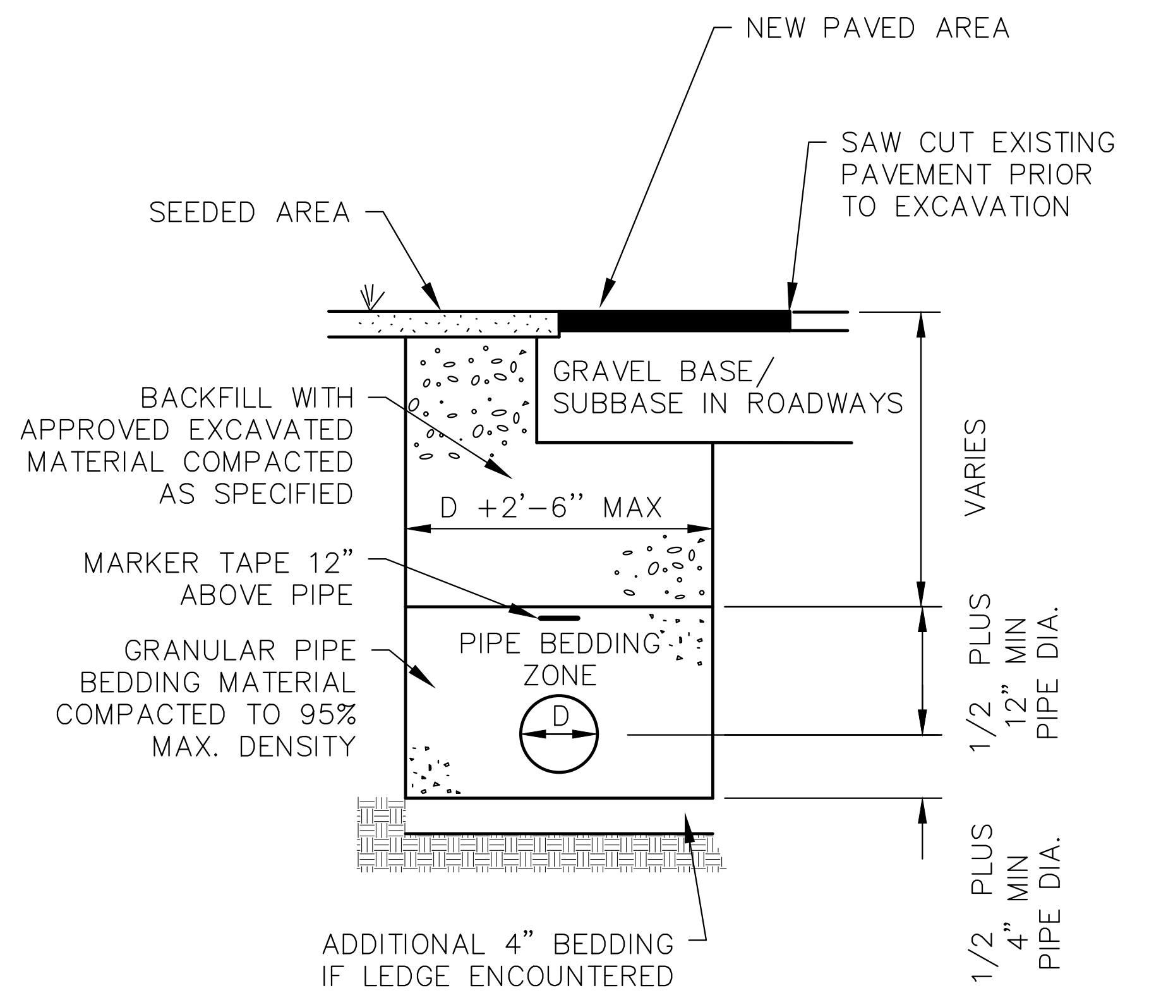
PRECAST CONCRETE CATCH BASIN
NOT TO SCALE
A5


MH FRAME AND COVER, LETTERED AS SPECIFIED
SET FRAME FLUSH TO PAVEMENT
LOAM AND SEED OR
BITUMINOUS PAVEMENT
SET FRAME 1/2" ABOVE ADJACENT GRASS ELEVATION
ADJUST MH FRAME TO GRADE WITH BRICK OR RISER RINGS AND ENCASE IN MORTAR
2'-0"
2'-0" TO 4'-0"
STEPS
8"
PRECAST CONCRETE BARREL SECTION
12"
CONC. SHELF SLOPED 1/2" PER FOOT
WATERTIGHT JOINTS
1'-0" TO 4'-0"
4'-0"
5"
BASE SECTION
PIPE
3"
FLEXIBLE PIPE SLEEVE & STAINLESS CLAMP
2'-0" TYP
5"
2'-0" TO 4'-0"
8" MIN. COMPACTED GRANULAR BEDDING MATERIAL
WRAP BARREL SECTIONS IN 3 LAYERS OF 6-MIL BLACK POLY SHEETING.

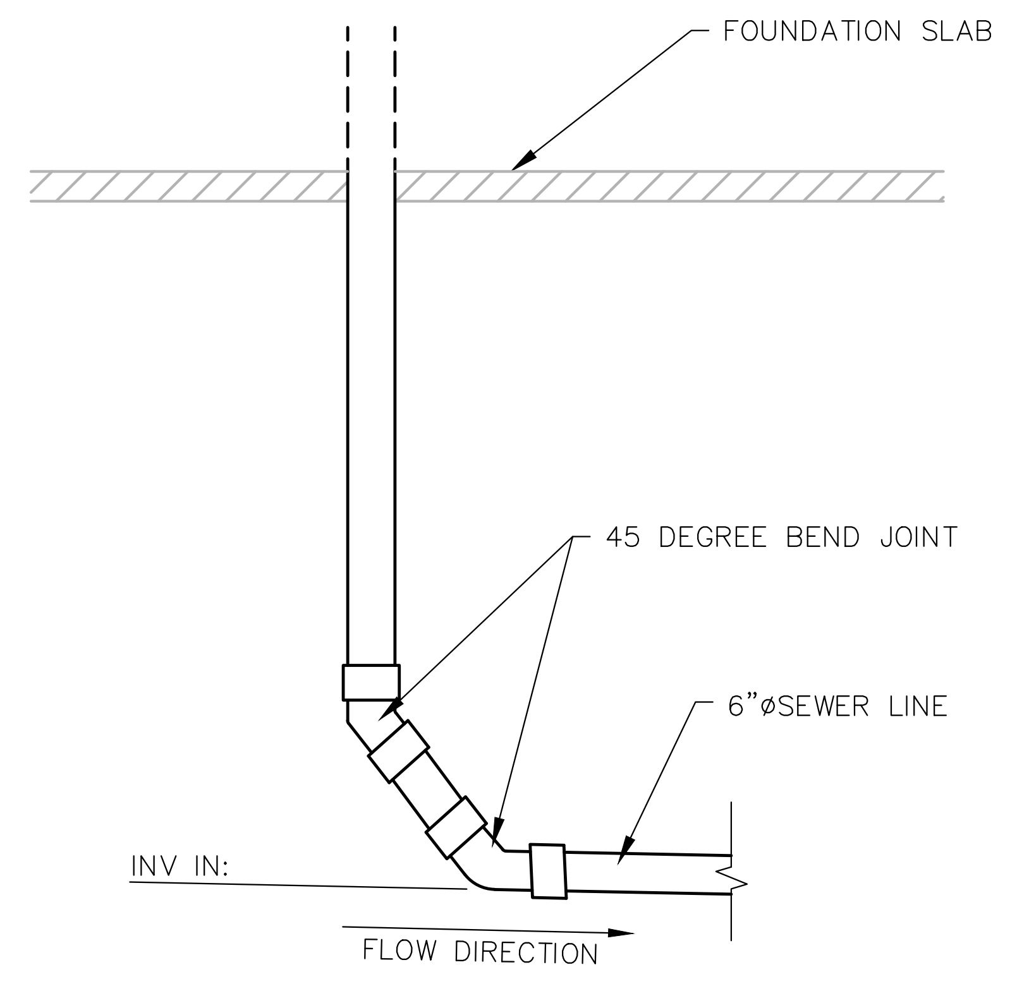
PRECAST CONCRETE MANHOLE
NOT TO SCALE
A4


1" WOOD GRADING STAKE MARKED "[UTILITY] PIPE END"
GRADE
4"±
#3x24" REINFORCEMENT BAR OVER PIPE CAP
UTILITY PIPE
CAP PIPE END WITH WATER-TIGHT CAP OR PLUG.

WITNESS STAKE DETAIL
NOT TO SCALE
A3


NEW PAVED AREA
SAW CUT EXISTING PAVEMENT PRIOR TO EXCAVATION
SEEDED AREA
BACKFILL WITH APPROVED EXCAVATED MATERIAL COMPACTED AS SPECIFIED
GRAVEL BASE/ SUBBASE IN ROADWAYS
D +2'-6" MAX
VARIES
MARKER TAPE 12" ABOVE PIPE
GRANULAR PIPE BEDDING MATERIAL COMPACTED TO 95% MAX. DENSITY
PIPE BEDDING ZONE
D
1/2 PLUS 12" MIN PIPE DIA.
1/2 PLUS 4" MIN PIPE DIA.
ADDITIONAL 4" BEDDING IF LEDGE ENCOUNTERED

PIPE TRENCH
NOT TO SCALE
A2


FOUNDATION SLAB
45 DEGREE BEND JOINT
6"øSEWER LINE
INV IN:
FLOW DIRECTION

SEWER PIPE RISER
NOT TO SCALE
A1

MAIN-LAND
DEVELOPMENT CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT
BRICKYARD COMMONS
AUBURN, MAINE 04210

OWNER OF RECORD
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2022-03-18 SDH ISSUED FOR CLIENT REVIEW.
SUBMISSION 2: 2022-03-28 SDH ISSUED FOR 75% REVIEW.
SUBMISSION 3: 2022-03-31 SDH ISSUED FOR 75% REVIEW.
SUBMISSION 4: 2022-05-03 SDH ISSUED FOR REVIEW.
SUBMISSION 5: 2022-05-03 SDH ISSUED FOR PERMITTING.
SUBMISSION 6: 2022-06-16 SDH ISSUED FOR PERMITTING.
SUBMISSION 7: 2022-08-11 SDH ISSUED FOR PERMITTING.
SUBMISSION 8: 2025-02-19 MJB ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	8
SURVEY DATE:	N/A
SUBMISSION DATE:	2025-02-19
SUBMITTED FOR:	PERMITTING

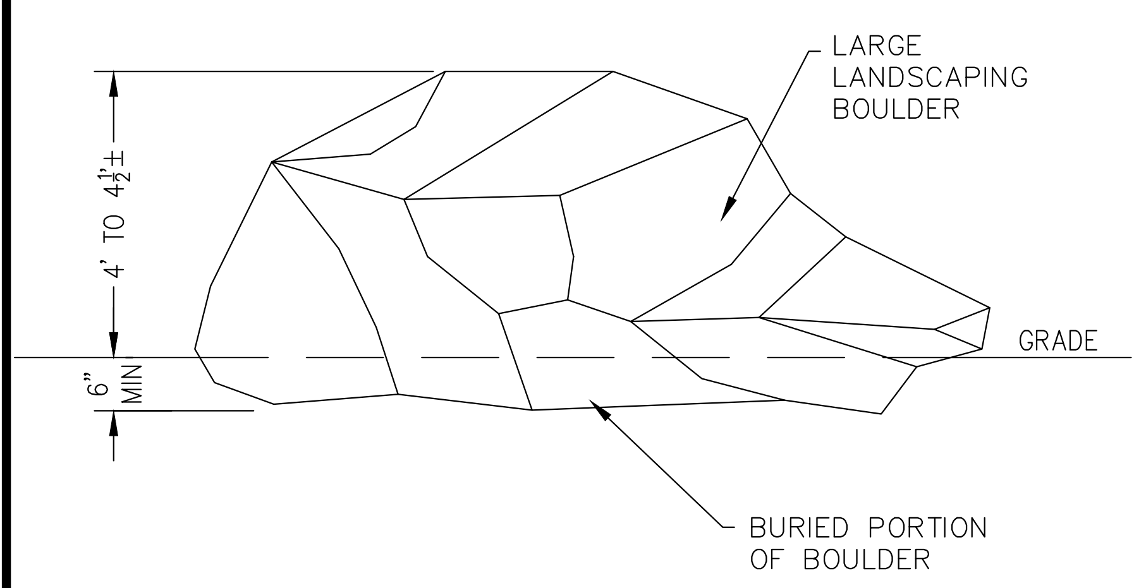
NOT FOR CONSTRUCTION

DETAILS

SEAL:
RICHARD W. DUNTON
No. 12485
2025-02-19
RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C9.1
MLDC NO. 21-342
11 OF 14

LANDSCAPE BOUNDER
NOT TO SCALE
C5


LARGE LANDSCAPING BOULDER
4' TO 4½'±
6" MIN
GRADE
BURIED PORTION OF BOULDER

NOTES:

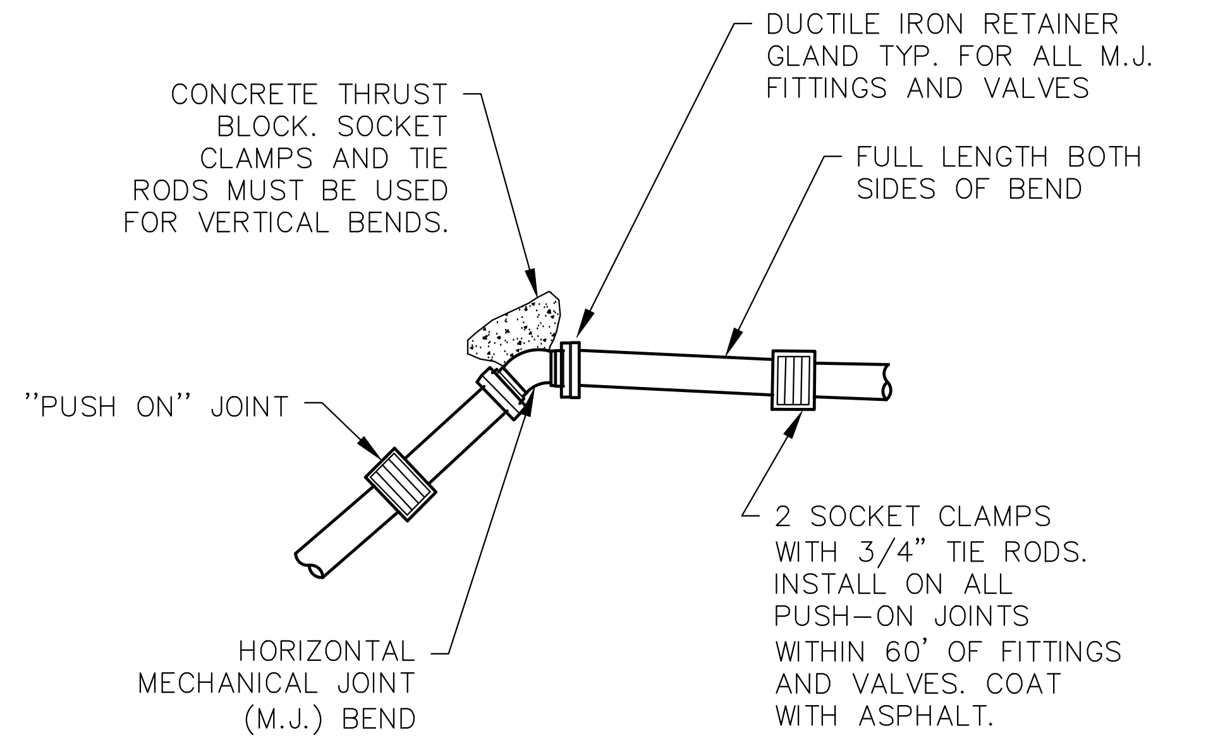
1. BOULDER SIZE AND SHAPE TO BE APPROVED BY ARCHITECT PRIOR TO PLACEMENT.

2. PARTIALLY BURY STONE (6" MIN) TO GIVE NATURAL APPEARANCE.

RESTRAINT AT WATER LINE FITTINGS
NOT TO SCALE
C4

GENERAL DATA FOR BLOCKING STANDARD FITTINGS
MINIMUM SURFACE AREA OF CONCRETE BLOCK AGAINST UNDISTURBED EARTH – SQ.FT.

PIPE SIZE	HYDRANT, PLUG, CAP, TEE	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	4	4	4	3	2
6"	8	10	6	4	3
8"	12	16	10	6	4
10"	18	26	14	8	5
12"	26	36	20	12	7
14"	36	50	28	16	9
16"	46	64	36	20	12


DUCTILE IRON RETAINER GLAND TYP. FOR ALL M.J. FITTINGS AND VALVES
CONCRETE THRUST BLOCK. SOCKET CLAMPS AND TIE RODS MUST BE USED FOR VERTICAL BENDS.
FULL LENGTH BOTH SIDES OF BEND
"PUSH ON" JOINT
2 SOCKET CLAMPS WITH 3/4" TIE RODS. INSTALL ON ALL PUSH–ON JOINTS WITHIN 60' OF FITTINGS AND VALVES. COAT WITH ASPHALT.
HORIZONTAL MECHANICAL JOINT (M.J.) BEND

DANDY SACK™
SPECIFICATIONS

NOTE: THE DANDY SACK™ WILL BE **MANUFACTURED IN THE U.S.A.** FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

REGULAR FLOW DANDY SACK™ (BLACK)

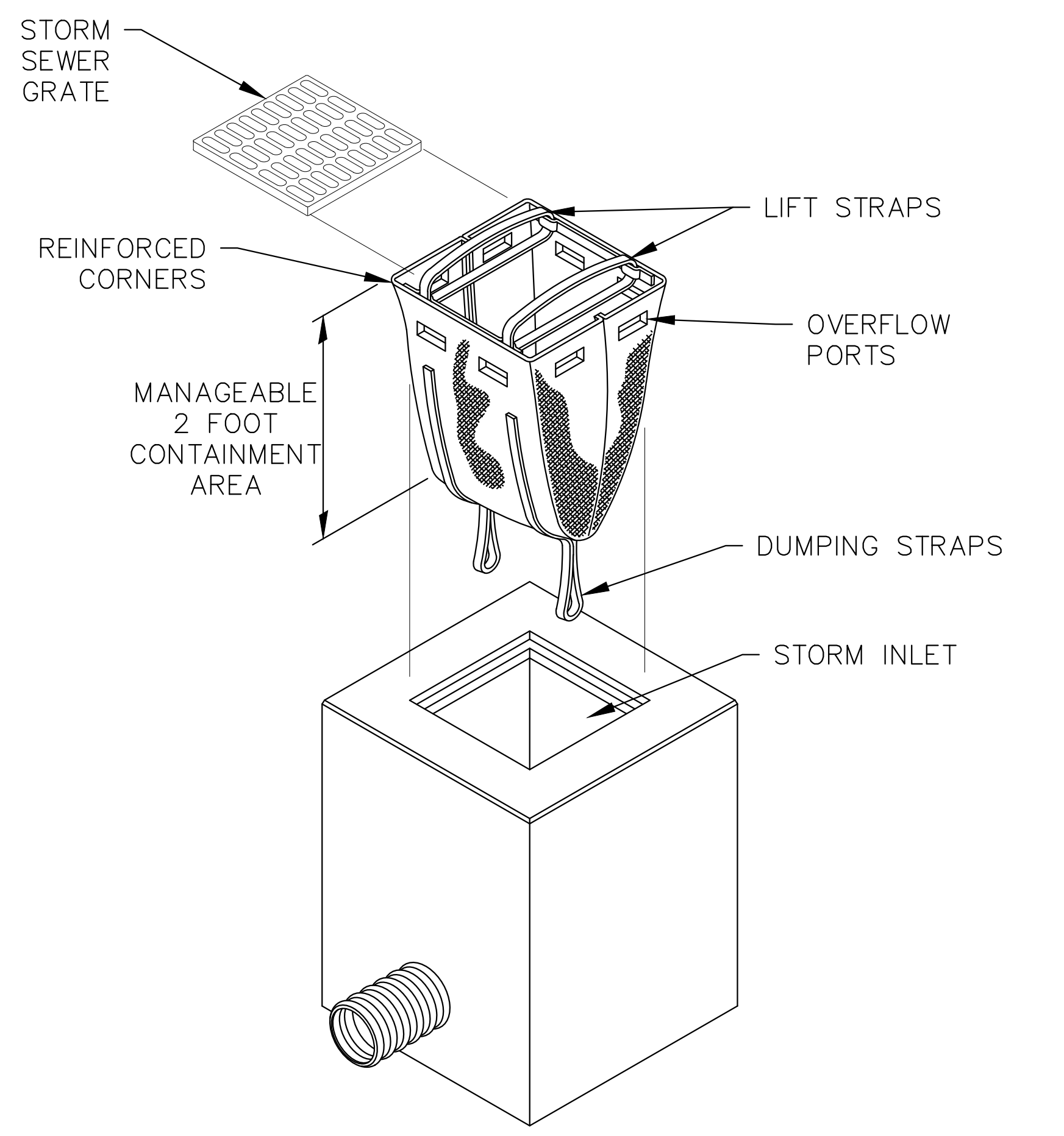
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.78 (400) x 1.40 (315)
Grab Tensile Elongation	ASTM D 4632	%	15 x 15
Puncture Strength	ASTM D 4833	kN (lbs)	0.67 (150)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5506 (800)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.67 (150) x 0.73 (165)
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	1/min/m^2 (gal/min/ft^2)	2852 (70)
Permittivity	ASTM D 4491	Sec^{-1}	0.90

HI–FLOW DANDY SACK™ (SAFETY ORANGE)

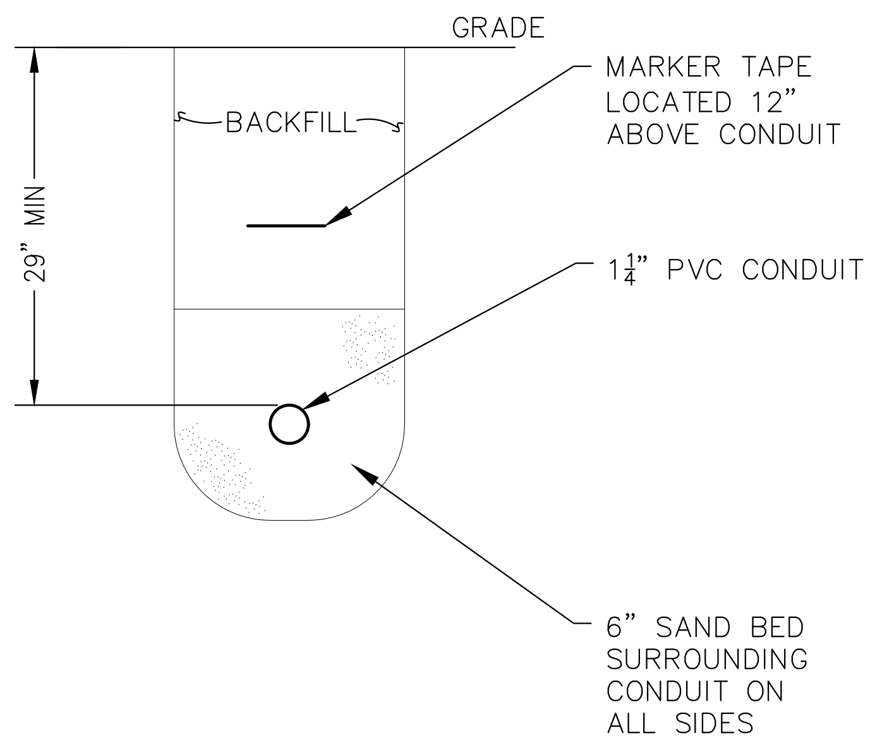
Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) X 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 X 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) X 0.33 (75)
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	1/min/m^2 (gal/min/ft^2)	5907 (145)
Permittivity	ASTM D 4491	Sec^{-1}	2.1

*Note: All Dandy Sacks™ can be ordered with our optional oil absorbent pillows

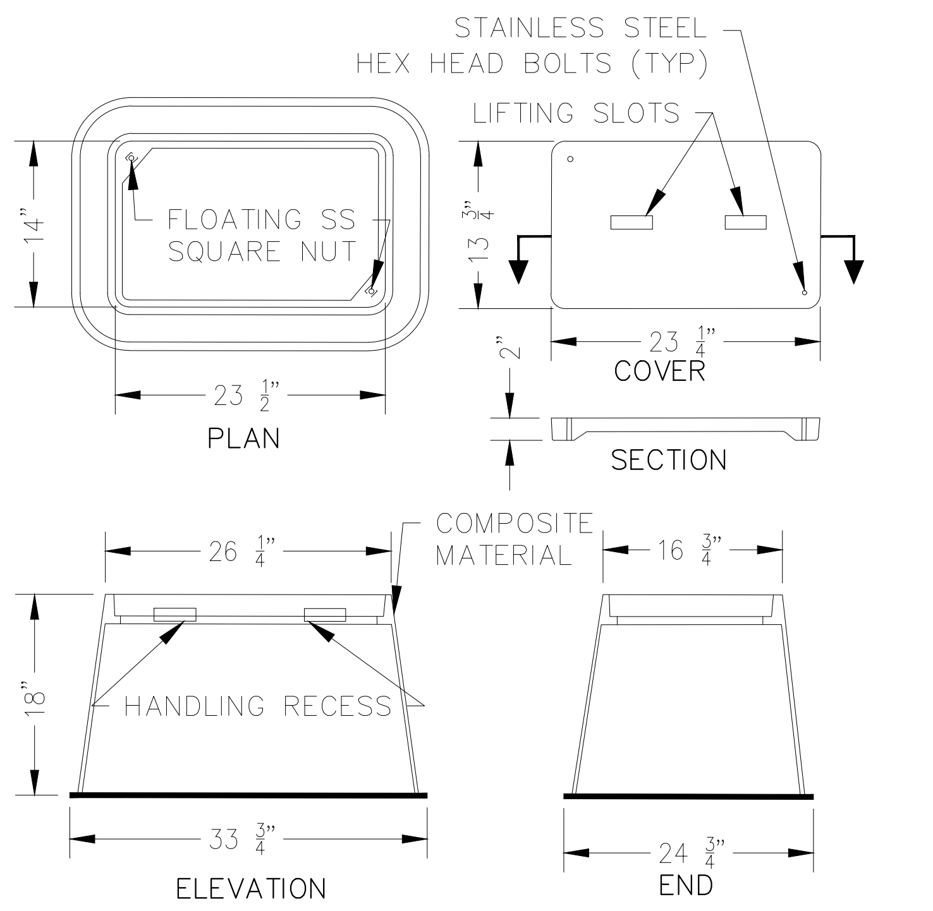
STORM DRAIN INLET EROSION CONTROL
NOT TO SCALE
C2


STORM SEWER GRATE
LIFT STRAPS
REINFORCED CORNERS
OVERFLOW PORTS
MANAGEABLE 2 FOOT CONTAINMENT AREA
DUMPING STRAPS
STORM INLET

NEW UNDERGROUND ELECTRIC CONDUIT
NOT TO SCALE
C1


GRADE
BACKFILL
MARKER TAPE LOCATED 12" ABOVE CONDUIT
29" MIN
1¼" PVC CONDUIT
6" SAND BED SURROUNDING CONDUIT ON ALL SIDES

CONCRETE ELECTRICAL JUNCTION BOX
NOT TO SCALE
B5


STAINLESS STEEL HEX HEAD BOLTS (TYP)
LIFTING SLOTS
14"
FLOATING SS SQUARE NUT
13 ¾"
23 ½"
PLAN
23 ¼"
COVER
2"
SECTION
COMPOSITE MATERIAL
26 ¼"
16 ¾"
18"
HANDLING RECESS
33 ¾"
ELEVATION
24 ¾"
END

13" X 24" FLARED WALL JUNCTION BOX

NOTE:
THE JUNCTION BOX SHALL BE CAPABLE OF SUPPORTING INCIDENTAL TRAFFIC LOADS OF 22,000 POUNDS WITHOUT DISTORTION OR FAILURE. DIMENSIONS SHOWN ARE REPRESENTATIVE AND MAY HAVE SLIGHTLY DIFFERENT DIMENSIONS.

CEDAR PRIVACY FENCE
NOT TO SCALE
B3

NOTES:

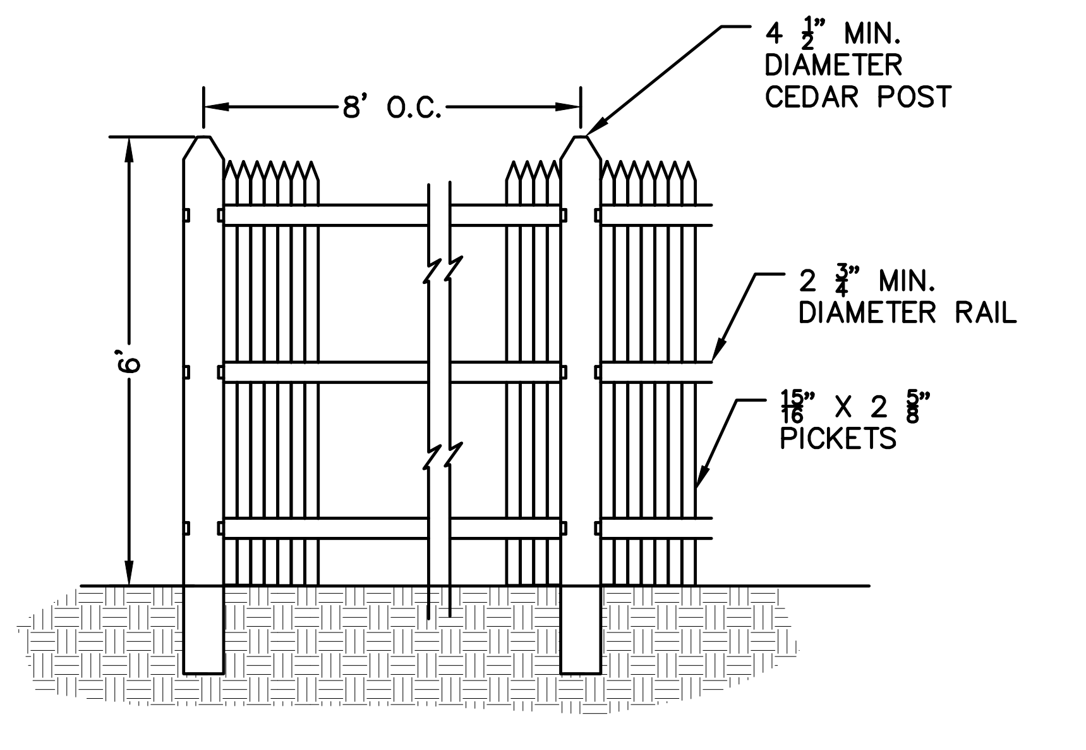
1. ALL FENCING MATERIAL SHALL BE NORTHERN WHITE CEDAR SAWN TO THE DIMENSIONS SHOWN ON THE DRAWING.

2. ALL FENCE POSTS SHALL BE TREATED WITH "CREOSOTE", ALL SIDES FOR A DIMENSION OF 3' FROM THE BUT OF POST.

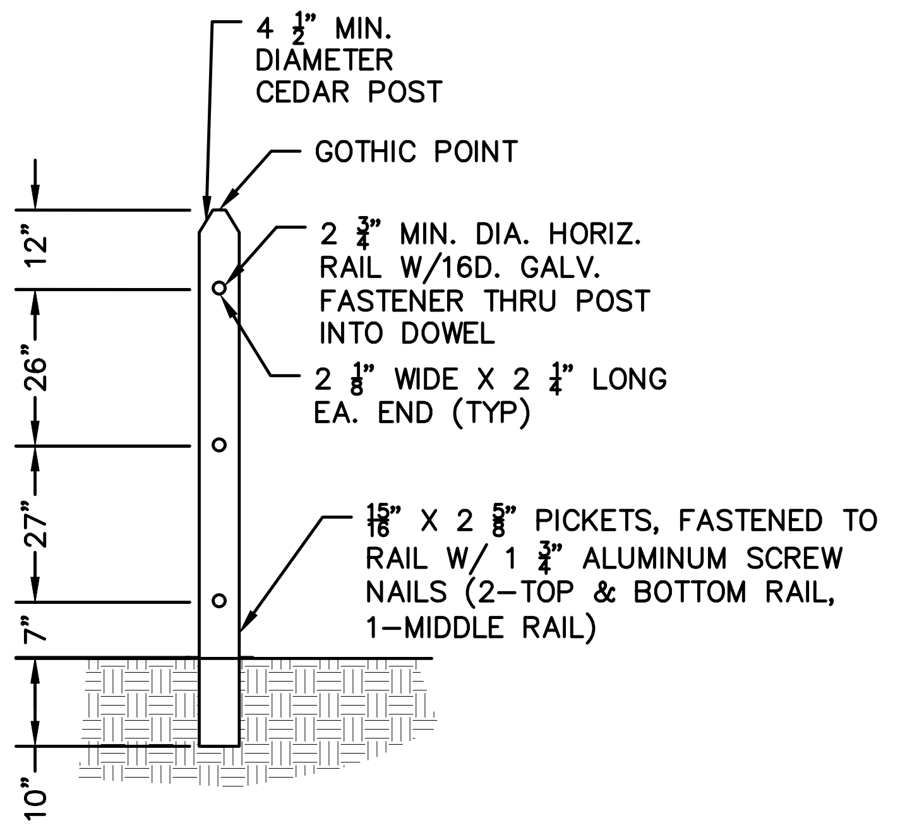
3. POST SHALL MAINTAIN A DEPTH OF 2'–10" IN GROUND AND SHALL BE RACKED TO ACCOMMODATE ANY CHANGES IN GRADE.

4. LINE OF FENCE TOP & BOTTOM SHALL BE INSTALLED STRAIGHT AND TRUE. ALL POST AND FACING BOARDS OR SLATS SHALL BE INSTALLED PARALLEL AND PLUMB. ALL RAILS SHALL BE INSTALLED PARALLEL AND TRUE.

5. CONTRACTOR SHALL CONSULT THE ENGINEER OF RECORD FOR APPROVAL OF ANY ADJUSTMENTS PRIOR TO INSTALLATION

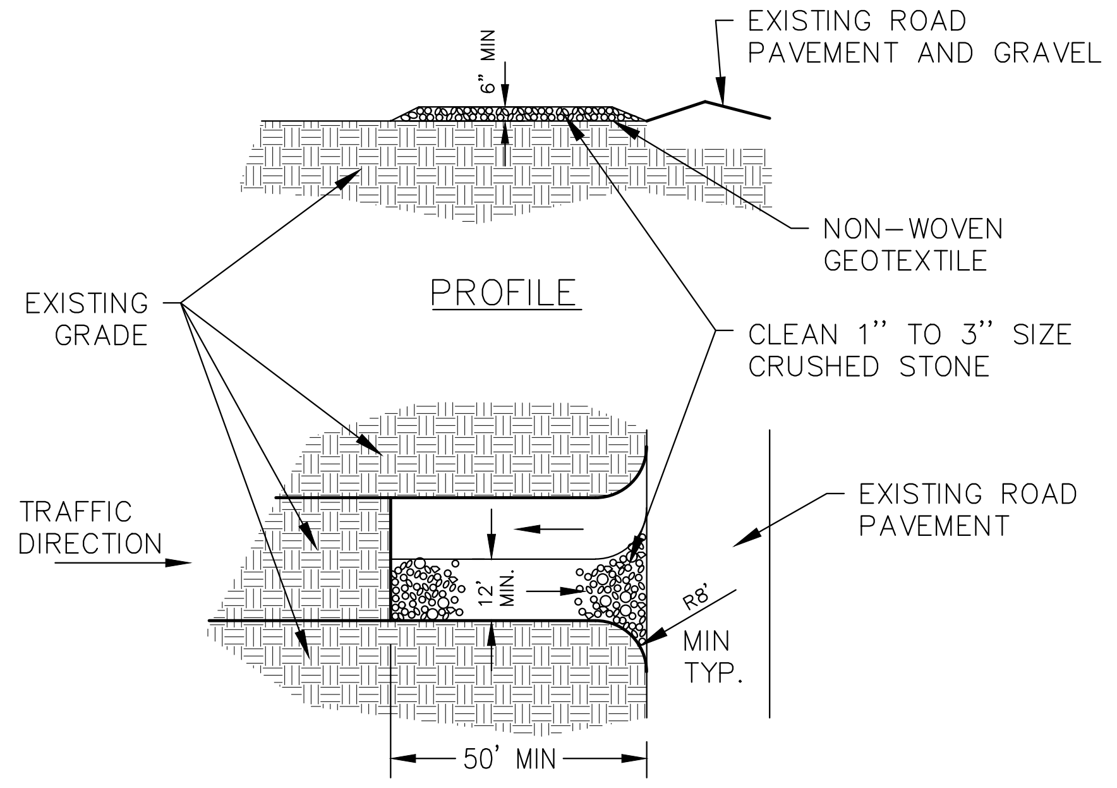

8' O.C.
4 ½" MIN. DIAMETER CEDAR POST
6'
2 ¾" MIN. DIAMETER RAIL
15/16" X 2 5/8" PICKETS

PLAN VIEW


4 ½" MIN. DIAMETER CEDAR POST
GOTHIC POINT
12"
2 ¾" MIN. DIA. HORIZ. RAIL W/16D. GALV. FASTENER THRU POST INTO DOWEL
26"
2 ⅛" WIDE X 2 ¼" LONG EA. END (TYP)
27"
15/16" X 2 5/8" PICKETS, FASTENED TO RAIL W/ 1 ¾" ALUMINUM SCREW NAILS (2–TOP & BOTTOM RAIL, 1–MIDDLE RAIL)
7"
2' 10"

SECTION VIEW

TEMP. STABILIZED CONSTRUCTION EXIT
NOT TO SCALE
B2

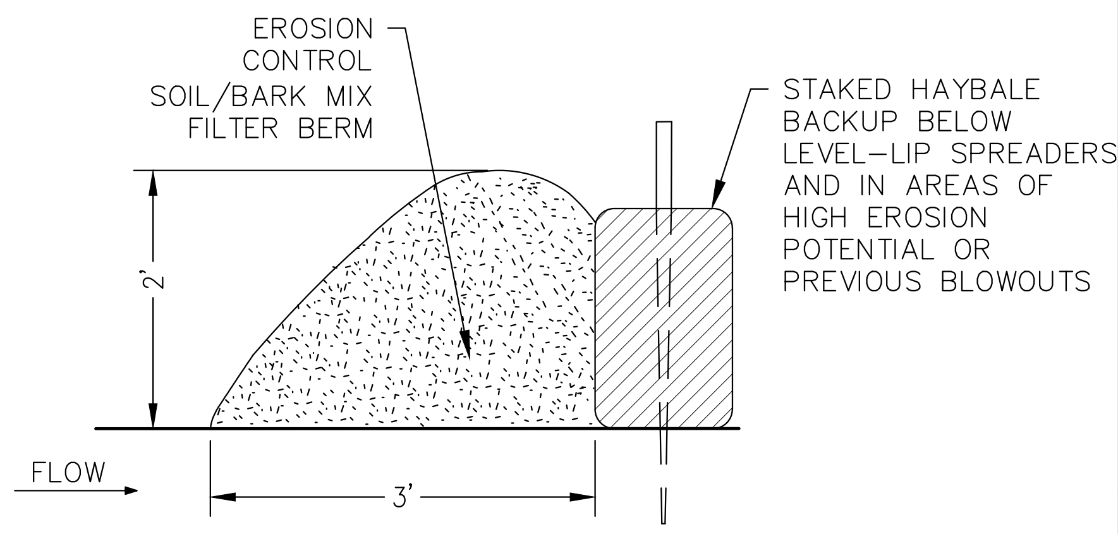

6" MIN
EXISTING ROAD PAVEMENT AND GRAVEL
NON–WOVEN GEOTEXTILE
EXISTING GRADE
PROFILE
CLEAN 1" TO 3" SIZE CRUSHED STONE
TRAFFIC DIRECTION
EXISTING ROAD PAVEMENT
12' MIN.
R8'
MIN TYP.
50' MIN

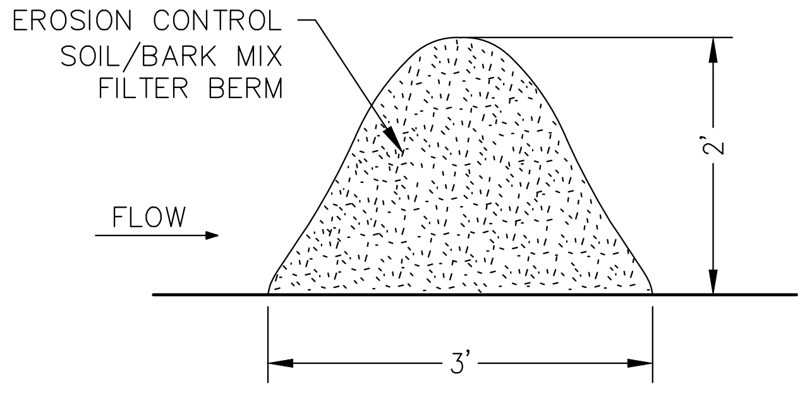
PLAN VIEW

NOTES:

1. STONE SIZE: 2½" TO 1½" USE CRUSH STONE.
2. THICKNESS: MINIMUM OF 8".
3. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC TRAVELED WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE.

SEDIMENT FILTER BERM
NOT TO SCALE
B1

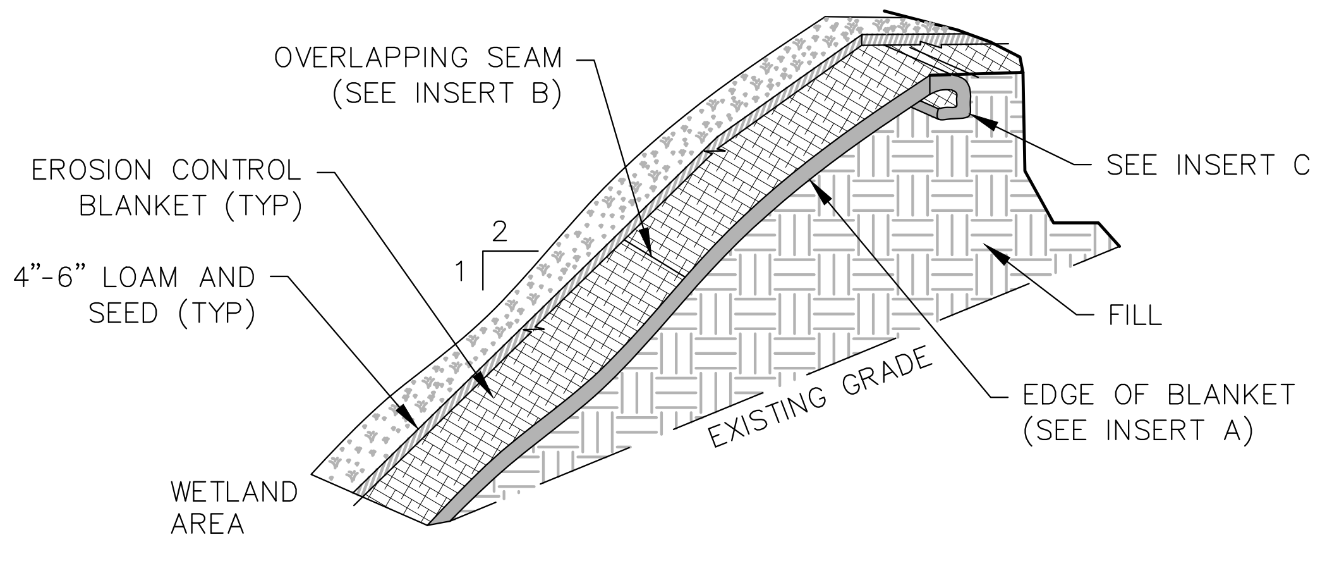

EROSION CONTROL SOIL/BARK MIX FILTER BERM
STAKED HAYBALE BACKUP BELOW LEVEL–LIP SPREADERS AND IN AREAS OF HIGH EROSION POTENTIAL OR PREVIOUS BLOWOUTS
2'
FLOW
3'

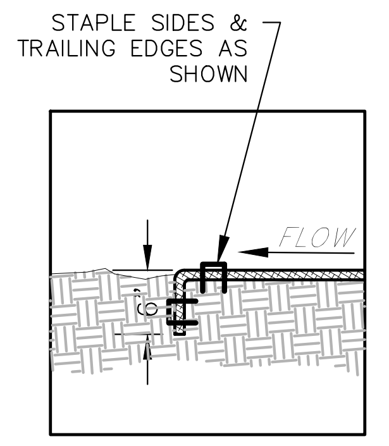

EROSION CONTROL SOIL/BARK MIX FILTER BERM
FLOW
2'
3'

EMBANKMENT W/EROSION CONTROL BLANKET
NOT TO SCALE
A4

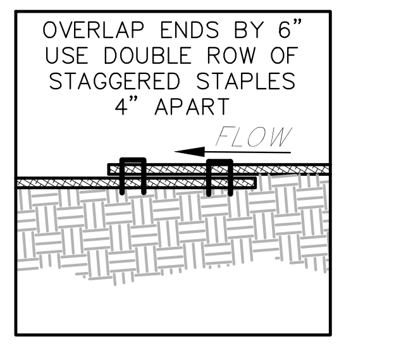
NOTES:

1. FILL SHALL BE COMPACTED IN 6" TO 12" LAYERS TO AVOID SETTLEMENT. COMPACT FILL UNDER PAVEMENTS AND GRAVEL AREAS TO 95% OF MAXIMUM DRY DENSITY; AND UNDER GRASS OR MULCH AREAS TO 90% OF MAXIMUM DRY DENSITY.
2. SOILS SHALL NOT CONTAIN COBBLES LARGER THAN 8" IN THE GREATEST DIMENSION, ICE, FROZEN SOIL, OR ROOTS/STUMPAGE.
3. DO NO WORK ON FROZEN OR MUDDY GROUND.
4. UNROLL MAT ONTO GROUND IN DIRECTION OF WATER FLOW.
5. MAT SHOULD LIE FLAT. DO NOT STRETCH MAT OVER GROUND. STRETCHING MAY CAUSE MAT TO BRIDGE DEPRESSIONS IN THE SURFACE AND ALLOW EROSION UNDERNEATH.
6. BURY TRANSVERSE TERMINAL ENDS OF MAT TO SECURE AND PREVENT EROSIVE FLOW UNDERNEATH.
7. SECURE MAT SNUGLY INTO ALL TRANSVERSE CHECK SLOTS.
8. BACKFILL AND COMPACT TRENCHES AND CHECK SLOTS AFTER STAKING THE MAT IN BOTTOM OF TRENCH.
9. OVERLAP ROLL ENDS BY THREE (3) FEET (MIN.) WITH UPSLOPE MAT ON TOP TO PREVENT UPLIFT OF MAT END BY WATER FLOW. IF INSTALLING IN THE DIRECTION OF A CONCENTRATED WATERFLOW, START NEW ROLLS IN A TRANSVERSE DITCH.
10. OVERLAP ADJACENT EDGES OF MAT BT THREE (3) INCHES (MIN.) AND STAKE.
11. WOOD STAKES ARE RECOMMENDED FOR PINNING MAT TO THE GROUND SURFACE. STAKES SHOULD BE 1" X 3" NOMINAL STOCK CUT IN A TRINGULAR SHAPE. STAKES SHOULD BE 12" TO 18" LONG, DEPENDING ON SOIL DENSITY.
12. DRIVE WOODEN STAKES TO WITHIN THREE (3) INCHES OF GROUND SURFACE. DO NOT DRIVE FLUSH TO SURFACE.
13. IN ALL TRANSVERSE TERMINAL TRENCHES AND CHECK SLOTS, STAKE EACH MAT AT ITS CENTER AND OVERLAP EDGES BEFORE BACKFILLING AND COMPACTING.
14. STAKE OVERLAPS LONGITUDINALLY AT THREE (3) TO FIVE (5) FOOT INTERVALS.
15. FOLLOW COLORED DOT PATTERNS BY MANUFACTURER.


OVERLAPPING SEAM (SEE INSERT B)
EROSION CONTROL BLANKET (TYP)
4"-6" LOAM AND SEED (TYP)
2
1
SEE INSERT C
FILL
EXISTING GRADE
EDGE OF BLANKET (SEE INSERT A)
WETLAND AREA

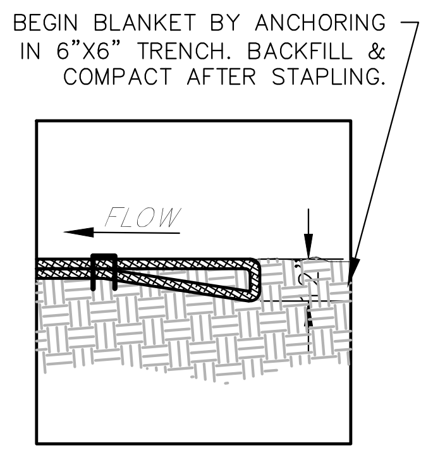

STAPLE SIDES & TRAILING EDGES AS SHOWN
FLOW
6"

INSERT A


OVERLAP ENDS BY 6" USE DOUBLE ROW OF STAGGERED STAPLES 4" APART
FLOW

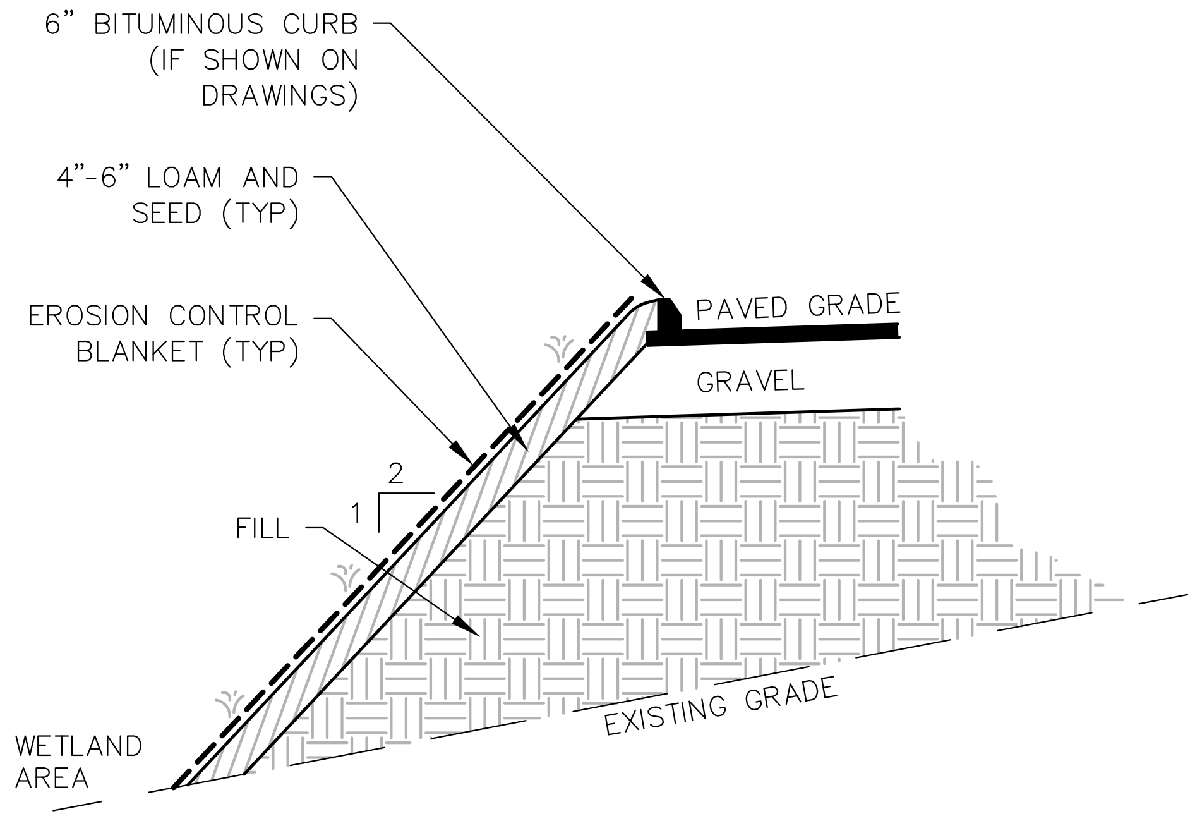
INSERT B

WOODEN STAKE (ALERNATE TO STAPLES)


BEGIN BLANKET BY ANCHORING IN 6"X6" TRENCH. BACKFILL & COMPACT AFTER STAPLING.
FLOW
6"

INSERT C

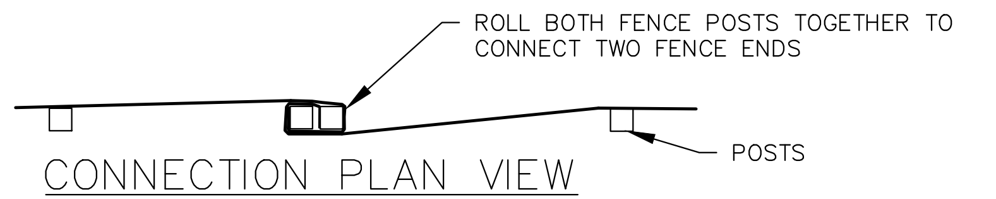
TYPICAL EMBANKMENT
NOT TO SCALE
A2


6" BITUMINOUS CURB (IF SHOWN ON DRAWINGS)
4"-6" LOAM AND SEED (TYP)
EROSION CONTROL BLANKET (TYP)
PAVED GRADE
GRAVEL
2
1
FILL
EXISTING GRADE
WETLAND AREA

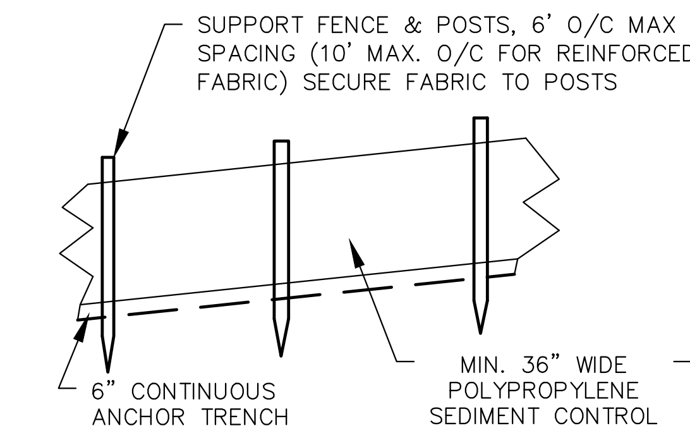
NOTES:

1. FILL SHALL BE COMPACTED IN 6" TO 12" LAYERS TO AVOID SETTLEMENT. COMPACT FILL UNDER PAVEMENTS AND GRAVEL AREAS TO 95% OF MAXIMUM DRY DENSITY; AND UNDER GRASS OR MULCH AREAS TO 90% OF MAXIMUM DRY DENSITY.
2. SOILS SHALL NOT CONTAIN COBBLES LARGER THAN 8" IN THE GREATEST DIMENSION, ICE, FROZEN SOIL, OR ROOTS/STUMPAGE.
3. DO NO WORK ON FROZEN OR MUDDY GROUND.
4. UNROLL MAT ONTO GROUND IN DIRECTION OF WATER FLOW.
5. MAT SHOULD LIE FLAT. DO NOT STRETCH MAT OVER GROUND. STRETCHING MAY CAUSE MAT TO BRIDGE DEPRESSIONS IN THE SURFACE AND ALLOW EROSION UNDERNEATH.
6. BURY TRANSVERSE TERMINAL ENDS OF MAT TO SECURE AND PREVENT EROSIVE FLOW UNDERNEATH.
7. SECURE MAT SNUGLY INTO ALL TRANSVERSE CHECK SLOTS.
8. BACKFILL AND COMPACT TRENCHES AND CHECK SLOTS AFTER STAKING THE MAT IN BOTTOM OF TRENCH.
9. OVERLAP ROLL ENDS BY THREE (3) FEET (MIN.) WITH UPSLOPE MAT ON TOP TO PREVENT UPLIFT OF MAT END BY WATER FLOW. IF INSTALLING IN THE DIRECTION OF A CONCENTRATED WATERFLOW, START NEW ROLLS IN A TRANSVERSE DITCH.
10. OVERLAP ADJACENT EDGES OF MAT BT THREE (3) INCHES (MIN.) AND STAKE.
11. WOOD STAKES ARE RECOMMENDED FOR PINNING MAT TO THE GROUND SURFACE. STAKES SHOULD BE 1" X 3" NOMINAL STOCK CUT IN A TRINGULAR SHAPE. STAKES SHOULD BE 12" TO 18" LONG, DEPENDING ON SOIL DENSITY.
12. DRIVE WOODEN STAKES TO WITHIN THREE (3) INCHES OF GROUND SURFACE. DO NOT DRIVE FLUSH TO SURFACE.
13. IN ALL TRANSVERSE TERMINAL TRENCHES AND CHECK SLOTS, STAKE EACH MAT AT ITS CENTER AND OVERLAP EDGES BEFORE BACKFILLING AND COMPACTING.
14. STAKE OVERLAPS LONGITUDINALLY AT THREE (3) TO FIVE (5) FOOT INTERVALS.
15. FOLLOW COLORED DOT PATTERNS BY MANUFACTURER.

