

City of Biddeford
Planning Board
December 06, 2023 6:00 PM City Hall
Council Chambers, & Zoom
<https://biddeford.zoom.us/j/91621088534?pwd=Tk5yRGtlblZ0eHEzTElSdGhKb3VuQT09>
Webinar ID 916 2108 8534; Passcode 276637
AGENDA AMENDED 12-5-23

STATUS: Planning Board Meeting, December 6, 2023, 6:00 PM Council Chambers & Zoom

1. PLEDGE OF ALLEGIANCE

2. DECLARATION OF QUORUM/VOTING MEMBERS

3. ADJUSTMENTS TO THE AGENDA

4. PLANNER'S BUSINESS

- 4.A. Amendment to Table A Bottle Clubs, in the MSRD 1, 2 & 3.

5. CONSENT AGENDA

- 5.A. Approve Meeting Minutes from November 15, 2023

[PB Minutes 111523-DRAFT.pdf](#)

6. NEW BUSINESS

- 6.A. 2023.55 Discuss and take questions regarding a Greatest Practical Extent Application submitted by the City of Biddeford, to repair the retaining wall on the Riverwalk.

[Staff Review- 2023.55_2 Main Street_Riverwalk Retaining Wall.pdf](#)

[Biddeford Riverwalk Retaining Wall Project Description Memo.pdf](#)

[Biddeford Riverwalk Wall Drawings - Planning Board Submission 2023-11-06.pdf](#)

[Biddeford Riverwalk - Planning Board Application.pdf](#)

[Easement for Sea Wall-DRAFT.pdf](#)

- 6.B. 2023.36 Discuss and take questions regarding a Sketch Plan Review Application submitted by Riverbend Reserve, LLC for Homestead by the River. The proposal is to open a 3,168 square foot restaurant at Homestead by the River Campground located at 608-610 New County Road further described as Tax Map 6, Lot 35-2 in the Rural Farm District (RF) and Shoreland Overlay.-ITEM REMOVED FROM AGENDA BY APPLICANT 12-5-23.

[Preliminary Plan Review Memo 12-6-23 DCMG.pdf](#)

[Restaurant Use Narrative.pdf](#)

[Homestead by the River Revised Sketch Plan Application 11-15-23.pdf](#)

[1206 Revised Sketch Application 11-15-23.pdf](#)

- 6.C. 2023.20 Discuss and take questions regarding a Preliminary Subdivision Application request for Lisa & Travis Wing. The proposed subdivision and private road are located at 1 Moxie Lane, further described as Tax Map 77, Lot 22 in the Suburban Residential 1, Rural Farm and Shoreland Overlay Zones. The plan is to re-construct a private road for 4 residential lots, 3 of which being new lots.

[Preliminary Plan Review Memo 12-6-23 DCMG.pdf](#)

[Saucier 8-8-23.pdf](#)
[1841_Plan Set 07-11-23.pdf](#)
[Documents Binder.pdf](#)
[1841-SUB REV 10-07-23.pdf](#)
[1841-BOUNDARY REV 10-07-23.pdf](#)

7. WORKSHOP

- 7.A. 2021.42 Workshop for South Street Village, LLC for the Hidden Hills Manufactured Housing Park located at 413 South Street, further described as Tax Map 7, Lot 8. This parcel is in the Suburban Residential 1, Rural Farm and Mobile Home Overlay Districts. The purpose of a Workshop is for Board discussion, input from the general public is not permitted.

[Hidden Hills PLANNING BOARD REPORT 12-1-2022 FINAL.pdf](#)
[Hidden Hills PLANNING BOARD - Workshop Sidewalk Discussion DCMG Report 12-06-2023.pdf](#)
[2023-08-16_Hidden Hills - Sidewalk Estimate.xlsx](#)
[Manufactured housing_mobile home parks \(1\).pdf](#)
[South Street Village Letter to Biddeford \(v1\)\(GPB\)\(9.12.23\).pdf](#)
[Title 30-A, §5002_Definitions.pdf](#)
[title30-Asec4358.pdf](#)
[2021.42 Hidden Hills Final Application letter to applicant 10-2-23 \(1\).pdf](#)
[Final Application Cover Letter 9-13-23.pdf](#)
[Hidden Hills Plan Set - 11-16-2022.pdf](#)

8. OPEN PUBLIC HEARING

- 8.A. 2023.51 FIRST READING of a proposal to Re-Zone some of the R-2 & R1A lots to MSRD-2.

[Zoning Map Amendment R2 to MSRD2 12-06-23 PB MEMO.pdf](#)
[Policy Brief Rezoning to MSRD2 9-20-23.pdf](#)
[R2_MSRD2_Zoning_Change_Map.PNG](#)
[Rezoning Map Proposal 9-20-2023 .PNG](#)

- 8.B. 2023.52 FIRST READING of a Proposal to Amend Part III, Article VI, Section 58, B1, 2 & 3 entitled Subsurface Wastewater Disposal and Sludge Spreading, to correspond with the Maine State Plumbing Code.

[Septic and Sludge Ordinance Amendment 12-06-23 PB MEMO.pdf](#)
[Ordinance Amendment SEPTIC and SLUDGE 12-6-23.pdf](#)
[Brent Lawson email regarding septic inspections.pdf](#)

9. CLOSE PUBLIC HEARING

10. ADJOURN

The Board reserves the right to halt official business at 9:30 p.m. Items not heard at tonight's meeting shall be rescheduled to the next meeting of the Board. All materials pertaining to items on the agenda are available for public review at the Biddeford Planning Department, second floor, Biddeford City Hall during normal business hours.



CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board Meeting Minutes

DRAFT

Date: November 15, 2023
Time: 6:00 PM
Location: Council Chambers & Zoom

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
Quorum Present: Larry Patoine (Chair), Susan Deschambault, Roch Angers, Alexa Plotkin, & Stephen Beaudette
Staff Present: David Galbraith & Nan Whitten
Chair Patoine opened the meeting at 6:03 PM
Mr. Patoine announced that Stephen Beaudette is now a voting member
3. Adjustments to the Agenda
 - Item 9A will be presented first
 - Wing at 1 Moxie Lane will not be presented tonight.
4. Planner's Business-none
5. Consent Agenda
Approval of Meeting Minutes from 11-1-23 & 11-8-23
MOTION 6:05 PM
Plotkin-Motion-to approve Consent Agenda
Angers Second Motion passed unanimously
6. Open Public Hearing
6.A 2023.52 SECOND READING Public Hearing: Accessory Dwelling Unit (ADU)
Ordinance Amendment: City Code of Ordinances, Part III: Land Development Regulations, Article VI-Performance Standards, Section 78-Accessory Dwelling Units (ADUs). This Ordinance amendment is being proposed to comply with LD 2003.
 - Galbraith introduced amendment
 - No public commentsMOTIONS: 6:18 PM
Plotkin-Motion-To approve the amendment proposed as presented of the Part III Land Development Regulations, regarding Accessory Dwelling Units in Article IV Section 78.
Deschambault-Second Motion passed 3-1 with Anger against
Plotkin-Motion-To approve the amendments to Table A Table of Land Uses to show the amendment to the regulations.
Deschambault-Second Motion passed 3-1 with Anger against

6.B 2023.48 SECOND READING Public Hearing: Zoning Ordinance Amendment: Code of Ordinances, Part III: Land Development Regulations, Article VI-Performance Standards Section 77-Marijuana Establishments: This proposed amendment seeks to establish additional performance standards related to odor complaints and enforcement of such, including penalties/procedures for noncompliance.

- Public-Morgan Stoner, Stoner & Co. 414 Hill Street, Biddeford
- Plotkin & Deschambault asked about violation to ordinances

MOTIONS: 6:25 PM

Plotkin—Motion- To approve the proposed Amendments to the City's Code of Ordinances, Part III: Land Development Regulations, Article VI – Performance Standards, Section 77 – Marijuana Establishments, to adopt odor complaint regulations into the City's Land Use Ordinance to standardize the rules and enforcement of odor complaints at marijuana related business operating within the City, as written and proposed.

Beaudette-Second Motion passed 3-1 with Anger against

Plotkin-Motion-To approve the proposed Amendments to Code of Ordinances, Part III: Land Development Regulations, Amendment to Table A "Table of Land Uses" allow adult use marijuana retail sales within the City's I-1, I-2 and I-3 zoning districts, as a "Conditional Use", as written.

Deschambault-Second Motion passed 3-1 with Anger against

6.C 2023.51 SECOND READING Public Hearing: Density Bonus Ordinance: City Code of Ordinances, Part III: Land Development Regulations, Article V-Establishment of Zones, Section II, Notes for Table B. Amendments for Table B. This Ordinance amended would allow higher densities for low to moderate income housing.

MOTIONS: 6:29 PM

Deschambault-To approve the proposed Amendments to the City's Code of Ordinances, Part III: Land Development Regulations, Amendments to Table B "Dimensional Requirements", as written and proposed.

Plotkin-Second Motion passed unanimously

7. Close Public Hearing
8. Unfinished Business
9. New Business

9.A 2023.45 Public Meeting to review additional information regarding a Shoreland Zoning Application for the University of New England (which was tabled on 10-18-23) to construct a permanent pier with floats at 11 Hills Beach Rd. (Tax map 52, Lot 4)

- 6:09-Beaudette Motion to take item off the table
- Angers Second Motion passed unanimously
- Andrew Philippe represented application
- Cleared up questions from previous presentation
- Shared plan showing requested information
- Mr. Angers confirmed that they have gotten approvals from Saco River Corridor & Army Corp of Engineers

MOTION 6:12 PM

Plotkin-Motion-To approve the Shoreland Zoning application for the proposed permanent float and dock at located at 11 Hills Beach Rd. (Tax Map 52, Lot 4), within the Shoreland zoning district, as presented.

Angers & Beaudette Second Motion passed unanimously

10. Other Business

11. Adjourn

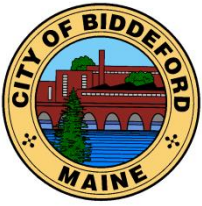
Meeting adjourned at 6:38 PM

Planning Board Chair/Vice Chair

Date

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.

DRAFT



CITY OF BIDDEFORD

Planning and Development Department

Eric Freeman
Assistant City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
eric.freeman@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: Eric Freeman, Assistant City Planner

DATE: November 28th, 2023

RE: 2023.55 Shoreland Zoning Application for the Repair of the Riverwalk Retaining Wall located at 2 Main St.

MEETING DATE: December 5th, 2023 at 6:00 PM

1. INTRODUCTION

On October 31st, 2021 an approximately 80 ft. long section of retaining wall failed located between the smokestack and MSE overhang wall failed during a period of significant rainfall and flash flooding. The failed sections of wall and backfill material, along with features immediately behind the wall including a concrete sidewalk adjacent to the overhang structure, metal railings, a flagpole, and landscaped features, collapsed into the Saco River. The failure left a steep, sloughed soil slope along the failed wall section. Based on existing site topographic information and site investigations estimating top of bedrock, the failed section of wall was up to approximately 33 ft. in height.

Shortly after retaining wall failure, emergency stabilization measures were completed to protect the sloughed slope and remaining sections of retaining walls from further damage. The stabilization measures included installing stone riprap over the sloughed soil to stabilize the slope and a stone fill access road in the Saco River to divert flow away from the sloughed slope and damaged retaining wall sections and to reduce the potential for future scour and further damage.

The project retaining walls are located along a stretch of the Biddeford-Saco Riverwalk that extends through the North Dam Mill Complex at 2 Main Street in Biddeford. The complex and the walls are located in a designated national historic district. There are/were three different retaining wall systems in the project area prior to failure. The wall systems (from upstream to downstream) include a concrete and stacked, nonmortared granite rubble wall (rubble wall), a mechanically stabilized earth (MSE) wall and non-mortared granite block wall (block wall).

The rubble wall is/was approximately 33 ft. tall with a former mill building (Boiler House building) and an approximately 250-foot tall smokestack located behind a portion of the wall. The MSE wall, which is approximately

2023.55 Shoreland Zoning Application for the repair of Riverwalk retaining wall at 2 Main St.

13 ft. tall and 55 ft. long, replaced a section of rubble wall that failed in 2006. The MSE wall is supported on the portion of rubble wall that did not fail. The Riverwalk overlook deck structure is located above and behind the MSE wall. The block wall is approximately 33 ft. tall. It is assumed that the rubble and block walls are supported directly on bedrock.

Site features behind the retaining walls include/included, the overlook structure, concrete sidewalks, a public garden, a generator and pad, light poles, and other ancillary features. A paved parking lot for the buildings at 2 Main Street is located south of the Riverwalk (further beyond the retaining walls).

Additional staff comments are outlined in detail below.

2. PROJECT DATA/INFORMATION

1.	Applicant:	City of Biddeford – Roby Fecteau 205 Main St. Biddeford, ME 207-284-9236
2.	Owner of Property:	Same as Applicant
3.	Agent:	Tom Strike P.E - Weston & Samson Engineers 150 Dow St. Tower 4, Suite 350 Manchester, NH 03101 603-263-9499
4.	Surveyor:	Same as Agent
5.	Project Location:	2 Main St.
6.	Project Tax Map #/Lot #:	N/A – See easement info
7.	Lot Size:	~0.5 acres
8.	Base Zoning:	MSRD-3, GD-1
9.	Overlay Zoning:	Historic Preservation
10.	Existing Use:	Compromised retaining wall
11.	Proposed Use:	Repaired retaining wall
12.	Approvals Required:	Shoreland Zoning, Historic Preservation
13.	Uses in the Vicinity:	Saco River, Downtown Mill District
14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	Army Corps of Engineers, Maine Department of Environmental Protection, Saco River Corridor Commission
23.	LDR Attachment A: Fees Paid:	Application Fees Paid, not escrows
25.	Planning Board Review History:	N/A

3. REVIEW PROCESS

Per City ordinance, this application is subject to Shoreland Zoning review and approval by the Planning Board.

4. Departmental Review Comments:

A. Planning:

1. Planning staff found the application to be substantively complete. Planning staff has worked extensively with Code Enforcement and Public works to advance these repairs.

B. Code Enforcement:

1. N/A – Applicant

C. Public Works:

1. No Comments

D. Engineering:

1. See attached engineering comments

E. Police:

1. No Comments

F. Fire:

1. No Comments

G. Traffic Peer Review:

1. No Comments

H. Engineering Peer Review:

1. No comments

2. STAFF REVIEW

- **APPLICATION COMPLETENESS:** The applicant has submitted a complete application, featuring all required elements as specified under Section 66-35 (Required Information for Final Plan Submissions). As part of the staff's review comments, we have identified aspects of the plan submission to be revised or clarified, which we suggest being made a condition of approval.
- **ZONING:** The proposed uses are permitted uses within the Shoreland zone, Similarly, with respect to applicable dimensional requirements, the project would comply with all applicable requirements.
- **REVIEW STANDARDS:**

2023.55 Shoreland Zoning Application for the repair of Riverwalk retaining wall at 2 Main St.

In general, staff found the application to satisfy Shoreland Zoning requirements. The major site details and relevant third party permits have been secured and locations have been finalized to ensure that the plan being reviewed the Board is what will be constructed on the face of the earth.

Maine DEP Stormwater Permit: The project does not require a Maine DEP Stormwater Permit.

WAIVERS: No waivers requested as part of this project.

3. STAFF RECOMMENDATION

Staff recommends that the Shoreland Zoning application be approved provided the applicant is able to satisfactorily answer questions raised by Board members. Therefore, Staff recommends the Planning Board approve the project plans as presented.

SAMPLE MOTIONS

A. Motion to Approve: I motion to APPROVE the Shoreland Zoning application for the proposed retaining wall repair located at 2 Main St. as presented.

B. Motion to Deny I motion to DENY the proposed retaining wall repair located at 2 Main St for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

C. Motion to Table: I motion to TABLE the Shoreland Zoning application for the proposed retaining wall repair located at 2 Main St for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

MEMORANDUM

TO: Biddeford Planning Board

FROM: Tom Strike, PE, Team Leader – Weston & Sampson Engineers, Inc.

DATE: November 6, 2023

SUBJECT: Riverwalk Retaining Wall Replacement Project – Biddeford, Maine
Project Description for Planning Board Submission

The purpose of this memorandum is to provide brief narratives of the project, permitting, wall replacement alternatives considered for the proposed Riverwalk Retaining Wall Replacement project. Weston & Sampson prepared an Alternatives Analysis Report for the project that contained detailed discussions on the project, our engineering assessments and evaluations, and wall replacement alternatives considered, and ultimately the recommended alternative.

SITE CONDITIONS PRIOR TO FAILURE

The project retaining walls are located along a stretch of the Biddeford-Saco Riverwalk that extends through the North Dam Mill Complex at 2 Main Street in Biddeford. The complex and the walls are located in a designated national historic district. There are/were three different retaining wall systems in the project area prior to failure. The wall systems (from upstream to downstream) include a concrete and stacked, non-mortared granite rubble wall (rubble wall), a mechanically stabilized earth (MSE) wall, and a stacked, non-mortared granite block wall (block wall). The walls are shown in the photo to the right.



View of site prior to wall failure (googlemaps.com)

The rubble wall is/was approximately 33 ft. tall with a former mill building (Boiler House building) and an approximately 250-foot tall smokestack located behind a portion of the wall. The MSE wall, which is approximately 13 ft. tall and 55 ft. long, replaced a section of rubble wall that failed in 2006. The MSE wall is supported on the portion of rubble wall that did not fail. The Riverwalk overlook deck structure is located above and behind the MSE wall. The block wall is approximately 33 ft. tall. It is assumed that the rubble and block walls are supported directly on bedrock.

Site features behind the retaining walls include/included, the overlook structure, concrete sidewalks, a public garden, a generator and pad, light poles, and other ancillary features. A paved parking lot for the buildings at 2 Main Street is located south of the Riverwalk (further beyond the retaining walls).

Based on our review of available information from the Maine Department of Environmental Protection (MEDEP), the project area coincides with two state-listed remediation sites (the North Dam Mill Site and Westpoint Stevens

Boiler House Site). These sites are associated with the historic release of petroleum, metals, and polycyclic aromatic hydrocarbons (PAHs) to soil and groundwater from former bulk petroleum storage at the site, former industrial land use, and occurrence of historic urban fill.

OCTOBER 31, 2021 FAILURE AND EXISTING CONDITIONS

An approximately 80 ft. long section of the rubble wall between the smokestack and the MSE wall/overhang structure failed on October 31, 2021 during a period of significant rainfall in which the Biddeford area received approximately 6.5-inches of rain. The failed sections of wall and backfill material, along with features immediately behind the wall including a concrete sidewalk adjacent to the overhang structure, metal railings, a flagpole, and landscaped features, collapsed into the Saco River. The failure left a steep, sloughed soil slope along the failed wall section. Based on existing site topographic information and site investigations estimating top of bedrock, the failed section of wall was up to approximately 33 ft. in height.



Failed Wall and Damaged MSE Wall

Failure of the retaining wall caused significant damage to the adjacent MSE wall and overlook structure. Damage included loss of backfill and geogrid support behind the MSE wall, displacement and reduced support of wall blocks that were structurally connected to the failed wall, and outward displacement of MSE wall support base (remnants of the 2006 wall failure). The failure also caused significant damage to an approximately 25-foot long section of the rubble wall immediately upstream of the failure. Additionally, outward bulging is present in the section of block wall immediately adjacent to the downstream side of the MSE wall.

EMERGENCY STABILIZATION MEASURES

Shortly after retaining wall failure, emergency stabilization measures were completed to protect the sloughed slope and remaining sections of retaining walls from further damage. The stabilization measures included installing stone riprap over the sloughed soil to stabilize the slope and a stone fill access road in the Saco River to divert flow away from the sloughed slope and damaged retaining wall sections and to reduce the potential for future scour and further damage. The access road will also provide a working platform for permanent repair.

The access road is approximately 500 ft long, extending from downstream of the Main Street bridge to just upstream of the smokestack. Based on the top of the bedrock surface along the Saco River (in vicinity of the collapsed section of wall) and top of access road elevations, the access road is approximately 10 to 11 ft. tall.



Emergency Repair Measure

RETAINING WALL REPLACEMENT ALTERNATIVES ANALYSIS

General

In evaluating alternatives for restoring the failed retaining wall, we considered constructing a new wall in the failure area and repairing the adjacent damaged walls. However, given the level of repair necessary and unknowns of the full extent of damage sustained, it was our professional opinion that repair was not a practical or reliable approach, and was not further considered for the following reasons:

- The MSE wall foundation and bottom blocks have showed signs of displacement that affects the stability of the entire wall. Additionally, the overall wall stability is compromised due to the significant loss of backfill volume and geogrid support. The foundation cannot be repaired, backfill cannot be reliably replaced, and geogrid support cannot be regained without wall and Riverwalk overlook removal.
- The section of rubble wall immediately upstream of the failed wall has displaced backwards and is at risk of failure due to loss of soil support behind the wall and due to the likelihood that rubble blocks shifted as a result of wall failure. Given the age and condition of this section of wall, repair of this section was not considered feasible.
- The bulging section of the block wall adjacent to the downstream side of the MSE wall does not appear at imminent risk of failure. The bulging, however, is an indication of block movement and displacement of soil. Continued bulging could cause damage to features behind the wall and contribute to future failure. Removal of the bulged wall section was recommended as it would serve as a reasonable and appropriate point to tie into with a new wall type system.

Based on the forgoing, we determined that the failed and damaged sections should be replaced with a new retaining wall that extends from the bulged area downstream to approximately 25 ft. beyond upstream end of the Boiler House building. The total length of replacement is 212 ft. and the total height of the wall is 33 ft.

We considered three retaining wall replacement alternatives. These alternatives included an MSE wall, a cast-in-place concrete wall, and a soldier pile and lagging wall. Although each of these walls were technically feasible replacement alternatives (along most of the proposed replacement alignment), each had their own advantages and disadvantages that were considered, including the volume of environmentally contaminated material that would need to be handled and disposed. Each of the alternatives would be constructed along similar alignments and along the approximate alignments of the failed and damaged walls.

Not replacing the failed wall with a new wall, but with an armored riprap slope, was not considered a viable alternative since such a slope would contribute to additional damage to adjacent walls and likely failure by allowing forces imposed by river currents to act on these walls. Additionally, such a slope would not fit the historical characteristics of this area, which is in a designated national historic district.

MSE Wall Replacement Alternative

MSE walls include the wall blocks, backfill soils, and geogrids that are connected to the blocks and extend into the backfill soils (reinforced soil zone). The bottom blocks are typically supported on a crushed stone or concrete leveling pad and the geogrids typically extend up to about 70 percent of the wall height behind the blocks (up to 23 ft. for this wall replacement). The precast concrete wall blocks come in various patterns and facing options.

Replacement with an MSE wall was considered feasible along much of the proposed replacement alignment, however, construction of this type of wall is not possible in front of the smokestack or Boiler House building since

excavation and placement of the geogrids in these areas are not possible. Wall replacement would, therefore, need to terminate on the downstream side of the smokestack, leaving the structurally deficient section of rubble wall in place. It was considered to be possible, however, to complete some localized temporary repairs to this section of wall. Such repairs were not considered a permanent solution and was not recommended since the City prefers a long-term repair approach.

Advantages and disadvantages of the MSE wall alternative are presented below:

Advantages

- Construction can be completed using conventional earthwork equipment.
- The blocks can be faced to aesthetically blend with existing historic features.
- The lowest cost wall system (**not including excavation, disposal, and replacement costs**).

Disadvantages

- Significant excavation volumes needed to install geogrids and construct safe excavation slopes, which would result in excessive contaminated soil handling and disposal costs.
- The inability to extend a MSE wall beyond the smokestack, leaving structurally deficient wall sections in-place.

Cast-in-Place Concrete Wall Replacement Alternative

Cast-in-place concrete walls are comprised of a stem wall and a foundation that includes a heel and a toe that extend to the back and front of the stem wall, respectively. Taller concrete walls, such as the intended wall replacement, oftentimes include a concrete buttress/batter along the back of the stem wall to help resist forces imposed by backfill soils and overlying features. The foundation would be supported directly on the competent bedrock surface. The foundation width is generally 2/3rds the wall height behind the wall, or approximately 22 ft. for this wall replacement. Facing can be applied to the front of the wall.

As with the MSE wall alternative, replacement with a cast-in-place concrete retaining wall is feasible along much of the proposed replacement alignment, however, construction of this type of wall is not possible in front of the smokestack or Boiler House building due required excavations and wall configuration. This leads to the same concerns discussed above for the MSE wall.

Advantages and disadvantages of the cast-in-place alternative are presented below:

Advantages

- Construction can be completed using conventional earthwork equipment.
- No specialty contractor required.
- The front of the wall can be faced to aesthetically blend with existing historic features.

Disadvantages

- Significant excavation volumes needed to construct the wall and safe excavation slopes, which would result in excessive contaminated soil handling and disposal costs.
- The inability to extend a cast-in-place concrete wall beyond the smokestack, leaving structurally deficient wall sections in-place.

- Longest construction duration due to concrete placement and curing times.
- The highest cost wall system (**excluding excavation, disposal, and replacement costs**).

Soldier Pile and Lagging Wall Replacement Alternative

Soldier pile and lagging walls are comprised of vertical steel piles (H-piles) with horizontal lagging between the piles. The H-piles are driven through overburden soil and/or drilled into bedrock at regular intervals along the wall alignment. The lagging for this project would consist of precast concrete panels. The lagging resists loading imposed by the backfill soils and overlying features and transfers the loading to the H-piles. Due to the height of the wall needed for this project, additional lateral support needs to be attained by rows of tiebacks installed into the backfill soils and the bedrock surface. Large excavations are not required for soldier pile and lagging walls.

The use of a soldier pile and lagging wall is feasible along the entire wall replacement alignment, including in front of the smokestack and Boiler House building. The piles would be installed in holes drilled into the bedrock surface (rock sockets) at approximate 8-foot spacing. Pre-cast concrete panels come in numerous patterns and color tones.

Advantages and disadvantages of the cast-in-place alternative are presented below:

Advantages

- Can be installed over the full length of the recommended wall replacement area.
- Relatively small amount of excavation needed behind the wall that would result in significantly less volume of soil requiring handling and disposal and less disturbance to features behind the replacement areas as compared with the MSE and cast-in-place concrete wall alternatives.
- Numerous pre-cast concrete panel options so that the wall can aesthetically blend with existing historic features.

Disadvantages

- Installed by specialty contractor.
- Cost of wall system (**excluding excavation and disposal costs**) higher than MSE wall alternative, but less than cast-in-place concrete wall alternative.
- The total cost of wall system **including excavation and disposal costs** is less than both the MSE and cast-in-place wall alternatives.

SELECTED WALL REPLACEMENT ALTERNATIVE

Based on the advantages and disadvantages and the estimated construction costs, Weston & Sampson recommended to the City to select the soldier pile and lagging wall as the wall replacement alternative. This alternative will provide a consistent, aesthetically pleasing wall along the entire recommended wall replacement alignment at the lowest cost, while having the least impact to existing contaminated soils. Based on our recommendation, the City selected the soldier pile and lagging alternative and we have progressed our design to the permitting stage.

PERMITTING

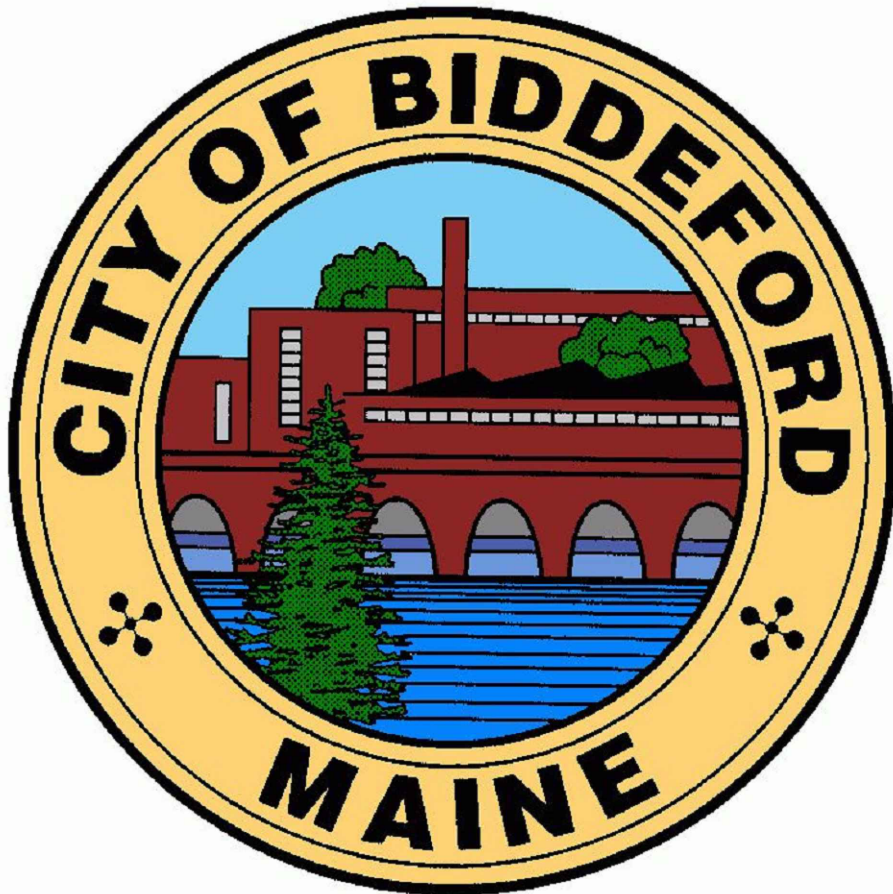
We have discussed this project and our design with staff from the Maine Department of Environmental Protection (MEDEP), Federal Emergency Management Agency (FEMA), Army Corps of Engineers (ACOE), and the Maine

Historic and Preservation Commission (MHPC). We received approval for the construction of the soldier pile and lagging wall from the MHPC on July 6, 2022 and submitted our Saco River Corridor Commission Application on November 1, 2023. We plan to submit our MEDEP permit application in December 2023.

Based on conversations with ACOE, a permit application above the permit submitted at the time of the emergency stabilization measures is not required.

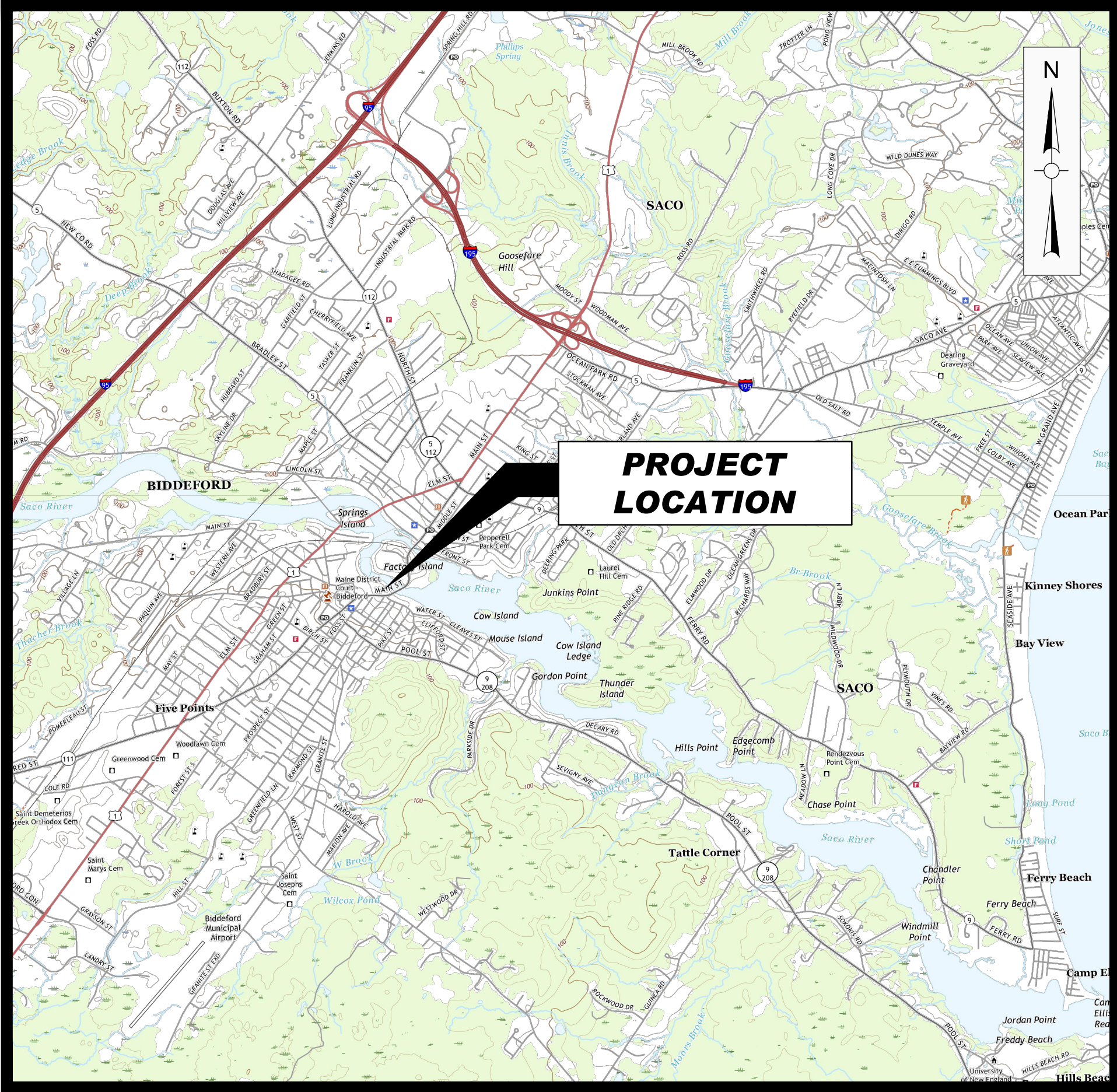
P:\ME\Biddeford ME\ENG21-1343 Riverwalk Retaining Walls\Permits\Planning Board\Biddeford Riverwalk Retaining Wall Project Description Memo.docx

CITY OF BIDDEFORD, MAINE

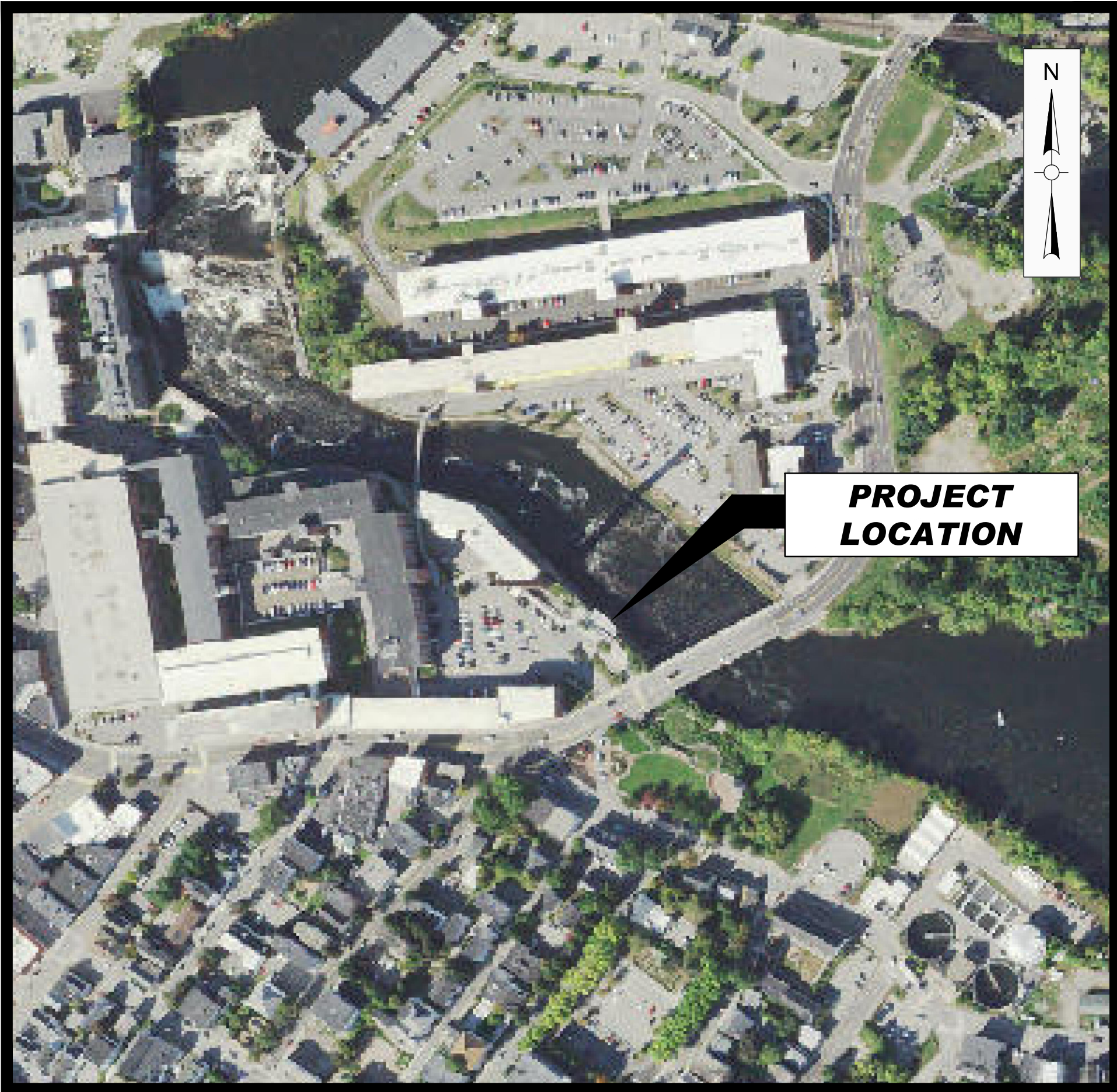


RIVERWALK RETAINING WALL REPLACEMENT

BIDDEFORD, MAINE



LOCUS
SCALE: 1" = 3000'



AERIAL
SCALE: 1" = 200'

DRAWING INDEX (PROGRESS SET)

- | | |
|------|---|
| G-0 | TITLE SHEET |
| G-1 | GENERAL NOTES |
| C-1 | EXISTING CONDITIONS PLAN (NORTH) |
| C-2 | EXISTING CONDITIONS PLAN (SOUTH) |
| C-3 | ALIGNMENT LAYOUT AND SURVEY CONTROL PLAN (NOT INCLUDED) |
| C-4 | SITE PREPARATION AND DEMOLITION PLAN |
| C-5 | SITE IMPROVEMENTS AND MATERIALS PLAN |
| C-6 | GRADING AND DRAINAGE PLAN |
| C-7 | FINAL CONDITIONS SITE PLAN |
| S-1 | PROPOSED FOUNDATION PLAN AND NOTES |
| S-2 | PROPOSED FOUNDATION PLAN AND DETAILS |
| S-3 | SOLDIER PILE AND LAGGING RETAINING WALL SECTION AND ELEVATION |
| S-4 | SOLDIER PILE AND LAGGING RETAINING WALL DETAILS |
| S-5 | RETURN WALL SECTION AND ELEVATION |
| S-6 | RETURN WALL DETAILS |
| S-7 | END WALL CONNECTION DETAILS |
| S-8 | OVERLOOK STRUCTURE DETAILS (1 OF 3) |
| S-9 | OVERLOOK STRUCTURE DETAILS (2 OF 3) |
| S-10 | OVERLOOK STRUCTURE DETAILS (3 OF 3) |

NOVEMBER 2023

FOR REVIEW ONLY
NOT FOR CONSTRUCTION



Know what's below.
Call before you dig.



**YORK COUNTY,
MAINE**

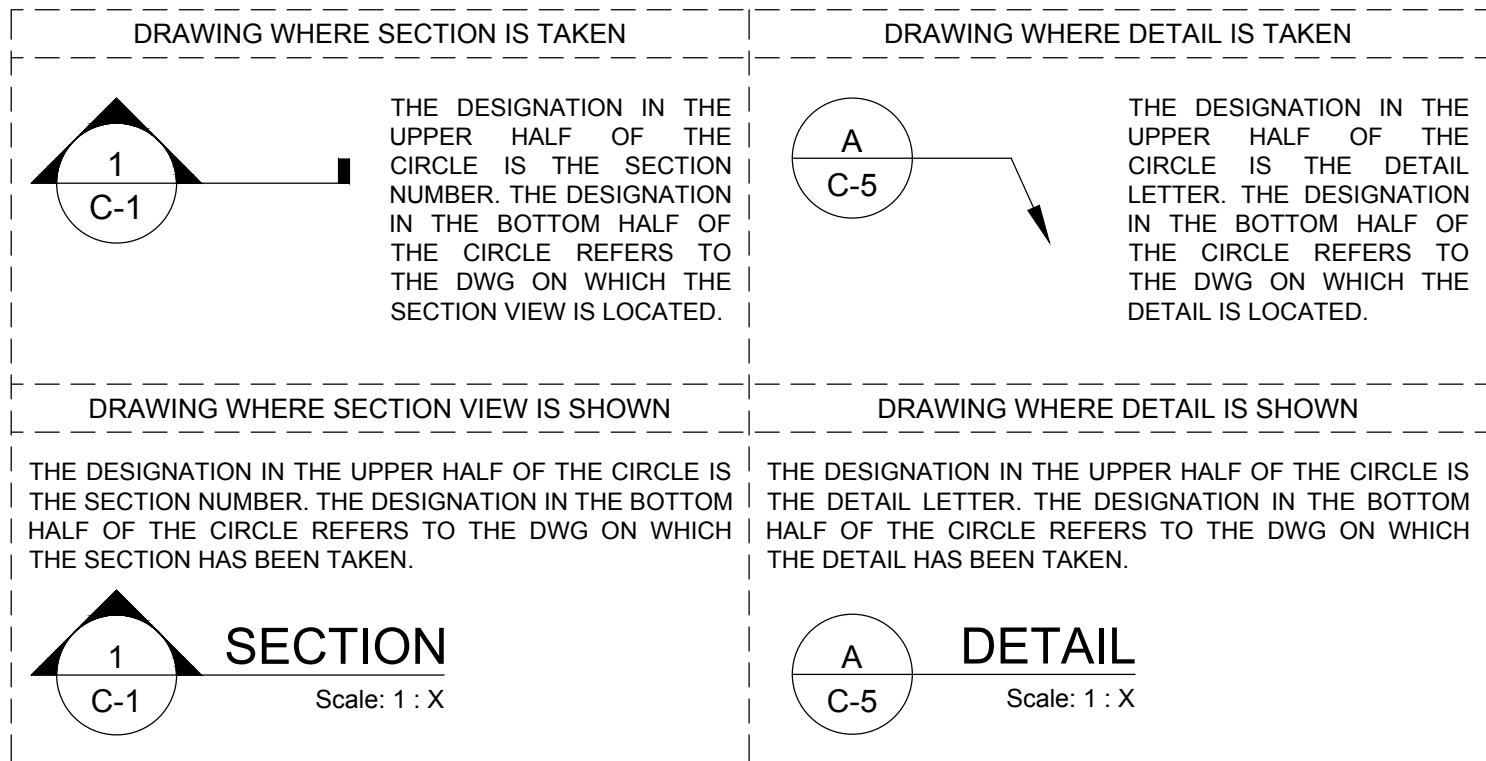
Weston & SampsonSM

Weston & Sampson Engineers, Inc.
150 Dow Street, Tower 4, Suite 350
Manchester, NH 03101

\\west01\local\WSE\Projects\Maine\Bideford\MEENG21-1343\Riverwalk Retaining Wall\CAD\DWG Production Drawings\Title Sheet (DWG)001_LNOTES.dwg

METHOD OF SECTIONING AND DETAILING

SECTION VIEWS AND DETAILS ARE CROSS-REFERENCED BETWEEN DRAWINGS AS FOLLOWS:



PLAN REFERENCES

1. TOPOGRAPHICAL INFORMATION IS BASED UPON A SITE SURVEY AND EXISTING CONDITIONS MAPPING PERFORMED BY DOUCET SURVEY, LLC.
2. SITE ELEVATIONS, GRID COORDINATES, AND BASELINE ALIGNMENT DATA WERE ESTABLISHED RELATIVE TO PRE-EXISTING CONTROL POINTS PROVIDED BY THE CITY OF BIDDEFORD. ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88). GEOGRAPHIC COORDINATES ARE EXPRESSED AS NORTHINGS AND EASTINGS RELATIVE TO THE MAINE COORDINATE SYSTEM OF 2000, WEST ZONE, WHICH IS A TRANSVERSE MERCATOR PROJECTION OF THE NORTH AMERICAN DATUM OF 1983 (NAD83).
3. DIMENSIONS INDICATED ARE IN EITHER DECIMAL FEET OR FEET-AND-INCHES.
4. 'UPSTREAM' IS ORIENTED DUE WEST OF THE SITE. 'DOWNSTREAM' IS ORIENTED DUE EAST OF THE SITE.
5. 'RIGHT' SHALL MEAN THE SIDE TO THE RIGHT OF THE PROJECT BASELINE WHEN LOOKING IN THE DIRECTION OF INCREASING STATIONING. 'LEFT' SHALL MEAN THE SIDE OPPOSITE THE RIGHT.
6. 'OWNER' SHALL MEAN THE CITY OF BIDDEFORD, MAINE.
7. 'ENGINEER' SHALL MEAN WESTON & SAMPSON ENGINEERS, INC.
8. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF SUCH UTILITIES, PROTECTING ALL EXISTING UTILITIES, AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES.

NOTES TO BIDDERS

1. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID. CONTRACTOR AND SUB-CONTRACTOR SHALL BE FAMILIAR WITH ALL DRAWINGS AND SPECIFICATIONS PRIOR TO COMMENCING THE CONSTRUCTION.
2. SCANNED COPIES OF AVAILABLE DRAWINGS ASSOCIATED WITH PRIOR SITE CONSTRUCTION WORKS ARE ACCESSIBLE TO PROSPECTIVE BIDDERS UPON REQUEST. THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE ACCURACY AND VALIDITY OF SUCH INFORMATION OR FOR THE CONTRACTOR'S INTERPRETATIONS OF SUCH INFORMATION.
3. COORDINATE ALL WORK WITH THE OWNER AND THE OWNER'S ENGINEER.
4. DELINEATE THE LIMIT OF WORK IN THE FIELD PRIOR TO THE START OF CONSTRUCTION ACTIVITY.
5. PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR NECESSARY TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. NOTIFY DIG-SAFE AT LEAST 72-HOURS PRIOR TO EXCAVATING AT ANY LOCATION. PROVIDE A COPY OF THE DIG-SAFE PROJECT REFERENCE NUMBER(S) TO THE OWNER AND ENGINEER PRIOR TO EXCAVATION.
7. SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
8. CHECK AND VERIFY ALL EXISTING CONDITIONS AND RELEVANT DIMENSIONS AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING MATERIALS.
9. REVIEW ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
10. VERIFY THE LOCATION, SIZE, SERVICE, AND INVERT ELEVATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES AS IT MAY PERTAIN TO THE WORK PRIOR TO CONSTRUCTION. COORDINATE ACTIVITY WITH RESPECTIVE UTILITY COMPANIES, EMERGENCY SERVICES, AND THE OWNER.
11. ESTABLISH AND MAINTAIN SURVEY CONTROL DURING PERFORMANCE OF THE WORK AND TO VERIFY EXISTING ELEVATIONS.
12. THOROUGHLY REVIEW AND UNDERSTAND THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF ERRORS, OMISSIONS, AND / OR DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING MATERIALS.
13. UNLESS INDICATED IN THE CONTRACT DOCUMENTS OR INSTRUCTED OTHERWISE, MATCH EXISTING GRADES, WALL WIDTHS, ETC. AT ALL LOCATIONS WHERE NEW WORK MEETS EXISTING CONDITIONS.
14. RESTORE ALL DISTURBED AREAS TO THE ORIGINAL CONDITIONS OR AS SHOWN ON THE CONTRACT DRAWINGS. ALL CONSTRUCTION WASTE MATERIAL AND BARRICADES SHALL BE REMOVED FROM ALL AREAS WHEN CONSTRUCTED IS COMPLETED.
15. RAISE OR LOWER ALL EXISTING UTILITY VALVES, COVERS, GRATES, ETC. AS NEEDED TO BE FLUSH WITH THE FINAL GRADE UNLESS STATED OTHERWISE.
16. PROTECT FROM DAMAGE ALL TREES AND EXISTING SITE FEATURES WITHIN THE WORK AREA THAT ARE TO REMAIN.
17. PROPERLY MAINTAIN AND INSPECT ALL TEMPORARY EROSION CONTROL MEASURES UNTIL THE SITE IS PERMANENTLY STABILIZED.
18. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7:00 AM TO 5:00 PM MONDAY THROUGH FRIDAY. HAULING SHALL ALSO BE PROHIBITED ON STATE AND FEDERAL HOLIDAYS.
19. KEEP ALL STREETS, PARKING LOTS, AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE ACCEPTABLE METHODS AND MATERIALS TO MAINTAIN ADEQUATE DUST CONTROL THROUGHOUT CONSTRUCTION.
20. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT CONTRACTOR EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
21. MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
22. RECORD ANY ALTERATIONS TO THESE DRAWINGS ON "AS-BUILT" DRAWINGS.

1. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT CONTRACTOR EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
2. MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
3. RECORD ANY ALTERATIONS TO THESE DRAWINGS ON "AS-BUILT" DRAWINGS.

CONFLICTS AND DISCREPANCIES

1. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
2. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION, AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING. ITEMS ENCOUNTERED IN AREAS OF EXCAVATION THAT ARE NOT INDICATED ON THE DRAWINGS, BUT ARE VISIBLE ON SURFACE, SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.

SITE SAFETY / SECURITY, UTILIZATION, AND LIMIT OF WORK

1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SITE SECURITY AND SAFETY AND SHALL PREVENT ACCESS BY THE PUBLIC TO THE SITE AT ALL TIMES DURING THE WORK, INCLUDING DURING NON-WORKING HOURS. THESE DRAWINGS DO NOT INDICATE ALL COMPONENTS WHICH MAY BE NECESSARY FOR CONSTRUCTION SAFETY.
2. THE CONTRACTOR SHALL CONFINE THE OPERATIONS AND ACTIVITIES FOR CONSTRUCTION PURPOSES WITHIN THE LIMIT OF WORK INDICATED IN THESE DRAWINGS.
3. SPECIFIC AREAS WITHIN THE LIMIT OF WORK ARE INDICATED IN THESE DRAWINGS AS AREAS AVAILABLE FOR CONTRACTOR USE DURING THE WORK. HOWEVER, NO ADDITIONAL CONSIDERATION OR PAYMENT WILL BE MADE FOR TEMPORARY SIGNAGE, FENCING, EROSION / SEDIMENTATION CONTROLS, EARTHWORK, GROUND STABILIZATION, ETC. IN THESE AREAS THAT MAY BE REQUIRED OR NECESSARY TO FULFILL THE CONTRACTOR'S NEEDS.
4. IF THE CONTRACTOR IDENTIFIES ADDITIONAL STAGING AREAS ON THE OWNER'S PROPERTY, THE CONTRACTOR SHALL MAKE A WRITTEN REQUEST TO THE OWNER AND ENGINEER DESCRIBING THE NEED, LOCATION, AND EXTENTS OF THE PROPOSED AREA. NO GUARANTEE IS MADE THAT ADDITIONAL STAGING AREAS WILL BE MADE AVAILABLE.

SITE PROTECTION AND RESTORATION

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS AS SHOWN AND AS REQUIRED BY THE PROJECT PERMITS. SUCH CONTROLS SHALL REMAIN IN-PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN RESTORED TO THEIR ORIGINAL CONDITION AND AS REQUIRED BY THE PROJECT PERMITS. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EROSION AND SEDIMENT CONTROLS UPON COMPLETION OF THE WORK AND APPROVAL BY APPLICABLE PERMITTING AUTHORITIES.
2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
3. THE CONTRACTOR TO MEET ALL OF THE STATE OF MAINE DEP AND CITY OF BIDDEFORD WETLAND ORDINANCE REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
4. ALL STAGING AND STOCKPILE AREAS SHALL BE PROTECTED FROM EROSION AND CONTAMINATION INTO ANY RESOURCE AREA BY EROSION AND SEDIMENT CONTROLS. EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE.
5. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT. THE CONTRACTOR SHALL REMOVE ALL SOIL, SEDIMENT, DEBRIS, AND FOREIGN MATERIAL FROM ALL DRAINAGE STRUCTURES, INCLUDING BUT NOT LIMITED TO, DRAINAGE INLETS, MANHOLES AND CATCH BASINS WITHIN THE LIMIT OF WORK AND DRAINAGE STRUCTURES OUTSIDE THE LIMIT OF WORK THAT ARE IMPACTED BY THE WORK FOR THE ENTIRE DURATION OF CONSTRUCTION.
6. ALL CATCH BASINS AND DRAIN GRATES WITHIN THE LIMIT OF WORK SHALL BE PROTECTED WITH FILTER FABRIC DURING THE ENTIRE DURATION OF CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY THE OWNER.
8. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC / PRIVATE ROADS.
9. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE LIMIT OF WORK SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
10. ALL PAVEMENT DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND AS SHOWN IN THESE DRAWINGS.
11. THE CONTRACTOR SHALL MAINTAIN SIDE SLOPES AND DRAINAGE SWALES DURING CONSTRUCTION TO PREVENT PONDING AND EROSION.
12. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN. NO GUYS SHALL BE ATTACHED TO ANY TREE TO REMAIN.

SITE CLEARING AND DEMOLITION

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL, THE CONTRACTOR SHALL ALLOW ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED FROM THE SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE SALVAGED OR REUSED, ALL SITE FEATURES CALLED FOR REMOVAL SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC. AND TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO ADDITIONAL COST TO THE OWNER.
4. DURING EARTHWORK OPERATIONS, THE CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY. AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
5. THE STORAGE OF SALVAGED MATERIALS AWAITING REUSE OR RELOCATION / REPLACEMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF SUCH MATERIALS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

LAYOUT AND MATERIALS

1. THE CONTRACTOR SHALL COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY THIS CONTRACT. THE CONTRACTOR SHALL SET, PROTECT, AND REPLACE REFERENCE STAKES AS NECESSARY OR AS REQUIRED ENSURE THE THE REQUIRED LINES, GRADES, AND LOCATIONS ARE HELD THROUGHOUT THE ENTIRE PROJECT DURATION.
2. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS".
3. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION.
4. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS / RAMPS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE STATE OF MAINE RULES AND REGULATIONS FOR HANDICAP ACCESS AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE REQUIRED.
5. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
6. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF INSTALLATION, ANY REQUIRED ADJUSTMENTS TO THE LAYOUT SHALL BE UNDERTAKEN AS REQUIRED, AT NO ADDITIONAL COST TO THE OWNER.
7. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES AND SHALL BE TREATED WITH AN RS-1 TACK COAT AT POINT OF CONNECTION. ALL PATHWAY WIDTHS SHALL BE AS NOTED ON THE LAYOUT AND MATERIALS PLAN.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES
9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.

EXCAVATION, GRADING, AND DRAINAGE

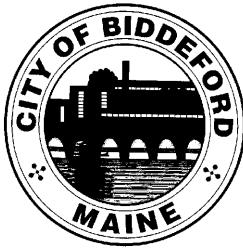
1. ALL WORK RELATING TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND / OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF BIDDEFORD. THE CONTRACTOR SHALL NOTIFY THE BIDDEFORD DEPARTMENT OF PUBLIC WORKS PRIOR TO PERFORMING ANY PAVEMENT CUTS OR MAKING CONNECTIONS TO ANY CITY UTILITIES.
2. THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE BIDDEFORD DEPARTMENT OF PUBLIC WORKS PRIOR TO PERFORMING ANY EXCAVATION WITHIN PUBLIC RIGHT OF WAY.
3. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED GRAVEL SURFACE MEETS EXISTING SURFACE, BLEND THE TWO PAVEMENTS AND ELIMINATE ROUGH SPOTS AND ABRUPT GRADE CHANGES AND MEET LINE AND GRADE OF EXISTING CONDITIONS WITH NEW IMPROVEMENTS.
4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
5. THE CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
6. ALL NEW WALKWAYS / ACCESS PATHS / RAMPS MUST CONFORM TO CURRENT ADA REGULATIONS: WALKWAYS / RAMPS SHALL MAINTAIN A CROSS PITCH OF NOT MORE THAN ONE AND A HALF PERCENT (1.5%) AND THE RUNNING SLOPE (PARALLEL TO THE DIRECTION OF TRAVEL) BETWEEN 1% MIN. AND 5% MAX.
7. MINIMUM SLOPE ON ALL WALKWAYS SHALL BE 1:100 OR 1% TO PROVIDE POSITIVE DRAINAGE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
8. ALL UTILITY GRATES, COVERS, OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES.
9. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS, PUBLIC / PRIVATE STREETS AND WORK AREAS. THE CONTRACTOR SHALL CLEAN OUT BASINS REGULARLY AND AT THE END OF THE PROJECT.
10. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
11. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, THE CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
12. NO FILL SHALL CONTAIN HAZARDOUS MATERIAL.
13. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER AND WITHOUT GIVING PRIOR NOTIFICATION TO THE ENGINEER.
14. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND PROPOSED GRADES TO EXISTING CONDITIONS.
15. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED UNLESS OTHERWISE NOTED.
16. ALL PRECAST STRUCTURES SHALL BE RATED FOR H-20 LOADING.

CONSTRUCTION MEANS, METHODS, AND SEQUENCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, EXCEPT WHERE SPECIFIED IN THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEQUENCE OF THE WORK, EXCEPT WHERE SPECIFIED IN THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURFACE WATER AND GROUNDWATER CONTROL DURING THE WORK. TEMPORARY WATER CONTROL MEASURES SHALL BE, AT A MINIMUM, AS REQUIRED BY THE CONTRACT DOCUMENTS AND APPLICABLE PERMIT CONDITIONS.
4. WHERE NO INDICATION IS MADE IN THESE DRAWINGS, THE SLOPE OF AN EXCAVATION SHALL BE DETERMINED BASED ON THE CONTRACTOR'S MEANS AND METHODS. IN ALL CASES, EXCAVATIONS MUST BE IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS, REGARDLESS OF DEPICTIONS SHOWN IN THESE DRAWINGS.

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT



Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023

Drawn By: TJB

Reviewed By: ---

Approved By: ---

W&S Project No.: ENG21-1343

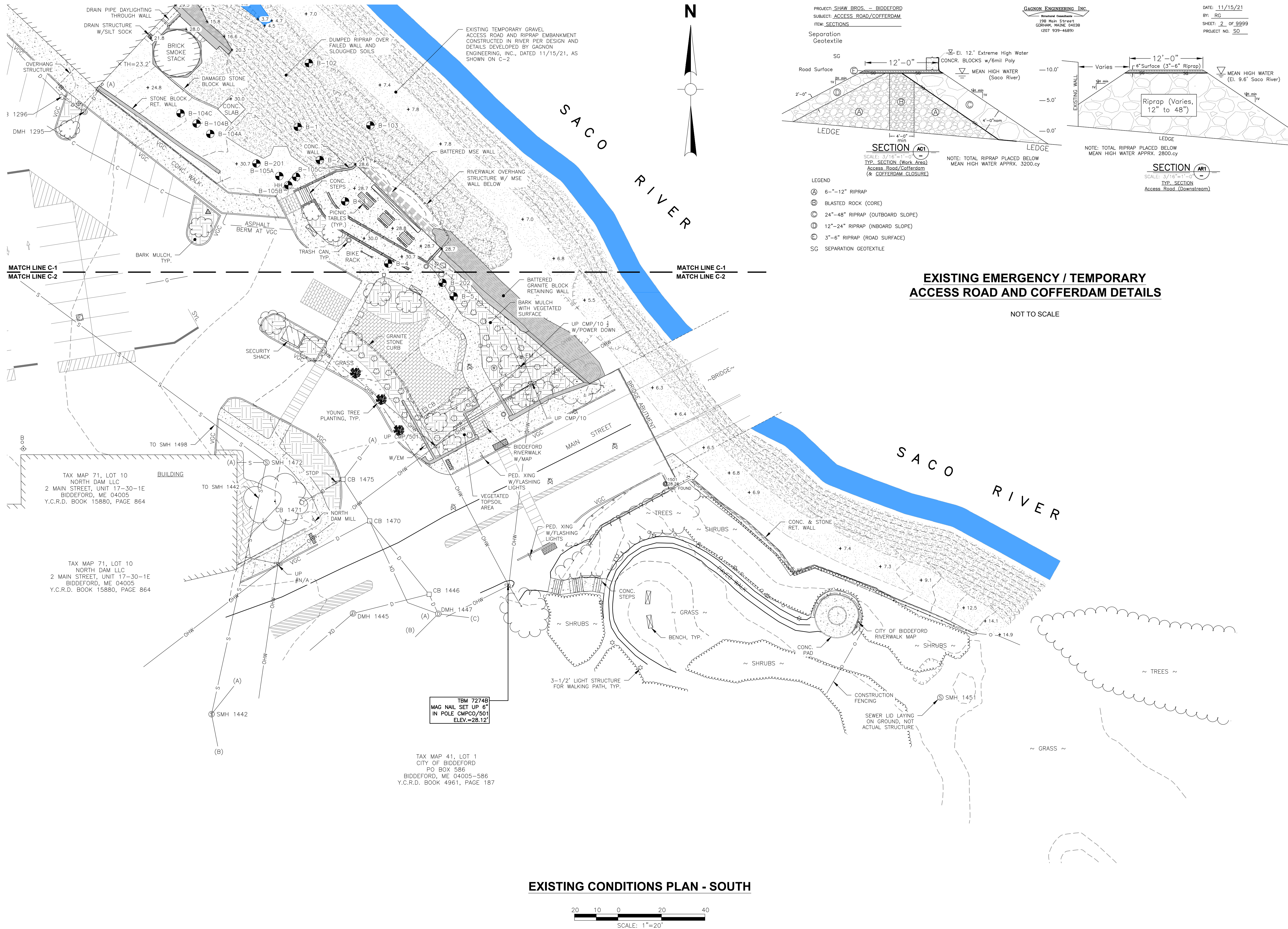
W&S File No.: ---

Drawing Title:

GENERAL
NOTES

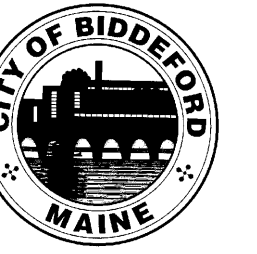
Sheet Number:

G-1



Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023
Drawn By: TJB
Reviewed By: TJS
Approved By: ---

W&S Project No.: ENG21-1343
W&S File No.: ---

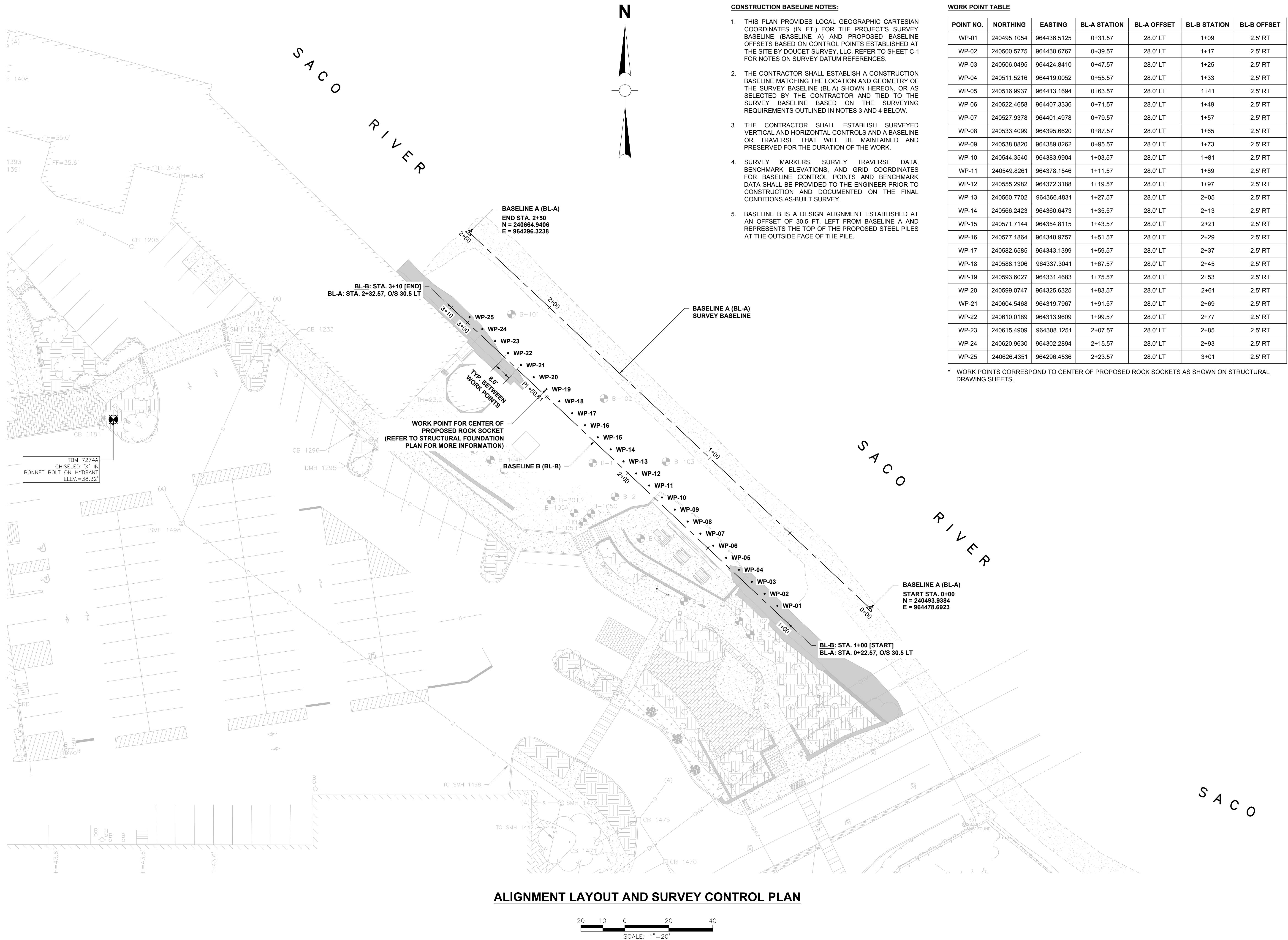
Drawing Title:

EXISTING
CONDITIONS
PLAN
(SOUTH)

Sheet Number:

C-2

\\weston\local\WSE\Projects\BIDDEFORD\ME\ENG21-1343 Riverwalk Retaining Wall\CAD\DWG\Production Drawings\Sheet DWG\COL_BLC-2.dwg



CONSTRUCTION BASELINE NOTES:

- THIS PLAN PROVIDES LOCAL GEOGRAPHIC CARTESIAN COORDINATES (IN FT.) FOR THE PROJECT'S SURVEY BASELINE (BASELINE A) AND PROPOSED BASELINE OFFSETS BASED ON CONTROL POINTS ESTABLISHED AT THE SITE BY DOUCET SURVEY, LLC. REFER TO SHEET C-1 FOR NOTES ON SURVEY DATUM REFERENCES.
- THE CONTRACTOR SHALL ESTABLISH A CONSTRUCTION BASELINE MATCHING THE LOCATION AND GEOMETRY OF THE SURVEY BASELINE (BL-A) SHOWN HEREON, OR AS SELECTED BY THE CONTRACTOR AND TIED TO THE SURVEY BASELINE BASED ON THE SURVEYING REQUIREMENTS OUTLINED IN NOTES 3 AND 4 BELOW.
- THE CONTRACTOR SHALL ESTABLISH SURVEYED VERTICAL AND HORIZONTAL CONTROLS AND A BASELINE OR TRAVERSE THAT WILL BE MAINTAINED AND PRESERVED FOR THE DURATION OF THE WORK.
- SURVEY MARKERS, SURVEY TRAVERSE DATA, BENCHMARK ELEVATIONS, AND GRID COORDINATES FOR BASELINE CONTROL POINTS AND BENCHMARK DATA SHALL BE PROVIDED TO THE ENGINEER PRIOR TO CONSTRUCTION AND DOCUMENTED ON THE FINAL CONDITIONS AS-BUILT SURVEY.
- BASLINE B IS A DESIGN ALIGNMENT ESTABLISHED AT AN OFFSET OF 30.5 FT. LEFT FROM BASELINE A AND REPRESENTS THE TOP OF THE PROPOSED STEEL PILES AT THE OUTSIDE FACE OF THE PILE.

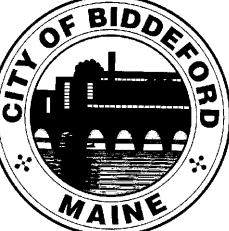
WORK POINT TABLE

POINT NO.	NORTHING	EASTING	BL-A STATION	BL-A OFFSET	BL-B STATION	BL-B OFFSET
WP-01	240495.1054	964436.5125	0+31.57	28.0' LT	1+09	2.5' RT
WP-02	240500.5775	964430.6767	0+39.57	28.0' LT	1+17	2.5' RT
WP-03	240506.0495	964424.8410	0+47.57	28.0' LT	1+25	2.5' RT
WP-04	240511.5216	964419.0052	0+55.57	28.0' LT	1+33	2.5' RT
WP-05	240516.9937	964413.1694	0+63.57	28.0' LT	1+41	2.5' RT
WP-06	240522.4658	964407.3336	0+71.57	28.0' LT	1+49	2.5' RT
WP-07	240527.9378	964401.4978	0+79.57	28.0' LT	1+57	2.5' RT
WP-08	240533.4099	964395.6620	0+87.57	28.0' LT	1+65	2.5' RT
WP-09	240538.8820	964389.8262	0+95.57	28.0' LT	1+73	2.5' RT
WP-10	240544.3540	964383.9904	1+03.57	28.0' LT	1+81	2.5' RT
WP-11	240549.8261	964378.1546	1+11.57	28.0' LT	1+89	2.5' RT
WP-12	240555.2982	964372.3188	1+19.57	28.0' LT	1+97	2.5' RT
WP-13	240560.7702	964366.4831	1+27.57	28.0' LT	2+05	2.5' RT
WP-14	240566.2423	964360.6473	1+35.57	28.0' LT	2+13	2.5' RT
WP-15	240571.7144	964354.8115	1+43.57	28.0' LT	2+21	2.5' RT
WP-16	240577.1864	964348.9757	1+51.57	28.0' LT	2+29	2.5' RT
WP-17	240582.6585	964343.1399	1+59.57	28.0' LT	2+37	2.5' RT
WP-18	240588.1306	964337.3041	1+67.57	28.0' LT	2+45	2.5' RT
WP-19	240593.6027	964331.4683	1+75.57	28.0' LT	2+53	2.5' RT
WP-20	240599.0747	964325.6325	1+83.57	28.0' LT	2+61	2.5' RT
WP-21	240604.5468	964319.7967	1+91.57	28.0' LT	2+69	2.5' RT
WP-22	240610.0189	964313.9609	1+99.57	28.0' LT	2+77	2.5' RT
WP-23	240615.4909	964308.1251	2+07.57	28.0' LT	2+85	2.5' RT
WP-24	240620.9630	964302.2894	2+15.57	28.0' LT	2+93	2.5' RT
WP-25	240626.4351	964296.4536	2+23.57	28.0' LT	3+01	2.5' RT

* WORK POINTS CORRESPOND TO CENTER OF PROPOSED ROCK SOCKETS AS SHOWN ON STRUCTURAL DRAWING SHEETS.