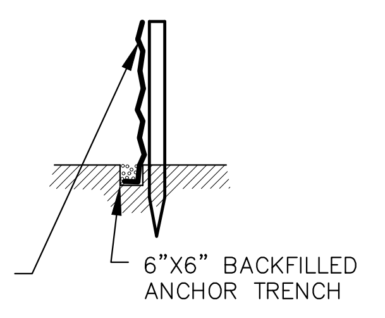
SILT FENCE
NOT TO SCALE
A1


ROLL BOTH FENCE POSTS TOGETHER TO CONNECT TWO FENCE ENDS
POSTS

CONNECTION PLAN VIEW


SUPPORT FENCE & POSTS, 6' O/C MAX SPACING (10' MAX. O/C FOR REINFORCED FABRIC) SECURE FABRIC TO POSTS
6" CONTINUOUS ANCHOR TRENCH
MIN. 36" WIDE POLYPROPYLENE SEDIMENT CONTROL FABRIC ON WIRE FENCE

PROFILE


6"X6" BACKFILLED ANCHOR TRENCH

SECTION

NOTES:

1. PLACE SILT FENCE OR FILTER BERMS ALONG UNIFORMLY SLOPED SURFACE.
2. EROSION CONTROL MIX FILTER BERM MAY BE SUBSTITUTED FOR A SILTFENCE. SEE THE SITE GRADING AND EROSION CONTROL PLAN.
3. EXCAVATE A 6"X6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
4. UNROLL ONE SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
5. DRIVE THE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM. JOIN SECTIONS AS SHOWN ABOVE.
6. LAY THE TOE–IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE–IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPLISHED BY AN INTERCEPTION DITCH.
7. BARRIER SHALL BE MIRAFI SILT FENCE OR APPROVED EQUAL.

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PROJECT
BRICKYARD COMMONS
AUBURN, MAINE 04210

OWNER OF RECORD
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2022–03–18 SDH
ISSUED FOR CLIENT REVIEW.

SUBMISSION 2: 2022–03–28 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 3: 2022–03–31 SDH
ISSUED FOR 75% REVIEW.

SUBMISSION 4: 2022–05–03 SDH
ISSUED FOR REVIEW.

SUBMISSION 5: 2022–05–03 SDH
ISSUED FOR PERMITTING.

SUBMISSION 6: 2022–06–16 SDH
ISSUED FOR PERMITTING.

SUBMISSION 7: 2022–08–11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 8: 2025–02–19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	8
SURVEY DATE:	N/A
SUBMISSION DATE:	2025–02–19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

DETAILS

SEAL:
RICHARD W. DUNTON
No. 12485
2025-02-19

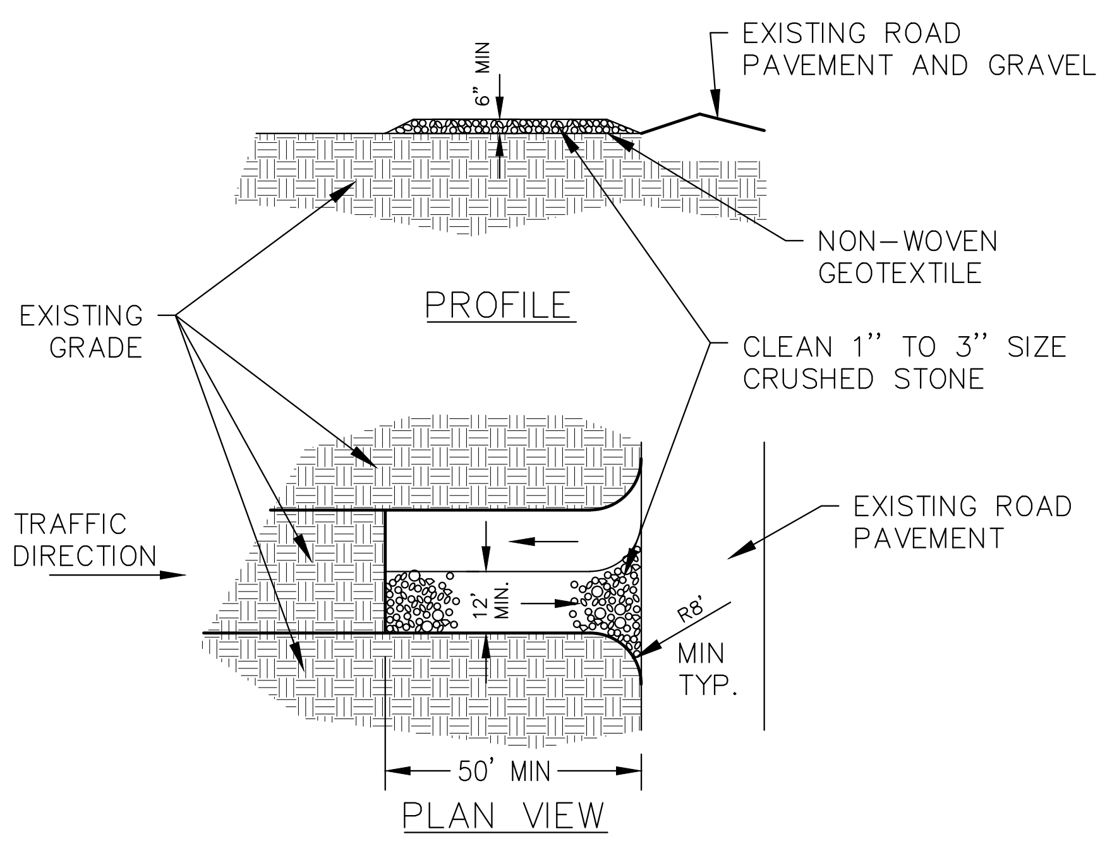
RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C9.2
MLDC NO. 21–342
12 OF 14

TEMP. STABILIZED CONSTRUCTION EXIT

A3

NOT TO SCALE


6" MIN
EXISTING ROAD PAVEMENT AND GRAVEL
NON–WOVEN GEOTEXTILE
EXISTING GRADE
CLEAN 1" TO 3" SIZE CRUSHED STONE
TRAFFIC DIRECTION
EXISTING ROAD PAVEMENT
12' MIN.
R8' MIN TYP.
50' MIN

PROFILE

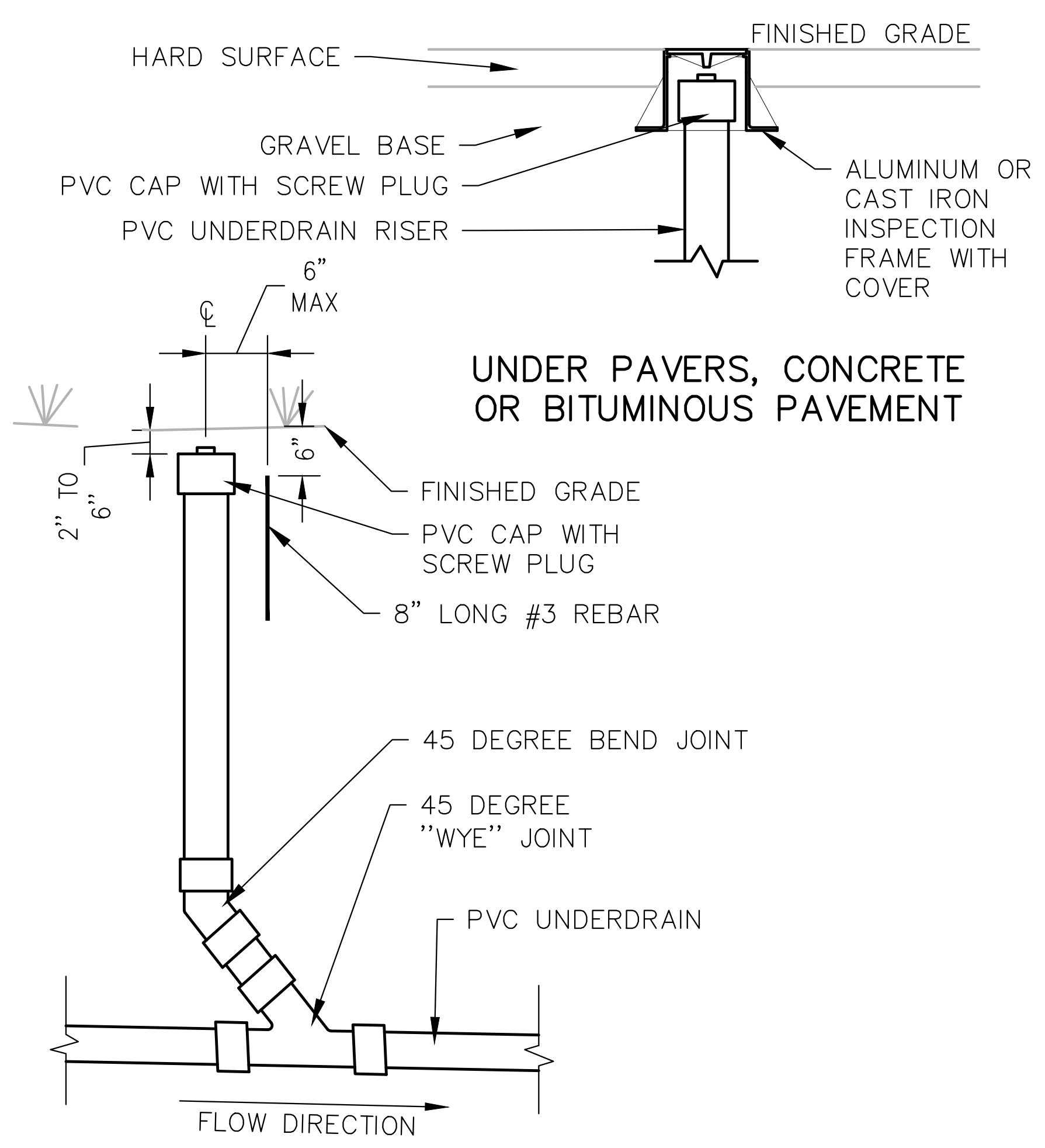
PLAN VIEW

NOTES:
1. STONE SIZE: $2\frac{1}{2}$" TO $1\frac{1}{2}$" USE CRUSH STONE.
2. THICKNESS: MINIMUM OF 8".
3. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC TRAVELED WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE.

UNDERDRAIN CLEANOUT

A2

NOT TO SCALE

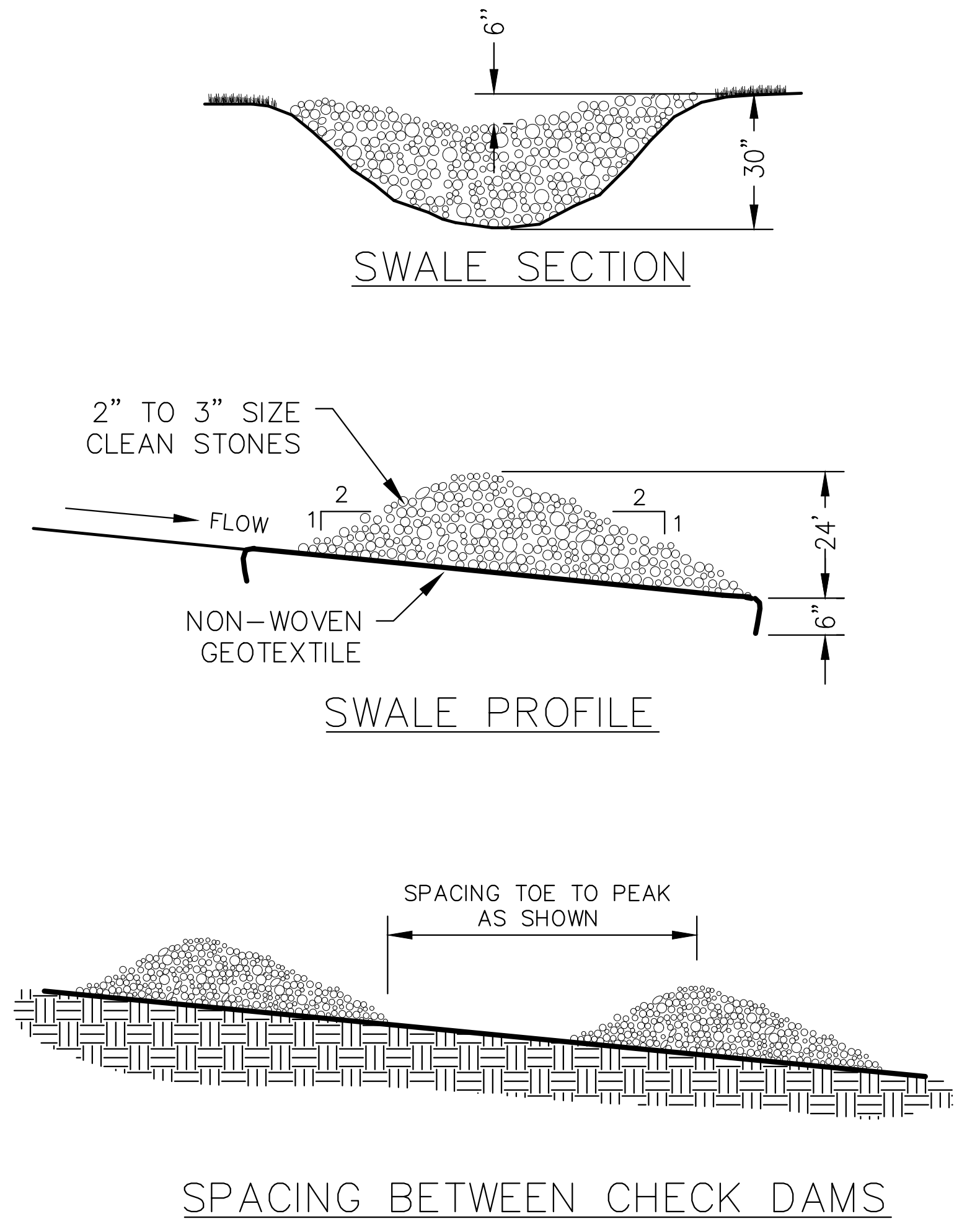

HARD SURFACE
FINISHED GRADE
GRAVEL BASE
PVC CAP WITH SCREW PLUG
PVC UNDERDRAIN RISER
ALUMINUM OR CAST IRON INSPECTION FRAME WITH COVER
6" MAX
℄
2" TO 6"
6"
FINISHED GRADE
PVC CAP WITH SCREW PLUG
8" LONG #3 REBAR
45 DEGREE BEND JOINT
45 DEGREE "WYE" JOINT
PVC UNDERDRAIN
FLOW DIRECTION

UNDER PAVERS, CONCRETE OR BITUMINOUS PAVEMENT

SWALE/DITCH STONE CHECK DAM

A1

NOT TO SCALE


6"
30"
2" TO 3" SIZE CLEAN STONES
FLOW
2
1
2
1
24'
6"
NON–WOVEN GEOTEXTILE
SPACING TOE TO PEAK AS SHOWN

SWALE SECTION

SWALE PROFILE

SPACING BETWEEN CHECK DAMS

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MADE FOR

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LEWISTON, MAINE 04241

DRAWING SCALE:

NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2022–08–11 SDH
ISSUED FOR PERMITTING.

SUBMISSION 2: 2025–02–19 MJB
ISSUED FOR PERMITTING

PROJ. MGR:	RWD
DRAWN BY:	SDH
CHECKED BY:	RWD
SUBMISSION NO.	2
SURVEY DATE:	N/A
SUBMISSION DATE:	2025–02–19
SUBMITTED FOR:	PERMITTING

NOT FOR CONSTRUCTION

DETAILS

SEAL:

RICHARD W. DUNTON No. 12485

2025-02-19

RICHARD W. DUNTON ME PE #12485

DRAWING NO.

C9.3

MLDC NO. 21–342

13 OF 14

2. TEMPORARY EROSION CONTROL: TEMPORARY CONTROL MEASURES MAY CONSIST OF A COMBINATION OF MEASURES WHERE APPROPRIATE AND/OR AS SHOWN ON THE PLANS.

A. SEDIMENT FILTER BERMS:

SEDIMENT FILTER BERMS ARE THE PREFERRED FILTERING DEVICE, BUT MAY NOT BE USED IN WETLAND AREAS. THE BERMS SHALL BE PLACED DOWN SLOPE OF ALL EARTH MOVING ACTIVITIES, WHERE WATER FROM THESE DISTURBED AREAS WILL RUN OFF. THESE BERMS WILL BE PLACED ALONG AN EVEN CONTOUR, BE AT LEAST 24 INCHES TALL, AND 3 FEET WIDE AT THE BASE. TURN THE ENDS OF THE BERM UP-GRADE TO AVOID RUNOFF FLOWING AROUND THE BERM. IN AREAS OF HIGH EROSION POTENTIAL, THE BERM WILL BE BACKED BY HAY BALES OR SILT FENCING, AS SHOWN ON THE FILTER BERM DETAIL.

B. SILT FENCING:

SILT FENCING MAY BE USED IN PLACE OF, OR TOGETHER WITH, THE SEDIMENT FILTER BARRIERS. THE SILT FENCING WILL ALSO BE ANCHORED AT LEAST FOUR INCHES INTO THE GROUND AND PLACED ALONG AN EVEN CONTOUR. TURN THE ENDS OF THE FENCE UP-GRADE TO AVOID RUNOFF FLOWING AROUND THE FENCE. DURING FROZEN CONDITIONS, FURNISH AND INSTALL SEDIMENT FILTER BERMS IN LIEU OF SILT FENCING OR HAY BALES IF FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF SILT FENCES AND HAY BALES.

C. STONE CHECK DAMS:

STONE CHECK DAMS SHALL BE PLACED IN THE CENTER OF DITCHES IMMEDIATELY FOLLOWING EXCAVATION TO PROVIDE A MEANS OF TRAPPING SEDIMENTS. (IF THE DITCH HAS BEEN IMMEDIATELY ARMORED WITH RIP-RAP, CHECK DAMS ARE NOT NECESSARY.) THE DAMS SHALL CONSIST OF SMALL STONE PLACED ACROSS THE DITCH, WITH A DEPRESSION AT THE TOP OF THE DAM TO ALLOW WATER OVER THE TOP OF THE DAM, SHOULD IT BECOME CLOGGED WITH SEDIMENT. SEE THE SPECIFICATIONS ON THE TYPICAL DETAILS PLAN FOR CONSTRUCTION DETAILS OF THIS MEASURE

D. TEMPORARY MULCH:

TEMPORARY MULCH SHALL BE PLACED ON ALL DISTURBED AREAS WHERE SEEDING, CONSTRUCTION OR STABILIZATION ACTIVITIES WILL NOT TAKE PLACE FOR OVER 7 CONSECUTIVE DAYS. TEMPORARY MULCH WILL ALSO BE PLACED ON AREAS WITHIN 75 FEET OF A NATURAL RESOURCE (WETLAND, STREAM, ETC.) WHERE SEEDING WILL NOT TAKE PLACE FOR OVER 48 HOURS, AND ON ALL BARE SOILS OUTSIDE THE ROAD BASE PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT. A SIGNIFICANT RAIN EVENT IS CONSIDERED TO BE AT LEAST 1 INCH OF RAIN OR MORE. TEMPORARY MULCH MAY BE HAY AND SHALL BE APPLIED AT A RATE OF TWO BALES PER 1,000 SQUARE FEET. SOIL MUST NOT BE VISIBLE UPON COMPLETION OF APPLICATION, REGARDLESS OF RATE OF APPLICATION.

E. TOPSOIL STOCKPILES:

TOPSOIL, REMOVED AS PART OF THE CONSTRUCTION, WILL BE STOCKPILED ON SITE FOR USE IN AREAS TO BE RE-VEGETATED. THE LOCATION OF TOPSOIL STOCKPILES MUST NOT BE WITHIN 75 FEET OF A DEFINED NATURAL RESOURCE (WETLAND, STREAM, ETC.), OR WITHIN 75 FEET OF A SWALE OR DITCH.

STOCKPILES SHALL BE MULCHED WITH HAY AT TWO BALES PER 1,000 SQUARE FEET. THE AREA DOWN SLOPE FROM ANY STOCKPILE AREAS WILL BE PROTECTED BY A SEDIMENT FILTER BERM OR SILT FENCE PLACED DIRECTLY BELOW OR DOWN GRADIENT FROM THE STOCKPILE. IF THE STOCKPILE MUST BE LEFT FOR MORE THAN 30 DAYS, THE PILE WILL BE SEEDED WITH RYE GRASS AT A RATE OF TWO POUNDS PER 1,000 SQUARE FEET AND MULCHED IN ACCORDANCE WITH THIS PARAGRAPH.

F. TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION

WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A PROPRIETARY PRODUCT FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE AND FABRIC LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

H. MAINTENANCE OF TEMPORARY MEASURES:

ALL TEMPORARY MEASURES DESCRIBED ABOVE SHALL BE INSPECTED WEEKLY AND BEFORE/AFTER EVERY SIGNIFICANT STORM EVENT (1 INCH OF RAIN OR GREATER) THROUGHOUT THE CONSTRUCTION OF THE PROJECT. REPAIRS OR REPLACEMENTS OF TEMPORARY MEASURES WILL BE MADE AS NECESSARY. ONCE THE SITE IS STABLE, ALL TEMPORARY DEVICES SUCH AS HAY BALE BARRIERS AND SILT FENCING WILL BE REMOVED.

3. WINTER STABILIZATION:

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH A COMBINATION OF PAVEMENT, A ROAD GRAVEL BASE, 90% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 1 THEN THE SITE NEEDS TO BE PROTECTED WITH WINTER STABILIZATION.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS DENUDED AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE FOLLOWING 15 DAYS. EXPOSED AREA SHALL NOT BE SO LARGE THAT IT CANNOT BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 200 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS.

CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES
STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 200 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOODWASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

ANY NEW SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET OF ANY NATURAL RESOURCES.

2. NATURAL RESOURCE PROTECTION
ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 90 % MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS.

DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. SILT FENCING MAY NOT BE PLACED ON FROZEN GROUND.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. MULCHING
AREAS SHALL BE CONSIDERED DENUDED UNTIL LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 200 LB. PER 1.000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION.

AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 200 LB. PER 1,000 SQUARE FEET AND ADEQUATELY ANCHORED, SUCH THAT THE GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, OR WOOD CELLULOSE FIBER. THE GROUND SURFACE SHALL NOT BE VISIBLE THOUGH THE MULCH.

AFTER NOVEMBER 1TH, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

4. MULCHING ON SLOPES AND DITCHES
SLOPES SHALL NOT BE LEFT EXPOSED FOR MORE THAN 7 DAYS UNLESS FULLY MULCHED AND ANCHORED. SLOPES WITHIN 75 FEET OF A NATURAL RESOURCE SHALL NOT BE LEFT EXPOSED FOR MORE THAN 48 HOURS. MULCHING SHALL BE APPLIED AT A RATE OF 300 LBS/1,000 SQ FT ON ALL SLOPES GREATER THAN 8%. EROSION CONTROL MESH SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS AND DITCHES, FOR SLOPES EXPOSED TO DIRECT WINDS, AND FOR ALL OTHER SLOPES GREATER THAT 8 %. EROSION CONTROL BLANKET AND CHECK DAMS (OR PERMANENT RIP-RAP) SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES OF 8 % OR MORE.

A SIX INCH LAYER OF EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

5. SEEDING: BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES, FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED (SEE TABLE BELOW) AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF AFTER NOVEMBER 1ST THE EXPOSED AREA HAS BEEN FINAL GRADED AND LOAMED, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

TEMPORARY SEED MIX

TYPE	% BY WEIGHT	% PURITY	% GERMINATION
DOMESTIC RYE GRASS	60	69.7	90
PERENNIAL RYE GRASS	20	28.0	85
AROOSTOOK RYE GRASS	20	28.00	85

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES.

IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. AREAS NOT SUFFICIENTLY VEGETATED (LESS THAN 90 % CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH.

IF DORMANT SEEDING IS NOT USED, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

6. TRENCH DEWATERING
WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

7. INSPECTION AND MONITORING
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION.

IN THE SPRING, FOLLOWING THE TEMPORARY/FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL INSPECT AND REPAIR ANY DAMAGES AND/ OR UN-ESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90 % OF AREAS VEGETATED WITH VIGOROUS GROWTH.

8. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS

ALL STONE-LINED DITCHES AND CHANNELS SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1. ALL GRASS-LINED DITCHES AND CHANNELS SHALL BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. FAILURE TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1, WILL REQUIRE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

INSTALL A SOD LINING IN THE DITCH – SOD LINING SHALL BE INSTALLED IN DITCHES BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

INSTALL A STONE LINING IN THE DITCH –DITCHES SHALL BE LINED WITH STONE RIPRAP BY NOVEMBER 1, AS PRESENTED BELOW. IF NECESSARY, THE APPLICANT WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

9. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES

CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 1. THE APPLICANT WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. SLOPES WILL BE CONSIDERED ANY AREA HAVING A GRADE GREATER THAN 15% (6H:1V). IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 1, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS –– SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE OCTOBER 1. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 90% OF THE DISTURBED SLOPE BY NOVEMBER 1, COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST OR WITH STONE RIPRAP AS DESCRIBED BELOW.

STABILIZE THE SLOPE WITH SOD –– STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. SOD STABILIZATION SHALL NOT BE USED LATE-SEASON TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SLOPE WITH WOOD WASTE COMPOST (EROSION CONTROL MIX) ––PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 1. PRIOR TO PLACING THE WOOD WASTE COMPOST, REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. WOOD WASTE COMPOST WILL NOT BE USED TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP –– PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 1, SIMILAR TO THE STONE LINED DITCH THE PERMANENT EROSION CONTROL SECTION.

10. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS

SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% BY SEPTEMBER 1. FAILURE TO STABILIZE THESE SOILS BY THIS DATE WILL REQUIRE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION –– SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING BY OCTOBER 1. GROWTH OF THE RYE WILL REQUIRE MONITORING OVER THE FOLLOWING 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED BELOW.

STABILIZE THE SOIL WITH SOD –– STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

STABILIZE THE SOIL WITH MULCH –– MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH BY NOVEMBER 1. PRIOR TO APPLYING THE MULCH, REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

4. PERMANENT EROSION CONTROL:

PERMANENT MEASURES WILL CONSIST OF THE PLACEMENT OF CULVERTS; CULVERT INLET/OUTLET STABILIZATION; THE CONSTRUCTION OF GRASS/STONE LINED DITCHES; AND THE RE-VEGETATION OF ALL AREAS OUTSIDE THE TRAVELED WAY OF THE ROAD, AND THOSE AREAS DESIGNATED AS STONE LINED DITCHES.

A. CULVERTS:

ALL CULVERTS HAVE BEEN SIZED TO HANDLE THE PEAK FLOWS GENERATED BY A 25-YEAR, 24-HOUR RAIN STORM. THE LOCATIONS AND SIZES OF THE CULVERTS ARE SHOWN ON THE SITE PLANS.

THE INLETS AND OUTLETS OF THE CULVERTS WILL BE ARMORED WITH RIPRAP TO PREVENT SCOURING. THIS ARMORING WILL CONSIST OF PLACING STONE POSSESSING A D50 OF 6 INCHES TO A DEPTH OF 18 INCHES TO THE FOLLOWING DIMENSIONS: WIDTH EQUAL TO TWICE THE DIAMETER OF THE CULVERT; LENGTH EQUAL TO THREE TIMES THE DIAMETER OF THE CULVERT, UNLESS NOTED OTHERWISE.

B. DITCHES:

DITCHES ON THE PROJECT HAVE BEEN DESIGNED BASED ON EXPECTED FLOW RATES AND VELOCITIES FOR THE 25-YEAR, 24-HOUR STORM EVENT AND THE SLOPE OF THE DITCH. WHERE WATER VELOCITIES ARE EXPECTED TO EXCEED 3.5 FEET PER SECOND, THE DITCH HAS BEEN DESIGNED TO BE STONE LINED. DITCHES WITH WATER VELOCITIES OF LESS THAN 3.5 FEET PER SECOND HAVE BEEN DESIGNED TO BE GRASS LINED.

STONE LINED DITCHES:

STONE LINED DITCHES WILL FIRST BE LINED WITH A NON-WOVEN FILTER FABRIC, AND THEN LINED WITH RIPRAP POSSESSING A D50 OF APPROXIMATELY 6 INCHES IN DIAMETER. THIS MEANS THAT APPROXIMATELY HALF THE STONES BY WEIGHT WILL BE SMALLER THAN 6 INCHES AND HALF WILL BE LARGER. THE MINIMUM STONE SIZE SHOULD BE 1 INCH WITH THE LARGEST STONE BEING 9 INCHES IN DIAMETER. THE DEPTH OF STONE IN THE DITCH SHOULD AVERAGE 15 INCHES.

THE FINAL SHAPE OF THE DITCH WILL CONSIST OF THE FOLLOWING DIMENSIONS: A BOTTOM WIDTH OF TWO FEET; SIDE SLOPES POSSESSING A 3:1 HORIZONTAL TO VERTICAL; AND A TOTAL DEPTH OF 2 FEET.

IN LIEU OF STONE RIP-RAP, THE DITCH MAY BE LINED WITH A PERMANENT EROSION CONTROL BLANKET, SUCH AS NORTH AMERICAN GREEN P300 OR APPROVED EQUAL.

GRASS LINED DITCHES:

GRASS LINED DITCHES WILL POSSESS THE SAME FINAL DIMENSIONS AS THE STONE LINED DITCHES. THE FLOW AREA OF THE DITCH WILL BE ARMORED BY PLACING A BIODEGRADABLE MATTING OR NETTING (SUCH AS AMERICAN EXCELSIOR CURLEX BLANKET OR EQUAL) IN THE BOTTOM OF THE DITCH. PLACEMENT OF THIS MATERIAL MUST TAKE PLACE AFTER SEEDING. INSTALL ACCORDING TO THE MANUFACTURERS' RECOMMENDATIONS.

SEEDING AND MULCHING OF GRASS LINED DITCHES WILL FOLLOW THE SPECIFICATIONS STATED BELOW FOR RE-VEGETATION.

C. RE-VEGETATION MEASURES:

ALL AREAS TO BE PERMANENTLY RE-VEGETATED WITH GRASS WILL FIRST BE COVERED WITH LOAM AND THEN FERTILIZED.

LOAM WILL BE PLACED ON ALL AREAS TO BE RE-VEGETATED. LOAM WILL BE PLACED TO A MINIMUM DEPTH OF 4 INCHES. LOAM WILL BE THE STOCKPILED TOPSOIL, IF POSSIBLE.

TEST THE LOAM SAMPLES FOR NUTRIENTS AT A PROFICIENT TESTING LABORATORY (THE UNIVERSITY OF MAINE PROVIDES THIS SERVICE). REQUEST THAT THE TESTING LABORATORY PROVIDE A RECOMMENDED FERTILIZER MIX, WITH EMPHASIS AT REDUCING THE PHOSPHORUS COMPONENT DUE TO THE TWITCHELL POND WATERSHED. THE AREAS WITH LOAM WILL THEN BE FERTILIZED WITH THE RECOMMENDED APPLICATION RATE. LIME WILL ALSO BE APPLIED AT A RATE OF 50 POUNDS PER 1,000 SQUARE FEET. BOTH THE LIME AND THE FERTILIZER WILL BE MIXED THOROUGHLY WITH THE SOIL.

ALL AREAS TO BE RE-VEGETATED WITH PERMANENT GRASS ARE TO BE SEEDED WITH THE SEED MIX SHOWN ON THE TABLE BELOW. THIS MIXTURE WILL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.

GENERAL LAWN AREAS	CHEWING FESCUE "DIGNITY"	35%
	PENNLAWN CREEPING RED FESCUE	35%
	PERENNIAL RYE "TOURSTAR" (NUTRITE)	30%

MULCH WILL THEN BE SPREAD ON ALL SEEDED AREAS AT A RATE OF TWO BALES PER 1,000 SQUARE FEET. REGARDLESS OF APPLICATION RATE THE SOIL SHALL NOT BE VISIBLE THROUGH THE MULCH.

SEED AND MULCH WILL BE PLACED WITHIN FIVE DAYS OF FINAL GRADING OF TOPSOIL.

SEEDED AREAS WILL BE INSPECTED AFTER 30 DAYS TO DETERMINE THE SUCCESS OF THE SEEDING. IF THE GROUND COVER IS LESS THAN 90%, THE AREA WILL BE RESEEDED.

D. CRITICAL AREAS:

SLOPES IN EXCESS OF 15% WILL REQUIRE THE PLACEMENT OF A BIODEGRADABLE NETTING OR MATTING OVER THE MULCH AND SEED (IF THE NETTING HAS NO MULCH IN IT). IF STABILIZATION IS TO TAKE PLACE AFTER OCTOBER 1, SLOPES OVER 8% WILL BE TREATED WITH THE MATTING.

E. MAINTENANCE OF PERMANENT MEASURES:

ALL MEASURES WILL BE INSPECTED WEEKLY AND BEFORE AND AFTER EVERY SIGNIFICANT STORM EVENT DURING CONSTRUCTION, AND THEN AT LEAST ONCE ANNUALLY TO INSURE PROPER FUNCTION. ANY DAMAGED AREAS WILL BE REPAIRED OR REPLACED AS NECESSARY. ANY DITCHES OR CULVERTS NOT FUNCTIONING AS DESIGNED WILL BE REDESIGNED AND RECONSTRUCTED ACCORDING TO SPECIFICATIONS PREPARED BY A PROFESSIONAL ENGINEER.

IN ANY EVENT, SEEDING SHOULD TAKE PLACE EITHER BETWEEN MAY 1 AND JUNE 15, OR AUGUST 15 AND SEPTEMBER 1.

HOUSEKEEPING PLAN

THE PURPOSE OF THIS PLAN IS TO ENSURE CONSTRUCTION ACTIVITIES PROTECT AGAINST AND DO NOT CREATE OR RESULT IN MATERIALS THAT COULD BECOME A SOURCE OF POLLUTION. THESE STANDARDS APPLY TO SPILL PREVENTION, GROUNDWATER PROTECTION, SEDIMENT AND DUST, DEBRIS AND OTHER UNAUTHORIZED NON-STORMWATER DISCHARGES.

SPILL PREVENTION:
A SPCC PLAN IS UNNECESSARY. NO HAZARDOUS MATERIALS WILL BE STORED ON SITE. THE SITE WILL PRIMARILY BE UTILIZED FOR PARKING, LOADING/UNLOADING AND STORAGE OF NON-HAZARDOUS MATERIALS.

GROUNDWATER PROTECTION:
NO STORMWATER INFILTRATION AREAS A PROPOSED ON THIS SITE. ADDITIONALLY, THE SITE IS NOT LOCATED OVER A SIGNIFICANT SAND AND GRAVEL AQUIFER.

FUGITIVE SEDIMENT AND DUST:
A STABILIZED CONSTRUCTION EXIT WILL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION TO MINIMIZE THE TRACKING OF MUD AND SEDIMENT OFF SITE. APPLICATION OF WATER WILL BE UTILIZED FOR DUST PREVENTION DURING CONSTRUCTION. APPLICATION OF OTHER CHEMICALS TO REDUCE DUST SHALL NOT BE ALLOWED WITHOUT MAINE DEP APPROVAL DUE TO THE TAYLOR BROOK WATERSHED.

DEBRIS AND OTHER MATERIALS:
CONSTRUCTION DEBRIS SHALL BE CONTAINED WITHIN ROLL-OFF DUMPSTERS AND HAULED TO A LICENSED WASTE FACILITY. THE SITE SHALL BE KEPT IN A TIDY CONDITION, FREE FROM TRASH AND LITTER.

EXCAVATION DE-WATERING:
IF EXCAVATION DEWATERING IS WARRANTED, DISCHARGE OF WATER FROM EXCAVATION SHALL BE THROUGH AN APPROVED FILTER AS NOTED IN THE EROSION AND SEDIMENTATION CONTROL PLAN. THE DISCHARGE SHALL BE AT A MINIMUM OF 100' FROM TAYLOR BROOK AND ALLOW FLOW THROUGH A VEGETATED AREA PRIOR TO CONFLUENCE WITH WETLAND OR STREAM FLOWS.

AUTHORIZED NON-STORMWATER DISCHARGES:
THERE ARE NOT AUTHORIZED NON-STORMWATER DISCHARGES EXISTING OR PROPOSED FOR THIS SITE.

UNAUTHORIZED NON-STORMWATER DISCHARGES:
THERE ARE NO UNAUTHORIZED NON-STORMWATER DISCHARGES EXISTING OR PROPOSED FOR THIS SITE.

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT
BRICKYARD COMMONS
AUBURN, MAINE 04210

OWNER OF RECORD
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

MADE FOR
JIG INVESTMENTS, LLC
PO BOX 1913
LEWISTON, MAINE 04241

DRAWING SCALE:
NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2022-08-11 SDH
ISSUED FOR PERMITTING.

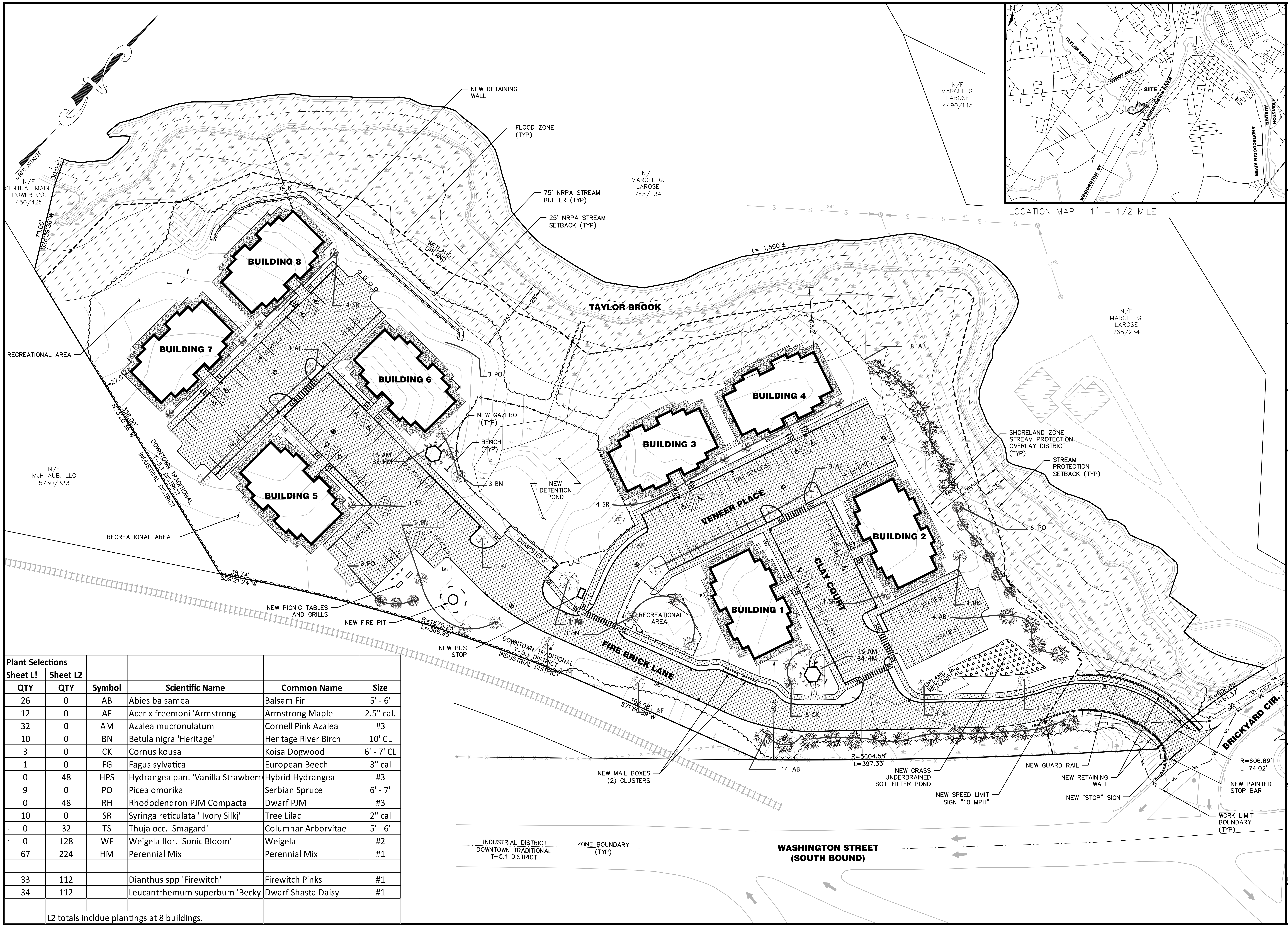
SUBMISSION 2: 2025-02-19 MJB
ISSUED FOR PERMITTING

PROJ. MGR: RWD
DRAWN BY: SDH
CHECKED BY: RWD
SUBMISSION NO. 2
SURVEY DATE: N/A
SUBMISSION DATE: 2025-02-19
SUBMITTED FOR: PERMITTING
NOT FOR CONSTRUCTION

EROSION CONTROL & HOUSEKEEPING NOTES

SEAL:
RICHARD W. DUNTON
No. 12485
2025-02-19
RICHARD W. DUNTON ME PE #12485

DRAWING NO.
C9.4
MLDC NO. 21-342 14 OF 14


GRID NORTH
N/F CENTRAL MAINE POWER CO. 450/425
30.04'
70.00'
S28°39'36"W
75.8'
NEW RETAINING WALL
FLOOD ZONE (TYP)
N/F MARCEL G. LAROSE 4490/145
N/F MARCEL G. LAROSE 765/234
75' NRPA STREAM BUFFER (TYP)
25' NRPA STREAM SETBACK (TYP)
WETLAND UPLAND
BUILDING 8
4 SR
BUILDING 7
RECREATIONAL AREA
24 SPACES
9 SPACES
3 AF
BUILDING 6
3 PO
27.6'
356.00'
N73°20'36"W
10 SPACES
NEW GAZEBO (TYP)
BENCH (TYP)
16 AM
33 HM
BUILDING 5
13 SPACES
23 SPACES
3 BN
1 SR
NEW DETENTION POND
N/F MJH AUB, LLC 5730/333
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
INDUSTRIAL DISTRICT
RECREATIONAL AREA
3 BN
7 SPACES
3 SPACES
3 PO
1 AF
DUMPSTERS
38.74'
S59°21'24"W
NEW PICNIC TABLES AND GRILLS
NEW FIRE PIT
R=1670.28'
L=368.95'
NEW BUS STOP
1 FG
3 BN
FIRE BRICK LANE
165.08'
S71°54'39"W
L= 1,560'±
TAYLOR BROOK
63.2'
8 AB
BUILDING 4
BUILDING 3
4 SR
26 SPACES
3 AF
9 SPACES
VENEER PLACE
1 AF
12 SPACES
RECREATIONAL AREA
BUILDING 1
CLAY COURT
12 SPACES
18 SPACES
1 SR
BUILDING 2
1 BN
4 AB
10 SPACES
10 SPACES
16 AM
34 HM
3 CK
99.5'
UPLAND WETLAND
1 AF
1 AF
SHORELAND ZONE STREAM PROTECTION OVERLAY DISTRICT (TYP)
STREAM PROTECTION SETBACK (TYP)
75'
25'
6 PO
N/F MARCEL G. LAROSE 765/234
R=606.69'
L=61.37'
BRICKYARD CIR.
R=606.69'
L=74.02'
NEW MAIL BOXES (2) CLUSTERS
14 AB
R=5604.58'
L=397.33'
NEW GRASS UNDERDRAINED SOIL FILTER POND
NEW SPEED LIMIT SIGN "10 MPH"
NEW GUARD RAIL
NEW RETAINING WALL
NEW "STOP" SIGN
NEW PAINTED STOP BAR
WORK LIMIT BOUNDARY (TYP)
INDUSTRIAL DISTRICT
DOWNTOWN TRADITIONAL T-5.1 DISTRICT
ZONE BOUNDARY (TYP)
WASHINGTON STREET (SOUTH BOUND)
TAYLOR BROOK
MINOT AVE.
SITE
LITTLE ANDROSCOGGIN RIVER
WASHINGTON ST.
ANDROSCOGGIN RIVER
AUBURN
LEWISTON
N

LOCATION MAP 1" = 1/2 MILE

Plant Selections

Sheet L! QTY	Sheet L2 QTY	Symbol	Scientific Name	Common Name	Size
26	0	AB	Abies balsamea	Balsam Fir	5' - 6'
12	0	AF	Acer x freemoni 'Armstrong'	Armstrong Maple	2.5" cal.
32	0	AM	Azalea mucronulatum	Cornell Pink Azalea	#3
10	0	BN	Betula nigra 'Heritage'	Heritage River Birch	10' CL
3	0	CK	Cornus kousa	Koisa Dogwood	6' - 7' CL
1	0	FG	Fagus sylvatica	European Beech	3" cal
0	48	HPS	Hydrangea pan. 'Vanilla Strawberry	Hybrid Hydrangea	#3
9	0	PO	Picea omorika	Serbian Spruce	6' - 7'
0	48	RH	Rhododendron PJM Compacta	Dwarf PJM	#3
10	0	SR	Syringa reticulata ' Ivory Silkj'	Tree Lilac	2" cal
0	32	TS	Thuja occ. 'Smagard'	Columnar Arborvitae	5' - 6'
0	128	WF	Weigela flor. 'Sonic Bloom'	Weigela	#2
67	224	HM	Perennial Mix	Perennial Mix	#1
33	112		Dianthus spp 'Firewitch'	Firewitch Pinks	#1
34	112		Leucantrhemum superbum 'Becky'	Dwarf Shasta Daisy	#1
	L2 totals incldue plantings at 8 buildings.				

MAIN-LAND
Development
Consultants, Inc.
69 Main St. Livermore Falls, Maine
367 US Route 1 Falmouth, Maine
Ph: (207) 897-6752 Fax: (207) 897-5404
www.main-landdci.com

PROJECT

BRICKYARD COMMONS

AUBURN, MAINE 04210

OWNER OF RECORD

GENDRON CORP.

50 ALFRED A. PLOURDE PARKWAY
PO BOX 1913,
LEWISTON, MAINE 04241

MADE FOR

GENDRON CORP.

50 ALFRED A. PLOURDE PARKWAY
PO BOX 1913,
LEWISTON, MAINE 04241

DRAWING SCALE:
40 0 20 40
(IN FEET)
1 INCH = 40 FT

Davis Landscape Company, Inc.
78 Lisbon Street
Lisbon, ME 04250
(207) 353-4848 tel
www.DavisLandscape.com

Date: 06-02-2022

Drawn By: CTD

NOT FOR CONSTRUCTION

Landscape
Plan

SEAL:

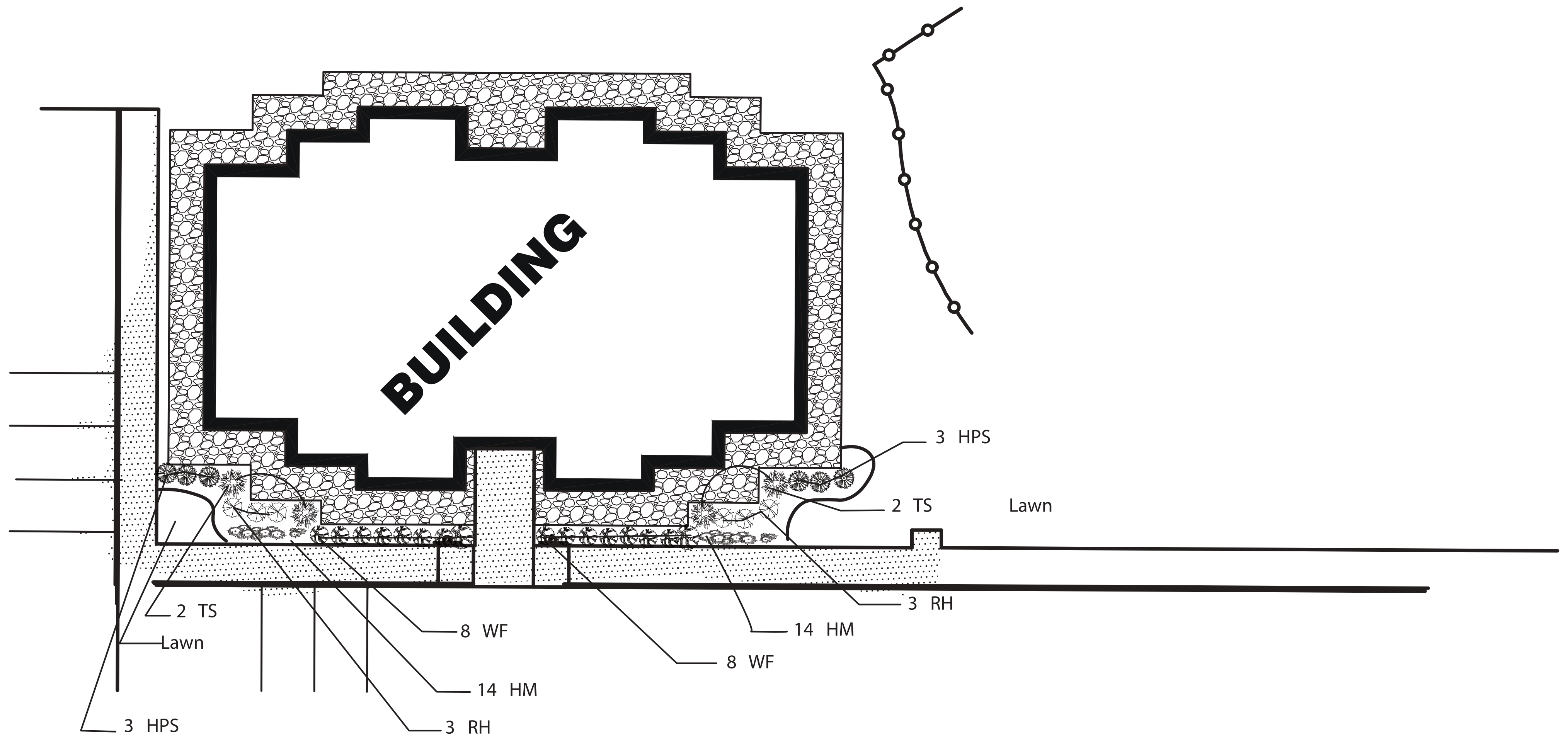
DRAFT

RI

DRAWING NO.

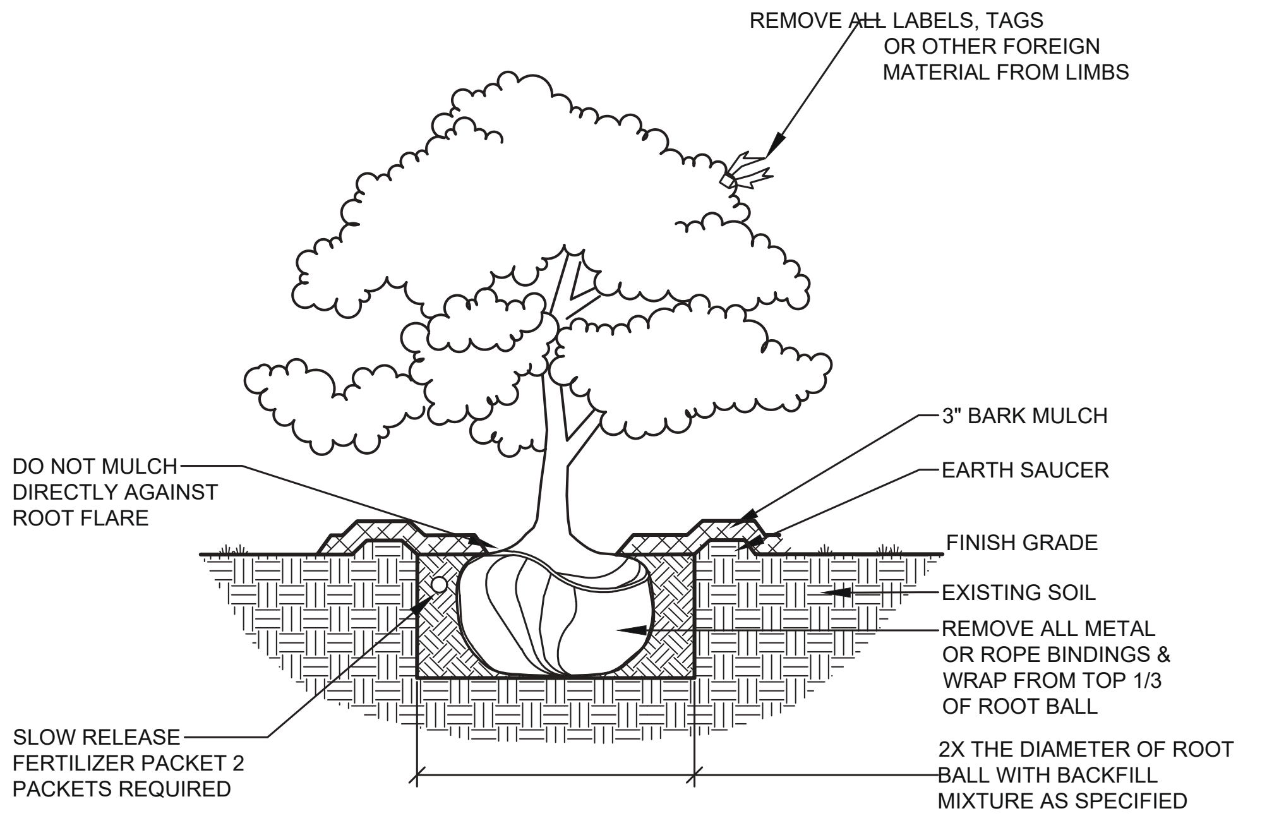
L 1

F 1


BUILDING
3 HPS
2 TS
Lawn
3 RH
14 HM
8 WF
8 WF
14 HM
3 RH
2 TS
Lawn
3 HPS

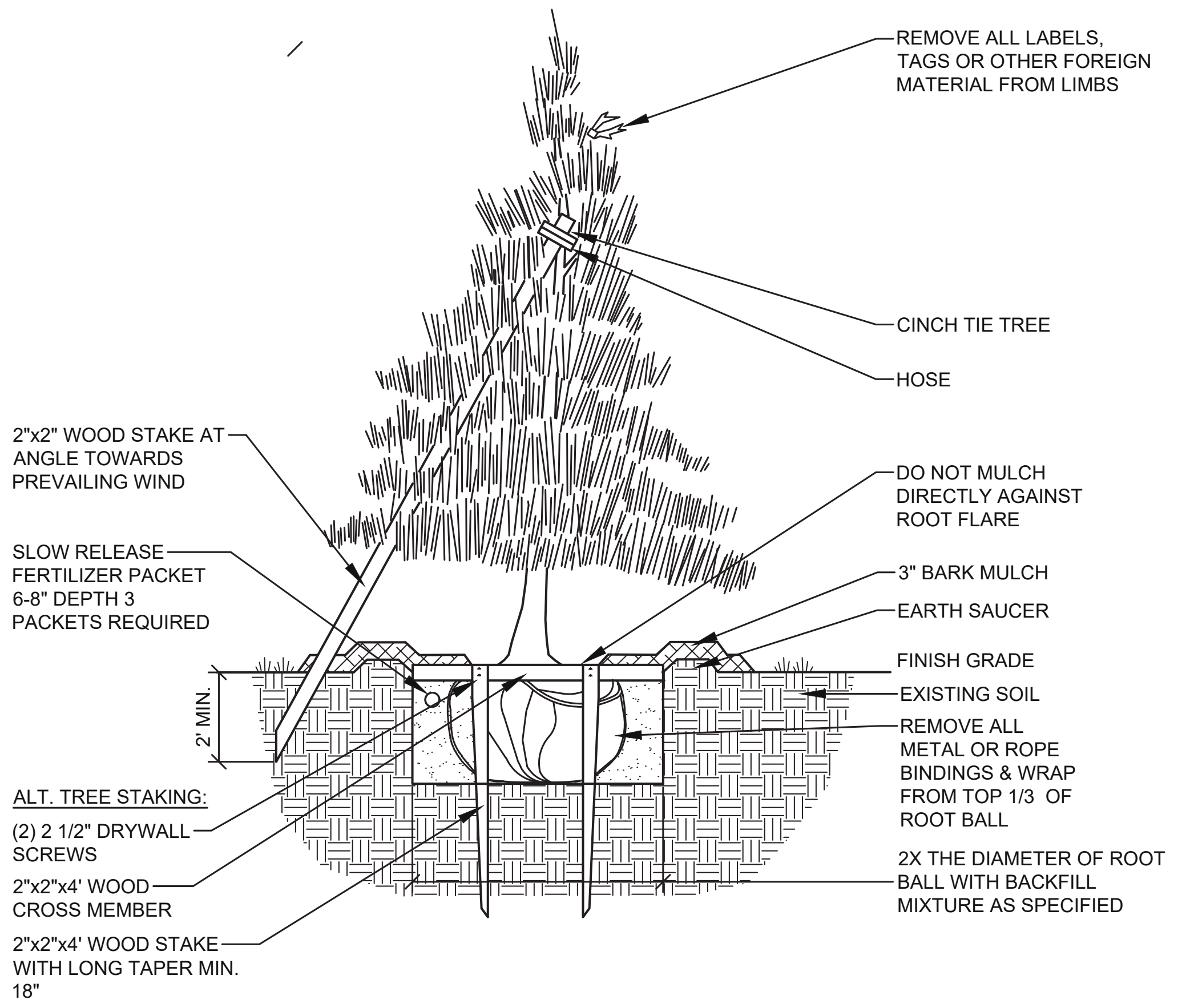
Building Planting - Typical @8 Buildings

Scale: 1" = 20'


REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS
DO NOT MULCH DIRECTLY AGAINST ROOT FLARE
SLOW RELEASE FERTILIZER PACKET 2 PACKETS REQUIRED
3" BARK MULCH
EARTH SAUCER
FINISH GRADE
EXISTING SOIL
REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL
2X THE DIAMETER OF ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED

DECIDUOUS & EVERGREEN SHRUB

NOT TO SCALE


REMOVE ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL FROM LIMBS
CINCH TIE TREE
HOSE
2"x2" WOOD STAKE AT ANGLE TOWARDS PREVAILING WIND
SLOW RELEASE FERTILIZER PACKET 6-8" DEPTH 3 PACKETS REQUIRED
DO NOT MULCH DIRECTLY AGAINST ROOT FLARE
3" BARK MULCH
EARTH SAUCER
FINISH GRADE
EXISTING SOIL
2' MIN.
REMOVE ALL METAL OR ROPE BINDINGS & WRAP FROM TOP 1/3 OF ROOT BALL
ALT. TREE STAKING:
(2) 2 1/2" DRYWALL SCREWS
2"x2"x4' WOOD CROSS MEMBER
2"x2"x4' WOOD STAKE WITH LONG TAPER MIN. 18"
2X THE DIAMETER OF ROOT BALL WITH BACKFILL MIXTURE AS SPECIFIED

NOTES:

INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:

1. THE TREE IS OF SUBSTANTIAL SIZE.
2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

DECIDUOUS TREES
EVERGREEN TREES

NOT TO SCALE

MAIN-LAND
Development
Consultants, Inc.
69 MAIN ST. LIVERMORE FALLS, MAINE
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DRAWING SCALE:

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78 Lisbon Street
Lisbon, ME 04250
(207) 353-4848 tel
www.DavisLandscape.com

Date: 06-02-2022

Drawn By: CTD

NOT FOR CONSTRUCTION

Landscape Details

SEAL:

DRAFT

DRAWING NO.

L 2

Public Comment

Carol Lane
30 Arbania St , Auburn 04210

April 7, 2025

Dear Planning Board Members,

I'm writing today regarding the proposed Brickyard Commons development project. Thank you for your service to Auburn and for considering my comments below.

As a backdrop to my comments, I'd like to indulge in a brief history of my neighborhood. Starting in 2019, Hammond Lumber cleared many acres of attractive wooded area which had acted as a **buffer zone** between themselves (an industrial lot) and all the houses on my street. When I used to walk my dogs on Arbania street, I couldn't even see Hammond lumber or the adjacent railyard because of the many acres of healthy trees.

In May 2019, when I heard the chainsaws across from my house, I personally called Hammond Lumber. I was so upset at what I was seeing that I ran out of my house and stopped their work crews until I could find out if what they were doing was approved by the city. The work crews also stated that they were trying to fill in some wet areas, which in my research turned out to be an actual Vernal pool. Due to the clear cutting they did, now instead of Spring peepers I hear screeching rail cars and forklifts backing up. Now every step of my street has a view of warehouses, industrial lots and railyards.

On that day in May 2019 I also emailed and called city planning and I was told that what Hammond Lumber was doing was NOT in alignment with their approved site plan. I was told in an email dated May 9, 2019 from Audrey Knight that "they were told to stop their clearing efforts until they have received approval on a revised site plan which needs to address full tree planting and screen replacement." NOTHING OF THE SORT EVER HAPPENED.

When I followed up with emails to Planning office folks, I got no response.

To give you a clear mental picture: they removed acres of trees, they opened up a view of not only their warehouses and parking lots, but also of the nearby Safe Handling rail-yard, which previously had not been visible to me AT ALL. Now when I sit in my living room I can look out the window and see industrial rail cars instead of trees. I can HEAR all of the industrial noise from the rail-yard and Hammond Lumber's yard and also traffic from Washington St beyond. Everything is louder, uglier and brighter at night due to the now visible industrial lighting. In this residential neighborhood, my neighbors and I now have increased problems of:

- Visual pollution
- Sound pollution – both industrial noise and Washington St traffic noise
- Night-time industrial light pollution
- Neighbors who experience basement flooding caused by loss of trees whose roots used to collect runoff from Hammond Lumber parking lots

I hope this clearly illustrates the backdrop for my concern over this new eight-building development proposed within 500 feet of my house. The problems created for my neighborhood in 2019 have never been addressed, nor rectified. I've made this known at multiple City Council and Planning Board meetings. In seven years Hammond have not replanted any trees nor created any visual (or sound) barrier to replace the buffer they removed.

I can also tell you that since they removed those trees, the wind in my neighborhood has become more intense, because those trees provided protection for us. During one recent Winter storm one of the few trees they did not cut (because of my protestations) was taken out by a storm and fell across the street by my house. Why did that happen? Because those acres of trees that used to be there behind it were acting as a wind buffer too, protecting our neighborhood from wind and storm damage. Now they're gone.

Carol Lane
30 Arbania St , Auburn 04210

I ask you to consider carefully this history lesson before rubber stamping any further development to move forward. I still do not know why no one in the City of Auburn has ever held Hammond Lumber accountable to replace that tree buffer.

I can at least take a stand that we hold accountable landowners and future developers BEFORE they do further damage to that buffer, my neighborhood and the natural habitat around Taylor Brook.

This brings me specifically to the proposed eight building development, abutting the Brook across the street from me. This property in question accounts for most of the rest of the trees and natural habitat in my small neighborhood. The developers want to clearcut this entire lot. I've seen a mother fox and her cubs living along the stream. I've seen bald eagles circling above the towering old white pines. As a member of the Auburn Conservation working group, I know that protecting our natural environment is a form of protecting ourselves, as illustrated in my story above. That is not an abstract concept. It is in that spirit that I raise my concerns.

I'd like to pose the following questions for your consideration:

1. Why aren't we requiring low-impact development next to the stream and wetland?
2. Why aren't we better protecting our natural treed areas like this one?
3. Has anyone considered or done studies on the potential light pollution, sound pollution and increased winds caused by removing these acres of trees?
4. What can you say about the loss of all those trees, and the acres of parking lots that will replace them; the effect it will have on potential wind damage and flooding in and around my neighborhood?
5. Can't we balance development with commonsense protection of our precious trees and the habitat we all depend upon?
6. Why can't we work harder to preserve existing treed buffer zones?

I want to say that I am not opposed to development of new housing in Auburn. However, I hope we can be sensible about where we place that housing with regards to the natural environment and how it affects our neighborhoods and waterways. With those trees gone, my neighbors and I will find ourselves living with not just a view of a railyard and lumberyard, but now tall buildings with acres of parking lots and all the noise and light from speeding traffic on Washington Street as well.

Please respect and consider carefully the natural habitat and environment that we depend on for our own health, safety and peace of mind. Please do not allow more trees to be stripped from my neighborhood and from the area around the Taylor brook.

The loss of those trees will be a loss to the environment, and everyone in my neighborhood as well as a loss to all the people who would end up living in those buildings. Once the trees are gone they are gone. You have the power to prevent this damage, rather than try to fix it after it has already occurred. Please delay any decisions on this huge development project until these questions and concerns can be addressed.

Thank you,

Carol Lane

Jacqueline Sawyer

From: David Hediger
Sent: Tuesday, April 8, 2025 3:30 PM
To: Jacqueline Sawyer
Subject: FW: [External]comments for planning board re revoked permit CB-20911-2024/A.R. Company history

Please save to file for Brickyard. Thanks.

David Hediger, Director of Planning
City of Auburn
60 Court Street, Auburn, ME 04210
207.333.6601 X1154

The City of Auburn is subject to statutes relating to public records. E-mail sent or received by City employees are subject to these laws.
Senders and receivers of City e-mail should presume that messages are subject to release

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From: Paul Jacques (Planning Board) <pjacques@auburnmaine.gov>
Sent: Monday, April 7, 2025 7:49 PM
To: Jacqueline Sawyer <jsawyer@auburnmaine.gov>; David Hediger <dhediger@auburnmaine.gov>; Natalie Thomsen <nthomsen@auburnmaine.gov>; Eric Cousens <ECousens@auburnmaine.gov>
Subject: Re: [External]comments for planning board re revoked permit CB-20911-2024/A.R. Company history

Hi All, Please be prepared to answer questions regarding Renee Cote's comments about approving a foundation and the apparent lack of environmental concern regarding the resources in the area and traffic concerns. Some of the board members were not present for this meeting. I am not sure if this will come up again, but I suspect it will. No response needed. Thank you.

From: Jacqueline Sawyer <jsawyer@auburnmaine.gov>
Date: Monday, February 10, 2025 at 10:40 AM
To: Darren Finnegan (Planning Board) <dfinnegan@auburnmaine.gov>, Ed Bearor (Planning Board) <ebearor@auburnmaine.gov>, Eric Cousens <ECousens@auburnmaine.gov>, Jacqueline Sawyer <jsawyer@auburnmaine.gov>, John Blais <jblais@auburnmaine.gov>, Maureen Hopkins (Planning Board) <mhopkins@auburnmaine.gov>, Paul Jacques (Planning Board) <pjacques@auburnmaine.gov>, Riley Bergeron (Planning Board) <rbergeron@auburnmaine.gov>, Robert Hayes (Planning Board) <rhayes@auburnmaine.gov>, Stacey LeBlanc (Planning Board) <sleblanc@auburnmaine.gov>, Tim DeRoche (Planning Board) <tderoche@auburnmaine.gov>
Cc: Natalie Thomsen <nthomsen@auburnmaine.gov>
Subject: FW: [External]comments for planning board re revoked permit CB-20911-2024/A.R. Company history

Hello Planning Board,

We received the comments below from resident Renee Cote who lives at 24 Brickyard Circle. Eric's response with some explanation is also included here for your reference.

Jackie Sawyer
Executive Assistant Planning and Permitting
60 Court Street | Auburn, Maine 04210 | 207.333.6601 X1158
www.auburnmaine.gov

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From: Eric Cousens <ECousens@auburnmaine.gov>
Sent: Monday, February 10, 2025 9:43 AM
To: reneecote@myfairpoint.net
Cc: Jeff Harmon <jharmonmaine@gmail.com>; Jacqueline Sawyer <jsawyer@auburnmaine.gov>; 'Rhyanna Larose' <rhyannalarose@gmail.com>; Natalie Thomsen <nthomsen@auburnmaine.gov>; John Blais <jblais@auburnmaine.gov>
Subject: Re: [External]comments for planning board re revoked permit CB-20911-2024/A.R. Company history

Thank You Renee,

I will share your email with the Planning Board and add it to the meeting file. Our GIS system has the parcel listed as S. Washington Street PID 199-052 so that was the only label the applicant could choose when applying online. We had tentatively assigned building addresses to the project around the time of the original Planning Board Approval but they do not become part of the assessing and GIS Parcel records until the buildings are permitted and ready for occupancy. If they choose to reapply with the Planning Board we will notify property owners withing 500 feet, advertise the public hearing and post the agendas as required to make sure people are aware.

The note about AR Development will also be shared with the Board.

Eric J. Cousens

Executive Director of Public Services

60 Court Street | Auburn, Maine 04210 | 207.333.6601 X1402

www.auburnmaine.gov

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From: Renee Cote <reneecote@myfairpoint.net>
Sent: Sunday, February 9, 2025 4:27 PM
To: Eric Cousens <ECousens@auburnmaine.gov>
Cc: Jeff Harmon <jharmonmaine@gmail.com>; 'Rhyanna Larose' <rhyannalarose@gmail.com>
Subject: [External]comments for planning board re revoked permit CB-20911-2024/A.R. Company history

You don't often get email from reneecote@myfairpoint.net. Learn why this is important

Dear Eric Cousens,

I understand that you've received a promotion and there will be an incoming planning director later this month. Congratulations.

In the interim, before Tuesday's planning board meeting, I would like the following two observations to be noted in the file for the 2/11/25 meeting:

First, regarding the permit given to JIG Investments, CB-20911-2024, on December 4, 2024, for a foundation at an address given as Washington Street South, it is my understanding that this permit has been revoked as the prior permitting approval for this development expired in July of 2024. This development would have had its entry on Brickyard Circle, so it was misleading of JIG to apply for the new permit with a different, ambiguous address in the hope that the expired permits would go under the radar, as would have happened if not for nearby property owner vigilance.

My spouse owns the property at 24 Brickyard Circle, the former Crystal Spring Water Company, the spring for which is located within the building. Our concerns about water contamination in the spring were treated lightly during the permitting process in 2022, as were the concerns about speeding traffic, reconfiguring of Washington St., proximity of housing to Safe Handling with its documented episodes of spills, and the general lack of concern for an area of Auburn that's environmentally sensitive. It was distressing to see the lack of regard for these concerns by both the city and the state, presumably because of the financial heft of the applicant. The concern here should not be to protect JIG's property investment but to place housing in appropriate areas of the city, not in a location like this one.

Due diligence on the planning department's part was needed here.

Second, when I reviewed the agenda for 2/11 I noted the name of the company that's applying to build a large development on Stetson St., A.R. Company. I understand that this has been postponed until March. A quick internet search of this national company offered some revealing details about this operation, which I'm aware has built the property by BJ's that burned down. It has an F rating from the Better Business Bureau. In December of 2024 it was sued by the state attorney general of Rhode Island for deceptive trade practices. In August of 2024 it reached a settlement with the AG in Pennsylvania for tenant-related violations. This was just a quick look. I would like to think the planning department has done some research here. The glowing description of the company in the September 2021 planning department memo to the planning board doesn't seem to match the history of this company's practices:

“The proposed improvements are shown on the attached full plan set prepared by DiPrete Engineering, building design and construction of the project will be completed by AR Builders. Today, ARB is a real estate development company with over 50 years of experience. They focus on creating Class “A” apartment communities **with the utmost regard to quality and resident satisfaction**. They currently own over 9,000 units across 10 states. Since they started expanding to New England in 2014, ARB has created a construction division based out of Westerly, Rhode Islands. They also employ all the onsite staff in every community they occupy buildings in. The company builds and holds property, and pride themselves on being in these projects for the long term.”

Very truly yours,

Renee Cote
Dawes Avenue, Auburn

From:	Renee Cote <reneecote@myfairpoint.net>
Sent:	Wednesday, April 30, 2025 9:13 AM
To:	David Hediger; Natalie Thomsen
Subject:	[External]Safe Handling / Savage Safe Handling report for the PB meeting on May 13--pls confirm receipt

Some people who received this message don't often get email from reneecote@myfairpoint.net. Learn why this is important

Dear David, Natalie, and members of the Auburn Planning Board:

On April 8 the planning board (PB) heard public comment about the permitting for the proposed Brickyard Commons development on Brickyard Circle. Because the permitting from 2022 had expired, the PB is considering the development as if it were a new proposal.

My husband, Peter Bornstein, owns the premises at 24 Brickyard Circle, which would abut the proposed development. The building on those premises houses a natural spring that was the source of water for the former Crystal Spring Water Company, and was used for decades by the Bornstein family for bottling both soda and water.

A number of commenters referred to the fact that this development would also abut Savage/Safe Handling (Safe Handling), a chemical handling company with its address on Rodman Road. The company receives shipments via railroad, the tracks of which would be close to the Brickyard Commons development.

I contacted the Maine Bureau of Remediation and Waste Management, part of the Maine DEP, to find out the extent of incidents involving Safe Handling over the past three decades. The response I received from an office associate is copied below.

The point of sharing this information with you is not to highlight any particular past spill incident at Safe Handling. Handling chemicals is this company's business, and it has operated on these premises for some time. I merely wish to give specific history of activity in a location where the developer proposes to place 96 residential units, now that the area has been rezoned to allow such development.

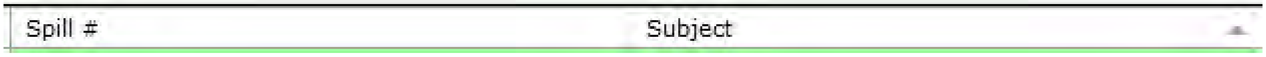
Below you will see a double column list of about a hundred incidents, listed by the number assigned to the spill and the date of occurrence. These incidents took place from 2002 to 2016. Following the list is a photograph of a stack of folders that contain reports from Safe Handling that have not yet been scanned. Also included is some explanatory text from the associate. She provided files with instructions for looking up incidents that I have not included here, but that can be made available.

I hope that you will look over this material and give consideration to the fact that even with best practices an event can occur. Should a major event occur, in addition to notifying or evacuating the businesses and existing residences, the situation would be much worse were there to be 96 residential units with one egress point. This potentially hazardous situation should be part of the decision making regarding this permit.

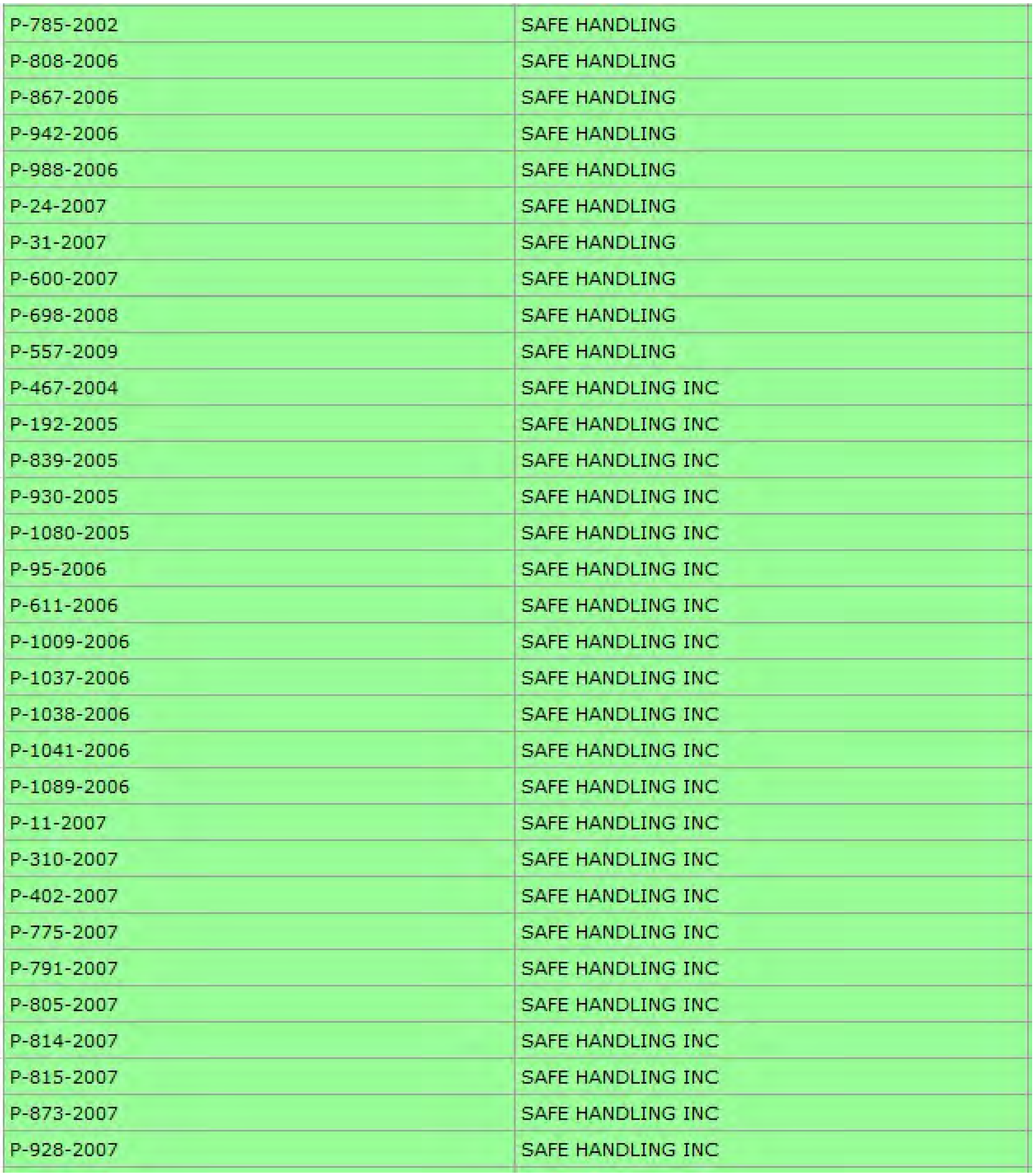
Very truly yours,
Renee Cote
Peter Bornstein
54 Dawes Avenue, Auburn

From: Shenett, Lisa <Lisa.Shenett@maine.gov>
Sent: Thursday, April 24, 2025 2:18 PM
To: reneecote@myfairpoint.net
Subject: Safe Handling / Savage Safe Handling

Hi,
Here is a list of all spill numbers in our system for Safe Handling & Savage Safe Handling. I'm not sure if they are all online or not, but if there are any specific spills you are interested in but can't find, please let us know and we can get you the information. There is one Underground Storage Tank file related to this site (Registration #21829) which is online, but I didn't find any spills related to it. Attached are instructions for locating online documents for all programs. There is also approximately 11 inches of paper files in the file room related to General Correspondence and Enforcement which have not been scanned. Anyone interested in viewing those files would have to contact the file room to schedule an in-person review. I hope this helps. Please let us know if you have any questions or need further assistance.

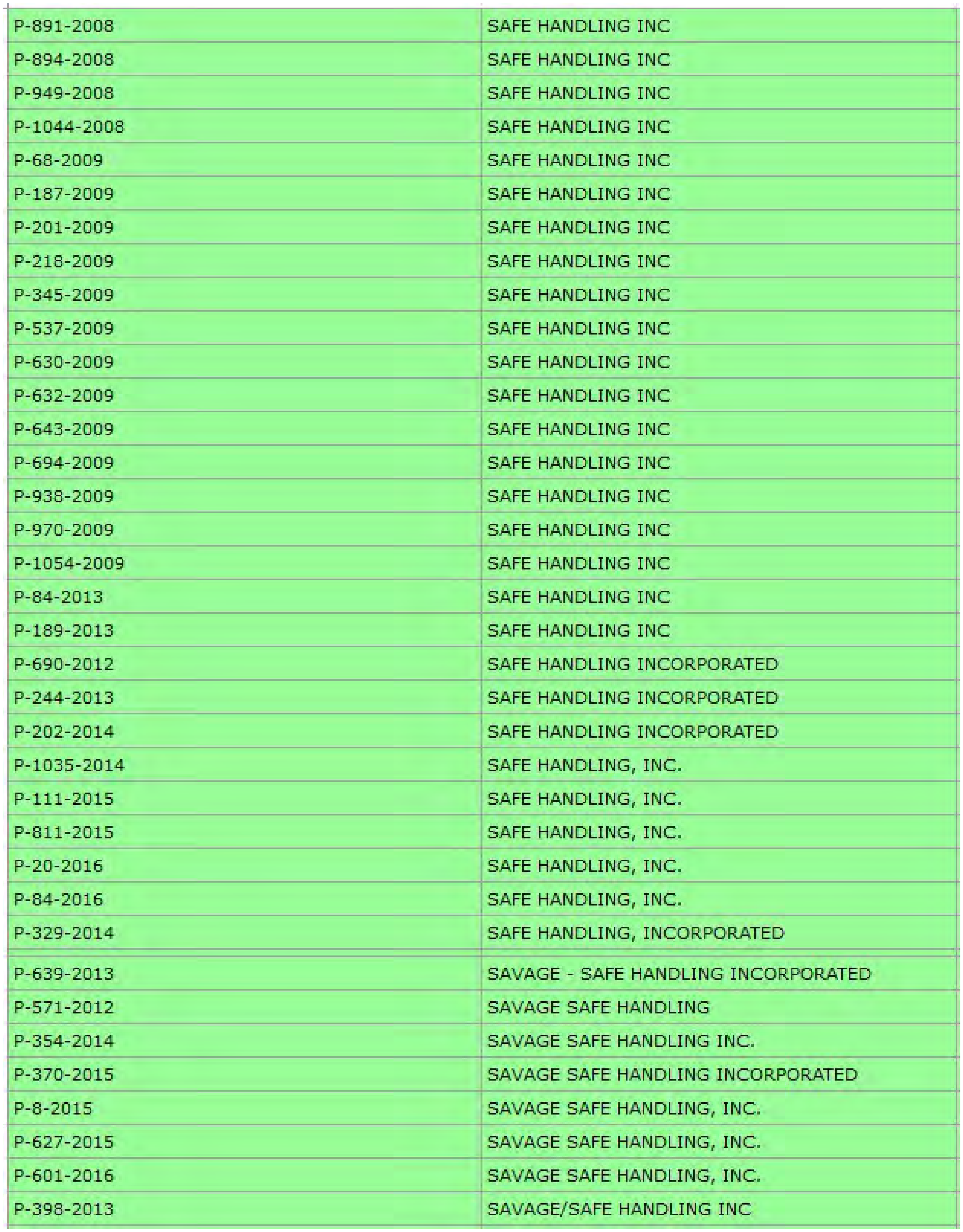


Spill #	Subject



P-785-2002	SAFE HANDLING
P-808-2006	SAFE HANDLING
P-867-2006	SAFE HANDLING
P-942-2006	SAFE HANDLING
P-988-2006	SAFE HANDLING
P-24-2007	SAFE HANDLING
P-31-2007	SAFE HANDLING
P-600-2007	SAFE HANDLING
P-698-2008	SAFE HANDLING
P-557-2009	SAFE HANDLING
P-467-2004	SAFE HANDLING INC
P-192-2005	SAFE HANDLING INC
P-839-2005	SAFE HANDLING INC
P-930-2005	SAFE HANDLING INC
P-1080-2005	SAFE HANDLING INC
P-95-2006	SAFE HANDLING INC
P-611-2006	SAFE HANDLING INC
P-1009-2006	SAFE HANDLING INC
P-1037-2006	SAFE HANDLING INC
P-1038-2006	SAFE HANDLING INC
P-1041-2006	SAFE HANDLING INC
P-1089-2006	SAFE HANDLING INC
P-11-2007	SAFE HANDLING INC
P-310-2007	SAFE HANDLING INC
P-402-2007	SAFE HANDLING INC
P-775-2007	SAFE HANDLING INC
P-791-2007	SAFE HANDLING INC
P-805-2007	SAFE HANDLING INC
P-814-2007	SAFE HANDLING INC
P-815-2007	SAFE HANDLING INC
P-873-2007	SAFE HANDLING INC
P-928-2007	SAFE HANDLING INC

P-934-2007	SAFE HANDLING INC
P-935-2007	SAFE HANDLING INC
P-962-2007	SAFE HANDLING INC
P-963-2007	SAFE HANDLING INC
P-25-2008	SAFE HANDLING INC
P-42-2008	SAFE HANDLING INC
P-59-2008	SAFE HANDLING INC
P-60-2008	SAFE HANDLING INC
P-76-2008	SAFE HANDLING INC
P-116-2008	SAFE HANDLING INC
P-117-2008	SAFE HANDLING INC
P-155-2008	SAFE HANDLING INC
P-160-2008	SAFE HANDLING INC
P-170-2008	SAFE HANDLING INC
P-219-2008	SAFE HANDLING INC
P-261-2008	SAFE HANDLING INC
P-280-2008	SAFE HANDLING INC
P-316-2008	SAFE HANDLING INC
P-319-2008	SAFE HANDLING INC
P-374-2008	SAFE HANDLING INC
P-492-2008	SAFE HANDLING INC
P-597-2008	SAFE HANDLING INC
P-615-2008	SAFE HANDLING INC
P-621-2008	SAFE HANDLING INC
P-622-2008	SAFE HANDLING INC
P-664-2008	SAFE HANDLING INC
P-717-2008	SAFE HANDLING INC
P-746-2008	SAFE HANDLING INC
P-800-2008	SAFE HANDLING INC
P-807-2008	SAFE HANDLING INC
P-860-2008	SAFE HANDLING INC
P-875-2008	SAFE HANDLING INC
P-881-2008	SAFE HANDLING INC



P-891-2008	SAFE HANDLING INC
P-894-2008	SAFE HANDLING INC
P-949-2008	SAFE HANDLING INC
P-1044-2008	SAFE HANDLING INC
P-68-2009	SAFE HANDLING INC
P-187-2009	SAFE HANDLING INC
P-201-2009	SAFE HANDLING INC
P-218-2009	SAFE HANDLING INC
P-345-2009	SAFE HANDLING INC
P-537-2009	SAFE HANDLING INC
P-630-2009	SAFE HANDLING INC
P-632-2009	SAFE HANDLING INC
P-643-2009	SAFE HANDLING INC
P-694-2009	SAFE HANDLING INC
P-938-2009	SAFE HANDLING INC
P-970-2009	SAFE HANDLING INC
P-1054-2009	SAFE HANDLING INC
P-84-2013	SAFE HANDLING INC
P-189-2013	SAFE HANDLING INC
P-690-2012	SAFE HANDLING INCORPORATED
P-244-2013	SAFE HANDLING INCORPORATED
P-202-2014	SAFE HANDLING INCORPORATED
P-1035-2014	SAFE HANDLING, INC.
P-111-2015	SAFE HANDLING, INC.
P-811-2015	SAFE HANDLING, INC.
P-20-2016	SAFE HANDLING, INC.
P-84-2016	SAFE HANDLING, INC.
P-329-2014	SAFE HANDLING, INCORPORATED
P-639-2013	SAVAGE - SAFE HANDLING INCORPORATED
P-571-2012	SAVAGE SAFE HANDLING
P-354-2014	SAVAGE SAFE HANDLING INC.
P-370-2015	SAVAGE SAFE HANDLING INCORPORATED
P-8-2015	SAVAGE SAFE HANDLING, INC.
P-627-2015	SAVAGE SAFE HANDLING, INC.
P-601-2016	SAVAGE SAFE HANDLING, INC.
P-398-2013	SAVAGE/SAFE HANDLING INC

Best Regards,
Lisa

Lisa Shenett
Office Associate II
Bureau of Remediation & Waste Management

Department of Environmental Protection
(207) 287-7843

These are the files I referenced. The stack of files is approx. 11 inches of paper. None of these files have been scanned so they are not available online. The “00” file on top is a General Correspondence file. The second file is “03” which is a report file. The rest are “14” files which are Compliance Action.

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SAFE HANDLING
FOR-TANK POLE YARD AUBURN
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14

Planning Board members,

Today, I am writing you in regards to a gigantic proposed building development along Brickyard cir. (Brickyard commons), That was somehow approved back in 2022 with the Previous Planning Board. As an abutter and concerned citizen who spoke against this project along with numerous others back then, because it was/ and still is, so wrong, on so many levels.

I ask you all now, today, that you take this project into full consideration in its entirety and look at it **with fresh eyes**, as if it were a BRAND NEW concept without preconceived notions/ideas or leverage/pressure to just simply "Approve it, because perhaps it was before". That is your purview. That is what should happen this time around. That is really, what **should** have happened back then, but didn't. Please take into high regards/consideration what "your actual Purview states… what your actual planning board roles and responsibilities truly are", with a "fresh set of unbiased eyes". Stick to them. Stay on the task at hand.

Do not allow a developer to influence you or attempt to persuade you to go outside your realm, that because, perhaps they cannot do X/Y/Z as requested from the city or current zonings, to conform as requested …(because they say, "well that is not economically/financially feasible to do", **that is no excuse, nor, any of your concern, it's on them, that is their problem to figure out**) or feel that you will need to make special exceptions to make any project here or within the city feasible for them. That is also, not on your shoulders. That is not your role. You need to remain unbiased and look at the exact facts. Those are just **Manipulation** strategies used by developers in attempt to push you outside your roles for them. Trying to influence you and make you feel guilty and move outside your given roles.

It is up to a developer to conform/adjust site plans or projects in accordance with all current local Auburn Ordnances and requests. Not for the City Planning Board to make special exceptions to the numerous ordnances themselves. If the City ordinances themselves, as currently written, need to be changed, (such as watersheds/shoreland boundaries/Ag Zone etc.) then that is done separately, through city council or Zoning Board of appeals and an entirely different process. It is not on you, or in your purview to make special exceptions/after special exceptions regarding other city ordinances/zoning.

You should be looking at a project for giving the basic approval as is/currently presented, and asking yourself, "does this conform to current city zoning/ordinances for this parcel"?, if not?, then **No**, It should not be approved as presented. The developer then, needs to conform/adapt and re-present a new revised site plan/concept that does, at a later date. You should only be able to allow for maybe a particular one time approved "variance" on the actual building itself, such as maybe a 4 story building where you could only build a 3 story one in a particular zone, or a simple walkway could be shortened a bit to a particular proposed commercial business. Something brief, minor/simple outside actual current building/zone codes. Looking at just the particular building structures itself, perhaps, if a small, one time variance seems feasible on any given plot in the city. You should not be attempting to make "special exceptions" for other numerous city ordinances and venturing out…into the relentless unknown…such as allowing for development within an existing/current Shoreland ordnance or allowing for development without proper road frontage or set-backs and diving yourselves into numerous other current city ordances….in any area/parcel that otherwise cannot be developed as is/ with that particular site plan. If then, what is really the point of even having set municipal Auburn ordnances in the 1st place? Again, those City-wide Auburn Zoning ordinances would need to be changed and put before City Council. Again, that is not on you, and a completely separate issue.

Just because a developer happened to get an NRPA application approved does not mean they conform to city ordinances. Those are 2 entirely separate entities and need to be treated as such. One, should not be influencing the other. State is State, City/Municipalities are another.

Now, with all that being said, (and I truly, hope, you really take a moment to think about it). I have numerous legit concerns and questions I want you to consider, while reviewing this project with brand new eyes. **Remember you don't have to vote on this on April 8th, you can absolutely table it to May's meeting so you have more time to get your answers**

1.) It does not appear to me that there is even enough road frontage to build a driveway from Brickyard circle into this site plan. In regards, to this current zoning map as presented. Please look into that. I know it is now changed to T-5.1 from Industrial? and there maybe variances regarding private road width vs public / city road width. Some requiring 25/50 ft. some more. But also, the 75 ft of "undisturbed vegetative" buffer needs to be maintained on Taylor Brook in accordance to Auburn's current Shoreland Ordnance (Which used to be 100ft just a few years ago).
2.) It does not appear that this site plan has the proper set backs as well. Please look into that. Regarding possible 250' set back with Maine DOT along Washington st. as well as the set backs from current property/parcel lines and adjacent road, bridge, Taylor brook, wetlands and proposed development area.
3.) Auburn's current recently revised Shoreland Ordnance requires a 75ft buffer of undisturbed vegetative buffer along rivers/streams/brooks etc. Yet, several buildings are in that buffer and or need to remove the buffer. For example, building #4 is a mere 63 ft from the center of Tayor brook not even taking into acct. where the normal high water line is, nor, the 100 year flood plan boundary is. Building # 3 is much the same possibly 68 ft. It's in that zone. Building 8 is barely 75 ft from the center of Tayor brook, not even considering where the normal high water mark is, because under normal circumstances

that corner is also in that water line. Also within that zone… etc…The driveway that is being purposed is also barely 10-12 ft from center of the brook line, completely within the flood plain and also the shore land ordnance. It also states that 25 ft of undisturbed vegetative buffer must be maintained at all times, yet their site plan requires them to encroach on that as well, and there is not even 25ft by the driveway/entrance.

4.) 96 multi bedroom units = a potential of several hundred kids. Where are they going to school? Fairview, park ave and Sherwood heights are basically at max now, and we don't even have enough school teachers and bus drivers as it is.

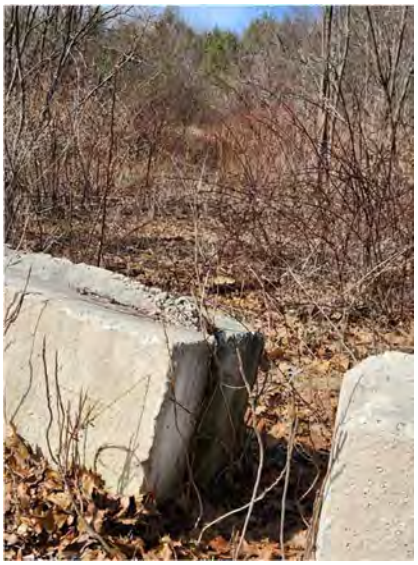
5.) There is still no "Fencing" on this site plan which was brought up Numerous times with the developers. We have enormous concerns about kiddos playing and creating mischief in the Rail yard of Safe Handling where some of the most toxic/Hazardous chemicals are stored in the entire state. I have spoken with Safe Handling, and met with Gerry Henschel the General Manager, and he has grave concerns as well, and wants to see that safety fencing on this site plan. Currently there is no public view or line of site to that railyard. But once all that land is developed and trees are removed, those kiddos will have a clear view of it from this project. The railyard is in very close abutting/proximity to this development. A Safety Fence should be required! For safety and to minimize risk and potential Hazards.

6.) The proposed Microstrike Viper lightening is rated from 5,000-80,000 lumens. Yes, it is downward facing, however, they are enormous and extremely bright. The lightening needs to be as dim as reasonably possible to minimize light pollution to the surrounding properties and parcel owners land and backyards. This was brought up with the developers at great lengths Numerous times. So I feel that there needs to be a "Set limit made" on the amount of Lumens they are allowed and that they also be required to dim them, after peak hours. Currently it is undeveloped and buffered to the surrounding property owners and backyard neighborhoods. Where there is virtually no street lights at all within 1000 ft of this parcel. The closest one might be on the corner of Zoar and Bennett ave. So this is going to now, be all lit up.

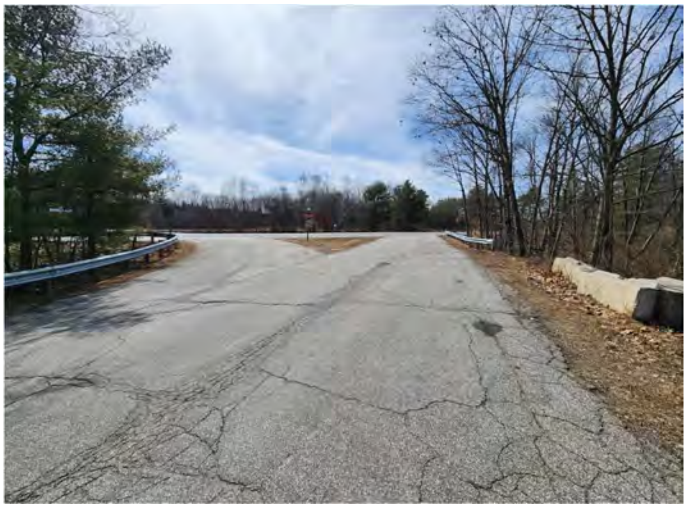
7.) What is the weight limit/load for the bridge on Brickyard circle? It is already in need of repair, and we already have concerns with current large vehicles there. That bridge cannot support heavy cranes/machinery and oversized excavators. Those will need to access from the far end off Washington street rather than park in road and traverse that bridge. This was brought up before.

8.) Brickyard circle is in complete disrepair. There are numerous large craters, potholes, washed out areas, cracks etc. It is badly deteriorated and needs immediate repair & attention before any increased traffic demands occur on this street. That needs to be in the site plan and added in addition to the slow down lane on Washington st. and installed sidewalk as prior demands. This was brought up before and yet, I see no mention of it in the developers site plan.

9.) The developers continue to state there is an existing driveway in several of their plans and letters, yet there is no existing driveway and never has been. This has always been undeveloped land. They came in years ago with trucks and attempted to create a path at the entrance but it is heavily over grown, and just because they put jersey barriers there does not mean it's an existing driveway.



Does that look like an existing driveway to you? You can't even get a 4 wheeler in there, They say that, so it makes them look better on paper.



10.) The proposed slow down lane needs to continue to keep the curb cuts to Ness oil and those businesses as is. If it's changed then trucks would now need to continue all the way up to the rotary and down the hill to enter Ness oil etc.

11.) The new slow down lane appears to create a new curb cut? in front of/adjacent Brickyard circle's entrance rather than utilize the existing one?. I'm concerned about this because if so it would change the flow of the existing traffic pattern.

12.) The new slow down lane will also need to cut down 3 large existing trees in the medium buffer directly across from Brickyard circle. Has anyone reached out to the City Arborist and Current Lewiston/Auburn Forest Board who are responsible for maintaining city street trees about that? Because they need to be consulted with beforehand.

13.) How does this development and proposed slow down lane now tie into "Reimage Washington st corridor" concepts. This to me changes a lot.

14.) Offsite improvements at to be in view of $320,000 granted to city for sidewalks & slow down lane etc.??? That is going to cost way more than that? I hope Tax payers aren't picking up the remainder because these are "only" being done for the developers to allow for this development to happen. The developers need to be bonded and held accountable for the "Full" cost of those offsite plans. That should be written down.

15.) Increased Noise! We have also brought up this concern in surrounding neighborhoods and parcel owners. This is now a heavily forested area, with an enormous sound buffer from Washington st traffic, safe handling and Hammond lumber. After this parcel is clear cut, many of us will suffer from severe increased noise/traffic. I want to ensure that the developers make an extended effort to preserve as much current tall standing trees in/around this development as possible to assist with minimizing those effects. Many of those current trees are 150 + years old and they don't regrow over night. There needs to be something in there to preserve some of those aged large trees around these buildings and parking lots. Especially where they are intending to create green spaces in/around parking lots. That alone also adds value to the development and provides shade and scenic beauty so I am not clear why? They have to 100% clear cut the area for this development, then replant all new trees/saplings.

16.) The retaining wall and area by building 8 does not appear to meet the current auburn shoreland ordnance and 100 year flood overlay **Sec. 60-991. - Establishment of Shoreland Resource Protection District Overlay.**

(5)

Retaining walls are located outside of the 100-year floodplain on rivers, streams, and tributary streams, as designated on the Federal Emergency Management Agency's (FEMA) flood insurance rate maps or flood hazard boundary maps, or the flood of record, or in the absence of these, by soil types identified as recent floodplain soils.

(6)

The area behind the wall is revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and

The driveway doe not appear to be in compliance of the shoreland overlay ordnance.

Sec. 60-998. - Roads and driveways.

The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

(1)

‘Roads and driveways shall be set back at least 100 feet, horizontal distance, from the normal high-water line of a great pond classified GPA or a river that flows to a great pond classified GPA, **and 75 feet, horizontal distance from the normal high-water line of other water bodies, tributary streams,** or the upland edge of a wetland unless no reasonable alternative exists as determined by the planning board. If no other reasonable alternative exists, the road and/or driveway setback requirement shall be **no less than 50 feet**, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.’

17.) The City of Auburn ordnances repetitively also state that even “if” there is a **conflicting current city ordnance, than the one most stringent shall apply**.

18.) The minimum requirement for parking spaces is 120. Yet they are still requesting 168 parking spots. This again, was brought up numerous times, and requesting the developers to minimize impervious soil and foot print to prevent flooding and erosion in good faith effort etc… Yet, they continue to push the 168 with potential for 196 (If needed). That is ridiculous and should not be approved. They should only be approved for the 120 spaces and have to justify and request down the road, at a later date additional parking area approvals with planning/permitting at a later date. Do not allow them to have that in there now. There is no going back!, and no way to follow up on their intentions later. Staff doesn’t have the time… to think they would do that in good faith. I assure you! Their long term intent is 196 spaces (original site plans) when they only need 120. Give them 120 and 120 only, and make them justify additional parking later with planning & permitting dept. . And…it would save the developers money too…This hasn’t even been built yet. How the heck do they even know how much parking they need vs wants….they are trying to manipulate you into conforming to a “want”, not a current need. The immediate need as is, 120 spaces…Done…

19.) I am not seeing a gas line easement? They had requested one? And I'm curious as to wear that ties in. The last I knew, they had to tie into Poland road and run thru the neighborhood of Arbania/Rochelle & then someone's property? Was that Easement secured? If not? What exactly are they using for heating etc.? If it's propane instead, I'm not seeing it on these plans and there is a bunch of local fire/safety and life safety codes regarding outdoor storage of propane. So was the fire dept. consulted on that? Where is that mentioned in the original site plans? Adding outdoor propane storage tanks of that size would add an additional Health & Safety & Regulatory concern to this already Bottle necked development, that already only has one small means of egress in case of emergency. These people are trapped in there!

20.) This project, is just too enormously packed on this parcel. Building perhaps a few buildings is one thing, but this lot cannot support all 8. This project needs to be downsized.

21.) Why can't they remove Building 4, 7 & 8 and instead, build some 4 story's high on this lot, instead of all 3 story ones. Doesn't T5.1 zoning now allow that? It would minimize the foot print, impervious soil and decrease a lot of these issues with shoreland/flooding. I bet, if you ask the developers about that, they will tell you "It's not financially feasible"… and yet, it would be cheaper to remove 3 buildings and build the existing ones 1 story higher. So their excuses are always "It's not financially feasible" which is not your problem…and that is no excuse. They are already spending more than 9.6 million on this project, and that concept would be cheaper for them.

Again, you do not need to vote on this Tuesday April 8th, it can be postponed to May's meeting if you need more time.

Rhyanna Larose

164 Bennett ave, Auburn

SAVAGE®

901 W Legacy Center Way
Midvale, UT 84047
(800) 827-4439
www.savageco.com

May 5, 2025

Auburn Planning Board
60 Court Street
Auburn, Maine 04210

Dear Auburn Planning Board Members:

I write to provide clarification for public comments that lacked understanding and/or included misstatements about Auburn transload terminal and the proposed Brickyard Commons development on Brickyard Circle.

Our Auburn terminal is regularly inspected and audited, both by our internal team and external state and local authorities to ensure we are following best practices and safety procedures. We safely operate similar facilities in communities more urbanized than Auburn and have no concerns about the proposed Brickyard Commons as it relates to our business or the safety of our team members, customers, neighbors and community.

Federal and state regulations dictate setback requirements for materials handled at our operation, which we comply with. Additionally, we have spill prevention and response plans in place, as required, and follow those procedures on the rare occasion they are needed. We also diligently comply with all reporting requirements. We have a dedicated on-site safety professional, and all team members are trained annually on their roles and responsibilities. Our team goes above and beyond each day to operate the transload terminal in a safe and professional manner.