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023
Drawn By: TJB
Reviewed By: TJS
Approved By: ---

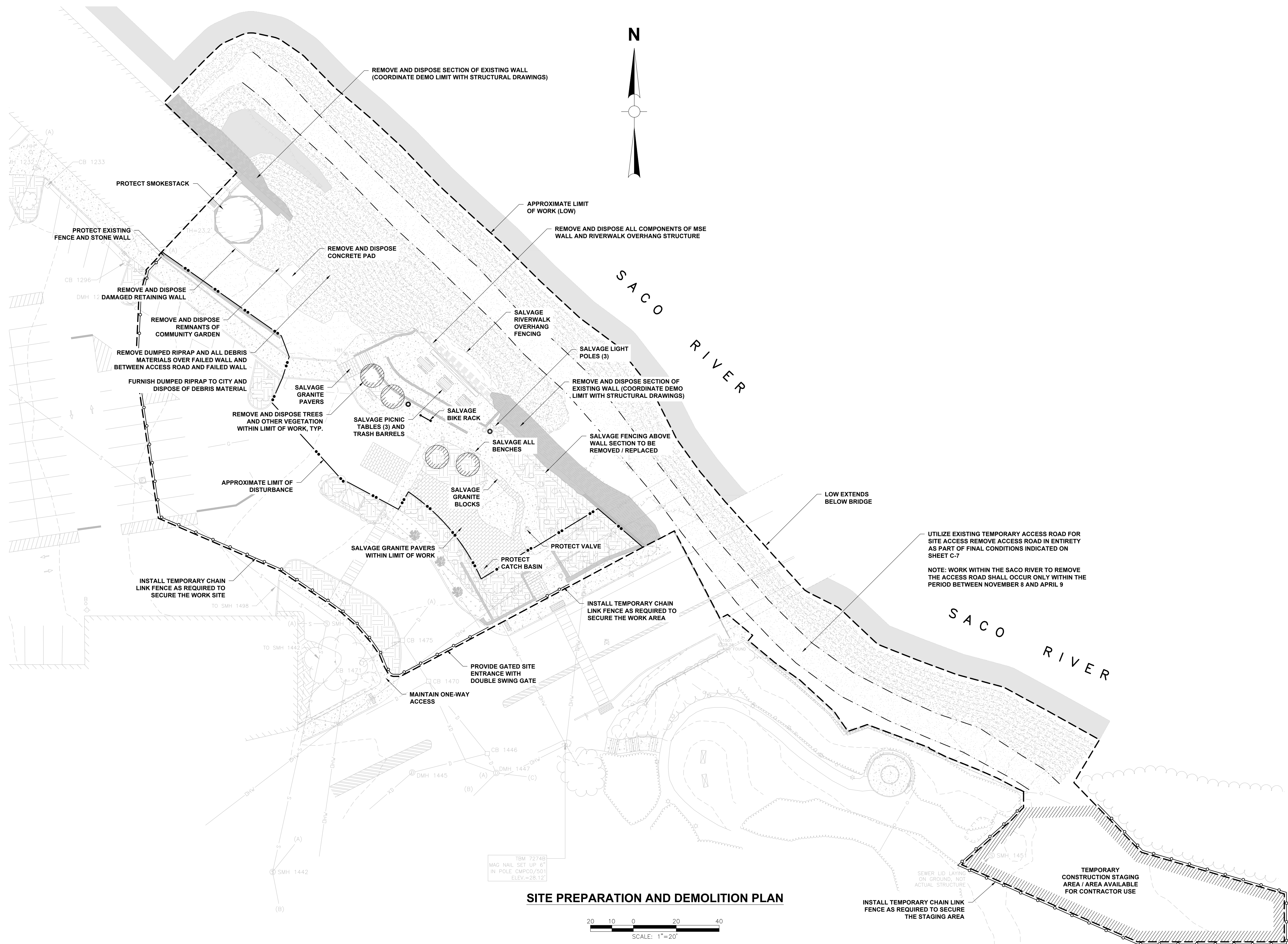
W&S Project No.: ENG21-1343
W&S File No.: ---

Drawing Title:

ALIGNMENT
LAYOUT AND
SURVEY
CONTROL
PLAN

Sheet Number:

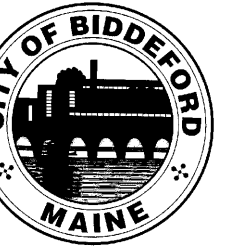
C-3



SITE PREPARATION AND DEMOLITION PLAN



Project:

CITY OF BIDDEFORD,
MAINERIVERWALK RETAINING
WALL REPLACEMENTWeston & SampsonSM

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

[illegible]

Seal:

ssued For:

SRCC REVIEW

Scale:

Date: 11-01-2023

Drawn By: TJB

Reviewed By: TJS

Approved By: ---

W&S Project No.: ENG21-1343

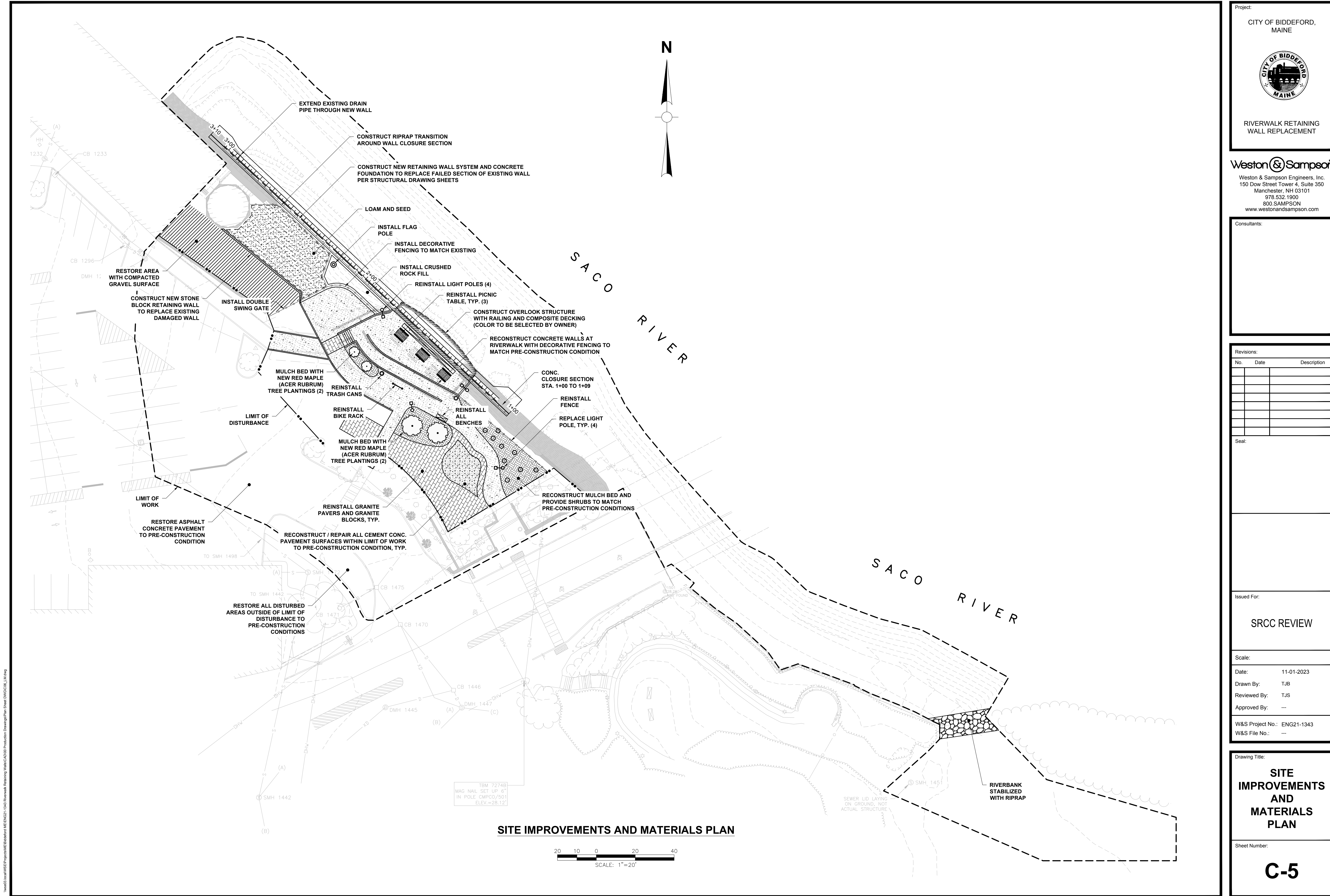
W&S File No.: ---

Drawing Title:

SITE PREPARATION AND DEMOLITION PLAN

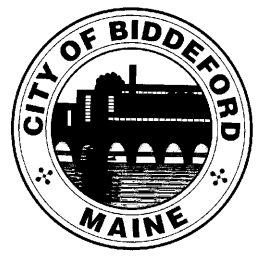
Sheet Number:

C-4



Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson
Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023
Drawn By: TJB
Reviewed By: TJS
Approved By: ---

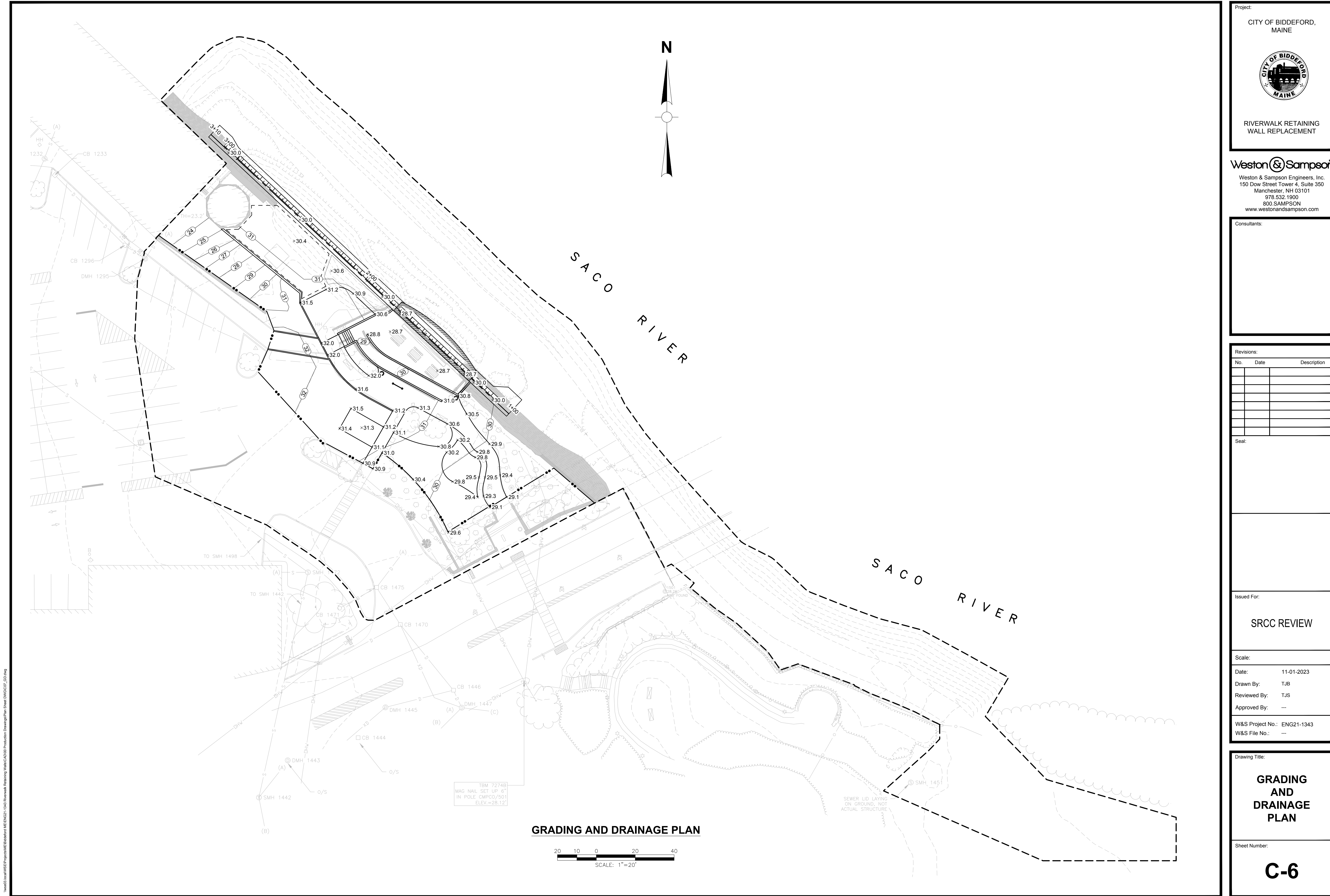
W&S Project No.: ENG21-1343
W&S File No.: ---

Drawing Title:

**SITE
IMPROVEMENTS
AND
MATERIALS
PLAN**

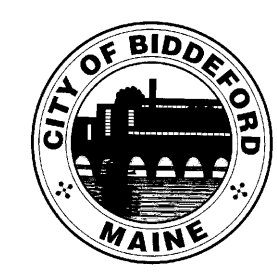
Sheet Number:

C-5



Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson
Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:		
No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023
Drawn By: TJB
Reviewed By: TJS
Approved By: ---

W&S Project No.: ENG21-1343
W&S File No.: ---

Drawing Title:

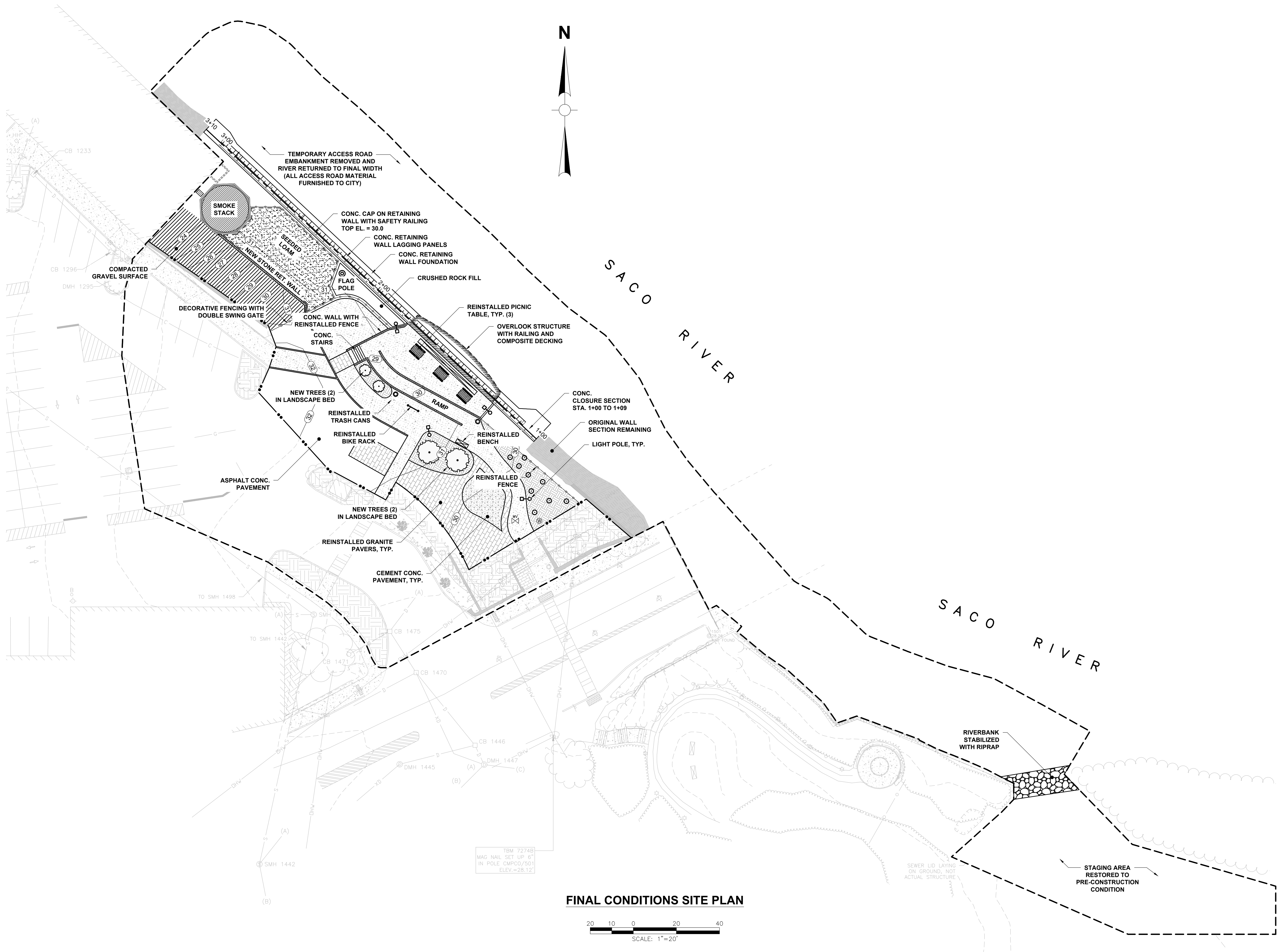
**GRADING
AND
DRAINAGE
PLAN**

Sheet Number:

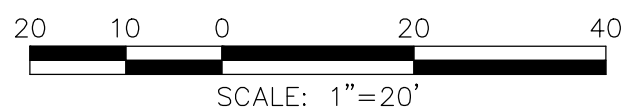
C-6

\\westonandsampson.com\Projects\BIDDEFORD\ME\ENG21-1343 Riverwalk Retaining Wall\CADD\Production Drawings\Title Sheet (DWG)\C6_C.dwg

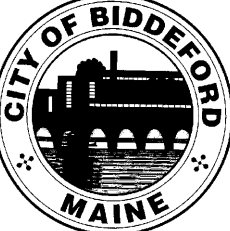
I:\w001\local\WSE\Projects\ME\Biddford\ME\ENG21-1343 Riverwalk Retaining Wall\CAD\DWG\Production Drawings\Plan Sheet DWG\COLL_P.C.dwg



FINAL CONDITIONS SITE PLAN



Project:
CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson
Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:		
No.	Date	Description

Seal:

Issued For:

SRCC REVIEW

Scale:

Date: 11-01-2023

Drawn By: TJB

Reviewed By: TJS

Approved By: ---

W&S Project No.: ENG21-1343

W&S File No.: ---

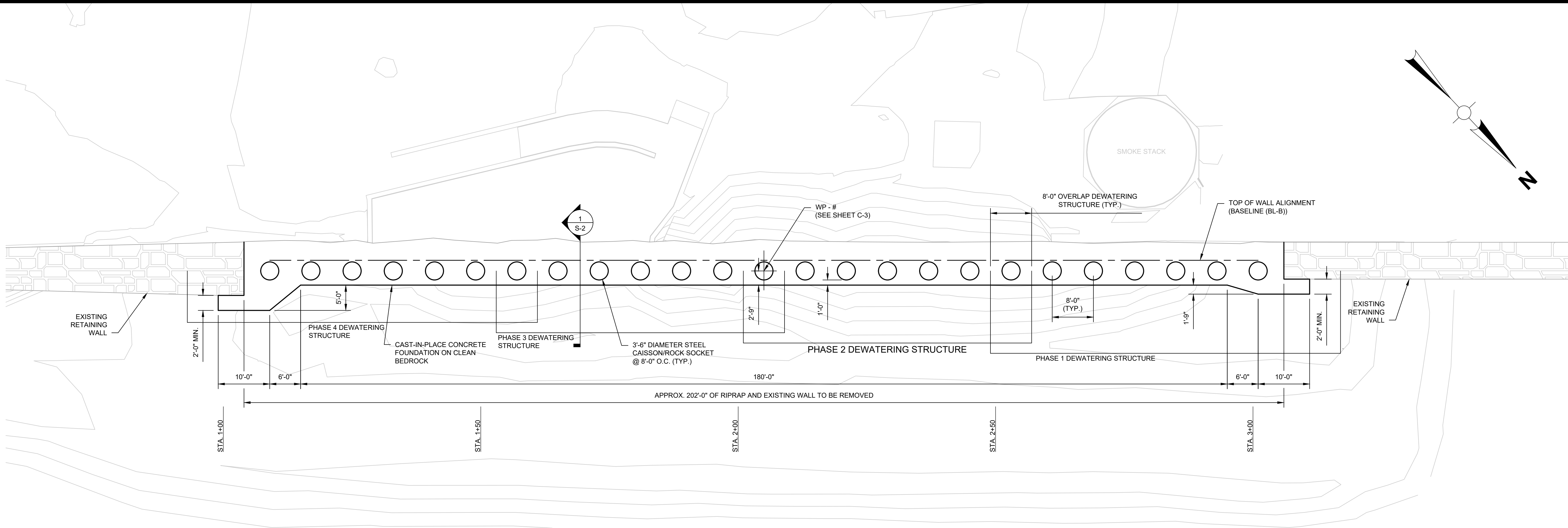
Drawing Title:

FINAL
CONDITIONS
SITE PLAN

Sheet Number:

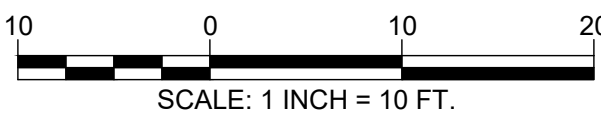
C-7

\\west01\local\WSE\Projects\BIDDEFORD\BIDDEFORD\ENG\21-1343\Riverwalk\Retaining Wall\CA2020\Production Drawings\Plan Sheet DWG21-1343 STRUCT.FINAL.DWG - 8/10/2022.dwg



RETAINING WALL FOUNDATION PLAN

SCALE: 1" = 10'-0"



NOTES:

1. ROCK SOCKET STATIONS AND OFFSETS CAN BE FOUND ON SHEET C-3.
2. 4 CONSTRUCTION PHASES EACH APPROXIMATELY 50 FT LONG. EACH CONSTRUCTION PHASE OVERLAPS 8 FT WITH EACH CONJOINING PHASE.

STRUCTURAL NOTES:

1.0 - GENERAL

- 1.01 THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SAFETY AND MAKING SURE ALL CONSTRUCTION RELATED WORK IS IN ACCORDANCE WITH CURRENT OSHA SAFETY STANDARDS.
- 1.02 EXISTING DETAIL, PROPERTY LINE AND SURVEY BASELINE INFORMATION SHOWN ON THE PLANS WERE DEVELOPED FROM SURVEY INFORMATION PREPARED BY DOUCET SURVEY, INC.
- 1.03 THE CONTRACTOR IS RESPONSIBLE FOR CHECKING, COORDINATING AND VERIFYING ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY DISCREPANCY TO THE ENGINEER AS A REQUEST FOR INFORMATION (RFI) BEFORE PROCEEDING WITH WORK.
- 1.04 THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING IN THE FIELD THE EXISTENCE AND LOCATION OF OVERHEAD, BURIED AND/OR EMBEDDED UTILITIES, AND DETERMINING LOCATIONS OF ALL EMBEDDED MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS AFFECTED BY THE WORK OF THIS CONTRACT.
- 1.05 ALL WORK SHALL BE IN ACCORDANCE WITH PERMITS PLANS SUBMITTED AND WITHIN REQUIREMENTS OF ANY PERMIT ISSUED BY THE PLANS TO PERFORM ANY CONSTRUCTION SHOWN IN THESE DOCUMENTS.
- 1.06 THE CONTRACTOR SHALL DESIGN AND PROVIDE ALL REQUIRED TEMPORARY SUPPORT OF EXCAVATION SYSTEMS REQUIRED DURING CONSTRUCTION. DESIGN SHOULD BE IN CONFORMANCE WITH TEMPORARY SUPPORT OF EXCAVATION SPECIFICATIONS. THE DESIGNER FOR THIS SYSTEM SHOULD TAKE INTO ACCOUNT ADJACENT STRUCTURE, WHEN DESIGNING THE TEMPORARY SUPPORT SYSTEM. IF TIE BACKS ARE WARRANTED, PROPERTY LINES SHOWN ON THE SURVEY SHOULD BE TAKEN INTO ACCOUNT TO AVOID AFFECTING NEIGHBORING PROPERTIES. DESIGN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE.

2.0 DESIGN LOADS

- 2.01 LOADS, LOADING CONDITIONS AND LOAD COMBINATIONS SHALL BE IN ACCORDANCE WITH THE LATEST BOCA CODE AND AMERICAN ASSOCIATION OF STATE AND HIGHWAY TRANSPORTATION OFFICIALS - 9TH EDITION - LRFD BRIDGE DESIGN SPECIFICATIONS.
- 2.02 LIVE LOAD
PEDESTRIAN LOADED AREAS: 100 PSF (OVERLOOK STRUCTURE)
- 2.03 SEISMIC LOAD
Ss: 0.217
21 0.069

3.0 FOUNDATIONS:

- 3.01 REFER TO GEOTECHNICAL REPORT FOR BORING INFORMATION.
- 3.02 FOUNDATIONS MAY BE ALTERED DURING CONSTRUCTION, WITH REVIEW AND APPROVAL OF THE ENGINEER, TO AVOID UNFORESEEN OBSTRUCTIONS OR CONFLICTS. THE CONTRACTOR SHALL SUBMIT PLANS AND DETAILS OF THE REQUEST FOR REVIEW AND APPROVAL, PRIOR TO PERFORMING ANY WORK.
- 3.03 ALL UNSUITABLE MATERIAL SHALL BE REMOVED WITHIN THE LIMITS OF THE STRUCTURE AS DIRECTED BY THE GEOTECHNICAL REPORT AND HAZARDOUS MATERIALS REPORT.
- 3.04 STEEL PILES SHALL BE BATTERED AS SHOWN IN THE CONTRACT DRAWINGS AND WITHIN TOLERANCE AS SHOWN IN THE SPECIFICATIONS.
- 3.05 REFER TO THE EARTHWORK AND DEWATERING SPECIFICATION FOR ALL FOR ALL FOUNDATION CONSTRUCTION REQUIREMENTS.

4.0 EXISTING DRAWINGS

- 4.01 ALL DIMENSIONS, ELEVATIONS, AND DETAILS SHOWN FOR THE EXISTING STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY DEMOLITION OR RECONSTRUCTION.
- 4.02 ANY DISCREPANCIES ON THESE CONTRACT DRAWINGS, WITH REGARD TO FIELD DIMENSIONS OR CONDITIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF WORK.
- 4.03 CONFIGURATIONS OF EXISTING STRUCTURES AS SHOWN IN THE CONTRACT DRAWINGS ARE TAKEN FROM THE SURVEY AND EXISTING PLANS ENTITLED:
(A) WRIGHT-PIERCE
BIDDEFORD RIVERWALK
PHASE I
(B) GAGNON ENGINEERING INC.
SHAW BROS. - BIDDEFORD
ACCESS ROAD/COFFERDAM
DATED 11/15/21

5.0 CAST-IN-PLACE CONCRETE:

CONCRETE REINFORCEMENT

- 5.01 REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS:

MODIFICATION	CONDITION	#4 BARS	#5 BARS
1.	NONE	21"	26"
2.	12" OF CONCRETE BELOW BAR	29"	36"
3.	COATED BARS, COVER <3db, OR CLEAR SPACING<8db	31"	39"
4.	COATED BARS, ALL OTHER CASES	25"	31"
5.	CONDITION 2, AND 3	35"	44"
6.	CONDITION 2, AND 4	34"	43"

*FOR LARGER REINFORCEMENT REFER TO AASHTO 9TH EDITION REQUIREMENTS

- 5.02 REINFORCING PROTECTION PER ELEMENT SHALL BE AS FOLLOWS:

UNCOATED BARS:	FOUNDATION
EPOXY COATED BARS:	PRECAST CONCRETE PANELS, CAST-IN-PLACE (WALL CLOSURE AND CAP)

CONCRETE

- 5.03 REFER TO CAST-IN-PLACE CONCRETE SPECIFICATIONS - CAST-IN-PLACE CONCRETE WORK

(1)	(2)	(3)	TO BE USED IN CONSTRUCTION OF:
4000	3/4"	585 HP	ROCKSOCKET, FOUNDATION, WALL CLOSURE, WALL CAP
5000	3/4"	685 HP	PRECAST CONCRETE PANELS

- (1) 28 DAY COMPRESSIVE STRENGTH (PSI)
- (2) MAXIMUM AGGREGATE SIZE (IN)
- (3) CEMENTITIOUS CONTENT (LB/CY)

CONCRETE COVER

ALL SURFACES CAST AGAINST EARTH OR ROCK: 3"
ALL SURFACES EXPOSED TO EARTH OR WEATHER: 2"
TOP 2"

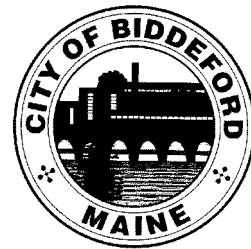
*UNLESS NOTED OTHERWISE

6.0 PRECAST CONCRETE

- 6.01 REFER TO PRECAST CONCRETE SPECIFICATION FOR PRECAST PANELS.

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

Date: 08-08-2022

Drawn By: ARA, RJB

Reviewed By: MAC

Approved By: ---

W&S Project No.: ENG21-1343

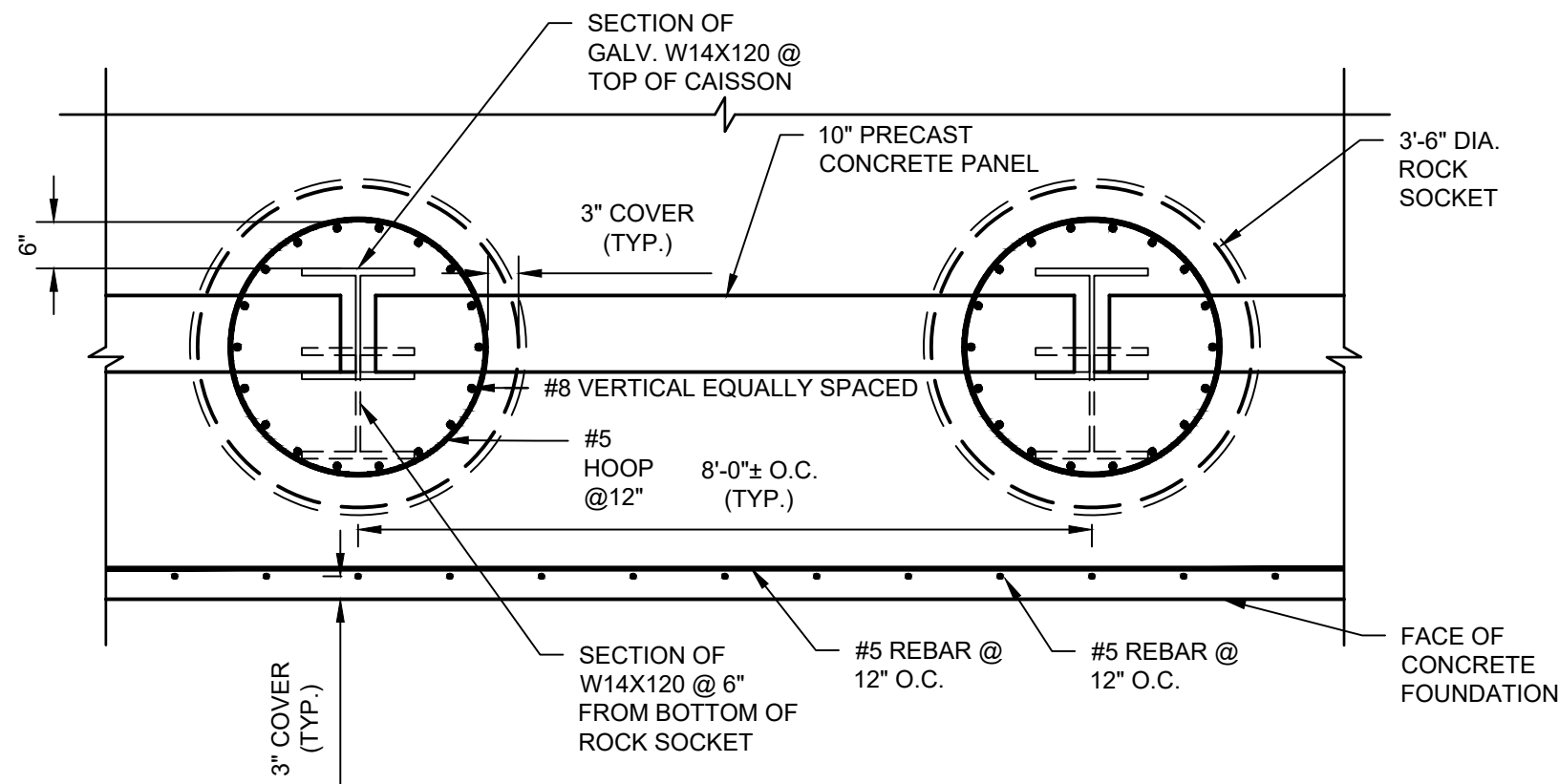
W&S File No.: ---

Drawing Title:

**PROPOSED
FOUNDATION
PLAN AND
NOTES**

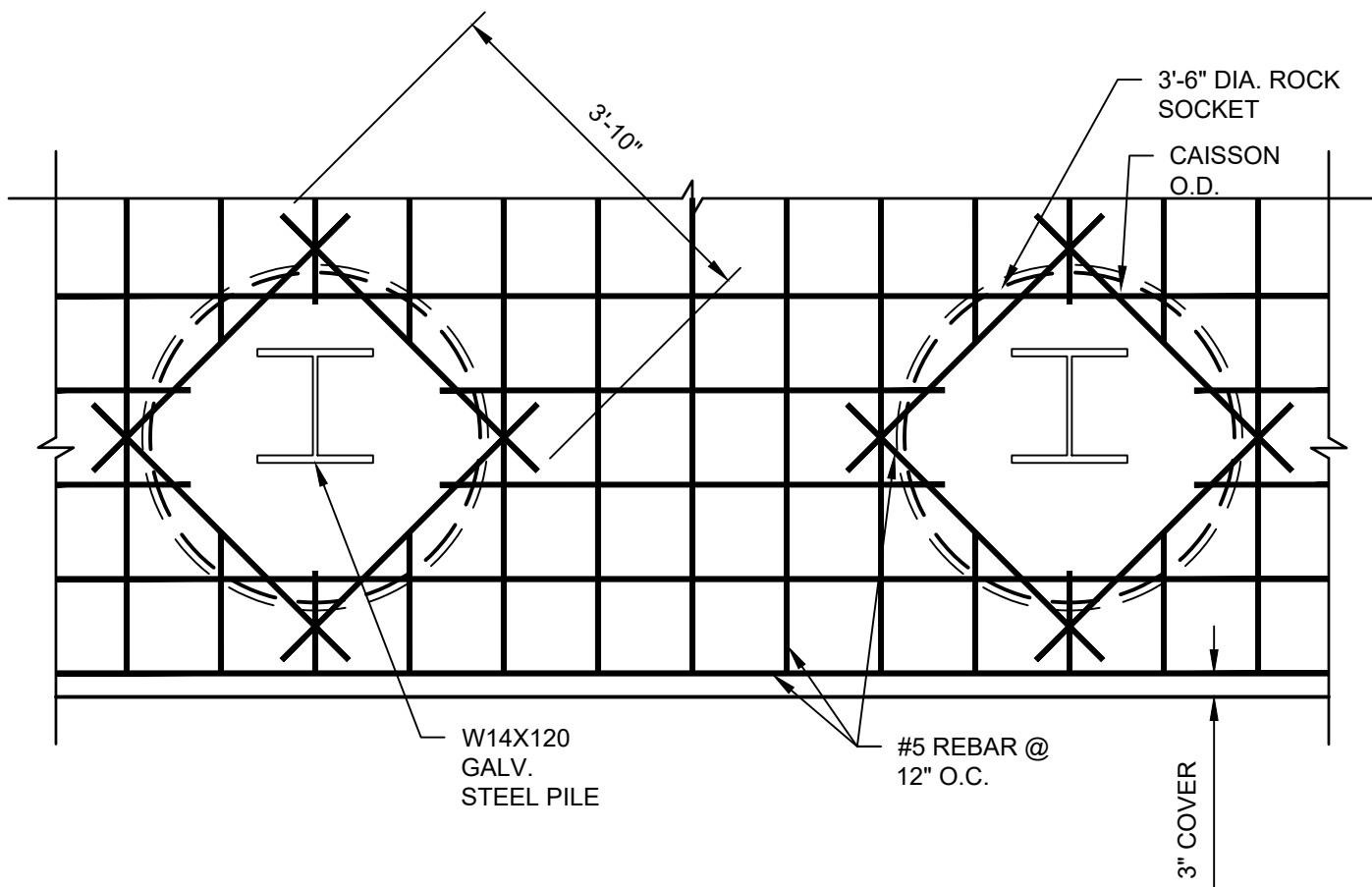
Sheet Number:

S-1



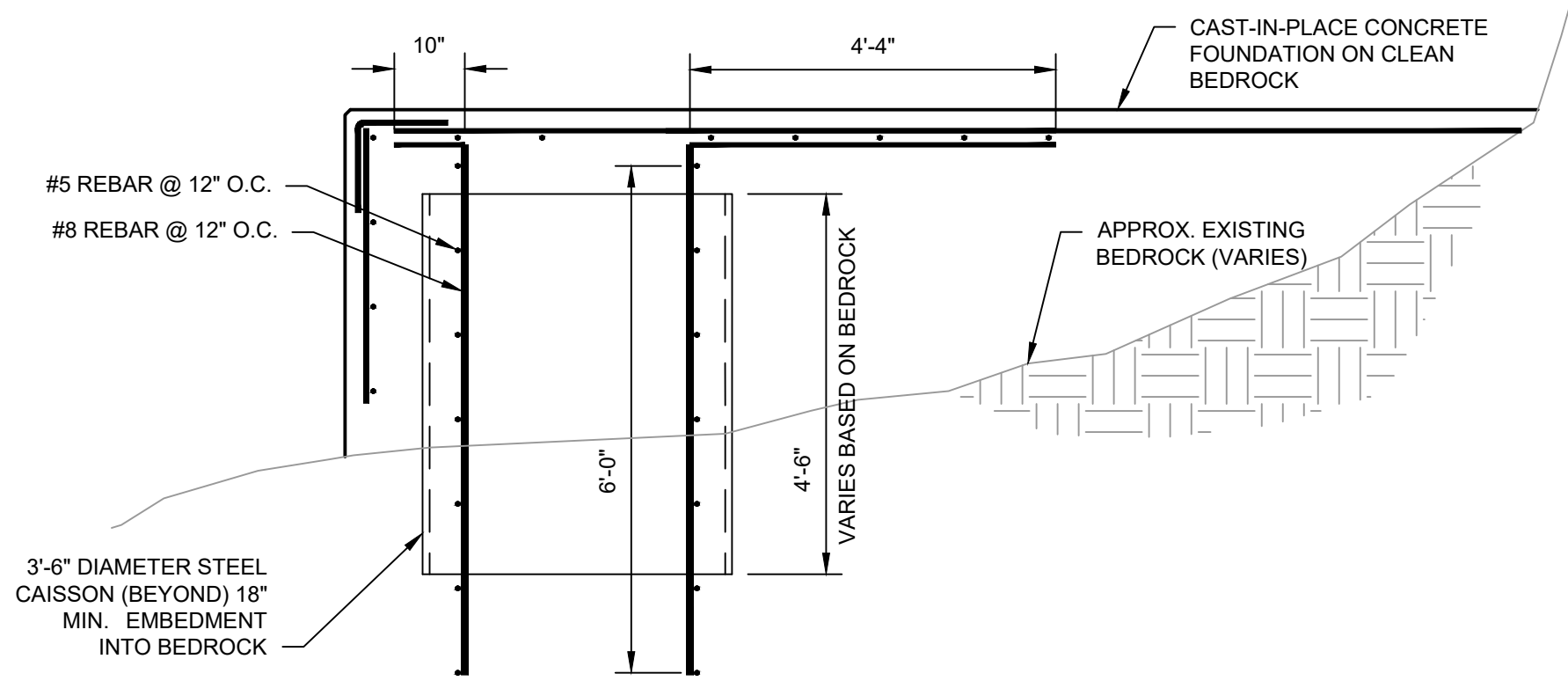
ROCK SOCKET PLAN

SCALE: 1/2" = 1'-0"



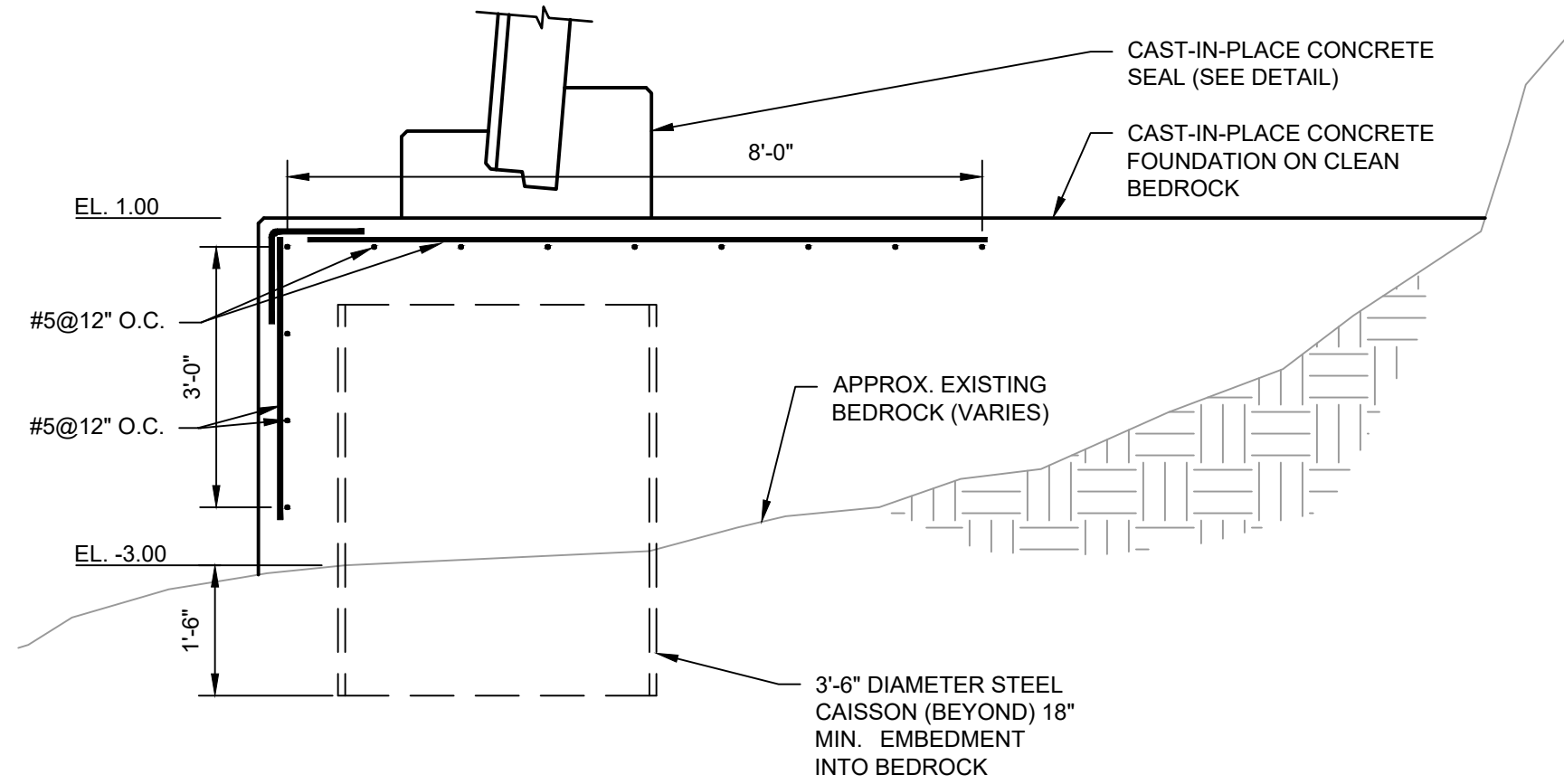
FOUNDATION REBAR DETAIL

SCALE: 1/2" = 1'-0"



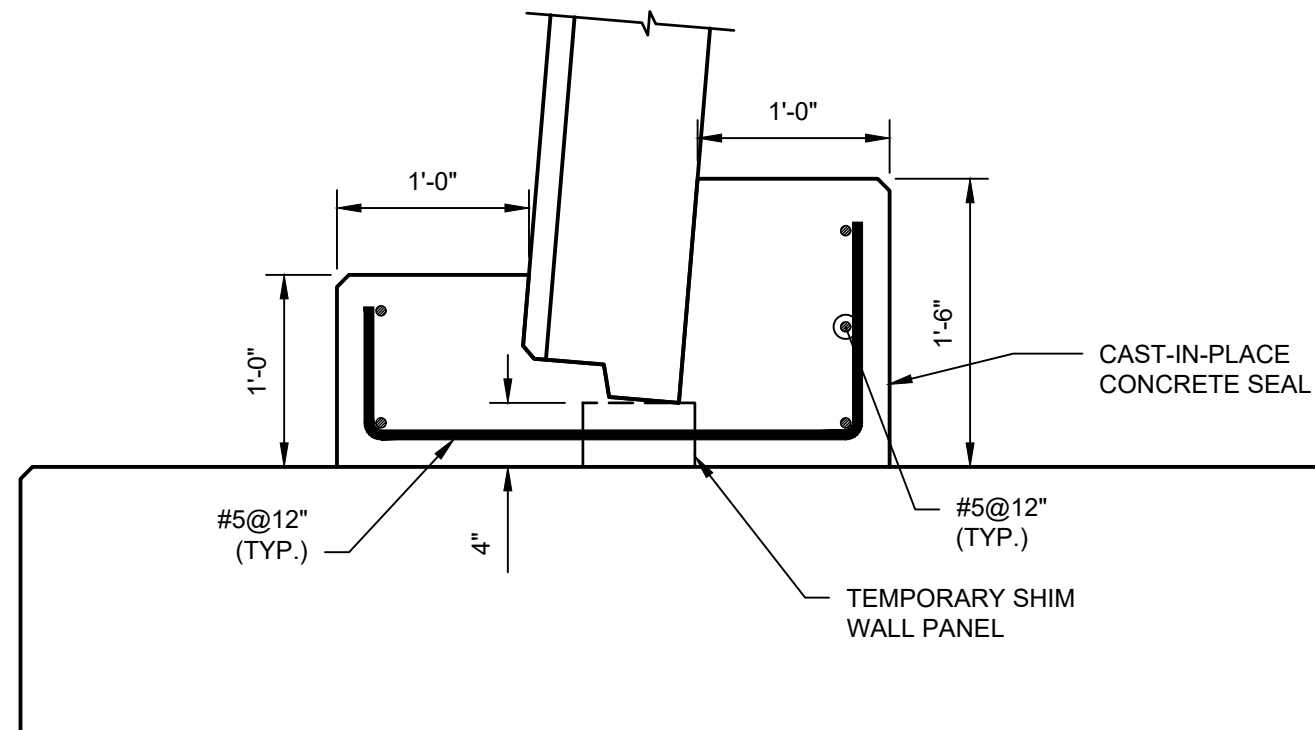
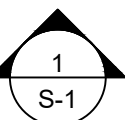
ROCK SOCKET REINFORCING DEAL

SCALE: 1/2" = 1'-0"



FOUNDATION SECTION

SCALE: 1/2" = 1'-0"



SEAL DETAIL

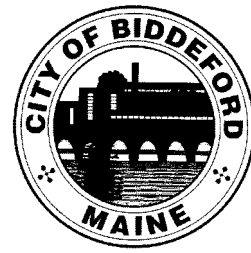
SCALE: 1" = 1'-0"

CONSTRUCTION SEQUENCE:

1. THE FOLLOWING CONSTRUCTION SEQUENCE IS INTENDED TO SHOW A REASONABLE MEANS OF COMPLETING THE PROJECT. THE GENERAL FLOW OF OPERATIONS INCLUDING MAINTENANCE AND PROTECTION OF THE SITE, STORMWATER PROTECTION MEASURES, PROTECTING EXISTING UTILITIES, DEWATERING, DEMOLITION OF THE EXISTING WALL, INSTALLATION OF THE ROCK SOCKETS AND STEEL PILES, CONSTRUCTION OF THE SOLDIER PILE AND LAGGING WALL INCLUDING THE CAST-IN-PLACE END SECTIONS, INSTALLATION OF THE TIE BACKS, BACKFILLING AND CONSTRUCTION OF THE OVERLOOK STRUCTURE IS NARRATED BELOW. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY, PROTECTION OF ALL SURROUNDING FEATURES WITHIN THE PROJECT LIMITS AND MEANS AND METHODS FOR COMPLETING THE WORK.
2. ESTABLISH EROSION CONTROL IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES, THE CONTRACT DOCUMENTS, AND PERMITS. CONSTRUCT TEMPORARY PERIMETER PROTECTIVE FENCING AND BARRIERS AS NEEDED AND AS REQUIRED BY THE CONTRACT DOCUMENTS.
3. DEWATERING, EXCAVATION AND CONSTRUCTION OF THE WALL IS ASSUMED TO BE PERFORMED IN FOUR (4) PHASES IN ORDER TO LIMIT THE VOLUME OF WATER TO BE REMOVED AND TREATED AT ANY GIVEN TIME. A COFFERDAM ON THE INSIDE OF THE ACCESS ROAD IS NECESSARY FOR OBSERVING THE ROCK SOCKETS, CONSTRUCTING THE FOUNDATION AND SETTING AND BACKFILLING THE WALL PANELS IN-THE-DRY. THE ACCESS ROAD IS CONSTRUCTED OF OPEN GRADED RIPRAP AND BLASTED ROCK AND DOES NOT FUNCTION AS A COFFERDAM.
4. DEMOLISH THE SECTIONS OF THE WALLS TO BE CONSTRUCTED AS PART OF EACH PHASE. ONLY DEMOLISH AS MUCH WALL AS CAN BE REBUILT BEFORE PROCEEDING WITH THE NEXT PHASE. REMOVE RIPRAP SLOPE PROTECTION AND SLOUGHED SOILS AT LOCATION OF WALL FAILURE. DEMOLISH THE OVERLOOK STRUCTURE, SALVAGE FEATURES AT, BEHIND, AND ADJACENT TO THE OVERLOOK STRUCTURE AS REQUIRED. PROTECTION OF THE MAIN STREET BRIDGE WINGWALLS, SMOKESTACK, BUILDING FOUNDATION AND ENDS OF EXISTING WALL TO REMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. PHASE 1: CONTRACTOR TO INSTALL TEMPORARY DEWATERING STRUCTURE TO DEWATER THE PHASE 1 ENCLOSURE, INSTALL STEEL CAISSONS, DRILL ROCK SOCKETS, INSTALL SOLDIER PILES, FORM AND PLACE FOUNDATION, SHIM AND PLACE WALL PANELS, CONSTRUCT CAST-IN-PLACE BASE TO SECURE BOTTOM OF WALL PANELS, BACKFILL BEHIND WALL PANELS AND INSTALL TIE BACKS WITHIN EACH PHASE. CONSTRUCT CAST-IN-PLACE END SECTION OF WALL AFTER DEFLECTION OF PILES FROM JACKING TIE BACKS HAS OCCURRED (APPLIES TO PHASE 1 AND 4).
6. DEMOLISH AND CONSTRUCT PHASE 2, 3 AND 4 SIMILARLY, OVERLAPPING THE WATER DIVERSION STRUCTURE FOR EACH PHASE IN ORDER TO CONSTRUCT THE FOUNDATION, INSTALL THE WALL AND BACKFILL AS DEPICTED IN NOTE 5 ABOVE.
7. RIPRAP SHALL BE PLACED AS SHOWN ON THE PLANS OR AS REQUIRED BY THE ENGINEER PRIOR TO REMOVING THE ACCESS ROAD.
8. CONSTRUCTION OF THE OVERLOOK IS ANTICIPATED TO BE PERFORMED FROM THE TOP OF THE WALL AS PART OF THE LANDSCAPING AND REPLACEMENT OF THE HARDSCAPE FEATURES.
9. COMPLETE SITE CLEANUP AND RESTORATION. REMOVAL OF THE EROSION CONTROL AND TEMPORARY PERIMETER PROTECTIVE FENCING AND BARRIERS SHALL OCCUR AT THE COMPLETION OF THE PROJECT.

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

Date: 08-08-2022

Drawn By: ARA, RJB

Reviewed By: MAC

Approved By: ---

W&S Project No.: ENG21-1343

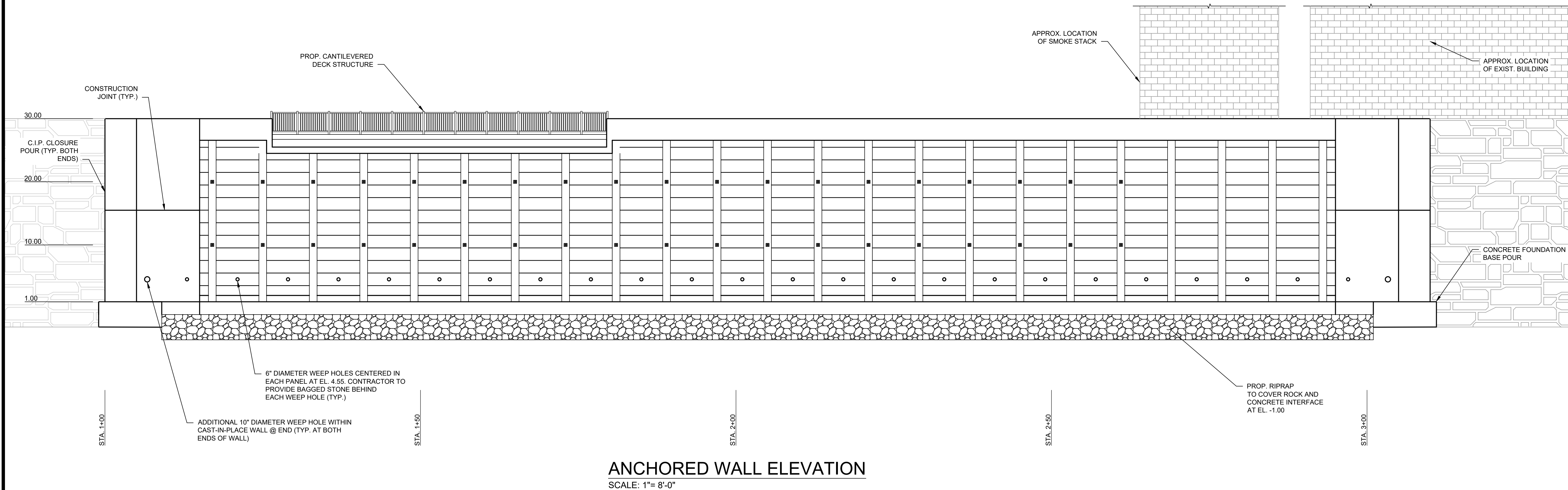
W&S File No.: ---

Drawing Title:

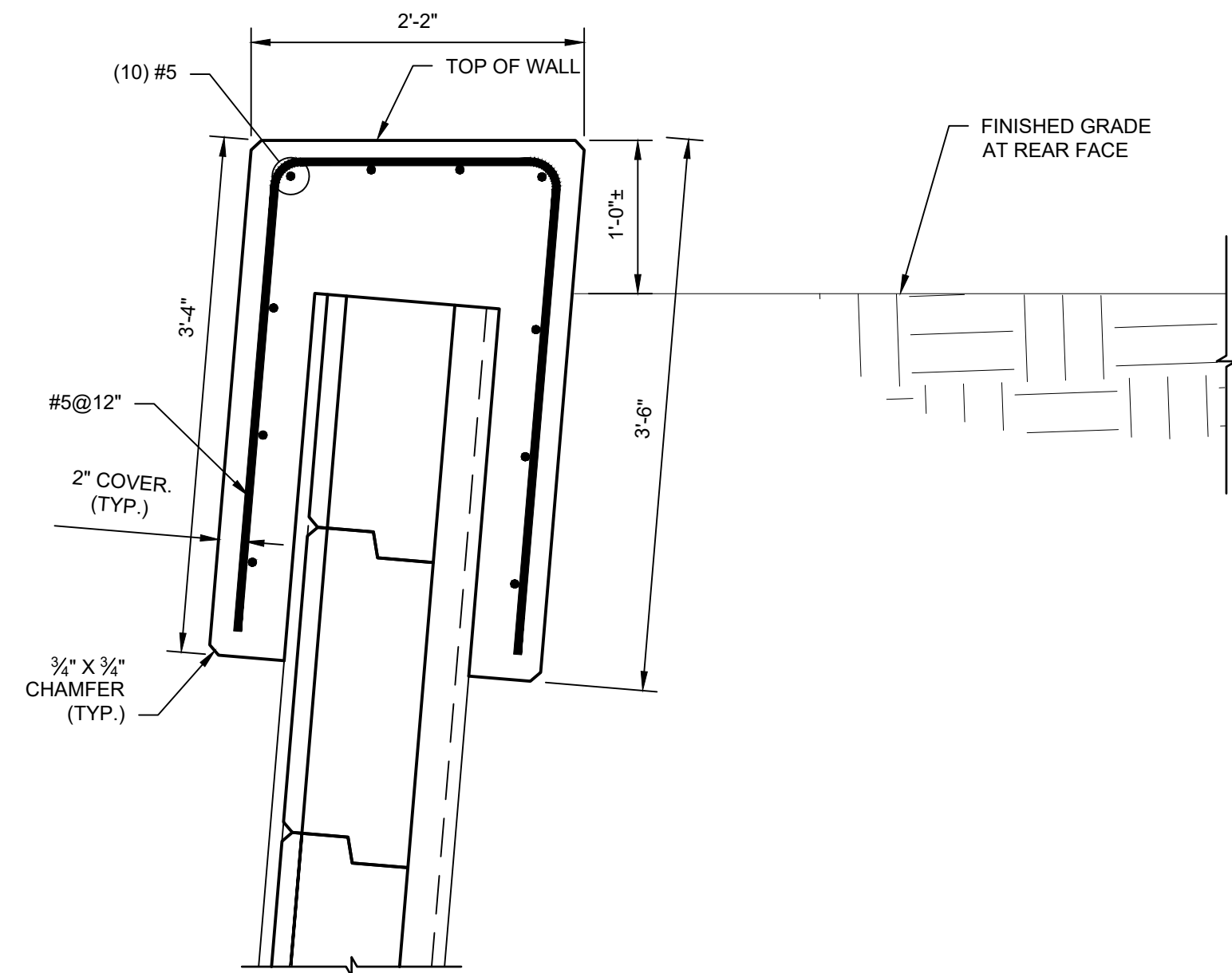
PROPOSED
FOUNDATION
PLAN AND
DETAILS

Sheet Number:

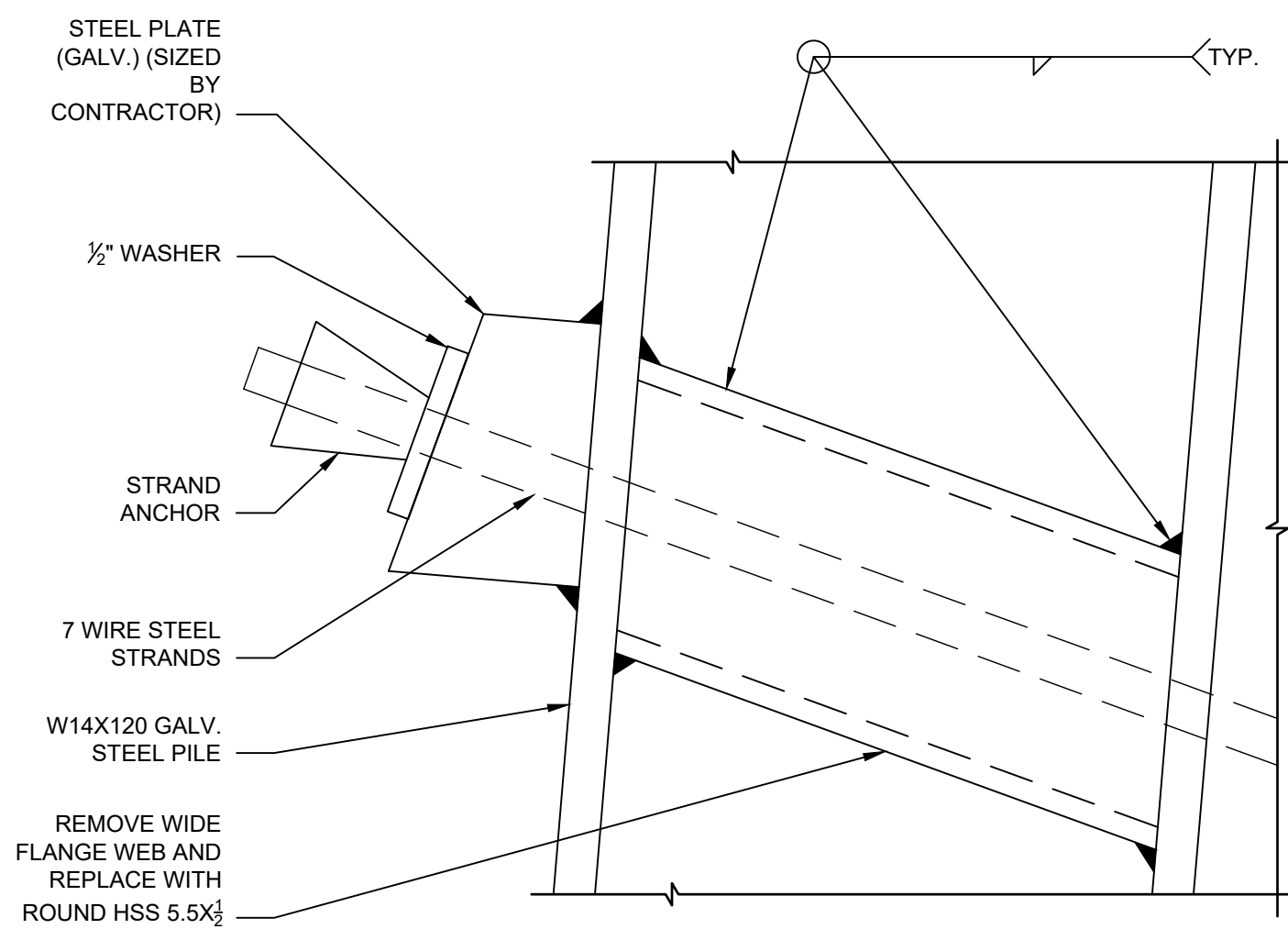
S-2



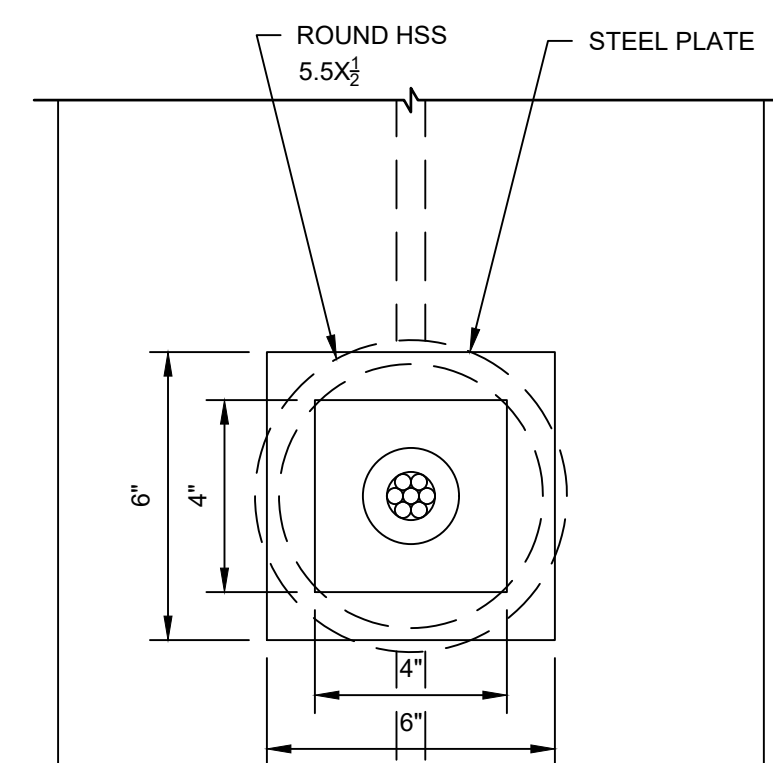
Drawing Title: PROPOSED RETAINING WALL SECTION AND ELEVATION	
Sheet Number: S-3	



CAST-IN-PLACE WALL CAP DETAIL
SCALE: 1"= 1'-0"

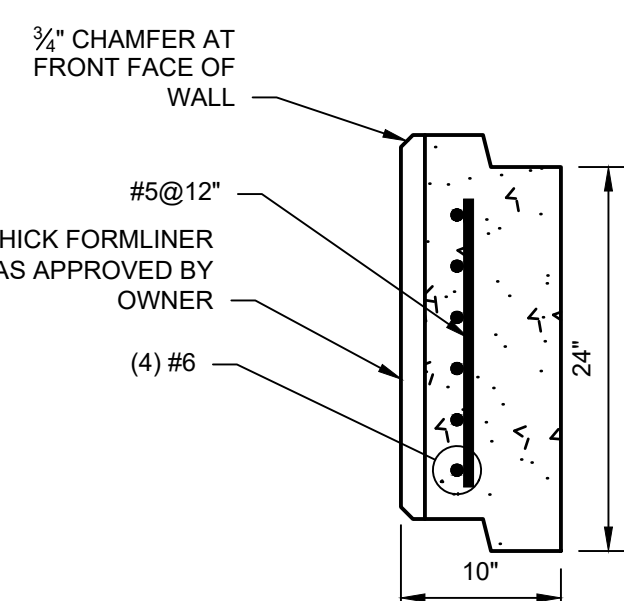


SECTION

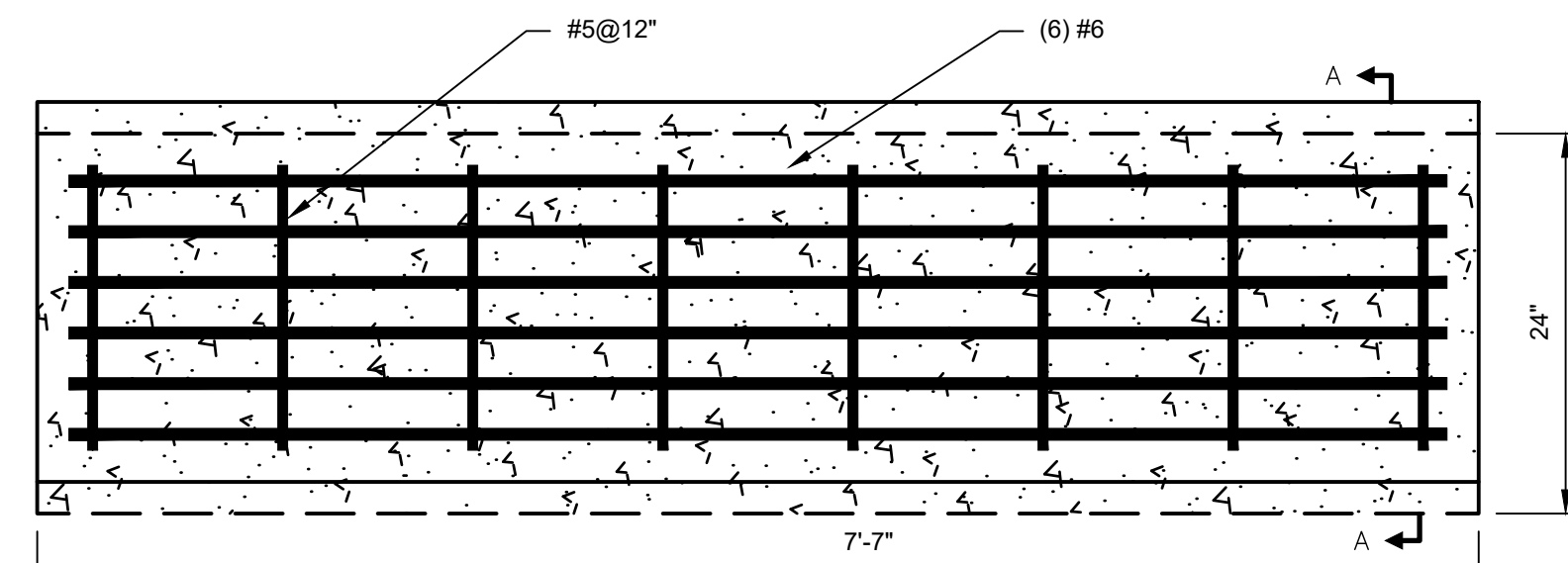


ELEVATION

TIEBACK SYSTEM ASSEMBLY
SCALE: 3"= 1'-0"