We greatly value being a part of the local Auburn community. Our Auburn transload terminal employs more than 30 team members who are trained to handle a variety of products for our customers, including materials that support the operation of local paper mills and the city's water treatment plant. These team members all live in or around Auburn and are motivated to ensure their community thrives and remains a great place to live.

We are grateful for our years of positive relations with the city of Auburn and are proud of the positive economic impact we have brought to the community since we acquired the terminal in December of 2009. Thank you for the opportunity to provide clarification as you consider the Brickyard Commons development.

Sincerely,

Andy Pierucci

Director, Government Affairs

Review of Proposed Brickyard Commons Housing development

& Follow up of the Applicable Shoreland Ordnances.

Attn: Auburn Planning Dept. & Auburn Planning Board,

First of all, thank you all, for taking the time to thoroughly investigate this full proposal in its entirety with fresh eyes. I would like to take a moment, to elaborate on **applicable zoning ordinances** this proposed development, at this location, should adhere to, within our Auburn City Charter and yet, **is still not**. As well as other concerns of mine.

First of all – At an Eagles eye view, this parcel may now, indeed be recently zoned as T5.1, (What was originally industrial just a few years ago), but portions of it, still fall within the Floodplain district, Shoreland overlay district & wetlands (including those of state significance). This is partly why they need special approval from Auburn Planning Board & Staff. These are just some of the numerous reasons this was triggered for Special Review before the Planning Board.

These zoning ordinances almost all fall under Section 60 -Zoning [illegible]ns/regulations. Each in its own category. So should be reviewed all independently against the parcel map.

Superseding & **Preceding** all those, in our City charter is 1st and foremost, under Article II "General Provisions" Sec 60-44-C [illegible]ts – it states "**In any case where there is a conflict with another ordnance the more stringent standard shall apply**" then gives reference to city ordinances in various zones.

[illegible]cle XII – [illegible]ermost in the city charter - then addresses Environmental Regulations in sec 60.

Now the Flood plain :

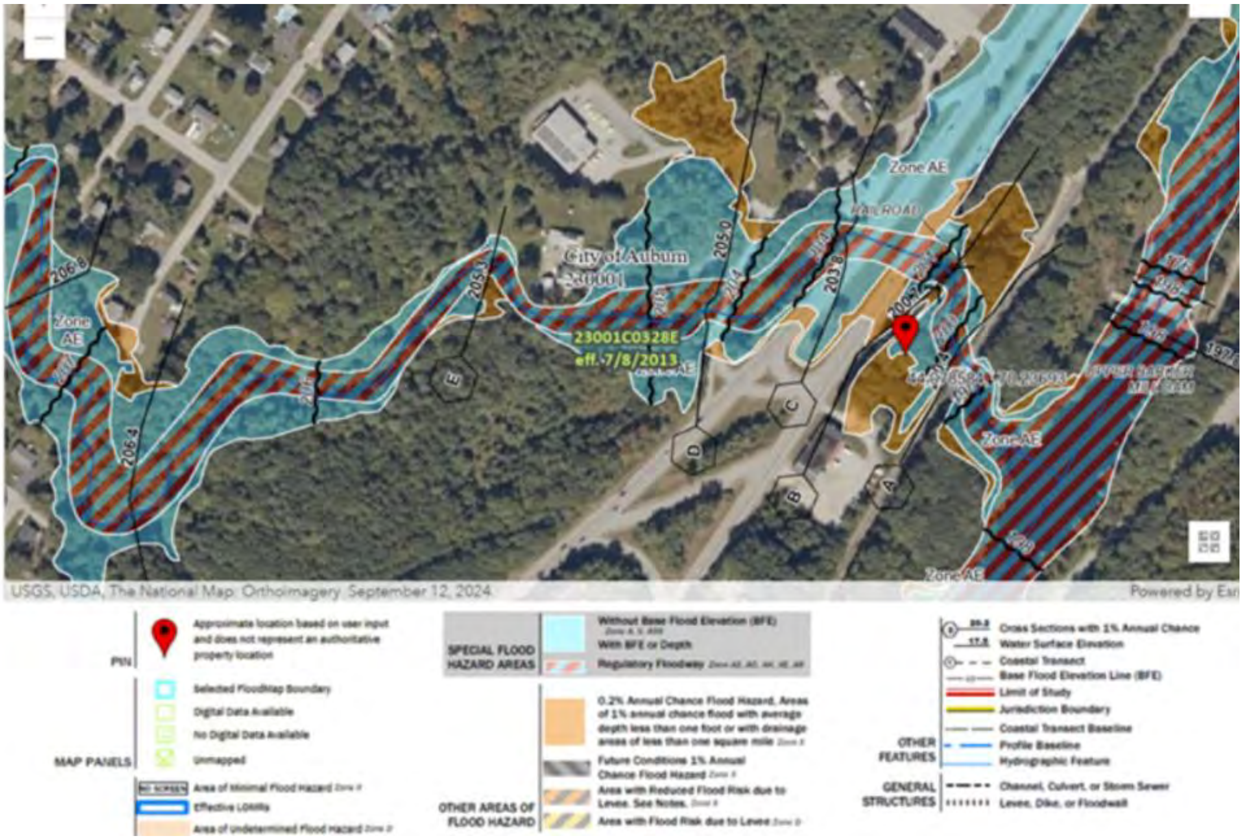
Division 2 : Flood Plain overlay District

Section (a) purpose

Certain areas of the city are subject to periodic flooding, **causing serious damages to properties within these areas.** Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. Therefore, the city has chosen to become a participating community in the national flood insurance program, and agrees to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as delineated in this division. It is the intent of the city to require the recognition and evaluation of flood hazards in all official actions **relating to land use** in the floodplain areas having **special flood hazards**.

Below is most accurate info. From FEMA Flood plain maps I can share with you.

https://msc.fema.gov/portal/search?AddressQuery=47%20Brickyard%20circle%2004210


Zone AE
RAILROAD
City of Auburn
230001
23001C0328E
eff. 7/8/2013
Zone AE
Zone AE
Zone AE
PIN
Approximate location based on user input and does not represent an authoritative property location
MAP PANELS
Selected FloodMap Boundary
Digital Data Available
No Digital Data Available
Unmapped
Area of Minimal Flood Hazard Zone X
Effective LOMRs
Area of Undetermined Flood Hazard Zone D
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A, V, A99
With BFE or Depth
Regulatory Floodway Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee. See Notes. Zone X
Area with Flood Risk due to Levee Zone D
OTHER FEATURES
Cross Sections with 1% Annual Chance
Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature
GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

USGS, USDA, The National Map: Orthoimagery. September 12, 2024 Powered by Esri

As you can see, the driveway, storm water run offs, new outlet intakes, retaining walls, portions of parking lots, as well as portions Building #2/4 &8 will all fall within that flood zone. And if this current floodplain were to be altered in any way, including impervious structures, & altered land use, it will also increase flooding potentials to neighboring parcels.

Section (k)

Floodways.

(1)

In Zone AE riverine areas, encroachments, **including fill, new construction, substantial improvement, and other development shall not be permitted within a regulatory floodway which is designated on the community's flood insurance rate map**, unless a technical evaluation certified by a registered professional engineer is provided demonstrating that such encroachments **will not result, in any increase in flood levels** within the community during the occurrence of the base flood discharge.

This has all been an uncertainty at this point, and a guesstimate, even in the NRPA application there were concerns raised, but they **cannot guarantee**, especially with climate change and the recent increased flow of water in past 2 years.

Please read the entire section of this part of our Auburn Charter.

Now, the Shoreland overlay district (SLO) which is Division 5.

Sec. 60-982. - Purposes. The purposes of this Shoreland Overlay District (SLO) is to further the maintenance of **safe and healthful conditions; to prevent and control water pollution**; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat**; to protect buildings and lands from flooding and accelerated erosion**; to protect archaeological and historic resources; **to protect freshwater wetlands; to control building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas**.

Sec. 60-984. - Applicability.

This SLO district applies to all land areas within 250 feet, horizontal distance, of those areas noted on the official shoreland zoning map for the city **and all land areas within 75 feet**, horizontal distance, of the normal high-water line of a stream.

This still includes the driveway, portions of building # 4 and 8, possibly 2 and the new culverts leading into the brook for additional pollutant discharge, retaining walls, proposed fill of existing wetlands some even of state significance, catch basins and run off intake pipes to be directly discharged into Taylor brook, and new drainage ditches proposed/or unforeseen in current climate change and increased flooding events. That does not even take into effect, the additional encroachment into the minimum 25 ft buffer of absolute Undisturbed vegetation which this site plan also does in numerous areas.

Once again, within the SLO district rules and ordnances, it once **again continues** to state the following. To remind the city officials of the above **superseding**…Especially in the City Charter of Article II “General Provisions”.

Sec. 60-987. - Conflicts with other ordinances.

Whenever a provision of this division conflicts with or is inconsistent with another provision of this chapter or of any other ordinance, regulation or statute administered by the municipality**, the more restrictive provision shall control**.

The retaining wall and area by building 8 does not appear to meet the current

auburn shoreland ordnance and 100 year flood overlay Sec. 60-991. - Establishment of Shoreland Resource Protection District Overlay.

(5)

Retaining walls are located outside of the 100-year floodplain on rivers, streams, and tributary streams, as designated on the Federal Emergency Management Agency (FEMA) flood insurance rate maps or flood hazard boundary maps, or the flood of record, or in the absence of these, by soil types identified as recent floodplain soils.

(6)

The area behind the wall is revegetated with grass, shrubs, trees, or a combination thereof, and no further structural development will occur within the setback area, including patios and decks; and

The driveway does not appear to be in compliance of the shoreland overlay ordnance.

Sec. 60-998. - Roads and driveways.

The following standards shall apply to the construction of roads and/or driveways and drainage systems, culverts and other related features.

(1)

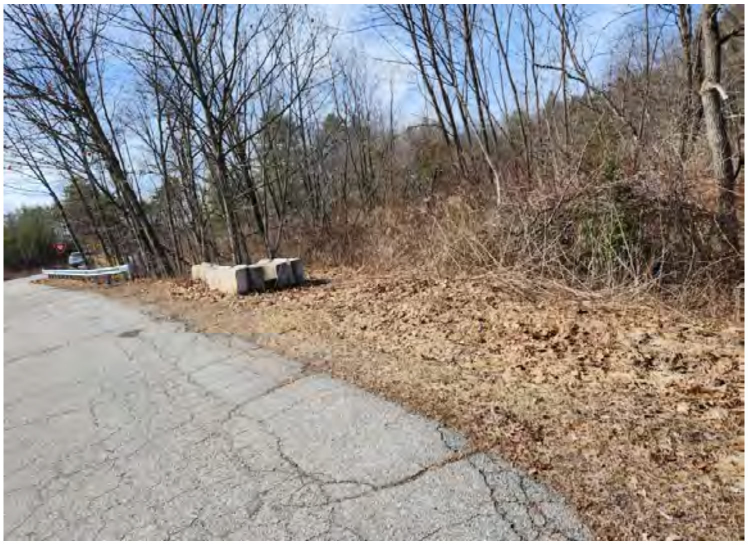
‘Roads and driveways shall be set back at least 100 feet, horizontal distance, from the normal high-water line of a great pond called GPA or a river that flows to a great pond called GPA, and 75 feet, horizontal distance from the normal high-water line of other water bodies, tributary streams, or the upland edge of a wetland unless no reasonable alternative exists as determined by the planning board. If no other reasonable alternative exists, the road and/or driveway setback requirement shall be no less than 50 feet, horizontal distance, upon clear showing by the applicant that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed so as to avoid sedimentation of the water body, tributary stream, or wetland.'

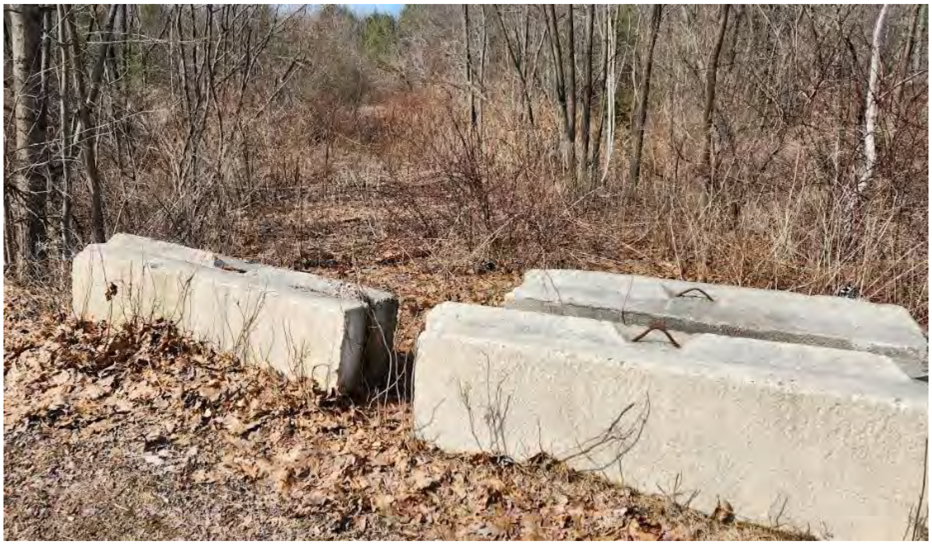
Now, there are numerous places just shortly upstream/downstream in Taylor brook, where it is 50-150+ ft across (Opens up, into larger/wider natural catch basins, like those behind 559 Minot ave and the Kendell Dams). Now, this is why that boundary measurement is so vitally, important to recognize currently. Because, if the "normal" high water line is measured at the center of the brook consistently in a river/lake/stream you could very well, still be standing in water using 25 ft or even 75 feet to measure it. It should be measured at the actual "Shoreline" of the normal high water mark, or the 100 year flood plain. The Shoreline….(Where water meets the buffered land and you could actually stand foot on it, without getting your shoes wet), not the middle of the body of water/river/stream/brook. Bodies of water are not always at consistent levels and shorelands have buffers/marshes/inlets/vernal pools/catch basins etc that ebb and flow to contain water boundaries in times of flooding or inundation. It's a natural process. This is a vitally import concept to acknowledge. Especially on this site/parcel. Because the shoreline has changed dramatically along Taylor Brook, in this exact area discussed, in my 45 years first hand witnessing it thru out the years/decades... I can tell you it has dramatically changed and will continue to do so, naturally.

Now when you do your Site plan visit on May 13th, I ask that you take some time to visit and acknowledge these effected areas.

- The entire current road conditions of Brickyard Circle, Walk it! (It has never been repaved/resurfaced, in its history, dating back to about 1959 when it was 1st built). We have been told, year after year, since 1995 that this would be repaved. We were also told in 2020 that it was on the books again, Yet, is still currently no longer on the books for the next several years because there is not enough current traffic flow to warrant repaving. It can barely handle current traffic with numerous washouts/pot holes/decay. How can you even build a sidewalk til this is completely redone. The current infrastructure is not even in place yet.
- The current driveway/access point to this parcel. This dates back to the 1980s long before the current owners owned this parcel and yet, there is still no visible driveway. Though, they claim such, is already in existence, in their correspondences with state entities, it has Never has been such. All the current owners have done, is occasionally go in there with excavators and tear up an access point, mow down trees, in their path without permits to make it look like such on paper. Just, to clear some of this lot, hopefully, without anyone paying attention. Like the day I called Eric Cousins when they went in there with a 440 excavator, back in 2021 and he shut them down because they

had no permits to do so. Their excuse was, “we are doing soil samples”, well if that was the case, why didn’t you go in there with a small bob cat and take core samples? Not a giant excavator and simply mow down all those aged trees…randomly in your path…They could not justify that extensive damage at the time. Many of those trees still lay fallen, splintered and on the ground. (when you walk the site pay attention to that) But, they were allowed to slide…without es…And Just because they dropped a few jersey barriers in 2021 and left them there… does not mean there is a driveway. It is all overgrown. See current photos below.

- 



- Pay close attention to the entrance/access point, where the new driveway will be. In relationship to the current brook, Drainage faults on Washington street, wetlands and swamped in areas, MDOT 250 foot Washington street setbacks, and current vernal pools and wetlands.

- Where the new slow down lane will be located, and the possible need to remove large standing city trees in existence in the median. And how this will affect current flow of traffic and trucks entering Ness oil etc.
- Think about the flood plain, and how this proposed "Fill in" will affect the shoreline, brook and adjacent property owners, including possible increased flood damage.
- How does this fit in with the new proposed Washington st development when the South bound lane will be a "high" traffic area, and North Bound lane will be slow traffic How does this development fit in, on the high traffic side?
- Walk the entire perimeter of the parcel, and note the close proximity to the brook, adjacent property owners, current street lamps, and Hazardous savage safe handling rail yard etc.
- Ask where the specific buildings and their edges will be located such as those of Building 2/3/4/6/7 & 8 in relation to brook/safe handling and adjacent parcels.
- When walking the perimeter, ask questions about the current where each building will be located, where the intake pipes are to be exhausted into the brook, where the "catch basins will be located" and how this will be remediated to prevent toxins from entering the brook.

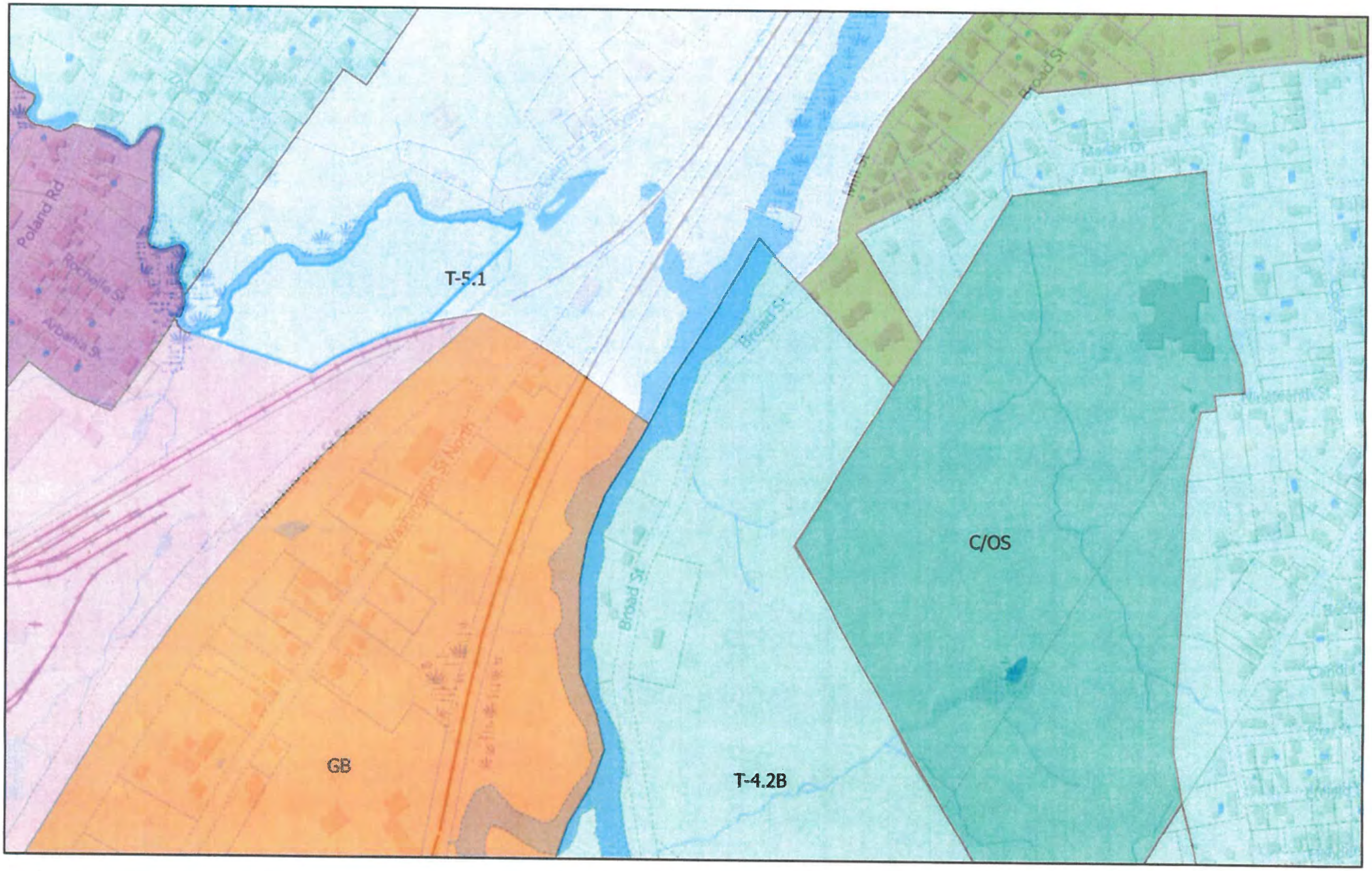
Thank you for your diligent time, investigating this this proposed project in it's entirety with fresh eyes.

-Rhyanna Larose

Bennett ave, Auburn

Submitted by
Steven Beale
for
May 13, 2025
Planning Board
Meeting
Public Comment for
Brickyard Commons

ArcGIS Web Map


T-5.1
C/OS
GB
T-4.2B
Poland Rd
Rochelle St
Albania St
Broad St
Broad St
Broad St
Broad St
Mill St
Washington St North
Minot Dr

5/1/2025, 3:23:00 PM

Current Parcels _ Public

Auburn Zoning

- 🟦 C/OS - Conservation / Open Space
- 🟧 GB - General Business
- ☐ ID - Industrial
- 🟪 SR - Suburban Residential
- 🟩 T-4.2 - Traditional Downtown Neighborhood
- 🟦 T-4.2B - Traditional Neighborhood Development District
- ☐ T-5.1 - Downtown Traditional Center
- Wetlands

1:9,028

0 0.05 0.1 0.2 mi

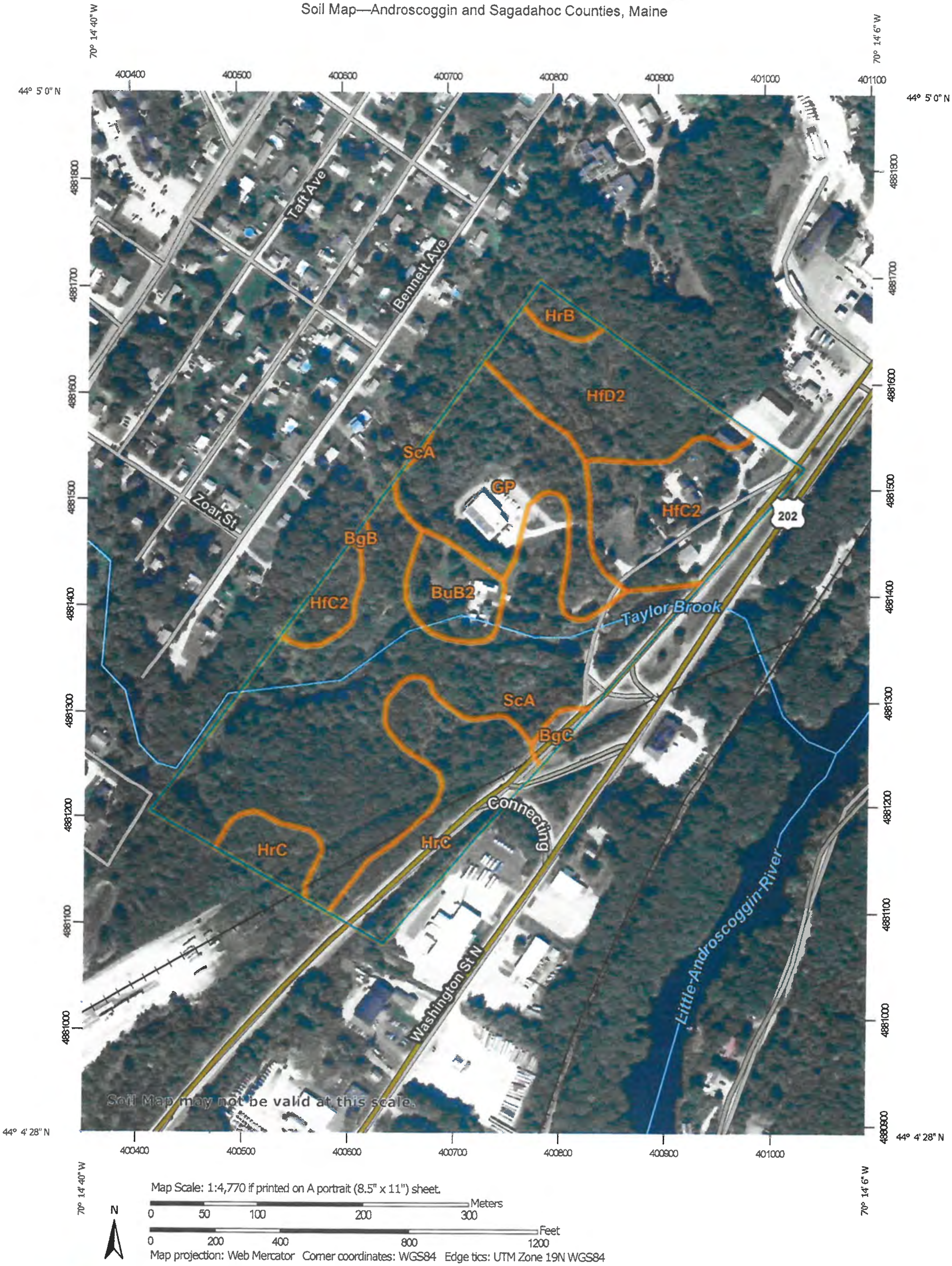
0 0.07 0.15 0.3 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

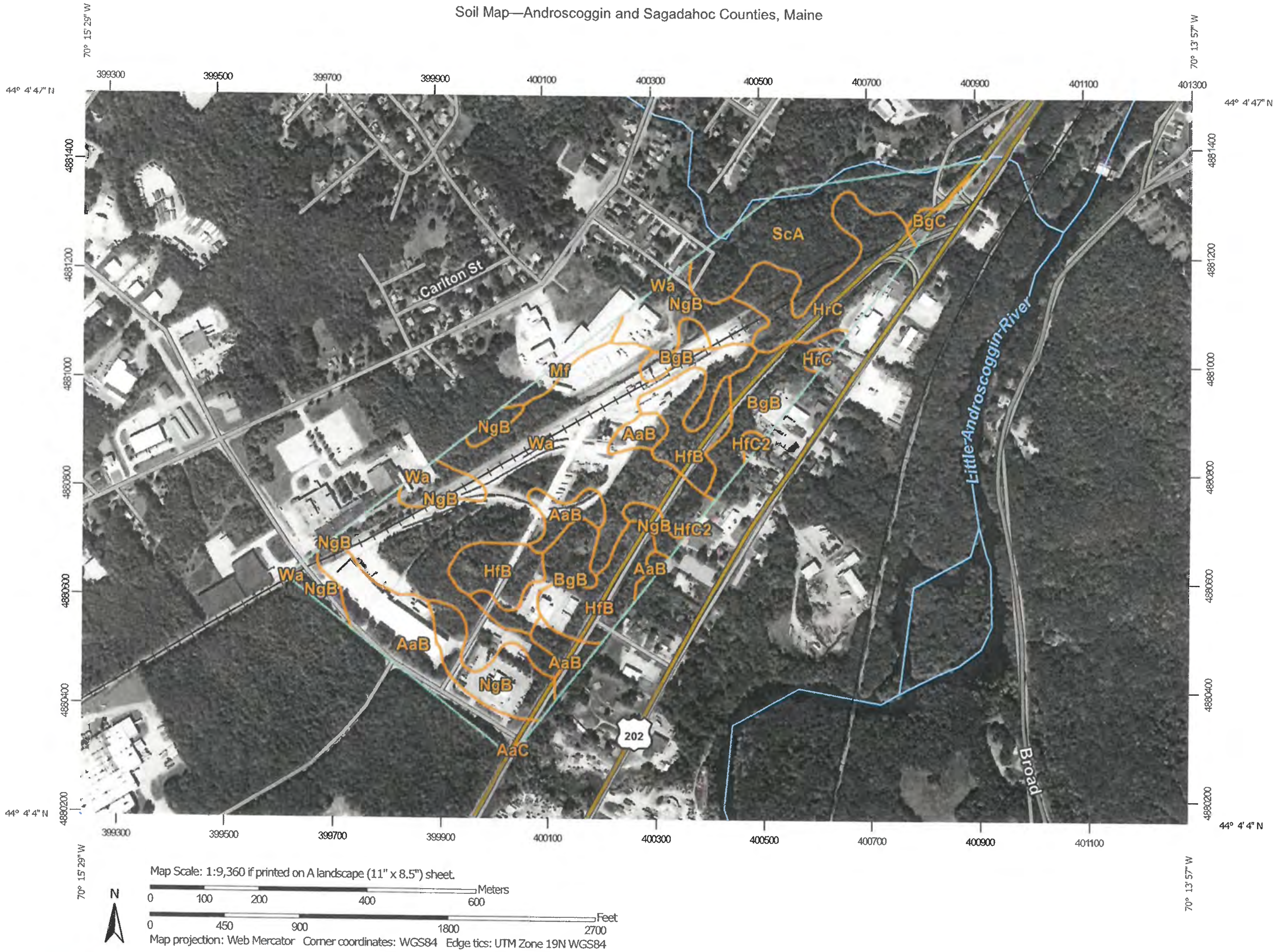
Web AppBuilder for ArcGIS

Credit should always be given to the data source and/or originator when the data is transferred or printed. | COA | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA,

Soil Map—Androscoggin and Sagadahoc Counties, Maine


70° 14' 40" W
70° 14' 6" W
44° 5' 0" N
44° 4' 28" N
400400
400500
400600
400700
400800
400900
401000
401100
4881800
4881700
4881600
4881500
4881400
4881300
4881200
4881100
4881000
4880900
Taft Ave
Bennett Ave
Zoar St
Washington St N
Connecting
202
Taylor Brook
Little Androscoggin River
HrB
HfD2
ScA
GP
HfC2
BgB
BuB2
HfC2
ScA
BgC
HrC
HrC
Soil Map may not be valid at this scale.
Map Scale: 1:4,770 if printed on A portrait (8.5" x 11") sheet.
Meters
0
50
100
200
300
Feet
0
200
400
800
1200
N
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Soil Map—Androscoggin and Sagadahoc Counties, Maine


70° 15' 29" W
70° 13' 57" W
44° 4' 47" N
44° 4' 4" N
399300
399500
399700
399900
400100
400300
400500
400700
400900
401100
401300
4880200
4880400
4880600
4880800
4881000
4881200
4881400
Carlton St
Little Androscoggin River
Broad
202
ScA
BgC
Wa
NgB
HrC
Mf
BgB
HrC
BgB
NgB
Wa
AaB
HfB
HfC2
Wa
NgB
AaB
NgB
HfC2
NgB
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HfB
BgB
AaB
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AaB
AaB
NgB
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100
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Meters
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450
900
1800
2700
Feet

Map Scale: 1:9,360 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	14.5	12.1%
AaC	Adams loamy sand, 8 to 15 percent slopes	0.1	0.1%
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	11.5	9.6%
BgC	Nicholville very fine sandy loam, 8 to 15 percent slopes	0.8	0.6%
HfB	Hartland very fine sandy loam, 2 to 8 percent slopes	14.5	12.0%
HfC2	Hartland very fine sandy loam, 8 to 15 percent slopes, eroded	0.3	0.3%
HrC	Lyman-Tunbridge complex, 8 to 15 percent slopes, rocky	9.8	8.2%
Mf	Made land, sanitary fill	1.3	1.1%
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes	16.5	13.7%
ScA	Scantic silt loam, 0 to 3 percent slopes	13.9	11.6%
Wa	Walpole fine sandy loam	37.1	30.8%
Totals for Area of Interest		**120.4**	**100.0%**

USDA Natural Resources
Conservation Service

Soil Fact Sheet

Franklin County, Vermont

ScB: Scantic silt loam, 3 to 8 percent slopes

The Scantic component makes up 70 percent of the map unit. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. This component is on terraces on lake plains. The parent material consists of clayey glaciolacustrine deposits. Depth to a root restrictive layer is greater than 60 inches.

Important farmland classification: Statewide (b)	Land capability: 3 w	Vermont Agricultural Value Group: 6d

Vermont Residential Onsite Waste Disposal Group and Subgroup: IVa

This unit is generally not suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. Excessive soil wetness in association with the minimal slope is the limiting condition. Prolonged periods of saturation at or near the soil surface do not allow for the proper functioning of septic systems.

PHYSICAL and CHEMICAL PROPERTIES / EROSION FACTORS

Soil name	Depth (In)	Typical texture	Clay (Pct)	Soil reaction (pH)	Permeability (In/Hr)	Organic matter (Pct)	Kw	Kf	T
Scantic	0-14	SIL	15-40	4.5 - 6.5	0.2-2	3.0-9.0	.37	.37	5
	14-21	SICL	20-55	5.1 - 7.3	0-0.2	0.5-3.0	.32	.32	
	21-41	SIC	35-55	5.6 - 7.3	0-0.2	0.0-0.5	.32	.32	

WATER FEATURES / SOIL FEATURES

Soil name	Hydrologic group	Depth to seasonal high water table (Feet)	Flooding Frequency	Flooding Duration	Ponding Frequency	Ponding Duration	Hydric soil?	Depth to bedrock (range in inches)
Scantic	C/D	0.0-1.0	None		None		Yes	---

LAND USE LIMITATIONS

Soil name	Land use	Rating	Reason **
Scantic	Dwellings with basements:	Very limited	Depth to saturated zone
Scantic	Pond reservoir areas:	Somewhat limited	Slope

AGRICULTURAL YIELD DATA

Crop name	Yield / acre
Pasture	6 AUM
Grass-legume hay	3 Tons
Grass hay	3.5 Tons
Corn silage	16 Tons

WOODLAND MANAGEMENT

Soil name	Management concern	Rating	Reason	Vermont natural communities
Scantic	Harvest equip operability:	Poorly suited	<30cm to water table fo >=6mos	Red Maple-Black Ash Swamp, Lowland Spruce-Fir ForestSpruce-Fir- Tamarack Swamp
Scantic	Road suitability:	Poorly suited	Wetness	
Scantic	Erosion hazard (off-road):	Slight		

MAP LEGEND

Area of Interest (AOI)
- ☐ Area of Interest (AOI)

Soils
- ☐ Soil Map Unit Polygons
- Soil Map Unit Lines
- ■ Soil Map Unit Points

Special Point Features
- Blowout
- ☒ Borrow Pit
- ✕ Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- ◎ Miscellaneous Water
- ○ Perennial Water
- Rock Outcrop
- + Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- 🟩 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

> Warning: Soil Map may not be valid at this scale.
>
> Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 25, Aug 26, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Natalie Thomsen

From:	Renee Cote <reneecote@myfairpoint.net>
Sent:	Friday, May 9, 2025 10:56 AM
To:	Natalie Thomsen
Cc:	David Hediger
Subject:	[External]RE: [External]Safe Handling / Savage Safe Handling report for the PB meeting on May 13--pls confirm receipt
Attachments:	auburn-savage-services-2020-2010-ueca-120120-compliance-review.pdf; environmental covenant-auburn-savage-services-2010-ueca-110510-covenant-with-5-year-compliance-review.pdf

Some people who received this message don't often get email from reneecote@myfairpoint.net. Learn why this is important

Good morning Natalie and David,

Since my April 30 submission for the May 13 planning board packet regarding the Brickyard Commons development, I've been in touch with the Bureau of Remediation and Waste Management in an effort to find out more about the documentation shown in the photograph at the end of the email. Some of that documentation concerns a 2010 environmental covenant between Savage/Safe Handling and the DEP.

As an addendum to the material I submitted on April 30, I would like to submit a copy of the DEP environmental covenant from 2010 and the five-year review of compliance letter dated November 2020 from Savage for inclusion in the May 13 packet. I apologize for the lateness of this submission.

As I will note in the remarks I plan to make at the May 13 meeting, it is a concern that no hydrogeological survey has been done to check for the presence of the chemicals that were the subject of the environmental covenant, considering that as far as I can tell the Gendron property directly abuts the area of concern. In addition, the disturbances forbidden in that covenant might well come into play as the removal of trees and installation of pipes and other infrastructure could eliminate any existing barrier between the Sahe Handling chemicals and Taylor Brook. The time to conduct that survey would be now, before a permit is issued.

I will call to confirm receipt of these two PDFs. I appreciate your efforts to include this material and present the most complete picture possible to the planning board.

Yours,

Renee Cote

Peter Bornstein

On Wed, 30 Apr 2025 14:07:58 +0000, Natalie Thomsen <nthomsen@auburnmaine.gov> wrote:

Thank you Renne,

SAVAGE

November 30, 2020

Pamela Davis Green
RCRA Corrective Action Project Manager
Environmental Specialist in the Bureau of Remediation
Maine Department of Environmental Protection

RE: Environmental Covenant Compliance Review
123 Rodman Road, Auburn, Maine 04201

Dear Ms. Green:

Per the Maine DEP Environmental Covenant, which was declared and granted to Savage Services Corporation (“Savage”), which is the owner of the 123 Rodman Road, Auburn Maine (the “Property”) dated November 5, 2010. The Environmental Covenant specifically pertains to the subsurface soils at a pole yard and associated unpaved driveways located at the northeast corner of the Property, referred to as “Restricted Area”, where the DEP and Savage have previously identified the presence of pentachlorophenol (PCP), dioxin, and polycyclic aromatic hydrocarbons (PAHs) related to historic operations by prior owners of the Property. Savage continues to abide by the agreement as outlined in the Environmental Covenant where there has been no construction activities and groundwater usage permitted in the aforementioned Restricted Area.

Below is a brief summary of the 5 year interval inspection results spanning the November 2015 - November 2020 period for the Restricted Area in accordance with the aforementioned Maine DEP Environmental Covenant:

- The Property presently and continues to be used and maintained for commercial and industrial or other non-residential purposes; corresponding municipal zoning has not changed.
- No other tenants or other entities occupy the aforementioned Property or Restricted Area.
- No construction has occurred, no buildings or structures are present, no roads exist, no fills are present on, in or under the Restricted Area.
- No ground disturbance has occurred, including excavation, digging, grading, drilling, mining or any other disturbance of the Restricted Area.
- No alterations have occurred either in any surface water, groundwater or the water table (other than those which occur naturally) including, but not limited to any discharge to the surface of the Restricted Area or discharge or injection into the subsurface of the Restricted Area or withdrawal from the subsurface of the Restricted Area or of liquids of any type.
- The only items found present in the Restricted Area include several empty highway cargo tanker trailers, two 20’ towable toy hauler box trailers, and a vacant portable construction trailer.
- There were no noncompliance issues observed as it relates to the Environmental Covenant, nor were there any environmental concerns or issues observed in the Restricted Area.

We greatly appreciate Maine DEP’s cooperation, support and efforts as it relates to this environmental compliance matter. We are committed to comply with all terms and conditions as outlined in the aforementioned Maine DEP Environmental Covenant for the Savage - Auburn, Maine property. If there are any further questions and/or issues related to this subject, do not hesitate to contact me.

Sincerely,

William Kaiser

William Kaiser
Environmental Director

Bk 8082 Pg331 #23381
12-22-2010 @ 10:57a

DECLARATION OF ENVIRONMENTAL COVENANT

This ENVIRONMENTAL COVENANT is hereby declared and granted as of this _5th____ day of ___November__________ 2010, by **Savage Services Corporation** ("**Savage**"), a Utah corporation with a place of business at 123 Rodman Road, in Auburn, Maine 04201, to the Maine Department of Environmental Protection ("DEP") on property located in Auburn, Maine, which is more fully described below.

WHEREAS, Savage is the owner of a certain property located at 123 Rodman Road, Auburn, Maine and described in a deed recorded in the Androscoggin County Registry of Deeds in Book, Page (the "Property");

WHEREAS, following an investigation of subsurface soils at a pole yard and associated unpaved driveways located at the northeast corner of the Property, the DEP and Savage have identified the presence of pentachlorophenol (PCP), dioxin, and polycyclic aromatic hydrocarbons (PAHs) related to historic operations by prior owners of the Property;

WHEREAS, Savage has agreed to restrict future construction activities and groundwater use at the Property and provide for notification to DEP in the event of future excavation activities at the Property. The portion of the Property subject to certain restrictions under this Environmental Covenant shall hereafter be referred to as the "Restricted Area," and is shown on the figure attached as **Exhibit A**;

WHEREAS, because the PCP, dioxin, and PAHs remain in the soil in the Restricted Area, DEP has determined in accordance with Maine's Uniform Environmental Covenants Act ("UECA"), 38 M.R.S.A. § 3001 et seq., that the environmental covenants in this Declaration are necessary to protect the public health, safety, and the environment, which covenants shall run with the land;

WHEREAS, Savage intends to create and grant an Environmental Covenant pursuant to the UECA;

NOW, THEREFORE, Savage, for and in consideration of the facts above recited and the covenants herein, and intending to create and be legally bound by a perpetual covenant running with the land, subject to the terms hereof, hereby declares, covenants and agrees as follows:

1. Declaration of Covenant. This instrument is an Environmental Covenant executed pursuant to the UECA.

2. Prohibited Activities. Savage and future owners and users of the Property shall be aware that the potential exists for contaminated soil and groundwater to be encountered on and beneath the Restricted Areas of the Property, therefore the following acts shall be prohibited throughout the Restricted Areas, and Savage or

any subsequent owner/occupant shall not cause, permit or suffer any such acts to occur therein without prior notice to, and prior written permission from, the DEP:

a) The use of any groundwater from on or under the Property for any drinking or agricultural purpose.

b) Except in an emergency, in which case DEP shall be notified of such activity as soon as is practicable, any activity which might disturb the soil or groundwater in the Restricted Areas (other than maintenance of the driveways), including without limitation:

    i) the construction or placement of any buildings, roads, fills, or structures on, in or under the Restricted Area;

    ii) the excavation, digging, grading, drilling, mining or any other disturbance of the Restricted Area; or

    iii) alteration in any surface water, groundwater or the water table (other than that occurring naturally) including, but not limited to, any discharge to the surface of the Restricted Area or discharge or injection into the subsurface of the Restricted Area or withdrawal from the subsurface of the Restricted Area or of liquids of any type.

3. Uses. The Property shall be used and maintained for commercial and industrial or other non-residential purposes, even if changes in zoning allow other uses, for as long as this Declaration is in effect. Residential uses are prohibited without the prior written approval of DEP. In no event shall the Restricted Area be used for residential purposes, schools, child care facilities, or long-term care facilities, even if such uses are allowed under applicable municipal zoning, unless prior written approval of DEP is obtained. DEP may provide such approval at its sole discretion if Savage or any future owner of the Property demonstrates to the DEP:

a) the comparison of on-site environmental data with appropriate risk-based standards indicate the Property (or portion thereof) meets residential criteria and access to areas not meeting residential criteria will be restricted; or

b) if the proposal concludes that one or more conditions in or on the Property do not meet residential criteria, said proposal suggests remediation activities (including but not limited to contamination removal, stabilization, or isolation) to alleviate such material risk to residents and Savage or the then owner of the Property properly performs such remediation activities to the satisfaction of the DEP.

4. Notice to Tenants and Others. Savage or future owners of the Restricted Area shall provide notice of this Environmental Covenant to any tenants or lessees, or to any other person conducting any activities on the Restricted Area that could result in disturbance of soil, groundwater, or any activity that would be otherwise prohibited by this Covenant.

5. Notice Requirement. Declarant or future owners must include in any instrument conveying any interest in any portion of the Protected Parcels, including but not limited to deeds, leases and mortgages, a notice which is in substantially the following form: "NOTICE: The interest conveyed herein is subject to a Declaration of Environmental Covenant, recorded in the Androscoggin County Registry of Deeds on __________, 2010, in Book ___, Page ___."

6. Inspection and Reporting. Savage and future land owners shall periodically review the status of compliance with this environmental covenant and shall report inspection results to the DEP in writing (a) at each 5 year interval after the recording of this Declaration, and (b) upon request of the DEP.

7. Agency and Holder. DEP is the environmental agency with enforcement authority pursuant to the UECA and is also the only Holder of the Environmental Covenant granted by Savage in this Declaration.

8. Perpetuity of Covenant. This Environmental Covenant, and each and every covenant contained herein, shall be a covenant running with the land in perpetuity and shall bind the Restricted Area, the Declarant, its successors and assigns, and all those acting by, through, or under the Declarant. Declarant shall be bound for the duration of this Declaration by each and every covenant, restriction, agreement, and obligation hereunder, during the period that Declarant owns the Protected Parcels. In the event any portion of the Protected Parcels is sold, each owner of any portion of the Protected Parcels shall be bound for the duration of this Declaration as to that portion of the Protected Parcels which it owns.

9. Representation of Ownership and Encumbrances. By its execution hereof, Savage warrants that it is the sole owner of the Property and that there are no mortgages, easements or other encumbrances on the Restricted Areas of the Property that would materially adversely affect the effectiveness or enforceability of this Environmental Covenant.

10. Access. Savage, its successors and assigns, and all future owners and land users shall provide, without cost, access to the Restricted Area to the DEP, including its authorized employees, agents, representatives, and independent contractors, upon presentation of credentials, for purposes of monitoring and enforcing this Environmental Covenant

11. Notice of Noncompliance. Savage and all future owners shall provide written notice to the DEP within 10 working days of discovery of any noncompliance with the terms of this Environmental Covenant.

12. Enforcement. This Environmental Covenant shall be enforceable as authorized by the UECA. Any forbearance as to enforcement of any of the terms hereof shall not be deemed a waiver of the right to seek and obtain enforcement at any time thereafter as to the same violation or as to any other violations.

13. Amendment or Termination by Consent. The terms and conditions herein may not be amended or terminated except by a written instrument duly executed by Savage, the current owner of the Restricted Area at the time of the amendment or termination, and DEP, or its successor in legal function, which instrument is duly recorded in the Androscoggin County Registry of Deeds, pursuant to the UECA. Savage waives its right to consent to amendment or termination of the Environment Covent in the event it no longer owns the property.

14. Petition to Modify. Savage, its successors, tenants and assigns may petition the DEP to modify or remove some or all of the covenants, restrictions, agreements and obligations herein. The burden is upon the party seeking DEP approval of the modification or removal of a restriction to show that the restriction is no longer necessary to protect the public health and safety and the environment. The DEP may agree to remove or modify restrictions that in the exercise of its sole discretion the DEP determine to be no longer necessary to protect the public health or the environment.

15. Notice Pursuant to Covenant. Any notice or other correspondence required pursuant to this instrument shall be in writing and shall be sent by certified mail, return receipt requested, and shall be sent to the following addresses, or such other addresses as Savage and the DEP may designate from time to time in a written notice:

For the DEP:

(Timothy Wright) or successor in position
RCRA Project Manager
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

For Savage:

Savage Industries, Inc.
6340 South 3000 East
Suite 600
Salt Lake City, Utah 84121
Attn: General Counsel

With a Copy to (which shall not constitute notice):

Holland & Hart LLP
222 South Main Street
Suite 2200
Salt Lake City, Utah 84101
Attn: Craig D. Galli, Esq.

Either party may change its address for purposes of this paragraph by giving the other party notice of the new address in the manner described herein.

16. Recording. Savage shall cause this Declaration to be duly recorded in the Androscoggin County Registry of Deeds within 30 days of execution of the Environmental Covenant and shall, within 30 days of this recording of the Declaration, notify the DEP of the book and page at which it is recorded, and submit to the DEP a copy of the signed Declaration date-stamped by the Register of Deeds.

17. Administrative Record. The administrative record relating to the Property is located at the main office of DEP, whose mailing address is 17 State House Station, Augusta, ME 04333-0017, with a street address of Ray Building, 28 Tyson Drive, Augusta, Maine.

18. Governing Law. This Environmental Covenant shall be governed and interpreted in accordance with the laws of the State of Maine.

19. Liberal Construction. It is intended that this Environmental Covenant be construed liberally to protect the health and welfare of the public and the quality of the environment from the risk of adverse effects of exposure to hazardous substances.

20. Invalidity. If any part of this Environmental Covenant shall be decreed to be invalid by any court of competent jurisdiction, all of the other provisions hereof shall not be affected thereby and shall remain in full force and effect.

[SIGNATURE PAGES FOLLOW]

DECLARATION OF RESTRICTIVE COVENANT
123 Rodman Road, Auburn, Maine

IN WITNESS WHEREOF, Savage Services Corporation has caused this Declaration to be signed by its duly authorized officer as of the day and year first above written.

Savage Services Corporation

By: Don Alexander

Name: Don Alexander

Title: Senior Vice President & Group Leader

STATE OF Utah COUNTY, Salt Lake.

The above-named Don Alexander personally appeared before me on 5 NOV, 2010 in his/her capacity as Sr VP + Group Leader and acknowledged the foregoing to be his/her free act and deed in his/her said capacity and the free act and deed of ABC Industries.

NOTARY PUBLIC

Printed Name:
Lisa Pizza

LISA PIZZA
NOTARY PUBLIC•STATE OF UTAH
6340 S. 3000 E. #600
COTTONWOOD HEIGHTS, UT 84121
COMM. EXP. 09-10-2011

ACKNOWLEDGED AND AGREED TO BY:
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

By:

Name: MARK HYLAND

Title: BUREAU DIRECTOR

STATE OF MAINE
KENNEBEC COUNTY

The above-named Mark Hyland personally appeared before me on Dec. 13th, 2010 in his capacity as Director, BRWM and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of the DEP.

SEAL

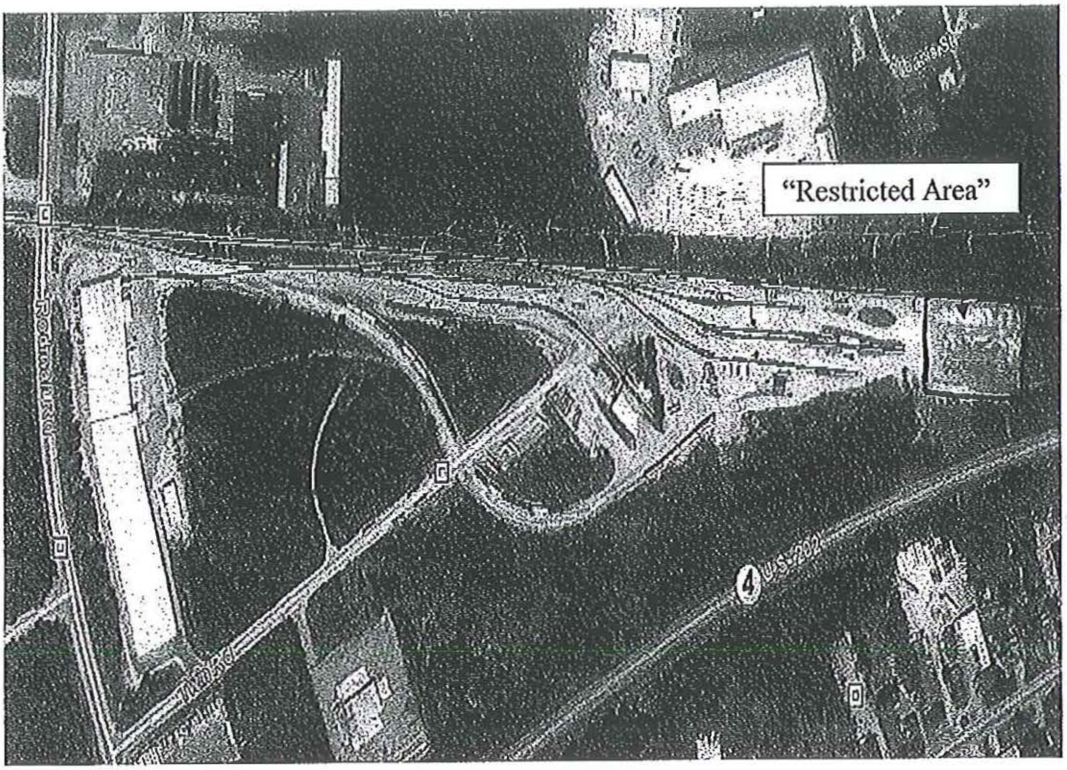
Lynn Boutilier 4/10/11
NOTARY PUBLIC

Printed Name: Lynn Boutilier

DECLARATION OF RESTRICTIVE COVENANT
123 Rodman Road, Auburn, Maine

Exhibit A

Plan of Property, 123 Rodman Road, Auburn, Maine


"Restricted Area"
Rodman Rd
4
US-202

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

auburnmaine.gov

City of Auburn, Maine
Office of Planning and Permitting
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

To: Auburn Planning Board
From: Natalie Thomsen, Planning Coordinator
Date: May 13, 2025
Re: Request for Extension of Site Plan Approval – West Shore Village

Project Overview

The project known as West Shore Village at Adamian Drive was granted Site Plan approval by the Planning Board on July 19, 2024, for the development of two 24-unit multifamily buildings and a two-story, 12,600 SF storage facility on City Assessor's Parcels 109-003 and 109-004.

Request Summary

On May 2, 2025, the applicant (Stoneybrook Land Use, Inc. on behalf of West Shore Village, LLC) submitted a written request seeking a one-year extension of the original site plan approval. This request was made more than 30 days prior to the July 19, 2025 expiration, meeting the requirements set forth in Sec. 60-1308 of the Auburn Zoning Ordinance.

The applicant cites good cause for the extension:

- Finalization of building plans for both the apartment buildings and storage facility.
- Coordination with the adjacent Agren Warehouse project, which impacted shared grading and utility infrastructure.
- Intent to begin construction on the storage facility in Fall 2025, followed by the multifamily units.

Zoning Ordinance Reference

Sec. 60-1308 – Expiration of Approval:

"A single one-year extension may be given upon a showing of good cause in writing by the applicant to the planning board not less than 30 days before the expiration of approval... The planning board shall approve or disapprove the requested extension at its next regular meeting."

Staff Recommendation

Planning Staff finds that the applicant has demonstrated good cause and has complied with the procedural timeline under Sec. 60-1308. The approved plans remain consistent with current zoning and land use policies. There have been no significant changes to the ordinance or surrounding area that would warrant re-review of the application.

Staff recommends the Planning Board approve an one-year extension, revising the expiration date to July 19, 2026.

Suggested Motion

"I move to approve the request for a one-year extension of the Site Plan approval for West Shore Village at Adamian Drive, as originally approved on July 19, 2024. This extension is granted pursuant to Sec. 60-1308 of the Auburn Zoning Ordinance, and the revised expiration date shall be July 19, 2026."

Stoneybrook
Land Use, Inc.

9172 SW 52nd Place Road
Ocala, FL 34481
(207) 513-6123

May 2, 2025

Mr. David Hediger, Director of Planning
Planning, Permitting and Code Division
City of Auburn
60 Court Street
Auburn, ME 04210

RE: West Shore Village
at Adamian Drive

Dear Mr. Hediger:

On behalf of West Shore Village, LLC (WSV), I am submitting this letter to request the extension of the approvals for the West Shore Village at Adamian Drive project. The City Planning Board approved this project in July of 2024.

Since the project was approved, WSV has been working to prepare the building plans for the storage building and the 24 Unit apartment buildings. They have also been waiting for construction of the Agren Warehouse project on the abutting lot to be completed. Sewer service for the Agren Warehouse project crosses the WSV site and grading along the common lot lines was designed to support development on both lots.

The warehouse construction is now complete and occupied and WSV is now seeking pricing based upon final building plans. They plan to start construction of the storage building this fall and complete the two apartment buildings as soon as the storage building has been constructed. Please accept this letter as a formal request from WSV to extend the approvals for an additional year to give them time to secure building permits and start construction this Fall.

Please do not hesitate to call if you have any questions.

Respectfully yours,

STONEYBROOK LAND USE, INC.

Michael F. Gotto

cc: Jason Agren
Tim Millett
Michael Barnes

City of Auburn, Maine
Department of Planning & Permitting
Eric Cousens, Director
60 Court Street | Auburn, Maine 04210
www.auburnmaine.gov | 207.333.6601

July 19, 2024

Applicant/Property Owner:
West Shore Village, LLC
40 Minot Avenue
Auburn, ME 04210
Email: jagren@agrenappliance.com

Agent:
Stoneybrook Land Use, Inc.
C/O Michael F. Gotto
4846 Sun City Center Blvd., #300
Sun City Center, FL 33573-6281

Main-Land Development Consultants
C/O , Michael Barnes, PE
PO Box Q
Livermore Falls, ME 04254

Re: Approval Letter for Taylor Brook House Site Plan Review

Dear Mr. Barnes,

This letter is to notify you that City of Auburn, Planning Board has approved the proposed Site Plan approval off Adamian Drive, City Assessor's Parcel I.D 109-003 and 109-004. The proposed project consists of two (2) 9,153 S.F. 24 multi-family units and one (1) two story 12,600 S.F. Storage Facility with access on both elevations. This item is according to Chapter 60, Article IV Division 12- General Business District; Article XVI Division 2- Site Plan Review; and Division 3- Special Exception.

Referenced Approved Plans and Materials:

Application Set Dated June 5th, 2024

Revised Drawings Application: June 25, 2024

Findings: Planning Board approved the changes with the following findings:
The application meets the conditions of Sec. 60-1277 in that the development has made provisions for:

(1) Protection of adjacent areas against detrimental or offensive uses on the site by provision of adequate surface water drainage, buffers against artificial and reflected light, sight, sound, dust and vibration; and preservation of light and air;
(2) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas;
(3) Adequacy of the methods of disposal for wastes; and
(4) Protection of environment features on the site and in adjacent areas.

Further, the application meets the conditions of Sec. 60-1336 in that it:

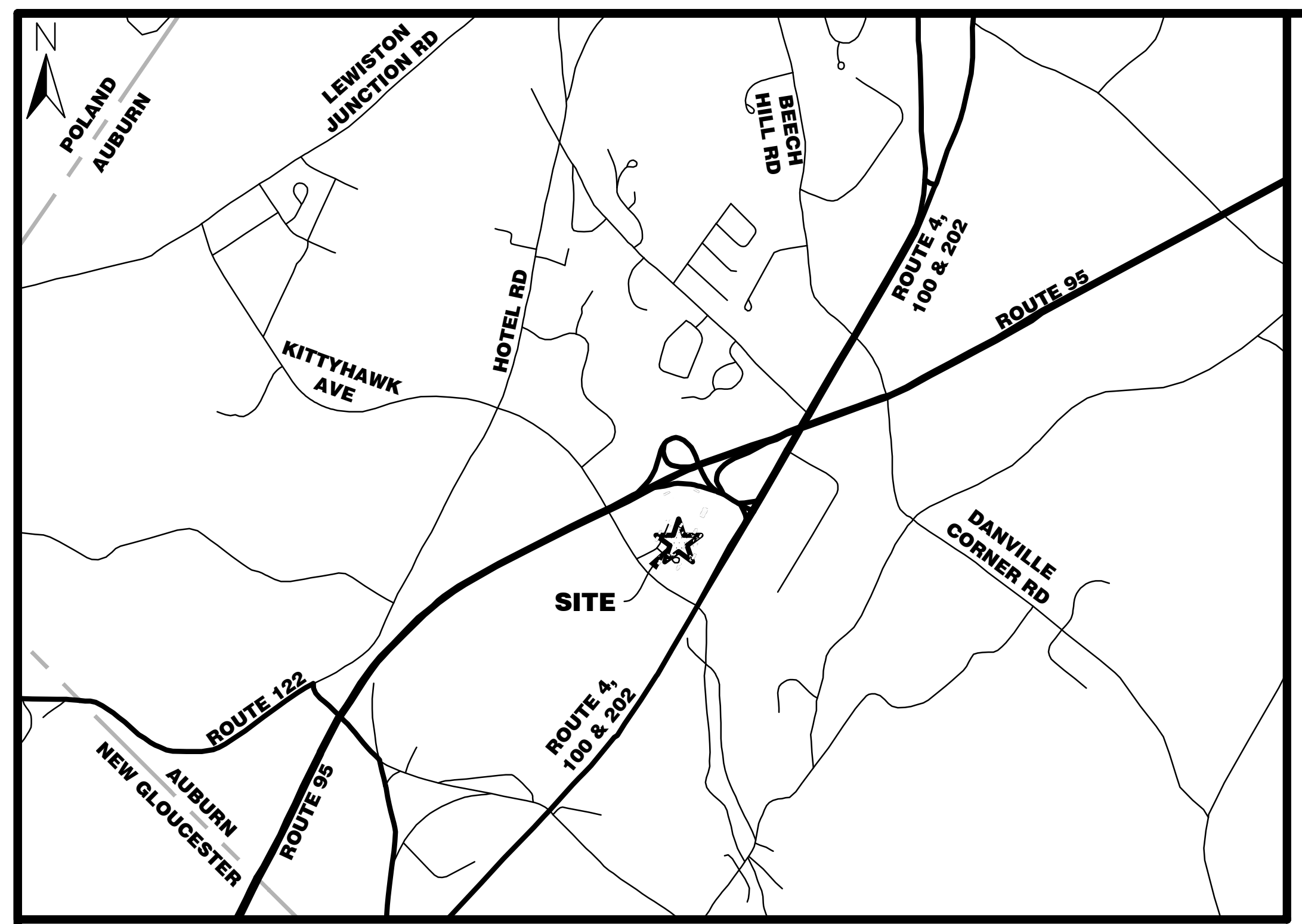
(1) Fulfills the specific requirements, if any, set forth in the zoning ordinance relative to such exception.
(2) Will neither create nor aggravate a traffic hazard, a fire hazard or any other safety hazard.
(3) Will not block or hamper the master development plan pattern of highway circulation or of planned major public or semipublic land acquisition.
(4) Will not alter the essential characteristics of the neighborhood and will not tend to depreciate the value of property adjoining and neighboring the property under application.
(5) Reasonable provisions have been made for adequate land space, lot width, lot area, stormwater management in accordance with section 60-1301(14), green space, driveway layout, road access, off-street parking, landscaping, building separation, sewage disposal, water supply, fire safety, and where applicable, a plan or contract for perpetual maintenance of all of the common green space and clustered off-street parking areas to ensure all such areas will be maintained in a satisfactory manner.
(6) The standards imposed are, in all cases, at least as stringent as those elsewhere imposed by the city building code and by the provisions of this chapter.
(7) Essential city services which will be required for the project are presently available or can be made available without disrupting the city's master development plan.

Conditions:

1. All required bonding/inspection fees shall be paid and a notice to proceed issued by the Engineering Department before the start of construction.
2. All appropriate permits are received prior to the start of construction.

Sincerely,

John Blais, Deputy Director of Planning, Permitting and Code
C: File


N
POLAND
AUBURN
LEWISTON JUNCTION RD
BEECH HILL RD
HOTEL RD
KITTYHAWK AVE
ROUTE 95
ROUTE 4, 100 & 202
SITE
DANVILLE CORNER RD
ROUTE 122
AUBURN
NEW GLOUCESTER
ROUTE 95
ROUTE 4, 100 & 202

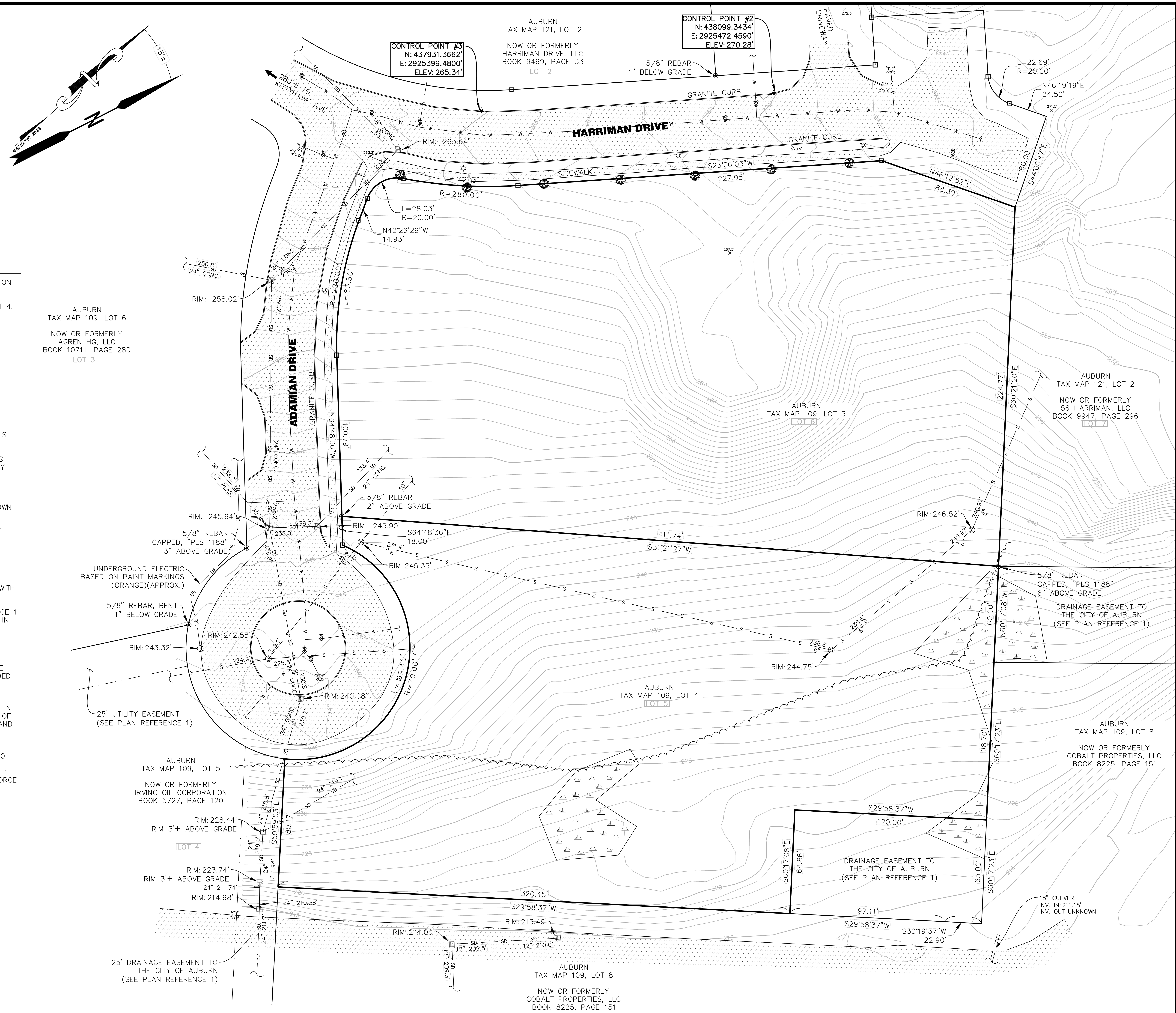
LOCATION MAP 1" = 1/2 MILE

NOTES

1. ALL BEARINGS ARE REFERENCED TO MAINE STATE GRID, WEST ZONE, NAD83 AND BASED ON GPS OBSERVATIONS NEAR THE SURVEYED PARCEL.
2. CITY OF AUBURN: TAX MAP 121, LOT 2, TAX MAP 109 LOT 3, & TAX MAP LOT 109 LOT 4.
3. SUMMARY – OWNER OF RECORD AT TIME OF SURVEY:
   LOT 3 12 ADAMIAN LLC: BOOK 9947, PAGE 291.
   LOT 4 24 ADAMIAN LLC: BOOK 9947, PAGE 294.
4. AREA SUMMARY:
   LOT 3 2.17 ACRES, MORE OR LESS.
   LOT 4 1.93 ACRES, MORE OR LESS.
   TOTAL AREA 4.10 ACRES, MORE OR LESS.
5. ALL BOOK AND PAGES REFER TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS.
6. CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN–LAND DEVELOPMENT CONSULTANTS, INC. ON MAY 11, 2021 & NOVEMBER 29, 2022 AND SUPPLEMENTED WITH STATE OF MAINE LIDAR DATA DOWNLOADED FROM HTTP://COAST.NOAA.GO WITH A CONTOUR INTERVAL OF 1–FOOT. THE VERTICAL DATUM IS NAVD88 AND BASED ON GPS OBSERVATIONS NEAR THE SURVEYED PARCEL.
7. UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON ABOVE GROUND FEATURES ONLY, MAIN–LAND RECOMMENDS THE USE OF DIG SAFE OR OTHER ENTITIES TO MARK ANY UNDERGROUND UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION.
8. THERE WERE NO APPARENT ENCROACHMENTS OBSERVED AT TIME OF SURVEY.
9. THERE ARE TWO OLD JUNK CARS NEAR THE WESTERLY PORTION OF LOT 2. IT IS UNKNOWN WHEN THESE CARS WERE PARKED ON THE PROPERTY.
10. CONTROL POINTS ARE 5/8" REBAR WITH ALUMINUM CAP MARKED "MLDC CONTROL POINT" FLUSH WITH GRADE.
11. THE SURVEYED PARCEL IS LOCATED IN THE GENERAL BUSINESS DISTRICT. SEE CITY OF AUBURN ORDINANCES FOR ADDITION INFORMATION PERTAINING TO LOT USAGES AND DIMENSIONS.
12. WETLANDS DELINEATED BY MAIN–LAND DEVELOPMENT CONSULTANTS, INC. AND LOCATED WITH A TRIMBLE GEOX7X MAPPING GRADE GPS.
13. TOGETHER WITH A RIGHT TO USE THE STREETS AND WAYS AS SHOWN ON PLAN REFERENCE 1 FOR ALL PURPOSES FOR WHICH STREETS AND WAYS ARE USED IN THE CITY OF AUBURN IN COMMON WITH OTHERS. ASSUMED TO BE HARRIMAN DRIVE AND ADAMIAN DRIVE.
14. TOGETHER WITH TWO EASEMENT TO CENTRAL MAINE POWER COMPANY AS DESCRIBED IN BOOK 926, PAGE 134 AND BOOK 525, PAGE 471.
15. SUBJECT TO AND TOGETHER WITH A RIGHT–OF–WAY, AS IT MAY BE NECESSARY, FOR THE ERECTION, MAINTENANCE, AND OPERATION OF THE SIGN FACILITIES ON LOT 2 AS DESCRIBED IN BOOK 9947, PAGE 294.
16. SUBJECT TO AND TOGETHER WITH A DRAINAGE LICENSE AND ENTRANCE IMPROVEMENT AGREEMENT WITH THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION AS DESCRIBED IN BOOK 2462, PAGE 340 AND A LICENSE FOR INSTALLATIONS UPON MAIN TURNPIKE RIGHT OF WAY RECORDED IN BOOK 2454, PAGE 107, INSOFAR AS THE SAME ARE STILL IN FORCE AND APPLICABLE.
17. SUBJECT TO AND TOGETHER WITH RIGHTS AND COVENANTS IN A DECLARATION OF COVENANTS DESCRIBED IN BOOK 2393, PAGE 245 AND AMENDED IN BOOK 2503, PAGE 90.
18. SUBJECT TO AND TOGETHER WITH THE DRAINAGE EASEMENT SHOWN ON PLAN REFERENCE 1 AND WITH THE PROVISIONS OF NOTE 10 ON SAID PLAN, TO THE EXTENT THAT IT IS IN FORCE AND APPLICABLE.

LEGEND

◉	EXISTING IRON PIPE, ROD, OR REBAR AS NOTED
⊡	6"X6" CONCRETE MONUMENT, CAPPED "PLS 1188"
▲	CONTROL POINT (SEE NOTE 10)
	FIRE HYDRANT
	WATER GATE
☼	LIGHT POLE
▦	CATCH BASIN
Ⓓ	DRAIN MANHOLE
LOT 7	LOT NUMBER (SEE PLAN REFERENCE 1)
	UTILITY POLE (CUT OFF AT GROUND)
	UTILITY POLE
—— OU ——	OVERHEAD UTILITY
——	BOUNDARY LINE (SURVEYED)
——	ABUTTING BOUNDARY LINES (APPROX.)
— · —	EASEMENT LINE
—— SD ——	STORM DRAIN LINE (APPROX.)
﹏﹏	TREELINE (APPROX.)
—— 490 ——	MAJOR CONTOUR LINE
——	MINOR CONTOUR LINE
× 495.3'	SPOT GRADE
▭	PAVEMENT
	WETLAND BOUNDARY (SEE NOTE 12)


MAGNETIC 2023
N
15°±
280'± TO KITTYHAWK AVE
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
LOT 2
CONTROL POINT #3
N: 437931.3662'
E: 2925399.4800'
ELEV: 265.34'
CONTROL POINT #2
N: 438099.3434'
E: 2925472.4590'
ELEV: 270.28'
PAVED DRIVEWAY
5/8" REBAR
1" BELOW GRADE
GRANITE CURB
HARRIMAN DRIVE
SIDEWALK
RIM: 263.64'
L=72.13'
R=280.00'
S23°06'03"W
227.95'
N46°12'52"E
88.30'
L=22.69'
R=20.00'
N46°19'19"E
24.50'
60.00'
S44°00'47"E
L=28.03'
R=20.00'
N42°26'29"W
14.93'
250.8'
24" CONC.
RIM: 258.02'
R=240.00'
L=85.50'
ADAMIAN DRIVE
GRANITE CURB
N64°48'36"W
100.79'
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
LOT 3
AUBURN
TAX MAP 109, LOT 3
LOT 6
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
LOT 7
224.77'
S60°21'20"E
5/8" REBAR
2" ABOVE GRADE
RIM: 245.90'
S64°48'36"E
18.00'
411.74'
S31°21'27"W
RIM: 245.64'
5/8" REBAR
CAPPED, "PLS 1188"
3" ABOVE GRADE
RIM: 245.35'
RIM: 246.52'
5/8" REBAR
CAPPED, "PLS 1188"
6" ABOVE GRADE
UNDERGROUND ELECTRIC
BASED ON PAINT MARKINGS
(ORANGE)(APPROX.)
5/8" REBAR, BENT
1" BELOW GRADE
RIM: 242.55'
RIM: 243.32'
RIM: 240.08'
RIM: 244.75'
L=199.40'
R=70.00'
DRAINAGE EASEMENT TO
THE CITY OF AUBURN
(SEE PLAN REFERENCE 1)
60.00'
N60°17'08"W
25' UTILITY EASEMENT
(SEE PLAN REFERENCE 1)
AUBURN
TAX MAP 109, LOT 4
LOT 5
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
98.70'
S60°17'23"E
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
RIM: 228.44'
RIM 3'± ABOVE GRADE
S59°55'53"E
80.17'
LOT 4
S29°58'37"W
120.00'
S60°17'08"E
64.86'
DRAINAGE EASEMENT TO
THE CITY OF AUBURN
(SEE PLAN REFERENCE 1)
65.00'
S60°17'23"E
RIM: 223.74'
RIM 3'± ABOVE GRADE
RIM: 214.68'
320.45'
S29°58'37"W
97.11'
S29°58'37"W
S30°19'37"W
22.90'
18" CULVERT
INV. IN: 211.18'
INV. OUT: UNKNOWN
RIM: 213.49'
RIM: 214.00'
25' DRAINAGE EASEMENT TO
THE CITY OF AUBURN
(SEE PLAN REFERENCE 1)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151

PLAN REFERENCES

1. "AUBURN BUSINESS PARK", DATED SEPTEMBER 20, 1988, MADE FOR ADAMIAN REALTY TRUST, COMPILED BY HARRIMAN ASSOCIATES, AND RECORDED IN PLAN BOOK 34, PAGE 126 ON FEBRUARY 23, 1989.
2. "STANDARD BOUNDARY SURVEY", DATED MAY 1985, MADE FOR JOHN MARTIN ENTERPRISES MANOR INN, COMPILED BY SEBAGO TECHNICS, INC., AND RECORDED IN PLAN BOOK 31, PAGE 1128 ON OCTOBER 28, 1985.

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PLAN SHOWING A
STANDARD BOUNDARY &
EXISTING CONDITIONS SURVEY

LAND OF
12 ADAMIAN, LLC
24 ADAMIAN, LLC

HARRIMAN DR. & ADAMIAN DR.
CITY OF AUBURN,
COUNTY OF ANDROSCOGGIN,
STATE OF MAINE

OWNER OF RECORD

12 ADAMIAN, LLC
24 ADAMIAN, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

12 ADAMIAN, LLC
24 ADAMIAN, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:
30 0 15 30
(IN FEET)
1 INCH = 30 FT

REVISION NOTES:

PROJ. MGR:	CLB
DRAWN BY:	CLB
CHECKED BY:	TJG
REVISION NO.	N/A
SURVEY DATE:	2021–05–11 2022–11–29 2023–06–14
SUBMISSION DATE:	2024–06–06
SUBMITTED FOR:	FINAL

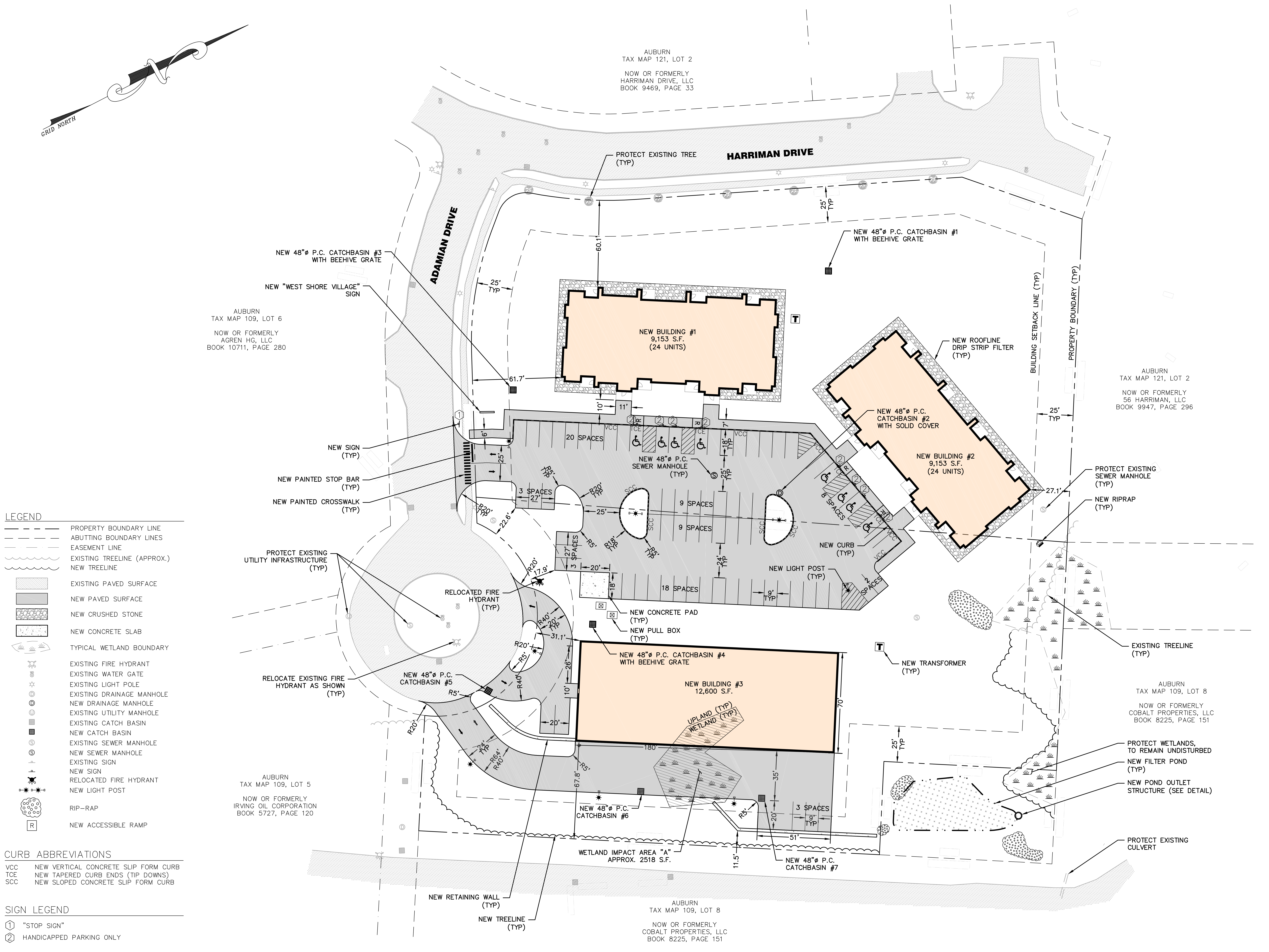
BOUNDARY & EXISTING CONDITIONS

SEAL:

CHARLES L. BUKER #2397

CHARLES L. BUKER PLS #2397

DRAWING NO.
S1.1
MLDC NO. 23–252 1 OF 9


GRID NORTH
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
HARRIMAN DRIVE
ADAMIAN DRIVE
PROTECT EXISTING TREE (TYP)
25' TYP
60.1'
NEW 48"ø P.C. CATCHBASIN #1 WITH BEEHIVE GRATE
NEW 48"ø P.C. CATCHBASIN #3 WITH BEEHIVE GRATE
NEW "WEST SHORE VILLAGE" SIGN
25' TYP
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
NEW BUILDING #1
9,153 S.F.
(24 UNITS)
61.7'
NEW ROOFLINE DRIP STRIP FILTER (TYP)
NEW 48"ø P.C. CATCHBASIN #2 WITH SOLID COVER
NEW BUILDING #2
9,153 S.F.
(24 UNITS)
BUILDING SETBACK LINE (TYP)
PROPERTY BOUNDARY (TYP)
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
25' TYP
10'
11'
6'
7'
20 SPACES
VCC
TCE
18' TYP
25' TYP
NEW 48"ø P.C. SEWER MANHOLE (TYP)
NEW SIGN (TYP)
NEW PAINTED STOP BAR (TYP)
NEW PAINTED CROSSWALK (TYP)
25'
R5' TYP
3 SPACES
27'
R20' TYP
25'
SCC
9 SPACES
9 SPACES
8 SPACES
R20' TYP
22.6'
R5'
R18' TYP
R5' TYP
NEW CURB (TYP)
27.1'
PROTECT EXISTING SEWER MANHOLE (TYP)
NEW RIPRAP (TYP)
PROTECT EXISTING UTILITY INFRASTRUCTURE (TYP)
27'
3 SPACES
20'
18'
24' TYP
18 SPACES
9' TYP
NEW LIGHT POST (TYP)
2 SPACES
R20'
17.9'
RELOCATED FIRE HYDRANT (TYP)
NEW CONCRETE PAD (TYP)
NEW PULL BOX (TYP)
R40'
20' TYP
31.1'
R20'
R5'
NEW 48"ø P.C. CATCHBASIN #4 WITH BEEHIVE GRATE
EXISTING TREELINE (TYP)
NEW TRANSFORMER (TYP)
RELOCATE EXISTING FIRE HYDRANT AS SHOWN (TYP)
NEW 48"ø P.C. CATCHBASIN #5
R40'
26'
10'
R5'
NEW BUILDING #3
12,600 S.F.
70'
UPLAND (TYP)
WETLAND (TYP)
20'
180'
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
R20'
24' TYP
R64'
R40'
R5'
67.8'
35'
25' TYP
PROTECT WETLANDS, TO REMAIN UNDISTURBED
NEW FILTER POND (TYP)
NEW POND OUTLET STRUCTURE (SEE DETAIL)
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
NEW 48"ø P.C. CATCHBASIN #6
R5'
3 SPACES
20'
9' TYP
51'
11.5'
WETLAND IMPACT AREA "A" APPROX. 2518 S.F.
NEW 48"ø P.C. CATCHBASIN #7
PROTECT EXISTING CULVERT
NEW RETAINING WALL (TYP)
NEW TREELINE (TYP)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151

LEGEND

— — — —	PROPERTY BOUNDARY LINE
— — — —	ABUTTING BOUNDARY LINES
— · — · —	EASEMENT LINE
︶︶︶	EXISTING TREELINE (APPROX.)
︶︶︶	NEW TREELINE
▨	EXISTING PAVED SURFACE
▨	NEW PAVED SURFACE
▨	NEW CRUSHED STONE
▨	NEW CONCRETE SLAB
▨	TYPICAL WETLAND BOUNDARY
☼	EXISTING FIRE HYDRANT
⊗	EXISTING WATER GATE
☼	EXISTING LIGHT POLE
Ⓓ	EXISTING DRAINAGE MANHOLE
Ⓓ	NEW DRAINAGE MANHOLE
Ⓤ	EXISTING UTILITY MANHOLE
▦	EXISTING CATCH BASIN
▦	NEW CATCH BASIN
Ⓢ	EXISTING SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
⊥	EXISTING SIGN
⊥	NEW SIGN
✱	RELOCATED FIRE HYDRANT
✱ ✱	NEW LIGHT POST
○	RIP-RAP
R	NEW ACCESSIBLE RAMP

CURB ABBREVIATIONS

VCC	NEW VERTICAL CONCRETE SLIP FORM CURB
TCE	NEW TAPERED CURB ENDS (TIP DOWNS)
SCC	NEW SLOPED CONCRETE SLIP FORM CURB

SIGN LEGEND

①	"STOP SIGN"
②	HANDICAPPED PARKING ONLY

MAIN-LAND
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367 US ROUTE 1 FALMOUTH, MAINE
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WWW.MAIN-LANDDCI.COM

PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:

30 0 15 30

(IN FEET)

1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2024-04-12 TLB FOR REVIEW.
SUBMISSION 2: 2024-05-16 TLB FOR REVIEW.
SUBMISSION 3: 2024-06-07 TLB FOR REVIEW.
SUBMISSION 4: 2024-07-02 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	4
SURVEY DATE:	2023-06-20
SUBMISSION DATE:	2024-07-02
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

SITE LAYOUT PLAN

SEAL:

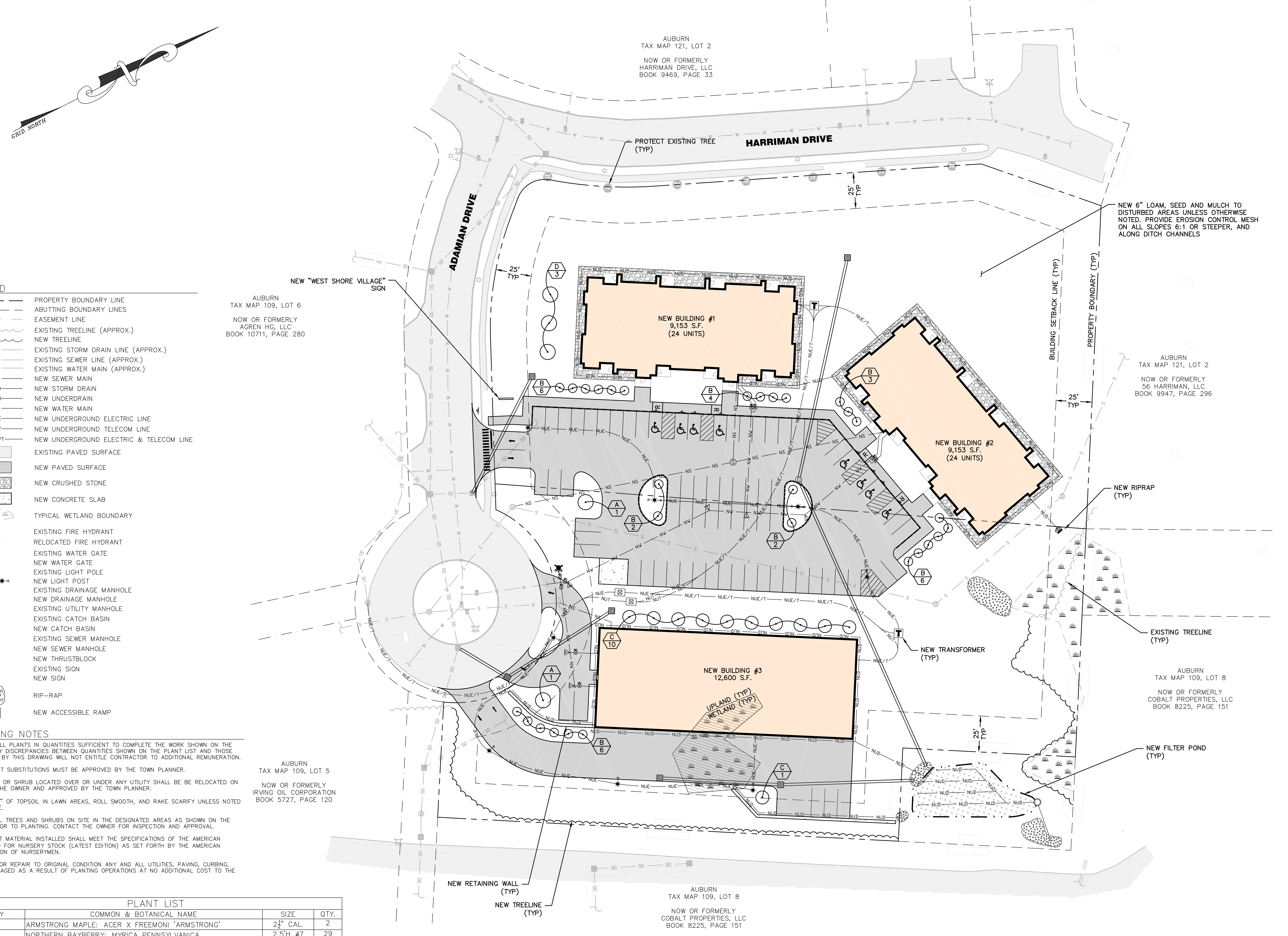
MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE#18356

DRAWING NO.

C2.1

MLDC NO. 23-252 2 OF 9


GRID NORTH
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
PROTECT EXISTING TREE
(TYP)
HARRIMAN DRIVE
ADAMIAN DRIVE
25'
TYP
NEW 6" LOAM, SEED AND MULCH TO DISTURBED AREAS UNLESS OTHERWISE NOTED. PROVIDE EROSION CONTROL MESH ON ALL SLOPES 6:1 OR STEEPER, AND ALONG DITCH CHANNELS
NEW "WEST SHORE VILLAGE" SIGN
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
NEW BUILDING #1
9,153 S.F.
(24 UNITS)
NEW BUILDING #2
9,153 S.F.
(24 UNITS)
BUILDING SETBACK LINE (TYP)
PROPERTY BOUNDARY (TYP)
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
NEW RIPRAP
(TYP)
EXISTING TREELINE
(TYP)
NEW TRANSFORMER
(TYP)
NEW BUILDING #3
12,600 S.F.
UPLAND (TYP)
WETLAND (TYP)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
NEW FILTER POND
(TYP)
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
NEW RETAINING WALL
(TYP)
NEW TREELINE
(TYP)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
A 1
B 2
B 3
B 4
B 6
C 1
C 10
D 3
NUE
NUE/T
NUT
NUD
NS
NW
S
SD
W
T
R

LEGEND

PROPERTY BOUNDARY LINE
ABUTTING BOUNDARY LINES
EASEMENT LINE
EXISTING TREELINE (APPROX.)
NEW TREELINE
SD EXISTING STORM DRAIN LINE (APPROX.)
S EXISTING SEWER LINE (APPROX.)
W EXISTING WATER MAIN (APPROX.)
NS NEW SEWER MAIN
NSD NEW STORM DRAIN
NUD NEW UNDERDRAIN
NW NEW WATER MAIN
NUE NEW UNDERGROUND ELECTRIC LINE
NUT NEW UNDERGROUND TELECOM LINE
NUE/T NEW UNDERGROUND ELECTRIC & TELECOM LINE
EXISTING PAVED SURFACE
NEW PAVED SURFACE
NEW CRUSHED STONE
NEW CONCRETE SLAB
TYPICAL WETLAND BOUNDARY
EXISTING FIRE HYDRANT
RELOCATED FIRE HYDRANT
EXISTING WATER GATE
NEW WATER GATE
EXISTING LIGHT POLE
NEW LIGHT POST
EXISTING DRAINAGE MANHOLE
NEW DRAINAGE MANHOLE
EXISTING UTILITY MANHOLE
EXISTING CATCH BASIN
NEW CATCH BASIN
EXISTING SEWER MANHOLE
NEW SEWER MANHOLE
NEW THRUSTBLOCK
EXISTING SIGN
NEW SIGN
RIP-RAP
R NEW ACCESSIBLE RAMP

PLANTING NOTES

SUPPLY ALL PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE PLAN. ANY DISCREPANCIES BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THOSE REQUIRED BY THIS DRAWING WILL NOT ENTITLE CONTRACTOR TO ADDITIONAL REMUNERATION.

ANY PLANT SUBSTITUTIONS MUST BE APPROVED BY THE TOWN PLANNER.

ANY TREE OR SHRUB LOCATED OVER OR UNDER ANY UTILITY SHALL BE BE RELOCATED ON SITE BY THE OWNER AND APPROVED BY THE TOWN PLANNER.

SPREAD 6" OF TOPSOIL IN LAWN AREAS, ROLL SMOOTH, AND RAKE SCARIFY UNLESS NOTED OTHERWISE.

PLACE ALL TREES AND SHRUBS ON SITE IN THE DESIGNATED AREAS AS SHOWN ON THE PLAN, PRIOR TO PLANTING. CONTACT THE OWNER FOR INSPECTION AND APPROVAL.

ALL PLANT MATERIAL INSTALLED SHALL MEET THE SPECIFICATIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK (LATEST EDITION) AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

REPLACE OR REPAIR TO ORIGINAL CONDITION ANY AND ALL UTILITIES, PAVING, CURBING, ETC., DAMAGED AS A RESULT OF PLANTING OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.

PLANT LIST

KEY	COMMON & BOTANICAL NAME	SIZE	QTY.
A	ARMSTRONG MAPLE: ACER X FREEMONI 'ARMSTRONG'	$2\frac{1}{2}$" CAL.	2
B	NORTHERN BAYBERRY: MYRICA PENNSYLVANICA	2.5'H #7	29
C	SEA GREEN JUNIPER: JUNIPERUS CHINENSIS 'SEA GREEN'	3 GAL.	11
D	BALSAM FIR TREE	6' DIA.	3

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WWW.MAIN-LANDDCI.COM

PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:
30 0 15 30
(IN FEET)
1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2024-06-07 TLB FOR REVIEW
SUBMISSION 2: 2024-07-02 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	2
SURVEY DATE:	2023-06-20
SUBMISSION DATE:	2024-07-02
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

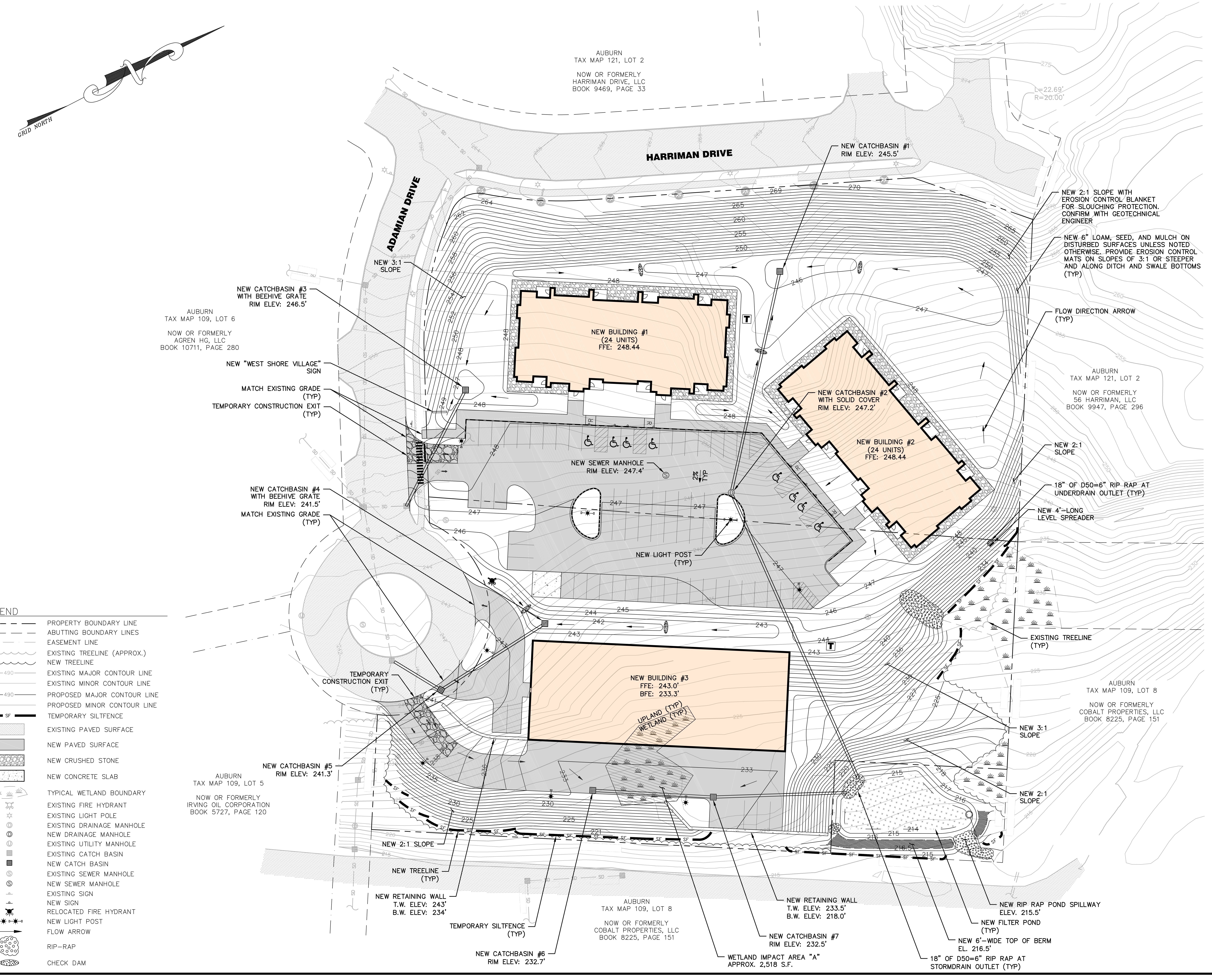
LANDSCAPING PLAN

SEAL:
MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE#18356

DRAWING NO.
C2.2

MLDC NO. 23-252


GRID NORTH
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
HARRIMAN DRIVE
ADAMIAN DRIVE
L=22.69'
R=20.00'
NEW CATCHBASIN #1
RIM ELEV: 245.5'
NEW 2:1 SLOPE WITH EROSION CONTROL BLANKET FOR SLOUCHING PROTECTION. CONFIRM WITH GEOTECHNICAL ENGINEER
NEW 6" LOAM, SEED, AND MULCH ON DISTURBED SURFACES UNLESS NOTED OTHERWISE. PROVIDE EROSION CONTROL MATS ON SLOPES OF 3:1 OR STEEPER AND ALONG DITCH AND SWALE BOTTOMS (TYP)
NEW 3:1 SLOPE
NEW CATCHBASIN #3 WITH BEEHIVE GRATE
RIM ELEV: 246.5'
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
NEW BUILDING #1
(24 UNITS)
FFE: 248.44
FLOW DIRECTION ARROW (TYP)
NEW "WEST SHORE VILLAGE" SIGN
MATCH EXISTING GRADE (TYP)
TEMPORARY CONSTRUCTION EXIT (TYP)
NEW CATCHBASIN #2 WITH SOLID COVER
RIM ELEV: 247.2'
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
NEW BUILDING #2
(24 UNITS)
FFE: 248.44
NEW 2:1 SLOPE
NEW SEWER MANHOLE
RIM ELEV: 247.4'
2% TYP
NEW CATCHBASIN #4 WITH BEEHIVE GRATE
RIM ELEV: 241.5'
MATCH EXISTING GRADE (TYP)
18" OF D50=6" RIP RAP AT UNDERDRAIN OUTLET (TYP)
NEW 4'-LONG LEVEL SPREADER
NEW LIGHT POST (TYP)
EXISTING TREELINE (TYP)
TEMPORARY CONSTRUCTION EXIT (TYP)
NEW BUILDING #3
FFE: 243.0'
BFE: 233.3'
UPLAND (TYP)
WETLAND (TYP)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
NEW 3:1 SLOPE
NEW CATCHBASIN #5
RIM ELEV: 241.3'
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
NEW 2:1 SLOPE
NEW 2:1 SLOPE
NEW TREELINE (TYP)
NEW RETAINING WALL
T.W. ELEV: 243'
B.W. ELEV: 234'
NEW RETAINING WALL
T.W. ELEV: 233.5'
B.W. ELEV: 218.0'
NEW RIP RAP POND SPILLWAY
ELEV. 215.5'
NEW FILTER POND (TYP)
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
TEMPORARY SILTFENCE (TYP)
NEW CATCHBASIN #7
RIM ELEV: 232.5'
NEW 6'-WIDE TOP OF BERM
EL. 216.5'
NEW CATCHBASIN #6
RIM ELEV: 232.7'
WETLAND IMPACT AREA "A"
APPROX. 2,518 S.F.
18" OF D50=6" RIP RAP AT STORMDRAIN OUTLET (TYP)
269
270
264
265
262
260
260
255
258
256
255
254
250
252
250
248
247
247
246
248
248
248
248
247
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245
244
243
242
243
243
244
243
240
236
232
228
227
225
230
235
233
233
230
225
230
235
221
220
215
214
215
216.5
215
216
217
218
225
230
SF

LEGEND

- PROPERTY BOUNDARY LINE
- ABUTTING PROPERTY LINES
- EASEMENT LINE
- EXISTING TREELINE (APPROX.)
- NEW TREELINE
- EXISTING MAJOR CONTOUR LINE
- EXISTING MINOR CONTOUR LINE
- PROPOSED MAJOR CONTOUR LINE
- PROPOSED MINOR CONTOUR LINE
- TEMPORARY SILTFENCE
- EXISTING PAVED SURFACE
- NEW PAVED SURFACE
- NEW CRUSHED STONE
- NEW CONCRETE SLAB
- TYPICAL WETLAND BOUNDARY
- EXISTING FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING DRAINAGE MANHOLE
- NEW DRAINAGE MANHOLE
- EXISTING UTILITY MANHOLE
- EXISTING CATCH BASIN
- NEW CATCH BASIN
- EXISTING SEWER MANHOLE
- NEW SEWER MANHOLE
- EXISTING SIGN
- NEW SIGN
- RELOCATED FIRE HYDRANT
- NEW LIGHT POST
- FLOW ARROW
- RIP-RAP
- CHECK DAM

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

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PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:

30 0 15 30

(IN FEET)
1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2024-04-12 TLB FOR REVIEW
SUBMISSION 2: 2024-05-16 TLB FOR REVIEW
SUBMISSION 3: 2024-06-07 TLB FOR REVIEW
SUBMISSION 4: 2024-07-02 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	4
SURVEY DATE:	2023-06-20
SUBMISSION DATE:	2024-06-21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

GRADING & EROSION CONTROL PLAN

SEAL:

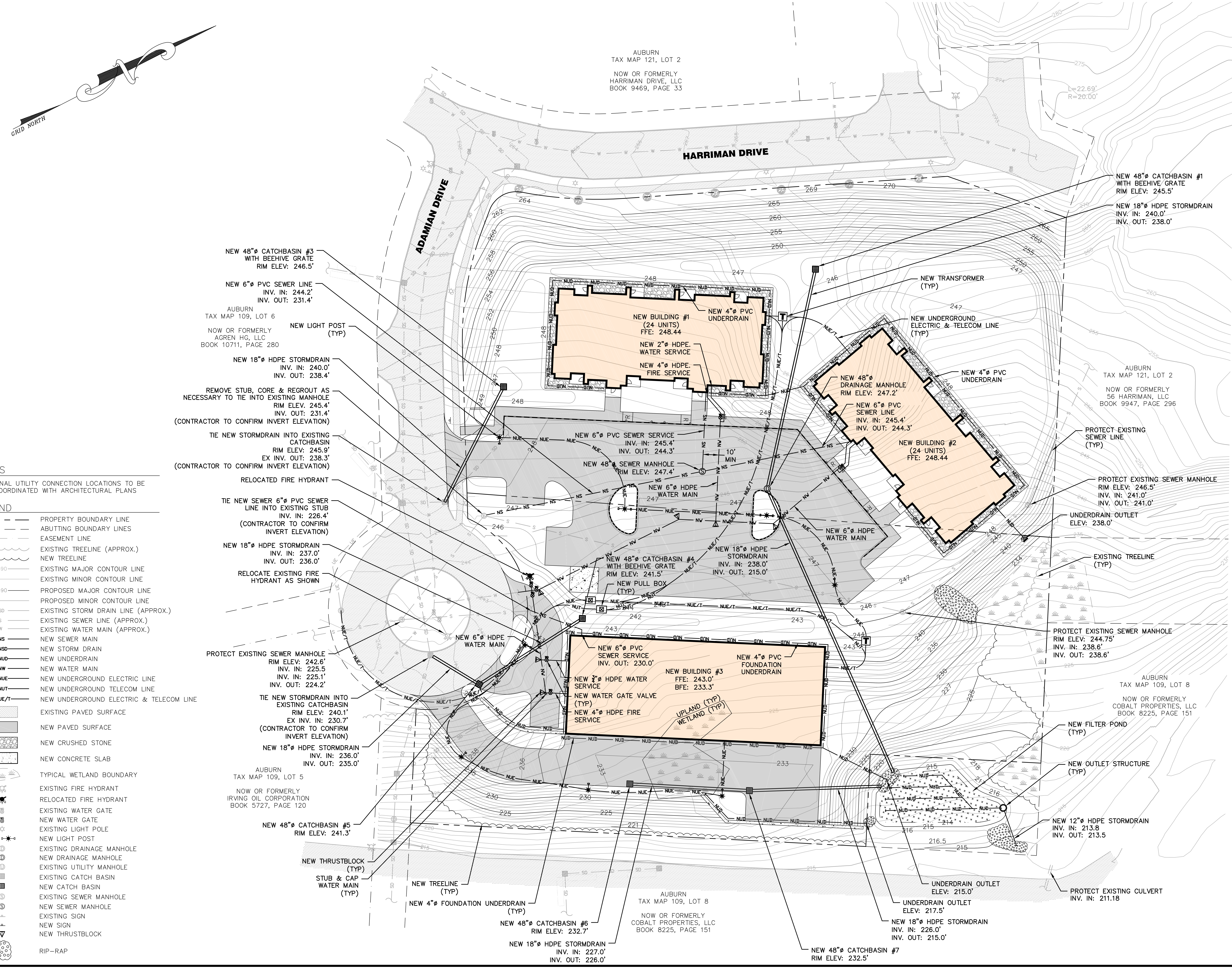
MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE#18356

DRAWING NO.