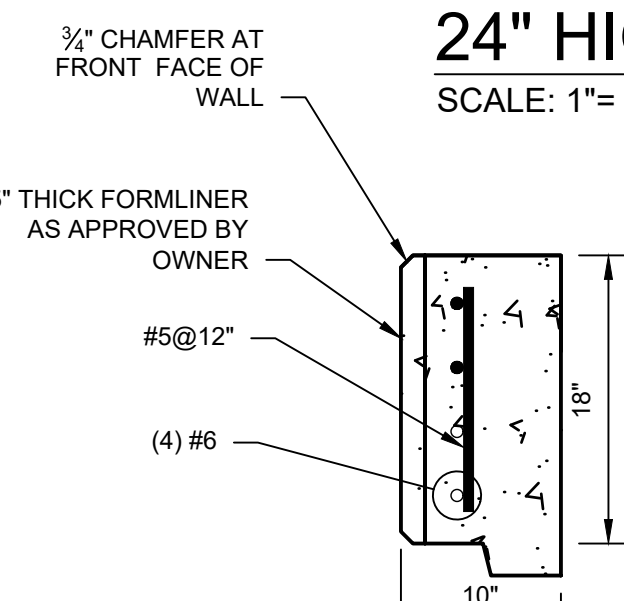


SECTION A-A

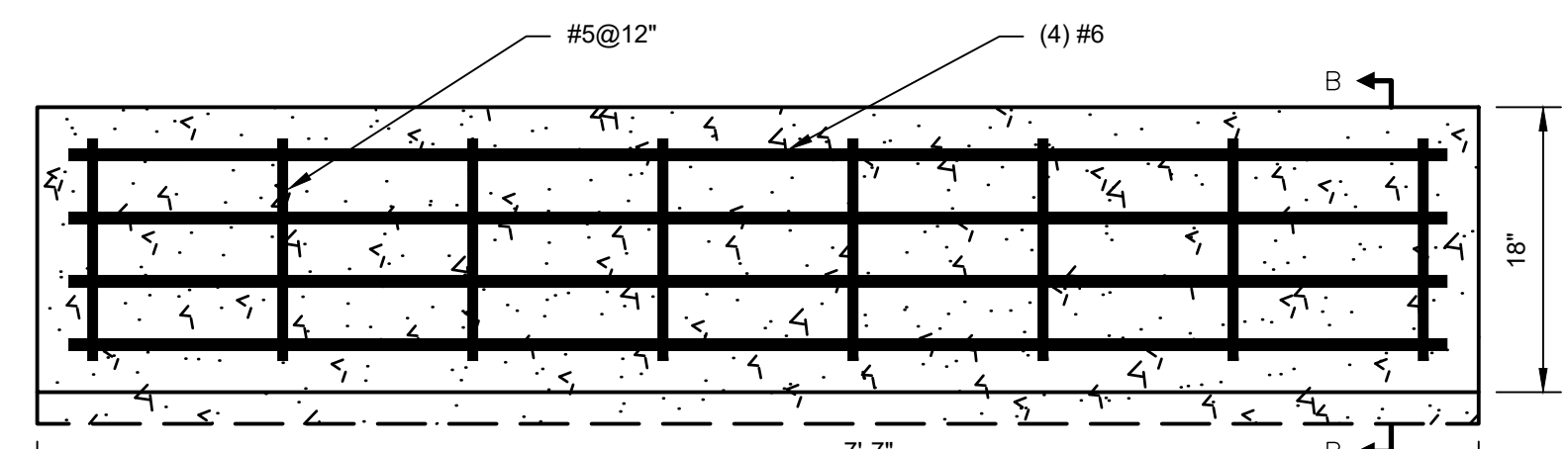


ELEVATION

24" HIGH PRECAST CONCRETE PANEL
SCALE: 1"= 1'-0"

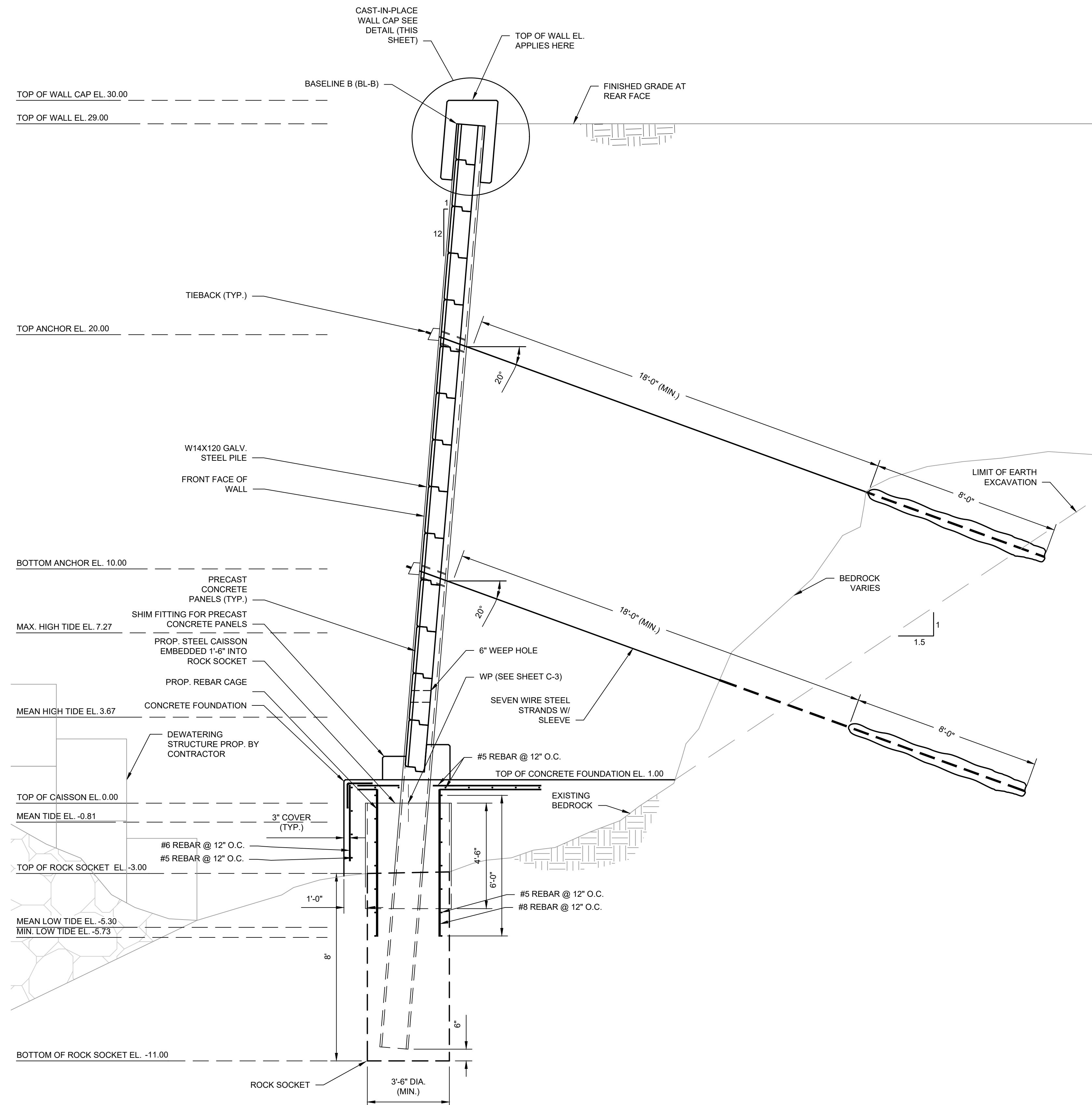


SECTION B-B

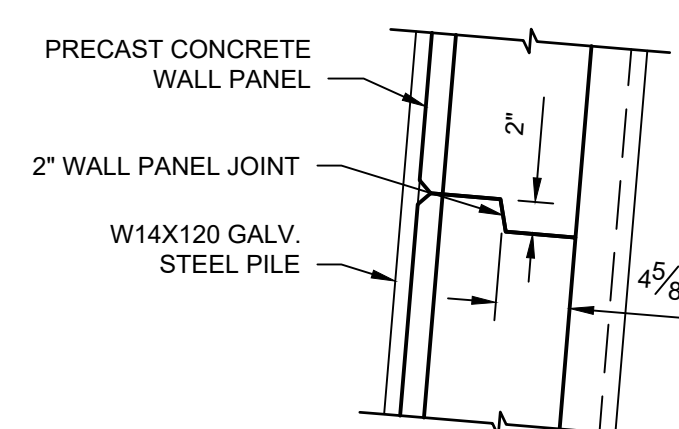


ELEVATION

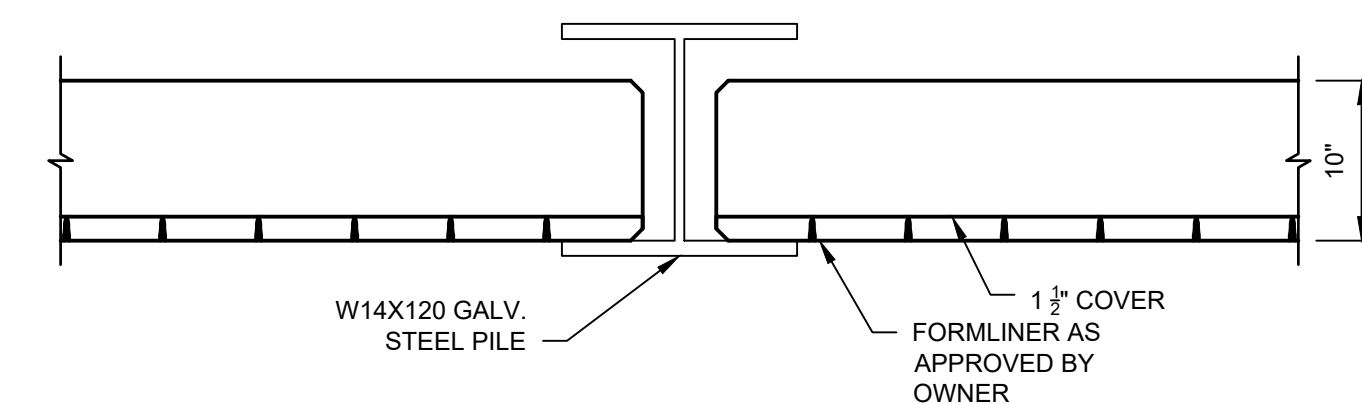
18" HIGH PRECAST CONCRETE PANEL
SCALE: 1"= 1'-0"



SOLDIER PILE AND LAGGING WALL - SECTION
SCALE: 3/8"= 1'-0"



WALL PANEL JOINT DETAIL
SCALE: 1"= 1'-0"



FORMLINER DETAIL
SCALE: 1"= 1'-0"

Revisions:		
No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

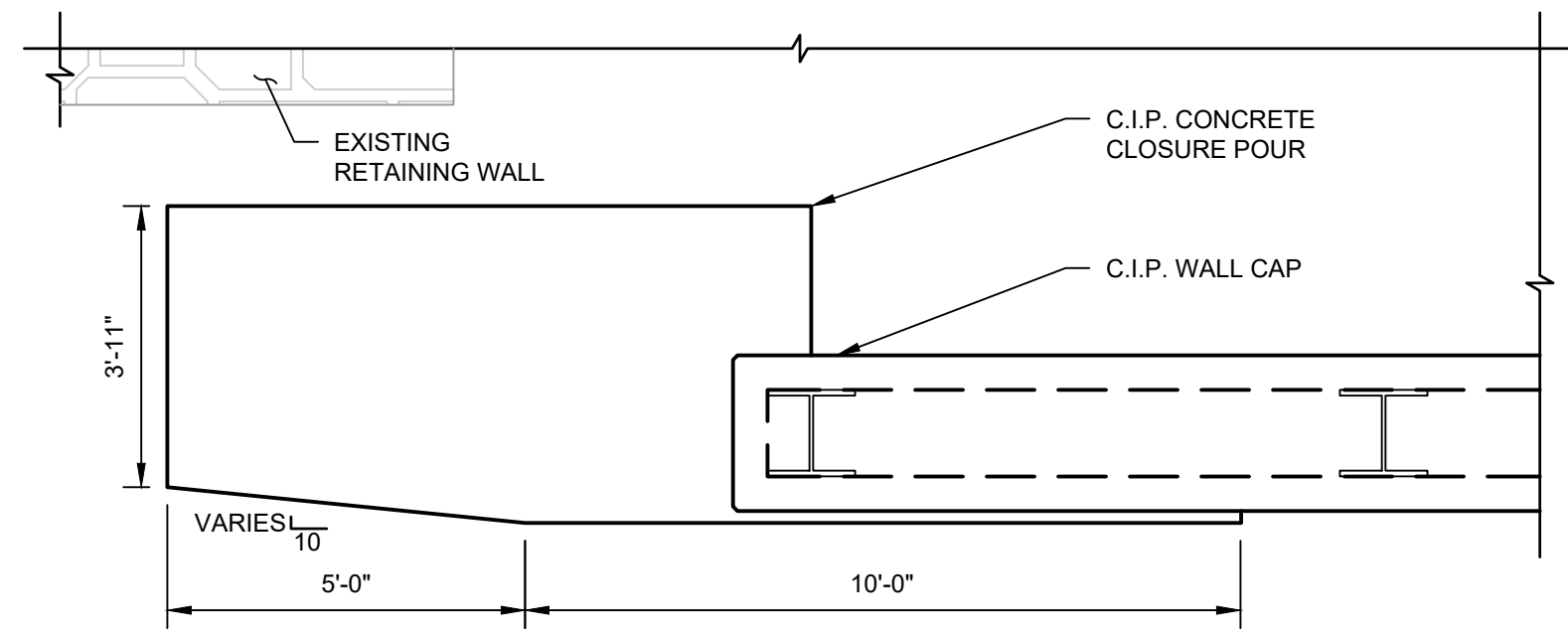
Date: 08-08-2022
Drawn By: ARA, RJB
Reviewed By: MAC
Approved By: ---

W&S Project No.: ENG21-1343
W&S File No.: ---

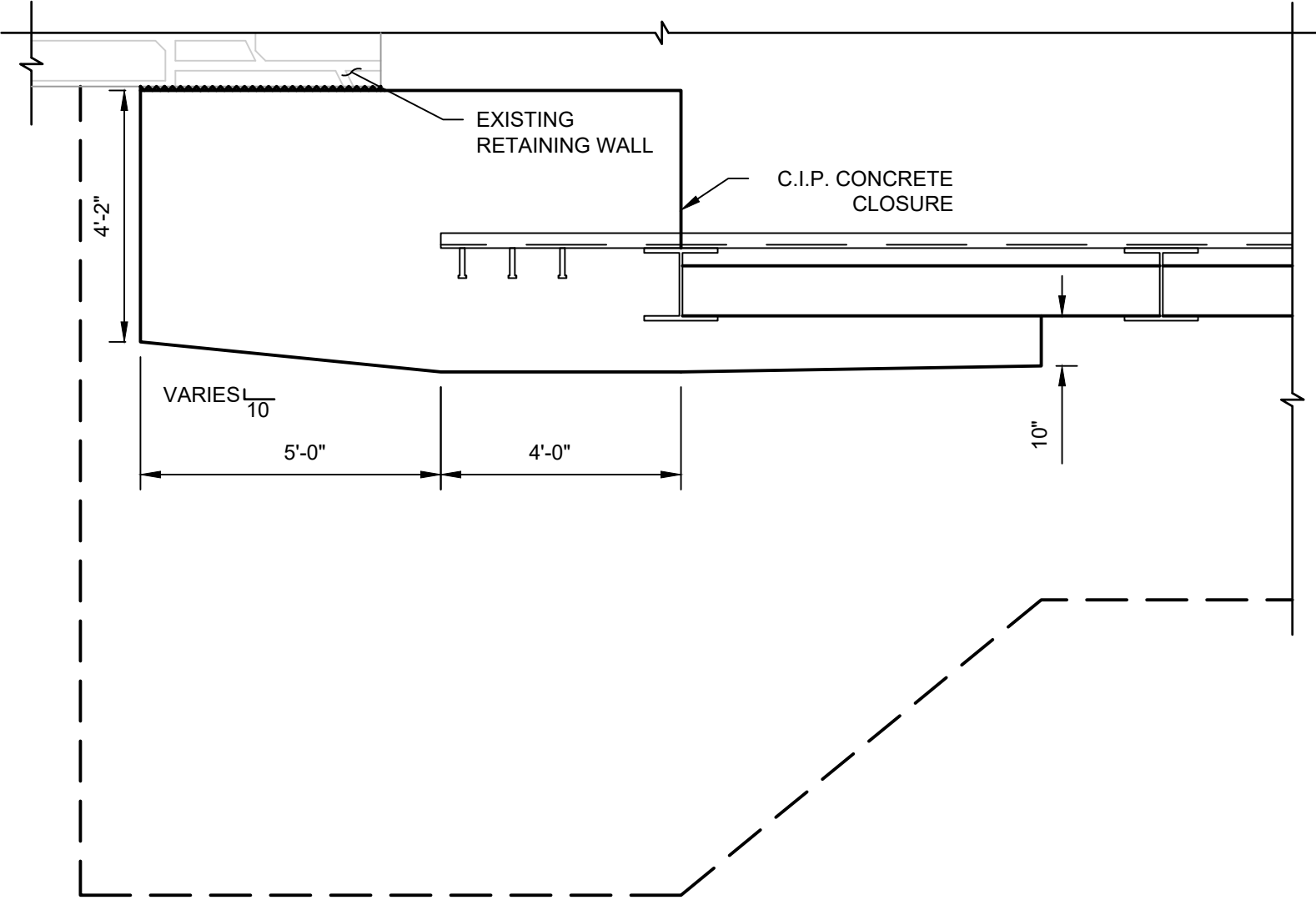
Drawing Title:
SOLDIER PILE AND LAGGING WALL DETAILS

Sheet Number:
S-4

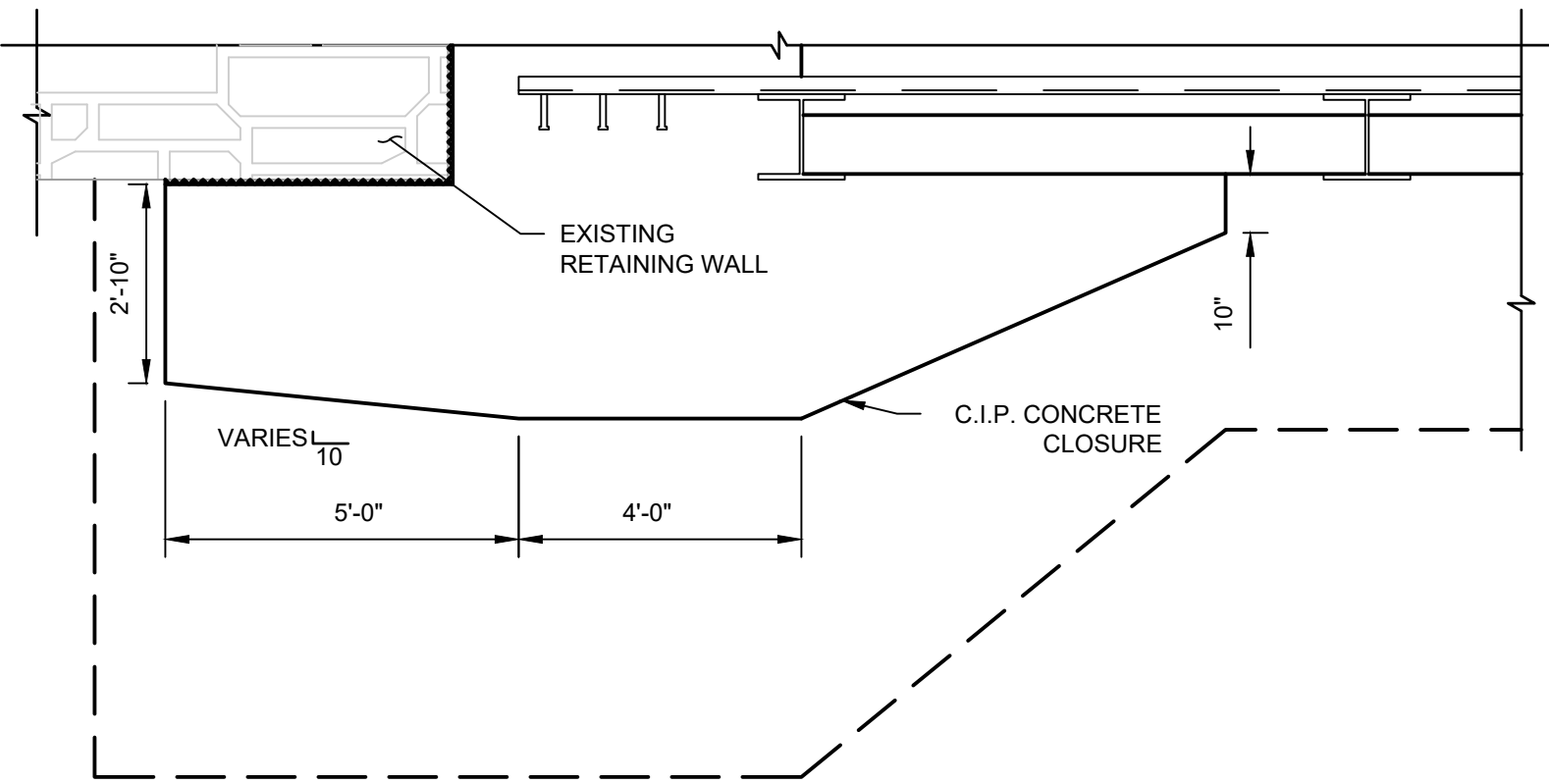
\\west01\local\WEST\Projects\BIDDEFORD MAINE\ENG\1-1343 Riverwalk Retaining Wall\CA2020 Production Drawings\Plan Sheet DWG-S-5-1 STRUCTURAL.DWG - 8/12/2022.dwg



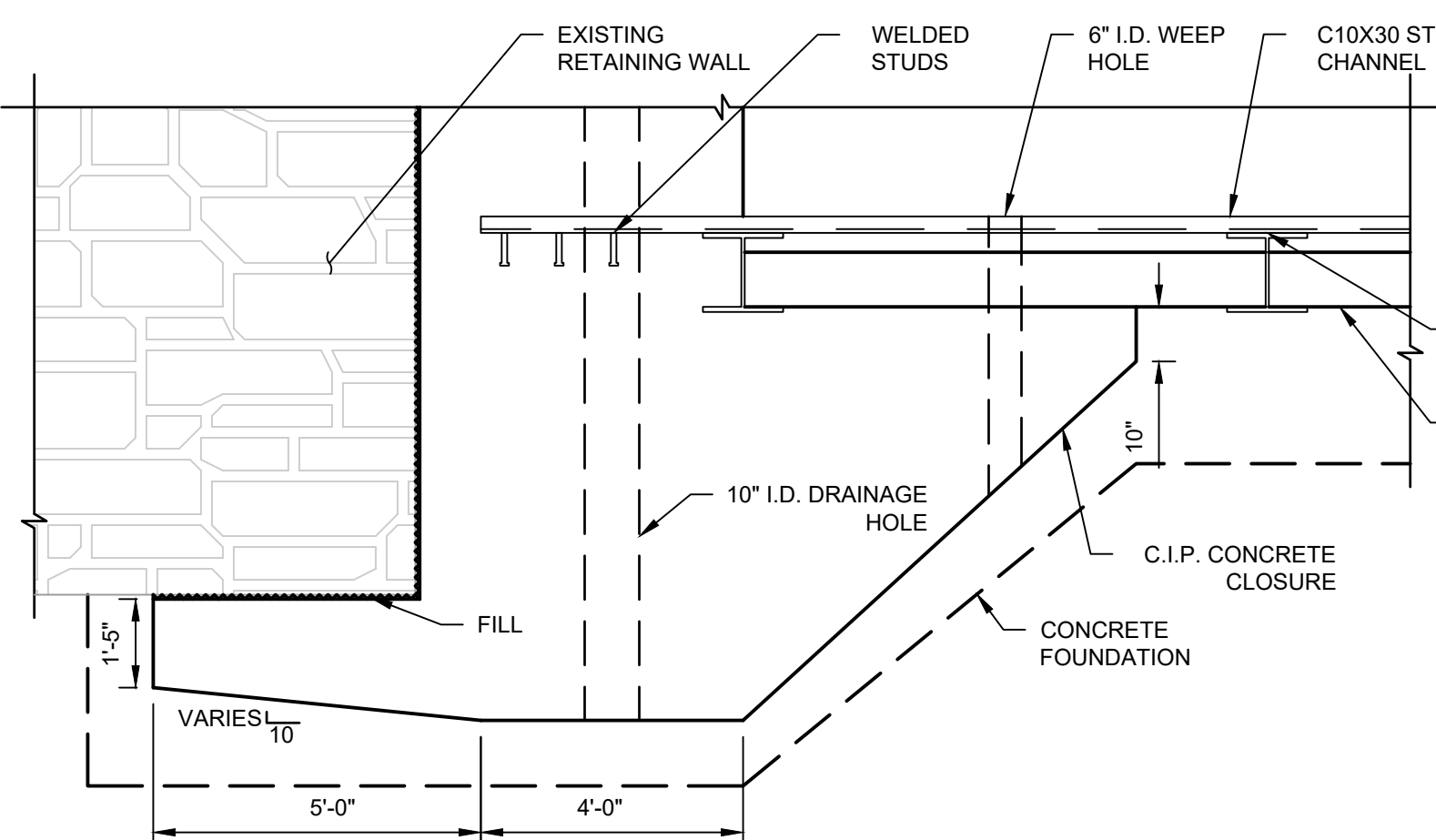
WALL CLOSURE AND CAP CONNECTION



SECTION 9

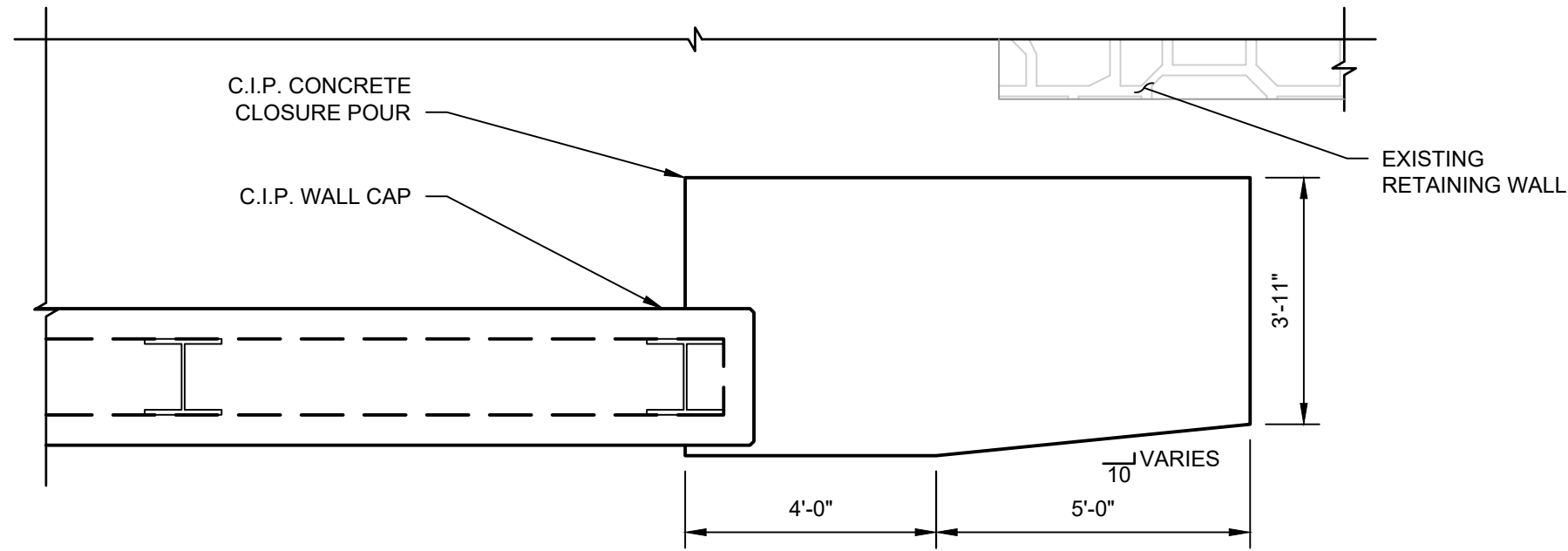


SECTION 8

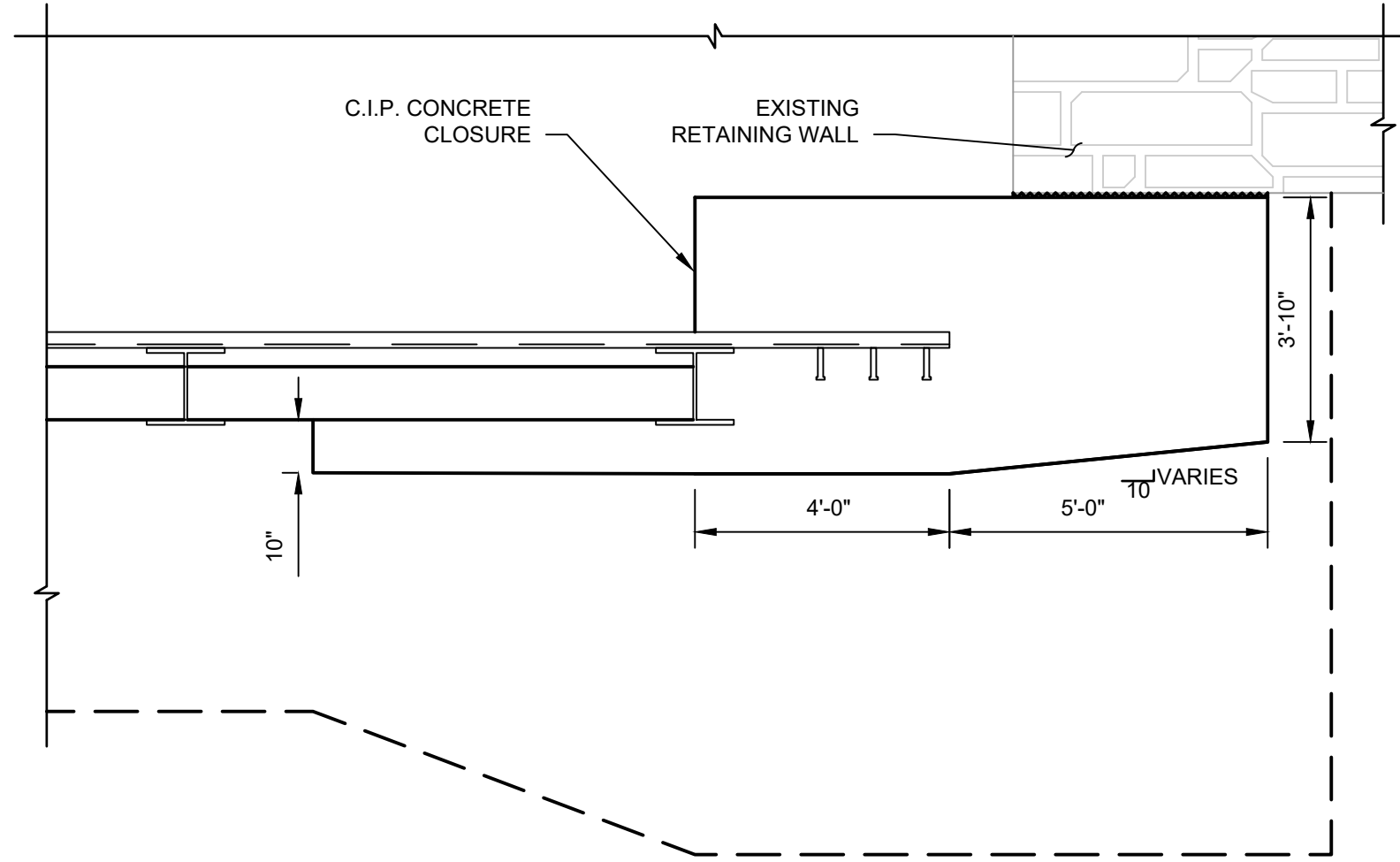


SECTION 7

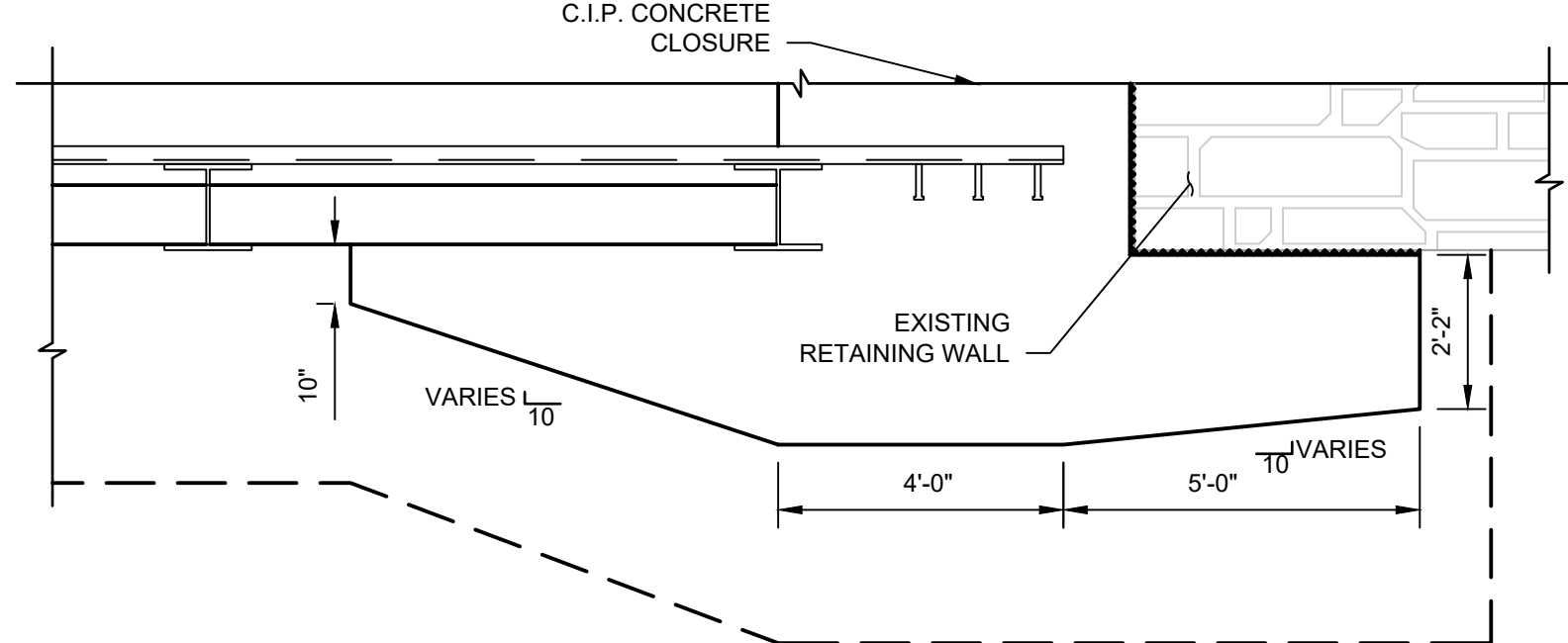
STA. 1+09 PROP. END OF WALL CONNECTION
SCALE: 3/8" = 1'-0"



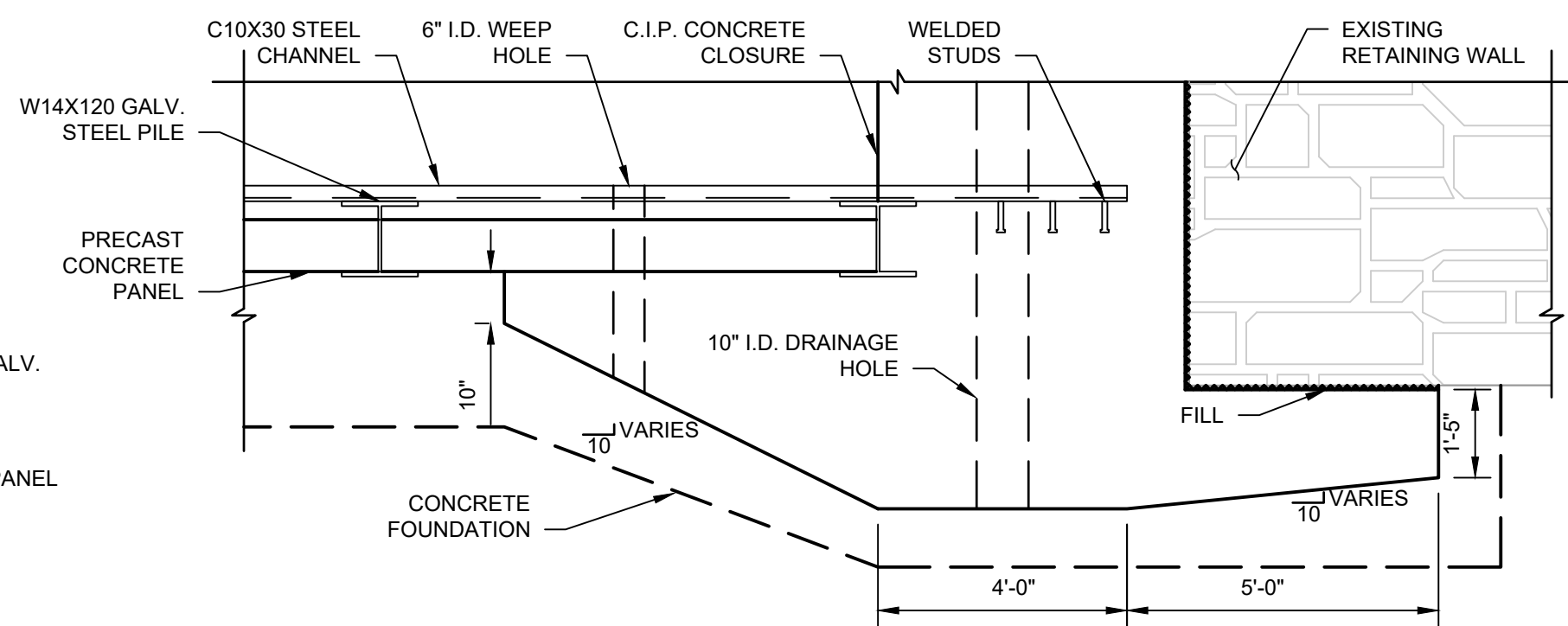
WALL CLOSURE AND CAP CONNECTION



SECTION 6



SECTION 5

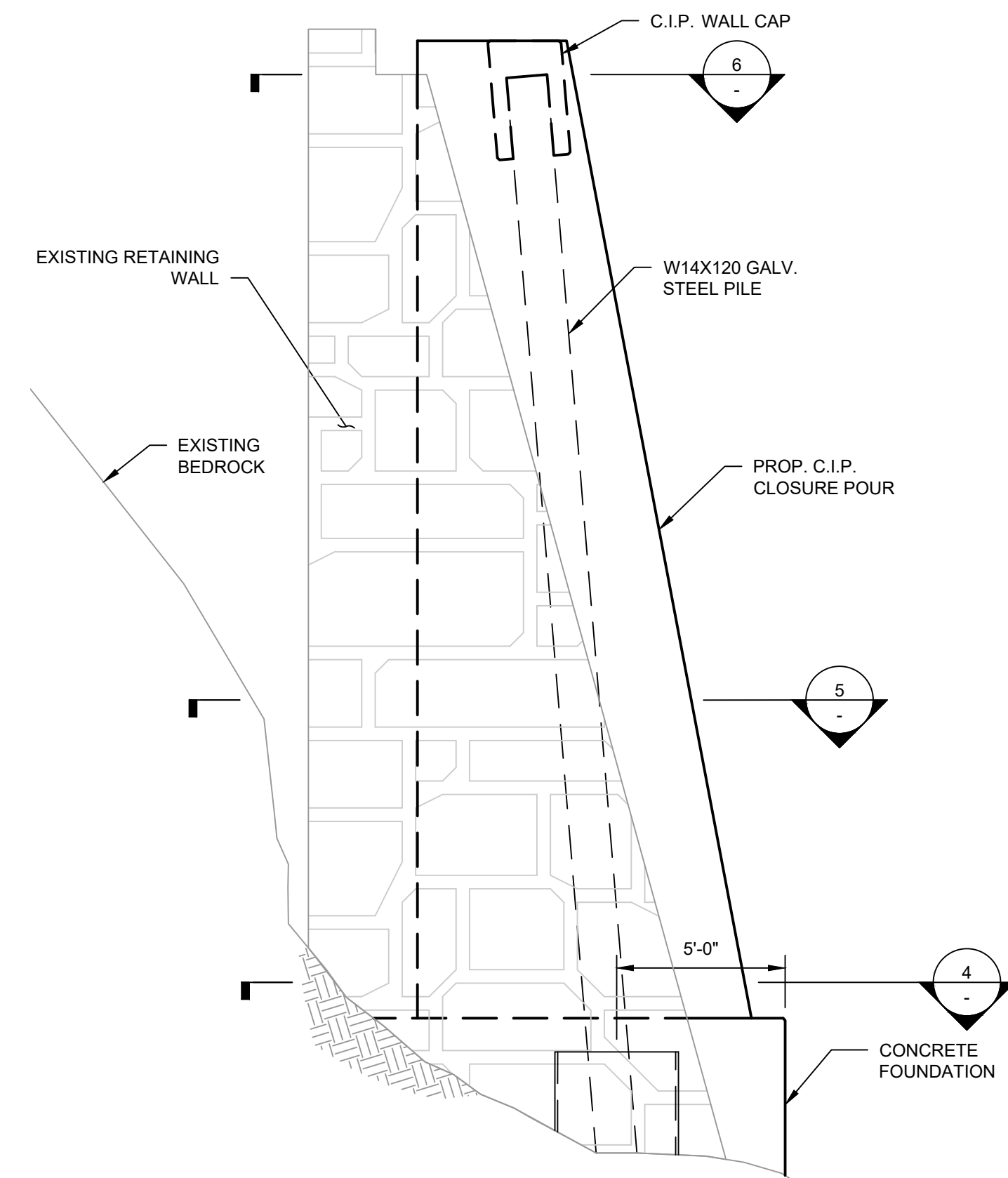


SECTION 4

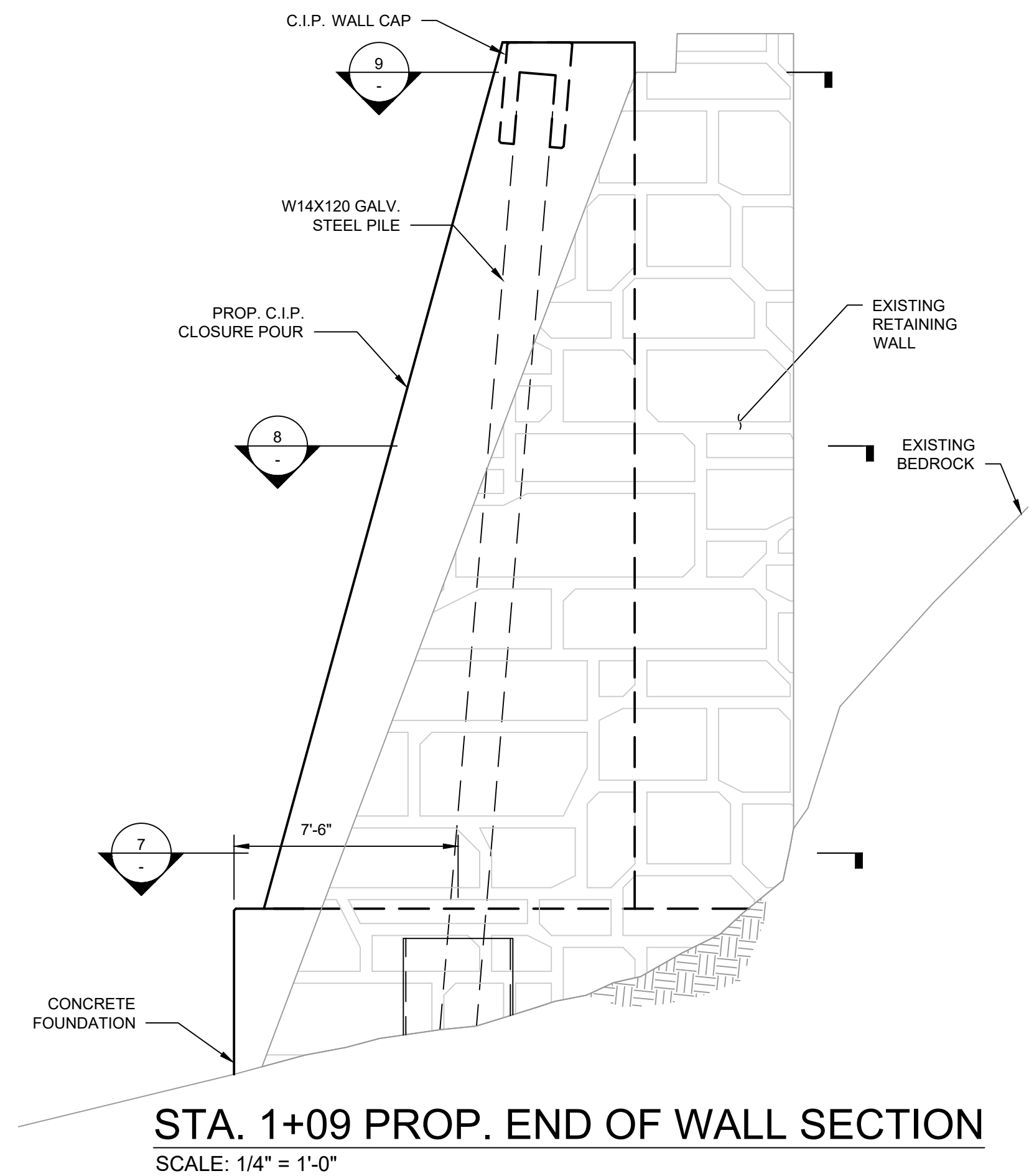
STA. 3+10 PROP. END OF WALL CONNECTION
SCALE: 3/8" = 1'-0"

CAST-IN-PLACE CONCRETE END WALL NOTES :

1. THE FRONT FACE SLOPE OF EXISTING RETAINING WALLS AT THE BEGIN AND END WALLS VARIES. A CAST-IN-PLACE CLOSURE AT EACH END OF SOLDIER PILE WALL IS REQUIRED TO SEAL ENDS FROM SOIL MIGRATION BEHIND THE PROPOSED WALL AND PREVENT SCOUR FROM THE RIVER AT THE FRONT FACE.
2. THICKNESS OF THE CONCRETE CLOSURE VARIES. UNLESS OTHERWISE NOTED, DIMENSIONS VARY TO PROVIDE SLOPE FACE OF CONCRETE CLOSURE.
3. PROVIDE 1" CLOSED CELL EXPANSION MATERIAL BETWEEN THE EXISTING FACE OF RETAINING WALL AND PROPOSED CONCRETE WALL CLOSURE PRIOR TO PLACING CONCRETE. EXPOSED EDGES OF CLOSED CELL SHALL BE SEALED WITH AN APPROVED PRODUCT.
4. CONTRACTOR TO PROVIDE BAGGED STONE ON THE BACK SIDE OF THE WALL AT ALL WEEPHOLES AND DRAINS.



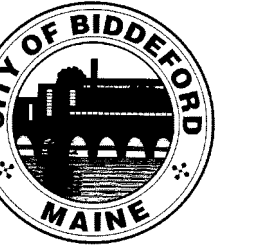
STA. 3+10 PROP. END OF WALL SECTION
SCALE: 1/4" = 1'-0"



STA. 1+09 PROP. END OF WALL SECTION
SCALE: 1/4" = 1'-0"

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

Date: 08-08-2022

Drawn By: ARA, RJB

Reviewed By: MAC

Approved By: ---

W&S Project No.: ENG21-1343

W&S File No.: ---

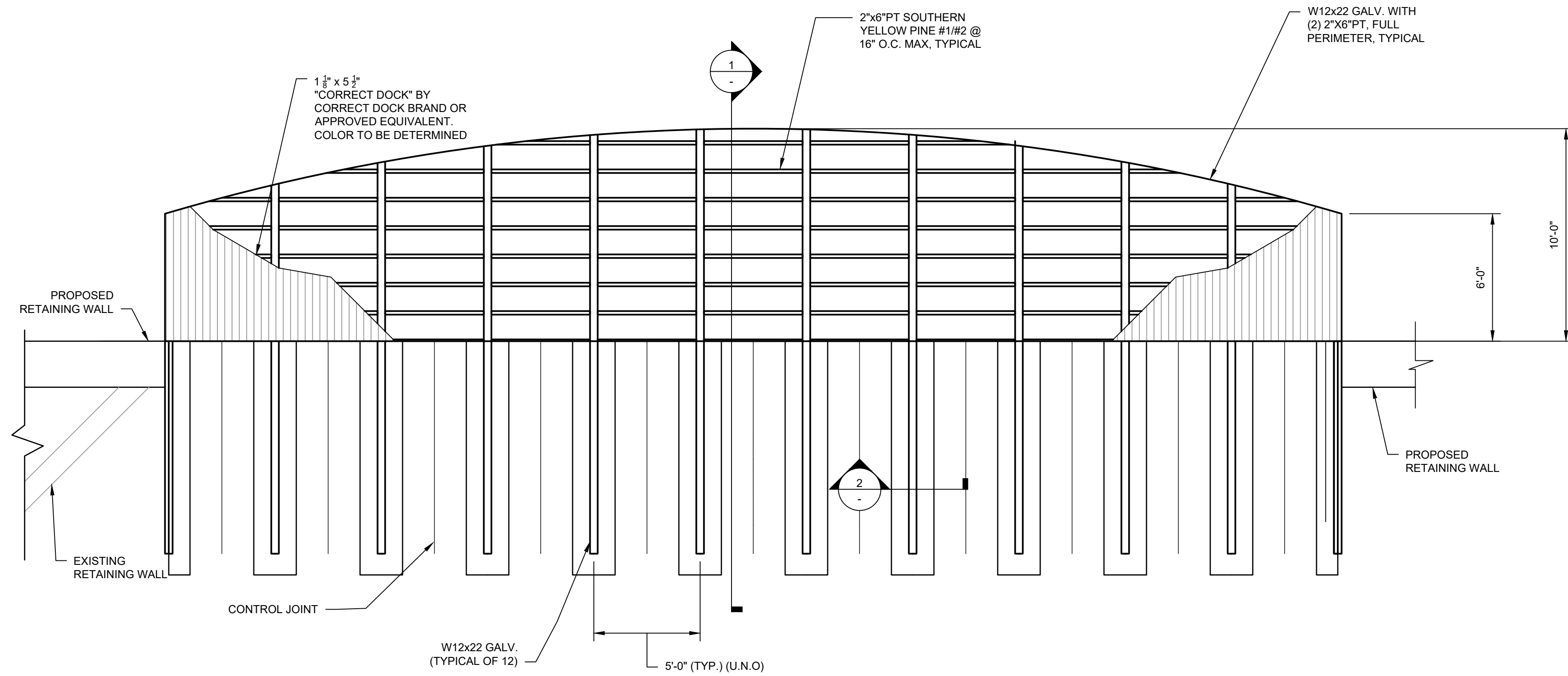
Drawing Title:

SOLDIER PILE
AND LAGGING
RETAINING
WALL DETAILS

Sheet Number:

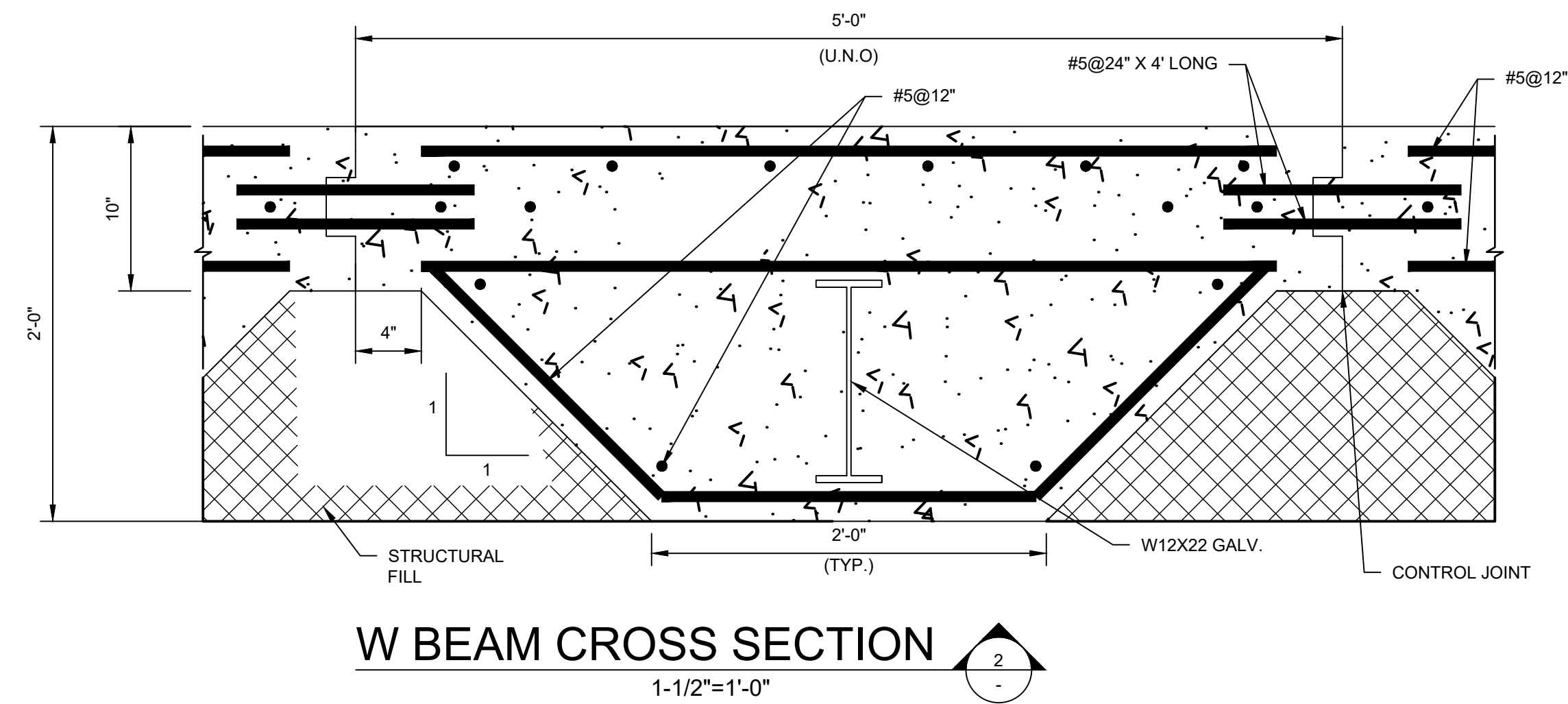
S-5

\\west01\local\WSE\Projects\MAE Biddeford ME\ENG21-1343 Riverwalk Retaining Wall\CA200 Production Drawings\Plan Sheet DWG21-1343 STRUCTURAL PLAN - S-6 10.02.2022.dwg

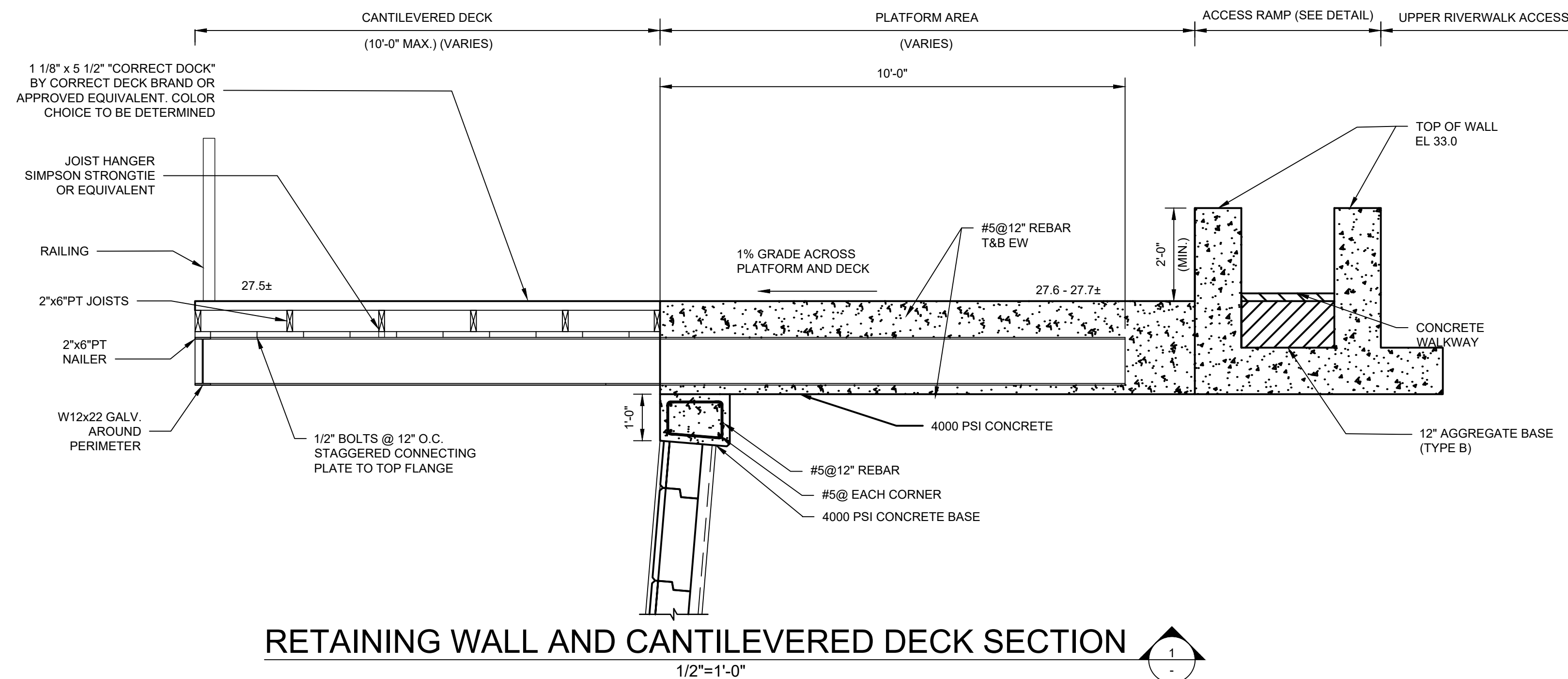


FRAMING PLAN
SCALE: 1/4"=1'-0"

- NOTES:
1. LIVE LOAD = 100 PSF
 2. ALL BEAMS, CLIPS ANGLES AND BOLTS SHALL BE HOT DIPPED GALVANIZED



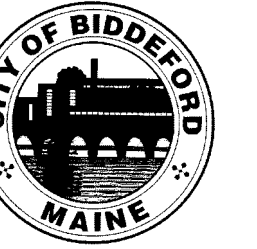
W BEAM CROSS SECTION
1-1/2"=1'-0"



RETAINING WALL AND CANTILEVERED DECK SECTION
1/2"=1'-0"

Project:

CITY OF BIDDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson

Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:

No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

Date: 08-08-2022

Drawn By: ARA, RJB

Reviewed By: MAC

Approved By: ---

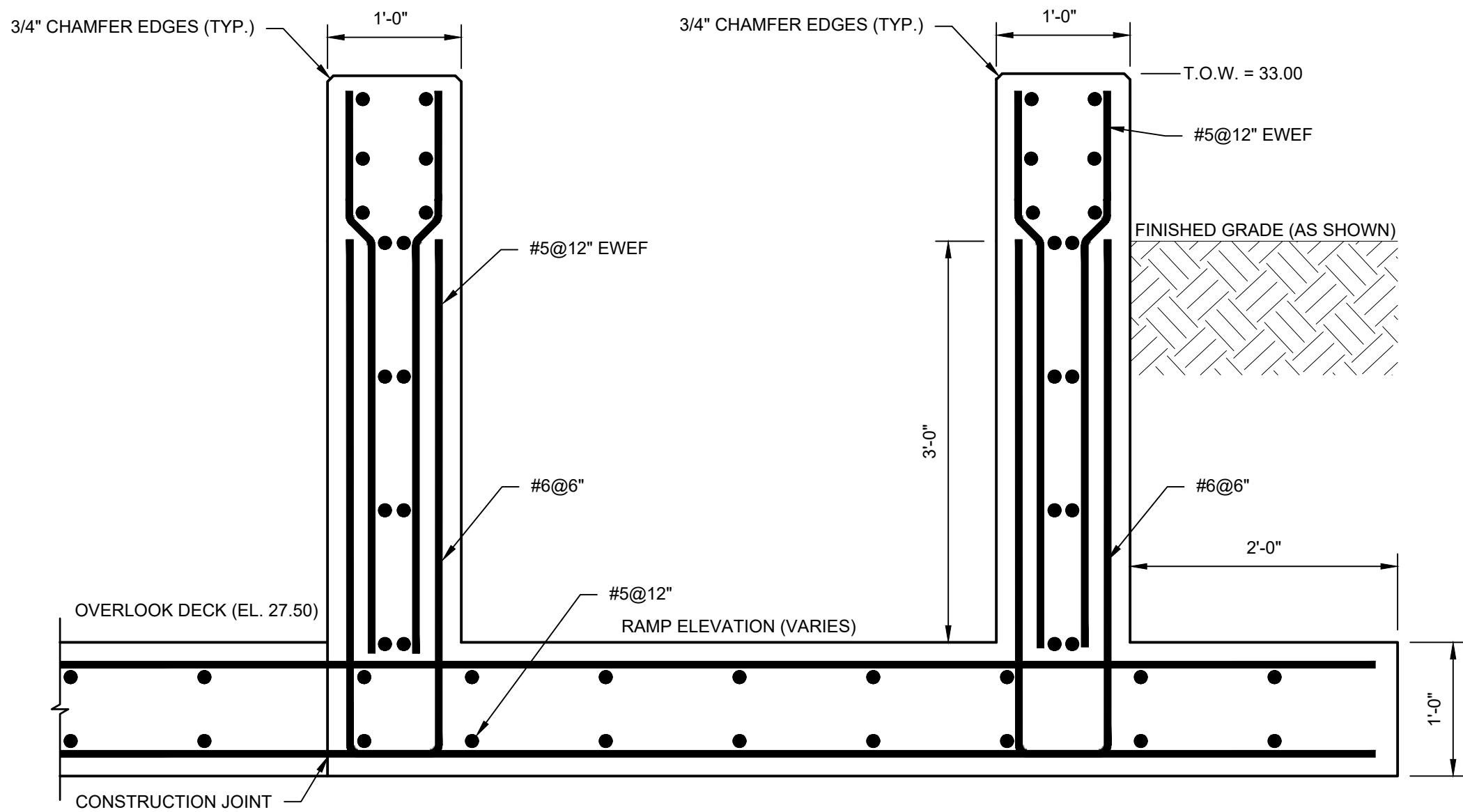
W&S Project No.: ENG21-1343
W&S File No.: ---

Drawing Title:

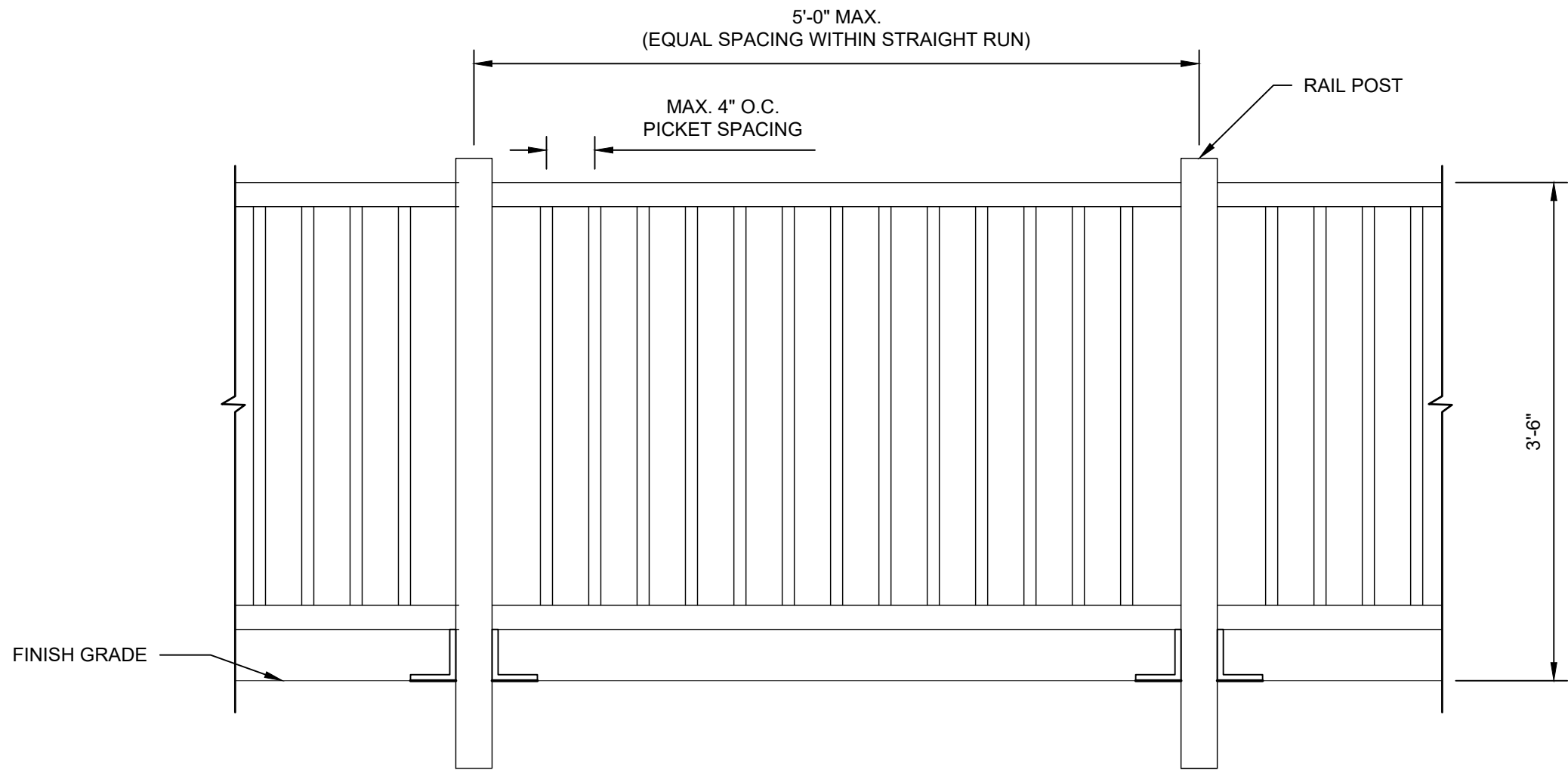
**OVERLOOK
STRUCTURE
DETAILS
(1 OF 2)**

Sheet Number:

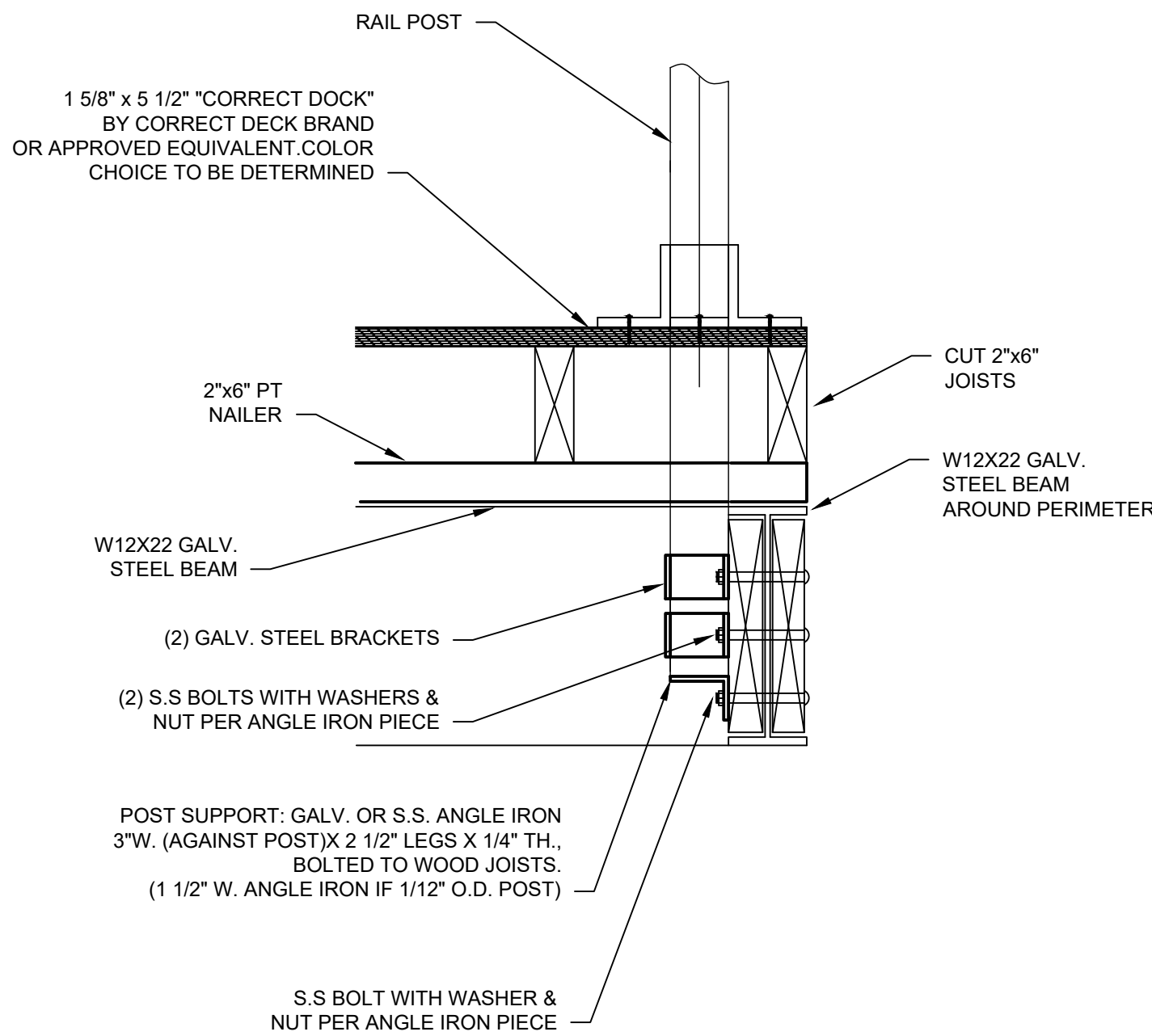
S-6



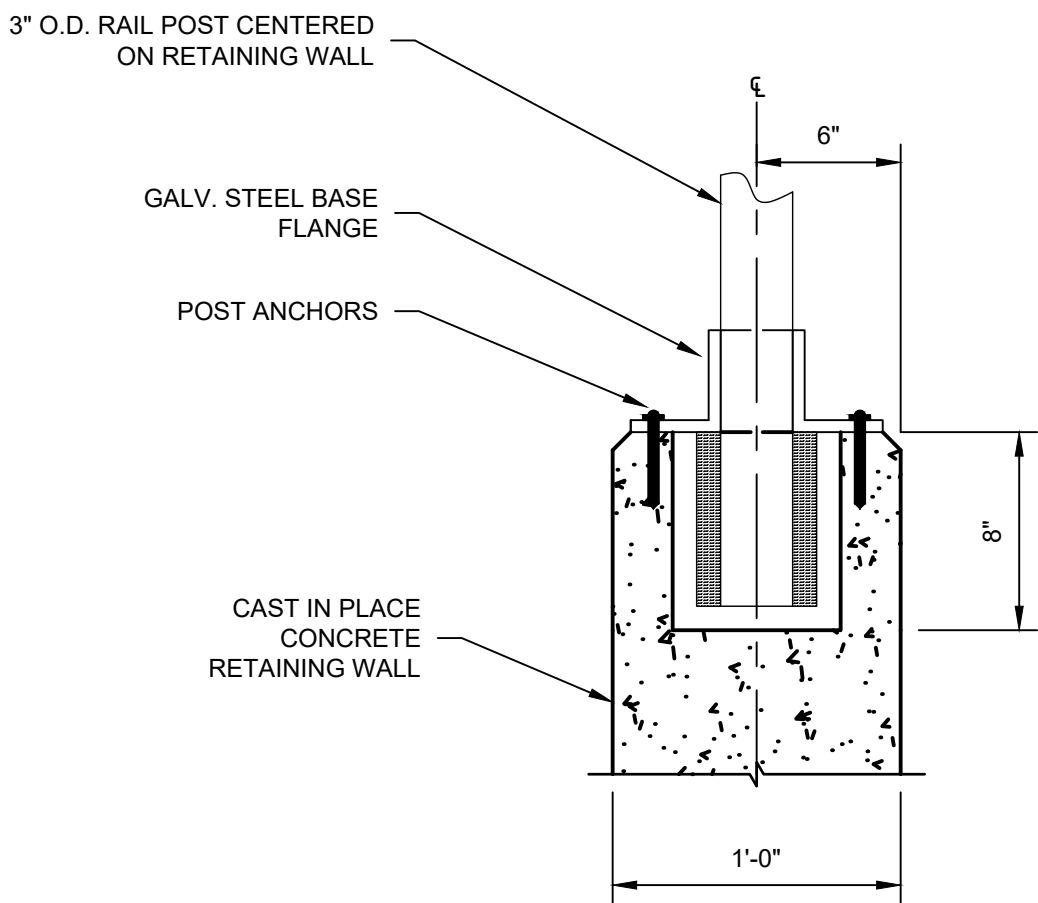
CONCRETE RETAINING WALL
1"=1'-0"



DECORATIVE RAILING
1"=1'-0"

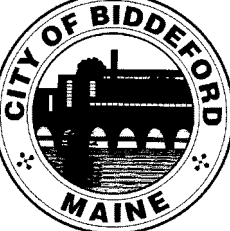


RAIL POST MOUNTING @ OVERLOOK
CANTILEVER STRUCTURE
1 1/2"=1'-0"



RAIL POST MOUNTING @ OVERLOOK PLAZA
RETAINING WALL
1/2"=1'-0"

Project:
CITY OF BIDEFORD,
MAINE



RIVERWALK RETAINING
WALL REPLACEMENT

Weston & Sampson
Weston & Sampson Engineers, Inc.
150 Dow Street Tower 4, Suite 350
Manchester, NH 03101
978.532.1900
800.SAMPSON
www.westonandsampson.com

Consultants:

Revisions:		
No.	Date	Description

Seal:

Issued For:

CITY REVIEW

Scale:

Date: 08-08-2022
Drawn By: ARA, RJB
Reviewed By: MAC
Approved By: ---

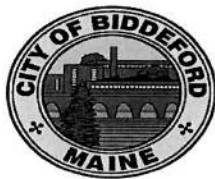
W&S Project No.: ENG21-1343
W&S File No.: ---

Drawing Title:

OVERLOOK
STRUCTURE
DETAILS
(2 OF 2)

Sheet Number:

S-7



City of Biddeford – Planning Department

Planning Board Application

P.O. Box 586, 205 Main Street Biddeford, Maine 04005

207-284-9115

Type of Application:

☐ Shoreland Zoning Permit

☒ Site Plan Review

☐ Extraction

☐ Conditional Use Permit

☐ Subdivision

☐ Private Way

☐ Other: _____

Applicant Information:

Name: City of Biddeford - Roby Fecteau

Mailing Address: 205 Main Street, Suite 104 Biddeford, ME

Telephone: 207-284-9236

Email: robby.fecteau@biddefordmaine.org

What is your legal interest in the property?

☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: Same as applicant

Mailing Address: _____

Telephone: _____

Email: _____

Agent's Information:

Name: Weston & Sampson Engineers, Inc. - Tom Strike

Mailing Address: 150 Dow St., Tower 4, Suite 350 Manchester, NH 03101

Telephone: 603-263-9499

Email: strike@wseinc.com

Engineer/Surveyor's Information:

Name: same as agent

Mailing Address: _____

Telephone: _____

Email: _____

Project Location and Lot Information:

Street Address: 2 Main Street Drainage Watershed: _____

Tax Map: see attached easement info Lot: see attached easement info

Current Zoning: General Development 1 Shoreland Zoning: _____

Size of Lot: 24,250 +/- () acres (X) s.f. Lot Frontage: Saco River

Existing Use of Property: Biddeford Riverwalk - Recreational

Property currently serviced by:

☐ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash

☐ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach information abouts Saco River

Is the project within the 100-year floodplain? ☒ (Yes) ☐ (No) if yes attach information Bottom of new wall in floodplain

Do you plan to bring fill onto the lot? ☒ (Yes) ☐ (No) If yes attach information

Fill will be removed to construct new wall and replace Riverwalk features. Fill will be replaced during replacement.

Description of proposed use of property:

Project/Proposed Use:

Repair damaged B. Bedford Riverwalk. Damaged retaining walls will be replaced with new soldier pile and lagging wall. All other damaged features, including overhang deck, will be replaced in-kind.

Property to be Serviced by:

☒ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☐ Private Hauler

Limits of Disturbance: 12,600 +/- () acres (☒) s.f.Net change in impervious cover: 0 () acres () s.f.Is this project part of a larger project? ☐ (Yes) ☒ (No)Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)Is this project within the Urbanized Area/MS4 (see City Drainage Map) ☒ (Yes) ☐ (No)Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)☒ **If in a Shoreland Zone:**Percent of residential lot coverage (Max 20%): 0Percent of structure expansion (Max 30%): 0☐ **If Subdivision Review, number of lots proposed:** _____☐ **If a Private Way is proposed, number of lots served:** _____**If Site Plan Review, you must provide the following information:**Total new square feet footprint of structure: replace in-kindTotal new square feet paving/parking: replace in-kind**Waiver Requests (attach details):**

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☐ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☐ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - ☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __ (Yes) __ (No)

- If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of Applicant: _____

Date

11/6/2023

Signature of Property Owner: _____

Date

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - All drawings & CAD reference files must be to-scale and within the following coordinate systems:
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

DRAFT EASEMENT

KNOW BY ALL THESE PRESENTS, That **PEPPERELL MILL PROGRESSION, LLC**, a Delaware Limited Liability Company duly authorized to do business in the State of Maine, whose mailing address is 84 Marginal Way, Suite 600, Portland, Maine 04101-2480, for consideration paid by the City of Biddeford, County of York, and State of Maine, whose mailing address is PO Box 586, Biddeford, Maine 04005, does hereby grant and convey unto the said City of Biddeford:

An easement to enter, repair, occupy and use for any and all lawful purpose, for the uses and purposes hereinafter described, over and across a certain parcel of land located in the City of Biddeford, County of York, and State of Maine, being described as follows:

Beginning at a point on the Southwesterly side of Main Street that is approximately one hundred fifty one (151) feet along the easterly side of the Grantee's land and running parallel to the Saco River Northerly;

Thence running seventy eight (78) feet Northerly along Grantee's land and parallel to the Saco River;

Thence turning ninety degrees (90°) and running two (2) feet west;

Thence turning at a ninety degree angle (90°) and running seventy eight (78) feet parallel to a point and turning ninety degrees (90°) and running two (2) feet to the point of beginning.

The above-described easement and right-of-way shall be for the following purposes: for the construction, reconstruction, repair, maintenance and installation of a certain sea wall to allow the Grantee access for the term of construction including the right to enter upon the said premises on foot and with motor vehicles, machinery, equipment and in any other manner for the purposes aforesaid.

The parties herein recognize that there exists an imminent danger to the health, safety and welfare of the inhabitants of the City of Biddeford due to the current existence of dangerous conditions over the land described herein including the potential collapse and/or destruction of buildings and a smoke stack into the Saco River or onto persons and property.

The Grantor herein agrees to indemnify and hold harmless the Grantee for any and all claims for any damage to the premises, liability claims and any and all claims whatsoever arising out of the Grantee's performance of any and all activities described herein.

DRAFT

IN WITNESS WHEREOF, the said Pepperell Mill Progression, LLC, has caused this instrument to be signed and sealed by _____, its _____, thereunto duly authorized, this ____ day of _____, 2023.

Signed, Sealed and Delivered
In the Presence of:

PEPPERELL MILL PROGRESSION, LLC

DRAFT

By _____

Its: _____

Print Name

STATE OF MAINE
YORK, SS.

_____, 2023

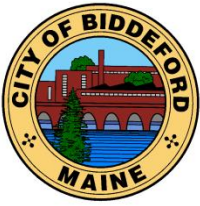
Then personally appeared the above-named _____, of Pepperell Mill Progression, LLC, and acknowledged the foregoing to be his/her free act and deed in his/her capacity and the free act and deed of said limited liability company.

Before me,

DRAFT

Notary Public/Maine Attorney at Law

(Print Name)



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

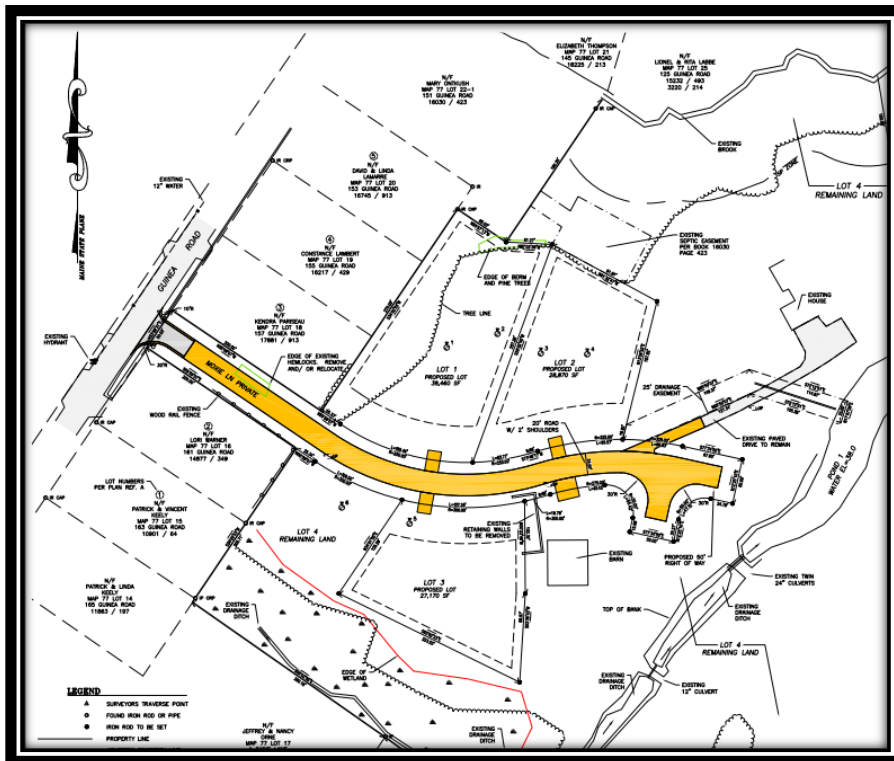
FROM: David C.M. Galbraith, City Planner & Acting Director of the Planning & Development Dept.

DATE: November 29, 2023

RE: **2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.**

MEETING DATE: December 6, 2023

1. INTRODUCTION



This project was last before the Planning Board, for sketch plan review, at the May 3, 2023 regular meeting. The Applicants and property owners, Travis and Lisa Wing with their agent Paul Gadbois, Project Engineer is seeking sketch plan review for the creation of three (3) new lots for the development of single-family homes. Moxie Lane is currently a paved driveway serving the a single house (1 Moxie Lane) however, the existing driveway is proposed to be improved to a four lot subdivision roadway standard. The subject property is 21 acres in area and the three proposed lots will be;

1) Lot # 1 = 38,460 square feet; 2) Lot # 2 = 28,870 square feet and; 3) Lot # 3 = 27,170 square feet in area. The balance of the 21 acres will remain with the existing house lot, identified as "Lot 4".

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023



Moxie Lane Existing Conditions

2. PROJECT DATA/INFORMATION

1.	Applicant:	Travis & Lisa Wing 1 Moxie Lane Biddeford, ME 04005
2.	Owner of Property:	Same as Applicant
3.	Agent:	Paul Gadbois PO Box 327 Saco, ME 04072
4.	Surveyor:	Same as above
5.	Project Location:	1 Moxie Lane
6.	Project Tax Map #/Lot #:	Tax Map 77, Lot 22
7.	Lot Size:	21 Acres
8.	Base Zoning:	SR1 & RF
9.	Overlay Zoning:	SP-Moora Brook
10.	Existing Use:	Single Family Home
11.	Proposed Use:	4 Single Family Homes with a private way
12.	Approvals Required:	Subdivision
13.	Uses in the Vicinity:	Residential

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	Application Fees Paid, not escrows
25.	Planning Board Review History: Sketch Plan - May 3, 2023	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan (Land Development Regulations, Article XI) review and Subdivision Review (Chapter 66 – Subdivisions) and approval by the Planning Board.

4. Departmental Review Comments:

A. Planning:

1. None

B. Code Enforcement:

1. No Comments Received.

C. Engineering Comments: Craig Chekan, Director of Engineering:

1. See below

D. Engineering Peer Review: Tom Saucier, P.E. Site Design Associates:

Based on our review we offer the following comments for your, the planning board's, and the applicant's consideration:

A. General

1. Are the existing ponds 1 and 2 shown on the plan regulated by DEP as streams?
2. What is the source of the draft stormwater maintenance agreement? Should it be reviewed by the city attorney?
3. The application indicates that no waivers are required. A waiver may be required for the 10 ft radius on the northerly side of the private way at Guinea Road and for monumentation of the private way with iron pins versus the granite monuments required by code.
4. Are the owners selling lots only, or are they building the homes on the lots?
5. For information only, the construction cost estimate indicates pricing is for a "box cut" road, which is not the typical section required for the private way.

B. Drawings I. Plan and Profile

- a. Are the 12" and 15" diameter storm drain pipes shown at Guinea Road existing or proposed? Where does the 12" outlet?
- b. The 15" diameter culvert should be shown in the profile.
- c. Based on the proposed profile grades and invert elevation, there will be inadequate cover over the 15" diameter culvert.
- d. There are drainage arrows shown in the ditch line of the road. Actual grades reflecting a ditch 6" below the subgrade elevation should be shown, including spot grades as required. Proposed grades are also required to verify that the low points at sta 2+50 and 4+45 are properly drained.
- e. More spot grades should be provided at the turnaround.
- f. The method for installing the water service under Guinea Road should be called out on the drawing.

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

- g. The profile and plan should show the grading at the end of the private way.
- h. Additional silt fence or sediment barriers should be called out downgradient of road construction and additional check dams called for in the road ditches.
- i. Some form of energy dissipation such as a level spreader should be shown at the outlet to the southerly road ditch near the turnaround.
- j. The rate of stormwater runoff to the existing 12" diameter culvert under the existing driveway to the existing house on lot 4 will increase as a result of the development. Some form of energy dissipation should be proposed at the outlet. Will this culvert have adequate capacity for the higher rate of runoff?
- k. A benchmark should be shown.

II. Details

- a. The road typical sections call for riprap on backslopes that exceed 3H to 1V. If there are such areas, the extent should be shown on the plan and profile drawing.
- b. The typical sections should show a crown.
- c. The typical public way section should include a note that the material thicknesses shown are a minimum, and should match the existing material thicknesses if those are greater than the thicknesses shown.

We do not believe that these comments, which are generally technical in nature, will significantly impact the overall design concept, and that they could be satisfactorily addressed at the time of the final plan submission/approval, if the planning board and you concur. If you have any questions, or require additional information, please do not hesitate to contact me.

E. Police Department:

- 1. No Comments received.

F. Fire:

- 1. The alternative hammer-head turn-around plan (SP2) as requested has been amended plan sets.

G. Traffic Peer Review:

- 1. Due to the small scale of the proposed three (3) lot subdivision, a Peer Traffic review is not warranted.

5. STAFF REVIEW

- **APPLICATION COMPLETENESS:** This application is for sketch plan approval so the purpose of this memorandum is to help identify missing submittal requirements and / or items Staff believes are important and necessary for the continued review of this plan.
- **ZONING:** The proposed use of the three (3) proposed lots is for the construction of a single family on each of the three (3) identified lots which are permitted uses within the SR-1 Zoning District. As currently proposed, each of the lots would meet the required dimensional standards including building height, building setback, frontage, and lot coverage requirements.

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

- **REVIEW STANDARDS:**

In general, staff found the preliminary plan application to satisfy City subdivision and site plan requirements. However, City Staff and the City’s third party civil engineer, identified a number of technical plan elements which need to be addressed by the Applicant in the Final Application.

- **WAIVERS:** The applicant is not seeking any waivers at this time.

6. STAFF RECOMMENDATION

Staff recommends the Board approve the Preliminary Subdivision Plans. Should the Board wish to formally make a motion sample motions are provided below:

7. SAMPLE MOTIONS

A. Motion to Approve: I motion to APPROVE the Preliminary Plan application for the proposal located 1 Moxie Lane (Tax Map 77, Lot 22), within the Suburban Residential & Rural Farm (SR 1 & RF) zones, as well as shoreland overlay zone.

B. Motion to Deny I motion to DENY Preliminary Plan approval for the proposal located 1 Moxie Lane (Tax Map 77, Lots 22), within Suburban Residential 1 and Rural Farm (SR1 & RF) zoning districts, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

C. Motion to Table: I motion to TABLE the Preliminary Subdivision and Site Plan approval for the proposal to be located 1 Moxie Lane (Tax Map 77, Lots 22), within the Suburban Residential 1 & Rural Farm (SR1 & RF) zoning districts, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

Riverbend Reserve Restaurant

One of the most striking aspects of the **Riverbend Reserve** property is the way it creates community. Families come to the campground year after year and stay for the season. Young parents who first camped at the campground are now grandparents. The large playground and river, for example, offer family friendly activities for all ages. The applicant's vision for the future of the campground involves construction of a new restaurant to deepen the sense of community by providing additional covered area for sharing meals and other hosting events for seasonal visitors and the neighboring communities.

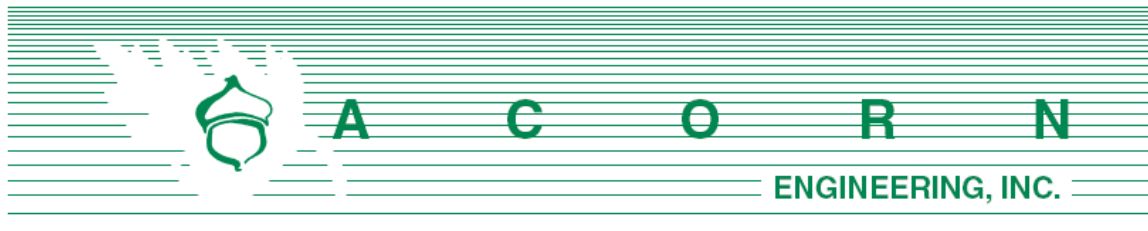
The proposed seasonal restaurant will accomplish the vision by adding food and activities to the existing campground business, as well as providing a gathering space for others. Breakfast and lunch will be served, and a full commercial kitchen is proposed for serving dinners. The applicant envisions that the restaurant would prepare food for movie nights and annual picnics hosted for the campers, as well as for special occasions that may be open to the public.

For breakfast, services and food offered will include a full coffee and espresso bar, locally baked goods, breakfast sandwiches and burritos, and fruit and yogurt plates. Lunch will include hot and cold sandwiches, burgers, and pizza from a pizza oven. The menu will focus on fresh and local rather than an extensive selection. For example, burgers would be locally sourced grass-fed beef, with local cheese, and topped with locally raised duck eggs.

Riverbend envisions that, with supervision by Riverbend Reserve staff, the kitchen could be made available for people and organizations that want to use a specific cooks or catering company. The applicant has already explored using local catering companies, and there are many quality businesses in the area which will be supported through recommendations and building partnerships.

The restaurant is the primary improvement to the property that will enhance options already available to guests. The existing campground currently has an animal barn playground, a game room, and daily RV and tent spots. The applicant would like to enhance the community sense with the addition of some farming elements such as honeybees, chickens, and an herb and flower garden. These additional farming elements can provide interesting activities for guests, as well as fresh food and flowers for the kitchen and barn.





Sketch Plan Review Application

To:
City of Biddeford

For:
Homestead by the River
Biddeford, Maine

Prepared For:
Riverbend Reserve, LLC.
608 New County Road
Biddeford, ME 04005

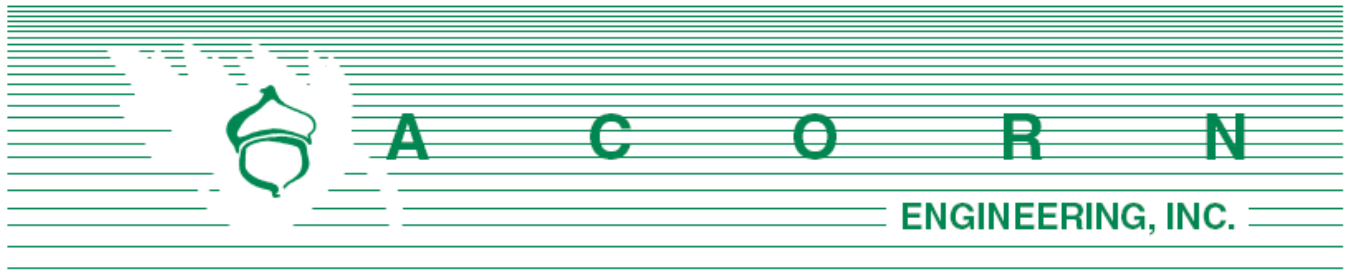
Prepared By:
Acorn Engineering, Inc.
500 Washington Avenue
Portland, Maine 04103

October 2023

Site Plans Revised 11-15-23

Exhibit A

Cover Letter



City of Biddeford, Planning Department
RE: David Galbraith, City Planner
205 Main Street
Biddeford, Maine 04005

September 22, 2023

Subject: Sketch Plan Review
New Restaurant Structure – Homestead by the River Campground

Dear Mr. Galbraith:

On behalf of Bryce Avallone and Peter Valcourt at Riverbend Reserve, LLC, Acorn Engineering (Acorn) is pleased to submit the enclosed Sketch Plan Application for a proposed 3,168 square foot restaurant at Homestead by the River Campground (608 – 610 New County Road). The approximate 29.5 parcel is identified as Lot 35-2 on Tax Map 6 and is located within the Rural Farm (RF) District and Shoreland Overlay Zoning District along Saco River. A “restaurant” is an allowed within the RF District as a Conditional Use.

The parcel is currently developed as Homestead by the River Campground, which is a small family friendly, seasonal campground consisting of tent and pull through camp sites, gravel parking area for visitors, bathhouse, barn, and recreational areas. There is also a single-family residential home on the property. The campground is served by an existing wastewater disposal system and public well. The intent of the new restaurant structure is to complement the existing campground by providing campers, visitors, and the public with fresh cooked farm-style comfort food. The restaurant will be situated outside the limits of the Shoreland Overlay Zoning District and Saco River Corridor District (includes land areas 500 feet along Saco River).

The restaurant will be constructed in an area of the campground that is currently used as a horse exercise area. Parking will be on land already used for campground visitor and recreation vehicle (RV) storage. We anticipate the existing gravel parking area will be sufficient meet local parking requirements of 1 space per 3 seats (Table 6-49B). A minimum 15-foot-wide vegetative screening buffer will be maintained along the westerly property line and adjoining residential use. The on-site well and disposal system will be evaluated for capacity to serve the restaurant. Other site improvements involve construction of walkways and patio areas surrounding the restaurant. With the implementation of buffers, lighting minimized to around the immediate building area, and hours of operation ending at 10:30 PM, we do not believe the proposed use will result a significant, detrimental effect on the use and peaceful enjoyment of abutting property. Furthermore, the parcel is outside the high value agricultural soils area as depicted in the comprehensive plan. We do not believe the project will result in a negative impact on agricultural production.

To assist the Planning Board and City staff, Acorn has prepared two site plans: one showing the entire parcel and a second that includes detailed site layout information of the immediate project area. We are hopeful that we have provided sufficient information for the committee to review before the meeting. Upon your review of the submitted information, please do not hesitate to contact us if you have any questions or comments. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Craig Burgess". The signature is written in a cursive, flowing style.

Craig A. Burgess, P.E.
Project Manager
Acorn Engineering, Inc.



TABLE OF CONTENTS**EXHIBIT #** **TITLE**

- | | |
|----|-------------------------------|
| A. | COVER LETTER |
| B. | SITE PLAN PREAPPLICATION FORM |
| C. | RIGHT, TITLE & INTEREST |
| D. | LOCATION MAP |
| E. | RESTAURANT USE NARRATIVE |

LIST OF DRAWINGS

- | | |
|--------|-------------------|
| C-10.1 | OVERALL SITE PLAN |
| C-10.2 | SITE PLAN |



Exhibit B

Site Plan Preapplication Form

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:☐ Shoreland Zoning Permit☒ Site Plan Review☐ Extraction☐ Conditional Use Permit☐ Subdivision☐ Private Way☒ Other: Sketch Plan Application**Applicant Information:**Name: Riverbend Reserve, LLC, attn: Bryce Avallone and Peter ValcourtMailing Address: 608 New County Road, Biddeford, ME 04005Telephone: (207) 469-8494Email: peter.valcourt@yahoo.com

What is your legal interest in the property?

☐ Owner☒ Potential Buyer with Contract☐ Lease/Rental Agreement**Owner's Information:**Name: Ruth P. and George H. KingMailing Address: 610 New County Road, Biddeford, ME 04005Telephone: (207) 282-6445Email: N/A**Agent's Information:**Name: Acorn Engineering, attn: Craig Burgess PE,Mailing Address: 500 Washington Avenue, Suite 202, Portland, ME 04101Telephone: (207) 837-1092Email: cburgess@acorn-engineering.com**Engineer/Surveyor's Information:**Name: Acorn Engineering, attn: Craig Burgess PE,Mailing Address: 500 Washington Avenue, Suite 202, Portland, ME 04101Telephone: (207) 837-1092Email: cburgess@acorn-engineering.com**Project Location and Lot Information:**Street Address: 608 - 610 New County Road Drainage Watershed: Saco RiverTax Map: 6Lot: 35-2Current Zoning: RF (Rural Farm)Shoreland Zoning: YesSize of Lot: 29.5 ☒ acres ☐ s.f. Lot Frontage: 2,536 feetExisting Use of Property: Existing campground and single-family residential home**Property currently serviced by:**☐ City Road☐ Public Sewer☐ Public Water☒ Public Trash☐ Private Road ☒ Septic System☒ Private Well☐ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope)☐ Rolling (3-8% slope)☐ Hilly (8-15% slope)☐ Steep (15%+ Slope)Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach informationIs the project within the 100-year floodplain? ☒ (Yes) ☐ (No) if yes attach informationDo you plan to bring fill onto the lot? ☐ (Yes) ☒ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

The project involves the construction of 3,168 square foot restaurant, walkways, and patio area. The restaurant will utilize the existing gravel parking area, public well, and subsurface wastewater disposal system.

Property to be Serviced by:

☐ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☐ Private Road ☒ Septic System ☒ Private Well ☐ Private Hauler

Limits of Disturbance: ~ 0.25 ☒ acres ☐ s.f.

Net change in impervious cover: ~ 20,300 ☐ acres ☒ s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)

Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☐ (Yes) ☒ (No)

Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

☒ If in a Shoreland Zone:

Percent of residential lot coverage (Max 20%): 0

Percent of structure expansion (Max 30%): 0

☐ If Subdivision Review, number of lots proposed: 10 total units

☐ If a Private Way is proposed, number of lots served: _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: 3,168 SF

Total new square feet paving/parking: N/A - utilize existing parking footprint

Waiver Requests (attach details):

1. None at this time
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☐ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☐ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - ☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to “Attachment A Fees and Charges” of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __ (Yes) __ (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant:  10/01/2023

Signature of Property Owner: _____ Date _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - *Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'*
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - *All drawings & CAD reference files must be to-scale and within the following coordinate systems:*
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

Exhibit C

Right, Title, & Interest

PURCHASE AND SALE AGREEMENT

("days" means business days unless otherwise noted, see paragraph 23)

September 30 202210/1/2022

Effective Date

Offer Date

Effective Date is defined in Paragraph 23 of this Agreement.

1. PARTIES: This Agreement is made between River Bend Reserve LLC ("Buyer") and Ruth P King and George H King ("Seller").

2. DESCRIPTION: Subject to the terms and conditions hereinafter set forth, Seller agrees to sell and Buyer agrees to buy ☐ all ☐ part of (if "part of" see para. 26 for explanation) the property situated in municipality of Biddeford, County of York, State of Maine, located at 608-610 New County Rd and described in deed(s) recorded at said County's Registry of Deeds Book(s) 16055, Page(s) 739-742.

3. FIXTURES: The Buyer and Seller agree that all fixtures, including but not limited to existing storm windows, screens, shades and/or blinds, shutters, curtain rods, built-in appliances, heating sources/systems including gas and/or kerosene-fired heaters and wood/pellet stoves, sump pump, electrical fixtures, hard-wired generators, landscaping, and _____ are included with the sale except for the following: _____. Seller represents that all mechanical components of fixtures will be operational at the time of closing except: None.

4. PERSONAL PROPERTY: The following items of personal property as viewed on August 15 2022 are included with the sale at no additional cost, in "as is" condition with no warranties: None.

5. PURCHASE PRICE/EARNEST MONEY: For such Deed and conveyance Buyer agrees to pay the total purchase price of \$ 2,000,000.00. Buyer ☐ has delivered; or ☒ will deliver to the Agency within 5 days of the Effective Date, a deposit of earnest money in the amount \$ 30,000.00. Buyer agrees that an additional deposit of earnest money in the amount of \$ 20,000.00 will be delivered July 15 2023. If Buyer fails to deliver the initial or additional deposit in compliance with the above terms Seller may terminate this Agreement. This right to terminate ends once Buyer has delivered said deposit(s). The remainder of the purchase price shall be paid by wire, certified, cashier's or trust account check upon delivery of the Deed.

This Purchase and Sale Agreement is subject to the following conditions:

6. ESCROW AGENT/ACCEPTANCE: Two Lights Settlement Service ("Agency") shall hold said earnest money and act as escrow agent until closing; this offer shall be valid until October 1 2022 (date) 5:00 ☐ AM ☒ PM; and, in the event of non-acceptance, this earnest money shall be returned promptly to Buyer.

7. TITLE AND CLOSING: A deed, conveying good and merchantable title in accordance with the Standards of Title adopted by the Maine Bar Association shall be delivered to Buyer and this transaction shall be closed and Buyer shall pay the balance due and execute all necessary papers on October 20 2023 (closing date) or before, if agreed in writing by both parties. If Seller is unable to convey in accordance with the provisions of this paragraph, then Seller shall have a reasonable time period, not to exceed 30 calendar days, from the time Seller is notified of the defect, unless otherwise agreed to in writing by both Buyer and Seller, to remedy the title. Seller hereby agrees to make a good-faith effort to cure any title defect during such period. If, at the later of the closing date set forth above or the expiration of such reasonable time period, Seller is unable to remedy the title, Buyer may close and accept the deed with the title defect or may terminate this Agreement in which case the parties shall be relieved of any further obligations hereunder and any earnest money shall be returned to the Buyer.

8. DEED: The property shall be conveyed by a Warranty Deed deed, and shall be free and clear of all encumbrances except covenants, conditions, easements and restrictions of record which do not materially and adversely affect the continued current use of the property.

Page 1 of 5

Buyer(s) Initials JKSeller(s) Initials JK

The Atlantic Real Estate Netw, 918 Forest Ave Portland, ME 04103
Jenna Segal

Produced with Lone Wolf Transactions (zipForm Edition) 717 N Harwood St, Suite 2200, Dallas, TX 75201

Phone: (207)

Fax:

www.lwlf.com

blank

9. **POSSESSION, OCCUPANCY, AND CONDITION:** Unless otherwise agreed in writing, possession and occupancy of premises, free of tenants and occupants, shall be given to Buyer immediately at closing. Said premises shall then be broom clean, free of all possessions and debris, and in substantially the same condition as at present, excepting reasonable use and wear. Buyer shall have the right to view the property within 24 hours prior to closing.

10. **RISK OF LOSS, DAMAGE, DESTRUCTION AND INSURANCE:** Prior to closing, risk of loss, damage, or destruction of premises shall be assumed solely by the Seller. Seller shall keep the premises insured against fire and other extended casualty risks prior to closing. If the premises are damaged or destroyed prior to closing, Buyer may either terminate this Agreement and be refunded the earnest money, or close this transaction and accept the premises "as-is" together with an assignment of the insurance proceeds relating thereto.

11. **FUEL/UTILITIES/PRORATIONS:** Buyer ☐ shall ☒ shall not pay Seller at closing for all fuel in any tanks remaining on the property calculated as of the closing date or such earlier date as required to comply with lender requirements, if any. The amount owed, if any, shall be determined using the most recently available cash price of the company that last delivered the fuel. Metered utilities such as electricity, water and sewer will be paid through the date of closing by Seller. The following items, where applicable, shall be prorated as of the date of closing: collected rent, association fees, (other) No Others. The day of closing is counted as a Seller day. Real estate taxes shall be prorated as of the date of closing (based on municipality's fiscal year). Seller is responsible for any unpaid taxes for prior years. If the amount of said taxes is not known at the time of closing, they shall be apportioned on the basis of the taxes assessed for the preceding year with a reapportionment as soon as the new tax rate and valuation can be ascertained, which latter provision shall survive closing. Buyer and Seller will each pay their transfer tax as required by State of Maine.

12. **DUE DILIGENCE:** Neither Seller nor Licensee makes any warranties regarding the condition, permitted use or value of Sellers' real or personal property, or any representations as to compliance with any federal, state or municipal codes, including, but not limited to, fire, life safety, electrical and plumbing. Buyer is encouraged to seek information from professionals regarding any specific issue or concern.

☐ Buyer's obligation to close under this Agreement is not subject to any due diligence investigations. Buyer is relying completely upon Buyer's own opinion as to the condition of the property.

☒ Buyer's obligation to close under this Agreement is subject to Buyer's satisfaction with the results of any due diligence investigations undertaken. Buyer shall have 7 days from the Effective Date of this Agreement to perform such due diligence investigations as Buyer deems necessary which may include, but are not limited to, any or all of the following: (See Due diligence addendum)

General Building	Square Footage	Zoning	Survey/MLI	Habitat Review/Waterfowl
Sewage Disposal	Code Conformance	Pests	Lead Paint	Shoreland Septic
Water Quality	Registered Farmland	Pool	Flood Plain	Energy Audit
Water Quantity	Environmental Scan	Insurance	Chimney	Lot Size/Acreage
Air Quality	Smoke/CO Detectors	Mold	Tax Status*	Arsenic Wood/Water (see par. 13)

All investigations will be done at Buyer's expense by persons chosen by Buyer in Buyer's sole discretion. Seller agrees to cooperate with Buyer and shall give Buyer and Buyer's agents and consultants reasonable access to the property and its systems and fixtures in order to undertake the above investigations. Buyer agrees to take reasonable steps to return the property to its pre-inspection condition. If the result of any investigation is unsatisfactory to Buyer in Buyer's sole discretion, Buyer may terminate this Agreement by notifying Seller in writing within the specified number of days, and any earnest money shall be returned to Buyer. If the result of any investigation is unsatisfactory to Buyer, and Buyer wishes to pursue remedies other than voiding the Agreement, Buyer must do so to full resolution within the time period set forth above; otherwise this contingency is waived. If Buyer does not notify Seller that an investigation is unsatisfactory within the time period set forth above, or if any investigation under this paragraph is not performed or completed during the period specified in this paragraph, this contingency and the right to conduct an investigation are waived by Buyer.

* If the property is enrolled in the Maine Tree Growth Tax program, Seller agrees to provide Buyer with the current Forest Management and Harvest Plan within 7 days. ☐ Yes ☐ No

13. **PROPERTY DISCLOSURE FORM:** Buyer acknowledges receipt of Property Disclosure Form and the information developed by the Maine Center for Disease Control and Prevention regarding arsenic in private water supplies and arsenic in treated wood.

14. FINANCING: Buyer's obligation to close:

Not Subject to Financing

- ☒ is not subject to a financing contingency. Buyer has provided Seller with acceptable proof of the funds.
☐ is not subject to a financing contingency. Buyer shall provide proof of the funds acceptable to Seller within _____ days. If such proof is unacceptable to Seller, Seller may terminate this Agreement no later than _____ days from receipt. If proof of funds is not provided within such time period, Seller may terminate this Agreement which right shall end once such proof is received, however Seller retains the agreed upon time period to terminate if such proof is unacceptable. If Seller terminates in either case, the earnest money shall be returned to Buyer.

☐ Buyer's ability to purchase ☐ is ☐ is not subject to the sale of another property. See addendum ☐ Yes ☐ No.

Subject to Financing

☐ Buyer's obligation to close is subject to financing as follows:

- Buyer's obligation to close is subject to Buyer obtaining a _____ loan of _____ % of the purchase price, at an interest rate not to exceed _____ % and amortized over a period of _____ years. Buyer is under a good faith obligation to seek and obtain financing on these terms. If such financing is not available to Buyer as of the closing date, Buyer is not obligated to close and may terminate this Agreement in which case the earnest money shall be returned to Buyer.
- Buyer to provide Seller with letter from lender showing that Buyer has made application for loan specified in (a) and, subject to verification of information, is qualified for the loan requested within _____ days from the Effective Date of the Agreement. If Buyer fails to provide Seller with such letter within said time period, Seller may terminate this Agreement and the earnest money shall be returned to Buyer. This right to terminate ends once Buyer's letter is received.
- Buyer hereby authorizes, instructs and directs its lender to communicate the status of the Buyer's loan application to Seller, Seller's licensee and Buyer's licensee.
- After (b) is met, if the lender notifies Buyer that it is unable or unwilling to provide said financing, Buyer is obligated to provide Seller with the written documentation of the loan denial within two days of receipt. After notifying Seller, Buyer shall have _____ days to provide Seller with a letter from another lender showing that Buyer has made application for loan specified in (a) and, subject to verification of information, is qualified for the loan requested. If Buyer fails to provide Seller with such letter within said time period, Seller may terminate this Agreement and the earnest money shall be returned to Buyer. This right to terminate ends once Buyer's letter is received.
- Buyer agrees to pay no more than _____ points. Seller agrees to pay up to \$ _____ toward Buyer's actual pre-pays, points and/or closing costs, but no more than allowable by Buyer's lender.
- Buyer's ability to obtain financing ☐ is ☐ is not subject to the sale of another property. See addendum ☐ Yes ☐ No.
- Buyer may choose to pay cash instead of obtaining financing. If so, Buyer shall notify Seller in writing including providing proof of funds and the Agreement shall no longer be subject to financing, and Seller's right to terminate pursuant to the provisions of this paragraph shall be void and Seller's obligations pursuant to 14e shall remain in full force and effect.

15. BROKERAGE DISCLOSURE: Buyer and Seller acknowledge they have been advised of the following relationships:

Peter Valcourt (014521) of Atlantic Real Estate (2712)
 Licensee MLS ID Agency MLS ID
 is a ☐ Seller Agent ☒ Buyer Agent ☐ Disc Dual Agent ☐ Transaction Broker
Matthew Freedman (010976) of EXP REALTY LLC (2742)
 Licensee MLS ID Agency MLS ID
 is a ☒ Seller Agent ☐ Buyer Agent ☐ Disc Dual Agent ☐ Transaction Broker

If this transaction involves Disclosed Dual Agency, the Buyer and Seller acknowledge the limited fiduciary duties of the agents and hereby consent to this arrangement. In addition, the Buyer and Seller acknowledge prior receipt and signing of a Disclosed Dual Agency Consent Agreement.

16. DEFAULT/RETURN OF EARNEST MONEY: Buyer's failure to fulfill any of Buyer's obligations hereunder shall constitute a default and Seller may employ all legal and equitable remedies, including without limitation, termination of this Agreement and forfeiture by Buyer of the earnest money. Seller's failure to fulfill any of Seller's obligations hereunder shall constitute a default and Buyer may employ all legal and equitable remedies, including without limitation, termination of this Agreement and return to Buyer of the earnest money. Agency acting as escrow agent has the option to require written releases from both parties prior to disbursing the earnest money to either Buyer or Seller. In the event that the Agency is made a party to any lawsuit by virtue of acting as escrow agent, Agency shall be entitled to recover reasonable attorney's fees and costs which shall be assessed as court costs in favor of the prevailing party.

17. MEDIATION: Earnest money or other disputes within the jurisdictional limit of small claims court will be handled in that forum. All other disputes or claims arising out of or relating to this Agreement or the property addressed in this Agreement (other than requests for injunctive relief) shall be submitted to mediation in accordance with generally accepted mediation practices. Buyer and Seller are bound to mediate in good faith and to each pay half of the mediation fees. If a party fails to submit a dispute or claim to mediation prior to initiating litigation (other than requests for injunctive relief), then that party will be liable for the other party's legal fees in any subsequent litigation regarding that same matter in which the party who failed to first submit a dispute or claim to mediation loses in that subsequent litigation. This clause shall survive the closing of the transaction.

Page 3 of 5

Buyer(s) Initials

Seller(s) Initials

Produced with Lone Wolf Transactions (zipForm Edition) 717 N Harwood St. Suite 2200, Dallas, TX 75201 www.lwolf.com

blank

18. **PRIOR STATEMENTS:** Any representations, statements and agreements are not valid unless contained herein. This Agreement completely expresses the obligations of the parties and may only be amended in writing, signed by both parties.

19. **HEIRS/ASSIGNS:** This Agreement shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns of the Seller and the assigns of the Buyer.

20. **COUNTERPARTS:** This Agreement may be signed on any number of identical counterparts with the same binding effect as if the signatures were on one instrument. Original or faxed or other electronically transmitted signatures are binding.

21. **SHORELAND ZONE SEPTIC SYSTEM:** Seller represents that the property ☐ does ☐ does not contain a septic system within the Shoreland Zone. If the property does contain a septic system located in the Shoreland Zone, Seller agrees to provide certification at closing indicating whether the system has/has not malfunctioned within 180 calendar days prior to closing.

22. **NOTICE:** Any notice, communication or document delivery requirements hereunder may be satisfied by providing the required notice, communication or documentation to or from the parties or their Licensee. Only withdrawals of offers and withdrawals of counteroffers will be effective upon communication, verbally or in writing.

23. **EFFECTIVE DATE/BUSINESS DAYS:** This Agreement is a binding contract when the last party signing has caused a paper or electronic copy of the fully executed agreement to be delivered to the other party which shall be the Effective Date. Licensee is authorized to fill in the Effective Date on Page 1 hereof. Except as expressly set forth to the contrary, the use of the term "days" in this Agreement, including all addenda made a part hereof, shall mean business days defined as excluding Saturdays, Sundays and any observed Maine State/Federal holidays. Deadlines in this Agreement, including all addenda, expressed as "within x days" shall be counted from the Effective Date, unless another starting date is expressly set forth, beginning with the first day after the Effective Date, or such other established starting date, and ending at 5:00 p.m. Eastern Time on the last day counted. Unless expressly stated to the contrary, deadlines in this Agreement, including all addenda, expressed as a specific date shall end at 5:00 p.m. Eastern Time on such date.

24. **CONFIDENTIALITY:** Buyer and Seller authorize the disclosure of the information herein to the real estate licensees, attorneys, lenders, appraisers, inspectors, investigators and others involved in the transaction necessary for the purpose of closing this transaction. Buyer and Seller authorize the lender and/or closing agent preparing the closing disclosure and/or settlement statement to release a copy of the closing disclosure and/or settlement statement to the parties and their licensees prior to, at and after the closing.

25. **ADDENDA:** Lead Paint - ☒ Yes ☐ No ; Other - ☒ Yes ☐ No Explain: see addendum 1

The Property Disclosure Form is not an addendum and not part of this Agreement.

26. **OTHER CONDITIONS:**

Once due Diligence is complete, and all other provisions of the contract are met, buyers agree to pay sellers \$75,000 as a penalty if they are unable to close on the agreed upon close date.

Sellers agree to pay buyers \$75,000 if they are unable to close on the agreed upon close date.

27. **GENERAL PROVISIONS:**

- a. A copy of this Agreement is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, contact an attorney. This is a Maine contract and shall be construed according to the laws of Maine.
- b. Seller acknowledges that State of Maine law requires buyers of property owned by non-resident sellers to withhold a prepayment of capital gains tax unless a waiver has been obtained by Seller from the State of Maine Revenue Services.
- c. Buyer and Seller acknowledge that under Maine law payment of property taxes is the legal responsibility of the person who owns the property on April 1, even if the property is sold before payment is due. If any part of the taxes is not paid when due, the lien will be filed in the name of the owner as of April 1 which could have a negative impact on their credit rating. Buyer and Seller shall agree at closing on their respective obligations regarding actual payment of taxes after closing. Buyer and Seller should make sure they understand their obligations agreed to at closing and what may happen if taxes are not paid as agreed.
- d. Buyer acknowledges that Maine law requires continuing interest in the property and any back up offers to be communicated by the listing agent to the Seller.
- e. Whenever this Agreement provides for earnest money to be returned or released, agency acting as escrow agent must comply with the Maine Real Estate Commission rules which may require written notices or obtain written release from both parties.

Page 4 of 5

Buyer(s) Initials

Seller(s) Initials

Produced with Lone Wolf Transactions (zipForm Edition) 717 N Harwood St, Suite 2200, Dallas, TX 75201 www.lwolf.com

blank

28. ELECTRONIC SIGNATURES: Pursuant to the Maine Uniform Electronic Transactions Act and Digital Signature Act, the parties authorize and agree to the use of electronic signatures as a method of signing/initialing this Agreement, including all addenda. The parties hereby agree that either party may sign electronically by utilizing an electronic signature service.

Buyer's Mailing address is 147 Pleasant Ave #1 Portland ME 04103

<u><i>[Signature]</i></u>	<u>9/29/22</u>	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE	DATE

Seller accepts the offer and agrees to deliver the above-described property at the price and upon the terms and conditions set forth and agrees to pay agency a commission for services as specified in the listing agreement.

Seller's	<u><i>Ruth King</i></u>	<u>October 1, 2022</u>	<u><i>George King</i></u>	<u>October 1, 2022</u>
SELLER	DATE	SEL	King	DATE
SELLER	DATE	SELLER	DATE	DATE

COUNTER-OFFER

Seller agrees to sell on the terms and conditions as detailed herein with the following changes and/or conditions:

The parties acknowledge that until signed by Buyer, Seller's signature constitutes only an offer to sell on the above terms and the offer will expire unless accepted by Buyer's signature with communication of such signature to Seller by (date) _____ (time) _____ ☐ AM ☐ PM.

SELLER	DATE	SELLER	DATE
SELLER	DATE	SELLER	DATE

The Buyer hereby accepts the counter offer set forth above.

BUYER	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE

EXTENSION

The closing date of this Agreement is extended until _____ DATE

SELLER	DATE	SELLER	DATE
SELLER	DATE	SELLER	DATE
BUYER	DATE	BUYER	DATE
BUYER	DATE	BUYER	DATE



Maine Association of REALTORS®/Copyright © 2022.
All Rights Reserved. Revised 2022.

Page 5 of 5

Produced with Lone Wolf Transactions (zipForm Edition) 717 N Harwood St, Suite 2200, Dallas, TX 75201 www.lwolf.com



blank

ADDENDUM 1 TO AGREEMENT

Addendum to contract dated September 28, 2022
 between Ruth P King, George H King (hereinafter "Seller")
 and River Bend Reserve LLC (hereinafter "Buyer")
 property located at 608-610 New County Road, Biddeford,

1. Seller to provide current campground map showing all existing sites, services for each, and list of which properties currently have leases for 2023.
2. Seller to provide a copy of the seasonal lease.
3. Seller to provide Buyer, during due diligence period, a personal information only walk through of structures to review HVAC systems.
4. Seller to provide one year of financials

Parties acknowledge Agency's advice to seek legal, tax and other professional advice as necessary in connection with sale/purchase of property

Buyer 9/29/22 ate
River Bend Reserve LLC

Buyer ate

Buyer ate

Buyer ate

Ruth King September 29, 2022
Seller ate
Ruth P King

George King September 29, 2022
Seller ate
George H King

Seller ate

Seller ate



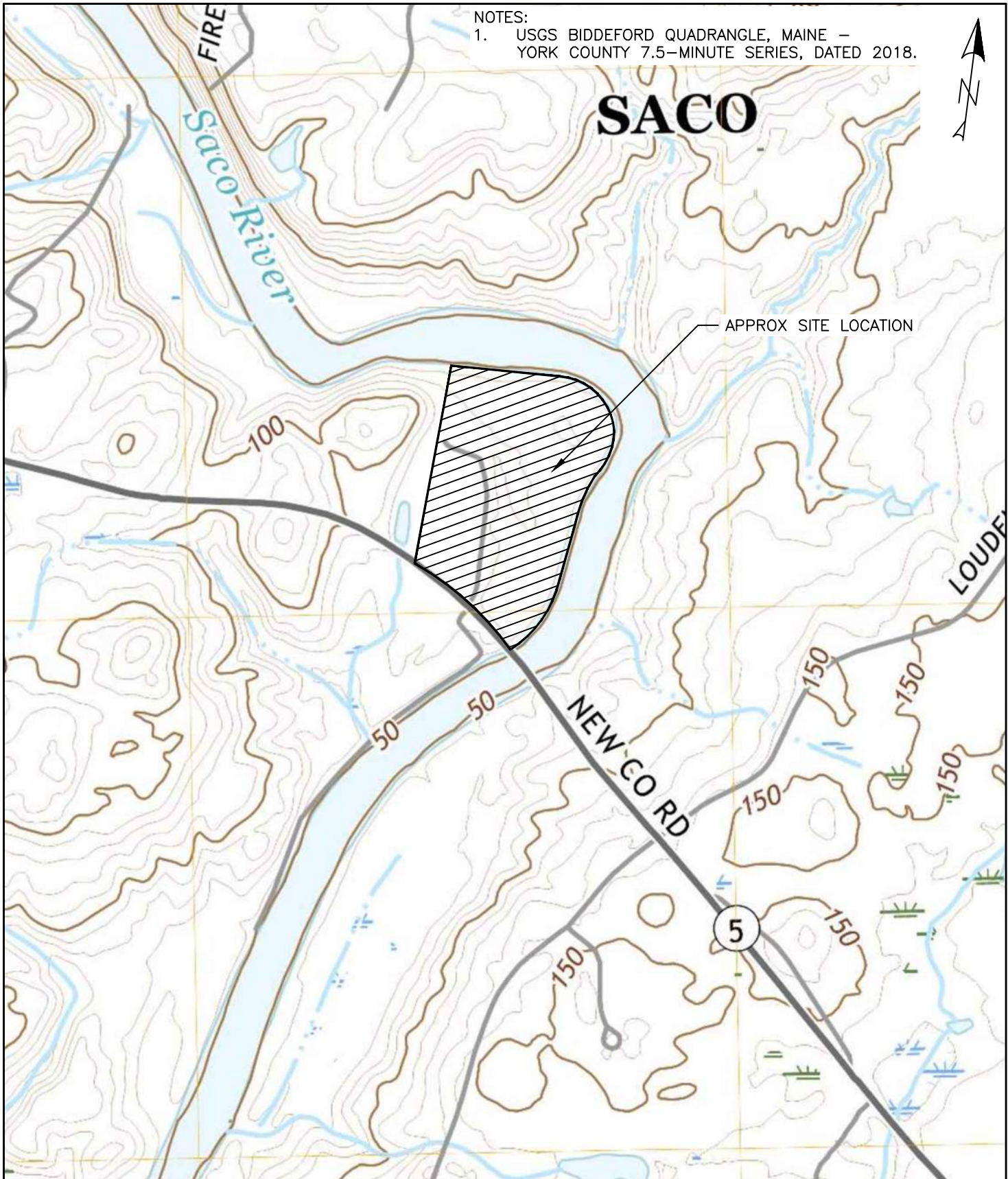
Maine Association of REALTORS®/Copyright © 2022.
 All rights reserved



King

Exhibit D

Site Location Map



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.	FILE:	1206_VICINITY	 ACORN ENGINEERING, INC. ACORN ENGINEERING, INC. P.O. BOX 3372 PORTLAND, MAINE 04104 (207) 775-2655	DRAWING NAME:	VICINITY MAP	ISSUED FOR	BY
	JN:	1206		PROJECT NAME:	HOMESTEAD BY THE RIVER	SKETCH PLAN	DATE
	SCALE:	1"=800'					CAB
	10/2/23						
DRAWING NO.	DESIGN BY:	CAB	CLIENT:	BRYCE AVALLONE & PETER VALCOURT			
VICINITY	DRAWN BY:	BJK					
	CHECKED BY:	WHS					

Exhibit E

Restaurant Use Narrative

Riverbend Reserve Restaurant

One of the most striking aspects of the **Riverbend Reserve** property is the way it creates community. Families come to the campground year after year and stay for the season. Young parents who first camped at the campground are now grandparents. The large playground and river, for example, offer family friendly activities for all ages. The applicant's vision for the future of the campground involves construction of a new restaurant to deepen the sense of community by providing additional covered area for sharing meals and other hosting events for seasonal visitors and the neighboring communities.

The proposed seasonal restaurant will accomplish the vision by adding food and activities to the existing campground business, as well as providing a gathering space for others. Breakfast and lunch will be served, and a full commercial kitchen is proposed for serving dinners. The applicant envisions that the restaurant would prepare food for movie nights and annual picnics hosted for the campers, as well as for special occasions that may be open to the public.

For breakfast, services and food offered will include a full coffee and espresso bar, locally baked goods, breakfast sandwiches and burritos, and fruit and yogurt plates. Lunch will include hot and cold sandwiches, burgers, and pizza from a pizza oven. The menu will focus on fresh and local rather than an extensive selection. For example, burgers would be locally sourced grass-fed beef, with local cheese, and topped with locally raised duck eggs.

Riverbend envisions that, with supervision by Riverbend Reserve staff, the kitchen could be made available for people and organizations that want to use a specific cooks or catering company. The applicant has already explored using local catering companies, and there are many quality businesses in the area which will be supported through recommendations and building partnerships.

The restaurant is the primary improvement to the property that will enhance options already available to guests. The existing campground currently has an animal barn playground, a game room, and daily RV and tent spots. The applicant would like to enhance the community sense with the addition of some farming elements such as honeybees, chickens, and an herb and flower garden. These additional farming elements can provide interesting activities for guests, as well as fresh food and flowers for the kitchen and barn.



C-10.1

Overall Site Plan

Revised 11-15-23

1. SUBJECT PARCELS INCLUDE:
A. 608 NEW COUNTY ROAD, BIDDEFORD, ME, 04005, PARCEL MAP 6, LOT 35,
SUB--LOT 2, AREA: 29.5 AC.±
2. THE PARCEL IS LOCATED WITHIN THE RF (RURAL FARM) DISTRICT. A PORTION OF THE PARCEL ALONG THE RIVER IS WITHIN THE LIMITED RESIDENTIAL DISTRICT.
3. PROPERTY BOUNDARY AND TOPOGRAPHIC DATA ARE FROM PLAN REFERENCE A. THE VERTICAL DATUM IS NAD83.
4. A PORTION OF THE PARCEL ALONG THE RIVER IS LOCATED INSIDE THE 100-YEAR FLOODPLAIN AS DEPICTED ON FIRM PANEL #2301450002B DATED 5/15/1984.
5. PLAN REFERENCES:
A. BOUNDARY & TOPOGRAPHICAL SURVEY MAP OF BIDDEFORD - COLUMBIE, ME LAND FOR SEBASTIAN K. BRADLEY & MADYLENE BRADLEY BY DOW & DAYTON, INC. LAND SURVEYORS & PLANNERS SACO, MAINE, DATED 7.23.1996

SPACE AND BULK STANDARDS		
ZONING DISTRICT: RF, ALL OTHER (RURAL FARM)	REQUIRED	PROPOSED
MINIMUM LOT SIZE WITH NEITHER WATER/ SEWER	40,000 SF	1,290,322 SF
MINIMUM FRONTAGE WITH NEITHER WATER/SEWER	200 FT	2,546 FT
MINIMUM SETBACK FROM MAJOR R.O.W.	40 FT	40 FT+
MINIMUM SETBACK FROM OTHER R.O.W.	25 FT	N/A
MINIMUM SIDE SETBACK	25 FT	25 FT+
MINIMUM REAR SETBACK	25 FT	25 FT+
MAXIMUM STRUCTURE STORIES	3	1.5
MAXIMUM STRUCTURE HEIGHT	35 FT	24.6 FT

[illegible]

DRAWING NAME:	OVERALL SITE PLAN
PROJECT NAME:	HOMESTEAD BY THE RIVER
CLIENT:	BRYCE AVALLONE & PETER VALCOURT 608 NEW COUNTY ROAD BIDEFORD, MAINE 04015

ACORN ENGINEERING, INC. 04104
 PO BOX 3372, PORTLAND MAINE
 (207) 775-2655

FILE:	1206_CIVIL_
JN:	1206
SCALE:	AS NOTED
DESIGNED BY:	CAB
DRAWN BY:	BJK
CHECKED BY:	WHS

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
PROFESSIONAL ENGINEER
11-15-23

DRAWING NO.
C-10.1

C-10.2

Site Plan

Revised 11-15-23

GENERAL NOTES:
1. SUBJECT PARCELS INCLUDE:
A. 608 NEW COUNTY ROAD, BIDDEFORD, ME, 04005, PARCEL MAP 6, LOT 35, SUB--LOT 2, AREA: 29.5 AC.±
2. THE PARCEL IS LOCATED WITHIN THE RF (RURAL FARM) DISTRICT. A PORTION OF THE PARCEL ALONG THE RIVER IS WITHIN THE LIMITED RESIDENTIAL DISTRICT.
3. PROPERTY BOUNDARY AND TOPOGRAPHIC DATA ARE FROM PLAN REFERENCE A, THE VERTICAL DATUM IS NAD83.
4. A PORTION OF THE PARCEL ALONG THE RIVER IS LOCATED INSIDE THE 100-YEAR FEMA FLOODPLAIN AS DEPICTED ON FIRM PANEL #2301450002B DATED 5/15/1984.
5. PLAN REFERENCES:
A. BOUNDARY & TOPOGRAPHICAL SURVEY MAP OF BIDDEFORD -- DAYTON, MAINE FOR BEDTON K. BRALEY & MARYALICE BRALEY BY DOW & COULOMBE, INC. LAND SURVEYORS & PLANNERS SACO, MAINE, DATED 7/29/1996

SPACE AND BULK STANDARDS		
ZONING DISTRICT: RF, ALL OTHER (RURAL FARM)	REQUIRED	PROPOSED
MINIMUM LOT SIZE WITH NEITHER WATER/ SEWER	40,000 SF	1,290,322 SF
MINIMUM FRONTAGE WITH NEITHER WATER/SEWER	200 FT	2,546 FT
MINIMUM SETBACK FROM MAJOR R.O.W.	40 FT	40 FT+
MINIMUM SETBACK FROM OTHER R.O.W.	25 FT	N/A
MINIMUM SIDE SETBACK	25 FT	25 FT+
MINIMUM REAR SETBACK	25 FT	25 FT+
MAXIMUM STRUCTURE STORIES	3	1.5
MAXIMUM STRUCTURE HEIGHT	35 FT	24.6 FT



ISSUED FOR
CITY COUNCIL SUBMISSION
SKETCH APPLICATION
REVISED
SKETCH APPLICATION

BY
DATE
CAB
4/23/2023
CAB
10/6/2023
CAB
11/15/2023

DRAWING NAME:
PROJECT NAME:
CLIENT:

SITE PLAN
HOMESTEAD BY THE RIVER
BRYCE AVALLONE & PETER VALCOURT
608 NEW COUNTY ROAD BIDDEFORD, MAINE 04005

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

FILE: 1206_CIVIL
JN: 1206
SCALE: AS NOTED
DESIGNED BY: CAB
DRAWN BY: BJL
CHECKED BY: WHS

STATE OF MAINE
CRAIG A. BURGESS
NO. 86938
PROFESSIONAL ENGINEER
11-15-23

DRAWING NO.
C-10.2

1. SUBJECT PARCELS INCLUDE:
 - A. 608 NEW COUNTY ROAD, BIDDEFORD, ME, 04005, PARCEL MAP 6, LOT 35, SUB--LOT 2, AREA: 29.5 AC.±
2. THE PARCEL IS LOCATED WITHIN THE RF (RURAL FARM) DISTRICT. A PORTION OF THE PARCEL ALONG THE RIVER IS WITHIN THE LIMITED RESIDENTIAL DISTRICT.
3. PROPERTY BOUNDARY AND TOPOGRAPHIC DATA ARE FROM PLAN REFERENCE A. THE VERTICAL DATUM IS NAD83.
4. A PORTION OF THE PARCEL ALONG THE RIVER IS LOCATED INSIDE THE 100-YEAR FEMA FLOODPLAIN AS DEPICTED ON FIRM PANEL #2301450002B DATED 5/15/1984.
5. PLAN REFERENCES:
 - A. BOUNDARY & TOPOGRAPHICAL SURVEY MAP OF BIDDEFORD -- DAYTON, MAINE FOR BEDTON K. BRALEY & MADYCALE BRALEY BY DOW & COULOMB, INC. LAND SURVEYORS & PLANNERS SACO, MAINE, DATED 7.29.1996

SPACE AND BULK STANDARDS		
ZONING DISTRICT: RF, ALL OTHER (RURAL FARM)	REQUIRED	PROPOSED
MINIMUM LOT SIZE WITH NEITHER WATER/ SEWER	40,000 SF	1,290,322 SF
MINIMUM FRONTAGE WITH NEITHER WATER/SEWER	200 FT	2,546 FT
MINIMUM SETBACK FROM MAJOR R.O.W.	40 FT	40 FT+
MINIMUM SETBACK FROM OTHER R.O.W.	25 FT	N/A
MINIMUM SIDE SETBACK	25 FT	25 FT+
MINIMUM REAR SETBACK	25 FT	25 FT+
MAXIMUM STRUCTURE STORIES	3	1.5
MAXIMUM STRUCTURE HEIGHT	35 FT	24.6 FT

[illegible]

DRAWING NAME:	OVERALL SITE PLAN
PROJECT NAME:	HOMESTEAD BY THE RIVER
CLIENT:	BRYCE AVALLONE & PETER VALCOURT 608 NEW COUNTY ROAD BIDDEFORD, MAINE 04005

ACORN ENGINEERING, INC. PO BOX 3372, PORTLAND, MAINE 04104
 (207) 775-2655

FILE:	1206_CIVIL_
JN:	1206
SCALE:	AS NOTED
DESIGNED BY:	CAB
DRAWN BY:	BJK
CHECKED BY:	WHS

STATE OF MAINE

CRAIG A. BURGESS

No. 12638

PROFESSIONAL ENGINEER

11-15-23

DRAWING NO.
C-10.1

GENERAL NOTES:
1. SUBJECT PARCELS INCLUDE:
A. 608 NEW COUNTY ROAD, BIDDEFORD, ME, 04005, PARCEL MAP 6, LOT 35, SUB--LOT 2, AREA: 29.5 AC.±
2. THE PARCEL IS LOCATED WITHIN THE RF (RURAL FARM) DISTRICT. A PORTION OF THE PARCEL ALONG THE RIVER IS WITHIN THE LIMITED RESIDENTIAL DISTRICT.
3. PROPERTY BOUNDARY AND TOPOGRAPHIC DATA ARE FROM PLAN REFERENCE A, THE VERTICAL DATUM IS NAD83.
4. A PORTION OF THE PARCEL ALONG THE RIVER IS LOCATED INSIDE THE 100-YEAR FEMA FLOODPLAIN AS DEPICTED ON FIRM PANEL #2301450002B DATED 5/15/1984.
5. PLAN REFERENCES:
A. BOUNDARY & TOPOGRAPHICAL SURVEY MAP OF BIDDEFORD -- DAYTON, MAINE FOR BEDTON K. BRALEY & MADYALICE BRALEY BY DOW & COULOMBE, INC. LAND SURVEYORS & PLANNERS SACO, MAINE, DATED 7/29/1996

SPACE AND BULK STANDARDS		
ZONING DISTRICT: RF, ALL OTHER (RURAL FARM)	REQUIRED	PROPOSED
MINIMUM LOT SIZE WITH NEITHER WATER/ SEWER	40,000 SF	1,290,322 SF
MINIMUM FRONTAGE WITH NEITHER WATER/SEWER	200 FT	2,546 FT
MINIMUM SETBACK FROM MAJOR R.O.W.	40 FT	40 FT+
MINIMUM SETBACK FROM OTHER R.O.W.	25 FT	N/A
MINIMUM SIDE SETBACK	25 FT	25 FT+
MINIMUM REAR SETBACK	25 FT	25 FT+
MAXIMUM STRUCTURE STORIES	3	1.5
MAXIMUM STRUCTURE HEIGHT	35 FT	24.6 FT



ISSUED FOR: BY: DATE: 4/23/2023
CITY COUNCIL SUBMISSION: CAB
SKETCH APPLICATION: CAB
REVIS: CAB
SKETCH APPLICATION: 11/15/2023

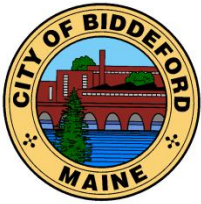
DRAWING NAME: SITE PLAN
PROJECT NAME: HOMESTEAD BY THE RIVER
CLIENT: BRYCE AVALLONE & PETER VALCOURT
608 NEW COUNTY ROAD BIDDEFORD, MAINE 04005

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

FILE: 1206_CIVIL
JN: 1206
SCALE: AS NOTED
DESIGNED BY: CAB
DRAWN BY: BJL
CHECKED BY: WHS

STATE OF MAINE
CRAIG A. BURGESS
PROFESSIONAL ENGINEER
11-15-23

DRAWING NO. C-10.2



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

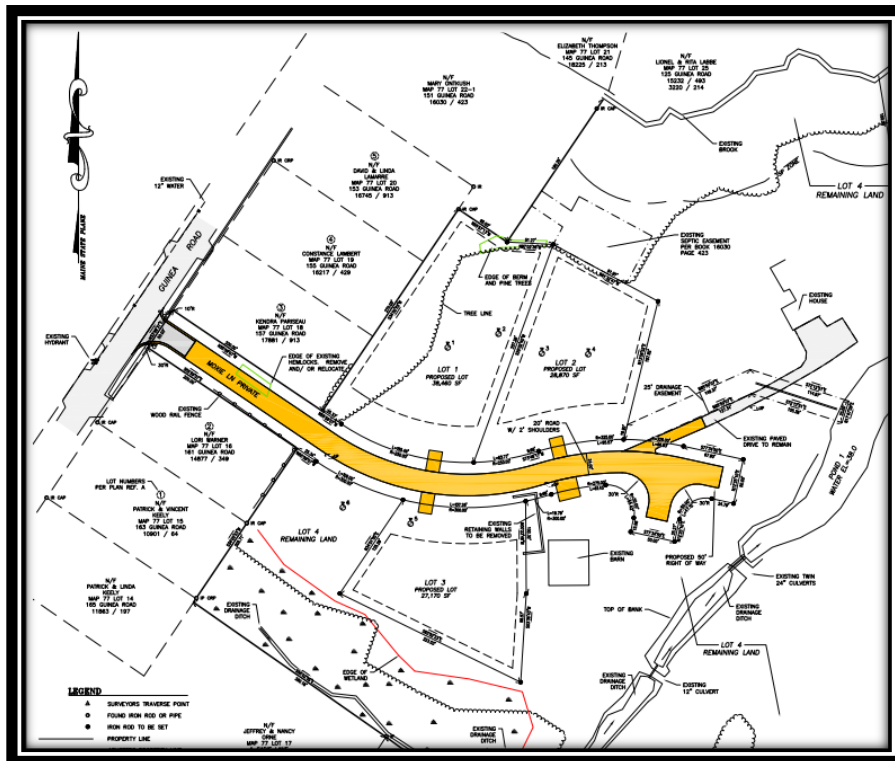
FROM: David C.M. Galbraith, City Planner & Acting Director of the Planning & Development Dept.

DATE: November 29, 2023

RE: **2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.**

MEETING DATE: December 6, 2023

1. INTRODUCTION



This project was last before the Planning Board, for sketch plan review, at the May 3, 2023 regular meeting. The Applicants and property owners, Travis and Lisa Wing with their agent Paul Gadbois, Project Engineer is seeking sketch plan review for the creation of three (3) new lots for the development of single-family homes. Moxie Lane is currently a paved driveway serving the a single house (1 Moxie Lane) however, the existing driveway is proposed to be improved to a four lot subdivision roadway standard. The subject property is 21 acres in area and the three proposed lots will be;

1) Lot # 1 = 38,460 square feet; 2) Lot # 2 = 28,870 square feet and; 3) Lot # 3 = 27,170 square feet in area. The balance of the 21 acres will remain with the existing house lot, identified as "Lot 4".

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023



Moxie Lane Existing Conditions

2. PROJECT DATA/INFORMATION

1.	Applicant:	Travis & Lisa Wing 1 Moxie Lane Biddeford, ME 04005
2.	Owner of Property:	Same as Applicant
3.	Agent:	Paul Gadbois PO Box 327 Saco, ME 04072
4.	Surveyor:	Same as above
5.	Project Location:	1 Moxie Lane
6.	Project Tax Map #/Lot #:	Tax Map 77, Lot 22
7.	Lot Size:	21 Acres
8.	Base Zoning:	SR1 & RF
9.	Overlay Zoning:	SP-Moora Brook
10.	Existing Use:	Single Family Home
11.	Proposed Use:	4 Single Family Homes with a private way
12.	Approvals Required:	Subdivision
13.	Uses in the Vicinity:	Residential

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

14.	Waivers Needed:	a. None
18.	Waivers Granted:	a. None
22.	Other Non-City Permits Required:	
23.	LDR Attachment A: Fees Paid:	Application Fees Paid, not escrows
25.	Planning Board Review History: Sketch Plan - May 3, 2023	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan (Land Development Regulations, Article XI) review and Subdivision Review (Chapter 66 – Subdivisions) and approval by the Planning Board.

4. Departmental Review Comments:

A. Planning:

1. None

B. Code Enforcement:

1. No Comments Received.

C. Engineering Comments: Craig Chekan, Director of Engineering:

1. See below

D. Engineering Peer Review: Tom Saucier, P.E. Site Design Associates:

Based on our review we offer the following comments for your, the planning board's, and the applicant's consideration:

A. General

1. Are the existing ponds 1 and 2 shown on the plan regulated by DEP as streams?
2. What is the source of the draft stormwater maintenance agreement? Should it be reviewed by the city attorney?
3. The application indicates that no waivers are required. A waiver may be required for the 10 ft radius on the northerly side of the private way at Guinea Road and for monumentation of the private way with iron pins versus the granite monuments required by code.
4. Are the owners selling lots only, or are they building the homes on the lots?
5. For information only, the construction cost estimate indicates pricing is for a "box cut" road, which is not the typical section required for the private way.