C3.1

MLDC NO. 23-252 4 OF 9


GRID NORTH
HARRIMAN DRIVE
ADAMIAN DRIVE
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
L=22.69'
R=20.00'
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
NEW BUILDING #1
(24 UNITS)
FFE: 248.44
NEW BUILDING #2
(24 UNITS)
FFE: 248.44
NEW BUILDING #3
FFE: 243.0'
BFE: 233.3'
UPLAND (TYP)
WETLAND (TYP)
10' MIN

NEW 48"ø CATCHBASIN #3
WITH BEEHIVE GRATE
RIM ELEV: 246.5'

NEW 6"ø PVC SEWER LINE
INV. IN: 244.2'
INV. OUT: 231.4'

NEW LIGHT POST
(TYP)

NEW 18"ø HDPE STORMDRAIN
INV. IN: 240.0'
INV. OUT: 238.4'

REMOVE STUB, CORE & REGROUT AS
NECESSARY TO TIE INTO EXISTING MANHOLE
RIM ELEV. 245.4'
INV. OUT: 231.4'
(CONTRACTOR TO CONFIRM INVERT ELEVATION)

TIE NEW STORMDRAIN INTO EXISTING
CATCHBASIN
RIM ELEV: 245.9'
EX INV. OUT: 238.3'
(CONTRACTOR TO CONFIRM INVERT ELEVATION)

RELOCATED FIRE HYDRANT

TIE NEW SEWER 6"ø PVC SEWER
LINE INTO EXISTING STUB
INV. IN: 226.4'
(CONTRACTOR TO CONFIRM
INVERT ELEVATION)

NEW 18"ø HDPE STORMDRAIN
INV. IN: 237.0'
INV. OUT: 236.0'

RELOCATE EXISTING FIRE
HYDRANT AS SHOWN

NEW 6"ø HDPE
WATER MAIN

PROTECT EXISTING SEWER MANHOLE
RIM ELEV: 242.6'
INV. IN: 225.5
INV. IN: 225.1'
INV. OUT: 224.2'

TIE NEW STORMDRAIN INTO
EXISTING CATCHBASIN
RIM ELEV: 240.1'
EX INV. IN: 230.7'
(CONTRACTOR TO CONFIRM
INVERT ELEVATION)

NEW 18"ø HDPE STORMDRAIN
INV. IN: 236.0'
INV. OUT: 235.0'

NEW 48"ø CATCHBASIN #5
RIM ELEV: 241.3'

NEW THRUSTBLOCK
(TYP)

STUB & CAP
WATER MAIN
(TYP)

NEW TREELINE
(TYP)

NEW 4"ø FOUNDATION UNDERDRAIN
(TYP)

NEW 48"ø CATCHBASIN #6
RIM ELEV: 232.7'

NEW 18"ø HDPE STORMDRAIN
INV. IN: 227.0'
INV. OUT: 226.0'

NEW 48"ø CATCHBASIN #7
RIM ELEV: 232.5'

NEW 18"ø HDPE STORMDRAIN
INV. IN: 226.0'
INV. OUT: 215.0'

UNDERDRAIN OUTLET
ELEV: 217.5'

UNDERDRAIN OUTLET
ELEV: 215.0'

PROTECT EXISTING CULVERT
INV. IN: 211.18

NEW 12"ø HDPE STORMDRAIN
INV. IN: 213.8
INV. OUT: 213.5

NEW OUTLET STRUCTURE
(TYP)

NEW FILTER POND
(TYP)

PROTECT EXISTING SEWER MANHOLE
RIM ELEV: 244.75'
INV. IN: 238.6'
INV. OUT: 238.6'

EXISTING TREELINE
(TYP)

UNDERDRAIN OUTLET
ELEV: 238.0'

PROTECT EXISTING SEWER MANHOLE
RIM ELEV: 246.5'
INV. IN: 241.0'
INV. OUT: 241.0'

PROTECT EXISTING
SEWER LINE
(TYP)

NEW 4"ø PVC
UNDERDRAIN

NEW UNDERGROUND
ELECTRIC & TELECOM LINE
(TYP)

NEW TRANSFORMER
(TYP)

NEW 18"ø HDPE STORMDRAIN
INV. IN: 240.0'
INV. OUT: 238.0'

NEW 48"ø CATCHBASIN #1
WITH BEEHIVE GRATE
RIM ELEV: 245.5'

NEW 4"ø PVC
UNDERDRAIN

NEW 2"ø HDPE.
WATER SERVICE

NEW 4"ø HDPE.
FIRE SERVICE

NEW 48"ø
DRAINAGE MANHOLE
RIM ELEV: 247.2'

NEW 6"ø PVC
SEWER LINE
INV. IN: 245.4'
INV. OUT: 244.3'

NEW 6"ø PVC SEWER SERVICE
INV. IN: 245.4'
INV. OUT: 244.3'

NEW 48"ø SEWER MANHOLE
RIM ELEV: 247.4'

NEW 6"ø HDPE
WATER MAIN

NEW 6"ø HDPE
WATER MAIN

NEW 18"ø HDPE
STORMDRAIN
INV. IN: 238.0'
INV. OUT: 215.0'

NEW 48"ø CATCHBASIN #4
WITH BEEHIVE GRATE
RIM ELEV: 241.5'

NEW PULL BOX
(TYP)

NEW 6"ø PVC
SEWER SERVICE
INV. OUT: 230.0'

NEW 4"ø PVC
FOUNDATION
UNDERDRAIN

NEW $\frac{3}{4}$"ø HDPE WATER
SERVICE

NEW WATER GATE VALVE
(TYP)

NEW 4"ø HDPE FIRE
SERVICE

NOTES

1. FINAL UTILITY CONNECTION LOCATIONS TO BE COORDINATED WITH ARCHITECTURAL PLANS

LEGEND

— — — —	PROPERTY BOUNDARY LINE
— — — —	ABUTTING BOUNDARY LINES
— · — · —	EASEMENT LINE
	EXISTING TREELINE (APPROX.)
	NEW TREELINE
490	EXISTING MAJOR CONTOUR LINE
	EXISTING MINOR CONTOUR LINE
490	PROPOSED MAJOR CONTOUR LINE
	PROPOSED MINOR CONTOUR LINE
SD	EXISTING STORM DRAIN LINE (APPROX.)
S	EXISTING SEWER LINE (APPROX.)
W	EXISTING WATER MAIN (APPROX.)
NS	NEW SEWER MAIN
NSD	NEW STORM DRAIN
NUD	NEW UNDERDRAIN
NW	NEW WATER MAIN
NUE	NEW UNDERGROUND ELECTRIC LINE
NUT	NEW UNDERGROUND TELECOM LINE
NUE/T	NEW UNDERGROUND ELECTRIC & TELECOM LINE
▨	EXISTING PAVED SURFACE
▨	NEW PAVED SURFACE
▨	NEW CRUSHED STONE
▨	NEW CONCRETE SLAB
	TYPICAL WETLAND BOUNDARY
	EXISTING FIRE HYDRANT
	RELOCATED FIRE HYDRANT
WG ⊗	EXISTING WATER GATE
WG ⊗	NEW WATER GATE
☼	EXISTING LIGHT POLE
	NEW LIGHT POST
Ⓓ	EXISTING DRAINAGE MANHOLE
Ⓓ	NEW DRAINAGE MANHOLE
Ⓤ	EXISTING UTILITY MANHOLE
▦	EXISTING CATCH BASIN
▦	NEW CATCH BASIN
Ⓢ	EXISTING SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
	EXISTING SIGN
	NEW SIGN
▽	NEW THRUSTBLOCK
	RIP-RAP

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:

30 0 15 30

(IN FEET)

1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2024-04-12 TLB FOR REVIEW
SUBMISSION 2: 2024-05-16 TLB FOR REVIEW
SUBMISSION 3: 2024-06-07 TLB FOR REVIEW
SUBMISSION 4: 2024-06-21 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	4
SURVEY DATE:	2023-06-20
SUBMISSION DATE:	2024-06-21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

UTILITY PLAN

SEAL:

MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE#18356

DRAWING NO.

C4.1

MLDC NO. 23-252 5 OF 9

UTILITY LOCATION REQUIREMENTS

PRIOR TO EXCAVATION, VERIFY THE UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND FACILITIES. PROVIDE THE FOLLOWING MINIMUM MEASURES.

A. PRE-MARK THE BOUNDARIES OF YOUR PLANNED EXCAVATION WITH WHITE PAINT, FLAGS, OR STAKES SO UTILITY CREWS KNOW WHERE TO MARK THEIR LINES.

B. CALL DIG SAFE, AT 1-888-DIGSAFE, AT LEAST THREE BUSINESS DAYS – BUT NO MORE THAN 30 CALENDAR DAYS – BEFORE STARTING WORK. DON'T ASSUME SOMEONE ELSE WILL MAKE THE CALL.

C. IF BLASTING, NOTIFY DIG SAFE AT LEAST ONE BUSINESS DAY IN ADVANCE.

D. WAIT THREE BUSINESS DAYS FOR LINES TO BE LOCATED AND MARKED WITH COLOR-CODED PAINT, FLAGS, OR STAKES. NOTE THE COLOR OF THE MARKS AND THE TYPE OF UTILITIES THEY INDICATE. TRANSFER THESE MARKS TO THE AS-BUILT DRAWINGS.

E. CONTACT THE LANDOWNER AND OTHER 'NON-MEMBER' UTILITIES (WATER, SEWER, GAS, ETC) FOR THEM TO MARK THE LOCATIONS OF THEIR UNDERGROUND FACILITIES. TRANSFER THESE MARKS TO THE AS-BUILT DRAWINGS.

F. RE-NOTIFY DIG SAFE AND THE NON-MEMBER UTILITIES IF THE DIGGING, DRILLING, OR BLASTING DOES NOT OCCUR WITHIN 30 CALENDAR DAYS, OR IF THE MARKS ARE LOST DUE TO WEATHER CONDITIONS, SITE WORK ACTIVITY, OR ANY OTHER REASON.

G. HAND DIG WITHIN 18 INCHES IN ANY DIRECTION OF ANY UNDERGROUND LINE UNTIL THE LINE IS EXPOSED. MECHANICAL METHODS MAY BE USED FOR INITIAL SITE PENETRATION, SUCH AS REMOVAL OF PAVEMENT OR ROCK.

H. DIG SAFE REQUIREMENTS ARE IN ADDITION TO TOWN, CITY, AND/OR STATE D.O.T. STREET OPENING PERMIT REQUIREMENTS.

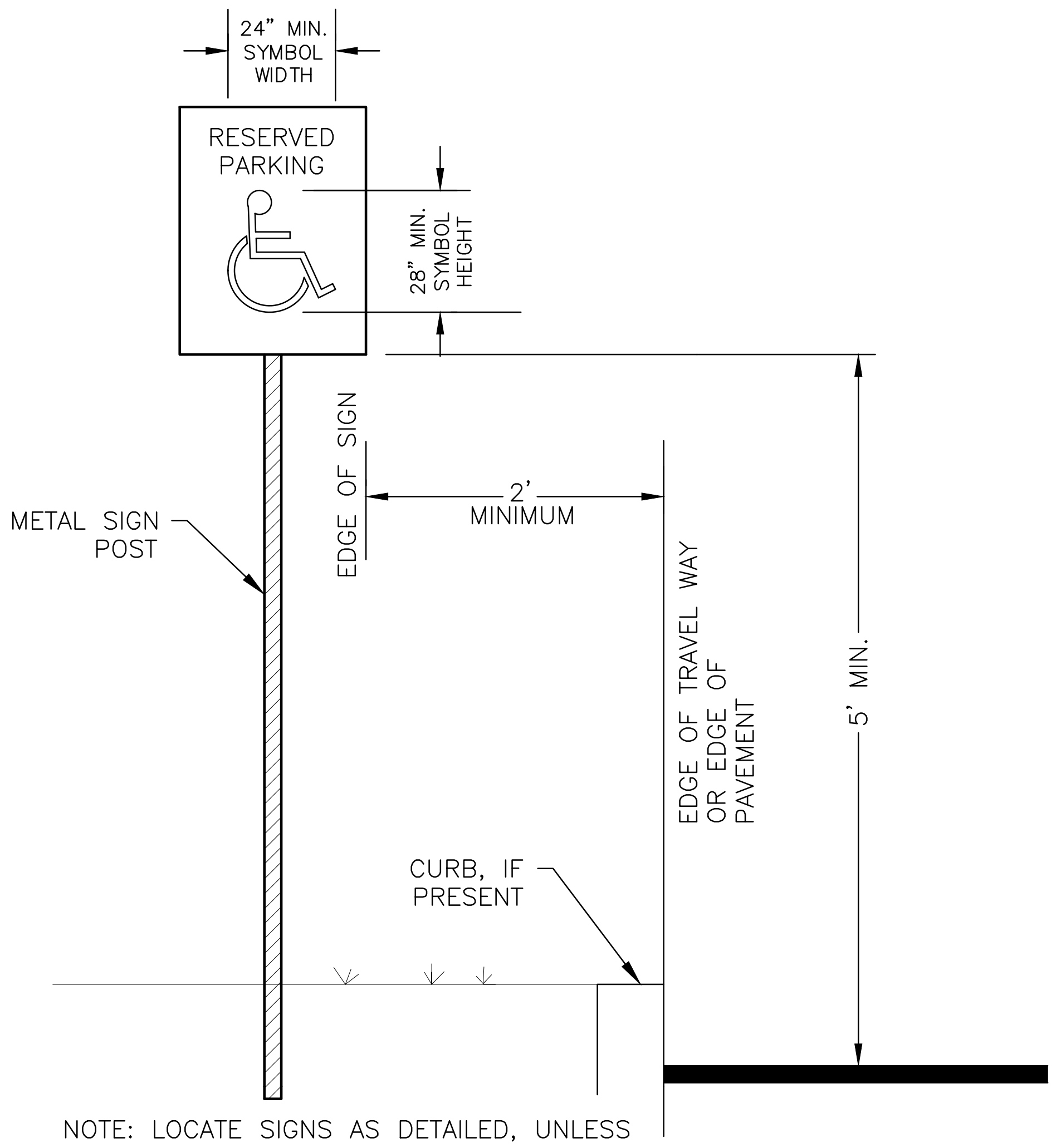
I. FOR COMPLETE DIG SAFE REQUIREMENTS, CALL THE P.U.C. OR VISIT THEIR WEBSITE.

J. IF YOU DAMAGE, DISLOCATE, OR DISTURB ANY UNDERGROUND UTILITY LINE, IMMEDIATELY NOTIFY THE AFFECTED UTILITY. IF DAMAGE CREATES SAFETY CONCERNS, CALL THE FIRE DEPARTMENT AND TAKE IMMEDIATE STEPS TO SAFEGUARD HEALTH AND PROPERTY.

K. ANY TIME AN UNDERGROUND LINE IS DAMAGED OR DISTURBED, OR IF LINES ARE IMPROPERLY MARKED, YOU MUST FILE AND INCIDENT REPORT WITH THE P.U.C.. FOR AN INCIDENT REPORT FORM VISIT WWW.STATE.ME.US/MPUC OR CALL THE P.U.C. AT 1-800-452-4699.

UTILITY LOCATION REQUIREMENTS C5

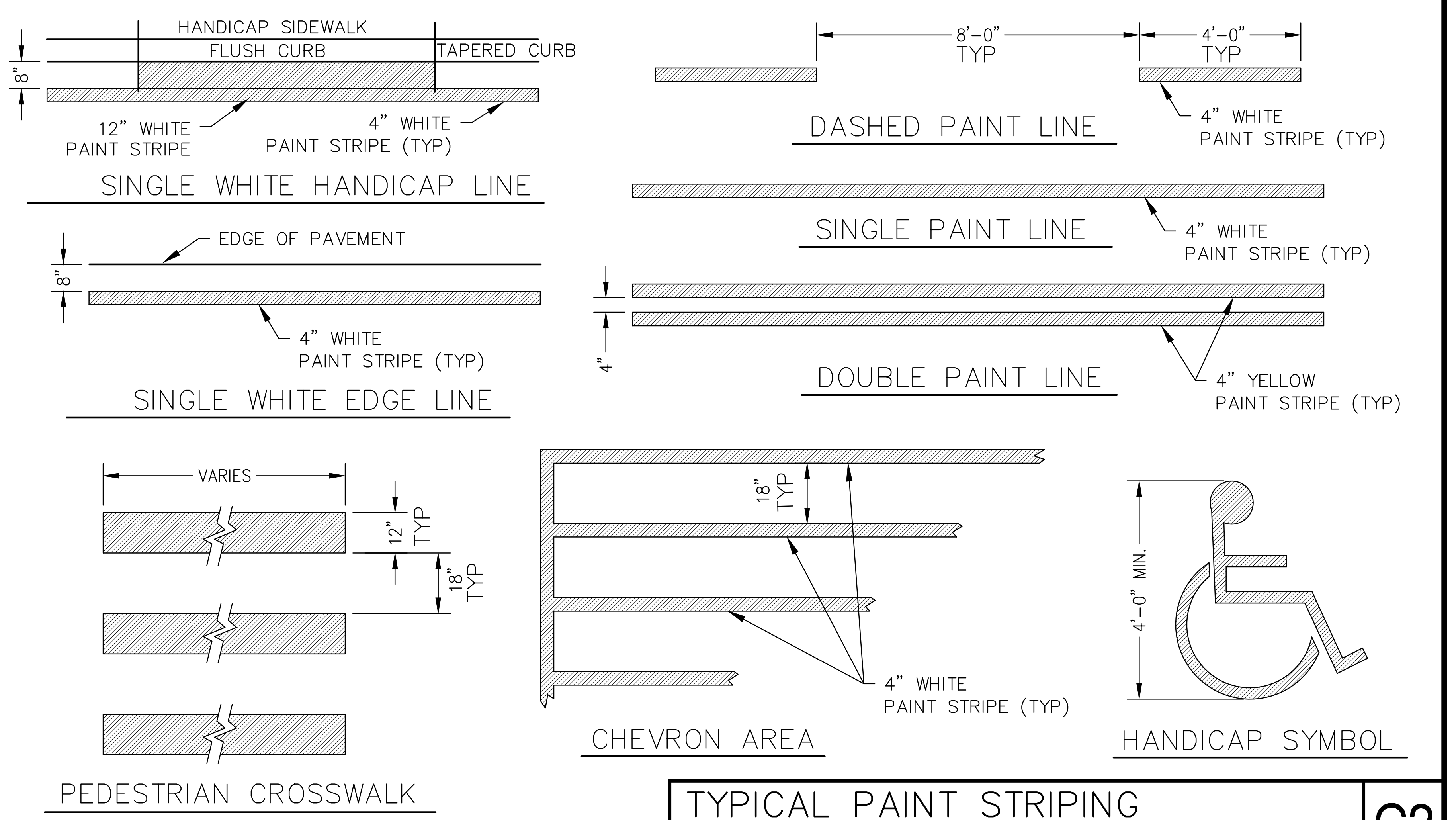
NOT TO SCALE


24" MIN. SYMBOL WIDTH
RESERVED PARKING
28" MIN. SYMBOL HEIGHT
METAL SIGN POST
EDGE OF SIGN
2' MINIMUM
EDGE OF TRAVEL WAY OR EDGE OF PAVEMENT
5' MIN.
CURB, IF PRESENT

NOTE: LOCATE SIGNS AS DETAILED, UNLESS NOTED OTHERWISE ON PLAN.

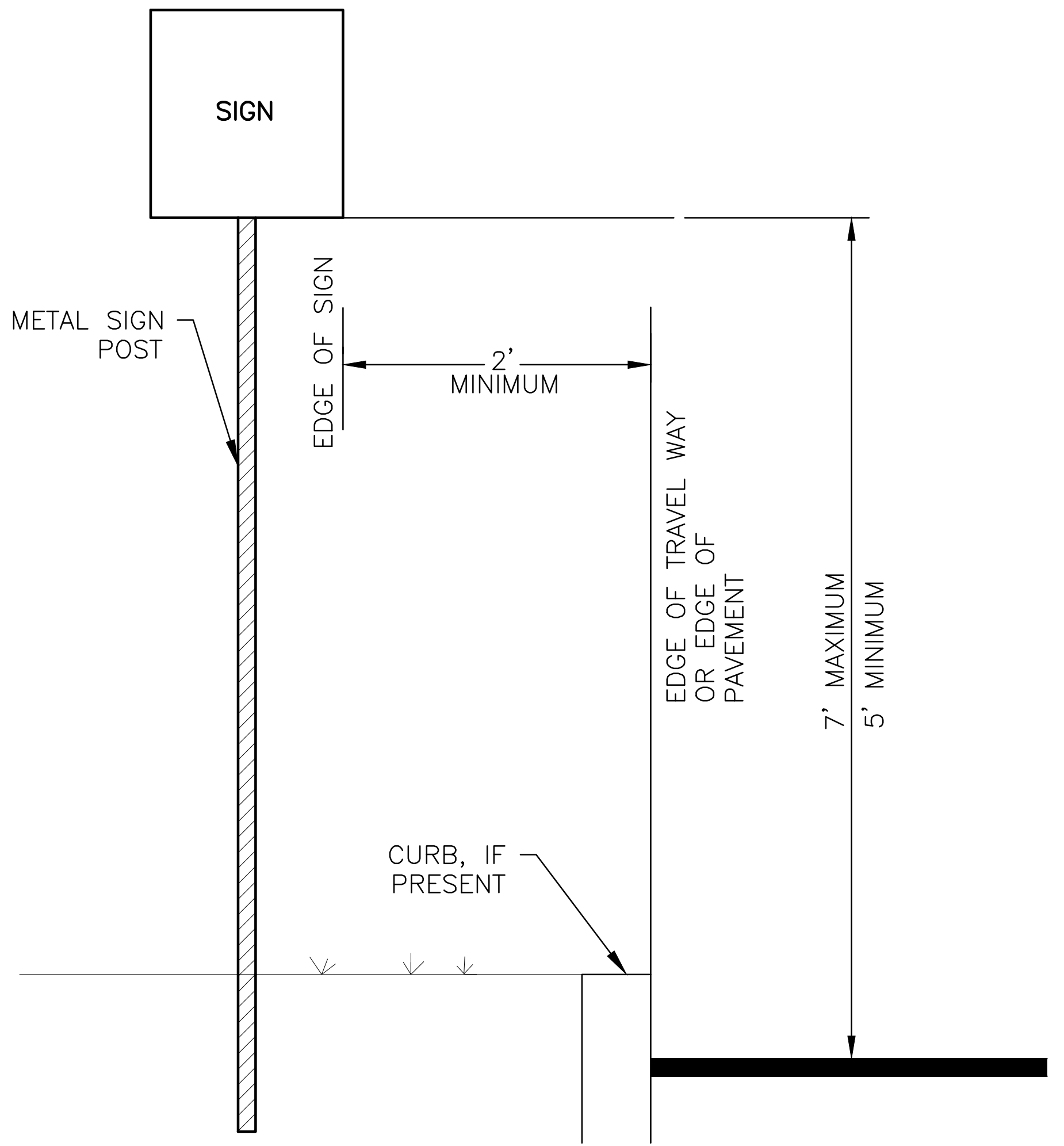
ACCESSIBLE PARKING SIGN DETAIL C4

NOT TO SCALE


HANDICAP SIDEWALK
FLUSH CURB
TAPERED CURB
8"
12" WHITE PAINT STRIPE
4" WHITE PAINT STRIPE (TYP)
SINGLE WHITE HANDICAP LINE
EDGE OF PAVEMENT
8"
4" WHITE PAINT STRIPE (TYP)
SINGLE WHITE EDGE LINE
VARIES
12" TYP
18" TYP
PEDESTRIAN CROSSWALK
8'-0" TYP
4'-0" TYP
DASHED PAINT LINE
4" WHITE PAINT STRIPE (TYP)
SINGLE PAINT LINE
4" WHITE PAINT STRIPE (TYP)
4"
DOUBLE PAINT LINE
4" YELLOW PAINT STRIPE (TYP)
18" TYP
4" WHITE PAINT STRIPE (TYP)
CHEVRON AREA
4'-0" MIN.
HANDICAP SYMBOL

TYPICAL PAINT STRIPING C2

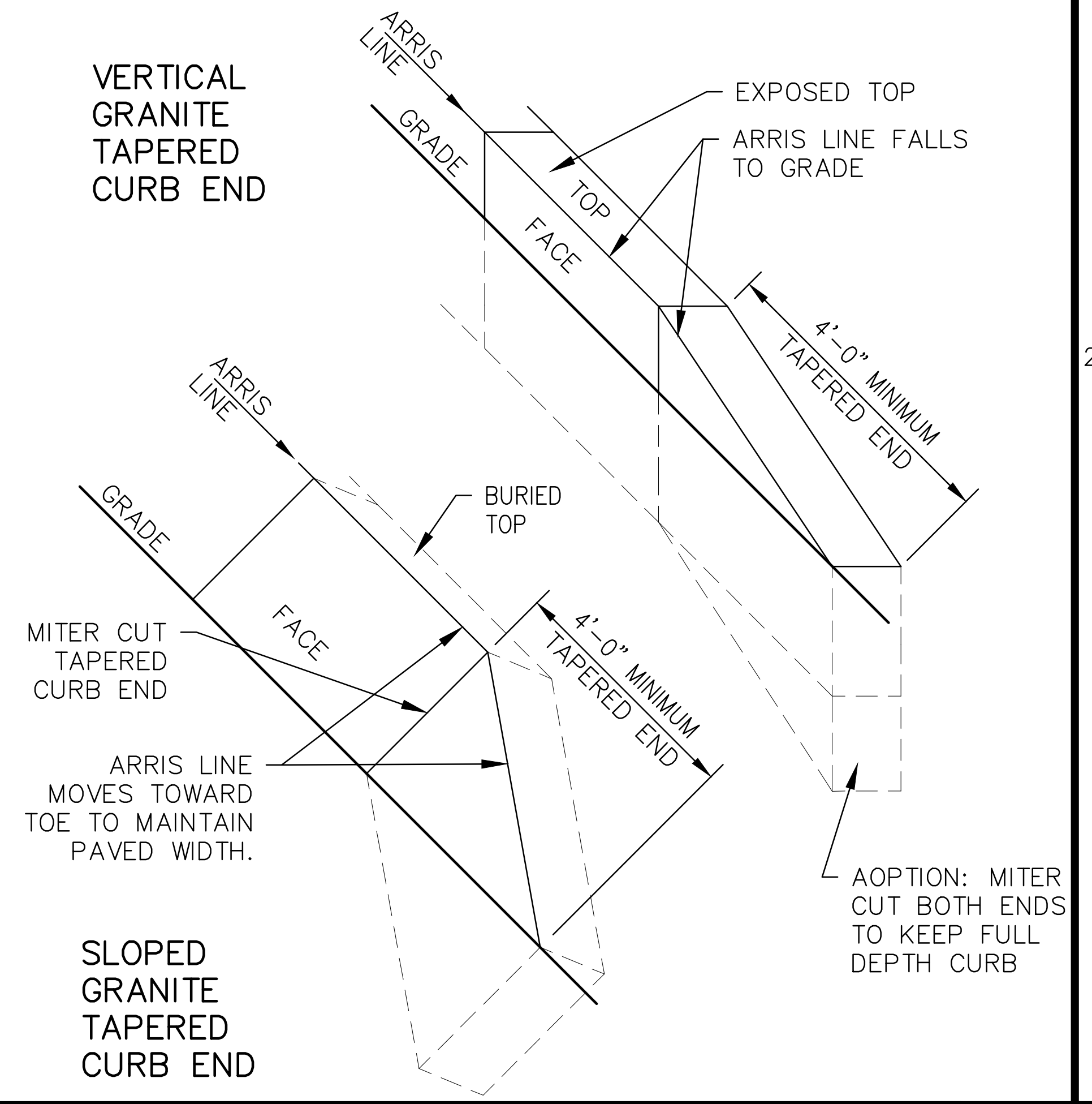
NOT TO SCALE


SIGN
METAL SIGN POST
EDGE OF SIGN
2' MINIMUM
EDGE OF TRAVEL WAY OR EDGE OF PAVEMENT
7' MAXIMUM
5' MINIMUM
CURB, IF PRESENT

NOTE: LOCATE SIGNS AS DETAILED, UNLESS NOTED OTHERWISE ON PLAN.

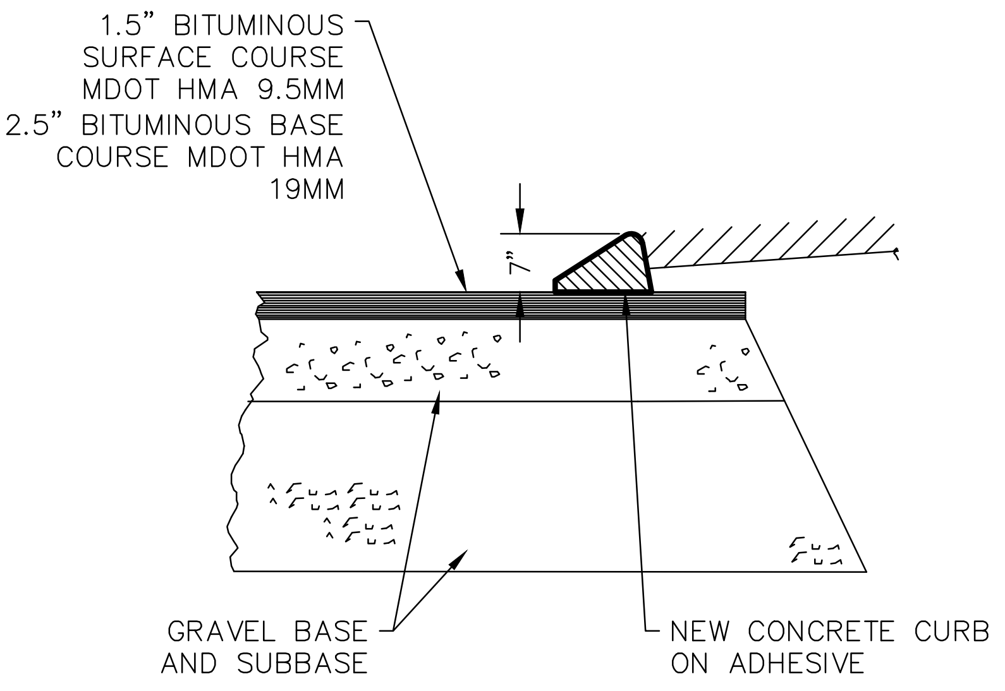
TRAFFIC SIGN DETAIL B5

NOT TO SCALE


VERTICAL GRANITE TAPERED CURB END
ARRIS LINE
GRADE
TOP
FACE
EXPOSED TOP
ARRIS LINE FALLS TO GRADE
4'-0" MINIMUM TAPERED END
ARRIS LINE
GRADE
FACE
BURIED TOP
MITER CUT TAPERED CURB END
4'-0" MINIMUM TAPERED END
ARRIS LINE MOVES TOWARD TOE TO MAINTAIN PAVED WIDTH.
AOPTION: MITER CUT BOTH ENDS TO KEEP FULL DEPTH CURB
SLOPED GRANITE TAPERED CURB END

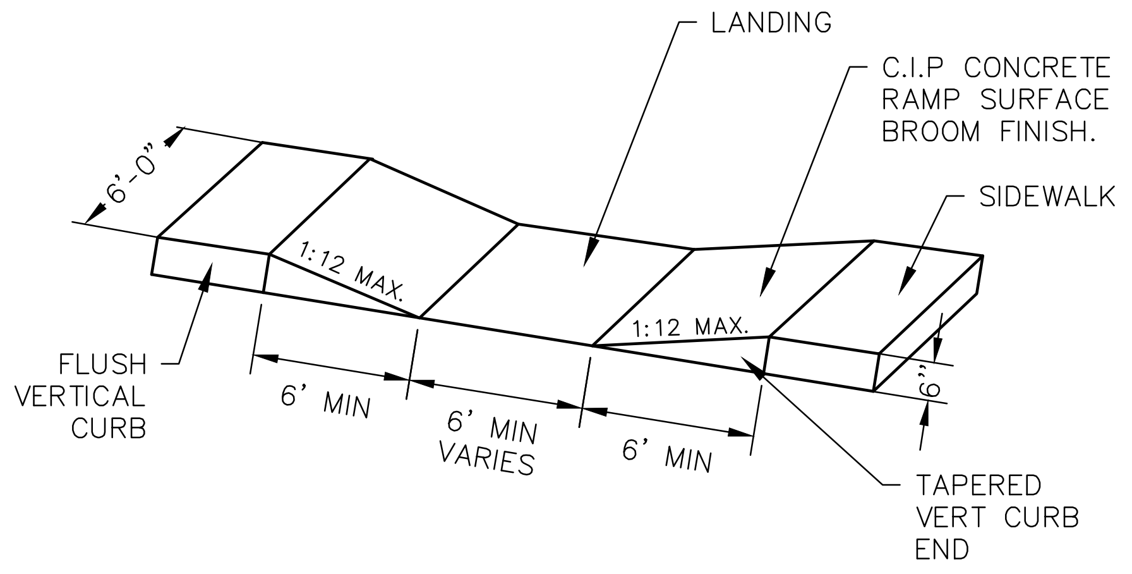
TAPERED CURB ENDS B4

NOT TO SCALE


1.5" BITUMINOUS SURFACE COURSE MDOT HMA 9.5MM
2.5" BITUMINOUS BASE COURSE MDOT HMA 19MM
7"
GRAVEL BASE AND SUBBASE
NEW CONCRETE CURB ON ADHESIVE

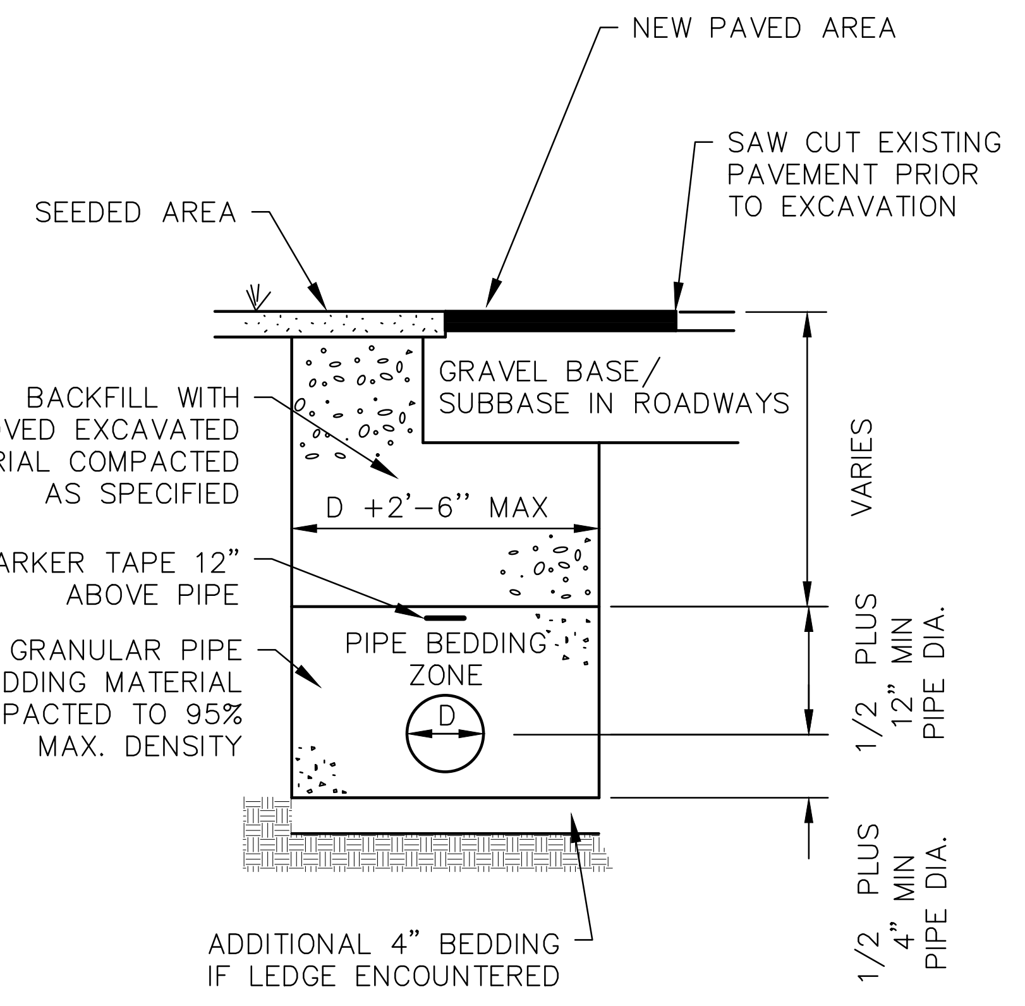
CONCRETE CURB B3

NOT TO SCALE | MDOT TYPE 3: MOLD 2


LANDING
C.I.P CONCRETE RAMP SURFACE BROOM FINISH.
SIDEWALK
6'-0"
1:12 MAX.
1:12 MAX.
FLUSH VERTICAL CURB
6' MIN
6' MIN VARIES
6' MIN
6"
TAPERED VERT CURB END

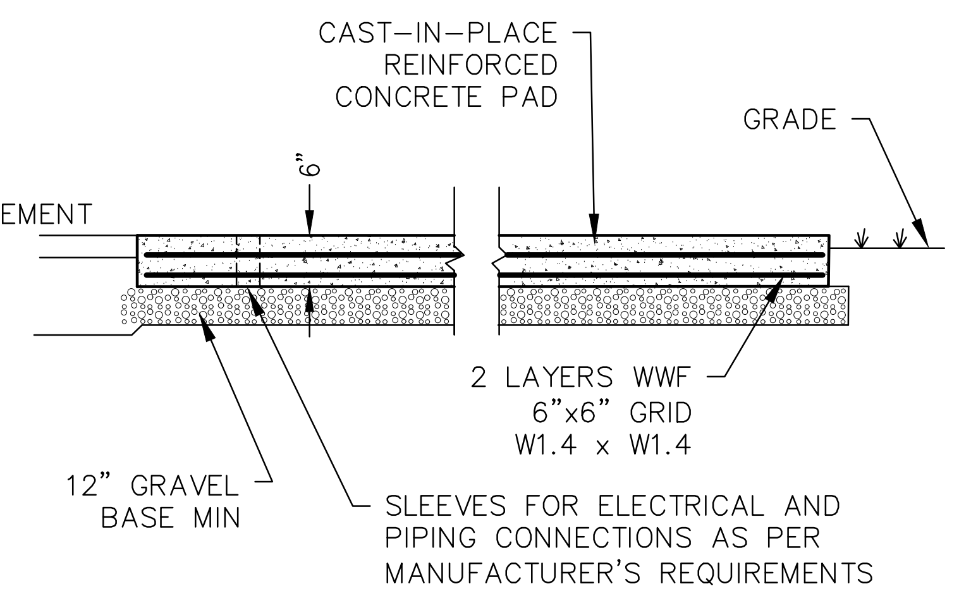
HANDICAP RAMP B2

NOT TO SCALE


NEW PAVED AREA
SAW CUT EXISTING PAVEMENT PRIOR TO EXCAVATION
SEEDED AREA
GRAVEL BASE/ SUBBASE IN ROADWAYS
BACKFILL WITH APPROVED EXCAVATED MATERIAL COMPACTED AS SPECIFIED
VARIES
D +2'-6" MAX
MARKER TAPE 12" ABOVE PIPE
GRANULAR PIPE BEDDING MATERIAL COMPACTED TO 95% MAX. DENSITY
PIPE BEDDING ZONE
D
1/2 PLUS 12" MIN PIPE DIA.
1/2 PLUS 4" MIN PIPE DIA.
ADDITIONAL 4" BEDDING IF LEDGE ENCOUNTERED

PIPE TRENCH A5

NOT TO SCALE


CAST-IN-PLACE REINFORCED CONCRETE PAD
GRADE
6"
PAVEMENT
2 LAYERS WWF 6"x6" GRID W1.4 x W1.4
12" GRAVEL BASE MIN
SLEEVES FOR ELECTRICAL AND PIPING CONNECTIONS AS PER MANUFACTURER'S REQUIREMENTS

CONCRETE PAD A5

NOT TO SCALE

MDOT GRAVEL SPECIFICATIONS SECTION 703.06					
SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVES				
	TYPE A	TYPE B	TYPE C	TYPE D	TYPE E
4 INCH			100		
3 INCH			90–100		
2 INCH			75–100		
1 INCH			50–80		
1/2 INCH	45–70	35–75	30–60	35–80	
1/4 INCH	30–55	25–60		25–65	25–100
NO. 4			15–40		
NO. 40	0–20	0–25		0–30	0–50
NO. 200	0–6.0	0–6.0	0–6.0	0–7.0	0–7.0

NOTE:
TYPE A SHALL BE CRUSHED LEDGE OR CRUSHED GRAVEL. TYPE A AGGREGATE FOR BASE SHALL ONLY CONTAIN PARTICLES OF ROCK WHICH PASS THE 2 INCH SIEVE. AT LEAST 50 PERCENT OF THE MATERIAL RETAINED ON THE NO. 4 SIEVE SHALL HAVE AT LEAST 1 FRACTURED FACE AS TESTED BY AASHTO T 335.

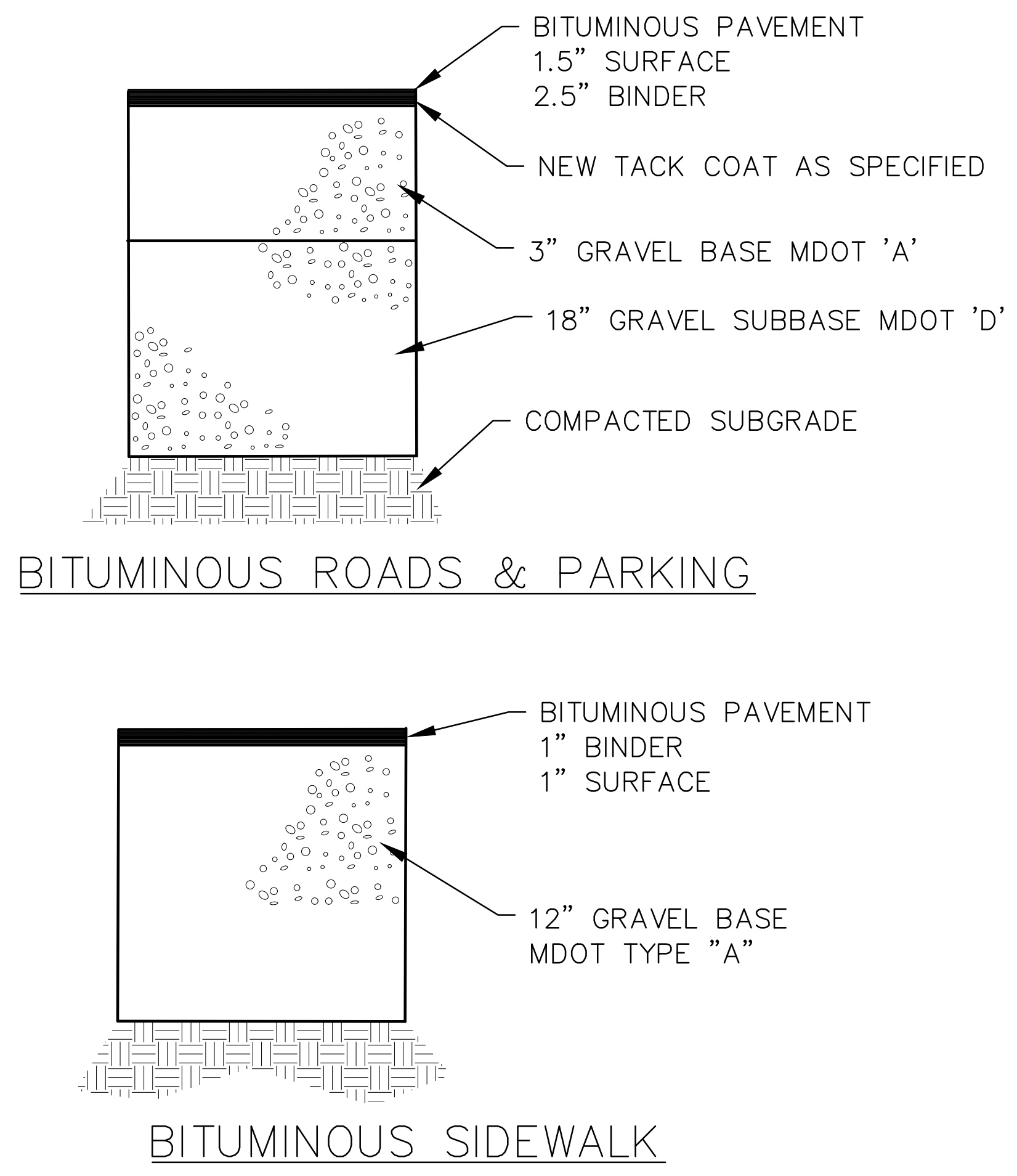
NOTE:
TYPE B SHALL BE CRUSHED LEDGE OR CRUSHED GRAVEL. TYPE B AGGREGATE FOR BASE SHALL ONLY CONTAIN PARTICLES OF ROCK WHICH PASS THE 4 INCH SIEVE.

NOTE:
TYPE C SHALL BE CRUSHED LEDGE OR CRUSHED GRAVEL AND AGGREGATE FOR BASE SHALL ONLY CONTAIN PARTICLES OF ROCK WHICH PASS THE 6 INCH SIEVE. AT LEAST 50 PERCENT OF THE MATERIAL RETAINED ON THE NO. 4 SIEVE SHALL HAVE AT LEAST 1 FRACTURED FACE AS TESTED BY AASHTO T 335.

NOTE:
AGGREGATE FOR SUB-BASE SHALL BE SAND OR GRAVEL OF HARD DURABLE PARTICLES FREE OF VEGETABLE MATTER, LUMPS OF CLAY, AND OTHER DELETERIOUS SUBSTANCES. AGGREGATE FOR SUB-BASE SHALL NOT CONTAIN PARTICLES THAT DO NOT PASS THE 6 INCH SIEVE.

TYPICAL MAINE DOT GRAVEL SPECS A3

NOT TO SCALE


BITUMINOUS PAVEMENT 1.5" SURFACE 2.5" BINDER
NEW TACK COAT AS SPECIFIED
3" GRAVEL BASE MDOT 'A'
18" GRAVEL SUBBASE MDOT 'D'
COMPACTED SUBGRADE
BITUMINOUS ROADS & PARKING
BITUMINOUS PAVEMENT 1" BINDER 1" SURFACE
12" GRAVEL BASE MDOT TYPE "A"
BITUMINOUS SIDEWALK

BITUMINOUS PAVEMENT DETAILS A2

NOT TO SCALE

EXISTING CONDITIONS AND DEMOLITION

E1. TOPOGRAPHIC AND BOUNDARY SURVEY INFORMATION SHOWN ON THIS DRAWING PERFORMED AND SUPPLIED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC (MAIN-LAND).

E2. CONTRACTOR SHALL VERIFY SITE CONDITIONS, INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES, AND REPORT ANY DISCREPANCIES TO MAIN-LAND PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.

E3. PRIOR TO REMOVAL OF UTILITIES, VERIFY UTILITY FUNCTION, MATERIAL, USE, AND CURRENT ACTIVITY. REPORT DISCREPANCIES TO MAIN-LAND FOR DIRECTION PRIOR TO COMMENCING THE WORK ON THAT UTILITY.

E4. SOME EXISTING PIPES COULD BE ASBESTOS CEMENT PIPE. HANDLE AND DISPOSE OF ASBESTOS MATERIALS WITH CARE AND IN ACCORDANCE WITH APPLICABLE CODES AND SAFETY STANDARDS.

E5. EXCAVATE AND STOCKPILE TOPSOIL ON-SITE. TOPSOIL IS TO REMAIN THE PROPERTY OF THE OWNER FOR REUSE.

E6. RELOCATE EXISTING TBM INFORMATION ONTO NEW TBM OF CONTRACTORS CHOICE FOR CONSTRUCTION USE PRIOR TO REMOVAL OF EXISTING TBM.

E7. PRIOR TO BEGINNING DEMOLITION OR SITE WORK, THE GENERAL CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF AUBURN ENGINEERING DEPARTMENT TO DISCUSS THE INSPECTION PROCESS AND PROJECT SCHEDULE.

SITE LAYOUT AND MATERIALS

L1. DIMENSIONS ARE TO FACE OF CURB AND TO FACE OF FOUNDATION UNLESS NOTED OTHERWISE.

L2. CATCH BASIN GRATES SHALL BE SET SQUARE TO PAVEMENT EDGES.

L3. PAVEMENT EDGES SHALL BE TRUE TO LINE. SAWCUT EXISTING PAVEMENT IN SMOOTH STRAIGHT LINES WHERE NEW PAVEMENT JOINS. PROVIDE TACK COAT LAYER AS SPECIFIED.

L4. CONTRACTOR SHALL VERIFY SITE CONDITIONS, INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES, AND REPORT ANY DISCREPANCIES TO MAIN-LAND PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.

L5. PROVIDE TRAFFIC CONTROL SIGNAGE AND STRIPING AS SHOWN AND IN ACCORDANCE WITH U.S.D.O.T. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

GRADING AND EROSION CONTROL

G1. ADD 6" LOAM, SEED AND MULCH TO DISTURBED AREAS UNLESS OTHERWISE NOTED. PROVIDE EROSION CONTROL MESH ON ALL SLOPES 6:1 OR STEEPER, AND ALONG DITCH CHANNELS.

G2. GRADE SURFACES TO DRAIN AWAY FROM BUILDING. PUDDLING OF WATER IN PAVED OR UNPAVED AREAS WILL NOT BE ACCEPTABLE EXCEPT FOR AREAS DESIGNATED AS PONDS.

G3. MAINTAIN TEMPORARY EROSION CONTROL MEASURES FOR THE FULL DURATION OF CONSTRUCTION. INSPECT WEEKLY AND AFTER EACH STORM AND REPAIR AS NEEDED. REMOVE SEDIMENTS FROM THE SITE, PLACE IN AREA OF LOW EROSION POTENTIAL, AND STABILIZE WITH SEED AND MULCH.

G4. PLACE TEMPORARY SOIL STABILIZATION WITHIN 7 DAYS OF INITIAL DISTURBANCE. PLACE PERMANENT SOIL STABILIZATION WITHIN 7 DAYS OF FINAL GRADING.

UTILITIES

U1. CATCH BASIN GRATES SHALL BE SET SQUARE TO PAVEMENT EDGES.

U2. THE ACCURACY AND COMPLETENESS OF SUBSURFACE INFORMATION IS NOT GUARANTEED. VERIFY SITE CONDITIONS INCLUDING TEST PITS FOR LOCATIONS AND INVERTS OF UTILITIES AND REPORT ANY DISCREPANCIES TO MAIN-LAND PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK.

U3. PROVIDE AT LEAST 5' OF SOIL COVER OVER WATER LINES AND SEWER FORCE MAIN. WHERE VERTICAL SEPARATION CANNOT BE OBTAINED, BETWEEN WATER AND SEWER, THE SEWER SHALL BE CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS-OF-CONSTRUCTION AND SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.

U4. PROVIDE 4 FOOT WIDE LAYER OF 2-INCH THICK RIGID FOAM INSULATION ON BEDDING MATERIAL 6-INCHES ABOVE OR BELOW SEWER PIPE OR WATER PIPE, WHERE IT CROSSES A STORM DRAIN PIPE WITH LESS THAN 4 FEET OF SEPARATION.

U5. UNDERDRAINS, INCLUDING INTERIOR UNDERSLAB UNDERDRAINS, INTERIOR AND EXTERIOR FOUNDATION UNDERDRAINS, AND RETAINING WALL UNDERDRAINS, SHALL BE PROVIDED BY CONTRACTOR. SEE THE STRUCTURAL FOUNDATION PLAN DRAWINGS FOR ADDITIONAL UNDERDRAINS NOT SHOWN ON THE SITE UTILITIES PLAN DRAWINGS. PLACE TOP OF EXTERIOR UNDER DRAIN CLEANOUTS IN LAWN OR PLANT BEDS 2 INCHES BELOW GRADE, OR WITH CLEAN-OUT COVER AS SHOWN ON THE SITE DETAILS DRAWING.

U6. PROVIDE THRUST BLOCKING FOR WATER LINES ACCORDING TO THE TABLE ON THE DETAIL SHEET.

U7. CLEAN SEDIMENTS FROM NEW AND EXISTING STORM DRAIN PIPES AND CATCH BASINS.

U8. COORDINATE WORK ON UTILITY LINES OR WITHIN ROAD RIGHT-OF-WAY WITH THE UTILITY COMPANIES AND CITY ROAD DEPARTMENT.

U9. PROVIDE 20' LENGTH OF 4 INCH UNDERDRAIN PIPE IN CRUSHED STONE AND GEOTEXTILE WRAP WITH END CAP AT EACH CATCH BASIN WHERE SHOWN. PIPE INVERT 2 FEET BELOW FINISH GRADE.

U10. RESET RIMS OF EXISTING UTILITY STRUCTURES, MANHOLES, AND CATCH BASINS TO NEW GRADE.

U11. SLOPE CONDUITS AWAY FROM BUILDING TO HANDHOLE OR UTILITY POLE TO AVOID GROUNDWATER SEEPAGE INTO BUILDING.

GENERAL NOTES A1

NOT TO SCALE

MLDC
MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:

NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2024-04-12 TLB FOR REVIEW
SUBMISSION 2: 2024-06-04 TLB FOR REVIEW
SUBMISSION 3: 2024-06-07 MJB FOR REVIEW
SUBMISSION 4: 2024-06-21 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	4
SURVEY DATE:	2023-06-20
SUBMISSION DATE:	2024-06-21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

DETAILS SHEET

SEAL:
MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE #18356

DRAWING NO.
C9.1

MLDC NO. 23-252 6 OF 9

1PLN-DETAILS.dwg – PLOTTED ON 6/21/2024 10:42 AM BY TANNER BINETTE

TABLE 1
SOIL FILTER MEDIA

Filter Media	Mixture by Volume	Specifications
Sandy loam/fine sandy loam & Course Loamy Sand	70%–80%	Required to meet the Sieve Analysis specified in Table 2, below.
Mulch	20%–25%	Moderatley fine, shredded bark or wood fiber mulch with less than 5% passing the #200 sieve
	8% to 12% passing #200 sieve. Clay content less than 2%	

TABLE 2
LOAMY COARSE SAND SIEVE ANALYSIS SPEC.

Sieve Size	% by Weight
#10	85–100
#20	70–100
#60	15–40
#200	8–15

TABLE 3
SANDY LOAM TO FINE SANDY LOAM SPEC.

Sieve Size	% by Weight
#4	75–95
#10	60–90
#40	35–85
#200	20–70
200 (CLAY SIZE)	<2.0

TABLE 4
MEDOT Specifications for UNDERDRAINS

Sieve Size	% by Weight
Underdrain Type B	
1"	95–100
1/2"	75–100
#4	50–100
#20	15–80
#50	0–15
#200	0–5

FILTER BED NOTES

CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.

COMPACTION OF SOIL FILTER: THE BED SHOULD BE INSTALLED BY FLOODING THE MEDIA WITH WATER AND PLACING MATERIAL IN 6–9" LIFTS.

CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:

- AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA,
- AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED. BIO–RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.
- AFTER ONE YEAR INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND
- ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:

- SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
- PERFORM A SIEVE ANALYSIS CONFORMING TO STM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
- PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90–92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

NOTE: MAINE DEP REQUIRES (PER CHAPTER 7.1 OF STORMWATER BMP DESIGN MANUAL), THE INSPECTION OF THE UNDERDRAINED FILTER BY THE DESIGN ENGINEER DURING CONSTRUCTION AT THE STAGES OF GENERAL SHAPE COMPLETED, UNDERDRAIN PIPE IN PLACE BUT NOT COVERED, DRAINAGE MEDIA IN PLACE, AND FINISHED WITH FILTER MEDIA AND SEED IN PLACE. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER 48 HOURS IN ADVANCE OF THE ESTIMATED TIME OF CONSTRUCTION INSPECTION TO ARRANGE AN INSPECTION.

GENERAL NOTES

1. AVOID COMPACTING UNDERDRAIN BEDDING AND SOIL FILTER MEDIA DURING CONSTRUCTION. OVER–COMPACTED SOILS WILL NOT ALLOW PROPER WATER MIGRATION THROUGH THE SOIL SECTION; FILTER BEDS ARE INTENDED TO DRAIN DRY WITHIN 24 TO 48 HOURS.

2. SEED FILTER AREA WITH CONSERVATION TYPE SEED MIXTURE (A 48 LBS/ACRE MIXTURE CONTAINING 20 LBS/ACRE OF CREEPING RED FESCUE AND TALL FESCUE EACH PLUS 8 LBS/ACRE OF BIRDSFOOT TREFOIL)

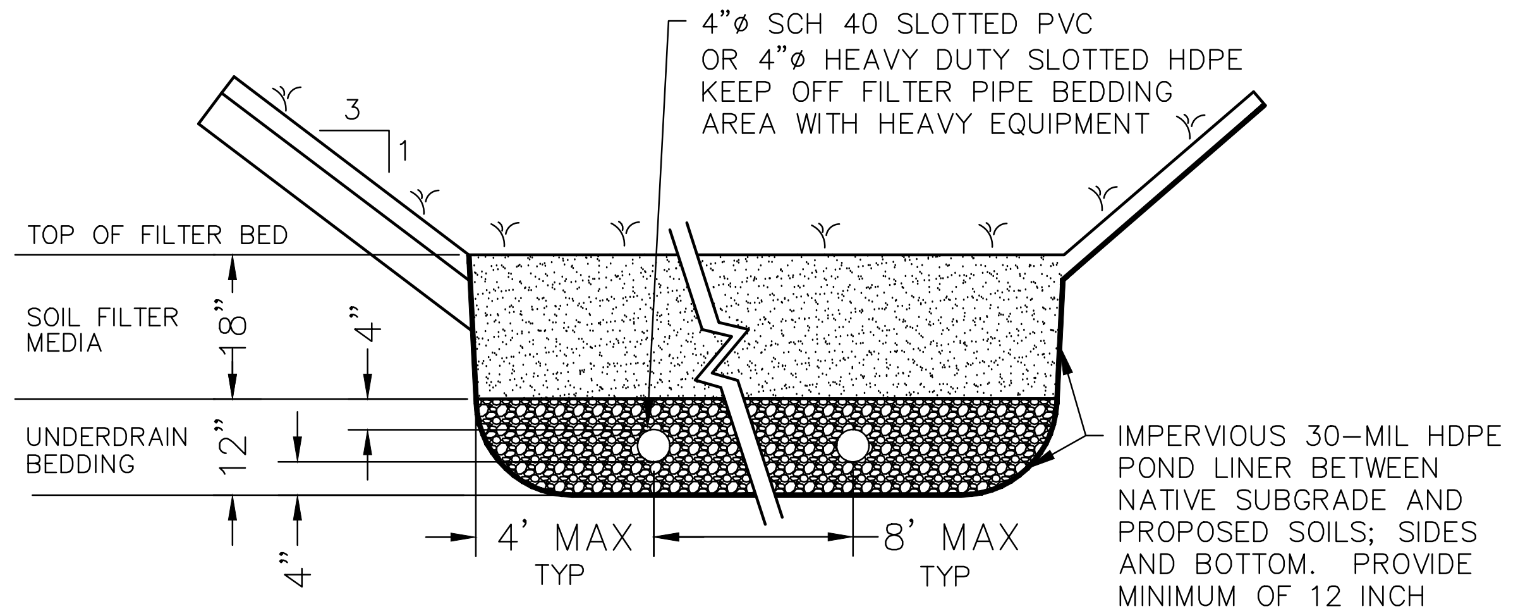
3. DO NOT INSTALL AND STABILIZE THE SOIL FILTER MEDIA IN THE BASIN UNTIL AFTER CONTRIBUTING AREAS HAVE BEEN PERMANENTLY STABILIZED.

UNDERDRAIN BEDDING

1. UNDERDRAIN GRANULAR MATERIAL SHALL BE WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYP B FOR UNDERDRAIN BACKFILL (SEE TABLE 4).

2. UNDERDRAINS SHALL BE PLACED NO FURTHER THAN 8 FEET APART.

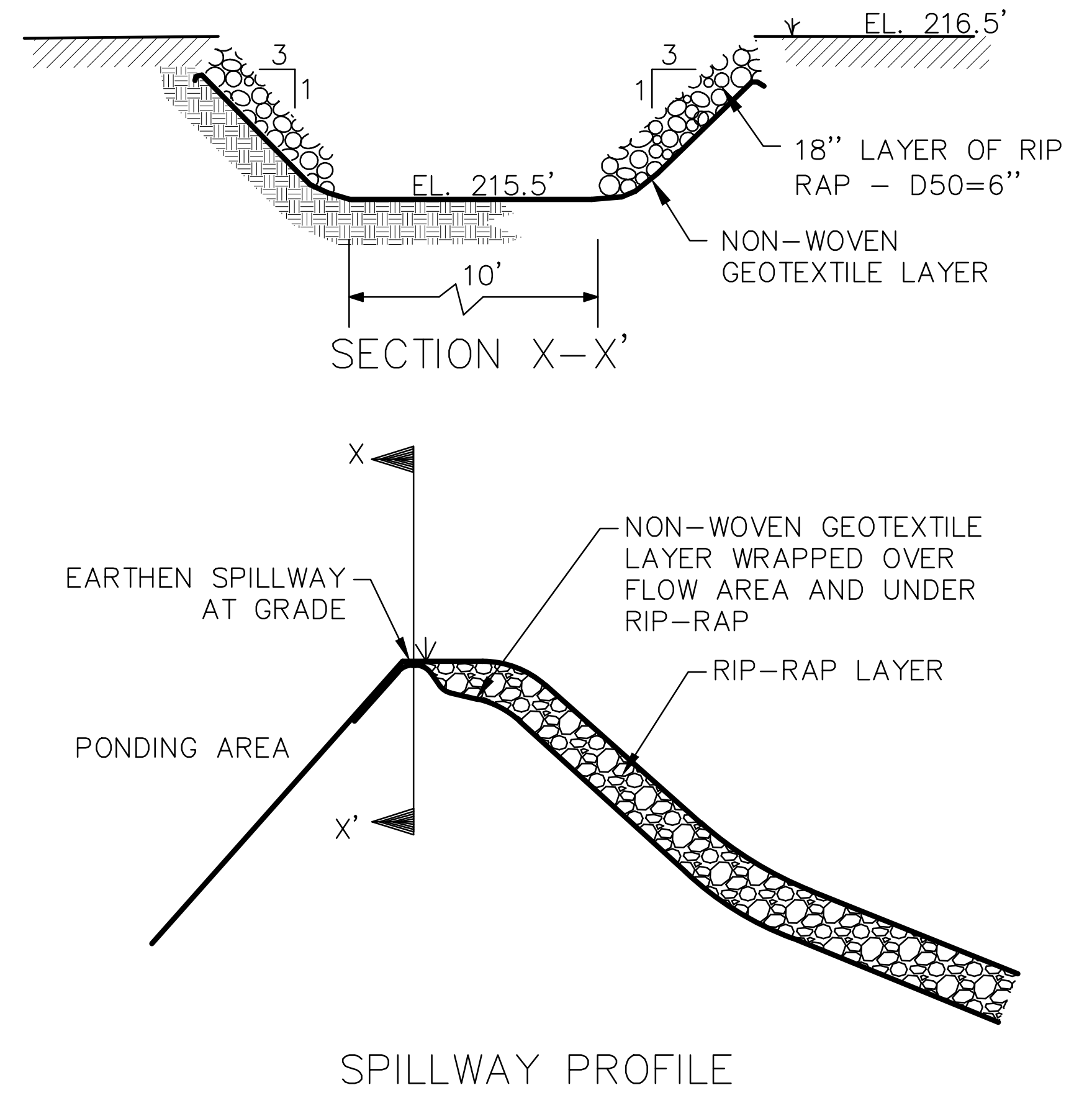
3. UNDERDRAINS SHALL MAINTAIN A MINIMUM OF 1% FOR POSITIVE DRAINAGE.


4"ø SCH 40 SLOTTED PVC
OR 4"ø HEAVY DUTY SLOTTED HDPE
KEEP OFF FILTER PIPE BEDDING
AREA WITH HEAVY EQUIPMENT
3
1
TOP OF FILTER BED
SOIL FILTER MEDIA
18"
4"
UNDERDRAIN BEDDING
12"
4"
4' MAX TYP
8' MAX TYP
IMPERVIOUS 30–MIL HDPE POND LINER BETWEEN NATIVE SUBGRADE AND PROPOSED SOILS; SIDES AND BOTTOM. PROVIDE MINIMUM OF 12 INCH OVERLAP AT SEAMS.

GRASSED FILTER BED DETAIL

NOT TO SCALE

B4


TOP OF BERM
EL. 216.5'
3
1
EL. 215.5'
18" LAYER OF RIP RAP – D50=6"
NON–WOVEN GEOTEXTILE LAYER
10'
SECTION X–X'
X
X'
EARTHEN SPILLWAY AT GRADE
NON–WOVEN GEOTEXTILE LAYER WRAPPED OVER FLOW AREA AND UNDER RIP–RAP
RIP–RAP LAYER
PONDING AREA
SPILLWAY PROFILE

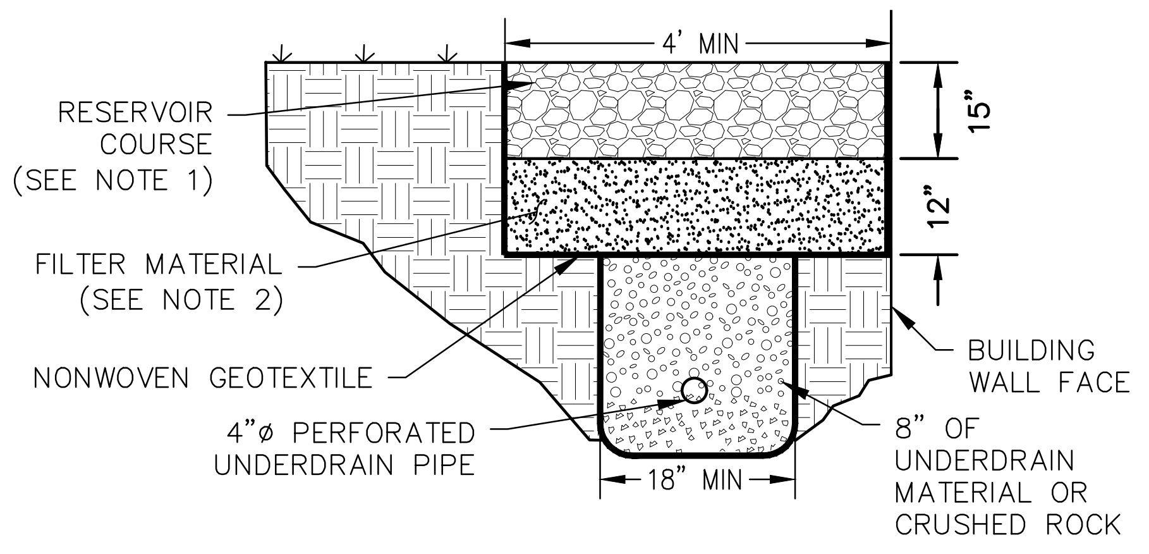
PONDING AREA SPILLWAY

NOT TO SCALE

C3

NOTES:

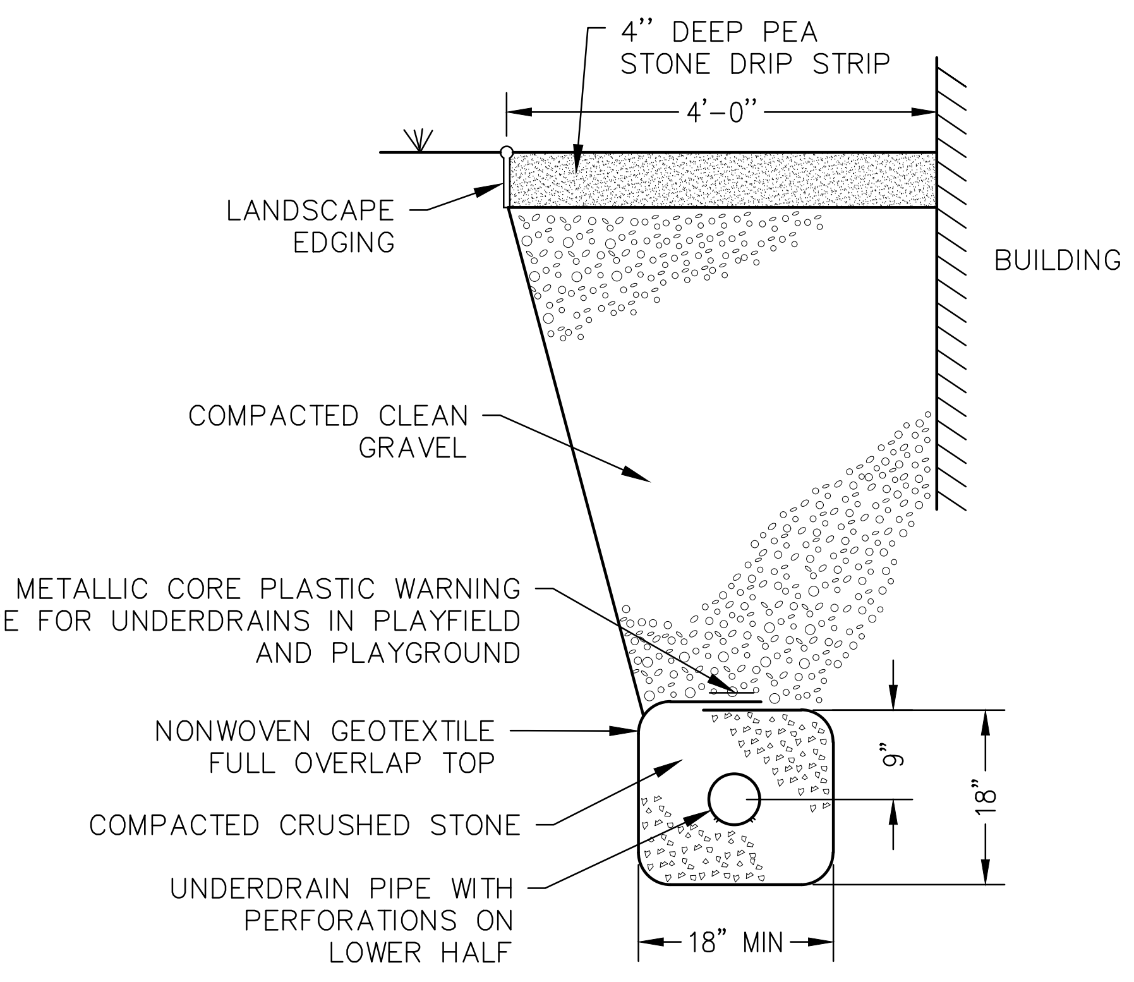
1. RESERVOIR COURSE SHALL BE 10 INCHES THICK AT MINIMUM AND SHALL CONSIST OF CLEAN, WASHED ¾" TO 1" AGGREGATE THAT IS FREE OF DEBRIS.
2. IF FOUNDATION BACKFILL IS A MINERAL SOIL BETWEEN 4 AND 7% FINES IT MAY BE USED AS THE FILTER MATERIAL.
3. UNDERDRAIN MATERIAL SHALL BE WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL. CRUSHED ROCK IS ALSO ACCEPTABLE AND SHOULD BE WRAPPED IN NON–WOVEN GEOTEXTILE FABRIC.


4' MIN
RESERVOIR COURSE (SEE NOTE 1)
15"
12"
FILTER MATERIAL (SEE NOTE 2)
NONWOVEN GEOTEXTILE
4"ø PERFORATED UNDERDRAIN PIPE
BUILDING WALL FACE
8" OF UNDERDRAIN MATERIAL OR CRUSHED ROCK
18" MIN

ROOF DRIPLINE FILTER

NOT TO SCALE

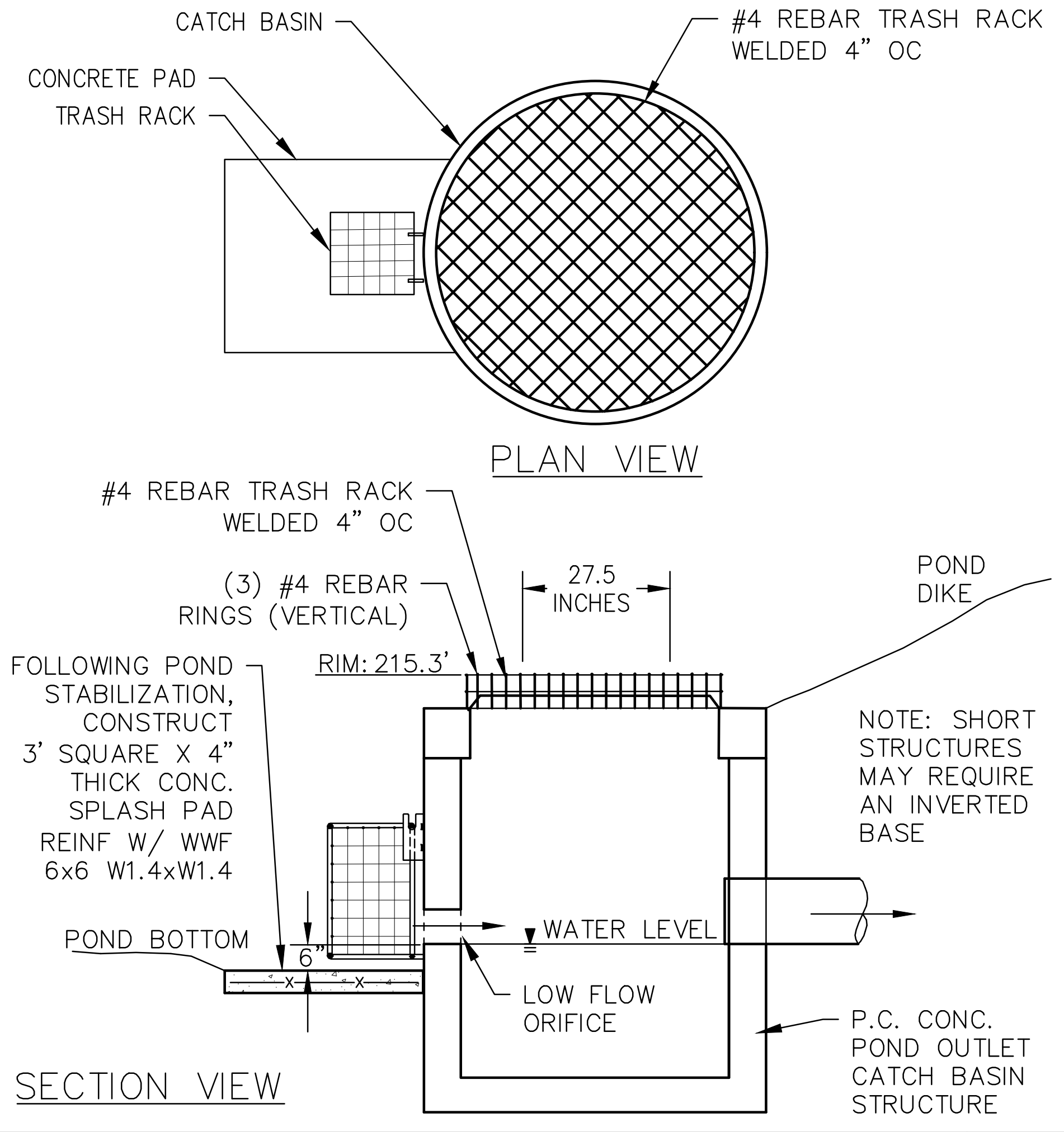
C2


4" DEEP PEA STONE DRIP STRIP
4'–0"
LANDSCAPE EDGING
BUILDING
COMPACTED CLEAN GRAVEL
METALLIC CORE PLASTIC WARNING TAPE FOR UNDERDRAINS IN PLAYFIELD AND PLAYGROUND
NONWOVEN GEOTEXTILE FULL OVERLAP TOP
COMPACTED CRUSHED STONE
UNDERDRAIN PIPE WITH PERFORATIONS ON LOWER HALF
9"
18"
18" MIN

FOUNDATION UNDERDRAIN DETAIL

NOT TO SCALE

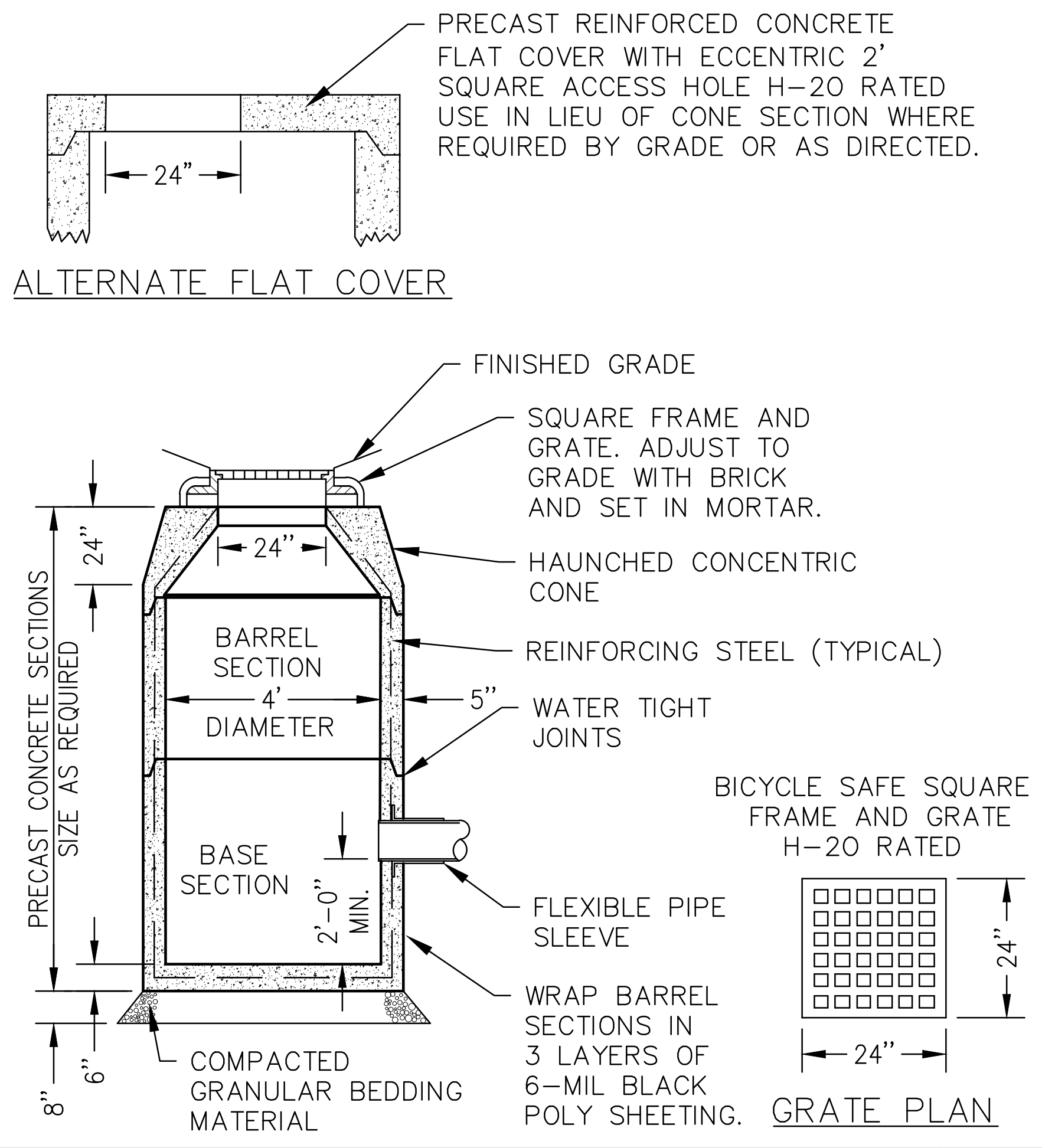
C1


CATCH BASIN
#4 REBAR TRASH RACK WELDED 4" OC
CONCRETE PAD
TRASH RACK
PLAN VIEW
#4 REBAR TRASH RACK WELDED 4" OC
(3) #4 REBAR RINGS (VERTICAL)
27.5 INCHES
POND DIKE
RIM: 215.3'
FOLLOWING POND STABILIZATION, CONSTRUCT 3' SQUARE X 4" THICK CONC. SPLASH PAD REINF W/ WWF 6x6 W1.4xW1.4
NOTE: SHORT STRUCTURES MAY REQUIRE AN INVERTED BASE
POND BOTTOM
6"
WATER LEVEL
LOW FLOW ORIFICE
P.C. CONC. POND OUTLET CATCH BASIN STRUCTURE
SECTION VIEW

POND OUTLET STRUCTURE

NOT TO SCALE

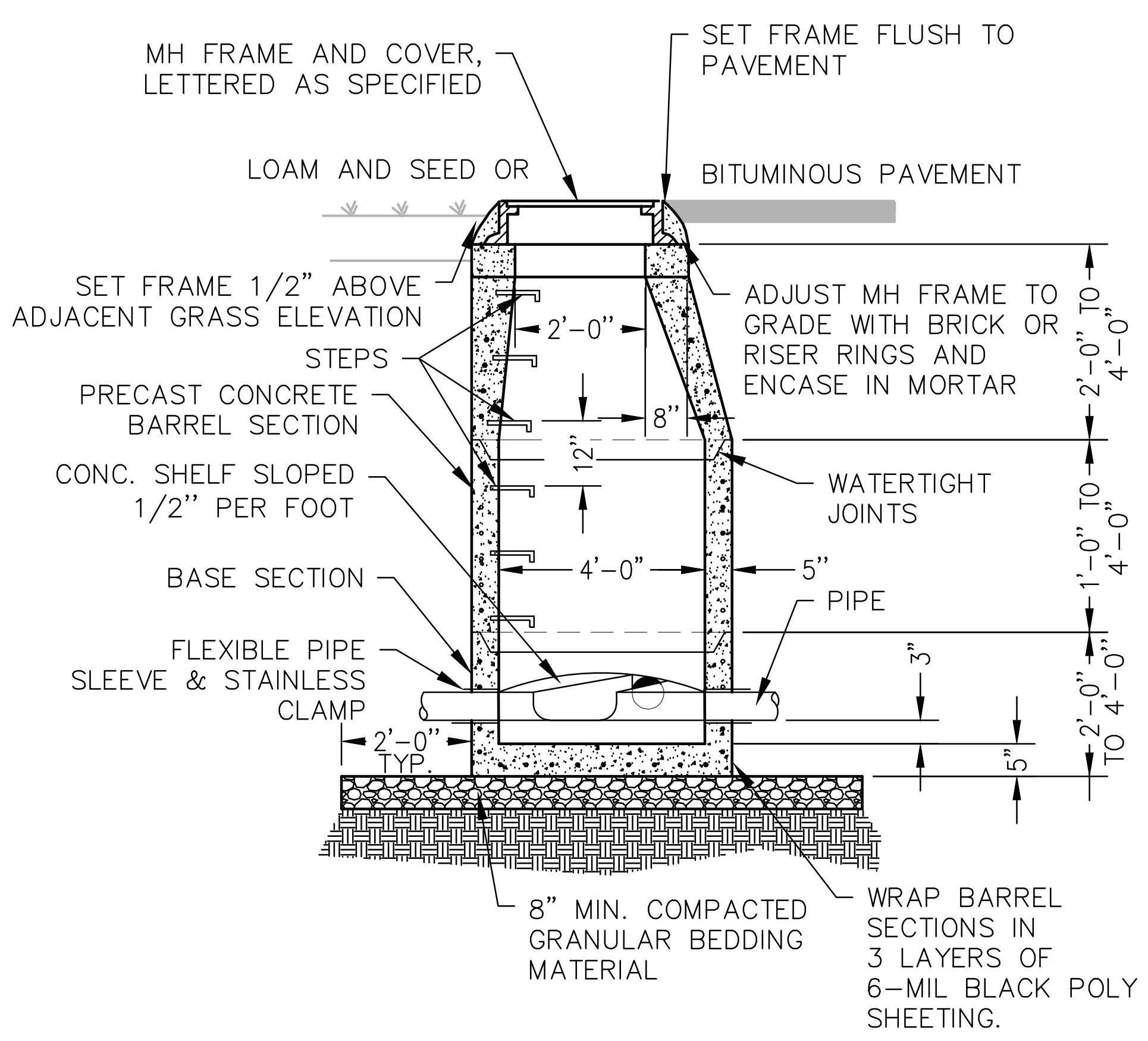
B3


PRECAST REINFORCED CONCRETE FLAT COVER WITH ECCENTRIC 2' SQUARE ACCESS HOLE H–20 RATED USE IN LIEU OF CONE SECTION WHERE REQUIRED BY GRADE OR AS DIRECTED.
24"
ALTERNATE FLAT COVER
FINISHED GRADE
SQUARE FRAME AND GRATE. ADJUST TO GRADE WITH BRICK AND SET IN MORTAR.
24"
HAUNCHED CONCENTRIC CONE
PRECAST CONCRETE SECTIONS SIZE AS REQUIRED
BARREL SECTION
4' DIAMETER
REINFORCING STEEL (TYPICAL)
5"
WATER TIGHT JOINTS
BASE SECTION
2'–0" MIN.
FLEXIBLE PIPE SLEEVE
WRAP BARREL SECTIONS IN 3 LAYERS OF 6–MIL BLACK POLY SHEETING.
8"
6"
COMPACTED GRANULAR BEDDING MATERIAL
BICYCLE SAFE SQUARE FRAME AND GRATE H–20 RATED
24"
24"
GRATE PLAN

PRECAST CONCRETE CATCH BASIN

NOT TO SCALE

B2


MH FRAME AND COVER, LETTERED AS SPECIFIED
SET FRAME FLUSH TO PAVEMENT
LOAM AND SEED OR
BITUMINOUS PAVEMENT
SET FRAME 1/2" ABOVE ADJACENT GRASS ELEVATION
STEPS
PRECAST CONCRETE BARREL SECTION
CONC. SHELF SLOPED 1/2" PER FOOT
BASE SECTION
FLEXIBLE PIPE SLEEVE & STAINLESS CLAMP
2'–0"
8"
12"
4'–0"
5"
ADJUST MH FRAME TO GRADE WITH BRICK OR RISER RINGS AND ENCASE IN MORTAR
2'–0" TO 4'–0"
WATERTIGHT JOINTS
1'–0" TO 4'–0"
PIPE
3"
2'–0" TO 4'–0"
5"
2'–0" TYP.
8" MIN. COMPACTED GRANULAR BEDDING MATERIAL
WRAP BARREL SECTIONS IN 3 LAYERS OF 6–MIL BLACK POLY SHEETING.

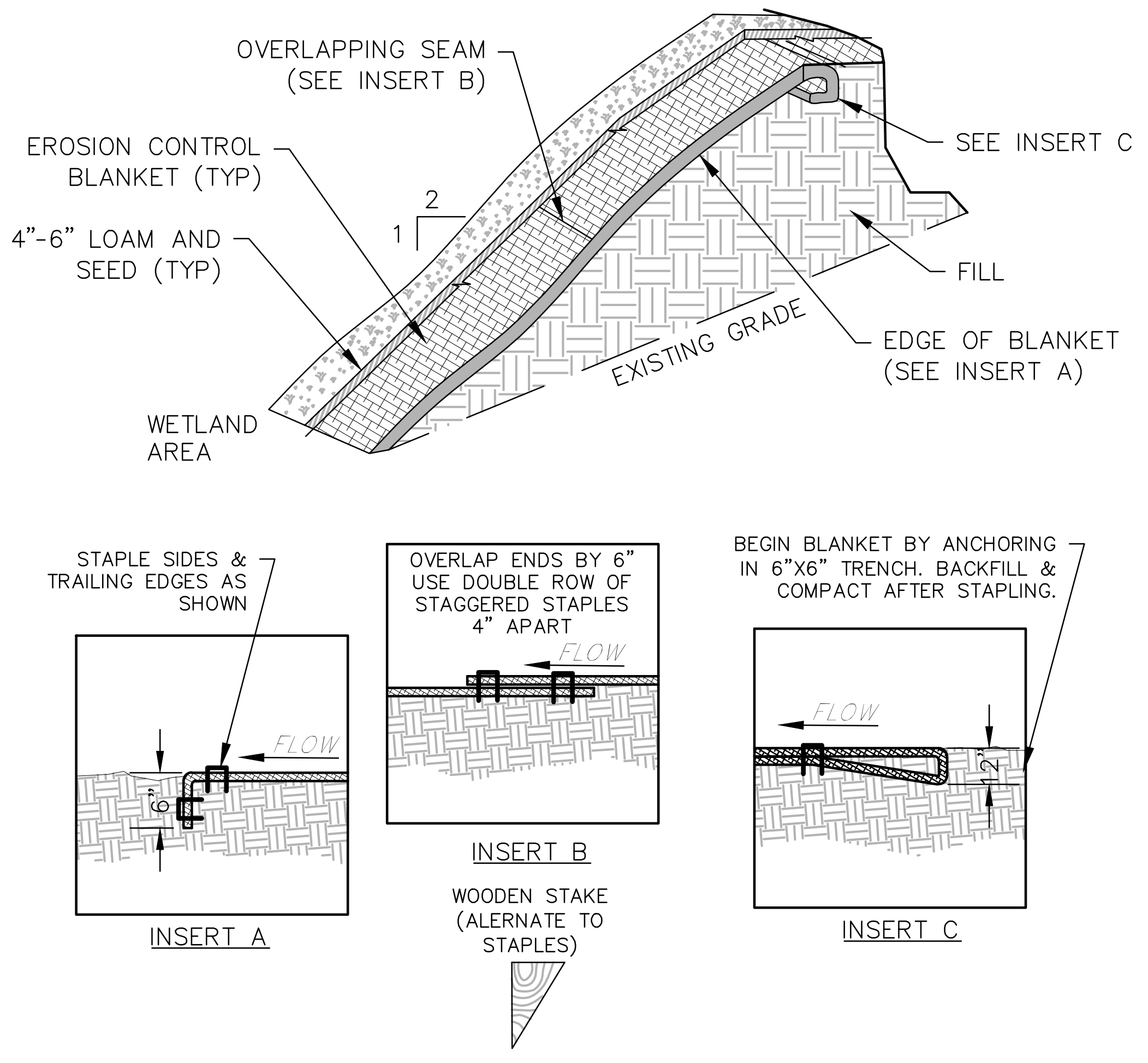
PRECAST CONCRETE MANHOLE

NOT TO SCALE

B1

NOTES:

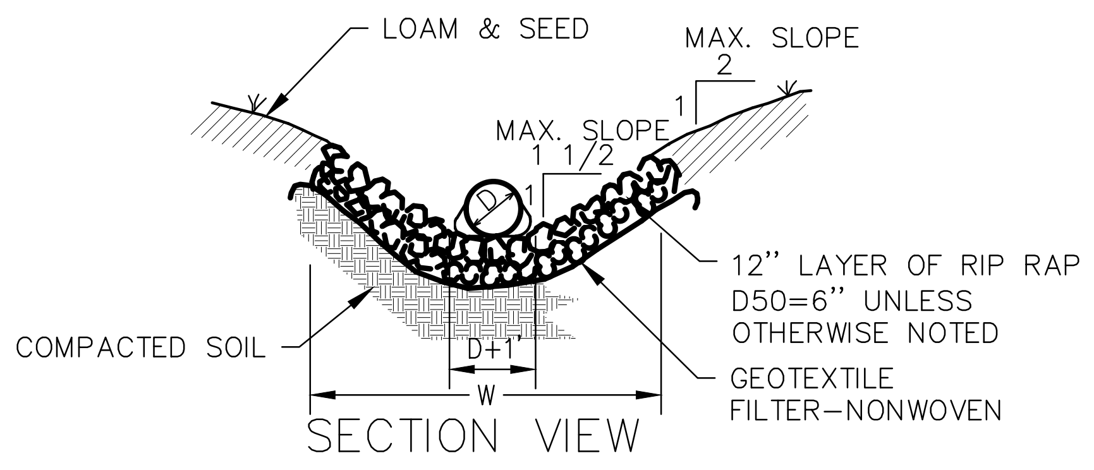
1. FILL SHALL BE COMPACTED IN 6" TO 12" LAYERS TO AVOID SETTLEMENT. COMPACT FILL UNDER PAVEMENTS AND GRAVEL AREAS TO 95% OF MAXIMUM DRY DENSITY; AND UNDER GRASS OR MULCH AREAS TO 90% OF MAXIMUM DRY DENSITY.
2. SOILS SHALL NOT CONTAIN COBBLES LARGER THAN 8" IN THE GREATEST DIMENSION, ICE, FROZEN SOIL, OR ROOTS/STUMPAGE.
3. DO NO WORK ON FROZEN OR MUDDY GROUND.
4. UNROLL MAT ONTO GROUND IN DIRECTION OF WATER FLOW.
5. MAT SHOULD LIE FLAT. DO NOT STRETCH MAT OVER GROUND. STRETCHING MAY CAUSE MAT TO BRIDGE DEPRESSIONS IN THE SURFACE AND ALLOW EROSION UNDERNEATH.
6. BURY TRANSVERSE TERMINAL ENDS OF MAT TO SECURE AND PREVENT EROSIVE FLOW UNDERNEATH.
7. SECURE MAT SNUGLY INTO ALL TRANSVERSE CHECK SLOTS.
8. BACKFILL AND COMPACT TRENCHES AND CHECK SLOTS AFTER STAKING THE MAT IN BOTTOM OF TRENCH.
9. OVERLAP ROLL ENDS BY THREE (3) FEET (MIN.) WITH UPSLOPE MAT ON TOP TO PREVENT UPLIFT OF MAT END BY WATER FLOW. IF INSTALLING IN THE DIRECTION OF A CONCENTRATED WATERFLOW, START NEW ROLLS IN A TRANSVERSE DITCH.
10. OVERLAP ADJACENT EDGES OF MAT BT THREE (3) INCHES (MIN.) AND STAKE.
11. WOOD STAKES ARE RECOMMENDED FOR PINNING MAT TO THE GROUND SURFACE. STAKES SHOULD BE 1" X 3" NOMINAL STOCK CUT IN A TRINGULAR SHAPE. STAKES SHOULD BE 12" TO 18" LONG, DEPENDING ON SOIL DENSITY.
12. DRIVE WOODEN STAKES TO WITHIN THREE (3) INCHES OF GROUND SURFACE. DO NOT DRIVE FLUSH TO SURFACE.
13. IN ALL TRANSVERSE TERMINAL TRENCHES AND CHECK SLOTS, STAKE EACH MAT AT ITS CENTER AND OVERLAP EDGES BEFORE BACKFILLING AND COMPACTING.
14. STAKE OVERLAPS LONGITUDINALLY AT THREE (3) TO FIVE (5) FOOT INTERVALS.
15. FOLLOW COLORED DOT PATTERNS BY MANUFACTURER.


OVERLAPPING SEAM (SEE INSERT B)
EROSION CONTROL BLANKET (TYP)
SEE INSERT C
2
1
4"-6" LOAM AND SEED (TYP)
FILL
EXISTING GRADE
EDGE OF BLANKET (SEE INSERT A)
WETLAND AREA
STAPLE SIDES & TRAILING EDGES AS SHOWN
FLOW
6"
INSERT A
OVERLAP ENDS BY 6" USE DOUBLE ROW OF STAGGERED STAPLES 4" APART
FLOW
INSERT B
WOODEN STAKE (ALERNATE TO STAPLES)
BEGIN BLANKET BY ANCHORING IN 6"X6" TRENCH. BACKFILL & COMPACT AFTER STAPLING.
FLOW
12"
INSERT C

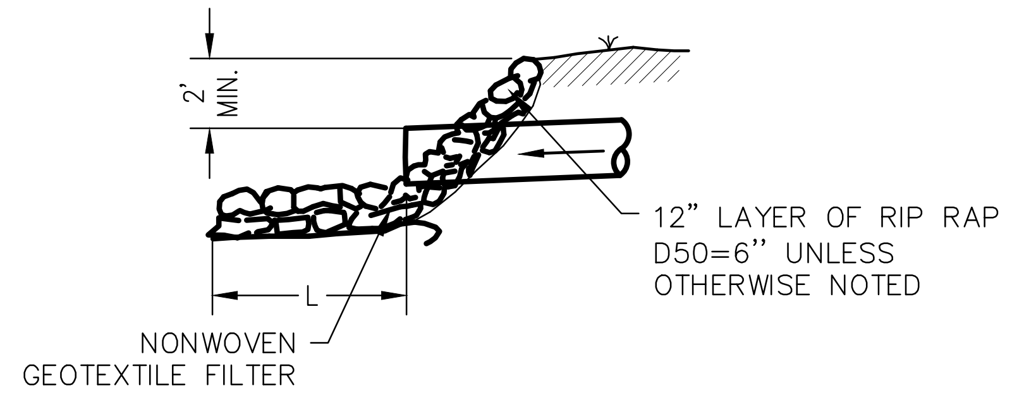
EMBANKMENT W/EROSION CONTROL BLANKET

NOT TO SCALE

A4


LOAM & SEED
MAX. SLOPE
2
1
MAX. SLOPE
1 1/2
1
D
12" LAYER OF RIP RAP D50=6" UNLESS OTHERWISE NOTED
COMPACTED SOIL
D+1'
W
GEOTEXTILE FILTER–NONWOVEN
SECTION VIEW

PIPE DIAMETER (IN)	APRON WIDTH W (FT)	APRON LENGTH L (FT)
12	5	10
15	6	12
18	8	15
24	10	20
30	15	30
36	17	35

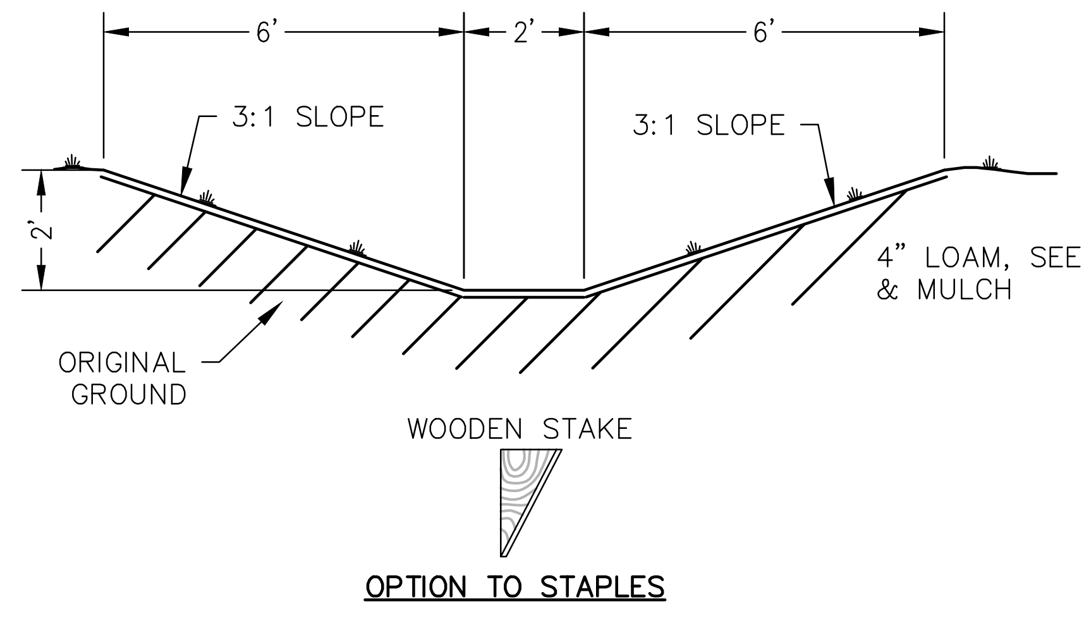

2' MIN.
12" LAYER OF RIP RAP D50=6" UNLESS OTHERWISE NOTED
L
NONWOVEN GEOTEXTILE FILTER

PROFILE VIEW

STORM DRAIN INLET/OUTET RIP–RAP

NOT TO SCALE

A3


6'
2'
6'
3:1 SLOPE
3:1 SLOPE
2'
4" LOAM, SEED, & MULCH
ORIGINAL GROUND
WOODEN STAKE

OPTION TO STAPLES

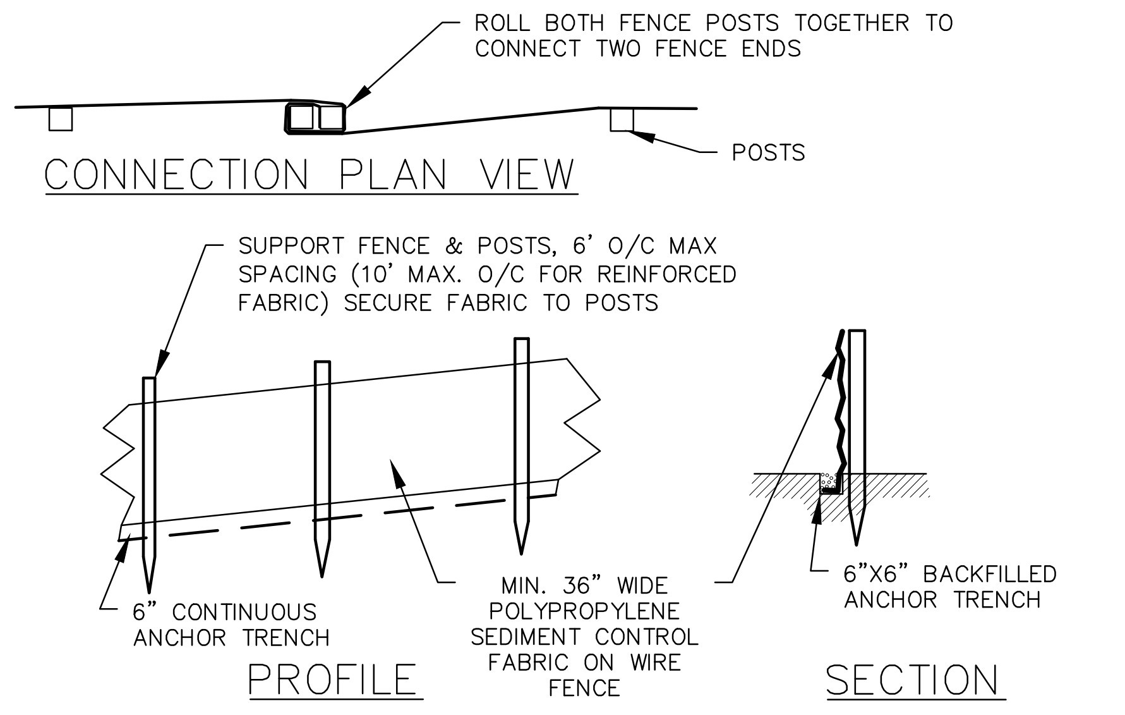
NOTES:

1. FLOW AREA OF GRASS DITCH TO BE LINED WITH AMERICAN EXCELSIOR CURLEX BANKMENT OR EQUAL, INSTALLED PER MANUFACTURER'S RECOMMENDATION WITHIN 48 HOURS OF FINAL DITCH GRADING.
2. BURY THE TOP OF THE NETTING IN A TRENCH 6" OR MORE DEEP.
3. TAM TRENCH FULL OF SOIL, SECURE WITH ROW OF STAPLES (OR WOOD STAKES), 12" SPACING, 4" DOWN FROM THE TRENCH.
4. OVERLAP–BURY UPPER END OF LOWER STRIP AS IN "A" & "B" OVERLAP END OF TOP STRIP 4" AND STAPLE OR WOOD STAKE.
5. CHECK SLOT–FOLD OF NETTING BURIED IN SLIT TRENCH TAMPED; DOUBLE ROW OF STAPLES (OR WOOD STAKES) AT 12" SPACING, USE CHECK SLOTS AT 15" SPACING IN DITCHES OR STEEP SLOPES.

TYPICAL GRASS DITCH

NOT TO SCALE

A2


ROLL BOTH FENCE POSTS TOGETHER TO CONNECT TWO FENCE ENDS
POSTS
CONNECTION PLAN VIEW
SUPPORT FENCE & POSTS, 6' O/C MAX SPACING (10' MAX. O/C FOR REINFORCED FABRIC) SECURE FABRIC TO POSTS
6" CONTINUOUS ANCHOR TRENCH
MIN. 36" WIDE POLYPROPYLENE SEDIMENT CONTROL FABRIC ON WIRE FENCE
6"X6" BACKFILLED ANCHOR TRENCH
PROFILE
SECTION

NOTES:

1. PLACE SILT FENCE OR FILTER BERMS ALONG UNIFORMLY SLOPED SURFACE.
2. EROSION CONTROL MIX FILTER BERM MAY BE SUBSTITUTED FOR A SILTFENCE. SEE THE SITE GRADING AND EROSION CONTROL PLAN.
3. EXCAVATE A 6"X6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
4. UNROLL ONE SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
5. DRIVE THE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM. JOIN SECTIONS AS SHOWN ABOVE.
6. LAY THE TOE–IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE–IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPLISHED BY AN INTERCEPTION DITCH.
7. BARRIER SHALL BE MIRAFI SILT FENCE OR APPROVED EQUAL.