B. Drawings I. Plan and Profile

- a. Are the 12" and 15" diameter storm drain pipes shown at Guinea Road existing or proposed? Where does the 12" outlet?
- b. The 15" diameter culvert should be shown in the profile.
- c. Based on the proposed profile grades and invert elevation, there will be inadequate cover over the 15" diameter culvert.
- d. There are drainage arrows shown in the ditch line of the road. Actual grades reflecting a ditch 6" below the subgrade elevation should be shown, including spot grades as required. Proposed grades are also required to verify that the low points at sta 2+50 and 4+45 are properly drained.
- e. More spot grades should be provided at the turnaround.
- f. The method for installing the water service under Guinea Road should be called out on the drawing.

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

- g. The profile and plan should show the grading at the end of the private way.
- h. Additional silt fence or sediment barriers should be called out downgradient of road construction and additional check dams called for in the road ditches.
- i. Some form of energy dissipation such as a level spreader should be shown at the outlet to the southerly road ditch near the turnaround.
- j. The rate of stormwater runoff to the existing 12" diameter culvert under the existing driveway to the existing house on lot 4 will increase as a result of the development. Some form of energy dissipation should be proposed at the outlet. Will this culvert have adequate capacity for the higher rate of runoff?
- k. A benchmark should be shown.

II. Details

- a. The road typical sections call for riprap on backslopes that exceed 3H to 1V. If there are such areas, the extent should be shown on the plan and profile drawing.
- b. The typical sections should show a crown.
- c. The typical public way section should include a note that the material thicknesses shown are a minimum, and should match the existing material thicknesses if those are greater than the thicknesses shown.

We do not believe that these comments, which are generally technical in nature, will significantly impact the overall design concept, and that they could be satisfactorily addressed at the time of the final plan submission/approval, if the planning board and you concur. If you have any questions, or require additional information, please do not hesitate to contact me.

E. Police Department:

- 1. No Comments received.

F. Fire:

- 1. The alternative hammer-head turn-around plan (SP2) as requested has been amended plan sets.

G. Traffic Peer Review:

- 1. Due to the small scale of the proposed three (3) lot subdivision, a Peer Traffic review is not warranted.

5. STAFF REVIEW

- **APPLICATION COMPLETENESS:** This application is for sketch plan approval so the purpose of this memorandum is to help identify missing submittal requirements and / or items Staff believes are important and necessary for the continued review of this plan.
- **ZONING:** The proposed use of the three (3) proposed lots is for the construction of a single family on each of the three (3) identified lots which are permitted uses within the SR-1 Zoning District. As currently proposed, each of the lots would meet the required dimensional standards including building height, building setback, frontage, and lot coverage requirements.

2023.20 Preliminary Plan Application for Travis and Lisa Wing to build a private way for 3 new single family home lots and the existing house lot (4 in total). The property is located at 1 Moxie Lane (Tax Map 77, Lot 22) in the SR1 & RF zones and the shoreland overlay district.

Planning Board Meeting Date: December 6, 2023

- **REVIEW STANDARDS:**

In general, staff found the preliminary plan application to satisfy City subdivision and site plan requirements. However, City Staff and the City’s third party civil engineer, identified a number of technical plan elements which need to be addressed by the Applicant in the Final Application.

- **WAIVERS:** The applicant is not seeking any waivers at this time.

6. STAFF RECOMMENDATION

Staff recommends the Board approve the Preliminary Subdivision Plans. Should the Board wish to formally make a motion sample motions are provided below:

7. SAMPLE MOTIONS

A. Motion to Approve: I motion to APPROVE the Preliminary Plan application for the proposal located 1 Moxie Lane (Tax Map 77, Lot 22), within the Suburban Residential & Rural Farm (SR 1 & RF) zones, as well as shoreland overlay zone.

B. Motion to Deny I motion to DENY Preliminary Plan approval for the proposal located 1 Moxie Lane (Tax Map 77, Lots 22), within Suburban Residential 1 and Rural Farm (SR1 & RF) zoning districts, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

C. Motion to Table: I motion to TABLE the Preliminary Subdivision and Site Plan approval for the proposal to be located 1 Moxie Lane (Tax Map 77, Lots 22), within the Suburban Residential 1 & Rural Farm (SR1 & RF) zoning districts, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

Site Design Associates

Consulting Engineering and Land Planning

August 8, 2023

Mr. David Galbraith
Via email

**RE: Moxie Lane
Engineering Peer Review**

Dear David;

Per your request Site Design Associates has undertaken a review of the plans and documentation submitted in support of a subdivision application for the referenced project.

Our review was based on preliminary civil engineering plans generally dated 07-11-23.

Based on our review we offer the following comments for your, the planning board's, and the applicant's consideration:

A. General

1. Are the existing ponds 1 and 2 shown on the plan regulated by DEP as streams?
2. What is the source of the draft stormwater maintenance agreement? Should it be reviewed by the city attorney?
3. The application indicates that no waivers are required. A waiver may be required for the 10 ft radius on the northerly side of the private way at Guinea Road and for monumentation of the private way with iron pins versus the granite monuments required by code.
4. Are the owners selling lots only, or are they building the homes on the lots?
5. For information only, the construction cost estimate indicates pricing is for a "box cut" road, which is not the typical section required for the private way.

B. Drawings

- I. Plan and Profile
 - a. Are the 12" and 15" diameter storm drain pipes shown at Guinea Road existing or proposed? Where does the 12" outlet?
 - b. The 15" diameter culvert should be shown in the profile.
 - c. Based on the proposed profile grades and invert elevation, there will be inadequate cover over the 15" diameter culvert.
 - d. There are drainage arrows shown in the ditch line of the road. Actual grades reflecting a ditch 6" below the subgrade elevation should be shown, including spot grades as required. Proposed grades are also required to verify that the low points at sta 2+50 and 4+45 are properly drained.
 - e. More spot grades should be provided at the turnaround.

23 Whitney Way Topsham, Maine 04086
Phone: (207) 449-4275 email: info@sitedesignassociates.biz

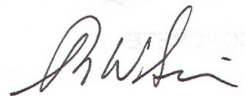
- f. The method for installing the water service under Guinea Road should be called out on the drawing.
- g. The profile and plan should show the grading at the end of the private way.
- h. Additional silt fence or sediment barriers should be called out downgradient of road construction and additional check dams called for in the road ditches.
- i. Some form of energy dissipation such as a level spreader should be shown at the outlet to the southerly road ditch near the turnaround.
- j. The rate of stormwater runoff to the existing 12" diameter culvert under the existing driveway to the existing house on lot 4 will increase as a result of the development. Some form of energy dissipation should be proposed at the outlet. Will this culvert have adequate capacity for the higher rate of runoff?
- k. A benchmark should be shown.

II. Details

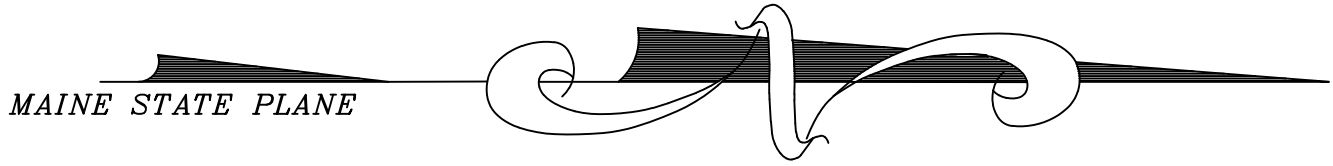
- a. The road typical sections call for riprap on backslopes that exceed 3H to 1V. If there are such areas, the extent should be shown on the plan and profile drawing.
- b. The typical sections should show a crown.
- c. The typical public way section should include a note that the material thicknesses shown are a minimum, and should match the existing material thicknesses if those are greater than the thicknesses shown.

We do not believe that these comments, which are generally technical in nature, will significantly impact the overall design concept, and that they could be satisfactorily addressed at the time of the final plan submission/approval, if the planning board and you concur. If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,
Site Design Associates



Tom Saucier, P.E.
President



LOCATION MAP
1"= 200'



PLAN INDEX

1. COVER SHEET
2. SUBDIVISION PLAN
3. EXISTING CONDITIONS PLAN
4. PLAN AND PROFILE
5. EROSION CONTROL AND DETAILS
6. EROSION CONTROL

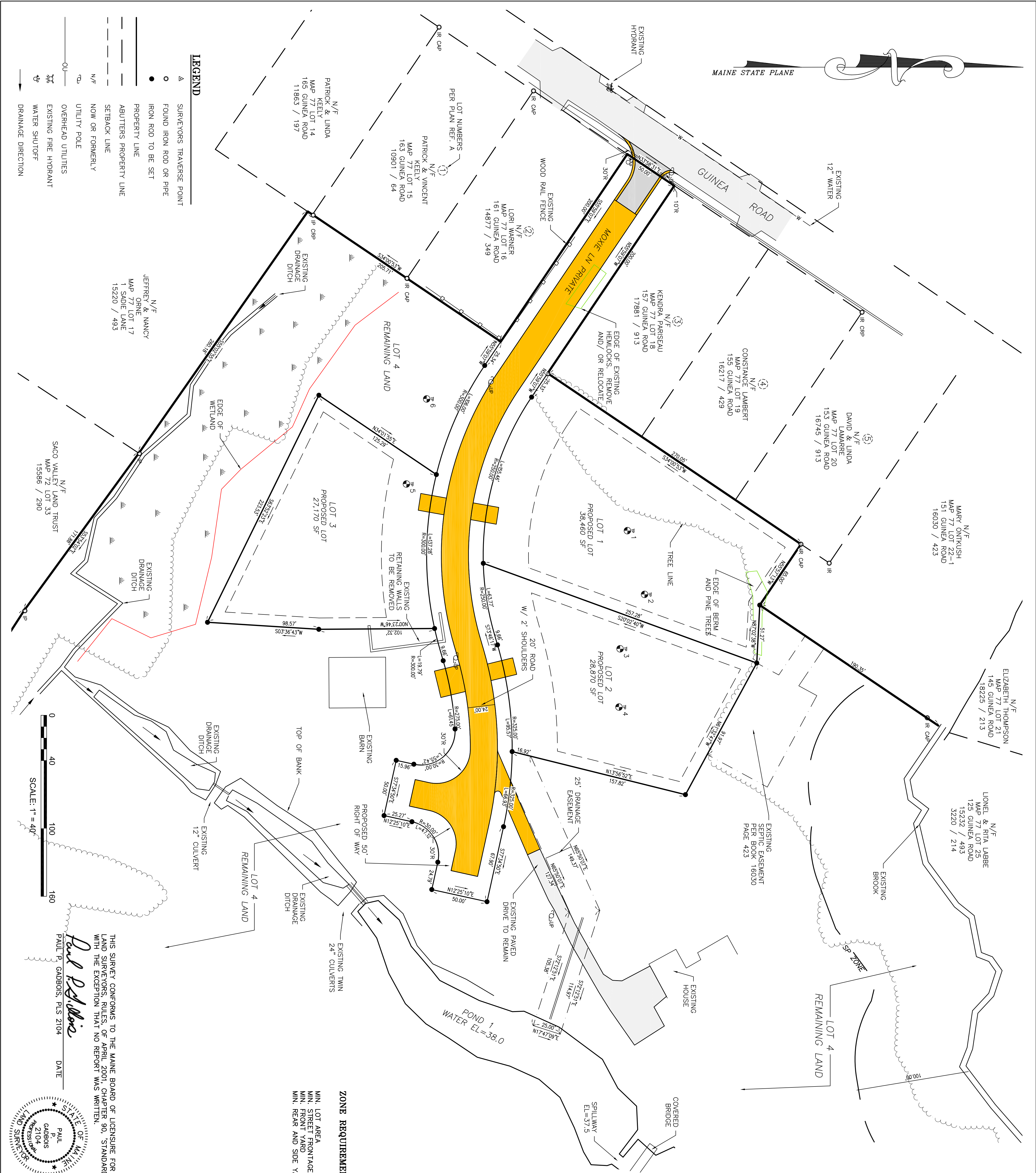


PAUL P. GADBOIS
ENGINEERING SURVEYING
LAND PLANNING
P.O. BOX 327, SACO, MAINE 04072
(207) 283-3980

COVER SHEET
LISA & TRAVIS WING
1 MOXIE LANE
BIDDEFORD, MAINE

RECORD OWNER
LISA WING
1 MOXIE LANE
BIDDEFORD, MAINE 04005

DRAWN: P.P.G.	REVISIONS:		
CHECKED: P.P.G.			
SCALE: 1"= 200'			
FIELD BOOK:			
DATE: 03-13-2023			
JOB NO. 1841			
SHEET 1 OF 6	1.	07-11-23	PRELIMINARY PLAN SET



LOCUS DEED REFERENCE:

A. QUITCLAIM DEED FROM LISA M. WING AND TRAVIS D. WING TO LISA M. WING DATED OCTOBER 27, 2010 AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN BOOK 15976, PAGE 986.

PLAN REFERENCES:

A. THE SHOWING LOTS OF RALPH & RACHEL LACHANCE RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 51, PAGE 14.

B. FINAL PLAN FOR GEORGE GARNACHE RECORDED IN SAID REGISTRY IN PLAN BOOK 309, PAGE 44.

ZONE REQUIREMENTS: (SR1)

MIN. LOT AREA 20,000 SF
MIN. STREET FRONTAGE 100 FEET
MIN. FRONT YARD 40 FEET
MIN. REAR AND SIDE YARD 10 FEET

ZONE REQUIREMENTS: (RF)

MIN. LOT AREA 20,000 SF
MIN. STREET FRONTAGE 120 FEET
MIN. FRONT YARD 40 FEET
MIN. REAR AND SIDE YARD 25 FEET

WATER NO SEWER

YORK,ss REGISTRY OF DEEDS
of Received _____ h _____ m _____ M., and
Filed in Plan Book _____ Page _____

ATTEST: _____ Register

APPROVAL

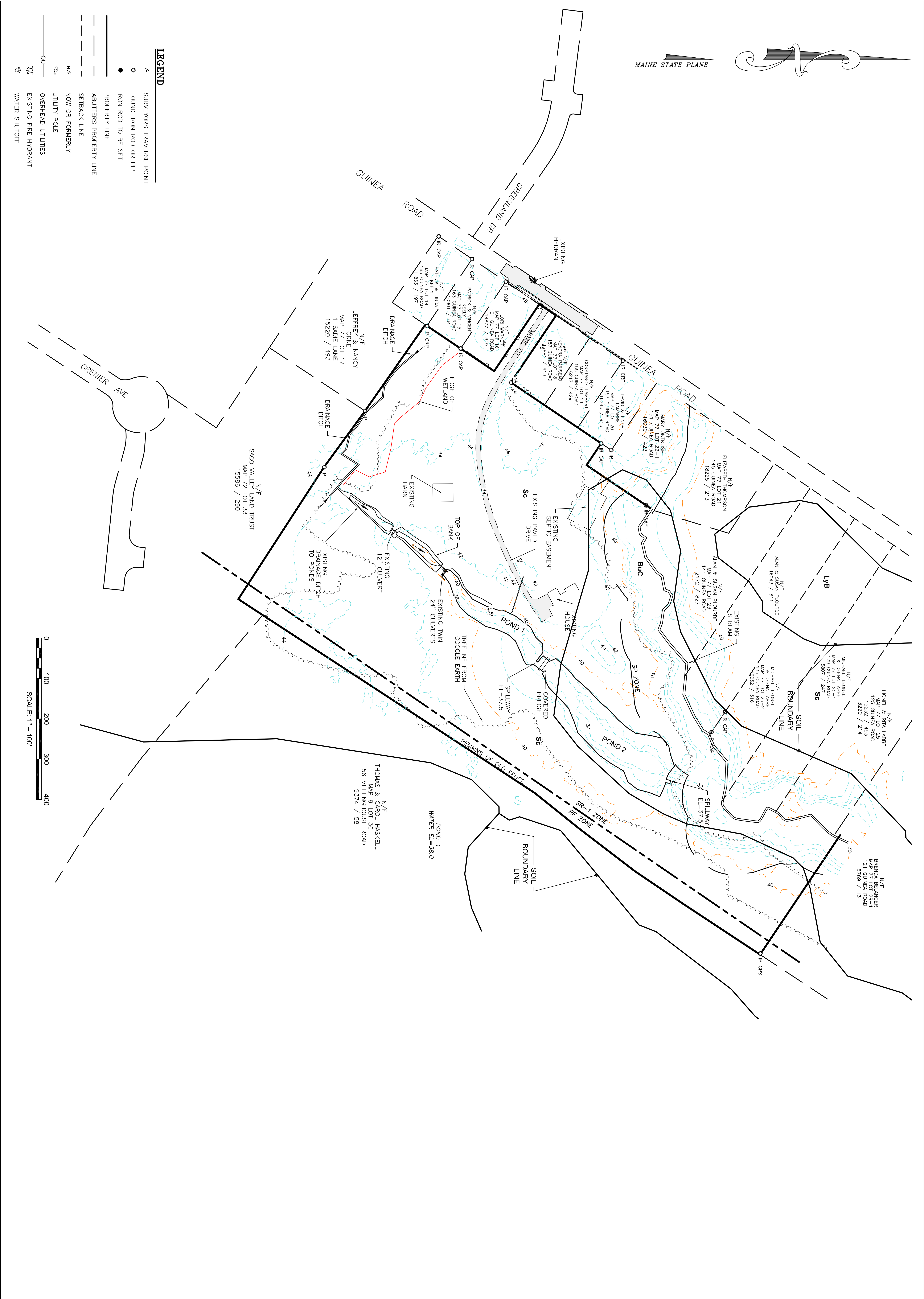
CITY OF BIDDEFORD

PLANNING BOARD

DATE _____

CHAMBERSON _____

 PAUL P. GADBOIS ENGINEERING SURVEYING LAND PLANNING P.O. BOX 327, SACO, MAINE 04072 (207) 283-3980	PRELIMINARY SUBDIVISION PLAN LISA & TRAVIS WING 1 MOXIE LANE BIDDEFORD, MAINE	RECORD OWNER LISA WING 1 MOXIE LANE BIDDEFORD, MAINE 04005		DRAWN: P.P.G. CHECKED: P.P.G. SCALE: 1"= 40' FIELD BOOK: DATE: 03-13-2023 JOB NO. 1841 SHEET 2 OF 6	REVISIONS: <table border="1"> <tr> <td>1.</td> <td>03-14-23</td> <td>REVISED HAMMERHEAD PER FIRE DEPT.</td> </tr> </table>	1.	03-14-23	REVISED HAMMERHEAD PER FIRE DEPT.
		1.	03-14-23	REVISED HAMMERHEAD PER FIRE DEPT.				



LEGEND

▲

SURVEYORS TRAVERSE POINT

○

FOUND IRON ROD OR PIPE

●

IRON ROD TO BE SET

PROPERTY LINE

ABUTTERS PROPERTY LINE

SETBACK LINE

NOW OR FORMERLY

⋈

UTILITY POLE

—OU—

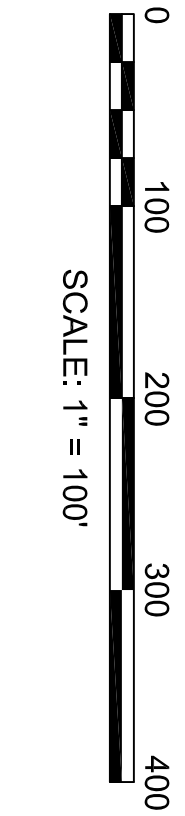
OVERHEAD UTILITIES

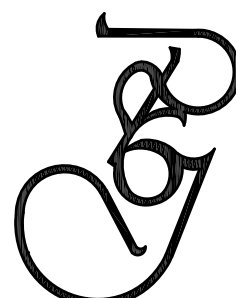
⋈

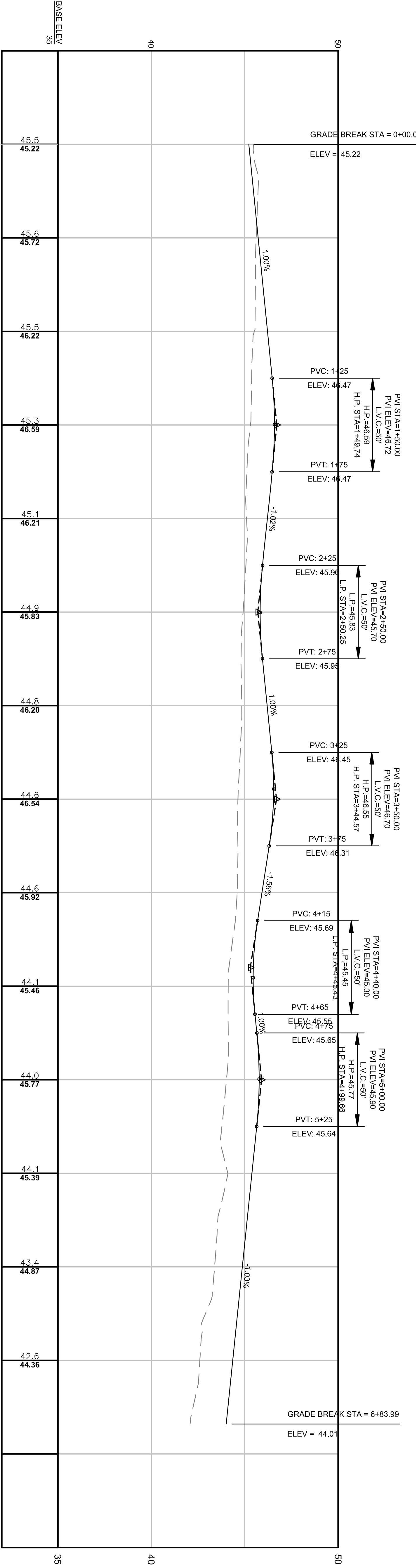
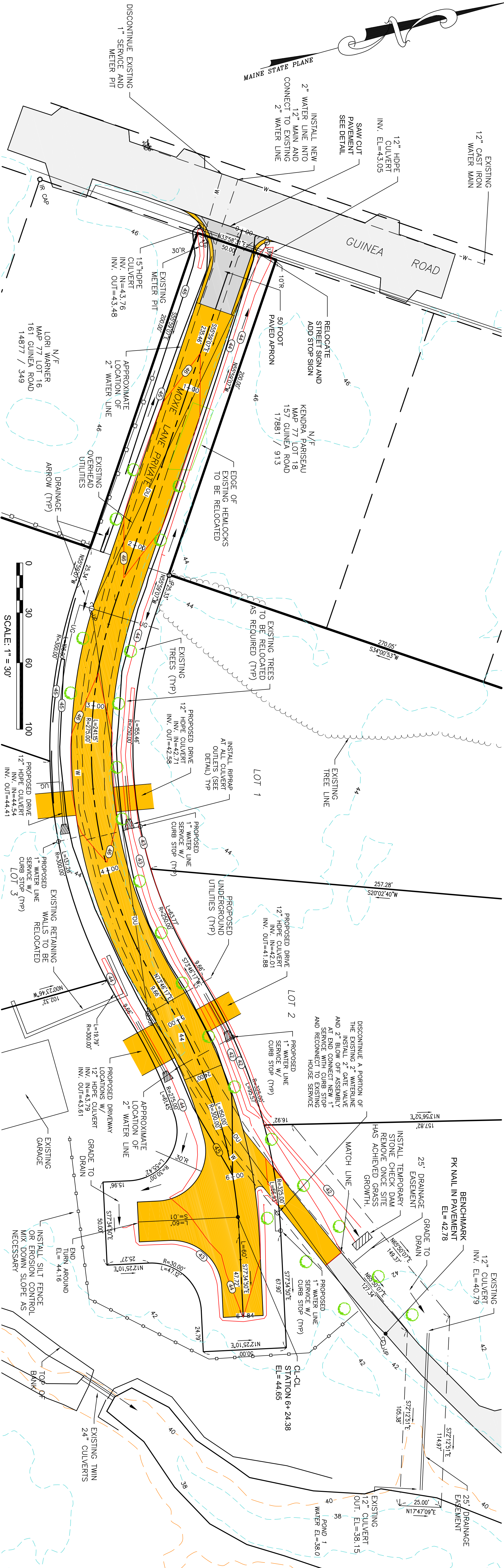
EXISTING FIRE HYDRANT

⋈

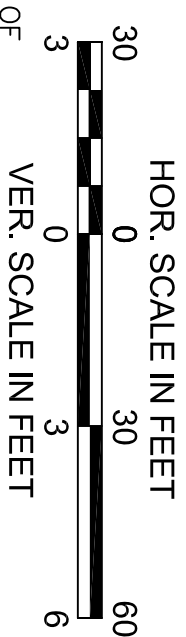
WATER SHUTOFF



 PAUL P. GADBOIS ENGINEERING SURVEYING LAND PLANNING P.O. BOX 327, SACO, MAINE 04072 (207) 283-3980	EXISTING CONDITIONS PLAN LISA & TRAVIS WING 1 MOXIE LANE BIDDEFORD, MAINE	RECORD OWNER LISA WING 1 MOXIE LANE BIDDEFORD, MAINE 04005	DRAWN: P.P.G.		REVISIONS:	
			CHECKED: P.P.G.			
			SCALE: 1"= 100'			
			FIELD BOOK:			
			DATE: 03-13-2023			
			JOB NO. 1841			
SHEET 3 OF 6			1.	07-11-23	RESPOND TO COMMENTS	



PROFILE: PCL (1)



WATER MAIN NOTES:

1. MAINTAIN 5' SEPARATION FROM PROPERTY LINES AND MAN MADE STRUCTURES.
2. MAINTAIN 5' OF COVER OVER THE LINE WITH NO MORE THAN 5.5 FEET.
3. MAINTAIN 10' OF SEPARATION FROM OTHER UTILITIES.
4. MAINTAIN 3' SEPARATION FROM EXISTING MAIN WATER INFRASTRUCTURE, UNLESS CONNECTING.
5. MAINTAIN 18 INCHES OF VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES.
6. RUN WITH TRACER WIRE WHERE NON-METALLIC AND BONDED FOR CONTINUITY FROM MAIN TO METER.
7. MUST COMPLY WITH ALL OTHER MAINE WATER SPECIFICATIONS.

PRIVATE WAY NOTES:

1. THE PROPOSED RIGHT OF WAY IS TO BE A PRIVATE ROAD. THE CITY OF BIDEFORD WILL NOT BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ANY KIND, SNOW PLOWING, OR TRASH PICKUP OF THE PRIVATE WAY AND THAT FURTHER LOT DIVISION UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.
2. NO NEW STREET LIGHTS ARE PROPOSED FOR THIS PROJECT.
3. ALL CONSTRUCTION AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE EROSION PREVENTION PROVISIONS AS OUTLINED IN THE MAINE EROSION CONTROL AND SEDIMENTATION HANDBOOK FOR CONSTRUCTION BEST MANAGEMENT PRACTICES, LATEST REVISION.
4. DRIVEWAY APRONS MUST COMPLY WITH CHAPTER 62 SECTION 62-111 OF THE BIDEFORD ORDINANCE.
5. IN LIEU OF A FULL PERFORMANCE GUARANTEE, THE APPLICANT SHALL NOT RECEIVE A

PROGRESS PLAN
NOT FOR CONSTRUCTION
THIS DOCUMENT IS ISSUED FOR
INFORMATIONAL PURPOSES ONLY.
THE DATA SHOWN HEREON
IS SUBJECT TO REVISION.

I HEREBY CERTIFY THAT THE INFORMATION SHOWN
ON THIS PLAN IS CORRECT TO THE BEST OF MY
KNOWLEDGE.



Paul P. Gadbois, P.E. # 4521

PAUL P. GADBOIS
ENGINEERING SURVEYING
LAND PLANNING
P.O. BOX 327, SACO, MAINE 04072
(207) 283-3980

PLAN AND PROFILE
LISA & TRAVIS WING
1 MOXIE LANE
BIDDEFORD, MAINE

RECORD OWNER
LISA WING
1 MOXIE LANE
BIDDEFORD, MAINE 04005

DRAWN: P.P.G.	REVISIONS:
CHECKED: P.P.G.	
SCALE: 1"= 30'	
FIELD BOOK:	
DATE: 03-13-2023	
JOB NO. 1841	
SHEET 4 OF 6	1. 07-11-23 RESPOND TO COMMENTS

MAINE CONSTRUCTION GENERAL PERMIT
APPENDICES – BASIC PERFORMANCE STANDARDS

APPENDIX A. EROSION AND SEDIMENTATION CONTROL. 1
APPENDIX B. INSPECTION AND MAINTENANCE. 4
APPENDIX C. HOUSEKEEPING. 4

APPENDIX A. EROSION AND SEDIMENTATION CONTROL.

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXCAVATING EARTH OR OTHER MATERIALS, OR CONSTRUCTING OR MAINTAINING ANY STRUCTURE, SHALL BE RESPONSIBLE FOR PREVENTING EROSION AND SEDIMENTATION FROM THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN M.R.S.A. §4904. EROSION 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.

NOTE: THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. SEE 38 M.R.S.A. § 4904-C. (ON PAVED, A LICENSE IS REQUIRED FOR ANY STORMWATER DISCHARGE THAT THE DEPARTMENT DETERMINES TO CONTRIBUTE TO POLLUTION OF WATER QUALITY UNDER A STANDARD OR DISCHARGE THAT CONTRIBUTES TO VIOLATIONS OF THE STATE. 06-996 CMR 21.09(5)(A) AND (6)).

(1) **POLLUTION PREVENTION.** MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, UPLAND, OR COASTAL, OR RESURFACED WETLANDS.

NOTE: BUFFERS IMPROVE WATER QUALITY BY HELPING TO FILTER POLLUTANTS IN RUN-OFF BOTH DURING AND AFTER CONSTRUCTION, MINIMIZING DISTURBED AREAS THROUGH PAVING LIMITS THE AMOUNT OF EXPOSED SOIL ON THE SITE AND REDUCES THE AMOUNT OF EROSION AND SEDIMENTATION. DISTURBED AREAS SHOULD BE REVEGETATED AS SOON AS POSSIBLE. IF FEWER EROSION CONTROLS TO INSTALL AND MAINTAIN IF WORK WITHIN AN AREA IS NOT ANTICIPATED TO BEGIN WITHIN TWO WEEKS TIME, CONSIDER LEAVING THE AREA IN ITS NATURALLY EXISTING COVER.

(2) **SEDIMENT BARRIERS.** PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

(3) **TEMPORARY STABILIZATION.** STABILIZE WITH MULCH, OR OTHER NON-ERODIBLE COVER, ANY EXPOSED SOILS THAT WOULD BE EXPOSED FOR MORE THAN 30 DAYS AFTER PERMANENT STABILIZATION MEASURES ARE IN PLACE. WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL, OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

NOTE: FOR GUIDANCE ON EROSION AND SEDIMENTATION CONTROLS, CONSULT THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION – BEST MANAGEMENT PRACTICES OR THE MAINE EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT PRACTICES.

(1) **REMOVAL OF TEMPORARY MEASURES.** REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL, SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

(1) **PERMANENT STABILIZATION.** IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AREAS OF NEEDED EROSION CONTROL, SUCH AS EROSION CONTROL BLANKETS, AND SCHEDULE SOILING, PLANTING, AND SEEDING, SO TO AVOID DIE-OFF FROM SUMMER BROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED. IF NECESSARY, AREAS MUST BE REMOVED AND REESTABLISHED IF GERMINATION IS SPARSE. PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT, ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

(a) **SEEDED AREAS.** FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH NATURAL, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

(b) **SODDED AREAS.** FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE RILLING OF THE SOD ROOTS INTO THE UNDERLYING SOIL, WITH NO SLUMPING OF THE SOD OR DIE-OFF.

(c) **PERMANENT MULCH.** FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MAY MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

(d) **RIPRAP.** FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP ARE PROTECTED FROM EROSION BY A DOUBLE ROW OF RIPRAP. RIPRAP STONE MUST BE SIZED APPROPRIATELY, IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

(e) **AGRICULTURAL USE.** FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.

(f) **PAVED AREAS.** FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

(g) **DITCHES, CHANNELS, AND SWALES.** FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH NATIVE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP LINING, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.

(h) **WINTER CONSTRUCTION.** "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 15 TO MARCH 15. WINTER CONSTRUCTION ACTIVITY MUST BE PERFORMED WITHIN THE PERIOD OF TEMPORARY OR PERMANENT MEASURES OBTAINED ABOVE BY NOVEMBER 15. THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS, NO MORE THAN ONE ACRE OF THE SITE MAY BE WITHOUT STABILIZATION AT ONE TIME.

(a) **SITE STABILIZATION.** FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.

(b) **SEDIMENT BARRIERS.** ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

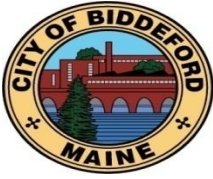
(c) **DITCH.** ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

(d) **SLOPES.** MULCH SPREADING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MAY IS BEING USED ON THESE SLOPES.

NOTE: FOR GUIDANCE ON WINTER CONSTRUCTION STANDARDS, SEE THE MAINE EROSION AND SEDIMENT CONTROL BMP'S, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(f) **STORMWATER CHANNELS.** DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME OF RUNOFF FROM THE DISTURBED AREA. THE CHANNELS MUST BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. THE INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY IF THE CHANNELS ARE STABILIZED BY A PERMANENT LINING. THE PERMANENT LINING MUST BE DELAYED THEN DIVERSION BERMS MUST BE USED TO DIVERT STORMWATER AWAY FROM THE CHANNEL, PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCORING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER APPENDIX A(5)(G) ABOVE.

NOTE: (1) THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT CORROSION. (2) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (3) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (4) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (5) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (6) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (7) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (8) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (9) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (10) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (11) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (12) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (13) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (14) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (15) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (16) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (17) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (18) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (19) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (20) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (21) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (22) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (23) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (24) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (25) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (26) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (27) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (28) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (29) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (30) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (31) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (32) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (33) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (34) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (35) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (36) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (37) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (38) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (39) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (40) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (41) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (42) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (43) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (44) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (45) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (46) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (47) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (48) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (49) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (50) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (51) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (52) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (53) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (54) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (55) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (56) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (57) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (58) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (59) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (60) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (61) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (62) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (63) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (64) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (65) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (66) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (67) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (68) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (69) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (70) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (71) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (72) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (73) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (74) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (75) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (76) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (77) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (78) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (79) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (80) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (81) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (82) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (83) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (84) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (85) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (86) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (87) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (88) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (89) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (90) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (91) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (92) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (93) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (94) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (95) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (96) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (97) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (98) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (99) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (100) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (101) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (102) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (103) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (104) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (105) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (106) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (107) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (108) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (109) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (110) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (111) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (112) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (113) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (114) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (115) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (116) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (117) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (118) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (119) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (120) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (121) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (122) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (123) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (124) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (125) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (126) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (127) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (128) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (129) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (130) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (131) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (132) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (133) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (134) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (135) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (136) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (137) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (138) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (139) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (140) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (141) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (142) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (143) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (144) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (145) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (146) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (147) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (148) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (149) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (150) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (151) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (152) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (153) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (154) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (155) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (156) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (157) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (158) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (159) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (160) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (161) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (162) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (163) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (164) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (165) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (166) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (167) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (168) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (169) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (170) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (171) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (172) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (173) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (174) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (175) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (176) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (177) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (178) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (179) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (180) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (181) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (182) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (183) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (184) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (185) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (186) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (187) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (188) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (189) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (190) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (191) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (192) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (193) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (194) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (195) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (196) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (197) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (198) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (199) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (200) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (201) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (202) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (203) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (204) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (205) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (206) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (207) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (208) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (209) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (210) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (211) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (212) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (213) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (214) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (215) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (216) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (217) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (218) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (219) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (220) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (221) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (222) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (223) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (224) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (225) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (226) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (227) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (228) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (229) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (230) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (231) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (232) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (233) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (234) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (235) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (236) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (237) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (238) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (239) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (240) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (241) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (242) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (243) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (244) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (245) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (246) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (247) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (248) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (249) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (250) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (251) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (252) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (253) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (254) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (255) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (256) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (257) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (258) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (259) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (260) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (261) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (262) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (263) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (264) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (265) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (266) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (267) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (268) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (269) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (270) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (271) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (272) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (273) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (274) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (275) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (276) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (277) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (278) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (279) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (280) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (281) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (282) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (283) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (284) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (285) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (286) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (287) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (288) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (289) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (290) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (291) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (292) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (293) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (294) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (295) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (296) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (297) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (298) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (299) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (300) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (301) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (302) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (303) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (304) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (305) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (306) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (307) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (308) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (309) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (310) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (311) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (312) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (313) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (314) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (315) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (316) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (317) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (318) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (319) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (320) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (321) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (322) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (323) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (324) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (325) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (326) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (327) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (328) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (329) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (330) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (331) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (332) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (333) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (334) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (335) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (336) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (337) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (338) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (339) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (340) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (341) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (342) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (343) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (344) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (345) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (346) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (347) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (348) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (349) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (350) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (351) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (352) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (353) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (354) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (355) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (356) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (357) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (358) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (359) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (360) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (361) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (362) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (363) THE CHANNEL SHOULD BE DESIGNED TO MAINTAIN A MINIMUM 3% SLOPE. (364) THE CHANNEL SHOULD BE DESIGNED

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

☐ Shoreland Zoning Permit ☐ Site Plan Review ☐ Extraction
☐ Conditional Use Permit ☒ Subdivision ☐ Private Way
☐ Other: _____

Applicant Information:

Name: _____ Travis and Lisa Wing
Mailing Address: _____ 1 Moxie Lane Biddeford
Telephone: _____ (207) 205-9092
Email: _____ stumblinfarm@gmail.com

What is your legal interest in the property?

☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: _____
Mailing Address: _____
Telephone: _____
Email: _____

Agent's Information:

Name: _____
Mailing Address: _____
Telephone: _____
Email: _____

Engineer/Surveyor's Information:

Name: _____ Paul Gadbois
Mailing Address: _____ P.O. Box 327 Saco, ME
Telephone: _____ (207) 283-3980
Email: _____ pgadbois53@gmail.com

Project Location and Lot Information:

Street Address: _____ 1 Moxie Lane Drainage Watershed: _____ Moors Brook
Tax Map: _____ 77 Lot: _____ 22
Current Zoning: _____ SR1 and RF Shoreland Zoning: _____ SP
Size of Lot: _____ 21 _____ (X) acres () s.f. Lot Frontage: _____ 50 Feet
Existing Use of Property: _____ Single Family

Property currently serviced by:

☐ City Road ☐ Public Sewer ☒ Public Water ☒ Public Trash
☒ Private Road ☒ Septic System ☐ Private Well ☐ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach information

Is the project within the 100-year floodplain? ☐ (Yes) ☒ (No) if yes attach information

Do you plan to bring fill onto the lot? ☒ (Yes) ☐ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

Re-construct private way to 4-lot standard for access to three new single family residential lots.

Property to be Serviced by:

☐ City Road ☐ Public Sewer ☒ Public Water ☒ Public Trash
☒ Private Road ☒ Septic System ☐ Private Well ☐ Private Hauler

Limits of Disturbance: 26,650 () acres (X)s.f.

Net change in impervious cover: 10,315 () acres (X)s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☒ (Yes, Private) ☐ (Yes, Public) ☐ (No)

Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☐ (Yes) ☒ (No)

Is the project proposing any Stormwater facilities/BMPs? ☒ (Yes) ☐ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

If in a Shoreland Zone:

Percent of residential lot coverage (Max 20%): -0-

Percent of structure expansion (Max 30%): -0-

If Subdivision Review, number of lots proposed: 4

If a Private Way is proposed, number of lots served: 4

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☒ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☒ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - ☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to “Attachment A Fees and Charges” of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __ (Yes) X (No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

~~Signature~~ of Applicant: _____

Date 3/12/23

~~Signature~~ of Property Owner: _____

Date 3/12/23

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - *Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'*
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - *All drawings & CAD reference files must be to-scale and within the following coordinate systems:*
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

SUBDIVISIONS

66 Attachment 2

City of Biddeford

Appendix B Required Information Checklist [Ord. of 6-20-1995]

In order for any application to be considered complete the following information must be provided at least two weeks prior to the Planning Board meeting. All plans for subdivisions shall contain the following information:

	Yes	No	N/A	Remarks
(1) Name of subdivision, owner and engineer or surveyor	X			
(2) Graphic scale, date, drawn, North point and its date, and whether it is true or magnetic	X			
(3) Boundaries of the tract	X			
(4) Existing zoning	X			
(5) Ownership and location of abutting properties	X			
(6) Name, location, width, profile, cross-section, radius of curves, angles of change in direction and center line length of all angles of change in direction and center line length of all proposed streets; other public ways, building lines and easements in the subdivision; intersection of existing streets	X			
(7) Type, location, profile and cross-section of all existing and/or proposed surface water drainage	X			
(8) Location of all existing and/or proposed utilities	X			
(9) Location of all existing and/or proposed sanitary sewers showing size, profile, and cross-section, or description, plan, location of other means of sewage disposal with evidence of successful soil evaluation	X			
(10) Topography at two-foot contour intervals, unless otherwise prescribed by the Board. In addition the location of existing natural or man-made features influencing the layout of the proposed subdivision shall be shown.	X			

SUBDIVISIONS

66 Attachment 2

City of Biddeford

Appendix B Required Information Checklist [Ord. of 6-20-1995]

In order for any application to be considered complete the following information must be provided at least two weeks prior to the Planning Board meeting. All plans for subdivisions shall contain the following information:

	Yes	No	N/A	Remarks
(1) Name of subdivision, owner and engineer or surveyor	X			
(2) Graphic scale, date, drawn, North point and its date, and whether it is true or magnetic	X			
(3) Boundaries of the tract	X			
(4) Existing zoning	X			
(5) Ownership and location of abutting properties	X			
(6) Name, location, width, profile, cross-section, radius of curves, angles of change in direction and center line length of all angles of change in direction and center line length of all proposed streets; other public ways, building lines and easements in the subdivision; intersection of existing streets	X			
(7) Type, location, profile and cross-section of all existing and/or proposed surface water drainage	X			
(8) Location of all existing and/or proposed utilities	X			
(9) Location of all existing and/or proposed sanitary sewers showing size, profile, and cross-section, or description, plan, location of other means of sewage disposal with evidence of successful soil evaluation	X			
(10) Topography at two-foot contour intervals, unless otherwise prescribed by the Board. In addition the location of existing natural or man-made features influencing the layout of the proposed subdivision shall be shown.	X			

BIDDEFORD CODE

	Yes	No	N/A	Remarks
(11) Lot lines and approximate dimensions	X			
(12) Proposed uses of property	X			
(13) Proposed public areas, if any			X	
(14) Copy of deed, or option for purchase, for land being subdivided	X			
(15) Reserved fire lane areas			X	
(16) Location of soil evaluation test pits for each lot on plan	X			
(17) Location of well or water supply for each lot	X			
(18) Aesthetics; trees, berms, shrubs, green strips, parks, etc.	X			
(19) Location and details for sedimentation and erosion control measures	X			
The preliminary of a subdivision shall be drawn at a scale no smaller than 100 feet (1 cm = 12 m) to the inch	X			
A preliminary plan shall include a location map insert, showing the relationship of the proposed subdivision to adjacent properties and public access, and drawn at no smaller scale than 2,000 feet (1 cm = 240 m) to the inch. It is suggested that reduced sections of City maps be used for this purpose.	X			

In addition to the above plat information, the Subdivider shall provide the following documents:

	Yes	No	N/A	Remarks
Valid deed or option indicating an interest held by the subdivider in the parcel of land	X			
Completed application form	X			
Narrative of the proposed project briefly describing the general nature of the project i.e., type of project; residential or commercial; number of lots intended to create	X			
Draft covenants and deeds for each lot proposed	X			Sample Deed
Easement documents for proposed rights-of-way for utilities, drainage ways, roadways and other	X			



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

July 11, 2023

David Galbraith, Planner
City of Biddeford
205 Main Street
Biddeford, Maine 04005

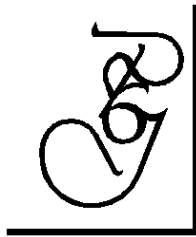
Re: Moxie Lane, Tax Map 77, Lot 22.

Dear Mr. Garnham,

The following is my response to Staff Report dated April 24, 2023.

DEPARTMENT REVIEW COMMENTS:

1. The original purpose of the conveyance was to create a buffer for the abutting property owned by Lori Warner. We have since revised the plan to be part of Lot 4 and the remaining land of owner. Also, per discussion we have amended Lot 3 so as not to include any wetlands.
2. Final Application.
 - a. No Covenants and or deed restrictions are proposed.
 - b. There is no open space, so we are not proposing a Homeowner's Association. The applicant is required to file a maintenance agreement as to rights and responsibilities of the private way. See note #14 of Subdivision Plan. A sample maintenance agreement was submitted with the application.
 - c. We have shown the existing septic easement located on remaining land. We are proposing a drainage easement over remaining land to tie into the existing drainage system and a within the proposed lots (See note #16). See sample deed descriptions for typical lot conveyance Exhibit A and right of way description Exhibit B.
 - d. We believe this submission meets the requirements for Preliminary Plan Approval. See attached required information checklist.
 - e. Stormwater Management. Under private ways roads servicing five or less lots, vegetated buffers and swales shall be utilized. This project is providing access to (4) lots, three (3) additional, one (1) existing. The project is proposing to install BMP's. See stormwater report.
3. Maine Water provided a response to the ability to serve the project. Currently a 1" water line exists from the main to a meter pit with a 2" water line to the existing house. Maine water is requesting a new 2" be tapped into the existing 12" main and connect 1" service lines into the 2" water line with curb stop shut off valves at the property right of way lines. The connection to the existing 12" will be accomplished by directional boring. The 12" waterline is located on the westerly side of Guinea Road and a minimal amount of disturbance is expected within the existing roadway. We have provided a pipe trench detail and a typical



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327

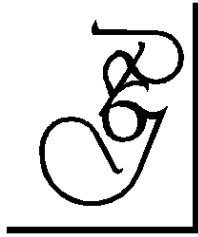
Saco, ME 04072

Phone & Fax (207) 283-3980

Email: pgadbois53@gmail.com

roadway section should excavation be required within the roadway. The public works director during a phone call on July 11, 2023, at approximately 2:30 p.m. confirmed that there is no moratorium on Guinea Road.

4. We have updated the plan to show the type of landscaping. The owner and developer of the property is in the landscaping business and has the skill and equipment to relocate the existing landscaping adjacent to the proposed roadway as required for the construction.
5. The existing conditions plan showed the existing 2-foot contours for the 21-acre parcel. The Plan and Profile showed the existing and proposed contours within the proposed roadway right of way. We have changed the color proposed contours to better define the grading.
6. The septic easement exists for the use of the abutting property as described in the deed recorded in Book 16030, Page 423. We have added this note to the subdivision plan. A tree line does exist along the edge of the septic area and is accurately located. Lot #1 is 25,000 square feet of developed lawn area. We are not proposing any change to the existing tree line.
7. The tree line is accurately shown. The existing septic easement has tree growth.
8. The alternate hammer head has been amended as requested by the Fire Department.
9. The lot owners will be required to wheel all trash to Guinea Road. Note #13 spells out the city will not pick up trash on Private Road.
10. Moors Brook is not located on the property and is located over two hundred feet from the property line. The brook shown on the plan is an unnamed tributary. No portions of the proposed lots are located within a shoreland zone. The plan has been revised to accurately show the location of the brook.
11. The location of Lot #3 was revised after Mr. Hampton delineated the wetlands. Mark Hampton has since revisited the site to delineate the wetlands to the existing drainage ditch. Also, per discussion with staff we have reduced size of Lot #3 so as not to include any portion of the wetlands. No wetlands were observed on Lots 1 & 2.
12. The owner currently rototills this area for a vegetable garden. Note #15 has been added to the plan. The owner has already seeded this area.
13. Note #6 has been revised to state “ underground utilities to lots from existing overhead utilities.
14. We have added setback lines to the plans. Also, tables of zone requirements specify the required setbacks. We are not proposing building envelopes for the Lots since there are no environmental reasons to do so.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

ENGINEERING COMMENTS:

1. Trash. See previous response note #9.
2. Site plans do not specify.
 - a. Road Material. Cross sections on sheet #3 show pavement to station 0+50 and gravel to 6+84.
 - b. Driveway locations were shown on Plan and Profile we have shaded to better define.
 - c. Note #13 on Subdivision states road to be private. Also, private way notes on plan and profile state the proposed roadway to be private. We have added private to the roadway name.
3. We have since removed this conveyance and reduced the size of Lot #3 so as not to include any wetlands. The owner will retain ownership to provide a buffer for parcel delineated as Map 77, Lot 16.
4. The plan did show the location of silt fence or erosion control mix at the end of the proposed turnaround. I have added riprap outlet protection at all proposed culverts and a stone check dam at the end of the constructed swale adjacent to the match line of the existing paved drive to protect sediment from entering the existing 12" culvert.
5. The wetlands were delineated only on the lots proposed for development. See Report by Mark Hampton Associates. The wetland line was delineated and extended to the existing drainage ditch. There were no wetlands found on Lots #1 and #2.
6. We have added culvert inlet and outlet elevations at the proposed driveway locations. We don't see any need for obtaining additional topographic information adjacent to the ditch since no construction will take place southerly of the edge of wetlands. Also, we believe the existing conditions plan show the topographic information at the top of bank. I have added directional arrows to define flow directions.

ENGINEERING PEER REVIEW:

1. We are not proposing any building windows except as required by zoning. The zoning setback lines have been added to the plans.
2. The fire department performed field maneuvers and determined that the existing drive provided adequate access for entering and exiting the site.
3. The plans state a maintenance agreement shall be recorded (See note #14) and a sample maintenance was provided in the packet.
4. See previous response note #3.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327

Saco, ME 04072

Phone & Fax (207) 283-3980

Email: pgadbois53@gmail.com

5. We have added the proposed monumentation to be set on the subdivision plan.
6. The hammerhead turn around has been revised to reflect the request by the fire department.

FIRE DEPARTMENT:

1. The alternate hammerhead turn around including dimensions has been revised on the plan set.

Attached are 7 full size sets of plans along with a digital copy. Please let me know if you need additional copies.

Sincerely,

Paul P. Gadbois, P.E., P.L.S.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

July 11, 2023

David Galbraith, Planner
City of Biddeford
205 Main Street
Biddeford, Maine 04005

Re: Moxie Lane, Tax Map 77, Lot 22.

Dear Mr. Garnham,

Stormwater Management Plan:

Moxie Lane currently provides access to the owner / applicant's home. The first 200 feet consisting of 2,356 square feet of new impervious area drains to the existing ditch located along Guinea Road. The remaining portion beyond 200 feet consisting of 8,450 square feet of new impervious area drains to (2) ponds containing a combined surface area of 52,000 square feet.

The proposed roadway will continue to use the existing drainage pattern. The proposed roadway will be improved to meet the private roadway standards and graded to allow culverts to be placed under the proposed driveway locations with the northerly swale draining to the existing 12" culvert. The southerly swale will grade and match the existing surface at the terminus of the turnaround and overland flow to the ponds.

The project proposes to install erosion control silt fence or erosion control mix downslope of the construction to prevent erosion from entering the existing pond. Also, a temporary stone check dam is proposed to prevent erosion from entering the inlet to the existing 12" culvert. Permanent riprap shall be installed at the culvert outlets.

In conclusion, upgrading the existing road will have no significant impact on downstream properties.

Sincerely,

Paul P. Gadbois, P.E., P.L.S.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

March 14, 2023

David Galbraith, Planner
City of Biddeford
205 Main Street
Biddeford, Maine

Re: Travis and Lisa Wing, 1 Moxie Lane, Tax Map 77, Lot 22.

Dear Mr. Galbraith,

The owner / applicants Travis and Lisa Wing wish to subdivide a portion of their 21-acre parcel of land and create 3 new single-family house lots ranging in size from 28,000 to 59,000 square feet. They are also proposing to convey 27,000 square feet to the abutter.

Access to the property is from a 50-foot strip of land and Moxie Lane a private way. The project proposes to upgrade the existing private way to a 4-lot standard.

The property will be serviced by public water, underground utilities from existing overhead power to the proposed lots, and on-lot septic. The proposed lots are located in the SR-1 Zone requiring 100 foot of street frontage and a minimum lot size of 20,000 square feet.

The proposed lots are not located in the stream protection zone.

Wetlands were delineated by Mark Hampton and are not considered wetlands of special significance. See wetland delineation report dated January 23, 2023. No wetland fill is proposed for this project. Suitable soils were found on the proposed lots. See preliminary soil evaluation by Mark Hampton dated January 23, 2023.

The proposed lots according to the soil survey are located on Scantic (Sc) soil group. This soil is not considered prime agricultural soils according to the City of Biddeford Article 6, Performance Standards.

According to Maine Historic Preservation Officer there will be no historic properties affected by the proposed development. Also, according to the director of Maine Natural Areas Program there are no rare botanical features documented with the project area.

The project drains to an unnamed stream which flows into Moors Brook. Moors Brook is not listed as an Urban Impaired Stream. No state or federal permits are required for this project.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

The hammerhead was designed to meet the performance standards for private ways and roads. However, the Fire Department is asking that we meet an alternate design which adds approximately 18.5 feet to the hammerhead legs. The client has no issues with this request. I have shown the alternate design as SP-2.

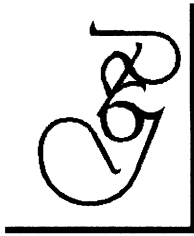
We will submit draft covenants and deeds at Final Submission.

The applicant has the funds to undertake the project and Perron Excavation has completed several projects in the City of Biddeford.

We look forward to discussing this preliminary plan submission with the staff and planning board.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

March 12, 2023

Paul P. Gadbois, P.E., P.L.S.
Paul P. Gadbois Engineering
P.O. Box 327
Saco, Maine 04072

Re: 1 Moxie Lane Tax Map 77, Lot 22.

Dear Paul,

This letter will serve as authorization for Paul P. Gadbois Engineering to act as agent on the above referenced project with regards to various land use permitting requirements for the property in Biddeford. This will include any submissions to the DEP, ACOE, and the City.

Very Truly Yours,

Lisa Wing

QUITCLAIM DEED
Maine Statutory Short Form

KNOW ALL MEN BY THESE PRESENTS,

THAT **LISA M. WING AND TRAVIS D. WING**, of the City of Biddeford, County of York, State of Maine,

for no consideration paid, interfamily gift

grant to **LISA M. WING** of the City of Biddeford, County of York, State of Maine, whose mailing address is 1 Moxie Lane, Biddeford, ME 04005 with **quitclaim covenants**, the land in the City of Biddeford, County of York, State of Maine, described as follows:

A certain lot or parcel of land, together with any improvements thereon, situated in the City of Biddeford, County of York and State of Maine, bounded and described as follows:

Beginning on the southeasterly side of the Guinea Road, so called, at the northerly corner of land now or formerly of Louis H. Staples, et al;

Thence southeasterly along land now or formerly of said Staples about sixty-five (65) rods to the easterly corner of land now or formerly of said Staples and to a lot of land conveyed by Raoul E. Labbe and Anita Labbe to said Staples, et al;

Thence northeasterly by said lot now or formerly of said Staples, by another lot now or formerly of said Staples, by land formerly of Nathaniel Emery and by land of owners unknown about ninety four and two thirds (94 2/3) rods to land now or formerly of one Lehouillier;

Thence northwesterly by land now or formerly of said Lehouillier to the brook;

Thence southwesterly, westerly and northwesterly by the brook to the said Guinea Road;

Thence southwesterly by said Road about six hundred sixty two (662) feet to the point of beginning.

Excepted and reserved from the above description are the following;

1. Deed from Ralph L. Lachance and Rachel Lachance to Richard R. Nolette and Dorothy Nolette, dated May 8, 1972 and recorded in said Registry of Deeds in Book 1946, Page 107.
2. Deed from Ralph L. Lachance and Rachel Lachance to Joseph O. Papineau and Maxine Papineau, dated May 4, 1974 and recorded in said Registry of Deeds in Book 2034, Page 621.
3. Deed from Ralph L. Lachance and Rachel Lachance to C & S Development, dated July 19, 1974 and recorded in said Registry of Deeds in Book 2047, Page 266.
4. Deed from Ralph L. Lachance and Rachel Lachance to C & S Development dated July 19, 1974 and recorded in said Registry of Deeds in Book 2047, Page 268.
5. Deed from Ralph L. Lachance and Rachel Lachance to Richard P. Lambert and Constance Lambert, dated September 26, 1974 and recorded in said Registry of Deeds in Book 2054, Page 433.
6. Deed from Fernand Payer, Clair Payeur and Lisa Payeur to Fernand Payeur and Claire Payeur, dated December 16, 2001 and recorded in said Registry of Deeds in Book 11230,

No R.E. Transfer Tax Paid

Page 326.

7. Deed from Lisa Payeur, Fernand Payeur and Claire Payeur to Fernand Payeur and Claire Payeur, dated June 26, 2002 and recorded in said Registry of Deeds in Book 11784, Page 157.

Reference is also made to the Plan of Lots of Ralph L. and Rachel Lachance, dated November 4, 1969 and recorded in said Registry of Deeds in Plan Book 51, Page 14.

The property is subject to a septic sewage easement as described in the deed from Lisa Payeur, Fernand Payeur and Claire Payeur to Fernand Payeur and Claire Payeur dated June 26, 2002 and recorded in said Registry of Deeds in Book 11784, Page 157.

Being the same premises conveyed to Lisa M. Wing and Travis D. Wing by deed of Lisa M. Wing dated April 23, 2008 and recorded in the York County Registry of Deeds in Book 15482, Page 566.

IN WITNESS WHEREOF, We, the said **Lisa M. Wing and Travis D. Wing**, have hereunto set our hands and seals, this 27th day of October, 2010.

**SIGNED, SEALED AND DELIVERED
IN PRESENCE OF**

Lisa M. Wing
Lisa M. Wing
Travis D. Wing
Travis D. Wing

**STATE OF MAINE
YORK, ss.**

October 27, 2010

Then personally appeared the above named **Lisa M. Wing and Travis D. Wing** and acknowledged the foregoing instrument to be their free act and deed.

Before me,

Richard J. Dudzisz
~~Notary Public~~, Attorney at Law

Print Name Richard J. Dudzisz

My Commission Expires _____

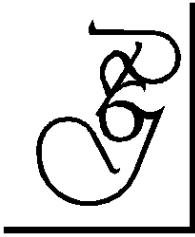
RETURN RECORDED DOCUMENT TO:

Lisa and Travis Wing
1 Moxie Lane
Biddeford, ME 04005

BRYCE W. INGRAHAM, ESQ.
338 Main Street
Saco, ME 04072

→ judy/my deeds wing to wing /lisa and travis to lisa

END OF DOCUMENT



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

March 13, 2023

Scott Gagne, Fire Chief
Fire Department
152 Alfred Road
Biddeford, Maine 04005

Re: Travis and Lisa Wing, Moxie Lane, Tax Map 77, Lot 22.

Mr. Gagne,

The planning department is requesting an ability to serve letter from your department in regard to the above referenced project.

The owners / applicant currently resides on the property and are proposing to upgrade an existing private way to serve 3 new single family residential lots.

The existing residence is located 965 feet from the existing hydrant located on the north side of Guinea Road. The proposed lots are less than 800 feet from the hydrant.

I have reviewed the turning radius movements for a fire truck ladder truck. The radius turning right exiting the development is proposed to be 10 feet in order to keep the existing power in its current location which will require that the ladder truck to be in the left lane of the private way to make the right hand turn onto Guinea Road. All other turns right in, left in, left out were reviewed and found to be not an issue.

Attached are the plans.

Please do not hesitate to call or email if you have any questions.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

March 13, 2023

Marcus Knipp
Maine Water
93 Industrial Park Road
Saco, Maine 04072

Re: Moxie Lane Biddeford, Map 77, Lot 22.

Mr. Knipp,

The planning department is requesting an ability to serve letter from your department in regard to the above referenced project.

The owners Travis and Lisa Wing currently resides on the property and are proposing to upgrade an existing private road in order to provide access to 3 new single-family residences.

The project is currently serviced by a 2" water line connected to the existing 12" waterline located on Guinea Road. The owner / developer wishes to install new 1" service lines for the proposed lots into the existing 2".

No fire protection is proposed since the proposed lots are located less than 800 feet from an existing hydrant.

Attached is the sketch plan of the proposed development.

Please do not hesitate to call or email if you have any questions.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.

Perron Excavation

140 Guinea Rd
Biddeford, ME 04005 US
pperron@maine.rr.com

Estimate

ADDRESS
LISA & TRAVIS WING

ESTIMATE
DATE

1031
03/14/2023

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Sales	INSTALL 671 FT. ROAD, REMOVE EXISTING HOT TOP, BOX CUTTING, RE-SLOPE DITCHES, LOAM, SEED, INSTALL CULVERTS, INSTALL WATER SERVICES			77,165.00

JOB LOCATION 1 MOXIE LN

ENGINEERING DESIGN BY PAUL P. GADBOIS

TOTAL

\$77,165.00

Accepted By

Accepted Date

ROAD MAINTENANCE AGREEMENT

Road Name

AGREEMENT made this ____ day of _____, 2010 by and between **OWNER** of **TOWN**, Maine and **OWNER** of **TOWN**, Maine, (hereinafter collectively referred to as "Owners" and individually as "Owner").

W I T N E S S E T H:

WHEREAS, the Owners all own lots **on Road Name** in **TOWN**, Maine, with the deed reference for each lot owner being set forth in Paragraph 1 of this Agreement; and

WHEREAS, the Owners have reached agreement as to the sharing of maintenance costs of **Road Name**; and

WHEREAS, the parties desire to set forth their agreements in writing.

NOW, THEREFORE, in consideration of the mutual promises and covenants herein contained, the sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. **Identification of Properties.** The Owners acquired title to the lots set forth below by the deeds so referenced:

Tax Map & Lot No.	Lot Owner or Owners	Title Deed Reference

2. Maintenance Costs. The parties agree that this Agreement pertains to the maintenance costs associated with **Road Name**, and that these costs shall include, but not be limited to, snow plowing, sanding and salting, regrading of travelled way and regrading of ditches.

3. Payment of Maintenance Expenses. The maintenance costs described above shall be borne equally by the Owners of lots referenced above.

4. Obligation to Pay Maintenance Costs. Each Owner obligated to pay maintenance costs by virtue of Paragraph 3 above shall contribute to such costs regardless of whether the condition requiring such repair or maintenance directly affects such Owner's lot. However, in the event that damage to the road results from the construction or other work being performed on one lot, the Owners of that lot shall be responsible for repair of the road so that it is restored to the condition which existed prior to any such damage.

5. Decision to Undertake Maintenance.

(a) Any Owner may propose an item of repair and/or maintenance to the other Owners. The decision to undertake a particular item of repair and/or maintenance shall be made by unanimous vote of those Owners obligated to pay maintenance costs pursuant to Paragraph 3 above. Each lot, regardless of the number of owners of record, shall have one vote. Upon unanimous vote of the obligated Owners, contracts may be entered into for such repair and/or maintenance in accordance with the terms of that vote.

(b) All payments required to be made pursuant to the terms of this Agreement shall be due within fifteen (15) days of the approval referred to above, or submission of an invoice, whichever shall first occur. Payments not made on the date when due shall become delinquent and shall, together with interest thereon at the then current rate of judgment interest and the costs of collection thereof, thereupon become a continuing lien on that lot and shall be binding upon the Owners thereof, their heirs, devisees, Personal Representatives, successors and assigns. In the event a judgment is obtained, such judgment shall include interest on the delinquent amount, from the date of delinquency and reasonable attorneys' fees to be fixed by the court, together with the costs of the action.

6. Superiority of Lien. The lien established in Paragraph 5 above, shall be superior to all other liens and encumbrances on the lot, except (a) a first mortgage recorded before or after the date of the delinquency; and (b) liens for real estate taxes and other governmental assessments or charges against the lot.

7. Enforcement of Lien. The lien for delinquencies may be enforced and foreclosed by the Owners, or any of them, in like manner as a mortgage on real estate or by any other means presently or hereinafter provided by law or in equity. A suit to recover a money judgment for unpaid delinquencies, interest, penalties and costs of collection may be maintained against the lot owner personally without foreclosing or waiving the lien securing the delinquency, and a foreclosure may be maintained notwithstanding the pendency of any suit to recover a money judgment.

8. Additional Property. Owners of other lots situated on **Road Name** may join in this Agreement, and have their lots subject to the terms and conditions set forth herein, upon unanimous consent of the owners set forth in Paragraph 1 above. Upon the joinder of any additional parties, all lots shall share equally in the maintenance costs described herein. In such event, all maintenance decisions as set forth in Paragraph 5(a) above shall be made by majority vote of Owners rather than by unanimous vote.

9. Entire Agreement. It is understood and agreed that all understandings and agreements, either oral or in writing, heretofore had between the parties hereto are merged in this Agreement, which alone fully and completely expresses their agreement, and that the same is entered into after full investigation, neither party relying upon any statements or representations not embodied in this Agreement.

10. Binding Agreement, Amendment. This Agreement shall be binding upon the parties hereto, their heirs, personal representatives, successors and assigns. This Agreement may be amended only by written agreement of all of the parties hereto.

11. Governing Law. This Agreement shall be governed in accordance with the laws of the State of Maine.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals on the day, month and year first above written.

WITNESS

NAME

WITNESS

NAME

STATE OF MAINE

YORK, ss.

_____, 2010

Then personally appeared the above-named **Name** and acknowledged the foregoing instrument to be his free act and deed, before me,

Before me,

Notary Public / Attorney-at-Law

Print Name: _____

My Commission Expires _____

STATE OF MAINE

YORK, ss.

_____, 2010

Then personally appeared the above-named **Name** and acknowledged the foregoing instrument to be their free act and deed, before me,

Before me,

Notary Public / Attorney-at-Law

Print Name: _____

My Commission Expires _____



MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7248

January 23, 2023

Mr. Travis Wing
1 Moxie Lane
Biddeford, ME 04005

Re: Preliminary Soil Evaluation, Proposed Lots, Moxie Lane Biddeford, ME

Dear Travis,

I have completed a preliminary soil evaluation on the proposed 3 lots located on Moxie Lane Biddeford, ME. The soil evaluation was conducted in accordance with the Maine Subsurface Wastewater Disposal Rules dated August 2015, as amended. I evaluated two hand-excavated soil test pits on each proposed lot. The soils found on each lot are somewhat poorly drained marine lacustrine soils. The depth to the limiting factor was 9 to 12 inches.

The soils as evaluated meet the minimum requirements of the state rules. In my opinion, there are suitable soils and area on each lot for a septic system. The disposal bed for a three-bedroom home could be an Eljen Indrain system with a footprint of 15x24 ft. A septic design can be completed at some time in the future.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263

SOIL PROFILE / CLASSIFICATION INFORMATION

SOIL SCIENTIST DESCRIPTION
OF SOIL CONDITIONS AT PROJECT SITES

Project Name:

Moxie Lane Subdivision

Applicant Name:

Travis Wing

Project Location (municipality):

Biddeford

Exploration Symbol # TP-1 ☐ Test Pit ☒ Boring ☐ Probe

" Organic horizon thickness Ground surface elev. _____

" Depth: ☒ of exploration, or ☐ to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Grand	Very Friable	
Bw	Yellowish Brown	Silt Loam	Weak Sub Ang Blocky	Friable	
BCg	Olive Brown	Silty Clay Loam	Thin Platy	Firm	Common and Distinct
Cg	Olive Gray	Silty Clay Loam	Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name:

Lamoine

Limiting Factor

9

Depth

☒ Groundwater
☒ Restrictive Layer
☐ Bedrock

Drainage Class

☐ ED ☐ SED ☐ WD ☐ MWD
☒ SPD ☐ PD ☐ VPD

Slope

2
Percent

Hydric Soil

☒ No
☐ Yes

Hydrologic

Soil Group

Exploration Symbol # TP-2 ☐ Test Pit ☒ Boring ☐ Probe

" Organic horizon thickness Ground surface elev. _____

" Depth: ☒ of exploration, or ☐ to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Weak Angular	Very Friable	
Bw	Brown	F. Sandy Loam	Sub Ang Blocky	Friable	
BCg	Olive Gray	Silty Clay Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive	Silty Clay Loam	Medium Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name:

Lamoine

Limiting Factor

11

Depth

☒ Groundwater
☒ Restrictive Layer
☐ Bedrock

Drainage Class

☐ ED ☐ SED ☐ WD ☐ MWD
☒ SPD ☐ PD ☐ VPD

Slope

2
Percent

Hydric Soil

☒ No
☐ Yes

Hydrologic

Soil Group

Exploration Symbol # TP-3 ☐ Test Pit ☒ Boring ☐ Probe

" Organic horizon thickness Ground surface elev. _____

" Depth: ☒ of exploration, or ☐ to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	Silt Loam	Fine Grandul	Friable	
Bw	Yellowish Brown	Silt Loam	Weak Sub Ang Blocky	Friable	
BCg	Olive	Silty Clay Loam	Thin Platy	Firm	Common and Distinct
Cg	Olive	Silty Clay Loam	Medium Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name:

Lamoine

Limiting Factor

12

Depth

☒ Groundwater
☒ Restrictive Layer
☐ Bedrock

Drainage Class

☐ ED ☐ SED ☐ WD ☐ MWD
☒ SPD ☐ PD ☐ VPD

Slope

2
Percent

Hydric Soil

☒ No
☐ Yes

Hydrologic

Soil Group

Exploration Symbol # TP-4 ☐ Test Pit ☒ Boring ☐ Probe

" Organic horizon thickness Ground surface elev. _____

" Depth: ☐ of exploration, or ☐ to refusal

Horizon	Color	Texture	Structure	Consistence	Redox
Ap	Dark Brown	F. Sandy Loam	Grand	Friable	
Bw	Brown	F. Sandy Loam	Fine Grandul	Friable	
BCg	Olive Brown	Silty Clay Loam	Thin Platy	Firm	Common and Distinct
Cd	Olive Gray	Silty Clay Loam	Platy	Very Firm	

Depth below mineral soil horizon (inches)

Soil Series/Phase Name:

Lamoine

Limiting Factor

12

Depth

☒ Groundwater
☒ Restrictive Layer
☐ Bedrock

Drainage Class

☐ ED ☐ SED ☐ WD ☐ MWD
☒ SPD ☐ PD ☐ VPD

Slope

2
Percent

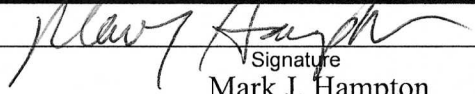
Hydric Soil

☒ No
☐ Yes

Hydrologic

Soil Group

SOIL SCIENTIST INFORMATION AND SIGNATURE



Mark J. Hampton

Name Printed

1/23/2023

Date

263/216

SS License No.

affix professional seal



MARK HAMPTON ASSOCIATES, INC.

SOIL EVALUATION • WETLAND DELINEATIONS • SOIL SURVEYS • WETLAND PERMITTING

7248

January 23, 2023

Mr. Travis Wing
1 Moxie Lane
Biddeford, ME 04005

Re: Wetland Delineation, 2+ acre portion of Property at 1 Moxie Lane Biddeford, ME

Dear Travis,

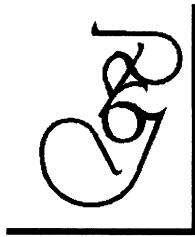
I have completed a delineation of wetlands on the 2+ acre portion of the parcel located 1 Moxie Lane Biddeford, ME. The wetland delineation was completed in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual for the Northcentral and Northeast Regions dated January 2012. These manuals require the presence of three parameters for a wetland to be present, wetland hydrology, hydrophytic vegetation, and hydric soils.

The wetlands I found on the parcel were flagged with yellow flagging. The flagging was labeled in an alphanumeric sequence. The wetland flags were located by GPS equipment capable of locating a point to within three feet. The wetland GPS data has been forwarded to Paul Gadbois to be incorporated into the project plans. The wetlands found on the property are forested wetlands. The wetlands on the property do not meet the definition of wetlands of special significance as defined by Maine Department of Environmental Protection.

If you have any questions or require additional information, please contact me.

Sincerely,

Mark J. Hampton C.S.S., L.S.E.
Certified Soil Scientist #216
Licensed Site Evaluator #263



PAUL P. GADBOIS PE, PLS

Civil Engineering, Surveying, Land Planning
Structural Engineering, DEP Permitting

P.O. Box 327
Saco, ME 04072
Phone & Fax (207) 283-3980
Email: pgadbois53@gmail.com

January 30, 2023

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

0186-23

RE: Lisa Wing
Moxie Lane
Biddeford, Maine
Tax Map 77, Lot 22

Dear Staff:

Our client owns approximately 20 acres of property located at off Guinea Road in Biddeford (See attached Delorme Map). The owner is planning to upgrade Moxie Lane to provide access to 3 new residential house lots. (See attached sketch plan)

As part of the planning process, we would like to identify any rare or unique botanical features on this property. We request that you kindly search your available resources and send us a written advisory as to the possible presence of rare, threatened, or endangered plant species and unique or exemplary natural communities on the site that might be a cause of concern.

Thank you for your assistance in conducting this site search. Please do not hesitate to contact me should you have any questions or require additional information. If there are fees for your review, please forward invoice to me.

Very truly yours,

Paul P. Gadbois, P.E., P.L.S.

Encl: Locus Map
Sketch 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,
State Historic Preservation Officer
Maine Historic Preservation Commission

2/16/23
Date



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

February 7, 2023

Paul Gadbois
PO Box 327
Saco, ME 04072

Via email: pgadbois53@gmail.com

Re: Rare and exemplary botanical features in proximity to: #1841, Moxie Lane Subdivision, Biddeford, Maine

Dear Mr. Gadbois:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received February 7, 2023 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Biddeford, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-8044
WWW.MAINE.GOV/DACF/MNAP

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Lisa St. Hilaire

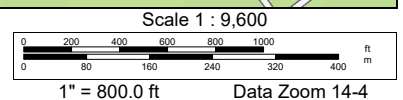
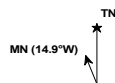
Lisa St. Hilaire | Information Manager | Maine Natural Areas Program
207-287-8044 | lisa.st.hilaire@maine.gov

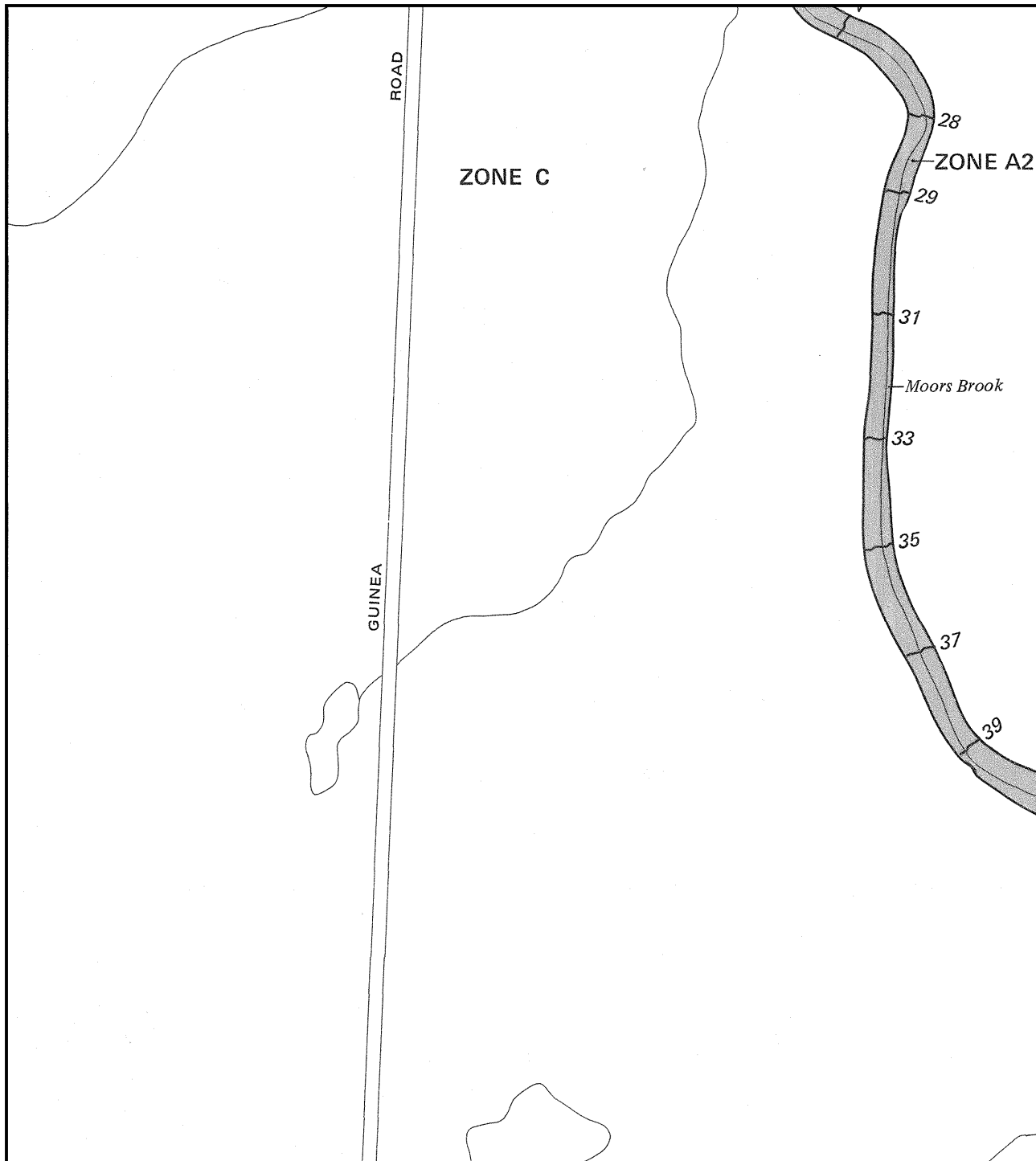


Data use subject to license.

© DeLorme. Topo North America™ 10.

www.delorme.com





Program, at (800) 638-6620.



APPROXIMATE SCALE

400

0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BIDDEFORD,
MAINE
YORK COUNTY

PANEL 5 OF 11
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230145 0005 B

EFFECTIVE DATE:
MAY 15, 1984



Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

Soil Map—York County, Maine



Soil Map may not be valid at this scale.

Map Scale: 1:3,980 if printed on A landscape (11" x 8.5") sheet.

0 50 100 200 300 Meters

0 150 300 600 900 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

3/14/2023
Page 1 of 3

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 1:20,000.

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: York County, Maine

Survey Area Data: Version 21, Aug 30, 2022

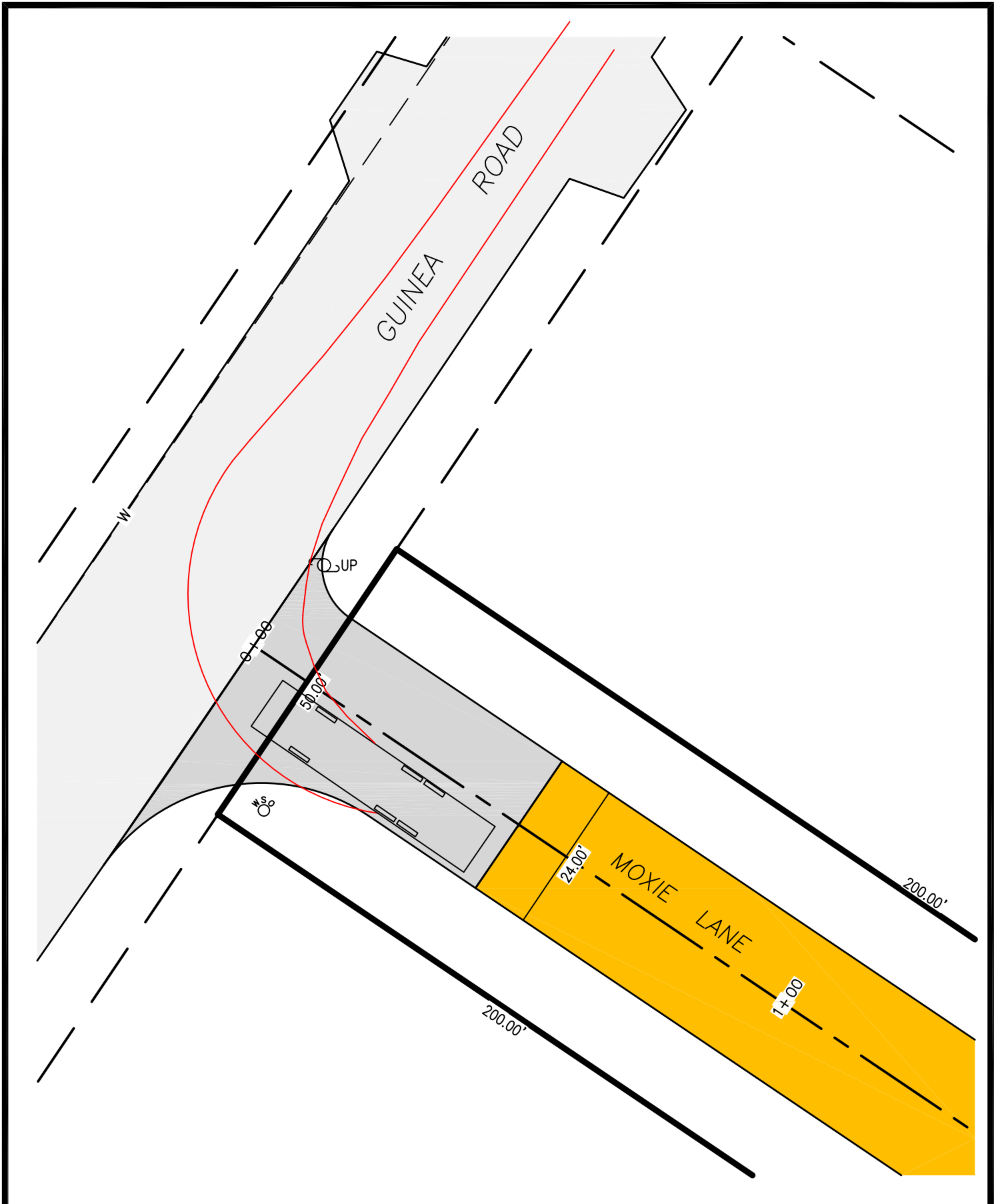
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

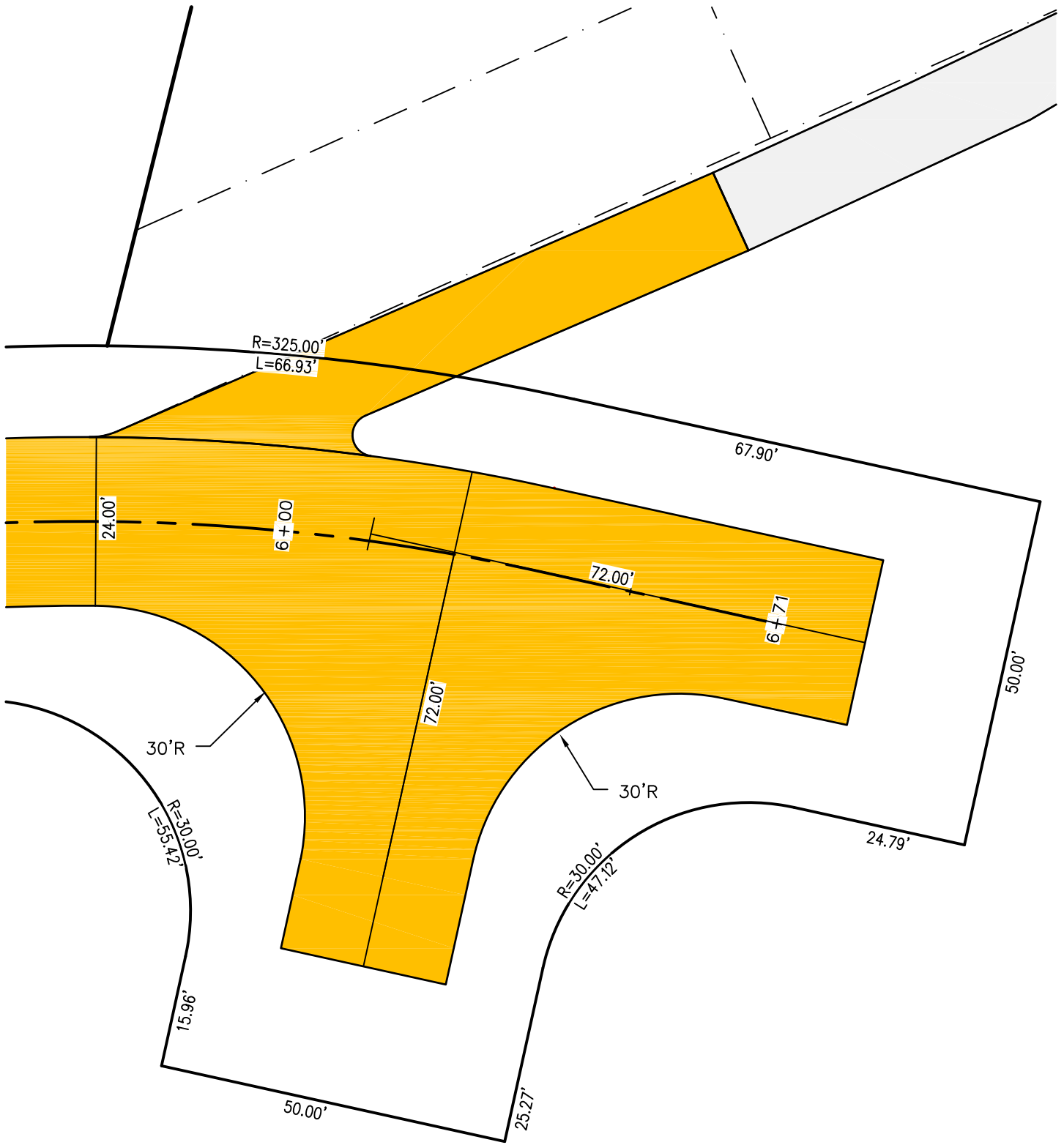
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BuC	Buxton silt loam, 8 to 15 percent slopes	8.0	22.1%
LyB	Lyman-Rock outcrop complex, 3 to 8 percent slopes	2.1	5.8%
Sc	Scantic silt loam, 0 to 3 percent slopes	26.2	72.1%
Totals for Area of Interest		36.4	100.0%



CLIENT/PROJECT: LISA & TRAVIS WING MAP 27 LOT 22	PAUL P. GADBOIS ENGINEERING SURVEYING LAND PLANNING P.O. BOX 327, SACO, MAINE 04072 (207) 283-3980	SHEET TITLE: LADDER TRUCK TURNING	SP 1
LOCATION: MOXIE LANE		SCALE: 1"=20'	
TOWN: COUNTY: YORK STATE: MAINE		DATE: 03-13-23	



CLIENT/PROJECT: **LISA & TRAVIS WING**
MAP 27 LOT 22

LOCATION: **MOXIE LANE**

TOWN: COUNTY: **YORK** STATE: **MAINE**

PAUL P. GADBOIS
 ENGINEERING SURVEYING
 LAND PLANNING

P.O. BOX 327, SACO, MAINE 04072
 (207) 283-3980

SHEET TITLE: **HAMMERHEAD DETAIL**

SCALE: 1"=20'

DATE: 03-13-23

PROJ. NO. 1841

SP2

EXHIBIT A

A certain parcel of land in Biddeford, County of York, State of Maine, said land being situated on the northerly side of Moxie Lane (Private Way), and being more particularly described as follows:

BEGINNING at a found iron rod located on the northerly sideline of said Lane, said iron rod marking the southeasterly corner of land conveyed to Kendra Pariseau by deed recorded in the York county Registry of Deeds in Book 17881, Page 913 and the southeasterly corner of Lot #3 as shown on plan entitled "Lots of Ralph and Rachel Lachance" approved by the City of Biddeford Planning Board and recorded in said Registry in Plan Book 51, Page 14;

THENCE S55°59'07"E along the northerly sideline of said Lane a distance of 25.33 feet to an iron rod to be set;

THENCE continuing along the northerly sideline of said Lane with a curve deflecting to the left a distance of 155.46 feet to an iron rod to be set, said curve having a radius of 250.00 feet;

THENCE N20°02'40"E along the westerly sideline of Lot #2 a distance of 257.28 feet to an iron rod to be set, as shown on plan entitled "Final Subdivision Plan for Lisa and Travis Wing" approved by the City of Biddeford Planning Board and to be recorded in said Registry;

THENCE N87°02'38"W along remaining land of grantor a distance of 51.27 feet to an iron rod to be set at the southerly corner of land conveyed to Mary Ontkush by deed recorded in said Registry in Book 16030, Page 423;

THENCE N55°57'13"W along the southerly sideline of said Ontkush land a distance of 65.00 feet to a found iron rod located on the easterly sideline of Lot #5 as shown on said Plan;

THENCE S34°00'53"W along the westerly sideline of Lots 3-5 as shown on said Plan a distance of 270.05 feet to the point of beginning.

The above-described parcel of land being 38,460 square feet, more or less. The bearings are referenced to Maine State Plane Coordinates – West Zone.

SUBJECT TO a drainage and utility easement reserved to the grantor his heirs and assigns 10 feet in width along all sidelines and rear lines and 25 feet in width along all front lines for the purpose relating to the installation of utilities and drainage structures including swales.

TOGETHER WITH a drainage easement over remaining land of grantor being more particularly described as follows:

BEGINNING at an iron rod to be set on the northerly sideline of said Lane, said iron marking the southeasterly corner of Lot # 2 as shown on said plan;

THENCE N13°56'52"E along the easterly sideline of said Lot a distance of 16.92 feet to a point;

THENCE N65°50'07"E a distance of 149.37 feet to a point;

THENCE S72°12'51"E a distance of 114.97 feet to a point;

THENCE S17°47'09"W a distance of 25.00 feet to a point;

THENCE N72°12'51"W a distance of 105.38 feet to a point;

THENCE S65°50'07"W a distance of 127.34 feet to a point located on the northerly sideline of said Lane;

THENCE along the northerly sideline of said Lane with a curve deflecting to the left to the point of beginning.

BEING a portion of the premises conveyed to this grantor from Lisa M. Wing and Travis D. Wing by deed dated October 27, 2010, and recorded in said Registry in Book 15976, Page 986.

EXHIBIT B

Together with a 50 foot right of way (Moxie Lane) and utility easement from the southerly sideline of Guinea Road being more particularly described as follows;

BEGINNING at an iron rod to bet set on the southeasterly sideline of said Road, said iron marking the southwesterly corner of land conveyed to Kendra Pariseau by deed recorded in the York County Registry of Deeds in Book 17881, Page 913 and the southwesterly corner of Lot #3 as shown on plan entitled "Lots of Ralph and Rachel Lachance" approved by the City of Biddeford Planning Board and recorded in said Registry in Plan Book 51, Page 14;

THENCE S55°59'07"E along the southerly sideline of said Lot #3 a distance of 200.00 feet to a found iron rod marking the southwesterly corner of Lot #1 as shown on plan entitled "Subdivision for Travis and Lisa Wing" approved by the City of Biddeford Planning Board and to be recorded in said Registry;

THENCE S55°59'07"E along the southerly sideline of said Lot #1 a distance of 25.33 feet to an iron rod to be set;

THENCE continuing along the southerly sideline of Lot #1 with a curve deflecting to the left a distance of 155.46 feet to an iron rod to be set at the southwesterly corner of Lot #2, said curve having a radius of 250.00 feet;

THENCE continuing with a curve deflecting to the left and along the southerly sideline of Lot #2 a distance of 63.77 feet, said curve having a radius of 250.00 feet;

THENCE N73°46'17"E continuing along the southerly sideline of Lot #2 a distance of 9.66 feet to an iron rod to be set;

THENCE continuing with a curve deflecting to the right and along the southerly sideline of Lot #2 a distance of 95.57 feet to an iron rod to be set, said curve having a radius of 325.00 feet;

THENCE along remaining land of grantor and the northerly sideline of said lane with a curve deflecting to the right a distance of 66.93 feet to an iron rod to be set, said curve having a radius of 325.00 feet;

THENCE S77°34'50"E continuing along remaining land of grantor a distance of 67.90 feet to an iron rod to be set;

THENCE S12°25'10"W continuing along remaining land of grantor a distance of 50.00 feet to an iron rod to be set;

THENCE N77°34'50"W continuing along remaining land of grantor a distance of 24.79 feet to an iron rod to be set;

THENCE continuing along remaining land of grantor with a curve deflecting to the left a distance of 47.12 feet to an iron rod to be set, said curve having a radius of 30.00 feet;

THENCE S12°25'10"W continuing along remaining land of grantor a distance of 25.27 feet to an iron rod to be set;

THENCE N77°34'50"W continuing along remaining land of grantor a distance of 50.00 feet to an iron rod to be set;

THENCE N12°25'10"E continuing along remaining land of grantor a distance of 15.96 feet to an iron rod to be set;

THENCE continuing along remaining land of grantor with a curve deflecting to the left a distance of 55.42 feet to an iron rod to be set, said curve having a radius of 30.00 feet;

THENCE continuing along remaining land of grantor with a curve deflecting to the left a distance of 61.45 feet to an iron rod to be set, said curve having a radius of 275.00 feet;

THENCE S73°46'17"W continuing along remaining land of grantor a distance of 9.66 feet to an iron rod to be set;

THENCE continuing along remaining land of grantor with a curve deflecting to the right a distance of 19.79 feet to an iron rod to be set at the northeasterly corner of Lot # 3, said curve having a radius of 300.00 feet;

THENCE along the northerly sideline of Lot #3 with a curve deflecting to the right a distance of 137.28 feet to an iron rod to be set at the northwesterly corner of said Lot #3, said curve having a radius of 300.00 feet;

THENCE along the southerly sideline of said Lane with a curve deflecting to the right a distance of 106.00 feet to an iron rod to be set, said curve having a radius of 300.00 feet;

THENCE N55°59'07"W along the southerly sideline of said Lane a distance of 25.34 feet to an iron rod to be set, said iron rod marking the northeasterly corner of Lot #2 as shown on said Lachance Plan;

THENCE N55°59'07"W along the northerly sideline of said Lot #3 a distance of 200.00 feet to the southeasterly sideline of Guinea Road;

THENCE N33°58'31"E along said Road a distance of 50.00 feet to the point of beginning.

TOGETHER WITH a drainage easement more particularly described as follows:

BEGINNING at an iron rod to be set on the northerly sideline of said Lane, said iron marking the southeasterly corner of Lot #2;

THENCE N13°56'52"E along the easterly sideline of said Lot a distance of 16.92 to a point;

THENCE N65°50'07"E along remaining land of grantor a distance of 149.37 feet to a point;

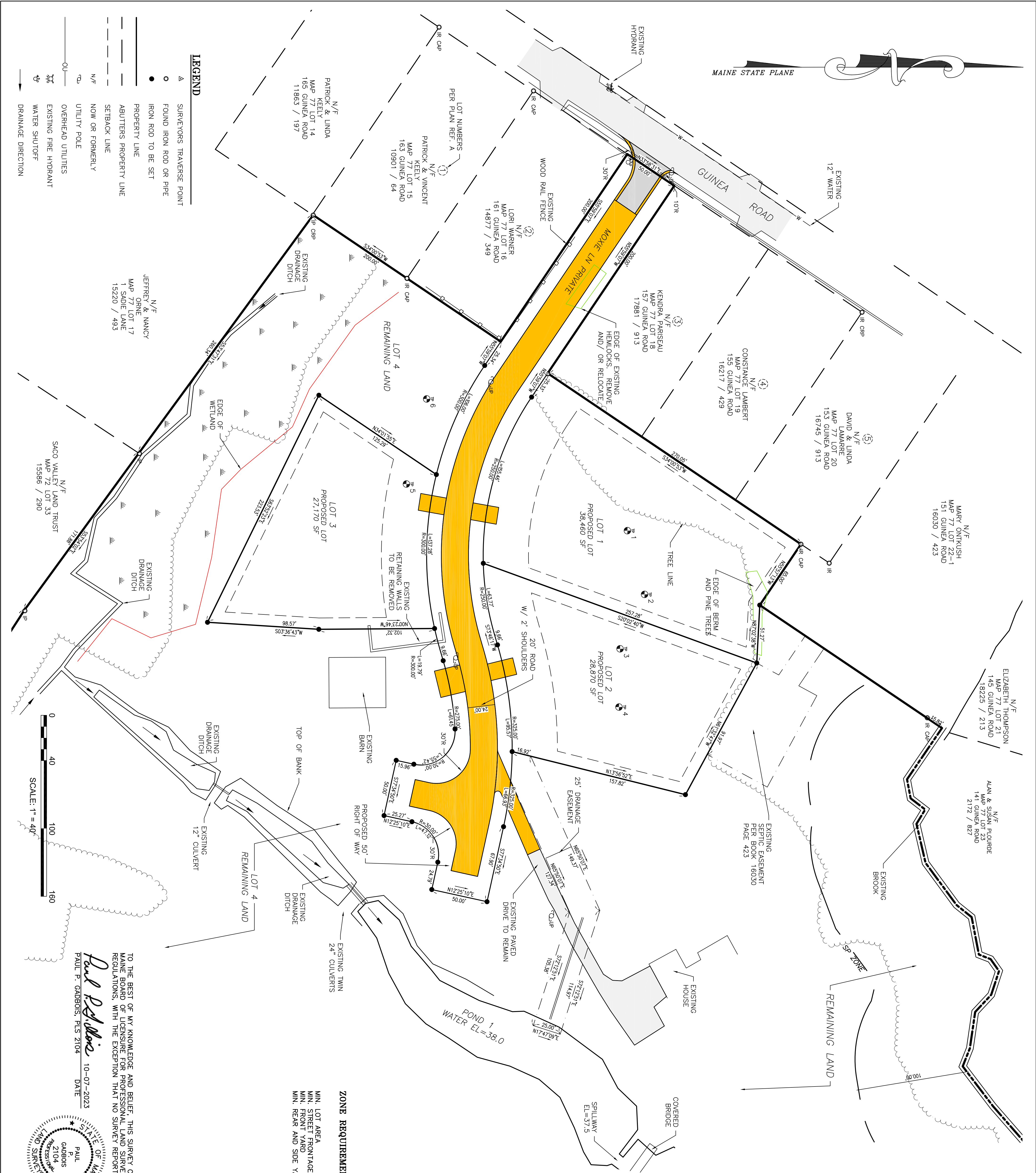
THENCE S72°12'51"E along remaining land of grantor a distance of 114.97 feet to a point;

THENCE S17°47'09"W along remaining land of grantor a distance of 25.00 feet to a point;

THENCE N72°12'51"W along remaining land of grantor a distance of 105.38 feet to a point;

THENCE S65°50'07"W along remaining land of grantor a distance of 127.34 feet to a point located on the northerly sideline of said Lane;

THENCE along the northerly sideline of said Lane a distance of 25.71 feet to the point of beginning.



NOTES:

- RECORD OWNER: LISA WING
1 MOXIE LANE
BIDDEFORD, MAINE
- MAP / LOT: 77 / 22
- TOTAL AREA OF PROPERTY 21.46 ACRES.
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL.
- PROPERTY IS LOCATED IN THE SR-1, RF AND SP OVERLAY ZONES.
- THE LOTS TO BE SERVED BY PUBLIC WATER, UNDERGROUND UTILITIES TO LOTS FROM EXISTING OVERHEAD UTILITIES AND ON LOT SEPTIC.
- THE PROPERTY IS NOT LOCATED IN A FEMA FLOOD ZONE.
- TOTAL AMOUNT OF DISTURBED AREA FOR CONSTRUCTION OF THE PRIVATE WAY IS 26,650 SQUARE FEET.
- THE PROJECT HORIZONTAL DATUM: MAINE STATE PLANE COORDINATE SYSTEM, MAINE WEST ZONE. PROJECT VERTICAL DATUM: NORTH AMERICAN DATUM 1988 (NAVD88). ALL DATA WAS DERIVED USING LEICA GS14 REAL TIME KINEMATICS GPS.
- WETLANDS AND TEST PIT LOCATIONS WERE DELINEATED AND LOCATED BY MARK HAMPTON ASSOCIATES, INC., SEE WETLAND REPORT AND SOIL REPORT BOTH DATED JANUARY 23, 2023.
- TOPOGRAPHIC INFORMATION WAS DERIVED FROM THE MAINE GIS WEBSITE, EXCEPT FOR DESIGN OF THE PRIVATE WAY WHICH IS BASED ON FIELD SURVEY DATA.
- UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTOR AND / OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO BUILDING DESIGN, CONSTRUCTION AND/OR EXCAVATION.
- THE PROPOSED RIGHT OF WAY TO BE A PRIVATE ROAD PROVIDING ACCESS TO THE LOTS FROM THE CITY OF BIDDEFORD, MAINE, NOT BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ANY KIND, SNOW PLOWING, OR TRASH PICKUP OF THE PRIVATE WAY AND THAT FURTHER LOT DIVISION UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE PLANNING BOARD. UNLESS A WAIVER IS REQUESTED BY ALL LOT OWNERS AND GRANTED, NO CITY TRASH TRUCK WILL ENTER MOXIE LANE. THE OWNERS WILL BE REQUIRED TO WHEEL TRASH TO GUINEA ROAD.
- A MAINTENANCE AGREEMENT SHALL BE RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS SPECIFYING THE RIGHTS AND RESPONSIBILITIES OF EACH LOT OWNER WITH RESPECT TO THE MAINTENANCE, REPAIR AND PLOWING OF THE PRIVATE WAY.
- ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, DRIVEWAYS, LANDSCAPING OR FOR GARDENING SHALL BE LOAMED AND SEEDED.
- THE OWNER RESERVES ONTO THEMSELVES, HEREIN AND ASSIGNS HEREON, ALL RIGHTS, INCLUDING BUT NOT LIMITED TO, THE RIGHT TO LINES AND 25 FEET IN WIDTH ALONG FRONT LINES OF ALL LOTS SHOWN HEREIN FOR THE PURPOSE RELATING TO THE INSTALLATION OF UTILITIES AND DRAINAGE STRUCTURES INCLUDING SWALES. THE EASEMENTS DESCRIBED ARE LOCATED ENTIRELY WITHIN THE PROPOSED LOTS.

LOCUS DEED REFERENCE:

- QUITCLAIM DEED FROM USA M. WING AND TRAVIS D. WING TO USA M. WING DATED OCTOBER 27, 2010 AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS IN BOOK 15976, PAGE 986.

PLAN REFERENCES:

- THE SHOWING LOTS OF RALPH & RACHEL LACHANCE RECORDED IN YORK COUNTY REGISTRY OF DEEDS IN PLAN BOOK 51, PAGE 14.
- FINAL PLAN FOR GEORGE GARNACHE RECORDED IN SAID REGISTRY IN PLAN BOOK 309, PAGE 44.

ZONE REQUIREMENTS: (SR1)

WATER NO SEWER
MIN. LOT AREA 20,000 SF
MIN. STREET FRONTAGE 100 FEET
MIN. FRONT YARD 40 FEET
MIN. REAR AND SIDE YARD 10 FEET

ZONE REQUIREMENTS: (RF)

WATER NO SEWER
MIN. LOT AREA 20,000 SF
MIN. STREET FRONTAGE 120 FEET
MIN. FRONT YARD 40 FEET
MIN. REAR AND SIDE YARD 25 FEET

YORK,ss REGISTRY OF DEEDS

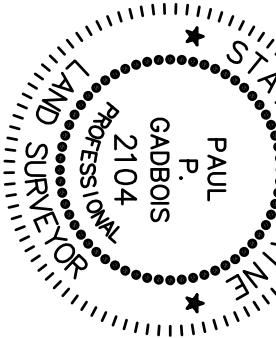
Received _____ h _____ m _____ M, and
Filed in Plan Book _____ Page _____
ATTEST: _____ Register

APPROVAL
CITY OF BIDDEFORD
PLANNING BOARD

DATE _____
CHAMBERSON

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS SURVEY CONFORMS TO THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS RULES AND REGULATIONS, WITH THE EXCEPTION THAT NO SURVEY REPORT WAS WRITTEN.

Paul P. Gadbois 10-07-2023
PAUL P. GADBOIS, PLS 2104 DATE



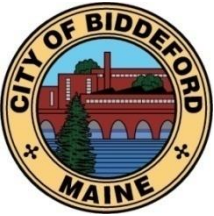
DRAWN: P.P.G.	REVISIONS:
CHECKED: P.P.G.	
SCALE: 1"= 40'	
FIELD BOOK:	
DATE: 03-13-2023	3. 10-07-23 REMOVED LOT 4 LABEL
JOB NO. 1841	2. 07-11-23 RESPOND TO COMMENTS
SHEET 2 OF 6	1. 03-14-23 REVISED HAMMERHEAD PER FIRE DEPT.

RECORD OWNER
LISA WING
1 MOXIE LANE
BIDDEFORD, MAINE 04005

PRELIMINARY SUBDIVISION PLAN
LISA & TRAVIS WING
1 MOXIE LANE
BIDDEFORD, MAINE

PAUL P. GADBOIS
ENGINEERING SURVEYING
LAND PLANNING
P.O. BOX 327, SACO, MAINE 04072
(207) 283-3980





CITY OF BIDDEFORD

PLANNING DEPARTMENT

David C.M. Galbraith
Interim Deputy Director/City Planner
205 Main Street
Biddeford, ME 04005
(207) 284-9115
David.Galbraith@Biddefordmaine.org

PLANNING BOARD REPORT

TO: William Southwick, Chair & Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Interim Deputy Director / City Planner

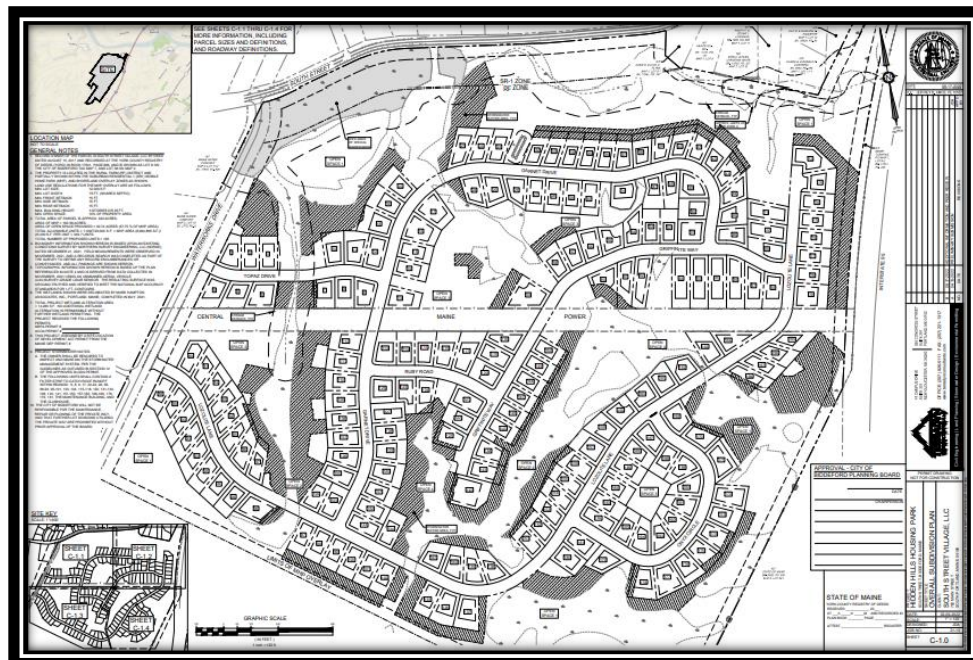
DATE: December 1, 2022

RE: Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

MEETING DATE: December 7, 2022

I. INTRODUCTION:

South Street Village, LLC has requested preliminary site plan/subdivision review of a 195 unit manufactured housing park on a 312 +/- acre parcel located in the Rural Farm (RF) and Suburban Residential (SR-1) zone with Mobile Home Parks (MHP) overlay zone. The site includes a large freshwater wetland among open field and woods and is traversed by Thatcher Brook. The Planning Board previously reviewed a sketch plan for this proposal in September 2021, and considered the preliminary site plan and subdivision application in May of 2022, where the Board voted to postpone consideration of the application until certain concerns had been addressed. The focus of this review memo is to discuss the modifications to the Site Plan since the Board's last review of the project.



Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

Planning Board Meeting date: December 7, 2022

The site plan has been slightly redesigned with the most important change being the single point of access relocation from South Street to two (2) proposed vehicle access points connecting to Waterworks Drive, which is currently a private road, owned by and located on the Applicant's property. The Applicant has also worked with the City's E-911 Coordinator (Joanne Fisk, Deputy Fire Chief) to verify that the proposed street names are acceptable. The roadway names shown on the revised plans have been changed, since the earlier reviews, to names acceptable to E-911. The applicant has decided to age restrict the development to residents 55 and older. This change, as described in the applicant's cover letter, significantly reduces the amount of traffic generated by the development and eliminates the need for a dedicated school bus turnaround.

II. PROJECT INFORMATION SUBJECT INFORMATION

1. Applicant/Property Owner South Street Village, LLC 762 Main Street South Portland, ME 04106 2. Agent/Engineer Jeff Amos, P.E. Terradyn Consultants, LLC 41 Campus Drive, Suite 301 New Gloucester, ME 04260.
2. Planning Board Report 2 2021-42 Hidden Hills Development
3. Project Location: 413 South Street
4. Map/Lot: Tax Map 7/Lot 8
5. City Approvals Required: Major Subdivision/Site Plan
6. Existing Zoning: Rural Farm (RF) and Suburban Residential (SR-1)
7. Overlay Zoning: Manufactured Park Overlay (MHP)
8. Existing Use: Undeveloped property. Forest, fields and wetlands.
9. Proposed Use: 195 unit manufactured housing park
10. Uses in the vicinity: Residential
11. Parcel Size: 312.1 acres
12. Water Supply by Maine Water
13. Sewerage Disposal Centralized subsurface septic systems
14. Solid Waste Disposal: Private Hauler
15. Fire Protection: City of Biddeford
16. Parking Spaces Required 2 spaces/dwelling unit
17. Parking Spaces Provided 418 parking spaces (28 for maintenance garage and community center)
18. Ownership of Road Private Streets
19. Estimated Site Development Costs Undisclosed
20. Financial Capacity Letter: Letter received from Evergreen Credit Union confirming financial capacity.
21. Waivers Needed/Requested: None requested
22. Waivers Granted N/A
23. Additional Approvals/Permits Needed: Site Location of Development Review, DEP Stormwater Review
24. Fees Paid (LDR Attachment A): All application fees paid
25. Planning Board Review History September 2021, May 2022, and December 7, 2022.

III. COMPLETENESS REVIEW: The application is before the Planning Board as required by Article XI (Site Plan Review) of the Land Development Regulations and Chapter 66 (Subdivisions) subject to Subdivision review and approval. With regards to the subdivision reviews, all applications have a three-tier approval process beginning with a Sketch Plan review, that was reviewed at the Planning Board's September 29, 2021 meeting. The applicant has submitted an updated preliminary plan application with additional information as requested by the Planning Board. The content requirements for a preliminary subdivision application are

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

Planning Board Meeting date: December 7, 2022

outlined in Sec.66-35 and, and requirements specific to a manufactured housing park are listed in Article VI. Section 45 of the Land Development Regulations. Staff consider the application to be generally complete. The following items were identified by Staff as being outstanding or requiring clarification. Below is an update on the status of these items.

1. Sec. 66-35(a)(15). Reserved Fire Lanes. The Application identified reserved fire lanes as being not applicable. In general, the proposed right-of-way widths and anticipated low volumes of traffic, likely do not necessitate reserved fire lanes. The applicant has confirmed this with the Fire Department and no designated fire lanes have been provided. It should be noted that the site redesign includes areas on two sides of every building where the Fire Department can utilize in emergency situations.
2. Sec. 66-35(a)(16). Mark Hampton Associates completed an evaluation of two hand dug test pits for the proposed stormwater treatment system in July. The plans have been updated to include the location of soil test pits for all proposed lots, see Attachment #10 (Septic System Test Pits). The proposed septic systems will be shared by 2-3 lots each, and the use and placement of the systems have been discussed with the Code Office and are sufficient for the proposed use.
3. Sec. 66-35(a)(18). Sec. 66-35(d)(10). The applicant has provided review or utility capacity letters from required entities, including the power company, City Engineering, Police and Fire Departments. These letters have been provided in the revised Application within Attachment 7 (Water, Power, City Engineering, Fire & Police Review).
4. Article VI, Sec.45.(Div.2)D.4. Names of abutting owners of properties and the nature of present use of abutting property. A revised abutter list has been included with the revised application which conforms with the City's definition of 'abutter'.
5. Article VI, Sec.45 (Div.2)D.4. Open Space Management Plan. This plan has not been provided. As part of the applicant's May submission, they detailed that this information would be provided as part of the final subdivision application.
6. Article VI, Sec.45. (Div.2)D.13. Park Management Plan. A draft Park Management Plan, dated May 1, 2022 was provided as part of the applicant's earlier preliminary plan submission and will be finalized and presented at Final Subdivision Review.
7. Article VI, Sec. 45. (Div.2)E.6. Groundwater Impacts. The applicant has supplied a Hydrological Assessment of the proposal, prepared by Mark Cengi Geologic, Inc, dated August 9, 2022.

V. REVIEW PROCESS: After determining if the application is complete for substantive review, an item for discussion and action is to determine if the application, prior to review and approval of the preliminary or final plan will require any studies for the Board's consideration. This is outlined in Sec. 66-38. The preliminary plan review application includes narratives that address how the application conforms to the various applicable standards required by Chapter 66 and by the Land Development Regulations, including Article VI, Sec. 45 Manufactured housing/mobile home parks and determine if additional information is needed to make a positive finding on the approval criteria.

VI. AREAS OF REVIEW: The proposed development is subject to the following areas of review.

- A. Zoning: The property is predominantly zoned Rural Farm (RF) with a Manufactured Housing Park (MHP) overlay. A narrow strip of the property immediately along South Street is zoned Suburban

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

Planning Board Meeting date: December 7, 2022

Residential (SR-1), though that portion of the property is not being developed. The development is proposed to occur entirely within the portion of the site that is zoned MHP overlay, with the remaining portion of the site remaining undisturbed. The MHP overlay permits the development of a manufactured housing park subject to the City's subdivision requirements, and regulations stated under Article VI, Section 45. Park design requirements and limitations are based upon the type of wastewater infrastructure being proposed, with applicable standards as follows: Minimum Lot Area Minimum Street Frontage Public Sewer 6,500 SF 50 Feet Central Subsurface Wastewater System 12,000 SF 75 Feet Individual Wastewater Systems 20,000 SF 100 Feet The applicant is requesting use of central subsurface wastewater systems, servicing between two and three individual lots, with minimum lot size of 12,000 square feet and minimum street frontage of 75 feet. The required setback for individual home sites is a minimum of 15 feet.

B. Subdivision: The City's subdivision ordinance specifies that the subdivision of property into five or more lots which include roadway and/or utility improvements is considered a major subdivision. A major subdivision requires a minimum of three public meetings; sketch plan, preliminary plan, and final plan review, with varying submittal requirements for each plan type. Sketch Plan and the initial review of the Preliminary Plan occurred in September, 2021 and May, 2022 respectively. Content requirements for a final subdivision plan are outlined in Section 66-52 of the Biddeford Code of Ordinances. The following are comments that the Board should consider:

1. Both the subdivision ordinance (Sec. 66-79) and manufactured housing park performance standards (Sec. 45, Div.2 E.3) require buffering of residential development from adjacent public rights-of-way. These requirements, at 75 feet and 50 feet respectively, are met, given the proposed distances between South Street and areas of proposed development. However, the site landscaping plans do not depict any plantings within this buffer zone. The revise plans include photographs of the site from various vantage points illustrating existing vegetation being used as a natural buffer to surrounding property owners.
2. Net Density Calculation. As previously requested by the Planning Board, the City has requested a formal determination from the City Attorney to determine whether this requirement is applicable due to the state statute (MRS Title 30-A §4358) on manufactured housing. The City has received a legal opinion from Harry B. Center, II Esq., dated October 4, 2022 stating that "it is our opinion that the net density calculations required by the Biddeford Land Development regulations would not apply to the Hidden Hills manufactured Housing Park".
3. As indicated in the May 12th staff report, the application does not detail the proposed future condition of the land immediately to the south of the project site, outside of the MHP overlay zone. The subdivision plan should clarify whether this portion of the property is to be included as part of the project's designated open space area, or whether it will be parceled off for future development.
4. Open Space: Staff previously commented that the applicant did not adequately address the open space requirements for a manufactured housing park, detailed in Article VI, Sec. 34, Div.2 E.3. As part of the applicant's prior submittal, draft language regarding management of park open space was provided for staff and Board consideration, to be included as part of the overall Park Management Plan. This information indicates that open space areas are to be utilized for recreational purposes, and that generally, open space areas are to be maintained in their natural state, with the exception of low

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

Planning Board Meeting date: December 7, 2022

impact trails, constructed of bark mulch or other low-impact materials. The agreement would restrict trail locations to areas outside of designated forested buffers and identified wetlands. Staff is supportive of this approach for on-site open space, though would recommend the provision of trails or walkways to better connect residents with the centrally location community building and common community amenities.

5. Manufactured housing parks expected to generate more than 200 daily trips are required to have a minimum of two entrance/exits on a public street. The plan depicts both property entrances off of Waterworks Drive, which is a private street owned by the Applicant, which directly connects to South Street, so this requirement is being met. It is anticipated that this street will be improved to City standards and will be accepted as a public street, which would satisfy this requirement.
6. Environmentally Sensitive Areas: Staff previously requested that the wetlands report utilized in delineating wetlands for the property be provided as part of the packet materials, and that the applicant should also address the discrepancy between the 2020 vernal pool assessment and 2021 Existing Conditions Plan which depicts vernal pools. Staff is asking that this be addressed as part of any future plan submission.
7. Impacts to Existing Plant and Wildlife Communities: In May, staff requested that the applicant coordinate with Basswood Environmental, the Maine Natural Areas Program (MNAP), and the Maine Department of Inland Fisheries and Wildlife (MDIFW) to comment on the potential impacts of this development on existing plant and wildlife communities. The Applicant has reached out to these entities for review and comment. It is also understood that this project will undergo site law review, given the acreage disturbed and scope of the project. The applicant should address this review comment and provide an update on the status of the project's site law review with Maine DEP.
8. Wetland Disturbance: Staff recommend that the Park Management Plan include language prohibiting disturbance of wetland areas without formal review and permitting.
9. Per section 51.D.1., Monumentation should be provided in accordance with section 62-87. Monumentation will be provided per ordinance requirements on the Waterworks Drive right of way and no waiver is necessary. The code requires granite monumentation of the roadways, and it appears if that is not the plan for monumentation of the new roads, a waiver will be required.
10. Hydrogeologic Assessment: DEP will review the Hydrogeologic Assessment as part of the SLODA review. If for some reason the project does not now require a SLODA permit, the city should consider having this information peer reviewed.
11. Peer Review Traffic Engineering Comments Based upon the scope of the project, the anticipated number of trips, and the potential for significant traffic impacts to South Street, the City has retained a separate third-party traffic engineer, Diane Morabito, P.E., PTOE, with Sewall Engineering, to provide a third party review of the traffic analysis prepared for this application. That review is provided under separate cover as an attachment to this report.

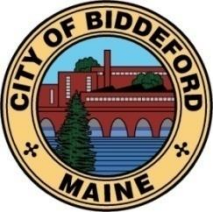
Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone.

Planning Board Meeting date: December 7, 2022

VII. CONCLUSION: The submitted application provides some additional materials as requested by the Planning Board. The Planning Board should determine if there is sufficient information to begin its substantive review of the application. If so, it should determine if there is information that is needed prior to preliminary approval, as it related to Sec. 66-39(b). If the application is not complete, it can be tabled until such time the outstanding information is provided. The Board may also consider conditioning a preliminary approval on those items needed to be addressed to satisfy the intent of Sec. 66-39(b). The latter should be detailed and clear on expectations.

City Staff and Peer Review Consultants continue to work with the Applicant on the fine details of the project, including sidewalk assessments. However, Staff believes that the Application provides enough information for the Planning Board to grant Preliminary Subdivision and Site Plan Approval by the Planning Board.

Recommended Motion: Motion to approve the Preliminary Subdivision and Site Plan for 416 South Street, Hidden Hills Manufactured Housing Park, a 195-unit manufactured housing park (Tax Map 7/Lot 8) in the Rural Farm (RF) and Suburban Residential (SR-1) zones and Manufactured Housing Park (MHP) overlay zone.



CITY OF BIDDEFORD

PLANNING DEPARTMENT

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@Biddefordmaine.org

PLANNING BOARD REPORT

TO: Larry Patoine, Chair & Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 28, 2023

RE: **Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone / Workshop.**

MEETING DATE: December 6, 2023

I. INTRODUCTION / UPDATE:

On December 7, 2022, the Planning Board approved the Preliminary Subdivision Plan to create a 195-unit manufactured housing park, called Hidden Hills, located at 413 South Street in the SR1, RF Zones and in the Mobile Home Park Overlay. The project was last before the Board on May 17, 2023 where the Board granted a six (6) month approval extension, to December 7, 2023 of the Preliminary Site Plan and Subdivision approval which the Board approved and the preliminary approval remains in effect. In September, the Applicant submitted his final application packet, prior to the expiration date, which in City Staff's opinion, were a drastic departure from the approved preliminary plans. The Applicant requested the Board workshop the proposed plan changes which primarily relate to sidewalks and street dedication which are explained briefly below. The focus of the memorandum is to specifically discuss the various roadway / sidewalk issues and to provide the Board Staff's position on these specific issues.

- A. Waterworks Drive Dedication: The preliminary plan application dated November 16, 2023, stated "*The development will connect to Waterworks Drive in two locations. Waterworks Drive has been constructed to City of Biddeford standards and will offered to the City Council for acceptance to the prior to final approval*". The Planning Board granted the preliminary approval, in part, due to the representations in the preliminary project application and based upon statements made during the deliberations of the project. The Final Application cover letter stated, "The applicant is no longer proposing to make Waterworks Drive a public road". As you are aware, Waterworks Drive, being dedicated as a public street, has remained one of the project's key items and has been presented as such to the Board. As the Board is aware, mobile home parks are subject to the Performance Standards in Article VI – Performance Standards, Section 45 – Manufactured housing/mobile home parks, Section E.5.c.i which states:

***Any mobile home park expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets. Any street within a park with an average daily traffic of 200 trips per day or more, shall have at least two street connections leading to existing public streets, other streets within the park, or other streets shown on an approved subdivision plan. Trip generation numbers will be determined by the latest*

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone / Planning Board Workshop.

Planning Board Workshop Date: December 6, 2023

*version of the publication "Recommended Guidelines for Subdivision Streets" by the Institute of Transportation Engineers (ITE) or other acceptable ITE manuals". (*Note – Emphasis added)*

As currently proposed the mobile home park does not have direct access on any public street. Therefore, City Staff are not supportive of the proposed changes to the application without Waterworks Drive being brought up to City standards and dedicated as a city street. Further, we consider the proposed change to be a major / significant change to the approved preliminary plans.

B. Waterworks Drive Sidewalks: As the Board may recall, during the various public hearings regarding this project, sidewalks were a highly discussed aspect of this development proposal and in response to the comments received from the public and Planning Board, City Staff and the Applicant worked towards providing sidewalks along the main roadways, namely South Street and Waterworks Drive as agreed, in response to neighborhood and Board desires to provide save sidewalks along these exterior roadways. In addition, the following items should be taken into consideration by the Board:

- 1) City Council Policy: The City Council has established a “complete streets” policy and as such the City Staff has been working with the Applicant to provide sidewalks being on Waterworks Drive and South Street. To be accepted as a city street, Waterworks Drive requires sidewalks / walking paths, meeting City standards, to be installed prior to the petition for roadway acceptance. The Applicant’s reversed position to not dedicate Waterworks Drive as a City street is contrary to the preliminary approval, the representations the Applicant made during public hearings and the current proposal would be in violation of Article VI – Performance Standards, Section 45 – Manufactured housing/mobile home parks, Section E.5.c.i. (Previously discussed).

The Applicant’s attorney, Gregory Braun’s letter of September 13, 2023 contends that this section of the City’s Land Use Code violates Title 30-A M.R.S. § 4358(3)(K) which states in part that, “a municipality may not enact or enforce land use regulations or ordinances, including, but not limited to, subdivision regulations or ordinances, which limit the number of lots in a mobile home park, which circumvent the intent of this section or which conflict with the provisions of this section.” I have reviewed Attorney Braun’s allegation/assertion that the City’s Ordinance violates State law as it relates to Mobile Home Parks, and I disagree with his contention. This matter has also been discussed with the City Solicitor who also disagrees with Mr. Braun’s contention. The City’s Ordinance does not seek to “limit the number of lots” and in fact the proposed mobile home park will be one of, if not the largest detached home residential developments within the City. Providing two (2) points of vehicle access into a development serving 195 detached residential units is necessary for emergency vehicle access and would be required of any development of this size.

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone / Planning Board Workshop.

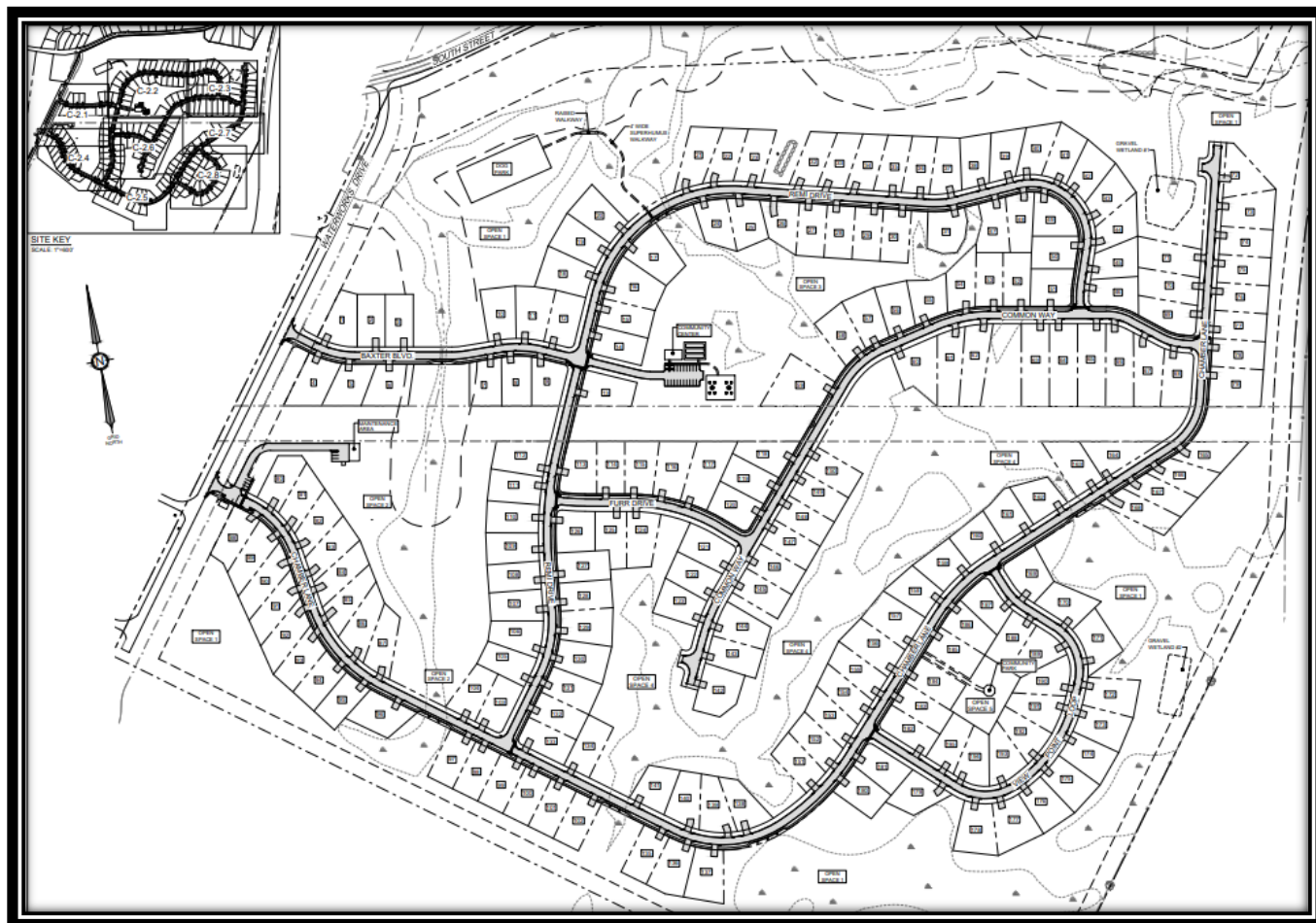
Planning Board Workshop Date: December 6, 2023

- 2) Public Access / Future Access to Undeveloped Property: As has been discussed on multiple occasions, Waterworks Drive being dedicated as a public street would provide citizen access to the 250 acres of openspace, located at the end of Waterworks Drive, managed by the Maine Coastal Heritage Trust, and providing public access being provided for residential access (via Waterworks Drive) to the openspace has also been a highly desired goal.
- 3) South Street Connector: As has been discussed, Waterworks Drive has been identified as the location for the City's South Street Connector project which, as dedicated as a public street, would create the first link to bring the project to fruition. This would provide public access to the currently vacant property located to the immediate south of the Hidden Hills project, part of which is the 100+ acre parcel that was divided from the Hidden Hills project following preliminary review of the project. Public access would also have been provided to other undeveloped land to the south of Hidden Hills. Without the public street being provided, the currently undeveloped land would be landlocked and would remain inaccessible, and undevelopable for the foreseeable future. The City's desire for the South Street Connector remains and was also specifically identified in the City's recently adopted Comprehensive Plan (2023). It should further be noted that should Waterworks Drive remain private, the future development of these vacant lands would be exclusively controlled by the Applicant which would create a barrier towards the development of these lands and a roadblock to the South Street Connector project.

C. Interior Sidewalks: The approved preliminary plans illustrated sidewalks being provided on one side of the majority of the proposed streets within the development. Internal sidewalks for mobile home parks are not required under City Ordinances and can't be required of the Applicant, despite them being previously proposed. The Applicant's final submittal has removed all interior sidewalks, which again is a major change from what was previously proposed and approved by the Planning Board. Due to comments made by the public and discussions with the Planning Board it was determined that providing sidewalks along Waterworks Drive and South Street was more important than providing interior sidewalks. That said, interior sidewalks have been removed from the plans, sidewalks are not being proposed on Waterworks Drive and although the Applicant will make a monetary contribution to the South Street sidewalk it will not be installed in the immediate future.

Case # 2021.42: Hidden Hills Housing Park - Preliminary Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP overlay zone / Planning Board Workshop.

Planning Board Workshop Date: December 6, 2023



Interior Sidewalks Illustrated on Preliminary Approved Plans

Closing: This workshop meeting was requested by the Applicant as they seek input from the Board related to the above matters. No vote will be taken but the Board may express their personal views.

Respectfully submitted,

David C.M. Galbraith

David C.M. Galbraith
Acting Director / City Planner

Attachments:

1. Final Application Cover Letter 9-13-23
2. Final Application Plan Set 11-16-23
3. Planning Board Report 12-1-22
4. Section 45 Mobile Home Parks

WATERWORKS DRIVE

ITEM	AMOUNT	UNIT	UNIT PRICE	COST
GENERAL CONDITIONS/LAYOUT/TRAFFIC LAYOUT	1165	LF	\$ 18	\$ 20,970
SAWCUT/PREP SUBGRADE	1165	LF	\$ 5	\$ 5,825
SLIPFORM CURB	1165	LF	\$ 20	\$ 23,300
5' ASPHALT SIDEWALK	1165	LF	\$ 22	\$ 25,630
5' ROAD WIDENING FOR BIKE LANE	1165	LF	\$ 50	\$ 58,250
LOAM & SEED	1165	LF	\$ 8	\$ 9,320
MISCELLANEOUS SITEWORK (STRIPING, SIGNAGE, FILL)	1	LS	\$ 10,000	\$ 10,000
DRAINAGE/UNDERDRAIN IMPROVEMENTS	1	LS	\$ 15,000	\$ 15,000
UTILITY POLE RELOCATION (GUY WIRE)	1	EA	\$ 5,000	\$ 5,000
DEMOLITION	1	LS	\$ 10,000	\$ 10,000
ENGINEERING	1	LS	\$ 15,000	\$ 15,000
INSPECTION	1	LS	\$ 5,000	\$ 5,000
PERMITTING	1	LS	\$ 5,000	\$ 5,000

TOTAL: \$ 208,295
10% CONTINGENCY: \$ 20,830
SUBTOTAL: \$ 229,125

SOUTH STREET

ITEM	AMOUNT	UNIT	UNIT PRICE	COST
GENERAL CONDITIONS/LAYOUT/TRAFFIC LAYOUT	1825	LF	\$ 18	\$ 32,850
SAWCUT/PREP SUBGRADE	1825	LF	\$ 5	\$ 9,125
SLIPFORM CURB	1825	LF	\$ 20	\$ 36,500
5' ASPHALT SIDEWALK	1825	LF	\$ 22	\$ 40,150
5' ROAD WIDENING FOR BIKE LANE	1825	LF	\$ 50	\$ 91,250
MISCELLANEOUS SITEWORK (STRIPING, SIGNAGE, FILL)	1	LS	\$ 10,000	\$ 10,000
LOAM & SEED	1825	LF	\$ 8	\$ 14,600
DRAINAGE/UNDERDRAIN IMPROVEMENTS	1	LS	\$ 30,000	\$ 30,000
UTILITY POLE RELOCATION	14	EA	\$ 15,000	\$ 210,000
DEMOLITION	1	LS	\$ 35,000	\$ 35,000
ENGINEERING	1	LS	\$ 30,000	\$ 30,000
INSPECTION	1	LS	\$ 10,000	\$ 10,000
PERMITTING	1	LS	\$ 15,000	\$ 15,000

TOTAL: \$ 564,475
10% CONTINGENCY: \$ 56,448
SUBTOTAL: \$ 620,923

GRAND TOTAL: \$ 850,047

NOTES:

1. ESTIMATES SHOWN ABOVE ARE BASED ON LIMITED INFORMATION; FINAL DESIGN NEEDED.
2. NO RIPRAP ASSUMED TO BE NEEDED FOR STEEP DOWNSLOPES.
3. NO LEDGE REMOVAL INCLUDED; ASSUMED SOME WILL BE REQUIRED FOR SOUTH STREET.

Section 45. Manufactured housing/mobile home parks. [Ord. No. 2004.45, 7-12-2004]

Division 1. Manufactured Housing, General

A. Applicability. These regulations shall apply to all manufactured housing to be located in the City of Biddeford or moved from one part of the City to another.

B. Permit requirements:

1. No person, firm, corporation or other legal entity shall locate a manufactured home in the City of Biddeford, or move a manufactured home from one lot or parcel of and to another, without a permit from the Building Inspector. The Building Inspector shall issue the permit within 10 days of receipt of a written application and submission of proof that the manufactured home meets the requirements of this ordinance.
2. No person other than a dealer licensed by the State of Maine with a sales tax certificate may construct or locate any new manufactured housing within the City of Biddeford without first providing a bill of sale indicating the name, address, dealer license number and sales tax certificate number of the person who sold or provided the manufactured housing to the buyer locating the housing in Biddeford.

If no such bill of sale is presented, evidence of certification of payment of the sales tax in accordance with Title 36 M.R.S.A. § 1760(40), and 36 M.R.S.A. § 1952-B must be provided.

3. A mobile home shall not be occupied for dwelling purposes unless it is properly placed on a permanent foundation and connected to water, sewage/septic, and electrical utilities.

C. Definitions. For the purposes of this section the following definitions shall be used. Any other terms shall be defined as provided in Article II of the Zoning Ordinance:

1. Manufactured housing means a structural unit or units designed for occupancy and constructed in a manufacturing facility and transported, by use of its own chassis or an independent chassis, to a building site. The term includes any type of building which is constructed at a manufacturing facility and transported to a building site where it is used for housing and may be purchased or sold by a dealer in the interim. For purposes of this section, two types of manufactured housing are included. Those two types are:
 - a. Those units constructed after June 15, 1976, commonly called "newer mobile homes," which the manufacturer certifies are constructed in compliance with the United States Department of Housing and Urban Development standards, meaning structures transportable in one or more sections, which in traveling mode are 14 body feet or more in width and are 750 or more square feet, and which are built on permanent chassis and designed to be used as dwellings, with or without permanent foundations, when connected to the required utilities including the plumbing, heating, air conditioning or electrical systems contained in the unit;
 - b. This term also includes any structure which meets all the requirements of this subparagraph, except the size requirements, and with respect to which the manufacturer voluntarily files a certification required by the Secretary of the United States Department of Housing and Urban Development and complies with the standards established under the National Manufactured Housing Construction and

Section 45

Section 45

Safety Standards Act of 1974, U.S. Code, title 42, Section 5401 et seq.; and

- c. Those units commonly called "modular homes," ("state certified manufactured homes") which the manufacturer certifies are constructed in compliance with 10 M.R.S.A. § 9041 et seq., and rules adopted under that chapter, meaning structures, transportable in one or more sections, which may or may not be constructed on a permanent chassis and are designed to be used as dwellings on foundations when connected to required utilities, including the plumbing, heating, air conditioning or electrical systems contained in the unit.
2. Mobile home park means a parcel of land under unified ownership approved by the municipality under the City of Biddeford Code, Chapter 66, Subdivisions, for the placement of three or more manufactured homes.
 - a. Mobile home park lot means the area of land on which an individual home is situated within a mobile home park and which is reserved for the use by occupants of that home. A municipality may require a lot to be designated on a mobile home park plan.
3. Mobile home subdivision or development means a parcel of land approved by the municipal reviewing authority under the City of Biddeford Code, Chapter 66, Subdivisions, for the placement of manufactured houses on individually owned lots.
4. Permanent foundation means all the following:
 - A. For "newer mobile homes," as defined by the previous Subsection C1a, a foundation that conforms to the installation standards established by the Manufactured Housing Board.
 - B. For "modular homes," as defined by the previous Subsection C1c, a foundation that conforms to the City of Biddeford Building Code.
5. Pitched, shingled roof means a roof with a pitch of two or more vertical units for every 12 horizontal units of measurement and which is covered with asphalt or fiberglass composition shingles or other materials, but specifically excludes corrugated metal roofing material.
- D. Prohibitions. No person, firm, corporation or other legal entity shall locate, or move from one lot or parcel of land to another, an older mobile home, trailer, or manufactured home, built prior to June 15, 1976, which fails to meet the requirements of Subsection F below unless legally located within Biddeford prior to August 4, 1988.
- E. Nonconforming structures. Mobile homes and trailers, and manufactured homes which fail to meet the standards set forth in Subsection F of this section, which were lawfully established prior to the effective date of this section, shall be considered nonconforming structures and may continue and may be maintained, repaired, improved, and expanded in accordance with the provisions of this ordinance related to nonconforming structures.
- F. Manufactured housing standards.
 1. All manufactured housing proposed to be located within the City of Biddeford or relocated from one lot to another within the City, and built prior to June 15, 1976, shall meet the following safety standards:
 - a. City of Biddeford Building Code;

Section 45

Section 45

- b. All electrical utilities shall comply with the National Electric Codes.
- 2. All manufactured housing proposed to be located within the City of Biddeford after August 4, 1988, shall meet the following design requirements:
 - a. The minimum width shall be 14 feet.
 - b. All units shall contain a minimum living area of 750 square feet.
 - c. All units shall be on a permanent foundation as defined in Subsection C4 above.
 - d. All mobile homes shall be equipped with adequate skirting to enclose the underside of the mobile home.
 - e. All units shall have a pitched, shingled roof of not less than two vertical units for every 12 horizontal units of measurement.
 - f. Exterior siding shall conform to any requirements for exterior siding of site-built housing in the City of Biddeford.

Division 2. Mobile Home Parks.

- A. Applicability. Except as stipulated below, mobile home parks shall meet all the requirements for a residential subdivision contained in Chapter 66 of the Code, and shall conform to all applicable state laws and local ordinances or regulations. Where the provisions of this section conflict with specific provisions of the City of Biddeford Ordinances the provisions of this section shall prevail.
- B. Permitted housing units. Mobile home parks, as defined, shall be limited to the siting of manufactured housing meeting the definition standards specified in Division 1C1(a) and (b) as such refers to "mobile homes."
- C. Approval; inspections.
 - 1. Mobile home parks shall be permitted after review and approval by the Planning Board in those districts designated on the Official Zoning Map of the City of Biddeford. The Planning Board shall determine the adequacy of the design with respect to lot layout, traffic circulation, water supply and sewage disposal, and other features specified in this ordinance and in the Subdivision Ordinance to assure conditions which preserve the health, safety, and welfare of the occupants, the surrounding neighborhood and the City generally. All mobile home parks shall meet the minimum standards of the manufactured Housing Board as well as the provisions of this ordinance, effective at the date of application.
 - 2. Park owners shall be held responsible for the notification of the Building Inspector to inspect new or replacement units being placed in the park. Failure to notify the Building Inspector's office for inspection, or the failure to receive a certificate of occupancy (CO) shall be a violation of Chapter 18 of the Code. Such violation shall be punishable under the terms of the applicable chapter. In cases where the two chapters apply, the stricter of the two shall apply.
 - 3. Owners of mobile home parks shall apply for a permit to operate a mobile home park. This application shall be submitted to the City Clerk's office. The application shall be submitted to the Building Inspector, the Fire Chief, and the Health Officer for their investigation and

Section 45

Section 45

recommendation. This application shall be reviewed for approval by the municipal officers based on the recommendation of the several public officers. The municipal officers shall act upon the application. Licenses granted by the municipal officers shall be valid for two years, but in no case shall a license be transferred. Failure to have a license renewed shall result in no more certificates of occupancy being issued until such license is renewed.