SILT FENCE

NOT TO SCALE

A1

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
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367 US ROUTE 1 FALMOUTH, MAINE
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PROJECT

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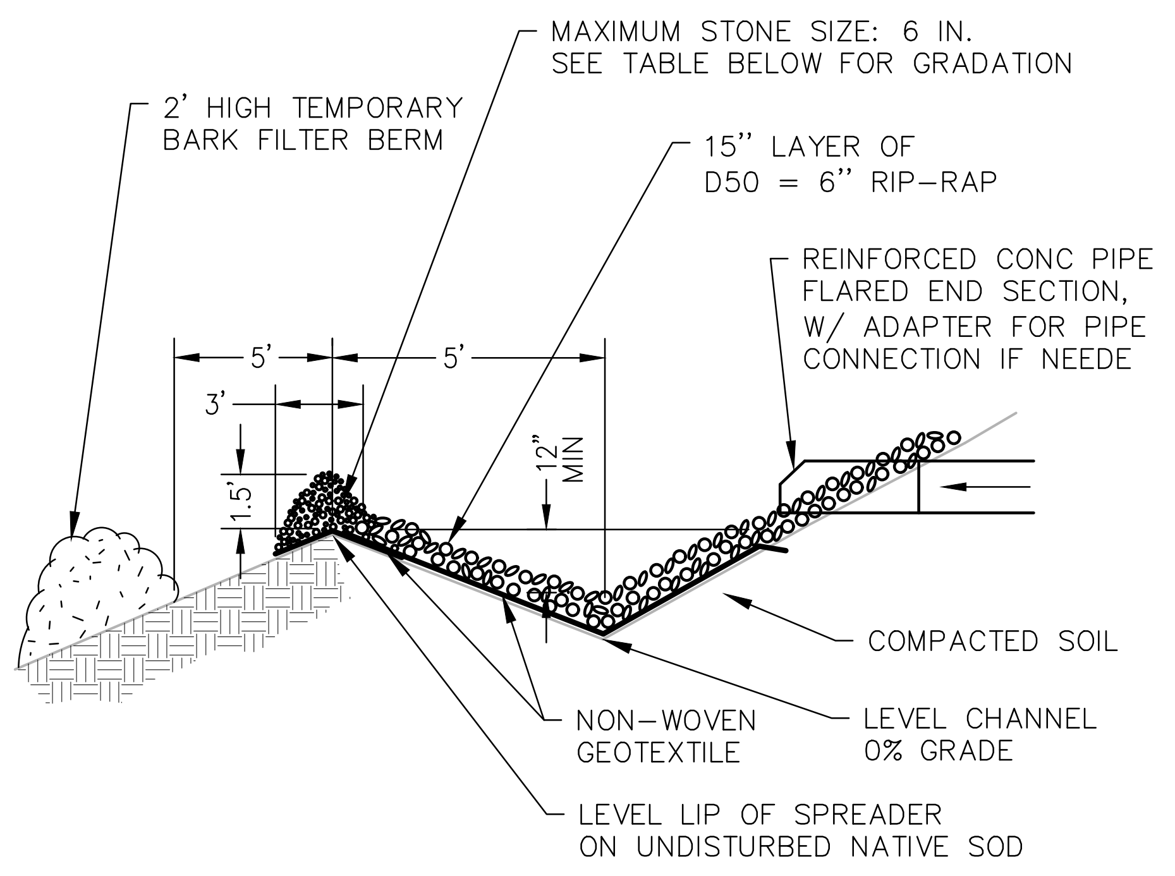
C9.2

MLDC NO. 23–252 7 OF 9

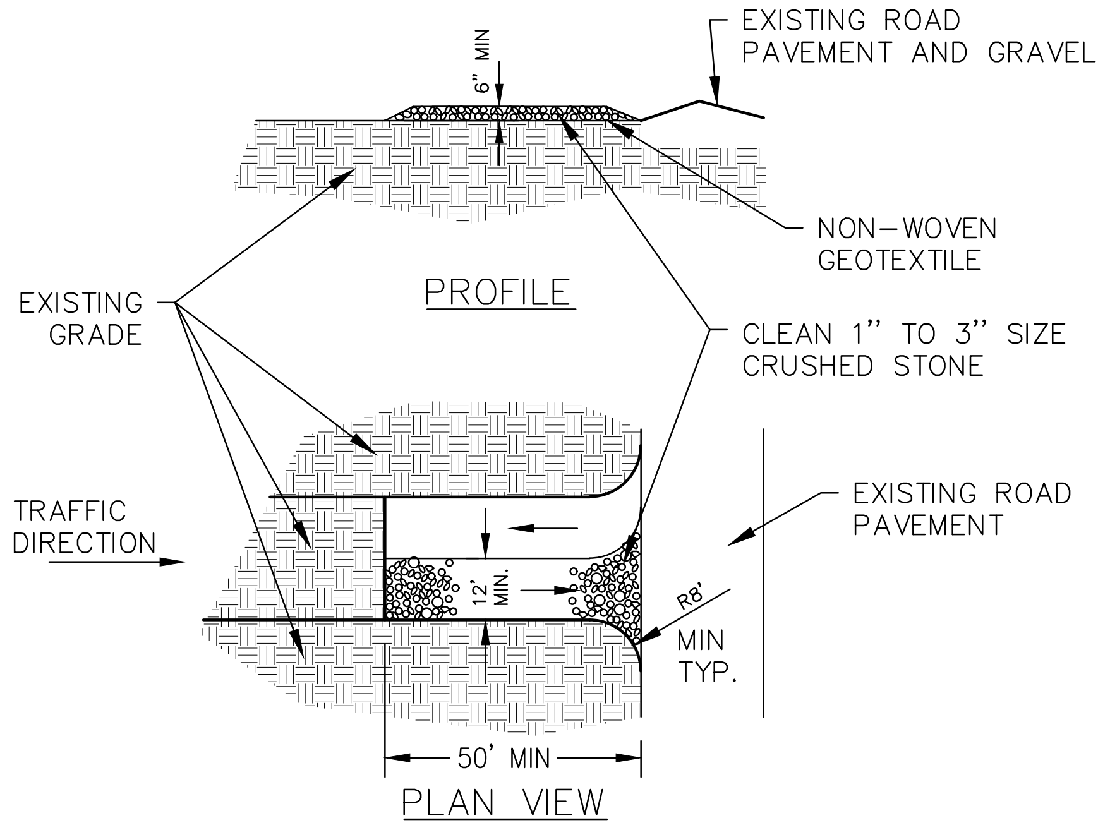
1PLN–DETAILS.dwg – PLOTTED ON 6/21/2024 10:42 AM BY TANNER BINETTE


MAXIMUM STONE SIZE: 6 IN.
SEE TABLE BELOW FOR GRADATION
2' HIGH TEMPORARY BARK FILTER BERM
15" LAYER OF D50 = 6" RIP-RAP
REINFORCED CONC PIPE FLARED END SECTION, W/ ADAPTER FOR PIPE CONNECTION IF NEEDE
5'
5'
3'
1.5'
12" MIN
COMPACTED SOIL
NON-WOVEN GEOTEXTILE
LEVEL CHANNEL 0% GRADE
LEVEL LIP OF SPREADER ON UNDISTURBED NATIVE SOD

BERM STONE GRADATION	
SIEVE SIZE	% PASSING
12 IN / 300 mm	100
6 IN / 150 mm	84–100
3 IN / 75 mm	63–83
1 IN / 25.4 mm	42–55
No. 4 / 4.75 mm	8–12

LEVEL–LIP SPREADER SECTION B2

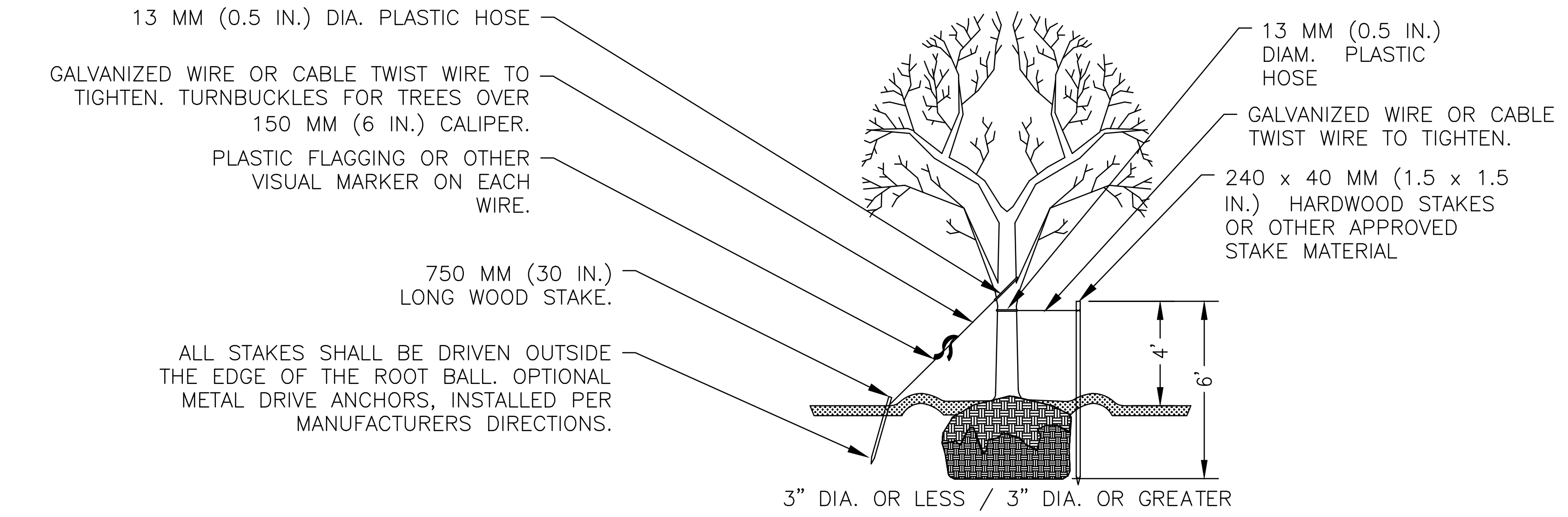
NOT TO SCALE


6" MIN
EXISTING ROAD PAVEMENT AND GRAVEL
NON–WOVEN GEOTEXTILE
PROFILE
EXISTING GRADE
CLEAN 1" TO 3" SIZE CRUSHED STONE
TRAFFIC DIRECTION
EXISTING ROAD PAVEMENT
12' MIN.
R8'
MIN TYP.
50' MIN
PLAN VIEW

NOTES:
1. STONE SIZE: $2\frac{1}{2}$" TO $1\frac{1}{2}$" USE CRUSH STONE.
2. THICKNESS: MINIMUM OF 8".
3. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC TRAVELED WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE.

TEMP. STABILIZED CONSTRUCTION EXIT B1

NOT TO SCALE


13 MM (0.5 IN.) DIA. PLASTIC HOSE
GALVANIZED WIRE OR CABLE TWIST WIRE TO TIGHTEN. TURNBUCKLES FOR TREES OVER 150 MM (6 IN.) CALIPER.
PLASTIC FLAGGING OR OTHER VISUAL MARKER ON EACH WIRE.
750 MM (30 IN.) LONG WOOD STAKE.
ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL. OPTIONAL METAL DRIVE ANCHORS, INSTALLED PER MANUFACTURERS DIRECTIONS.
13 MM (0.5 IN.) DIAM. PLASTIC HOSE
GALVANIZED WIRE OR CABLE TWIST WIRE TO TIGHTEN.
240 x 40 MM (1.5 x 1.5 IN.) HARDWOOD STAKES OR OTHER APPROVED STAKE MATERIAL
4'
6'
3" DIA. OR LESS / 3" DIA. OR GREATER

NOTES
ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM OF 12 MM (0.5 IN.). REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVERCOME THE PROBLEM THAT REQUIRED THE TREE TO BE STAKED. STAKES SHALL BE REMOVED NO LATER THE END OF THE FIRST GROWING SEASON AFTER PLANTING. TREES NORMALLY DO NOT NEED TO BE STAKED AND STAKING CAN BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF. THE FOLLOWING ARE REASONS WHY TREES DO NOT REMAIN STRAIGHT.
o TREES WITH POOR – QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED. REJECT RATHER THAN STAKE.
o TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS. REJECT RATHER THAN STAKE.
o PLANTING PROCEDURES THAT DO NOT ADEQUATELY TAMP SOILS AROUND THE ROOT BALL. CORRECT THE PLANTING PROCEDURE.
o ROOT BALLS PLACED ON SOFT SOIL. TAMP SOILS UNDER ROOT BALL PRIOR TO PLANTING.
o ROOT BALLS WITH VERY SANDY SOIL OR VERY WET CLAY SOIL. STAKING ADVISABLE.
o TREES LOCATED IN A PLACE OF EXTREMELY WINDY CONDITIONS. STAKING ADVISABLE.

1) WIRE OR CABLE SIZES SHALL BE AS FOLLOWS:
TREES UP TO 65 MM (2.5 IN.) CALIPER – 14 GAUGE TREES 65 MM (2.5 IN.) TO 75 MM (3 IN.) CALIPER – 12 GAUGE

2) TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 35MM (1.5 IN.) OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE.

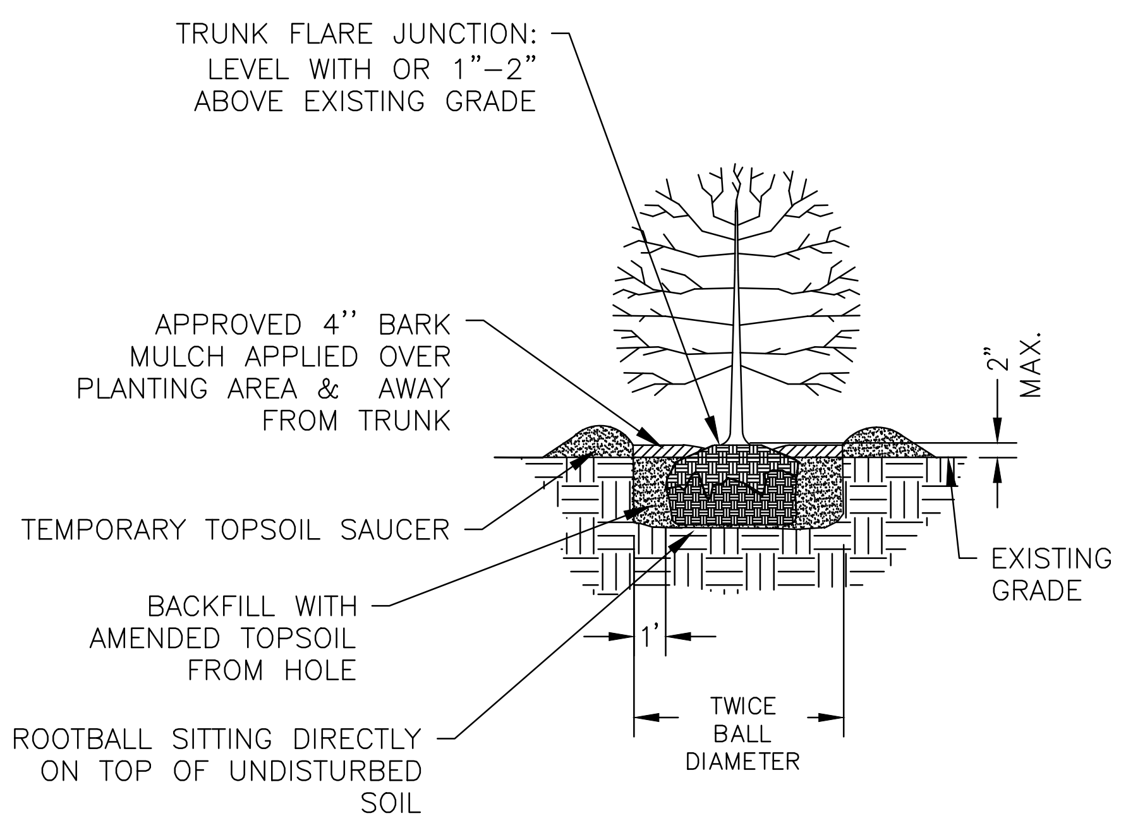
3) TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.

4) INSTALL THREE GUY WIRES PER TREE, SPACED EVENLY AROUND THE TRUNK.

TREE STAKING DETAIL A4

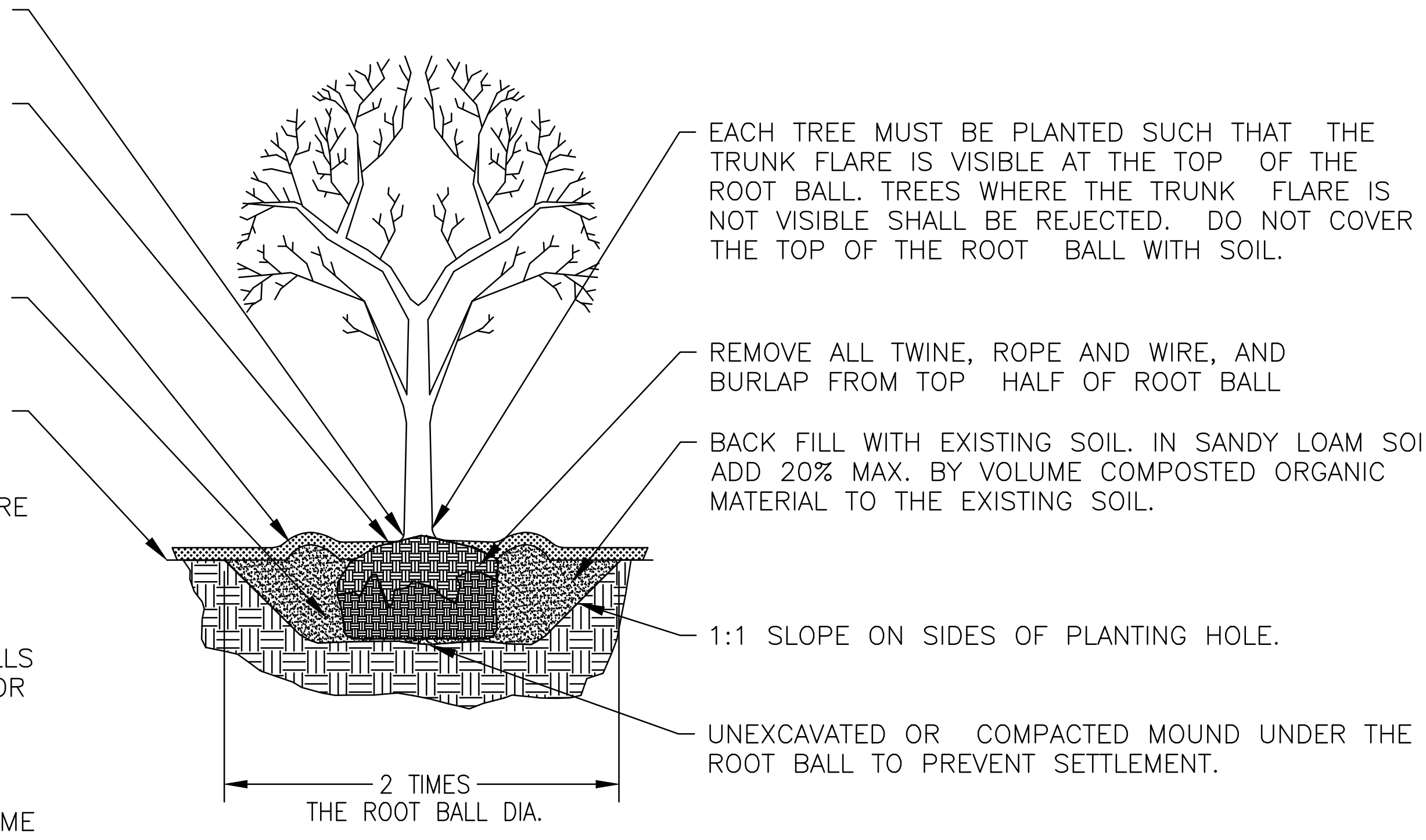
NOT TO SCALE

NOTE: NEVER CUT A LEADER. THIN BRANCHES & FOLIAGE BY 1/3 RETAINING NORMAL TREE SHAPE. PAINT ALL CUTS OVER 1/2" WITH APPROVED TREE PAINT.


TRUNK FLARE JUNCTION: LEVEL WITH OR 1"–2" ABOVE EXISTING GRADE
APPROVED 4" BARK MULCH APPLIED OVER PLANTING AREA & AWAY FROM TRUNK
2" MAX.
TEMPORARY TOPSOIL SAUCER
EXISTING GRADE
BACKFILL WITH AMENDED TOPSOIL FROM HOLE
1'
ROOTBALL SITTING DIRECTLY ON TOP OF UNDISTURBED SOIL
TWICE BALL DIAMETER

TYPICAL SHRUB PLANTING DETAIL A3

NOT TO SCALE


50 MM (4 IN.) MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.
SET TOP OF ROOT BALL FLUSH TO GRADE OR 25–50 MM (1–2 IN.) HIGHER IN SLOWLY DRAINING SOILS.
1800 MM (6 FT.) DIA. MIN. MULCH RING 2400 MM (8FT.) DIA. PREFERRED
TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.
UNDISTURBED GRADE
EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
REMOVE ALL TWINE, ROPE AND WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL
BACK FILL WITH EXISTING SOIL. IN SANDY LOAM SOILS, ADD 20% MAX. BY VOLUME COMPOSTED ORGANIC MATERIAL TO THE EXISTING SOIL.
1:1 SLOPE ON SIDES OF PLANTING HOLE.
UNEXCAVATED OR COMPACTED MOUND UNDER THE ROOT BALL TO PREVENT SETTLEMENT.
2 TIMES THE ROOT BALL DIA.

NOTE:
- SELECTED TREES MUST HAVE TRUNK FLARES IN CENTER OF ROOTBALL. IF THE TREE'S ROOT FLARE IS OFF CENTER BY MORE THAN TWO THIRDS OF THE TOP SURFACE OF ROOTBALL IT WILL BE REJECTED.
- ROOTBALLS MUST BE FIRM AND INTACT. ROOTBALLS THAT DO NOT MEET THE AMERICAN STANDARD FOR NURSERY STOCK WILL BE REJECTED.
- DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO–DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
- STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT SEE STAKING DETAIL.
- WRAP TREE TRUNKS ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT. SEE WRAPPING DETAIL.

TREE PLANTING DETAIL A1

NOT TO SCALE

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PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:

NOT TO SCALE

SUBMISSION NOTES:
SUBMISSION 1: 2024–06–04 TLB FOR REVIEW
SUBMISSION 2: 2024–06–07 MJB FOR REVIEW
SUBMISSION 3: 2024–06–21 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	3
SURVEY DATE:	2023–06–20
SUBMISSION DATE:	2024–06–21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

DETAILS SHEET

SEAL:

MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE #18356

DRAWING NO.
C9.3
MLDC NO. 23–252 8 OF 9

EROSION AND SEDIMENTATION CONTROL PLAN

West Shore Village
Adamian Drive, Auburn, Maine

Prepared By:

MAIN-LAND DEVELOPMENT CONSULTANTS, INC.
Livermore Falls, Maine
June 4, 2024

1. INTRODUCTION:

"A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S.A. §480-B. Sediment control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken." - Maine DEP Chapter 500 Rules, Appendix A.

This Plan has been developed to ensure that construction activities on this project site utilize sound erosion and sedimentation control measures. These measures will prevent or reduce the potential for the deposition of sediments down stream of site. The methods of control consist of preventive measures and remedial measures. Preventive measures are aimed at keeping the soils in their present location through mulching and through the reestablishment of vegetation. Remedial measures deal with the trapping and/or filtering of sediment laden stormwater run-off. Both types of measures will be utilized on this project.

The Erosion and Sedimentation Control Plan is best broken down into Temporary Measures, Winter Stabilization, and Permanent Measures.

2. TEMPORARY EROSION CONTROL:

Temporary control measures may consist of a combination of measures where appropriate and/or as shown on the plans.

A. Sediment Filter Berms:

Sediment Filter Berms are the preferred filtering device, but may not be used in wetland areas. The berms shall be placed down slope of all earth moving activities, where water from these disturbed areas will run off. These berms will be placed along an even contour, be at least 24 inches tall, and 3 feet wide at the base. Turn the ends of the berm up-grade to avoid runoff flowing around the berm. In areas of high erosion potential, the berm will be backed by hay bales or silt fencing, as shown on the filter berm detail.

B. Silt Fencing:

Silt fencing may be used in place of, or together with, the sediment filter barriers. The silt fencing will also be anchored at least four inches into the ground and placed along an even contour. Turn the ends of the fence up-grade to avoid runoff flowing around the fence. During frozen conditions, furnish and install Sediment Filter Berms in lieu of silt fencing or hay bales if frozen soil prevents the proper installation of silt fences and hay bales.

C. Stone Check dams:

Stone check dams shall be placed in the center of ditches immediately following excavation to provide a means of trapping sediments. (If the ditch has been immediately armored with rip-rap, check dams are not necessary.) The dams shall consist of small stone placed across the ditch, with a depression at the top of the dam to allow water over the top of the dam, should it become clogged with sediment. See the specifications on the Typical Details Plan for construction details of this measure.

D. Temporary Mulch:

Temporary mulch shall be placed on all disturbed areas where seeding, construction or stabilization activities will not take place for over 7 consecutive days. Temporary mulch will also be placed on areas within 75 feet of a natural resource (wetland, stream, etc.) where seeding will not take place for over 48 hours, and on all bare soils outside the road base prior to any predicted significant rain event. A significant rain event is considered to be at least ½ inch of rain or more. Temporary mulch may be hay and shall be applied at a rate of two bales per 1,000 square feet. Soil must not be visible upon completion of application, regardless of rate of application.

E. Topsoil Stockpiles:

Topsoil, removed as part of the construction, will be stockpiled on site for use in areas to be re-vegetated. The location of topsoil stockpiles must not be within 75 feet of a defined natural resource (wetland, stream, etc.), or within 75 feet of a swale or ditch.

Stockpiles shall be mulched with hay at two bales per 1,000 square feet. The area down slope from any stockpile areas will be protected by a sediment filter berm or silt fence placed directly below or down gradient from the stockpile. If the stockpile must be left for more than 30 days, the pile will be seeded with rye grass at a rate of two pounds per 1,000 square feet and mulched in accordance with this paragraph.

F. Catch Basins.

Catch basin inlets must be protected with a sediment trap until contributing areas, including paved and grassed island areas, are fully stabilized with pavement or grass. Temporary sediment traps shall be Dandy Bags or approved equal, with appropriate overflow slots. Geotextile cut to fit under the catch basin grate shall not be acceptable.

G. Maintenance of Temporary Measures:

All temporary measures described above shall be inspected weekly and before/after every significant storm event (1/2 inch of rain or greater) throughout the construction of the project. Repairs or replacements of temporary measures will be made as necessary. Once the site is stable, all temporary devices such as hay bale barriers and silt fencing will be removed.

A log shall be kept summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

3. WINTER STABILIZATION:

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with a combination of pavement, a road gravel base, 90% mature vegetation cover or riprap by November 1 then the site needs to be protected with winter stabilization.

Winter excavation and earthwork shall be completed such that no more than 1 acre of the site is denuded at any one time. Limit the exposed area to those areas in which work is expected to be under taken during the following 15 days. Exposed area shall not be so large that it cannot be mulched in one day prior to any snow event.

Areas shall be considered to be denuded until the subbase gravel is installed in roadway areas or the areas of future loam and seed have been loamed and mulched. Hay and straw mulch rate shall be a minimum of 200 lbs./1,000 s.f. (3 tons/acre) and shall be properly anchored.

The contractor must install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

1. Soil Stockpiles

Stockpiles of soil or subsoil will be mulched for over winter protection with hay or straw at twice the normal rate or at 200 lbs/1,000 s.f. (3 tons per acre) or with a four-inch layer of woodwaste erosion control mix. This will be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

Any new soil stockpile will not be placed (even covered with hay or straw) within 100 feet of any natural resources.

2. Natural Resource Protection

Any areas within 100 feet from any natural resources, if not stabilized with a minimum of 90 % mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats.

During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) will be placed between any natural resource and the disturbed area. Silt fencing may not be placed on frozen ground.

Projects crossing the natural resource shall be protected a minimum distance of 100 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

3. Mulching

Areas shall be considered denuded until loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 200 lb. per 1.000 square feet or 3 tons/acre (twice the normal accepted rate) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow will be removed down to a one-inch depth or less prior to application.

An area shall be considered stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 200 lb. per 1,000 square feet and adequately anchored, such that the ground surface is not visible though the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by either peg line, mulch netting, or wood cellulose fiber. The ground surface shall not be visible though the mulch.

After November 1th, mulch and anchoring of all bare soil shall occur at the end of each final grading work day.

4. Mulching on Slopes and Ditches

Slopes shall not be left exposed for more than 7 days unless fully mulched and anchored. Slopes within 75 feet of a natural resource shall not be left exposed for more than 48 hours. Mulching shall be applied at a rate of 300 lbs/1,000 sq ft on all slopes greater than 8%. Erosion Control mesh shall be used to anchor mulch in all drainage ways and ditches, for slopes exposed to direct winds, and for all other slopes greater that 8 %. Erosion control blanket and check dams (or permanent Rip-Rap) shall be used in lieu of mulch in all drainage ways with slopes of 8 % or more.

A six inch layer of erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

5. Seeding

Between the dates of October 15 and April 1st, loam or seed will not be required. During periods of above freezing temperatures, finished areas shall be fine graded and either protected with mulch or temporarily seeded (see table below) and mulched until such time as the final treatment can be applied. If after November 1st the exposed area has been final graded and loamed, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

TYPE	% BY WEIGHT	% PURITY	GERMINATION
Domestic Rye Grass	60	69.75	90
Perennial Rye Grass	20	28.00	85
Aroostook Rye Grass	20	28.00	85

Dormant seeding may be placed prior to the placement of mulch and fabric netting anchored with staples.

If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5lbs/1000 s.f. All areas seeded during the winter will be inspected in the spring for adequate catch. Areas not sufficiently vegetated (less than 90 % catch) shall be revegetated by replacing loam, seed and mulch.

If dormant seeding is not used, all disturbed areas shall be revegetated in the spring.

6. Trench Dewatering and Temporary Stream Diversion

Water from construction trench dewatering or temporary stream diversion will pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 100 feet of a protected natural resource.

7. Inspection and Monitoring

Maintenance measures shall be applied as needed during the entire construction season. After each rainfall, snow storm or period of thawing and runoff, the site contractor shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function.

In the spring, following the temporary/final seeding and mulching, the contractor shall inspect and repair any damages and/ or un-established spots. Established vegetative cover means a minimum of 90 % of areas vegetated with vigorous growth.

8. Standard for the timely stabilization of ditches and channels

All stone-lined ditches and channels shall be constructed and stabilized by November 1. All grass-lined ditches and channels shall be constructed and stabilized by September 1. Failure to stabilize a ditch or channel to be grass-lined by September 1, will require one of the following actions to stabilize the ditch for late fall and winter.

Install a sod lining in the ditch - Sod lining shall be installed in ditches by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

Install a stone lining in the ditch -Ditches shall be lined with stone riprap by November 1, as presented below. If necessary, the applicant will regrade the ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

9. Standard for the timely stabilization of disturbed slopes

Construct and stabilize stone-covered slopes by November 1. The applicant will Seed and mulch all slopes to be vegetated by September 1. Slopes will be considered any area having a grade greater than 15% (6H:1V). If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant will take one of the following actions to stabilize the slope for late fall and winter.

Stabilize the soil with temporary vegetation and erosion control mats -- Seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1000 square feet and apply erosion control mats over the mulched slope October 1. The applicant will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed slope by November 1, cover the slope with a layer of wood waste compost or with stone riprap as described below.

Stabilize the slope with sod -- Stabilize the disturbed slope with properly installed sod by October 1. Proper installation includes pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. Sod stabilization shall not be used late-season to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost (erosion control mix) --Place a six-inch layer of wood waste compost on the slope by November 1. Prior to placing the wood waste compost, remove any snow accumulation on the disturbed slope. Wood waste compost will not be used to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

Stabilize the slope with stone riprap -- Place a layer of stone riprap on the slope by November 1, similar to the Stone Lined Ditch the permanent erosion control section.

10. Standard for the timely stabilization of disturbed soils

Seed and mulch all disturbed soils on areas having a slope less than 15% by September 1. Failure to stabilize these soils by this date will require one of the following actions to stabilize the soil for late fall and winter.

Stabilize the soil with temporary vegetation -- Seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting by October 1. Growth of the rye will require monitoring over the following 30 days. If the rye fails to grow at least three inches or cover at least 75% of the disturbed soil before November 1, then mulch the area for over-winter protection as described below.

Stabilize the soil with sod -- Stabilize the disturbed soil with properly installed sod by October 1. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch -- Mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch by November 1. Prior to applying the mulch, remove any snow accumulation on the disturbed area. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

4. PERMANENT EROSION CONTROL:

Permanent measures will consist of the placement of culverts; culvert inlet/outlet stabilization; the construction of grass/stone lined ditches; and the re-vegetation of all areas outside the traveled way of the road, and those areas designated as stone lined ditches.

A. Culverts:

All culverts have been sized to handle the peak flows generated by a 25-year, 24-hour rain storm. The locations and sizes of the culverts are shown on the Site Plans.

The inlets and outlets of the culverts will be armored with riprap to prevent scouring. This armoring will consist of placing stone possessing a D50 of 6 inches to a depth of 18 inches to the following dimensions: width equal to twice the diameter of the culvert; length equal to three times the diameter of the culvert, unless noted otherwise.

B. Ditches:

Ditches on the project have been designed based on expected flow rates and velocities for the 25-year, 24-hour storm event and the slope of the ditch. Where water velocities are expected to exceed 3.5 feet per second, the ditch has been designed to be stone lined. Ditches with water velocities of less than 3.5 feet per second have been designed to be grass lined.

Stone Lined Ditches:

Stone lined ditches will first be lined with a non-woven filter fabric, and then lined with riprap possessing a D50 of approximately 6 inches in diameter. This means that approximately half the stones by weight will be smaller than 6 inches and half will be larger. The minimum stone size should be 1 inch with the largest stone being 9 inches in diameter. The depth of stone in the ditch should average 15 inches.

The final shape of the ditch will consist of the following dimensions: a bottom width of two feet; side slopes possessing a 3:1 horizontal to vertical; and a total depth of 2 feet.

In lieu of stone rip-rap, the ditch may be lined with a permanent erosion control blanket, such as North American Green P300 or approved equal.

Grass Lined Ditches:

Grass lined ditches will possess the same final dimensions as the stone lined ditches. The flow area of the ditch will be armored by placing a biodegradable matting or netting (such as American Excelsior Curlex Blanket or equal) in the bottom of the ditch. Placement of this material must take place after seeding. Install according to the manufacturers' recommendations.

Seeding and mulching of grass lined ditches will follow the specifications stated below for re-vegetation.

C. Re-vegetation Measures:

All areas to be permanently re-vegetated with grass will first be covered with loam and then fertilized.

Loam will be placed on all areas to be re-vegetated. Loam will be placed to a minimum depth of 4 inches. Loam will be the stockpiled topsoil, if possible.

Test the loam samples for nutrients at a proficient testing laboratory (The University of Maine provides this service). The areas with loam will then be fertilized with the recommended application rate. Lime will also be applied at a rate of 50 pounds per 1,000 square feet. Both the lime and the fertilizer will be mixed thoroughly with the soil.

All areas to be re-vegetated with permanent grass are to be seeded with the seed mix shown on the table below. This mixture will be applied at a rate of 2 pounds per 1,000 square feet.

General Lawn Areas	Chewing Fescue "Dignity"	35%
	Pennlawn Creeping Red Fescue	35%
	Perennial Rye "Tourstar" (Nutrite)	30%

Mulch will then be spread on all seeded areas at a rate of two bales per 1,000 square feet. Regardless of application rate the soil shall not be visible through the mulch.

Seed and mulch will be placed within five days of final grading of topsoil.

Seeded areas will be inspected after 30 days to determine the success of the seeding. If the ground cover is less than 90%, the area will be reseeded.

D. Critical Areas:

Slopes in excess of 15% will require the placement of a biodegradable netting or matting over the mulch and seed (if the netting has no mulch in it). If stabilization is to take place after October 1, slopes over 8% will be treated with the matting.

E. Maintenance of Permanent Measures:

All measures will be inspected weekly and before and after every significant storm event during construction, and then at least once annually to insure proper function. Any damaged areas will be repaired or replaced as necessary. Any ditches or culverts not functioning as designed will be redesigned and reconstructed according to specifications prepared by a Professional Engineer.

In any event, seeding should take place either between May 1 and June 15, or August 15 and September 1.

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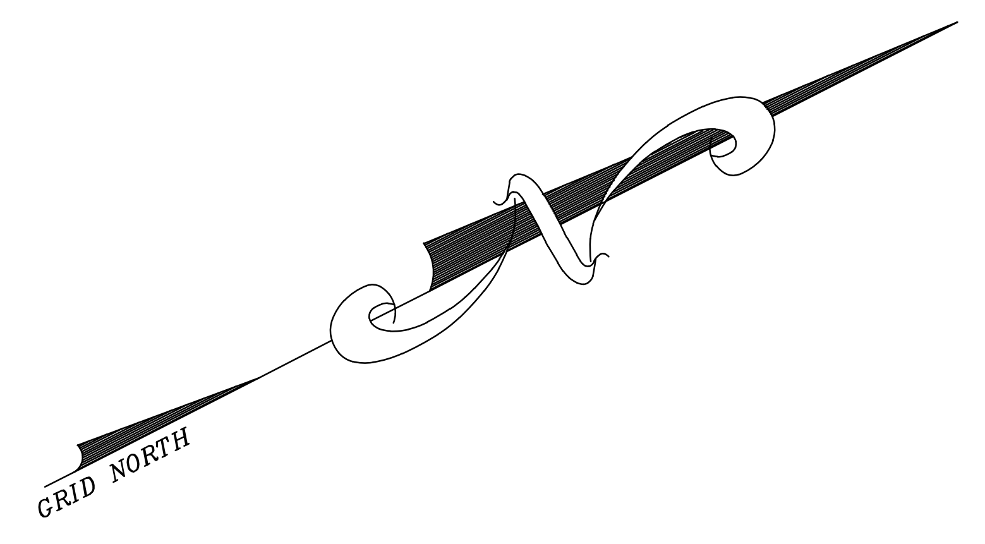
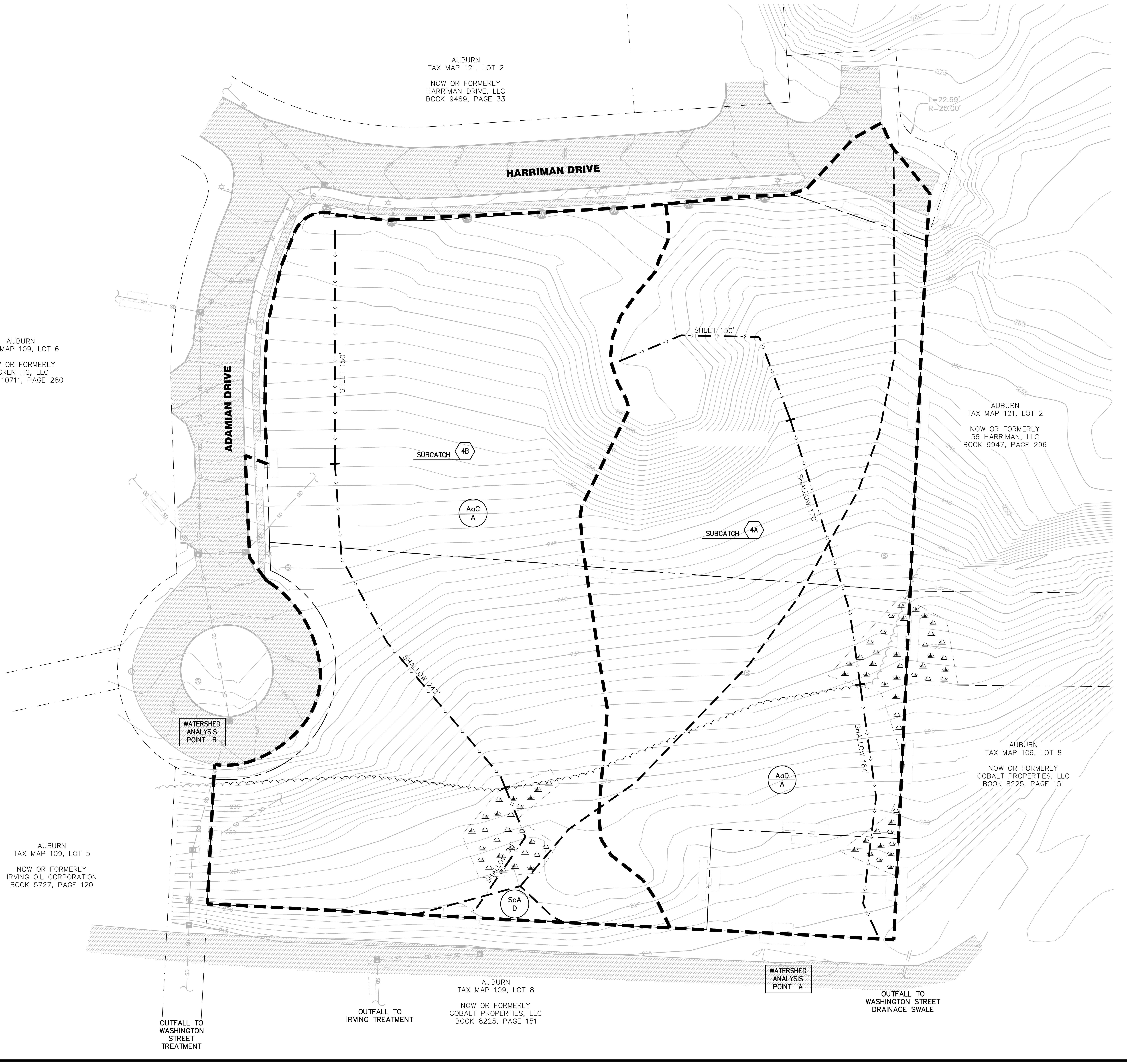
MLDC NO. 23-252 9 OF 9




AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
HARRIMAN DRIVE, LLC
BOOK 9469, PAGE 33
HARRIMAN DRIVE
L=22.69'
R=20.00'
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
ADAMIAN DRIVE
SHEET 150'
SHEET 150'
SUBCATCH 4B
SUBCATCH 4A
AaC
A
SHALLOW 76'
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
SHALLOW 242'
SHALLOW 164'
WATERSHED ANALYSIS POINT B
AaD
A
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
SHALLOW 90'
ScA
D
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
WATERSHED ANALYSIS POINT A
OUTFALL TO WASHINGTON STREET TREATMENT
OUTFALL TO IRVING TREATMENT
OUTFALL TO WASHINGTON STREET DRAINAGE SWALE

LEGEND

—— – – ——	PROPERTY BOUNDARY LINE
— — — —	ABUTTING BOUNDARY LINES
— · — · —	EASEMENT LINE
︶︶︶︶	EXISTING TREELINE (APPROX.)
—— 490 ——	EXISTING MAJOR CONTOUR LINE
————	EXISTING MINOR CONTOUR LINE
—— SD ——	EXISTING STORM DRAIN LINE (APPROX.)
▬ ▬ ▬ ▬	SUBCATCHMENT BOUNDARY
— -> — -> —	DRAINAGE FLOW PATH
— — —	SOIL BOUNDARY
SUBCATCH 1	SUBCATCHMENT NUMBER
WATERSHED ANALYSIS POINT A	WATERSHED ANALYSIS POINT
▨	EXISTING PAVED SURFACE
ψ	TYPICAL WETLAND BOUNDARY
☼	EXISTING FIRE HYDRANT
⊗	EXISTING WATER GATE
☼	EXISTING LIGHT POLE
Ⓓ	EXISTING DRAINAGE MANHOLE
Ⓤ	EXISTING UTILITY MANHOLE
▦	EXISTING CATCH BASIN
Ⓢ	EXISTING SEWER MANHOLE
-o-	EXISTING SIGN

SOILS LEGEND

AaC – ADAMS LOAMY SAND, 8 TO 15% SLOPES
AaD – ADAMS LOAMY SAND, 15 TO 30% SLOPES
ScA – SCANTIC SILT LOAM, 0 TO 3% SLOPES

PLAN REFERENCES

1. EXISTING CONDITIONS SHOWN BASED ON THE BOUNDARY SURVEY PLAN PREPARED BY MAIN–LAND DEVELOPMENT CONSULTANTS, INC. FOR 12 ADAMIAN, LLC & 24 ADAMIAN, LLC, PLAN TITLED "BOUNDARY & EXISTING CONDITIONS", DATED 2023–06–20.

NOTES

1. CITY OF AUBURN: TAX MAP 121, LOT 2, TAX MAP 109 LOT 3, & TAX MAP 109 LOT 4.
2. CONTOURS SHOWN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY MAIN–LAND DEVELOPMENT CONSULTANTS, INC. ON MAY 11, 2021 & NOVEMBER 29, 2022 AND SUPPLEMENTED WITH STATE OF MAINE LIDAR DATA DOWNLOADED FROM HTTP://COAST.NOAA.GO WITH A CONTOUR INTERVAL OF 1–FOOT. THE VERTICAL DATUM IS NAVD88 AND BASED ON GPS OBSERVATIONS NEAR THE SURVEYED PARCEL.
3. HYDROLOGIC SOIL GROUP BASED ON SOILS MAP DOWNLOADED FROM NATURAL RESOURCES CONSERVATION SERVICE AT HTTPS://WWW.NRCS.USDA.GO.
4. THE STORMWATER MANAGEMENT PLAN PACKAGE, INCLUDING CALCULATIONS AND NARRATIVE, ARE AN INTEGRAL PART OF THE STORMWATER DRAINAGE STUDY.

MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.
69 MAIN ST. LIVERMORE FALLS, MAINE
367 US ROUTE 1 FALMOUTH, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDCI.COM

PROJECT

WEST SHORE VILLAGE AT ADAMIAN DRIVE

12 ADAMIAN DRIVE
AUBURN, MAINE 04210

OWNER OF RECORD

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

MADE FOR

WEST SHORE VILLAGE, LLC

40 MINOT AVENUE,
AUBURN, MAINE 04210

DRAWING SCALE:
30 0 15 30
(IN FEET)
1 INCH = 30 FT

SUBMISSION NOTES:
SUBMISSION 1: 2024–06–04 TLB FOR REVIEW
SUBMISSION 2: 2024–06–07 MJB FOR REVIEW
SUBMISSION 3: 2024–06–21 TLB REVISED PER CITY COMMENTS

PROJ. MGR:	MJB
DRAWN BY:	TLB
CHECKED BY:	RWD
SUBMISSION NO.	3
SURVEY DATE:	2023–06–20
SUBMISSION DATE:	2024–06–21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

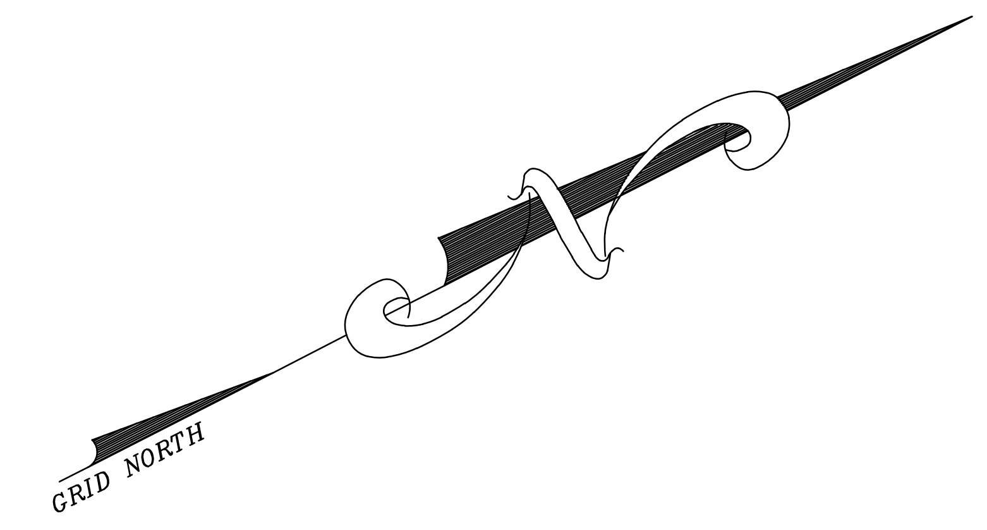
PRE–DEVELOPMENT DRAINAGE PLAN

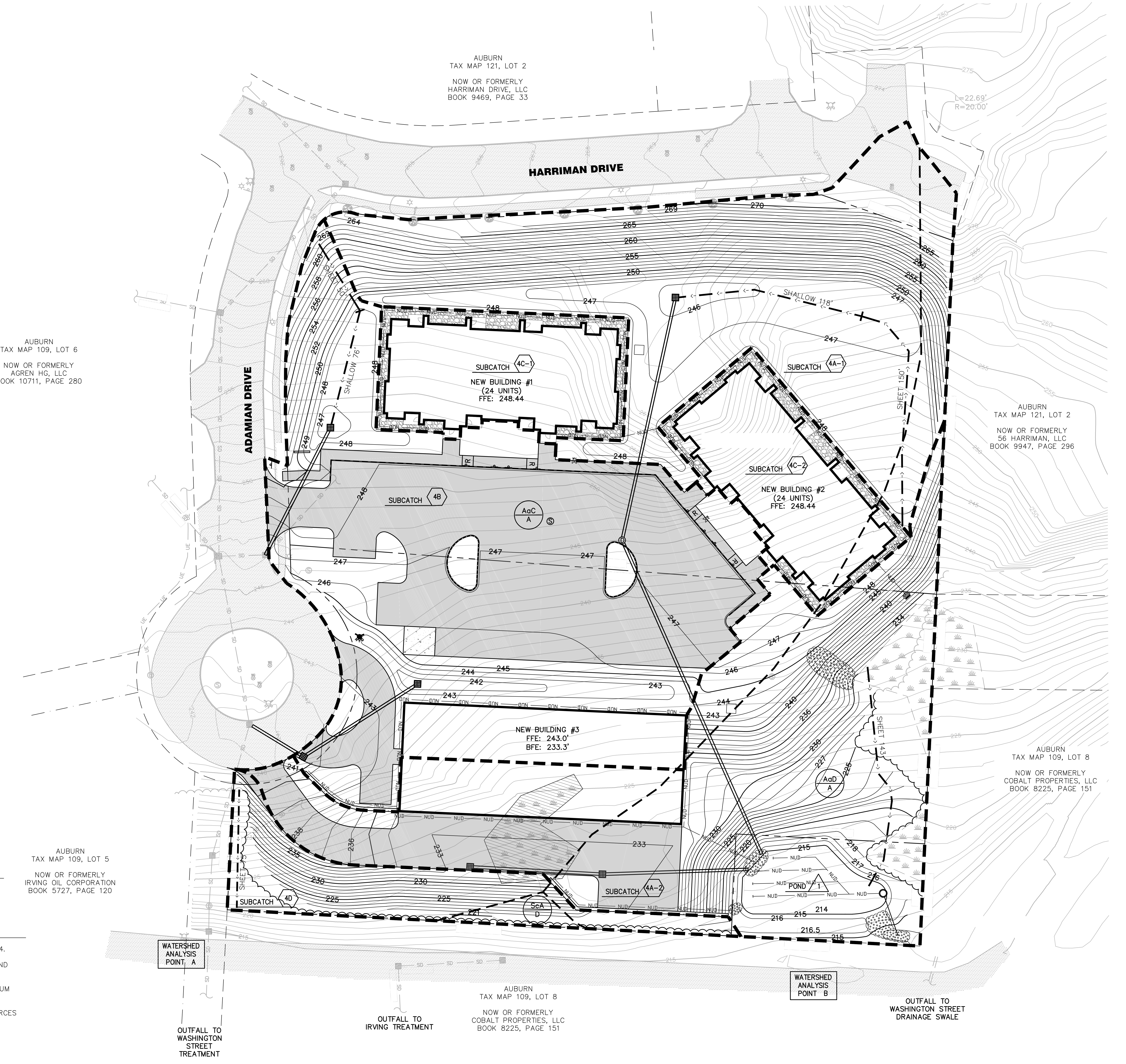
SEAL:
STATE OF MAINE
MICHAEL J. BARNES
NO. 18356
LICENSED PROFESSIONAL ENGINEER

MICHAEL J. BARNES ME PE#18356

DRAWING NO.
D1.1

MLDC NO. 23–252 1 OF 2

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HARRIMAN DRIVE
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R=20.00'
AUBURN
TAX MAP 109, LOT 6
NOW OR FORMERLY
AGREN HG, LLC
BOOK 10711, PAGE 280
ADAMIAN DRIVE
SHALLOW 76'
SHALLOW 118'
SHEET 150'
SUBCATCH 4C-1
NEW BUILDING #1
(24 UNITS)
FFE: 248.44
SUBCATCH 4A-1
SUBCATCH 4C-2
NEW BUILDING #2
(24 UNITS)
FFE: 248.44
AUBURN
TAX MAP 121, LOT 2
NOW OR FORMERLY
56 HARRIMAN, LLC
BOOK 9947, PAGE 296
SUBCATCH 4B
AaC
A
NEW BUILDING #3
FFE: 243.0'
BFE: 233.3'
AaD
A
SHEET 43'
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
BOOK 8225, PAGE 151
AUBURN
TAX MAP 109, LOT 5
NOW OR FORMERLY
IRVING OIL CORPORATION
BOOK 5727, PAGE 120
SHEET
SUBCATCH 4D
SUBCATCH 4A-2
ScA
D
POND 1
WATERSHED ANALYSIS POINT A
WATERSHED ANALYSIS POINT B
AUBURN
TAX MAP 109, LOT 8
NOW OR FORMERLY
COBALT PROPERTIES, LLC
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OUTFALL TO WASHINGTON STREET DRAINAGE SWALE

LEGEND

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— — — —	ABUTTING BOUNDARY LINES
- - - - -	EASEMENT LINE
～～～	EXISTING TREELINE (APPROX.)
～～～	NEW TREELINE
—490—	EXISTING MAJOR CONTOUR LINE
———	EXISTING MINOR CONTOUR LINE
—490—	PROPOSED MAJOR CONTOUR LINE
———	PROPOSED MINOR CONTOUR LINE
—SD—	EXISTING STORM DRAIN LINE (APPROX.)
━ ━ ━	SUBCATCHMENT BOUNDARY
— -> — -> —	DRAINAGE FLOW PATH
— — —	SOIL BOUNDARY
POND 1	POND NUMBER
SUBCATCH 1	SUBCATCHMENT NUMBER
WATERSHED ANALYSIS POINT A	WATERSHED ANALYSIS POINT
░	EXISTING PAVED SURFACE
▒	NEW PAVED SURFACE
▨	NEW CRUSHED STONE
⬚	NEW CONCRETE SLAB
～	TYPICAL WETLAND BOUNDARY
☼	EXISTING FIRE HYDRANT
⊗	EXISTING WATER GATE
☆	EXISTING LIGHT POLE
◎	EXISTING DRAINAGE MANHOLE
◉	NEW DRAINAGE MANHOLE
◎	EXISTING UTILITY MANHOLE
▩	EXISTING CATCH BASIN
■	NEW CATCH BASIN
Ⓢ	EXISTING SEWER MANHOLE
Ⓢ	NEW SEWER MANHOLE
⊥	EXISTING SIGN

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AaD – ADAMS LOAMY SAND, 15 TO 30% SLOPES
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MLDC
MAIN-LAND
Development
Consultants, Inc.
69 Main St. Livermore Falls, Maine
367 US route 1 falmouth, maine
Ph: (207) 897-6752 Fax: (207) 897-5404
www.main-landdci.com

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SURVEY DATE:	2023–06–20
SUBMISSION DATE:	2024–06–21
SUBMITTED FOR:	REVIEW

NOT FOR CONSTRUCTION

POST–DEVELOPMENT DRAINAGE PLAN

SEAL:
MICHAEL J. BARNES
NO. 18356

MICHAEL J. BARNES ME PE#18356

DRAWING NO.
D2.1
MLDC NO. 23–252 2 OF 2