- D. Permit: method of application and requirements. Applications shall be submitted by the applicant or his/her agent as specified in the Subdivision Ordinance. The applicant shall file with the application proof of ownership of the premises or of a lease or written permission from the owner thereof together with a complete set of plans drawn to scale, by a professional engineer, or land surveyor, registered with the State of Maine, showing the location of the proposed park, and which includes:
1. Dimensions of park boundary lines.
 2. Name of park, North arrow, date, and scale of plan.
 3. Name and address of owner of record, and the name and address of proposed park operator.
 4. Names of abutting owners of properties and the nature of present use of abutting properties.
 5. Locations, names and widths of adjacent street and rights-of-way.
 6. Locations and dimensions of all roadways, walkways, public areas, and reserved strips.
 7. Location and description of all existing or proposed buildings or other permanent structures.
 8. Locations and dimensions of all proposed mobile home or trailer spaces.
 9. Existing and proposed utilities, installations, service connections from adjacent streets or properties and the method of sewage disposal.
 10. Drainage plan.
 11. Traffic impact analysis.
 12. Open space management plan.
 13. Park management plan. Each application for a mobile home park shall have a park management plan. This plan shall state in detail, besides the name, address and telephone number of park owner and arrangements for daily contact of park manager/operator, the rules of the park, schedule for park maintenance, trash removal, road maintenance, security of the park, etc.
 14. Landscaping plan that includes details for buffer areas, open space areas and entryways.
 15. Any other reasonable information required by the Biddeford Subdivision Ordinance.
- E. Design requirements. Mobile home parks shall conform to the following minimum requirements. These requirements shall be shown on the park plan.
1. Lot area and lot width requirements. Notwithstanding the dimensional requirements table

Section 45

Section 45

located in Article VI, Section 6A of this section, lots in a mobile home park shall meet the following lot area and lot width requirements.

- a. Lots served by public sewer:

Minimum lot area: 6,500 square feet

Minimum lot width: 50 feet

- b. Lots served by individual subsurface wastewater disposal systems.

Minimum lot area: 20,000 square feet

Minimum lot width: 100 feet

- c. Lots served by a central subsurface wastewater disposal system approved by the Maine Department of Health and Human Services.

Minimum lot area: 12,000 square feet

Minimum lot width: 75 feet

- d. The overall density of any park served by any subsurface wastewater disposal system shall not exceed one dwelling unit per 20,000 square feet of total park area.

- e. Lots located within any shoreland zoning district shall meet the lot area, lot width and shore frontage requirements for that district.

2. Unit setback requirements.

- a. On lots 10,000 square feet in area or larger, structures shall not be located less than 15 feet from any boundary lines of an individual lot. On lots less than 10,000 square feet in area, structures shall not be located less than 10 feet from any boundary lines of an individual lot.

- b. On lots which are located within a shoreland zoning district, structures shall comply with all sections of Article XIV, Shoreland Zoning Ordinance.

3. Buffering. If a park is proposed with a residential density at least twice the density of adjacent development in existence, or at least twice the density permitted in the zoning district in which the park is located if the neighboring land is undeveloped, the park shall be designed with a continuous landscaped area not less than 50 feet in width which shall contain no structures, driveways, utilities or streets. The first 25 feet of the buffer strip, as measured from the exterior boundaries of the park shall contain evergreen shrubs, trees, fences, walls or any combination which forms an effective visual barrier to be located on all exterior lot lines of the park, except that driveways shall be kept open to provide visibility for vehicles entering and leaving the park.

4. Open space reservation. An area no less than 10% of the total area of those lots with a lot area of 10,000 square feet or less shall be reserved as open space. The area reserved as open space shall be suitable to be used for recreational purposes or use by the residents of the park for storage. Generally, the reserved open space shall have slopes less than 5% shall not be located on poorly or very poorly drained soils, and shall be accessible directly from roads within the park. The Planning Board may waive the requirement for open space

:5

Section 45

Section 45

- when the park is located within 1/2 mile of a publicly owned recreation area.
5. Road design, circulation, and traffic impacts. Streets within a park shall be designed by a professional engineer, registered in the State of Maine.
 - a. Streets which the applicant proposes to be dedicated as public ways shall be designed and constructed in accordance with the standards for streets in the Biddeford City Code, Chapter 62.
 - b. Streets which the applicant proposes to remain private ways shall meet the following minimum geometric design standards.
 - i. Minimum right-of-way width: 23 feet.
 - ii. Minimum width of traveled way: 20 feet.
 - c. Dead-end streets shall provide a suitable turnaround at the closed end. In addition the following shall apply:
 - i. Any mobile home park expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets. Any street within a park with an average daily traffic of 200 trips per day or more, shall have at least two street connections leading to existing public streets, other streets within the park, or other streets shown on an approved subdivision plan. Trip generation numbers will be determined by the latest version of the publication "Recommended Guidelines for Subdivision Streets" by the Institute of Transportation Engineers (ITE) or other acceptable ITE manuals.
 - ii. A dead-end street shall not exceed in length a distance of 1,500 feet, as measured along the proposed street center line, from the end of the dead end road to the outside edge of the traveled way of the nearest intersecting through road.
 - iii. Exceptions to the maximum dead-end lengths:
 - a. If an applicant can demonstrate (through a master plan) that the street will be connected to create a through street in future development, the Planning Board may allow dead-end lengths to temporarily exceed 1,500 feet.
 - b. If a road loops back on to itself (i.e. lollipop or p-shaped), it may exceed the standards above, provided that the point at which the road loops back onto itself as measured from the beginning of the dead-end road is not more than 1,500 feet.
 - d. No individual lot within a park shall have direct vehicular access onto an existing public street.
 - e. The intersection of any street within a park and an existing public street shall meet the following standards.
 - i. Angle of intersection. The desired angle of intersection shall be 90°. The minimum angle of intersection shall be 75°.
 - ii. Maximum grade within 75 feet of intersection. The maximum permissible grade

Section 45

Section 45

within 75 feet of the intersection shall be 2%.

- iii. Minimum sight distance. A minimum sight distance of 10 feet for every mile per hour of posted speed limit on the existing road shall be provided. Sight distances shall be measured from the driver's seat of a vehicle that is 10 feet behind the curb or edge of shoulder line with the height of the eye 3 1/2 feet above the pavement and the height of object 4 1/4 feet.
 - iv. Distance from other intersections. The center line of any street within a park intersecting an existing public street shall be no less than 125 feet from the center line of any other street intersecting that public street.
 - f. The application shall contain an estimate of the average daily traffic projected to be generated by all units within the park units completed in an earlier phase of the mobile home park development. Estimates of traffic generation shall be based on the latest Trip Generation Manual, published by the Institute of Transportation Engineers. If the park is projected to generate more than 400 vehicle trip ends per day, the application shall also include a traffic impact analysis, by a registered professional engineer with experience in transportation engineering.
6. Groundwater impacts.
- a. Assessment submitted. Accompanying the application for approval of any mobile home park which is not served by public sewer shall be an analysis of the impacts of the proposed mobile home park on ground water quality. The hydrogeologic assessment shall be prepared by a certified geologist or registered professional engineer, experienced in hydrogeology and shall contain at least the following information.
 - i. A map showing the basic soils types.
 - ii. The depth to the water table at representative points throughout the mobile home park.
 - iii. Drainage conditions throughout the mobile home park.
 - iv. Data on the existing ground water quality, either from test wells in the mobile home park or from existing wells on neighboring properties.
 - v. An analysis and evaluation of the effect of the mobile home park on ground water resources. The evaluation shall, at a minimum, include a projection of post-development nitrate-nitrogen concentrations at any wells within the mobile home park, at the mobile home park boundaries and at a distance of 1,000 feet from potential contamination sources, whichever is a shorter distance. For mobile home parks within the watershed of a lake, projections of the development's impact on groundwater phosphate concentrations shall also be provided.
 - vi. A map showing the location of any subsurface wastewater disposal systems and drinking water wells within the mobile home park and within 200 feet of the mobile home park boundaries.
 - b. Standards for acceptable groundwater impacts.

Section 45

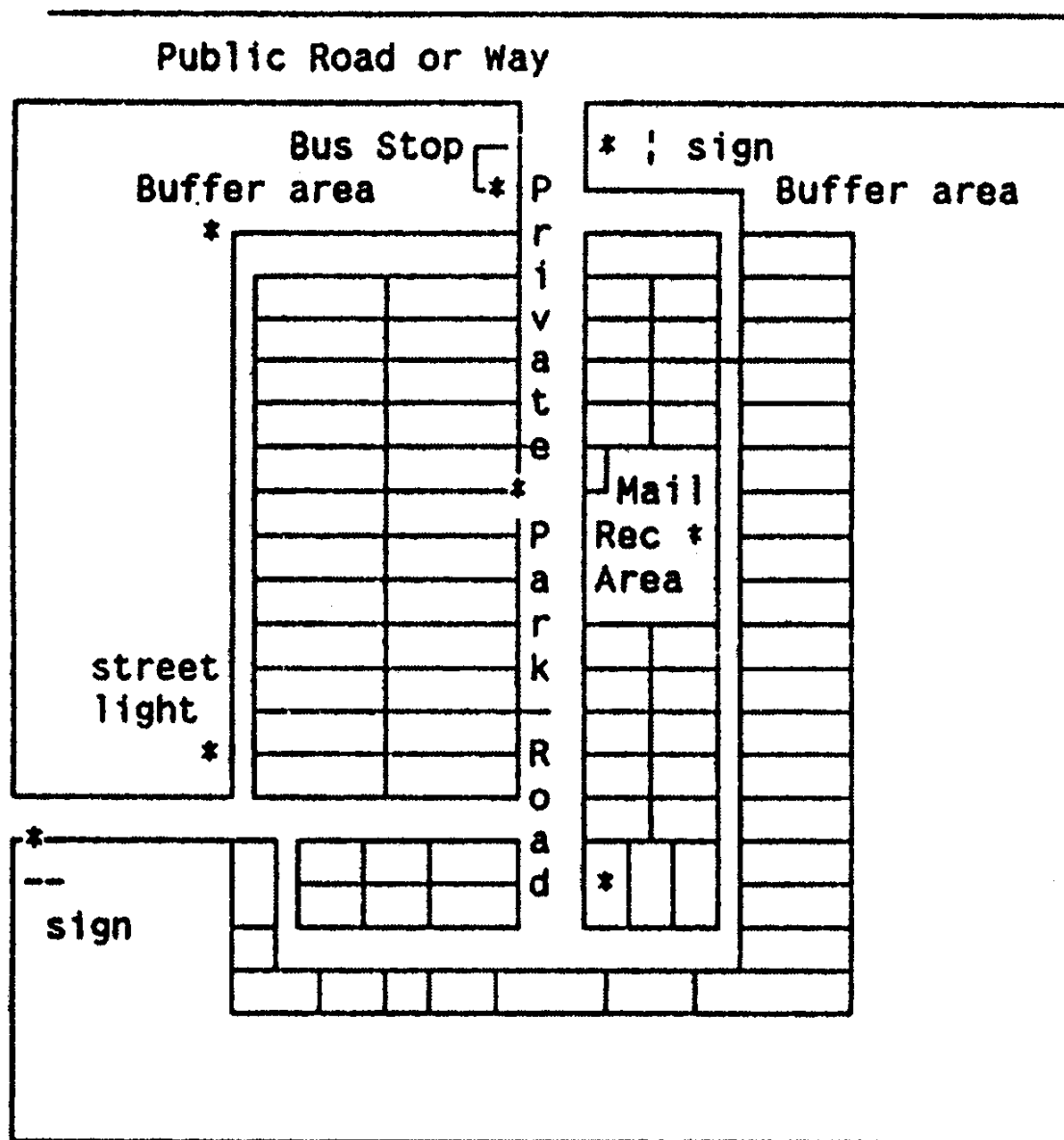
Section 45

- i. Projections of groundwater quality shall be based on the assumption of drought conditions (assuming 60% of annual average precipitation).
 - ii. No mobile home park shall increase any contaminant concentration in the groundwater to more than 1/2 of the Primary Drinking Water Standards. No mobile home park shall increase any contaminant concentration in the groundwater to more than the Secondary Drinking Water Standards.
 - iii. If groundwater contains contaminants in excess of the primary standards, and the mobile home park is to be served by on-site groundwater supplies, the applicant shall demonstrate how water quality will be improved or treated.
 - iv. If groundwater contains contaminants in excess of the secondary standards, the mobile home park shall not cause the concentration of the parameters in question to exceed 150% of the ambient concentration.
 - c. Subsurface wastewater disposal systems and drinking water wells shall be constructed as shown on the map submitted with the assessment. If construction standards for drinking water wells are recommended in the assessment, those standards shall be included as a note on the plan.
7. Conversion without approval. No development or subdivision which is approved under this section as a mobile home park may be converted to another use without the approval of the Planning Board, and meeting the appropriate lot size, lot width, setback and other requirements. The plan to be recorded at the Registry of Deeds and filed with the municipality shall include the following restrictions as well as any other notes or conditions of approval.
 - a. The land within the park shall remain in a unified ownership and the fee to lots or portions of lots shall not be transferred.
 - b. No dwelling unit other than a manufactured housing unit shall be located within the park.

Division 3. Mobile Home Subdivisions and Developments Other Than Mobile Home Parks.

- A. Mobile home subdivisions and developments other than mobile home parks shall meet the standards established under the Zoning Ordinance and the Subdivision Ordinance. If provisions conflict, the stricter standard shall prevail.

SAMPLE MOBILE HOME PARK
(Not to Scale)



Sample Mobile Home Park
Buffer area would maintain the natural vegetation and be landscaped as needed.

Barbara I. Belik
Gregory P. Braun
Milda A. Castner
Scott M. Edmunds
William J. Gallitto, III
Jeffrey R. Gnecco



Julia M. Keenan
Jana L. Kenney
Michael W. Macleod-Ball
Thomas R. Miscio
Sarah B. Neault
Durward W. Parkinson

September 13, 2023

City of Biddeford
David Galbraith, City Planner
205 Main Street
Biddeford, ME 04005

City of Biddeford
Planning Board
205 Main Street
Biddeford, ME 04005

**Re: South Street Village, LLC & Hidden Hills Mobile Home Development
Bergen Parkinson, LLC File No. 2023945.000**

Mr. Galbraith,

I hope this finds you well. Please know that our firm has been retained to assist South Street Village, LLC, ("Applicant") in completing the approval process for the Hidden Hills Mobile Home Development ("Development") to assist in the resolution of certain issues within the approval process that appear to have become roadblocks in that process.

Specifically, in an email from you dated August 23, 2023 to Matthew Chamberlain, sole member and manager of South Street Village, LLC, you discuss the issue of sidewalks within the Development, sidewalks to be constructed along Waterworks Drive, and monetary contributions to be made to South Street for sidewalks to be built by the city at a later time.

It is my understanding that these conversations regarding sidewalks have been ongoing for some time and that, almost exclusively, the issue of sidewalks remains the last hurdle for a final plan to be completed and presented to the City of Biddeford Planning Board.

What is striking is the apparent inconsistency and changing position of the City staff regarding this issue. For example:

1. On December 7, 2022, Gregory Mitchell, Director, Planning and Development Department, indicated that based on conversations with Jeff Demers, Public Works

Director, a five (5') foot wide flush asphalt walking path along Water Works Drive would meet city street acceptance standards (copy attached).

2. In conformity with the above representation, Mr. Demers made the same representations to the Planning Board at their meeting on the same date (12/7/2022) and indicated that not only did the five (5') foot wide flush asphalt walking path along Water Works Drive meet city acceptance standards but, additionally, such a design was preferable to raised sidewalks because it would allow Public Works to plow those paths thus allowing for their use throughout the entire year. (See City of Biddeford Planning Board meeting video at 1:33:00 mark).
3. On February 6, 2023, you indicated the following in an email to Mr. Chamberlain (copy attached):
 - a. Streets within a mobile home park proposed to remain private shall have a minimum right-of-way width of twenty-three (23') feet and a minimum travel width of twenty (20') feet.
 - b. Noting that the above standards came "straight out of the Manufactured Housing / Mobile Home Park Ordinance" you stated that "obviously a standard sidewalk (5') wouldn't fit," and contemplated foregoing the internal sidewalks (i.e. within the Development) due to reduced speeds and instead providing for sidewalks along South Street.

It should be noted that while you cite the city ordinance as requiring a "minimum" right-of-way width of twenty-three (23') feet and a minimum travel width of twenty (20') feet, Title 30-A M.R.S. § 4358(3)(G)(2) indicates that those dimensions are, in fact, the *maximum* which a municipality may require.

Frustratingly, in the time since these representations and analysis by City staff were made, it appears that the City (or the Planning Board?) is now proposing the that the Applicant:

1. Install raised sidewalks along Waterworks Drive and assist in the payment for installation of sidewalks along a portion of South Street by way of impact fees despite the fact that City staff has previously indicated that flush grade-level sidewalks would meet city street standards and be more practical for maintenance and use.
2. Assist in the payment for installation of sidewalks along a portion of South Street by way of impact fees, ostensibly to accommodate future development, despite the fact that the City's 2023 Comprehensive Plan explicitly contemplates a reduction in development in that part of the City.
3. Require the Applicant to install either five (5') foot wide raised sidewalks or an at-grade shared four (4') foot wide bike and sidewalk within the Development.

The cost of these proposed sidewalks is, candidly, significant with the most recently proposed plan for Waterworks Drive anticipated to cost more than \$750,000 and require substantial reconstruction of what is effectively a brand new road. Similarly, as you indicated in your February 6, 2023 email the sidewalks and/or bike path within the Development is not required by ordinance and is not required for the safety of pedestrians in the development. This unnecessary feature, again, comes at significant cost to the Applicant.

For these reasons, at this time South Street Village, LLC, has created an alternate proposal in conformity with your prior representations which eliminates sidewalks and/or bike paths within the Development. That new plan is included with this letter.

Additionally, for the reasons set forth below, South Street Village, LLC's, updated proposal contemplates retaining Waterworks Drive as a private road and incorporating it as part of the proposed Development.

My understanding is that, to date, discussions concerning the transfer of Waterworks Drive – which is privately and exclusively owned by the Applicant - to the City have been based upon the City of Biddeford Ordinance Section 45 “Manufactured Housing / Mobile Home Parks” Division 2(E)(5)(c)(i) which requires:

“Any mobile home park expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets. Any street within a park with an average daily traffic of 200 trips per day or more, shall have at least two street connections leading to existing public streets, other streets within the park, or other streets shown on an approved subdivision plan. Trip generation numbers will be determined by the latest version of the publication "Recommended Guidelines for Subdivision Streets" by the Institute of Transportation Engineers (ITE) or other acceptable ITE manuals.”

I believe that this specific ordinance violates Title 30-A M.R.S. § 4358(3)(K) which states in part that, “a municipality may not enact or enforce land use regulations or ordinances, including, but not limited to, subdivision regulations or ordinances, which limit the number of lots in a mobile home park, which circumvent the intent of this section or which conflict with the provisions of this section.”

By requiring mobile home parks which expect to generate average daily traffic of 200 trips per day or more – which trips, of course, are determined by the number of lots within the park - to have at least two street connections with existing public streets, the city ordinance effectively creates a restriction which limits the number of lots within a mobile home park.

In this specific matter, the Development contemplates two (2) entrances from Waterworks Drive into the larger Development and already has one (1) connection to an existing public street by way of the newly developed Waterworks Drive to South Street. The City's request that the Applicant gift Waterworks Drive to the City solely so that the Development may comply with the City's “two connections” ordinance seems counter to State law.

Similarly, based upon my preliminary review of other City of Biddeford ordinances concerning subdivisions and similar developments, it appears that this restriction applies only to mobile home parks. For this reason it seems even more particularly aimed at restricting the size of mobile home parks and circumventing the intent of Title 30-A M.R.S. § 4358 “Regulation of Manufactured Housing”.

Please know that the Applicant remains willing to pay an impact fee to the City of Biddeford in the amount of one thousand (\$1,000) dollars per lot permit as they are pulled. The City may use these funds to construct sidewalks along South Street, or, to further develop and improve the City as it wishes and as may be in compliance with State law and local ordinance.

I invite you to contact me at your convenience to discuss this project and I look forward to your response. It appears certain that this Development will be a positive addition to the City of Biddeford and all involved desire to see it move forward towards completion.

Very truly yours,

Gregory P. Braun, Esq.

Enclosure(s)

Cc: South Street Village, LLC
file

Title 30-A: MUNICIPALITIES AND COUNTIES
Part 2: MUNICIPALITIES
Subpart 8: DEVELOPMENT
Chapter 202: AFFORDABLE HOUSING PARTNERSHIP
Subchapter 1: ADMINISTRATION AND IMPLEMENTATION

§5002. Definitions

As used in this chapter, unless the context otherwise indicates, the following terms have the following meanings. [PL 1989, c. 601, Pt. B, §4 (NEW).]

1. Advisory committee.

[PL 1993, c. 359, Pt. B, §3 (RP).]

2. Affordable housing. "Affordable housing" means decent, safe and sanitary dwellings, apartments or other living accommodations for low-income and moderate-income households. The Maine State Housing Authority may define "affordable housing" by rule. Affordable housing includes, but is not limited to:

A. Government-assisted housing; [PL 1989, c. 601, Pt. B, §4 (NEW).]

B. Housing for low-income and moderate-income families; [PL 1989, c. 601, Pt. B, §4 (NEW).]

C. Manufactured housing; [PL 1989, c. 601, Pt. B, §4 (NEW).]

D. Multifamily housing; and [PL 1989, c. 601, Pt. B, §4 (NEW).]

E. Group and foster care facilities. [PL 1989, c. 601, Pt. B, §4 (NEW).]

[PL 1991, c. 610, §4 (AMD).]

3. Authority or state authority. "Authority" or "state authority" means the Maine State Housing Authority.

[PL 1989, c. 601, Pt. B, §4 (NEW).]

4. Commissioner.

[PL 1991, c. 610, §5 (RP).]

4-A. Council. "Council" means the Statewide Homeless Council.

[PL 2005, c. 380, Pt. B, §4 (NEW).]

5. Department.

[PL 1991, c. 610, §5 (RP).]

6. Homeless. "Homeless" means:

A. A person or family that lacks, or is in imminent danger of losing legal access to, a fixed, regular and adequate nighttime residence; or [PL 1989, c. 601, Pt. B, §4 (NEW).]

B. A person or family that has a primary nighttime residence that is:

- (1) A supervised publicly or privately operated shelter designed to provide temporary living accommodations, including, but not limited to, welfare hotels, congregate shelters and transitional housing for persons with mental illness or substance use disorder;
- (2) An institution that provides a temporary residence for individuals intended to be institutionalized; or
- (3) A public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings. [PL 2017, c. 407, Pt. A, §121 (AMD).]

[PL 2017, c. 407, Pt. A, §121 (AMD).]

7. Homestead land trust.

[PL 2017, c. 234, §37 (RP).]

8. Housing alliance or alliance.

[PL 1991, c. 610, §6 (RP).]

9. Interagency task force.

[PL 2005, c. 380, Pt. B, §5 (RP).]

10. Land trust.

[PL 2017, c. 234, §37 (RP).]

11. Lower income households. "Lower income households" means low-income and very low-income households as defined by the United States Department of Housing and Urban Development under the United States Housing Act of 1937, Public Law 75-412, 50 Stat. 888, [Section 8 \(../30-A/title30-Asec8.html\)](#), as amended.

[RR 2017, c. 1, §26 (COR).]

12. Moderate income households. "Moderate income households" means households in which gross income does not exceed 150% of the median income of the county or metropolitan statistical area in which the household is located.

[PL 1989, c. 601, Pt. B, §4 (NEW).]

13. Nonprofit housing corporation.

[PL 2017, c. 234, §37 (RP).]

SECTION HISTORY

PL 1989, c. 601, §B4 (NEW). PL 1989, c. 875, §M11,13 (AMD). PL 1991, c. 610, §§3-6 (AMD). PL 1993, c. 359, §B3 (AMD). PL 2005, c. 380, §B4,5 (AMD). RR 2017, c. 1, §26 (COR). PL 2017, c. 234, §37 (AMD). PL 2017, c. 407, Pt. A, §121 (AMD).

The Revisor's Office cannot provide legal advice or interpretation of Maine law to the public.
If you need legal advice, please consult a qualified attorney.

Office of the Revisor of Statutes (mailto:webmaster_ros@legislature.maine.gov) · 7 State House Station · State House Room 108 · Augusta, Maine 04333-0007

Data for this page extracted on 11/25/2020 14:51:37.

§4358. Regulation of manufactured housing

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Manufactured housing" means a structural unit or units designed for occupancy and constructed in a manufacturing facility and transported, by the use of its own chassis or an independent chassis, to a building site. The term includes any type of building that is constructed at a manufacturing facility and transported to a building site where it is used for housing and may be purchased or sold by a dealer in the interim. For purposes of this section, 2 types of manufactured housing are included. Those 2 types are:

(1) Those units constructed after June 15, 1976, commonly called "newer mobile homes," that the manufacturer certifies are constructed in compliance with the United States Department of Housing and Urban Development standards, meaning structures transportable in one or more sections, that in the traveling mode are 14 body feet or more in width and are 750 or more square feet, and that are built on a permanent chassis and designed to be used as dwellings, with or without permanent foundations, when connected to the required utilities including the plumbing, heating, air conditioning or electrical systems contained in the unit.

(a) This term also includes any structure that meets all the requirements of this subparagraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the Secretary of the United States Department of Housing and Urban Development and complies with the standards established under the National Manufactured Housing Construction and Safety Standards Act of 1974, United States Code, Title 42, Section 5401, et seq.; and

(2) Those units commonly called "modular homes" that the manufacturer certifies are constructed in compliance with Title 10, chapter 951, and rules adopted under that chapter, meaning structures, transportable in one or more sections, that are not constructed on a permanent chassis and are designed to be used as dwellings on foundations when connected to required utilities, including the plumbing, heating, air-conditioning or electrical systems contained in the unit. [PL 1995, c. 625, Pt. A, §35 (AMD).]

B. "Mobile home park" means a parcel of land under unified ownership approved by the municipality for the placement of 3 or more manufactured homes. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW); PL 1989, c. 506, §1 (AMD).]

B-1. "Mobile home park lot" means the area of land on which an individual home is situated within a mobile home park and which is reserved for use by the occupants of that home. A municipality may require a lot to be designated on a mobile home park plan. [PL 1989, c. 506, §2 (NEW).]

C. "Mobile home subdivision or development" means a parcel of land approved by the municipal reviewing authority under subchapter IV for the placement of manufactured houses on individually owned lots. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

D. "Permanent foundation" means:

(1) For "newer mobile homes," as defined in paragraph A, subparagraph (1), a foundation that conforms to the installation standards established by the Manufactured Housing Board; or

(2) For "modular homes," as defined in paragraph A, subparagraph (2), a foundation that conforms to the municipal building code or, in the absence of a municipal building code, a foundation that conforms to the Building Officials and Code Administrators National Code (1990). [PL 1993, c. 487, §1 (RPR).]

E. "Pitched, shingled roof" means a roof with a pitch of 2 or more vertical units for every 12 horizontal units of measurement and which is covered with asphalt or fiberglass composition

shingles or other materials, but specifically excludes corrugated metal roofing material. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]
[PL 1995, c. 625, Pt. A, §35 (AMD).]

2. Location of manufactured housing. Municipalities shall permit manufactured housing to be placed or erected on individual house lots in a number of locations on undeveloped lots where single-family dwellings are allowed, subject to the same requirements as single-family dwellings, except as otherwise provided in this section.

A. For the locations required by this section, municipal ordinances may not require that manufactured housing on individual lots be greater than 14 feet in width, although municipalities may establish design criteria, including, but not limited to, a pitched, shingled roof; a permanent foundation; and exterior siding that is residential in appearance, provided that:

- (1) The requirements do not have the effect of circumventing the purposes of this section; and
- (2) The design requirements may not be used to prevent the relocation of any manufactured housing, regardless of its date of manufacture, that is legally sited within the municipality as of August 4, 1988. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

B. Providing one or more zones or locations where mobile home parks or mobile home subdivisions or developments are allowed does not constitute compliance with this section. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

C. This section does not prohibit municipalities from establishing controls on manufactured housing which are less restrictive than are permitted by this section. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

D. Municipalities may not prohibit manufactured housing, regardless of its date of manufacture, solely on the basis of a date of manufacture before June 14, 1976, or the failure of a unit to have been manufactured in accordance with the National Manufactured Housing Construction and Safety Standards Act of 1974, United States Code, Title 42, Chapter 70. Municipalities may apply the design standards permitted by this section to all manufactured housing, regardless of its date of manufacture, and may apply reasonable safety standards to manufactured housing built before June 15, 1976, or not built in accordance with the National Manufactured Housing Construction and Safety Standards Act of 1974, United States Code, Title 42, Chapter 70. [RR 1993, c. 1, §75 (COR).]

E. Notwithstanding any other provision of law, any modular home that meets construction standards for state-certified manufactured homes adopted pursuant to Title 10, section 9042 must be allowed in all zones where other single-family homes are allowed. [PL 1995, c. 199, §1 (AMD).]

[PL 1995, c. 199, §1 (AMD).]

3. Regulation of mobile home parks. This subsection governs a municipality's regulation of mobile home parks.

A. Except as required under Title 38, or an ordinance adopted pursuant to Title 38, a municipality shall not require:

- (1) The size of any mobile home park lot served by a public sewer system to be larger than the smaller of:
 - (a) Six thousand five hundred square feet; or
 - (b) The area of the smallest residential lot permitted in the municipality;

- (2) The size of any mobile home park lot with on-site subsurface waste water disposal to be larger than 20,000 square feet; or
- (3) The size of any mobile home park lot served by a central on-site subsurface waste water disposal system approved by the Department of Health and Human Services to be larger than 12,000 square feet, provided that a municipality may require that the overall density of the mobile home park be no more than one home for every 20,000 square feet. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW); PL 1989, c. 506, §3 (RPR); PL 2003, c. 689, Pt. B, §6 (REV).]
- B. A municipality shall not require the overall area of a mobile home park to be greater than the combined area of its mobile home park lots plus:
- (1) The area required for road rights-of-way;
 - (2) The area required for buffer strips, if any; and
 - (3) For mobile home parks served by a public sewer, an additional area for open space, storage or recreation, as those terms are defined by local ordinances applicable to all residential developments. A municipality shall not require this additional area to be greater than 10% of the combined area of the individual lots within a mobile home park; and
 - (4) The area of any setbacks required under Title 38 or an ordinance adopted pursuant to Title 38. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW); PL 1989, c. 506, §3 (RPR).]
- C. Except as required under Title 38 or an ordinance adopted pursuant to Title 38, a municipality shall not require setbacks that have the effect of requiring lots larger than those permitted under paragraph A. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW); PL 1989, c. 506, §3 (RPR).]
- D. Notwithstanding paragraph C, a municipality may require that mobile homes on lots adjacent to a public road be set back from the public road according to requirements applicable to other residential developments. [RR 1993, c. 1, §76 (COR).]
- E. A municipality shall not require road frontage on individual lots within a mobile home park that has the effect of requiring a manufactured home on the lot to be placed parallel to an adjacent private or public roadway. [PL 1989, c. 506, §3 (NEW).]
- F. Except as provided by paragraph G, municipal road standards shall not apply to private roads within a mobile home park unless the developer intends to offer the roads to the municipality for acceptance as town ways. [PL 1989, c. 506, §3 (NEW).]
- G. A municipality may require by ordinance or rule that privately owned roads within a mobile home park:
- (1) Be built according to acceptable engineering standards and with a professional engineer's seal as required by the Manufactured Housing Board;
 - (2) Have a right-of-way up to 23 feet in width, 20 feet of which the municipality may require to be paved; and
 - (3) Conform to reasonable safety standards applicable to intersections with public ways adjacent to the mobile home park. [PL 1989, c. 506, §3 (NEW).]
- H. The Manufactured Housing Board shall develop standards for construction of roads within a mobile home park no later than January 1, 1990. The board shall submit these standards to the joint standing committee of the Legislature having jurisdiction over legal affairs matters for that committee's review. [PL 1989, c. 506, §3 (NEW).]

I. A municipality may require buffer strips, not to exceed 50 feet, including individual lot setbacks, along any mobile home park boundary which abuts land used for residential use if the per-acre density of homes within the mobile home park is at least 2 times greater than:

- (1) The density of residential development on immediately adjacent parcels of land; or
- (2) If the immediately adjacent parcels of land are undeveloped, the maximum net residential density permitted by applicable municipal ordinances or state law.

No structures, streets or utilities may be placed in the buffer strip, except that utilities may cross a buffer strip to provide services to a mobile home park. Municipalities may impose reasonable natural screening requirements within the first 25 feet of the buffer strip as measured from the exterior boundaries of the mobile home park if the requirements are no greater than those for other residential developments. [PL 1989, c. 506, §3 (NEW).]

J. A municipality shall not require electrical utilities and telephone lines to be located underground within a mobile home park. A municipality shall allow a developer to install utilities anywhere within the mobile home park. [PL 1989, c. 506, §3 (NEW).]

K. Except as required under Title 38, or an ordinance adopted pursuant to Title 38, a municipality may not enact or enforce land use regulations or ordinances, including, but not limited to, subdivision regulations or ordinances, which limit the number of lots in a mobile home park, which circumvent the intent of this section or which conflict with the provisions of this section. [PL 1989, c. 506, §3 (NEW).]

L. Notwithstanding any provision in this subsection, a person developing or expanding a mobile home park has the burden of proving that development will not pollute a public water supply or aquifer or violate any state law relating to land development, subdivision or use. [PL 1989, c. 506, §3 (NEW).]

M. A municipality shall permit mobile home parks to expand and to be developed in a number of environmentally suitable locations in the municipality with reasonable consideration being given to permit existing mobile home parks to expand in their existing locations. A municipality may not select a location for a mobile home park development which is not reasonably suitable because of:

- (1) Prior lot division;
- (2) Locational setting within the municipality;
- (3) Natural features; or
- (4) Other similar factors.

This paragraph is effective January 1, 1990. [PL 1989, c. 506, §3 (NEW).]
[RR 1993, c. 1, §76 (COR); PL 2003, c. 689, Pt. B, §6 (REV).]

4. Certification of payment of sales tax. No municipality may allow the construction or location of any new manufactured housing within the municipality by any person other than a dealer licensed by the State with a sales tax certificate, without:

A. A bill of sale indicating the name, address, dealer registration number and sales tax certificate number of the person who sold or provided the manufactured housing to the buyer locating the housing in the municipality; or [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

B. If no such bill of sale is presented, evidence of certification of payment of the sales tax in accordance with Title 36, section 1760, subsection 40, and Title 36, section 1952-B. [PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

In municipalities which require any type of permit for manufactured housing, the permit is deemed to be not approved or valid until payment of the sales tax has been certified.

[PL 1989, c. 104, Pt. A, §45 (NEW); PL 1989, c. 104, Pt. C, §10 (NEW).]

SECTION HISTORY

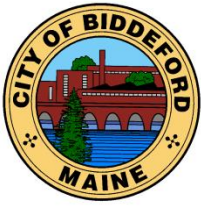
PL 1989, c. 104, §§A45,C10 (NEW). PL 1989, c. 506, §§1-3 (AMD). RR 1993, c. 1, §§75,76 (COR). PL 1993, c. 299, §1 (AMD). PL 1993, c. 487, §1 (AMD). PL 1995, c. 199, §1 (AMD). PL 1995, c. 625, §A35 (AMD). PL 2003, c. 689, §B6 (REV).

The State of Maine claims a copyright in its codified statutes. If you intend to republish this material, we require that you include the following disclaimer in your publication:

All copyrights and other rights to statutory text are reserved by the State of Maine. The text included in this publication reflects changes made through the Second Regular Session of the 130th Maine Legislature and is current through October 1, 2022. The text is subject to change without notice. It is a version that has not been officially certified by the Secretary of State. Refer to the Maine Revised Statutes Annotated and supplements for certified text.

The Office of the Revisor of Statutes also requests that you send us one copy of any statutory publication you may produce. Our goal is not to restrict publishing activity, but to keep track of who is publishing what, to identify any needless duplication and to preserve the State's copyright rights.

PLEASE NOTE: The Revisor's Office cannot perform research for or provide legal advice or interpretation of Maine law to the public. If you need legal assistance, please contact a qualified attorney.



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

Matthew Chamberlain
Broker/Owner/DB
Regency Realty Group
762 Main Street
South Portland, ME 04106

September 28, 2023

RE: Case # 2021.42: Hidden Hills Housing Park - Final Plan Review for 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.

Mr. Chamberlain, I am writing as a follow-up to the emailed letter I received from Mr. Gregory Braun, Esq. which I received on September 25, 2023, regarding the Hidden Hills Mobile Home Park. The same day I responded to your Final Subdivision / Site Plan application, prior to reviewing Mr. Braun's correspondence. As such I wanted to write to clarify the City's position regarding the project, post reviewing Mr. Braun's letter and I offer the following:

1. Final Application Checklist: Your submitted "Final" application did not include the required Final Application Checklist. Please complete this document and return to the Planning Office ASAP.
2. Waterworks Drive: As you are aware, the Preliminary project approval was granted by the Planning Board on December 7, 2022, and a six-month extension to the approval was granted by the Planning Board on May 17, 2023. The preliminary plan application dated November 16, 2023, stated *"The development will connect to Waterworks Drive in two locations. Waterworks Drive has been constructed to City of Biddeford standards and will offered to the City Council for acceptance to the prior to final approval"*. The Planning Board granted the preliminary approval, in part, due to the representations in the preliminary project application and based upon statements made during the deliberations of the project.

The cover letter provided in the Final Subdivision / Site Plan application stated, "The applicant is no longer proposing to make Waterworks Drive a public road". As you are aware, Waterworks Drive, being dedicated as a public street, has remained one of the project's key items and has been presented as such to the Planning Board. City Staff are not supportive of the proposed changes to the application without Waterworks Drive being dedicated as a city street. Further, we consider the proposed change to be a major / significant change to the approved preliminary plans.

Case # 2021.42: Hidden Hills Housing Park - Final Plan Review for a 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.

3. Waterworks Drive / City Council Policy: The City Council has established a “complete streets” policy and as such the City has been working with you related to sidewalks being provided on Waterworks Drive and South Street. As has been discussed on numerous occasions, to be accepted as a city street, Waterworks Drive requires sidewalks / walking paths, meeting City standards, to be installed prior to the petition for roadway acceptance. As you may recall, providing sidewalks on South Street and Waterworks Drive has been a key element of the project and the discussions before the Board. Reversing your position on dedicating Waterworks Drive as a public road is contrary to the preliminary approval granted and representations made during public hearings. Again, City Staff find the changes unacceptable, and I believe the Planning Board may also consider the changes to be a major deviation to the approved preliminary plan approval.
4. Public Access / Future Access to Undeveloped Property: As has been discussed on multiple occasions, Waterworks Drive being dedicated as a public street would provide citizen access to the 250 acres of openspace, located at the end of Waterworks Drive, managed by the Maine Coastal Heritage Trust, and providing public access being provided for residential access (via Waterworks Drive) to the openspace has also been a highly desired goal.
5. South Street Connector: As has been discussed, Waterworks Drive was identified as the location for the City’s South Street Connector project which, as dedicated as a public street, would create the first link to bring the project to fruition. This would provide public access to the currently vacant property located to the immediate south of the Hidden Hills project, part of which is the 100+ acre parcel that was divided from the Hidden Hills project following preliminary review of the project. Public access would also have been provided to other undeveloped land to the south of Hidden Hills. Without the public street being provided, the currently undeveloped land would be landlocked and would remain inaccessible, and undevelopable for the foreseeable future. The desire for the South Street Connector remains a desired goal of the City which was also identified in the City’s recently adopted Comprehensive Plan (2023). It should further be noted that should Waterworks Drive remain private, the future development of these vacant lands would be exclusively controlled by your company which would create a barrier towards the development of these lands and a roadblock to the South Street Connector project.
6. Interior Sidewalks: The approved preliminary plans contained sidewalks being provided on one side of the majority of the proposed streets within the development. The internal sidewalks for mobile home parks are not required under City Ordinances. However, sidewalks have been removed from the submitted final plans, which again is a major change from what was previously proposed and approved by the Planning Board. I believe the Board will take exception to this change, particularly as sidewalks are not being proposed on Waterworks Drive or South Street. Due to comments made by the public and discussions with the Planning Board it was determined that providing sidewalks along these roadways was more important than providing interior sidewalks. Although

Case # 2021.42: Hidden Hills Housing Park - Final Plan Review for a 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.

internal sidewalks were desired by the Planning Board, the City's mobile home park standards do not require them to be installed. That said, internal sidewalks were proposed by you and approved by the Planning Board. However, the Final Subdivision has now eliminated internal sidewalks which is contrary to the previously approved preliminary Subdivision plans and from what has been presented to the Board. This, from a Staff perspective, is another major change from the approved preliminary plans.

7. Roadway Network Connections: The City's Manufactured Housing / Mobile Home Park standards require manufactured housing parks expected to generate more than 200 daily trips to have a minimum of two entrance/exits on a public street. The plan depicts both property entrances off of Waterworks Drive, which at present is proposed to be a private street, therefore does not meet this City requirement. As has been discussed, and as previously proposed, Waterworks Drive was to be improved to City standards (the addition of a raised sidewalk) and would be recommended to be accepted as a public street, which would satisfy this requirement. Waterworks Drive not being upgraded to City standards and not being proposed as a public roadway is a major change to previously reviewed plans. As previously stated, Staff is not supportive of the proposed change to keep this roadway private and will not support the project without Waterworks Drive becoming a public roadway.
8. Plan Inconsistencies: It should be noted that sidewalks are still being shown on the proposed phasing plan and on some of the roadway details. If internal sidewalks are no longer being proposed, they must be removed from all plans and all plans must be consistent.
9. The Final Application cover memo stated, "The applicant now proposes to pay \$195,000 (\$1,000 per unit, due at each respective building permit) toward the construction of the sidewalk along South Street". As you are aware, the South Street sidewalk cost was estimated to be approximately \$620,923. and the Waterworks Drive sidewalk was estimated to cost approximately \$229,125. Due to the cost of the desired sidewalks being installed on Waterworks Drive and South Street, City Staff was agreeable to supporting the elimination of the interior sidewalks in exchange for sharing the costs of these roadway sidewalks. We never finalized the amount of your contribution, so I am unaware of where the \$1,000. per unit number you suggest came from. As we previously discussed, I was supportive of constructing the project in phases, and in order to defer your costs I was agreeable to accepting your proportionate share of the sidewalk contribution at the beginning of each phase of the development. I remain agreeable to this arrangement, but not the proposal to pay on a per lot basis for the issuance of building permits for each structure.
10. Landscape Plans: As outlined in my email of 9-25-23, the submitted landscape plans provided a graphic legend illustrating canopy trees, columnar trees and ornamental trees which also noted "potential species" to be installed. The landscape plan needs to be modified to include specific tree species, locations, and their proposed plant sizes at installation.

Case # 2021.42: Hidden Hills Housing Park - Final Plan Review for a 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.

11. The Final plan review also requires the submittal of an "Open Space Management Plan" and "Park Management Plan", and I do not recall receiving these items. The Final Application is incomplete without these documents.

I have reviewed Attorney Barun's allegation/assertion that the City's Ordinance violates State law as it relates to Mobile Home Parks, and I disagree with his contention. However, rather than going down a legal rabbit hole, I will put that issue aside. That said, should Atty Barun wish to discuss this matter directly with the City's Legal Counsel, he may make a written request to me, and I will seek authorization of this expenditure through the Manager's Office. If/when granted I will inform Atty Barun and our Legal Counsel of such. Due to the project being tentatively discussed on October 18th with the Planning Board, per your request, I will treat his/your request as a high priority and matter of some urgency.

In closing, due to the above items it is the City's position that the Final Subdivision application is drastically different than prior submittals reviewed by Staff and approved by the Planning Board. The Final Application plans are inconsistent, need corrections and are a big step backwards in bringing this project to fruition. Should you wish to present your Final Application plans to the Planning Board, as proposed, you may do so, but without Staff support due to the issues I have detailed within this letter. As such, we will be recommending that the Board table or deny the final project plans and / or, at minimum, treat the Application as a new preliminary review. As you requested, I have tentatively placed the Final Application review for the October 18, 2023, Planning Board agenda. I have taken the liberty to copy individuals involved with this matter in addition to Harry Center, Legal Counsel to the City and Atty Braun on this correspondence.

Sincerely,

David C.M. Galbraith
Acting Director of Planning and Economic Development / City Planner

Electronic Copies:
Case File

Gregory P. Braun, Esq
Kennebunk, ME 04043
Email: gbraun@bergenparkinson.com

Harry B. Center, II, Esq.
Woodman Edmands - Biddeford, Maine 04005
Via Email: hcenter@woodedlaw.com

Mr. Jeffrey Amos, P.E.
Terradyn Consultants, LLC
Via Email: jeff@terradyntconsultants.com

Case # 2021.42: Hidden Hills Housing Park - Final Plan Review for a 195-unit manufactured housing park subdivision at 413 South Street (Tax Map 7/Lot 8) in the RF, SR-1 zones and MHP Overlay Zone.

Mr. Roby Fecteau, Director of Code Enforcement

Via Email: robby.fecteau@biddefordmaine.org

Mr. Jeff Demers, Director of Public Works

Via Email: jeff.demers@biddefordmaine.org

Mr. Craig Chekan, Director of Engineering

Via Email: craig.chekan@biddefordmaine.org

Mr. Greg Mitchell, Development Consultant for the City of Biddeford

Vial Email: gregory.mitchell@biddefordmaine.org

**Pineland**

Cumberland Hall
41 Campus Drive, Suite 101
New Gloucester, ME 04260

Portland

565 Congress Street, Suite 201
Portland, ME 04101

September 13, 2023
21-13

David Galbraith
City Planner
Biddeford City Hall
P.O. Box 586
Biddeford, ME 04005

Final Subdivision Application
Hidden Hills – An Age Restricted, Manufactured Housing Park
413 South Street, Biddeford

David,

On behalf of South Street Village LLC, we are pleased to submit this final subdivision application. Since the board has not seen this project in a while and for the sake of clear record keeping, we are attaching all significant materials that were previously submitted with noted exceptions. Most of the information is unchanged. All items that are changed or updated are discussed below.

CHANGES SINCE PREVIOUS SUBMISSIONS

The proposed development and submission materials are largely unchanged from previous submissions. The plan changes & material updates are outlined below:

1. The original parent parcel was divided so that the project property area now closely aligns with the Mobile Home Park Overlay Zone line. The total project area is now 164.3 acres. It was previously 312 acres. An updated boundary survey can be found in Attachment 2.
2. The change in property area led to some updates to the application:
 - a. The property area has been updated on the application. See Attachment 1.
 - b. The new property deed is included in Attachment 3.
 - c. The applicant has been clarified in the Financial Capacity statement in Attachment 4.
3. Sidewalks were discussed at length during the previous meetings and the site walk. It was questioned whether it was better to have internal sidewalks or a sidewalk along South Street. The applicant visited other similar neighborhoods and noticed the following in all of them:
 - a. A lack of internal sidewalks
 - b. Widespread pedestrian & bicycle use of the street.
 - c. A speed limit of 15 mph.

The applicant now proposes to pay \$195,000 (\$1,000 per unit, due at each respective building permit) toward the construction of the sidewalk along South Street. He will limit the internal speed limit to 15 mph. The City of Biddeford Public Works/Engineering Departments are currently designing the offsite sidewalk system.

4. The applicant is no longer proposing to make Waterworks Drive a public road. It is my understanding that he will be providing a letter that details this reasons for this change under a separate cover.
5. Water booster pumps will be required on many of the lots in order to ensure that all units have acceptable water pressure. Note 11 has been added to C-1.0 to reflect this requirement.
6. The project amenities have been more clearly defined. The amenities are shown best on Sheet C-2.2 Site Plan. The project will feature the following amenities:
 - a. A larger club house. The building is now proposed to be 2,500 SF.
 - b. A pool with spacious patio.
 - c. A host of courts & game areas including:
 - i. Tennis
 - ii. Pickle Ball
 - iii. Bocce Ball
 - iv. Horseshoes
 - v. Shuffle Board
 - d. Multiple fire pits & picnic areas
 - e. Dog Park
7. We've received final approval from Maine Water, Maine DEP & Army Corp of Engineers. Those approvals can be found in Attachment 5.
8. Erik Lema, Site Evaluator #419 prepared designs for each septic system. The HHE-200 forms can be found in Attachment 6.
9. The project phasing plan changed per Maine Water Company request to help create looped water lines earlier in the project buildout. That updated plan can be found in Attachment 7.

WAIVER REQUESTS

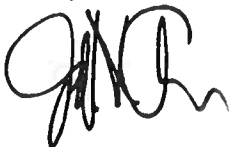
A waiver was granted from 66-76(b) that requires all mature trees of 24" caliper to be shown on the plan. This was granted because the site has largely been harvested. Very few large trees remain within the development area. Most of the remaining trees are located within front buffer area along South Street. This area of the property was not disturbed during the harvesting.

The project makes widespread use of forested buffers and preserves large wetland systems. The project streetscape will be lined with trees on both sides.

CLOSING

The project has been designed to meet the review standards of the City of Biddeford's Zoning and Land Use Code. Narratives describing how these criteria and standards are met is attached to the Development Review Application. Please do not hesitate to reach out if you have any questions or require additional information.

Terradyn Consultants, LLC



Jeffrey D. Amos, P.E.

LIST OF ATTACHMENTS

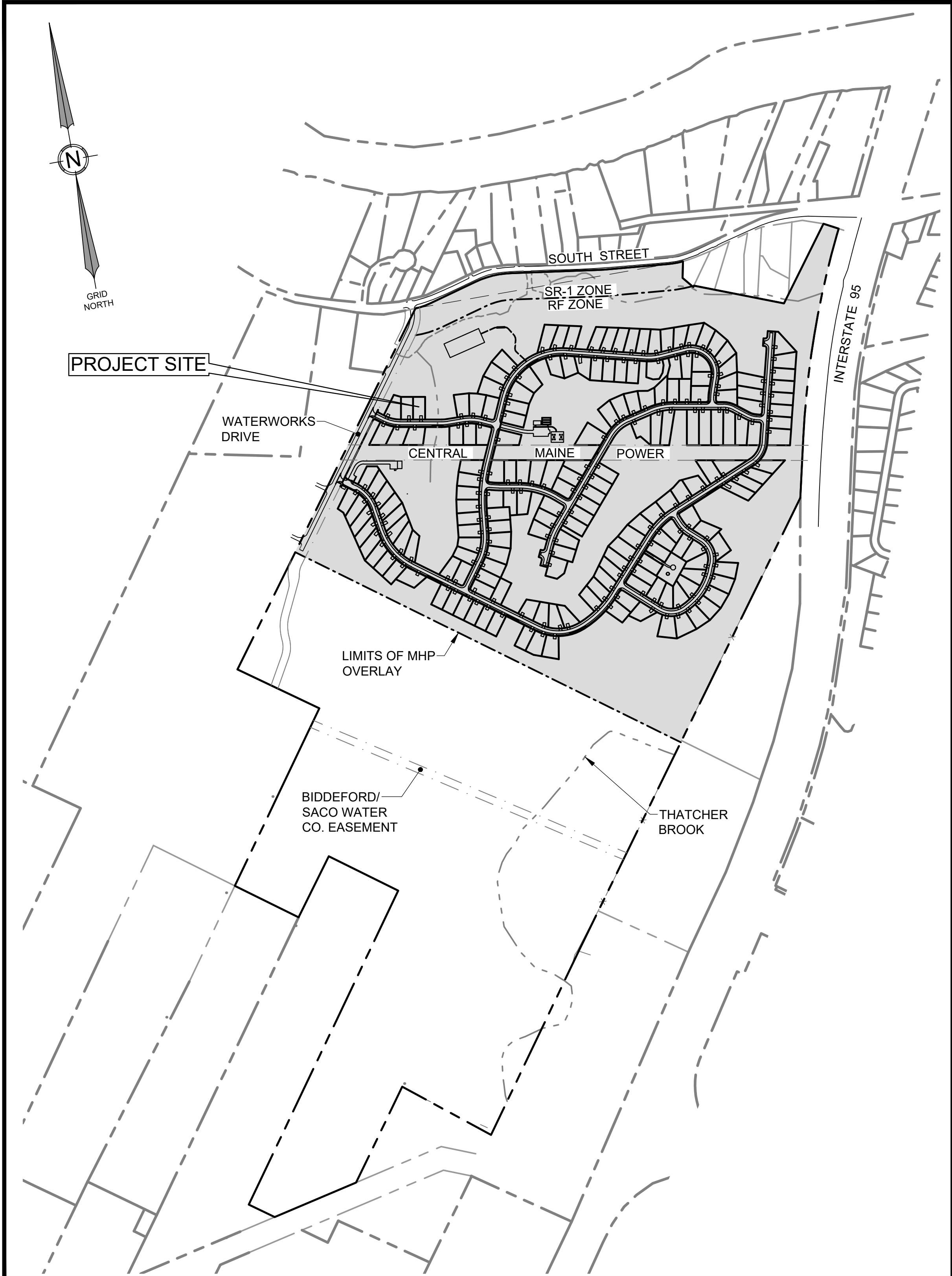
New Information	
Attachment 1	Updated Subdivision Application & Checklist
Attachment 2	Updated Boundary Survey
Attachment 3	Updated Deed
Attachment 4	Updated Financial Capacity
Attachment 5	Copies of Outside Approvals
Attachment 6	HHE-200 Forms
Attachment 7	Updated Phasing Plan
Attachment 8	Updated Standards Compliance Narrative

Previously Submitted Information	
Attachment 9	High Intensity Soil Survey
Attachment 10	Stormwater Report including Urban Impaired Stream Regulations
Attachment 11	Hydrogeologic Assessment
Attachment 12	Traffic Impact Analysis
Attachment 13	Habitat Assessment
Attachment 14	MDIF&W and Unusual Natural Areas Correspondence
Attachment 15	Vernal Pool Letter
Attachment 16	Park Rules
Attachment 17	Exhibit of View from South Street
Attachment 18	Photos of Anticipated Unit Types
Attachment 19	Abutter List

HIDDEN HILLS HOUSING PARK

AN AGE RESTRICTED COMMUNITY
SOUTH STREET, BIDDEFORD, MAINE

SHEET INDEX	
SHT. NO.	SHEET TITLE
C-0.0	COVER SHEET & LOCATION MAP
C-1.0	OVERALL SUBDIVISION PLAN
C-1.1	SUBDIVISION PLAN - 1
C-1.2	SUBDIVISION PLAN - 2
C-1.3	SUBDIVISION PLAN - 3
C-1.4	SUBDIVISION PLAN - 4
C-2.0	OVERALL SITE PLAN
C-2.1	SITE PLAN - 1
C-2.2	SITE PLAN - 2
C-2.3	SITE PLAN - 3
C-2.4	SITE PLAN - 4
C-2.5	SITE PLAN - 5
C-2.6	SITE PLAN - 6
C-2.7	SITE PLAN - 7
C-2.8	SITE PLAN - 8
C-3.0	OVERALL GRADING & DRAINAGE PLAN
C-3.1	GRADING AND DRAINAGE PLAN - 1
C-3.2	GRADING AND DRAINAGE PLAN - 2
C-3.3	GRADING AND DRAINAGE PLAN - 3
C-3.4	GRADING AND DRAINAGE PLAN - 4
C-3.5	GRADING AND DRAINAGE PLAN - 5
C-3.6	GRADING AND DRAINAGE PLAN - 6
C-3.7	GRADING AND DRAINAGE PLAN - 7
C-3.8	GRADING AND DRAINAGE PLAN - 8
C-3.9	GRAVEL WETLAND - 1 PLAN
C-3.10	GRAVEL WETLAND - 2 PLAN
C-4.0	OVERALL UTILITY PLAN
C-4.1	UTILITY PLAN - 1
C-4.2	UTILITY PLAN - 2
C-4.3	UTILITY PLAN - 3
C-4.4	UTILITY PLAN - 4
C-4.5	UTILITY PLAN - 5
C-4.6	UTILITY PLAN - 6
C-4.7	UTILITY PLAN - 7
C-4.8	UTILITY PLAN - 8
C-5.1	PROFILE - BAXTER BOULEVARD
C-5.2	PROFILE - CHAMBER LANE
C-5.3	PROFILE - CHAMBER LANE
C-5.4	PROFILE - CHAMBER LANE
C-5.5	PROFILE - CHAMBER LANE
C-5.6	PROFILE - REMI DRIVE
C-5.7	PROFILE - REMI DRIVE
C-5.8	PROFILE - REMI DRIVE
C-5.9	PROFILE - COMMON WAY
C-5.10	PROFILE - COMMON WAY
C-5.11	PROFILE - VIEW POINT LOOP
C-5.12	PROFILE - VIEW POINT LOOP
C-5.13	PROFILE - FURR DRIVE
C-6.1	SITE DETAILS - 1
C-6.2	SITE DETAILS - 2
C-6.3	SITE DETAILS - 3
C-6.4	SITE DETAILS - 4
C-6.5	SITE DETAILS - 5
L-7.0	OVERALL LANDSCAPE PLAN
L-7.1	LANDSCAPE PLAN - 1
L-7.2	LANDSCAPE PLAN - 2
L-7.3	LANDSCAPE PLAN - 3
L-7.4	LANDSCAPE PLAN - 4
L-7.5	LANDSCAPE PLAN - 5
L-7.6	LANDSCAPE PLAN - 6
L-7.7	LANDSCAPE PLAN - 7
L-7.8	LANDSCAPE PLAN - 8
P-1.0	OVERALL PHOTOMETRIC PLAN
P-1.1	PHOTOMETRIC PLAN - 1
P-1.2	PHOTOMETRIC PLAN - 2
P-1.3	PHOTOMETRIC PLAN - 3
P-1.4	PHOTOMETRIC PLAN - 4
P-1.5	PHOTOMETRIC PLAN - 5
P-1.6	PHOTOMETRIC PLAN - 6
P-1.7	PHOTOMETRIC PLAN - 7
P-1.8	PHOTOMETRIC PLAN - 8



LOCATION MAP

SCALE: 1" = 500'

APPLICANT/OWNER
SOUTH STREET VILLAGE LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

PROJECT PARCEL SITE

CITY OF BIDDEFORD TAX ASSESSOR'S MAP & LOT NUMBERS

<u>MAP</u>	<u>LOT</u>
2	7-8

PREPARED BY

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
41 CAMPUS DRIVE, SUITE 301
NEW GLOUCESTER, MAINE 04260
(207) 926-5111

SURVEYOR:
NORSE
NORTHERN SURVEY ENGINEERING
41 CHURCH ROAD
BRUNSWICK, MAINE 04011
MAIN: (207) 481-7080
DIRECT: (207) 481-7068
MOBILE: (978) 729-7110

WETLAND DELINEATION:
MARK HAMPTON ASSOCIATES
P.O. BOX 1931
PORTLAND, ME 04104-1931
(207) 756-2900

LEGEND

- | | |
|--|--|
| | EXISTING PROPERTY LINE |
| | PROPOSED PROPERTY LINE |
| | PROPOSED SETBACK LINE |
| | EXISTING SETBACK LINE |
| | EXISTING EASEMENT |
| | PROPOSED EASEMENT |
| | ROAD CENTERLINE |
| | EXISTING MINOR CONTOUR |
| | EXISTING MAJOR CONTOUR |
| | PROPOSED CONTOUR |
| | EXISTING STORMDRAIN |
| | PROPOSED STORMDRAIN |
| | EXISTING WATER LINE |
| | PROPOSED WATER LINE |
| | PROPOSED UNDERDRAIN |
| | EXISTING OVERHEAD ELECTRIC & TELEPHONE |
| | PROPOSED OVERHEAD ELECTRIC & TELEPHONE |
| | EXISTING EDGE OF PAVEMENT |
| | PROPOSED EDGE OF PAVEMENT |
| | EXISTING EDGE OF GRAVEL |
| | PROPOSED EDGE OF GRAVEL |
| | EXISTING CURB |
| | PROPOSED CURB |
| | EDGE OF WATER |
| | EXISTING TREE LINE |
| | PROPOSED TREE LINE |
| | EXISTING GUARDRAIL |
| | PROPOSED GUARDRAIL |
| | EROSION CONTROL MULCH BERM |
| | TP-A |
| | TEST PIT |
| | EXISTING VALVE |
| | PROPOSED VALVE |
| | EXISTING HYDRANT |
| | PROPOSED HYDRANT |
| | EXISTING TRANSFORMER |
| | PROPOSED TRANSFORMER |
| | EXISTING LIGHT POLE |
| | PROPOSED LIGHT POLE |
| | EXISTING UTILITY POLE |
| | PROPOSED UTILITY POLE |
| | EXISTING CATCH BASIN |
| | PROPOSED CATCH BASIN |
| | PROPOSED DRAINAGE MANHOLE |
| | EXISTING SEWER MANHOLE |
| | EXISTING SIGN |
| | PROPOSED SIGN |
| | EXISTING BUILDING |
| | PROPOSED BUILDING |
| | WETLAND AREA |
| | PROPOSED PAVEMENT |
| | RIPRAP |
| | PROPOSED BUFFER |
| | PROPOSED WETLAND ALTERATION |

APPROVED: CITY OF BIDDEFORD
PLANNING BOARD

DATE _____

STATE OF MICHIGAN
JEFFREY D. ADAMS
NO. 10167
LICENSED PROFESSIONAL ENGINEER

DATE:	11-16-2022
BY: JEFFREY D. AMOS, PE 10167	

[illegible]

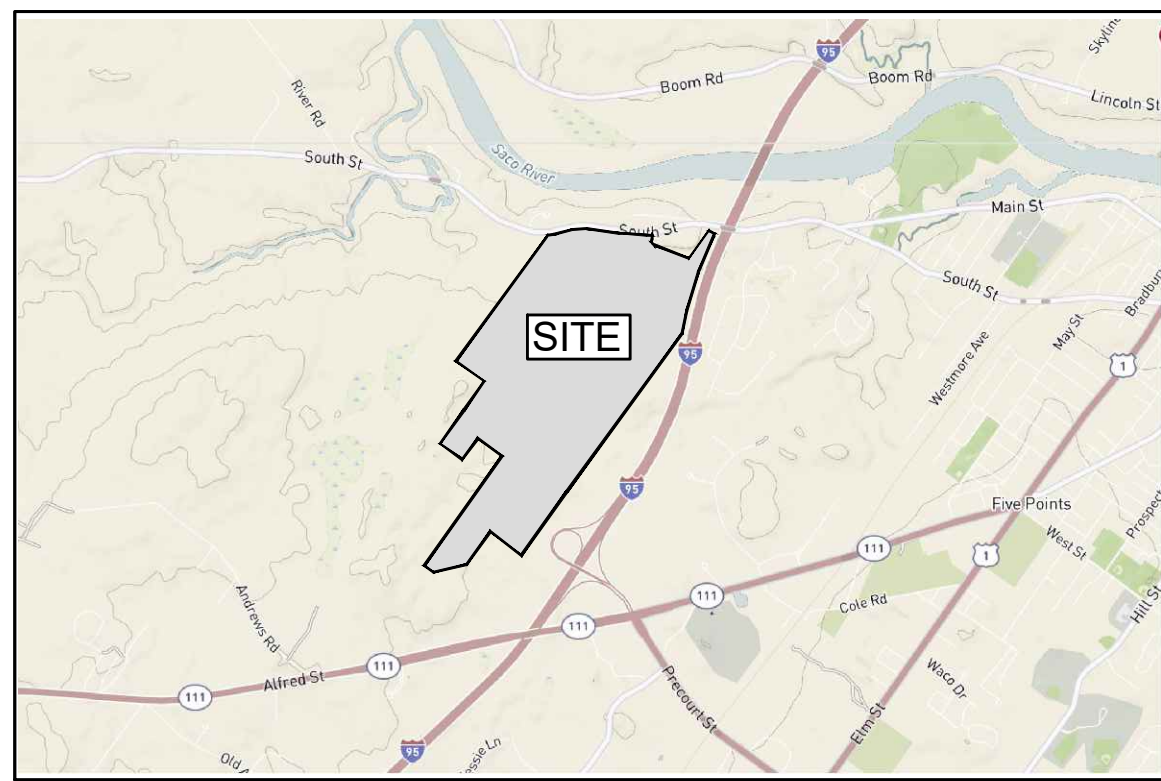
NO.	DATE	REVISIONS
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW
B	08-17-2022	ADDITIONAL INFORMATION PER PLANNING BOARD REVIEW
A	04-13-2022	PRELIMINARY SUBMISSION

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyvnconsultants.com

PERMIT DRAWING
NOT FOR CONSTRUCTION

SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106		DATE: 02-09-2022 SCALE: 1" = 120' DESIGNED: JDA JOB NO: 21-13
SHEET TITLE: SOUTH STREET VILLAGE, MAINE		
COVER SHEET & LOCATION MAP		



LOCATION MAP

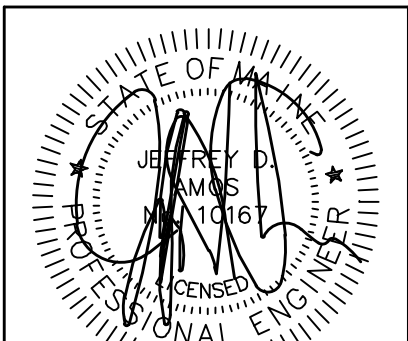
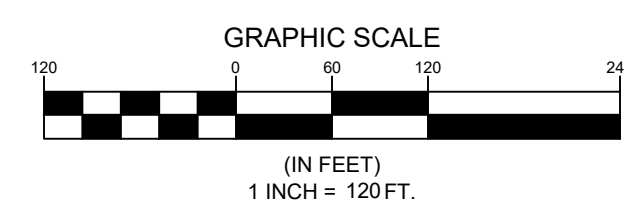
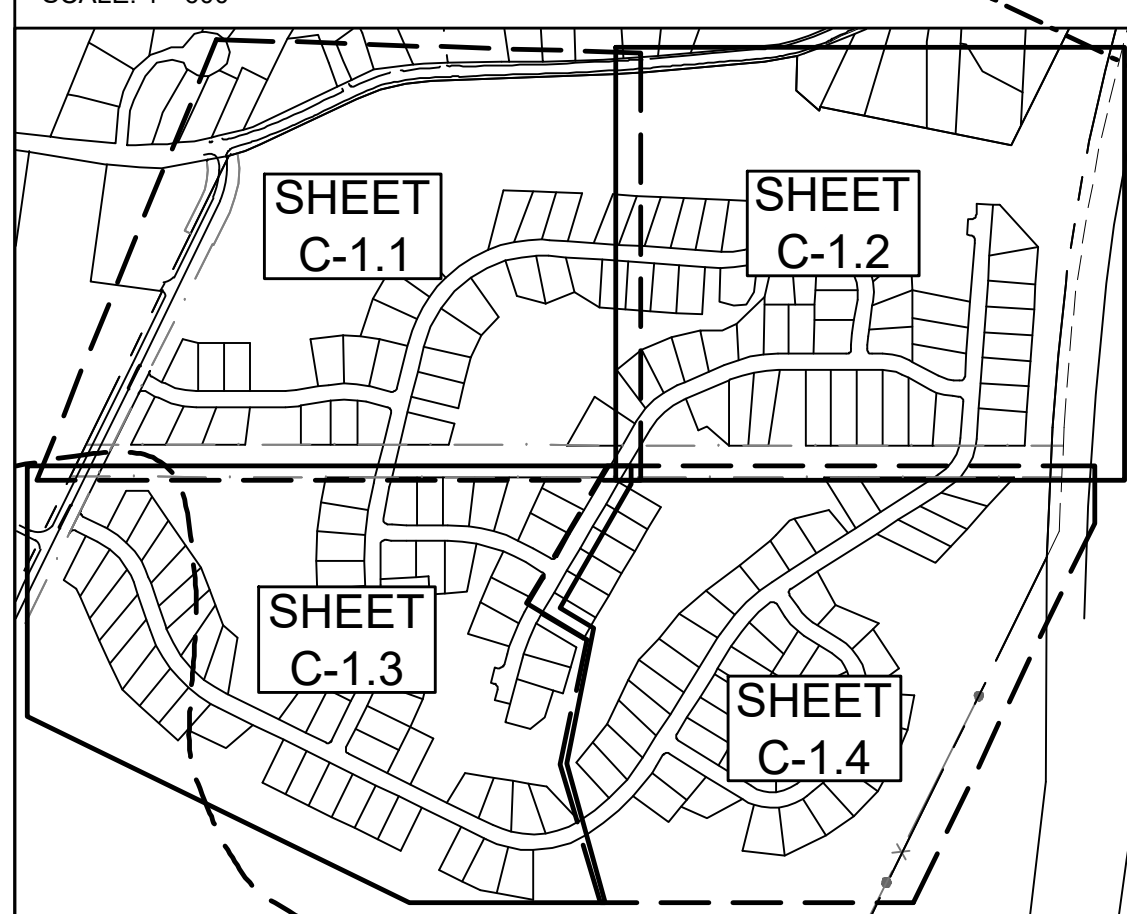
NOT TO SCALE

GENERAL NOTES

1. RECORD OWNER OF THE PARCEL IS SOUTH STREET VILLAGE, LLC BY DEED DATED AUGUST 15, 2017 AND RECORDED AT THE YORK COUNTY REGISTRY OF DEEDS (YCROD) IN BOOK 17541, PAGE 896, AND IS SHOWN AS LOT 8 ON THE CITY OF BIDEFORD TAX MAP 7, AND LOT 38 ON MAP 2.
2. THE PROPERTY IS LOCATED IN THE RURAL FARM (RF) DISTRICT AND PARTIALLY SHOWN WITHIN THE SUBURBAN RESIDENTIAL 1 (SR1) MOBILE HOME PARK (MHP), AND SHORELAND OVERLAY ZONES AS SHOWN. LAND USE REGULATIONS FOR THE MHP OVERLAY ARE AS FOLLOWS:
- | | |
|-----------------------|------------------------|
| MIN. LOT SIZE: | 12,000 S.F. |
| MIN. LOT WIDTH: | 75 FT. (SHARED SEPTIC) |
| MIN. FRONT SETBACK: | 15 FT. |
| MIN. SIDE SETBACK: | 15 FT. |
| MIN. REAR SETBACK: | 15 FT. |
| MAX. BUILDING HEIGHT: | 3 STORIES OR 35 FT. |
| MIN. OPEN SPACE: | 10% OF PROPERTY AREA |
3. TOTAL AREA OF PARCEL IS APPROX. 320 ACRES.
- AREA OF MHP = 160.58 ACRES.
- AREA OF OPEN SPACE PROVIDED = 92.74 ACRES (57.75 % OF MHP AREA).
- TOTAL ALLOWABLE UNITS = 1 UNIT/20,000 S.F. = MHP AREA (6,994,865 S.F.) / 20,000 S.F. PER UNIT = 349.7 UNITS
- TOTAL NUMBER OF PROPOSED UNITS = 195.
4. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON AN EXISTING CONDITIONS SURVEY BY NORTHERN SURVEY ENGINEERING, LLC (NORSE), DATED DECEMBER 21, 2021. FIELD MEASUREMENTS WERE OBSERVED IN NOVEMBER, 2022 DURING AN UNMANNED AERIAL SURVEY (UAVS) WITH A GRADE LIDAR SENSOR. THE RESULTING SURFACE WAS GROUND-TRUTHED AND VERIFIED TO MEET THE NATIONAL MAP ACCURACY STANDARDS FOR 1-F.T. CONTOURS.
5. THE WETLANDS SHOWN WERE DELINEATED BY MARK HAMPTON ASSOCIATES, INC., PORTLAND, MAINE, COMPLETED IN MAY, 2021.
6. TOTAL PROJECT WETLAND ALTERATION AREA = 14,280 S.F.
7. ADDITIONAL WETLAND ALTERNATION IS PERMISSIBLE WITHOUT FURTHER WETLAND PERMITTING. THE PROJECT RECEIVED THE FOLLOWING PERMITS:
- NRPA PERMIT #
- ACOA PERMIT #
8. THIS PROJECT IS BOUND BY A SITE LOCATION OF DEVELOPMENT ACT PERMIT FROM THE MAINE DEP PERMIT #
9. PROJECT STORMWATER NOTES:
- A. THE OWNER SHALL BE REQUIRED TO INSPECT AND MAINTAIN THE STORMWATER MANAGEMENT SYSTEM, PER THE GUIDELINES AS OUTLINED IN SECTION 12 OF THE APPROVED SLODA PERMIT.
- B. THE FOLLOWING UNITS SHALL CONTAIN A FILTER STRIP TO CATCH ROOF RUNOFF:
- | |
|---|
| 1. 22-28, 28-58, 88-93, 95-101, 6, 8, 9, 17, 122, 25, 58, 88-93, 95-101, 6, 8, 10, 115-118, 120, 131-134, 138, 140, 141, 151-153, 157-163, 166-169, 176, 179, 181, THE MAINTENANCE BUILDING, AND THE CLUBHOUSE. |
|---|
10. THE CITY OF BIDEFORD WILL NOT BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR OR PLOWING OF THE PRIVATE WAY. AND THAT FURTHER LOT DIVISIONS UTILIZING THE PRIVATE WAY ARE PROHIBITED WITHOUT PRIOR APPROVAL OF THE BOARD.

SITE KEY

SCALE: 1"=600'



DATE:	11-16-2022
P.E.:	JEFFREY D. AMOS, PE 10167

	C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA		
	B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA		
	A	04-13-2022	PRELIMINARY SUBMISSION	JDA		
NO.		DATE	REVISIONS	APPD BY		

11 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyconsultants.com

OFFICE: (207) 926-5111 FAX:
www.terradyconsultants.com

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting



Engineering | Land Planning

3

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
OVERALL SUBDIVISION PLAN

CLIENT:
SOUTH STREET VILLAGE, LLC

DATE:	02-09-2022
SCALE:	1" = 120'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	

C-1.0

C:\Users\MARKLO~1\AppData\Local\Temp\AcPublish_8500\21-13 SB.dwg



CENTERLINE TABLE		
LINE	DIRECTION	DISTANCE
L36	S 75°58'34" E	50.00' (15.24)m

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C54	71.55 (21.81m)	225.00 (68.58m)	S 85°10'10" E	71.25 (21.61m)
C55	87.46 (26.66m)	275.00 (83.82m)	N 85°10'10" E	87.09 (26.68m)
C56	75.50 (23.01m)	185.00 (56.39m)	N 82°35'21" W	74.97 (23.01m)
C57	42.86 (13.06m)	135.00 (41.15m)	N 85°11'08" W	42.68 (13.06m)
C58	75.54 (23.02m)	185.00 (56.39m)	N 59°12'03" W	75.02 (23.02m)
C59	75.54 (23.03m)	185.00 (56.39m)	N 35°48'19" W	75.02 (23.03m)
C60	193.96 (59.12m)	135.00 (41.15m)	N 34°55'56" W	177.70 (59.12m)
C61	75.54 (23.03m)	185.00 (56.39m)	N 12°34'33" W	75.02 (23.03m)
C62	63.21 (19.27m)	185.00 (56.39m)	N 9°04'37" E	62.90 (19.27m)
C63	29.78 (9.08m)	135.00 (41.15m)	N 12°32'44" E	29.72 (9.08m)
C64	34.93 (10.65m)	225.00 (68.58m)	S 14°25'02" W	34.90 (10.65m)
C65	34.17 (9.28m)	175.00 (53.34m)	S 14°25'02" W	27.14 (8.28m)
C66	23.56 (7.18m)	15.00 (4.57m)	N 54°58'11" E	21.21 (7.18m)
C67	23.56 (7.18m)	15.00 (4.57m)	S 35°01'49" E	21.21 (7.18m)
C68	49.73 (15.16m)	275.00 (83.82m)	S 45°34'52" W	49.66 (15.16m)
C69	75.25 (22.94m)	275.00 (83.82m)	S 58°36'04" W	75.01 (22.94m)
C70	142.48 (43.43m)	225.00 (68.58m)	S 88°32'28" W	140.11 (43.43m)
C71	49.16 (14.98m)	275.00 (83.82m)	S 71°33'39" W	49.09 (14.98m)
C72	46.74 (14.25m)	425.00 (129.54m)	S 79°49'56" W	46.72 (14.25m)
C73	80.13 (24.42m)	425.00 (129.54m)	S 88°23'05" W	80.02 (24.42m)
C74	77.85 (23.74m)	375.00 (114.30m)	S 82°37'55" W	77.75 (23.74m)
C75	45.87 (13.98m)	425.00 (129.54m)	N 83°07'19" W	45.85 (13.98m)
C76	74.53 (22.72m)	375.00 (114.30m)	N 85°43'27" W	74.41 (22.72m)
C77	85.25 (25.99m)	175.00 (53.34m)	N 66°04'26" W	84.41 (25.99m)
C78	23.56 (7.18m)	15.00 (4.57m)	N 59°01'26" E	21.21 (7.18m)
C79	60.90 (18.56m)	125.00 (38.10m)	N 66°04'24" W	60.30 (18.56m)
C80	52.05 (15.87m)	125.00 (38.10m)	S 64°02'48" E	51.68 (15.87m)
C81	20.95 (6.38m)	175.00 (53.34m)	S 55°32'46" E	20.93 (6.38m)
C82	51.93 (15.83m)	175.00 (53.34m)	S 67°28'42" E	51.74 (15.83m)
C83	23.56 (7.18m)	15.00 (4.57m)	N 59°01'26" E	21.21 (7.18m)
C84	23.56 (7.18m)	15.00 (4.57m)	N 30°56'34" W	21.21 (7.18m)
C85	23.56 (7.18m)	15.00 (4.57m)	N 30°58'34" W	21.21 (7.18m)
C87	24.34 (7.42m)	150.00 (45.72m)	N 18°40'20" E	24.31 (7.42m)
C88	115.13 (35.09m)	150.00 (45.72m)	N 45°18'31" E	112.33 (35.09m)
C89	20.73 (6.32m)	200.00 (60.96m)	N 16°59'37" E	20.72 (6.32m)
C90	112.82 (34.39m)	200.00 (60.96m)	N 36°07'25" E	111.33 (34.39m)

<u>APPROVAL - CITY OF</u> <u>BIDDEFORD PLANNING BOARD</u> _____ DATE _____ _____ CHAIRPERSON _____ _____ _____ _____	SEE SHEET C-1.0 FOR GENERAL NOTES. STATE OF MAINE YORK COUNTY REGISTER OF DEEDS RECEIVED _____, 20____ AT _____ h _____ m _____ M. AND RECORDED IN _____ PLAN BOOK _____ PAGE _____ . ATTEST _____ REGISTER _____
--	--

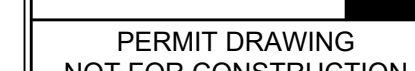
[illegible]

141 CAMPUS DRIVE SUITE 301
NEW GLOUCESTER, ME 04260

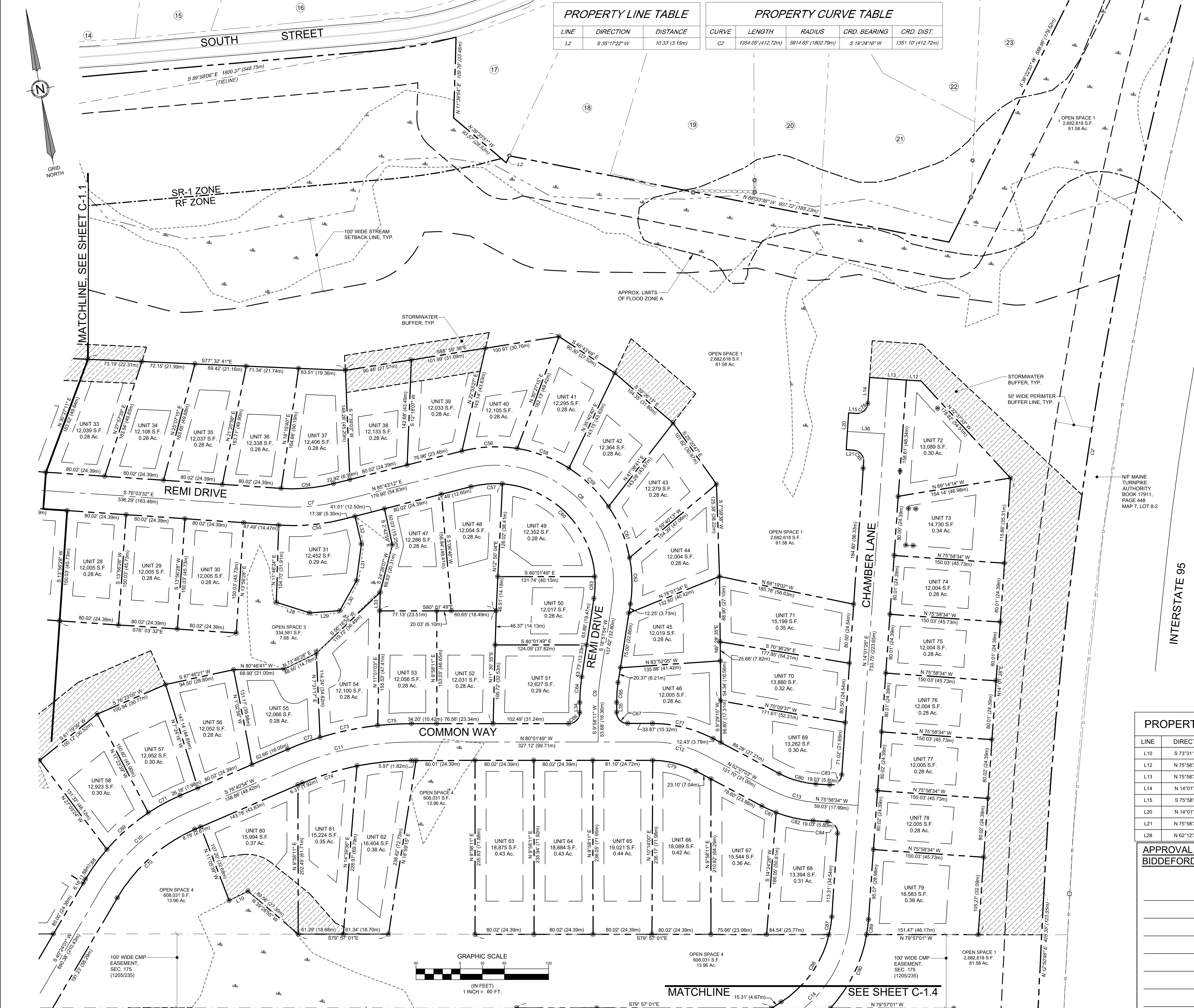
565 CONGRESS STREET SUITE 201
PORTLAND, ME 04102

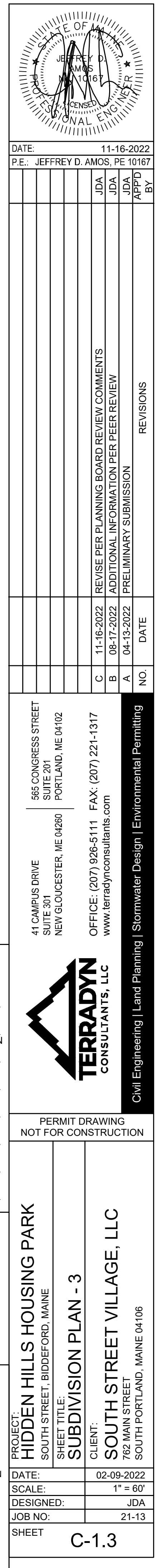
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradync consultants.com

Stormwater Design | Environmental Permitting



SHEET	JOB NO:	21-13	C-1.2
	SCALE:	JDA	
	DATE:	02-09-2022	
	PROJECT:	SOUTH HILLS HOUSING PARK 722 MAIN STREET SOUTH PORTLAND, MAINE 04106	
	SHEET TITLE:	SUBDIVISION PLAN - 2	

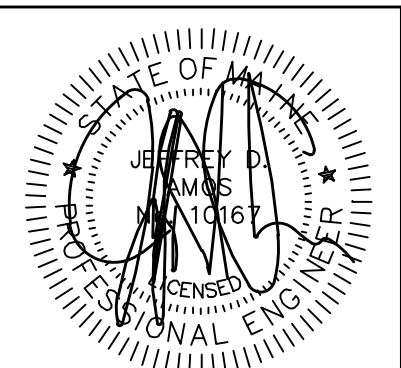




SEE SHEET C-1.0 FOR
GENERAL NOTES.

MATCHLINE, SEE SHEET C-1.2

MATCHLINE, SEE SHEET C-1.3



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS	BY
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS	JDA
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW	JDA
3	04-13-2022	PRELIMINARY SUBMISSION	JDA

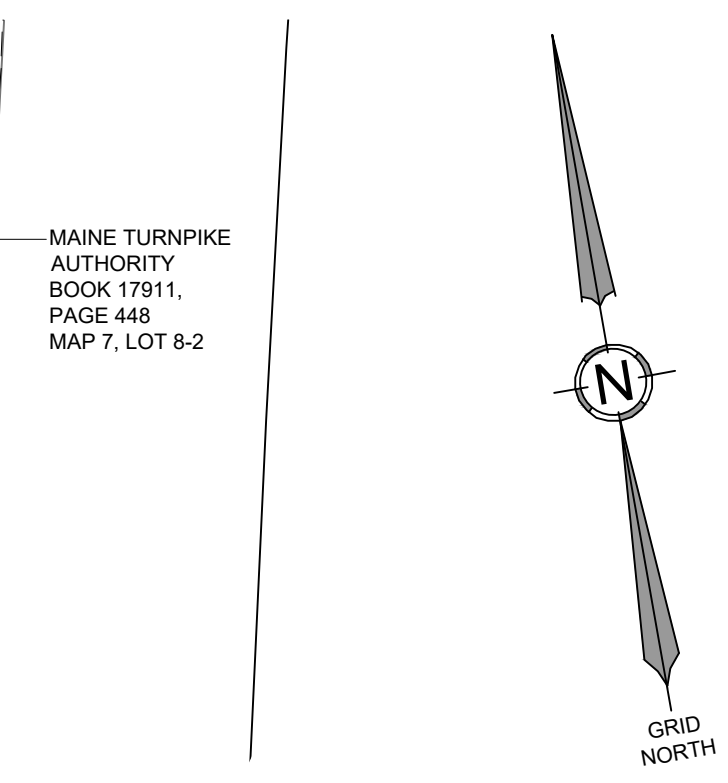
565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting



PROPERTY CURVE TABLE

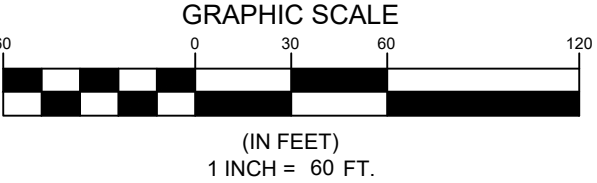
CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C150	119.25' (36.35m)	625.00' (190.50m)	N 62°41'15" E	119.07' (36.35m)
C151	80.07' (24.41m)	625.00' (190.50m)	N 53°33'04" E	80.02' (24.41m)
C152	186.41' (56.82m)	675.00' (205.74m)	N 60°14'32" E	185.82' (56.82m)
C153	84.28' (25.68m)	625.00' (190.50m)	N 46°01'08" E	84.19' (25.68m)
C154	95.29' (29.05m)	675.00' (205.74m)	N 48°17'11" E	95.21' (29.05m)
C155	24.57' (7.49m)	675.00' (205.74m)	N 43°11'58" E	24.57' (7.49m)
C156	23.56' (7.18m)	15.00' (4.57m)	S 87°09'25" W	21.21' (7.18m)
C157	23.56' (7.18m)	15.00' (4.57m)	S 2°50'35" E	21.21' (7.18m)
C158	73.49' (22.40m)	525.00' (160.02m)	S 46°10'00" W	73.43' (22.40m)
C159	107.52' (32.77m)	525.00' (160.02m)	S 56°02'37" W	107.33' (32.77m)
C160	79.04' (24.09m)	475.00' (144.78m)	S 46°55'26" W	78.95' (24.09m)
C161	86.25' (26.29m)	475.00' (144.78m)	S 56°53'33" W	86.13' (26.29m)
C162	24.87' (7.58m)	15.00' (4.57m)	N 70°24'47" W	22.12' (7.58m)
C163	23.62' (7.20m)	15.00' (4.57m)	S 22°11'19" W	21.25' (7.20m)
C164	49.36' (15.04m)	525.00' (160.02m)	S 64°36'13" W	49.34' (15.04m)
C165	65.25' (19.89m)	150.00' (45.72m)	S 35°22'54" E	64.74' (19.89m)
C166	63.84' (19.46m)	200.00' (60.96m)	S 32°03'52" E	63.57' (19.46m)
C168	47.08' (14.35m)	175.00' (53.34m)	N 40°08'12" W	46.94' (14.35m)
C169	76.46' (23.31m)	125.00' (38.10m)	N 30°19'09" W	75.28' (23.31m)
C170	76.46' (23.31m)	125.00' (38.10m)	N 4°43'45" E	75.28' (23.31m)
C171	146.73' (44.72m)	175.00' (53.34m)	N 8°24'35" W	142.47' (44.72m)
C172	20.29' (6.18m)	175.00' (53.34m)	N 18°55'55" E	20.28' (6.18m)
C173	14.47' (4.41m)	425.00' (129.54m)	N 23°13'42" E	14.47' (4.41m)
C174	113.82' (34.69m)	375.00' (114.30m)	N 30°56'56" E	113.39' (34.69m)
C175	80.02' (24.39m)	425.00' (129.54m)	N 29°35'50" E	79.90' (24.39m)
C176	80.02' (24.39m)	425.00' (129.54m)	N 40°23'04" E	79.90' (24.39m)
C177	111.12' (33.87m)	375.00' (114.30m)	N 48°08'00" E	110.71' (33.87m)
C178	80.02' (24.39m)	425.00' (129.54m)	N 51°10'17" E	79.90' (24.39m)
C179	35.59' (10.85m)	375.00' (114.30m)	N 59°20'28" E	35.58' (10.85m)
C180	40.76' (12.42m)	425.00' (129.54m)	N 59°18'46" E	40.75' (12.42m)
C181	52.41' (15.97m)	200.00' (60.96m)	N 59°47'26" E	52.26' (15.97m)
C182	70.36' (21.45m)	125.00' (38.10m)	N 78°11'10" E	69.44' (21.45m)
C183	80.02' (24.39m)	175.00' (53.34m)	N 80°14'01" E	79.32' (24.39m)
C184	80.02' (24.39m)	175.00' (53.34m)	S 73°34'08" E	79.32' (24.39m)
C185	82.56' (25.17m)	125.00' (38.10m)	S 66°45'56" E	81.07' (25.17m)
C186	38.57' (11.76m)	175.00' (53.34m)	S 54°09'24" E	38.49' (11.76m)
C188	15.50' (4.72m)	175.00' (53.34m)	N 64°35'51" E	15.49' (4.72m)

PROPERTY LINE TABLE

LINE	DIRECTION	DISTANCE
L24	S 22°15'12" W	45.65' (13.91m)
L25	N 22°15'12" E	45.65' (13.91m)
L26	S 62°03'37" W	23.75' (7.24m)
L27	N 62°03'37" E	23.75' (7.24m)

CENTERLINE CURVE TABLE

CURVE	LENGTH	RADIUS	CRD. BEARING	CRD. DIST.
C23	294.93' (89.89m)	650.00' (198.12m)	N 55°09'19" E	292.40' (89.89m)
C24	219.39' (66.87m)	500.00' (152.40m)	S 54°43'37" W	217.63' (66.87m)
C25	76.12' (23.20m)	175.00' (53.34m)	S 35°22'54" E	75.52' (23.20m)
C26	183.51' (55.93m)	150.00' (45.72m)	N 12°47'42" W	172.28' (55.93m)
C27	277.90' (84.71m)	400.00' (121.92m)	N 42°09'25" E	272.35' (84.71m)
C28	183.51' (55.93m)	150.00' (45.72m)	S 82°53'29" E	172.28' (55.93m)



APPROVAL - CITY OF
BIDDEFORD PLANNING BOARD

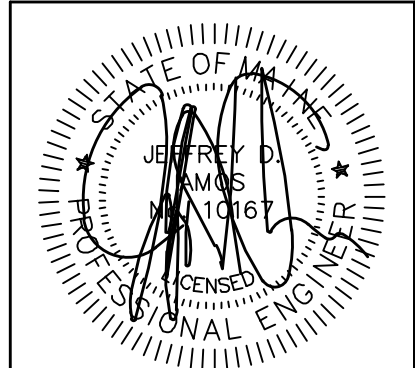
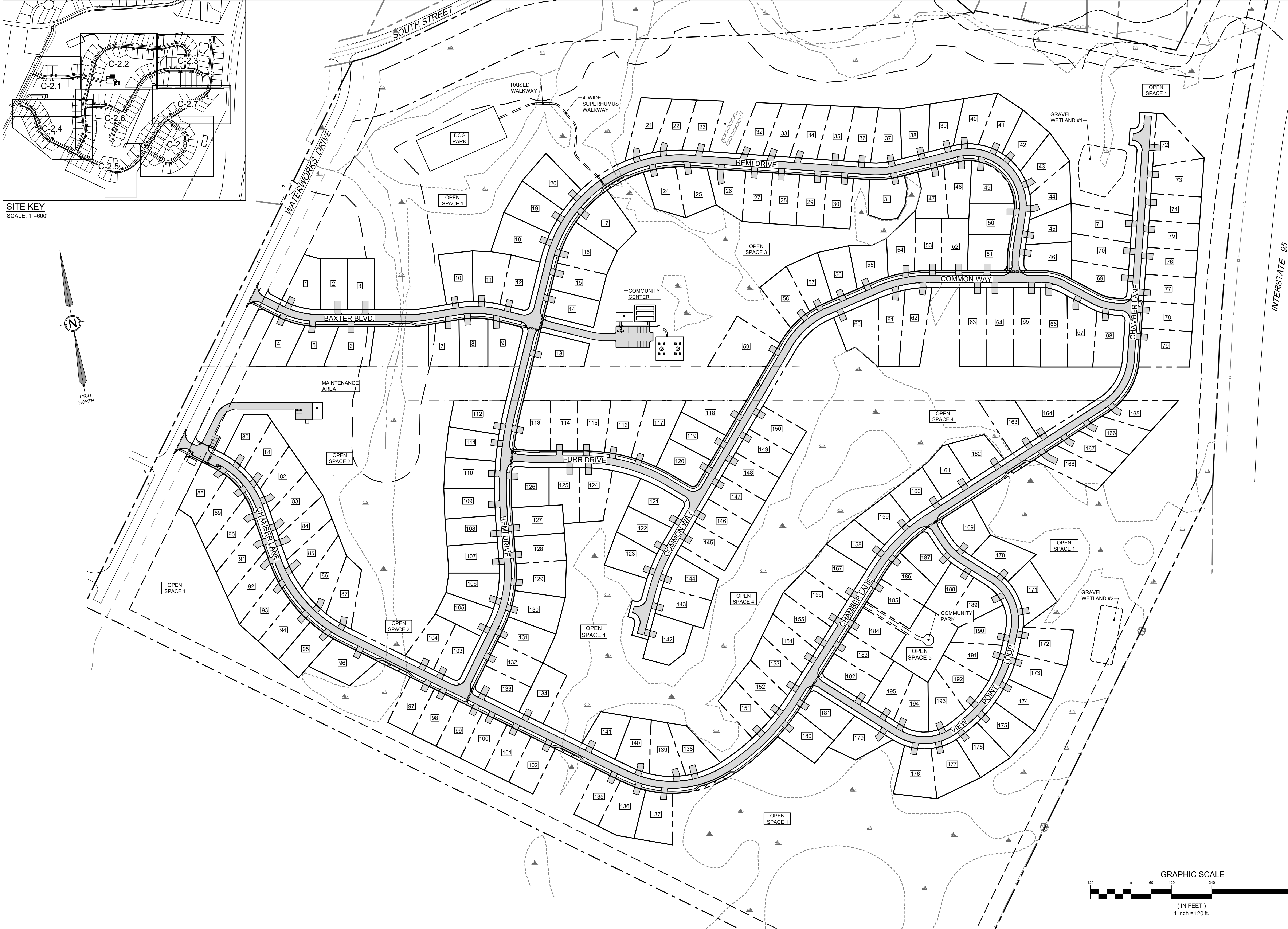
DATE	
CHAIRPERSON	

STATE OF MAINE
YORK COUNTY REGISTRY OF DEEDS

RECEIVED _____ 20____
AT _____ M. AND RECORDED IN
PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTER

PERMIT DRAWING
NOT FOR CONSTRUCTION

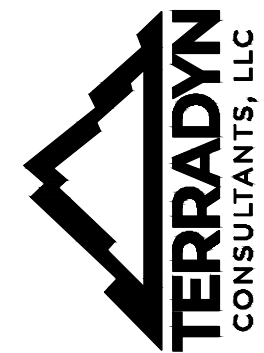
PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106
SHEET TITLE: SUBDIVISION PLAN - 4	DATE: 02-09-2022
	SCALE: 1" = 60'
	DESIGNED: JDA
	JOB NO.: 21-13
	SHEET C-1.4



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		

365 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradync consultants.com



Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106
SHEET TITLE: OVERALL SITE PLAN	DATE: 02-09-2022
	SCALE: 1" = 120'
	DESIGNED: JDA
	JOB NO.: 21-13
SHEET	C-2.0

C:\ODI\terradyn\Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MHP\CAD\Permitting\01-13 SITE.dwg

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.

4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

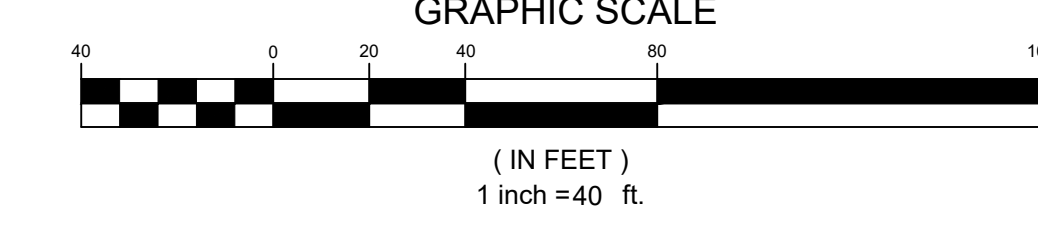
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.

6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.

8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.



10, THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.

11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.

12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MSA § 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.

13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT. ALL JOINTS SHALL BE BUTT JOINTS.

15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.

17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.

18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.

21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.

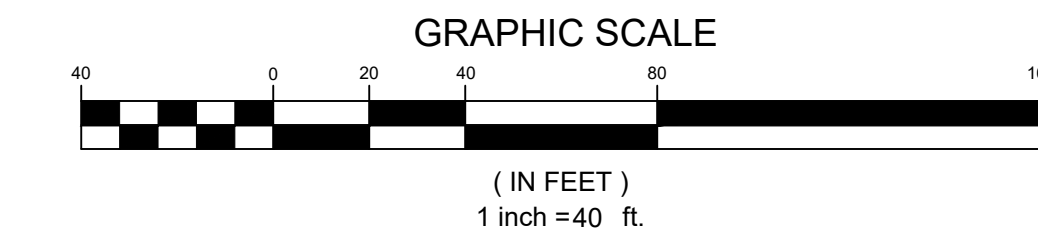
22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.

25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.

26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.




TERRADYN
 CONSULTANTS, LLC

41 CAMPLIS DRIVE
 SUITE 301
 NEW GLOUCESTER, ME 04260

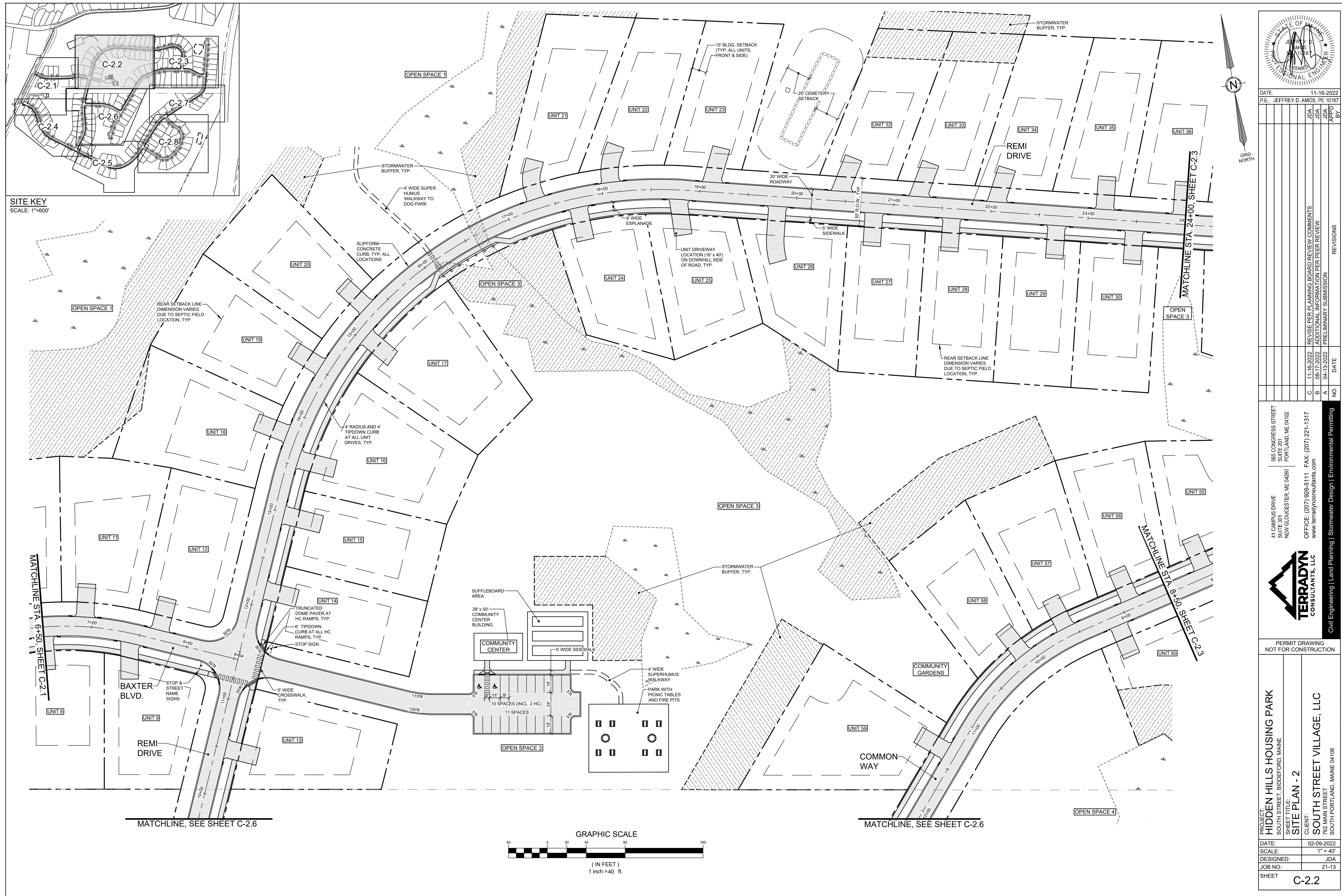
565 CONGRESS STREET
 SUITE 201
 PORTLAND, ME 04102

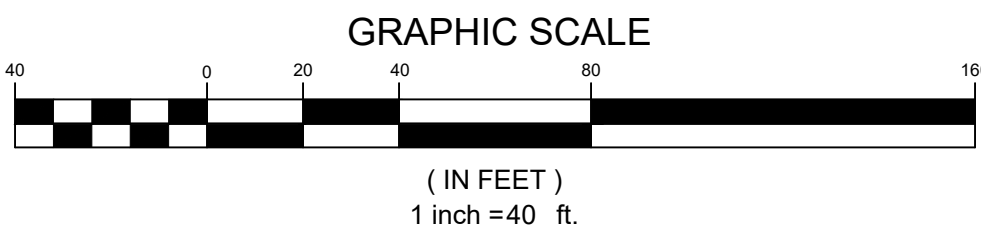
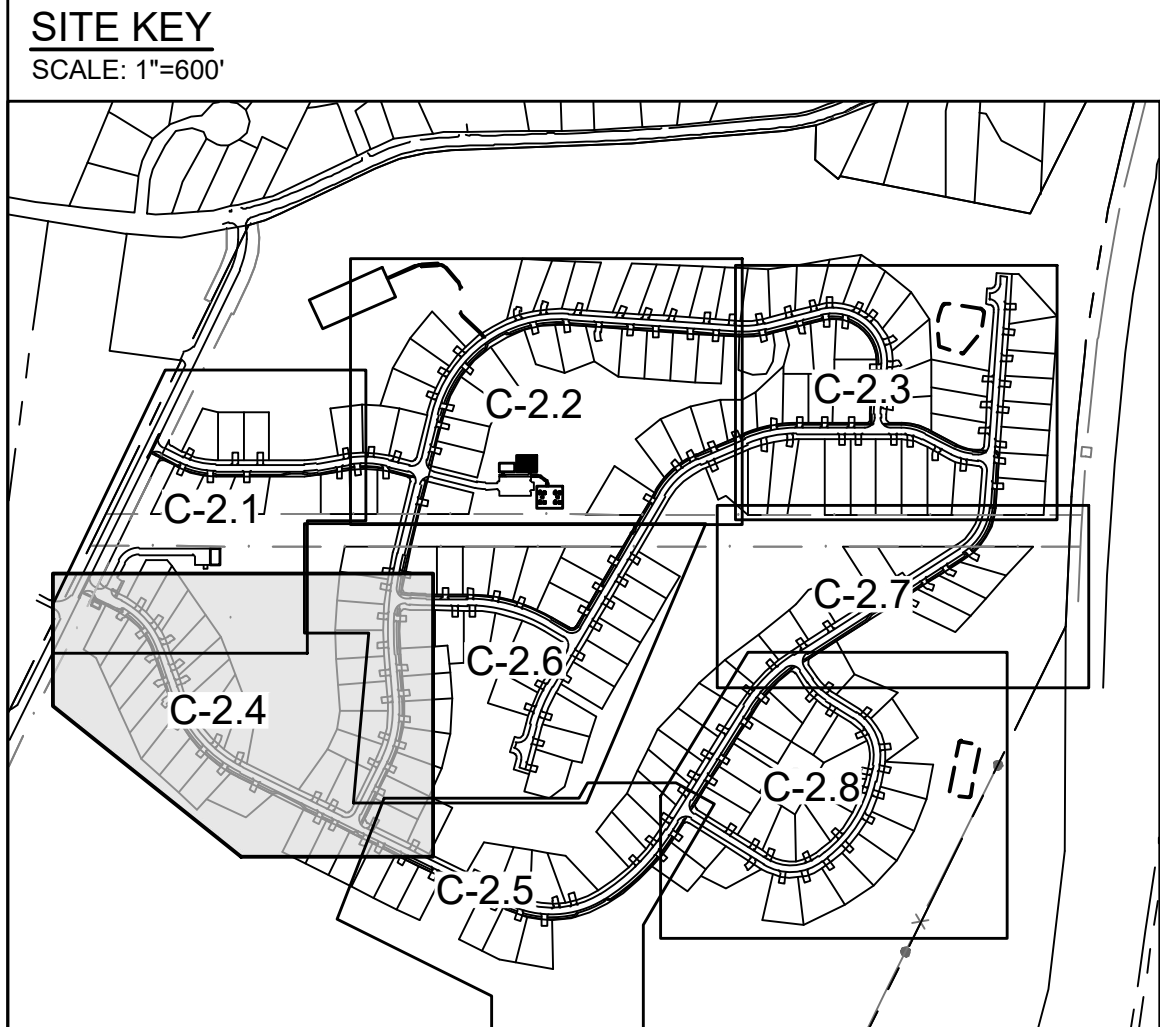
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradync consultants.com

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

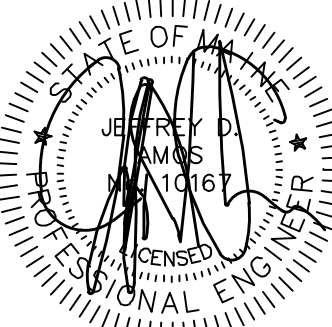
SHEET	PROJECT:	HIDDEN HILLS HOUSING PARK
		SOUTH STREET, BIDDEFORD, MAINE
	SHEET TITLE:	SITE PLAN - 1
	CIENT:	SOUTH STREET VILLAGE, LLC
		762 MAIN STREET SOUTH PORTLAND, MAINE 04106
	DATE:	02-09-2022
	SCALE:	1" = 40'
	DESIGNED:	JDA
	JOB NO:	21-13
	C-2.1	





DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		
195		
196		
197		
198		
199		
200		
201		
202		
203		
204		
205		
206		
207		
208		
209		
210		
211		
212		
213		
214		
215		
216		
217		
218		
219		
220		
221		
222		
223		
224		
225		
226		
227		
228		
229		
230		
231		
232		
233		
234		
235		
236		
237		
238		
239		
240		
241		
242		
243		
244		
245		
246		
247		
248		
249		
250		
251		
252		
253		
254		
255		
256		
257		
258		
259		
260		
261		
262		
263		
264		
265		
266		
267		
268		
269		
270		
271		
272		
273		
274		
275		
276		
277		
278		
279		
280		
281		
282		
283		
284		
285		
286		
287		
288		
289		
290		
291		
292		
293		
294		
295		
296		
297		
298		
299		
300		
301		
302		
303		
304		
305		
306		
307		
308		
309		
310		
311		
312		
313		
314		
315		
316		
317		
318		
319		
320		
321		
322		
323		
324		
325		
326		
327		
328		
329		
330		
331		
332		
333		
334		
335		
336		
337		
338		
339		
340		
341		
342		
343		
344		
345		
346		
347		
348		
349		
350		
351		
352		
353		
354		
355		
356		
357		
358		
359		
360		
361		
362		
363		
364		
365		
366		
367		
368		
369		
370		
371		
372		
373		
374		
375		
376		
377		
378		
379		
380		
381		
382		
383		
384		
385		
386		
387		
388		
389		
390		
391		
392		
393		
394		
395		
396		
397		
398		
399		
400		
401		
402		
403		
404		
405		
406		
407		
408		
409		
410		
411		
412		
413		
414		
415		
416		
417		
418		
419		
420		
421		
422		
423		
424		
425		
426		
427		
428		
429		
430		
431		
432		
433		
434		
435		
436		
437		
438		
439		
440		
441		
442		
443		
444		
445		
446		
447		
448		
449		
450		
451		
452		
453		
454		
455		
456		
457		
458		
459		
460		
461		
462		
463		
464		
465		
466		
467		
468		
469		
470		
471		
472		
473		
474		
475		
476		
477		
478		
479		
480		
481		
482		
483		
484		
485		
486		
487		
488		
489		
490		
491		
492		
493		
494		
495		
496		
497		
498		
499		
500		
501		
502		
503		
504		
505		
506		
507		
508		
509		
510		
511		
512		
513		
514		
515		
516		
517		
518		
519		
520		
521		
522		
523		
524		
525		
526		
527		
528		
529		
530		
531		
532		
533		
534		
535		
536		
537		
538		
539		
540		
541		
542		
543		
544		
545		
546		
547		
548		
549		
550		
551		
552		
553		
554		
555		
556		
557		
558		
559		
560		
561		
562		
563		
564		
565		
566		
567		
568		
569		
570		
571		
572		
573		
574		
575		
576		
577		
578		
579		
580		
581		
582		
583		
584		
585		
586		
587		
588		
589		
590		
591		
592		
593		
594		
595		
596		
597		
598		
599		
600		
601		
602		



	JDA
	JDA
	JDA
	PP'N

[illegible]

ENTS

NEW COMMENT
OR REVIEW?

RD REVIEW
PER PEER

[illegible][illegible]

REVISE PER
ADDITIONAL
RELIQUINA

						R
						A
						P

[illegible][illegible]

RESS STR
D, ME 0410
221-131
Permitt

565 CONG
SUITE 201
PORTLAND
AX: (207)
m

IE 04260

DRIVE
CESTER, M
207) 926
dynconsu
ter Design

11 CAMPUS
SUITE 301
NEW GLOUCESTER

OFFICE: (617) 552-1111
www.terra

Stormwa



ADY
ANTS, LI
|| and P



PERMIT DRAWING
NOT FOR CONSTRUCTION

--	--	--

MARK		
CLC		

NG PA
GE, L

WILLAMETTE
COUNCIL
OF
MAINE

5

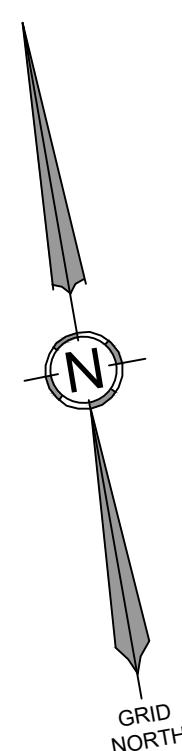
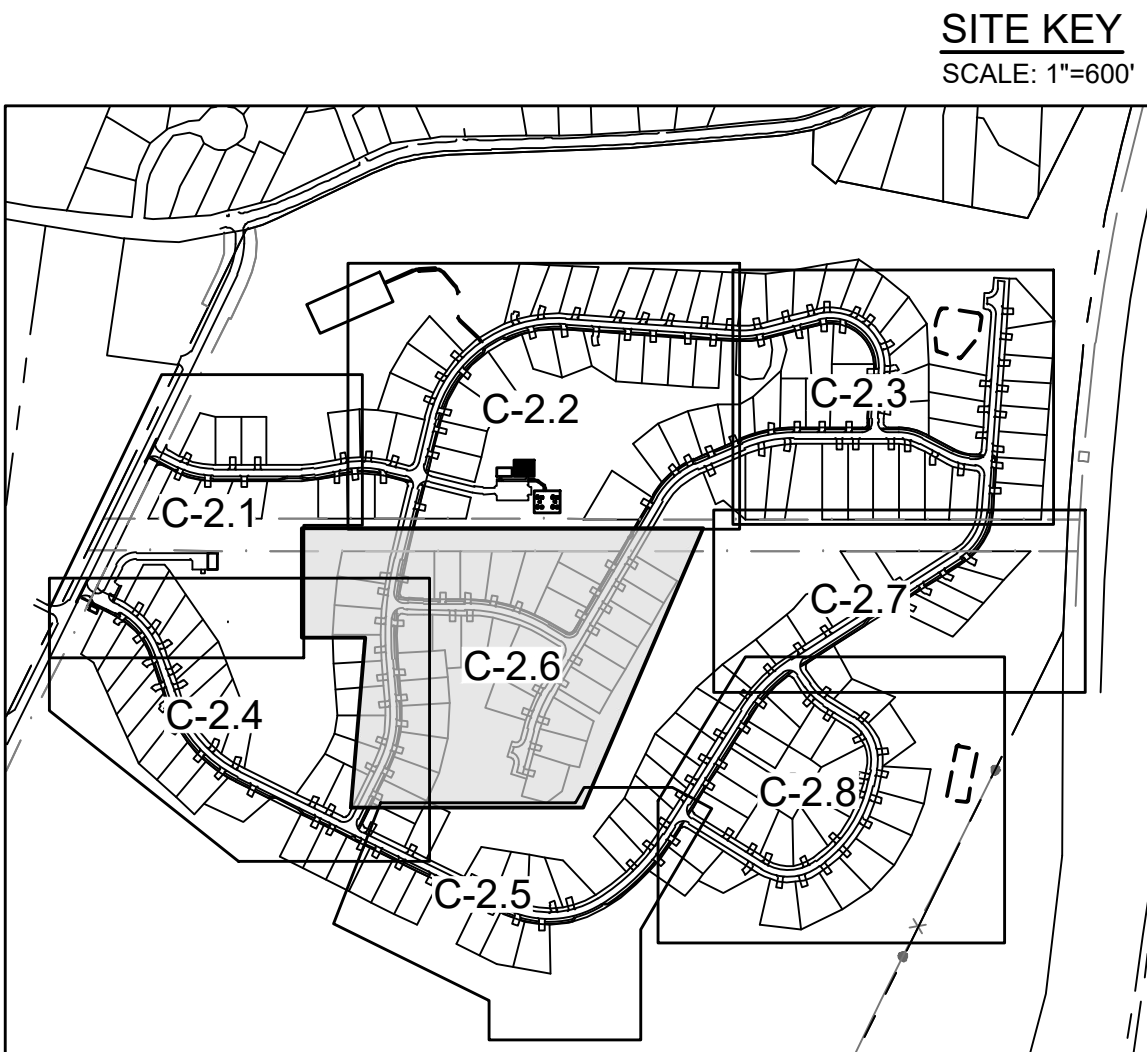
LAN -

PATIENT:

DATE:	02-09-202
SCALE:	1" = 4

DESIGNED:	JD
DB NO:	21-1

C-2.5

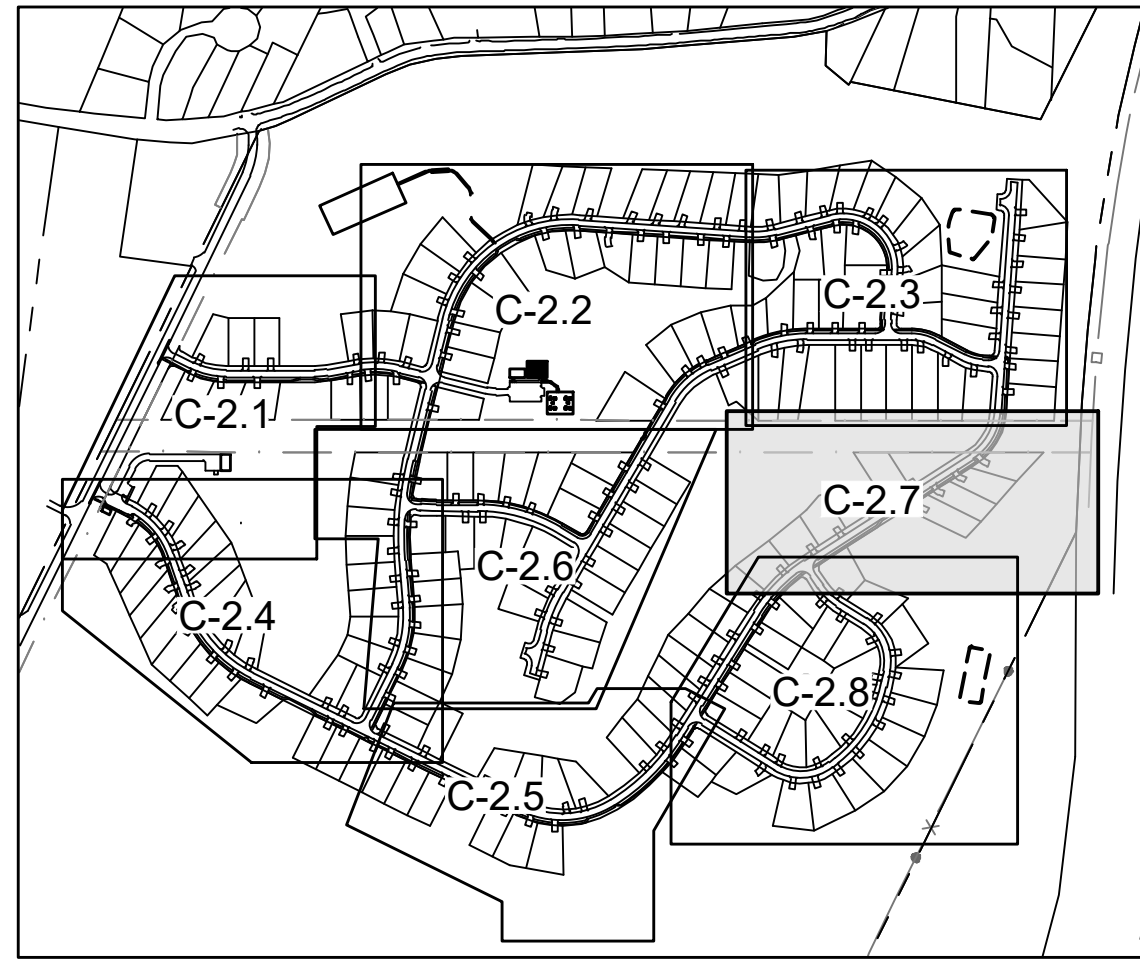
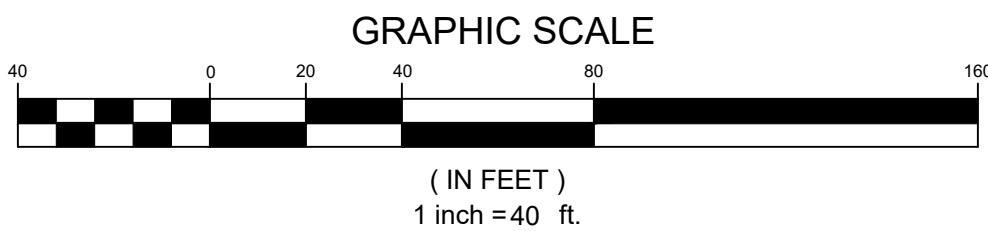
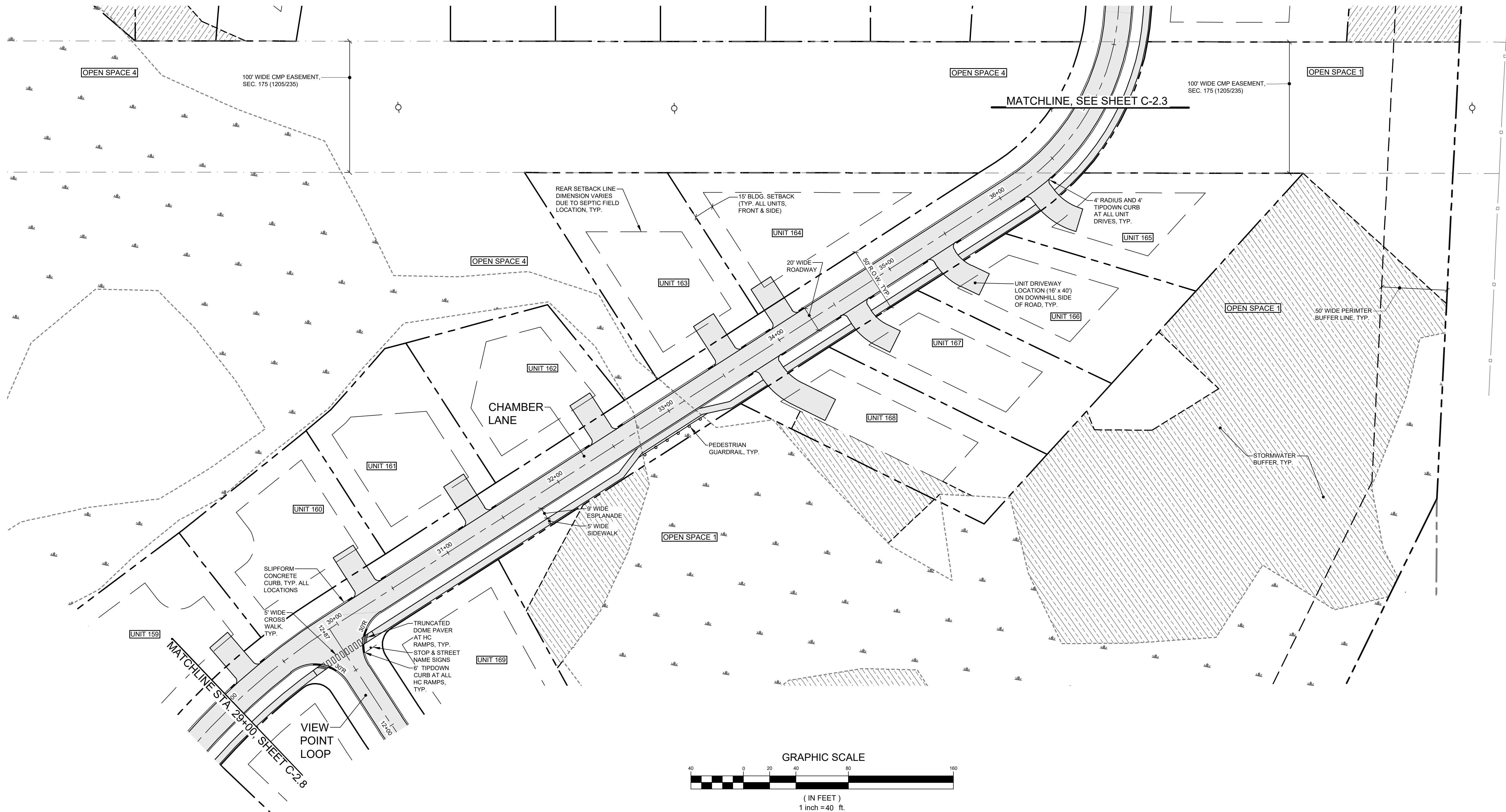
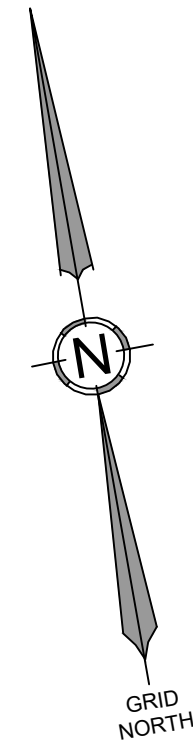
[illegible]

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

Stormwater Design | Environmental Permitting



C-2.6



SITE KEY
SCALE: 1"=600'

DATE: 11-16-2022

P.E.: JEFFREY D. AMOS, PE 10167

DATE: 11-16-2022

08-17-2022

04-13-2022

JDA

JDA

JDA

REVISIONS

NO.

DATE

REVISIONS

NO.

DATE

REVISIONS

NO.

DATE

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260

OFFICE: (207) 928-5111 FAX: (207) 221-1317
www.terradynconsultants.com

TERRADYN
CONSULTANTS, LLC

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:
SITE PLAN - 7

CLIENT:
SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022

SCALE: 1" = 40'

DESIGNED: JDA

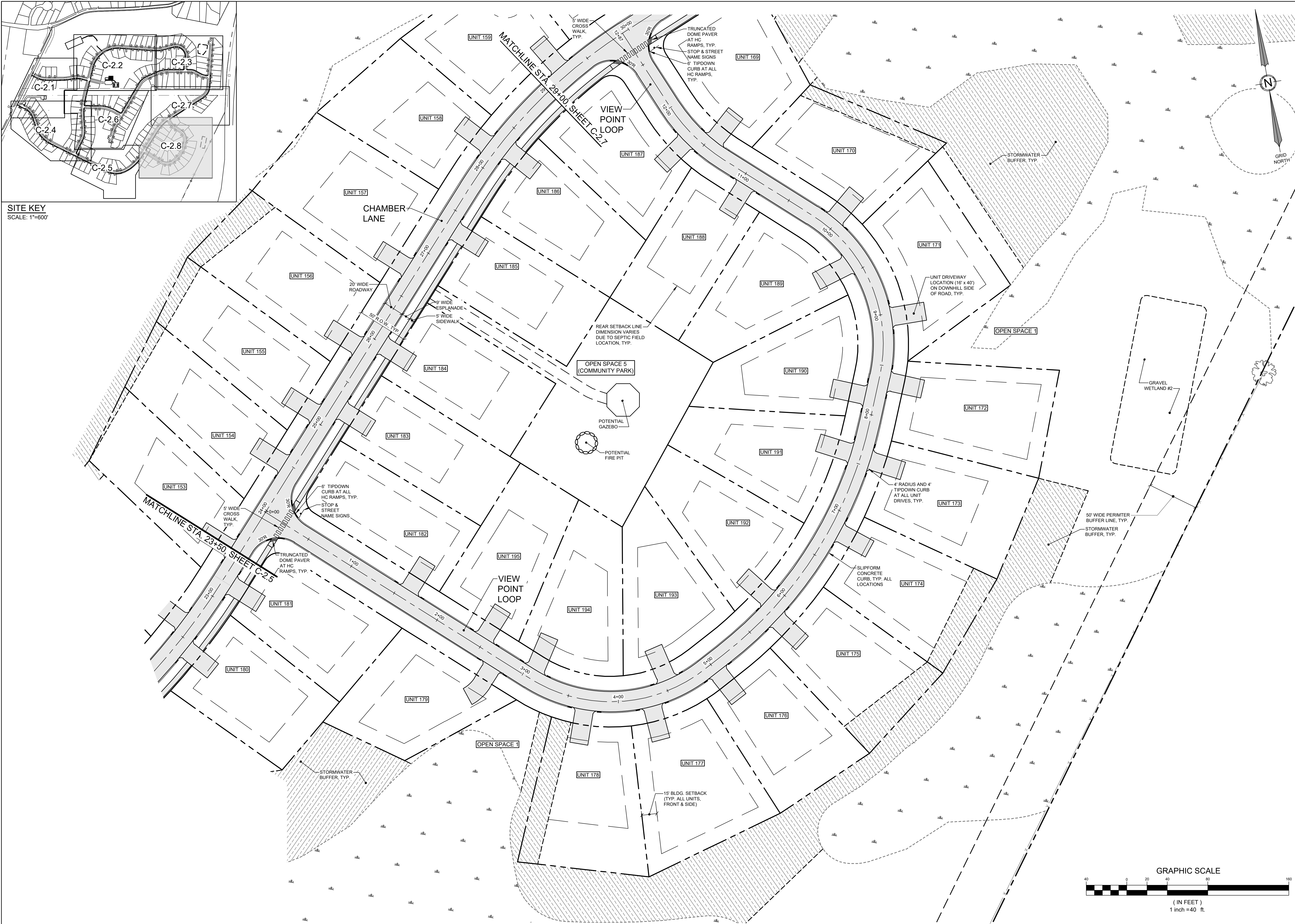
JOB NO: 21-13

SHEET

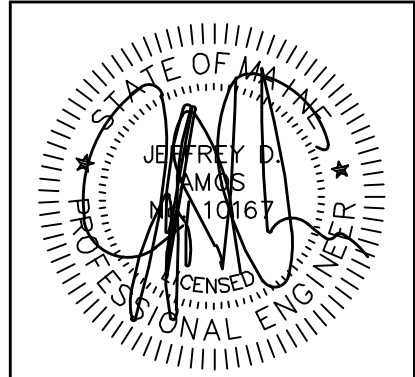
C-2.7

C:\ODI\terrady\Consultants\Project Folders - Documents\2021 Jobs\21-13 South Street MHP\CAD\Permitting\01-13 SITE.dwg

179



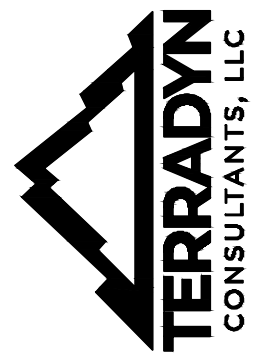
SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION

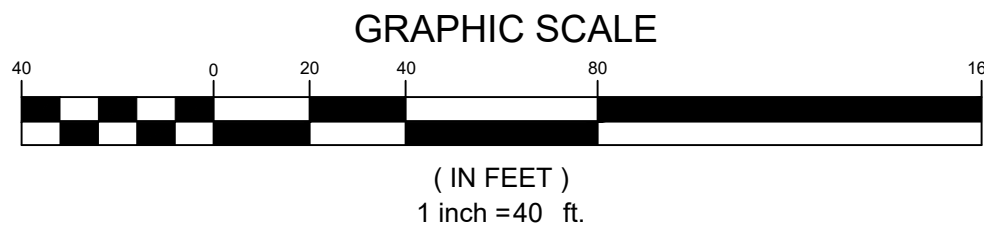
565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradync consultants.com



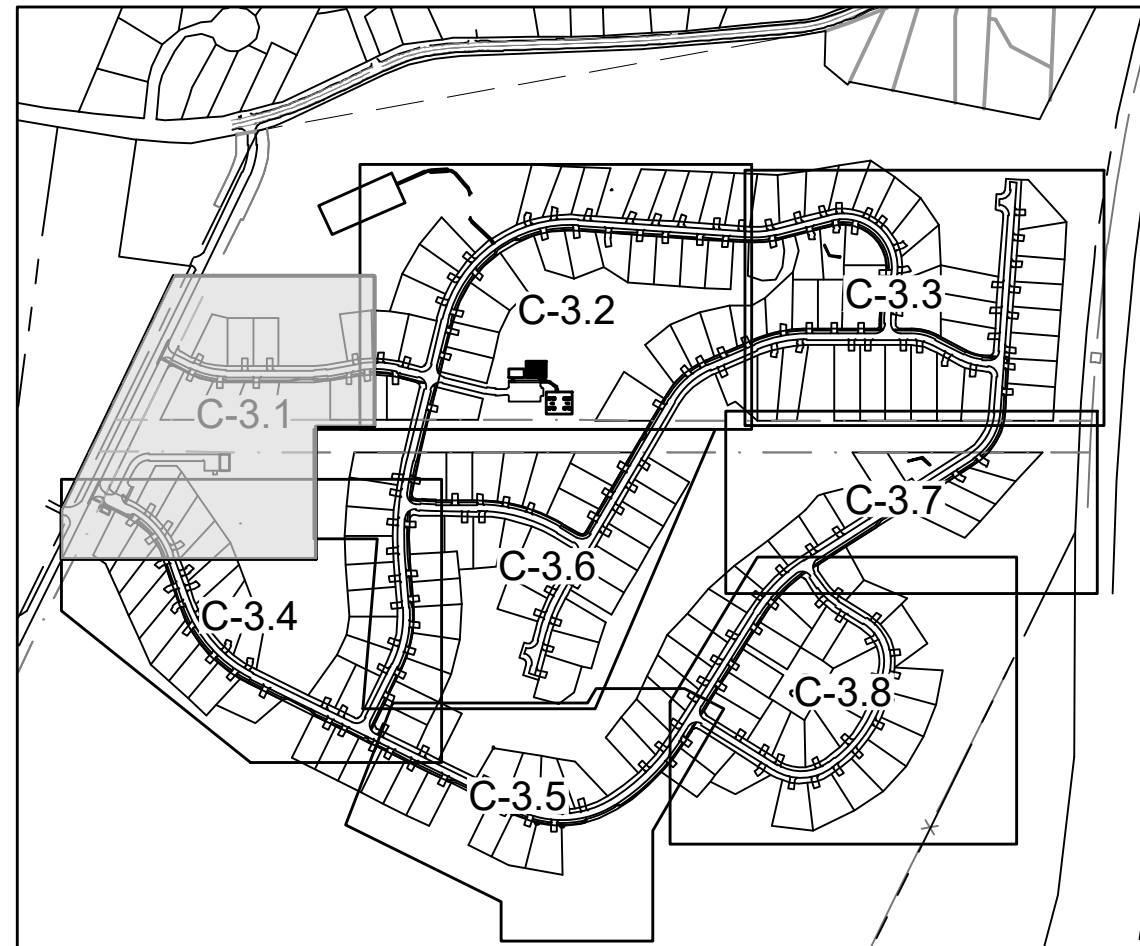
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106
SHEET TITLE: SITE PLAN - 8	DATE: 02-09-2022
	SCALE: 1" = 40'
	DESIGNED: JDA
	JOB NO.: 21-13
SHEET	C-2.8

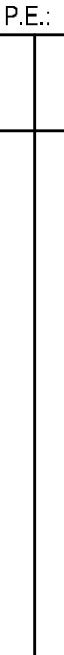


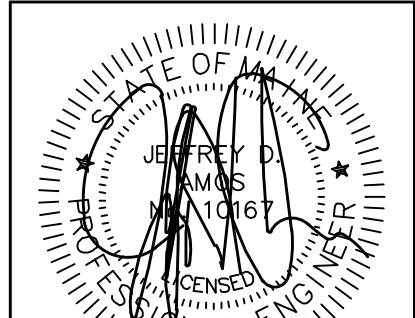
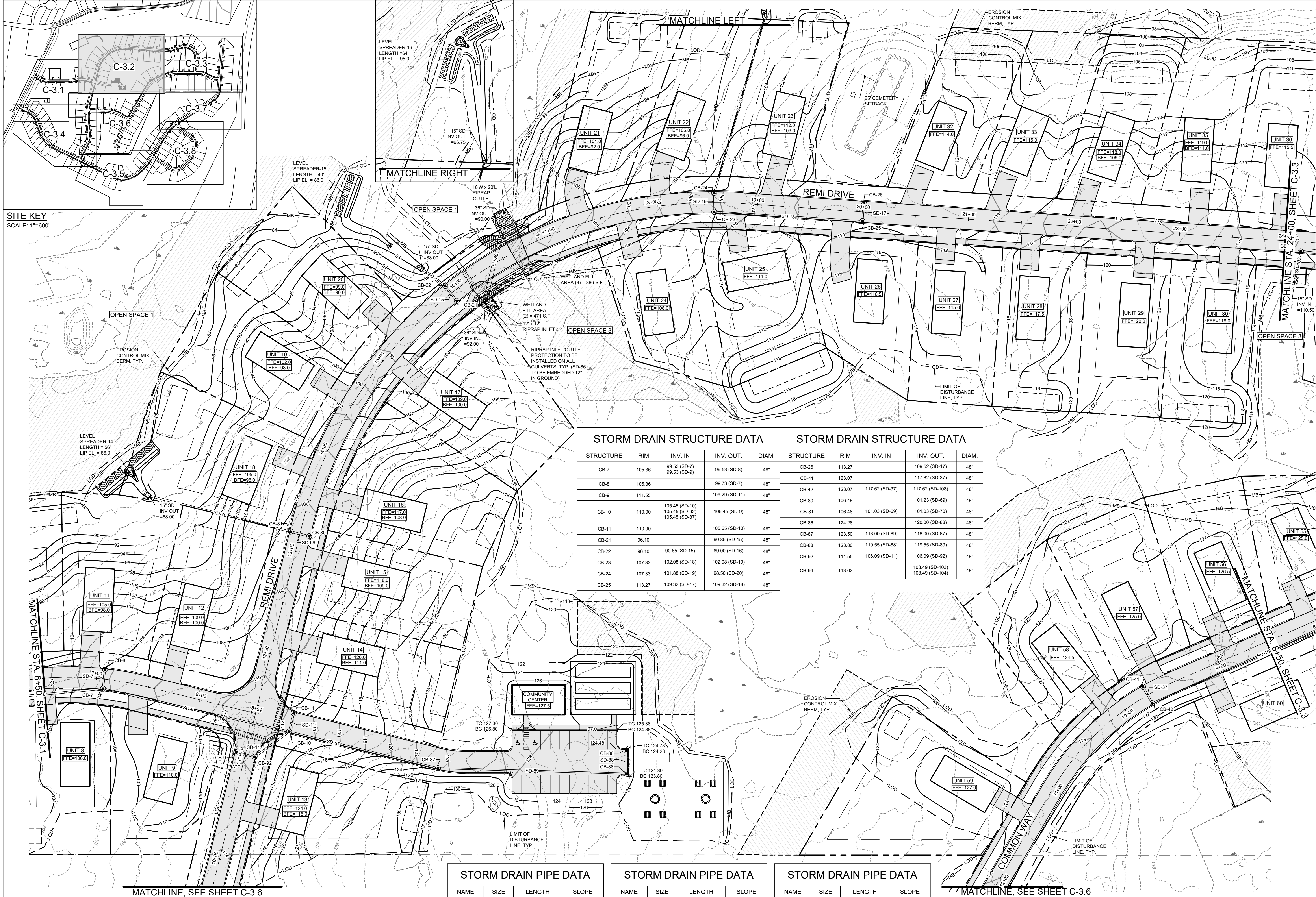
1. **SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.**
2. **GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, OR OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.**
3. **FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.**
4. **DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.**
5. **TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO RE-ENTER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.**
6. **NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.**
7. **ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.**



1. CONTRACTOR SHALL BE AWARE THAT DIG SAG ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF ANY EXISTING UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
2. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
3. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
4. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
5. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
6. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.
7. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.
8. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
9. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
21. WHERE THE TERMS "APPROVED EQUAL," "OTHER APPROVED," "EQUAL TO," "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.
22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM
CB-1	94.07		88.82 (SD-1)	48"
CB-2	94.07	88.62 (SD-1)	88.62 (SD-2)	48"
CB-3	93.18		87.93 (SD-3)	48"
CB-4	93.18	87.73 (SD-3)	87.73 (SD-4)	48"
CB-5	94.09	88.88 (SD-8)	88.68 (SD-5)	48"
CB-6	94.19	88.48 (SD-5)	88.48 (SD-6)	48"
CB-47	111.31		106.06 (SD-43)	48"
CB-48	111.31	105.86 (SD-43)	105.86 (SD-44)	48"
RG-1	91.72			48"
	91.72			48"

		41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260 OFFICE: (207) 926-5111 FAX: (207) 221-1317 www.terradyconsultants.com		565 CONGRESS STREET SUITE 201 PORTLAND, ME 04102		PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE		SHEET TITLE: GRADING AND DRAINAGE PLAN - 1		CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106	
DATE: 02-09-2022											
SCALE: 1" = 40'											
DESIGNED: JDA											
JOB NO: 21-13											
SHEET C-3.1											



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

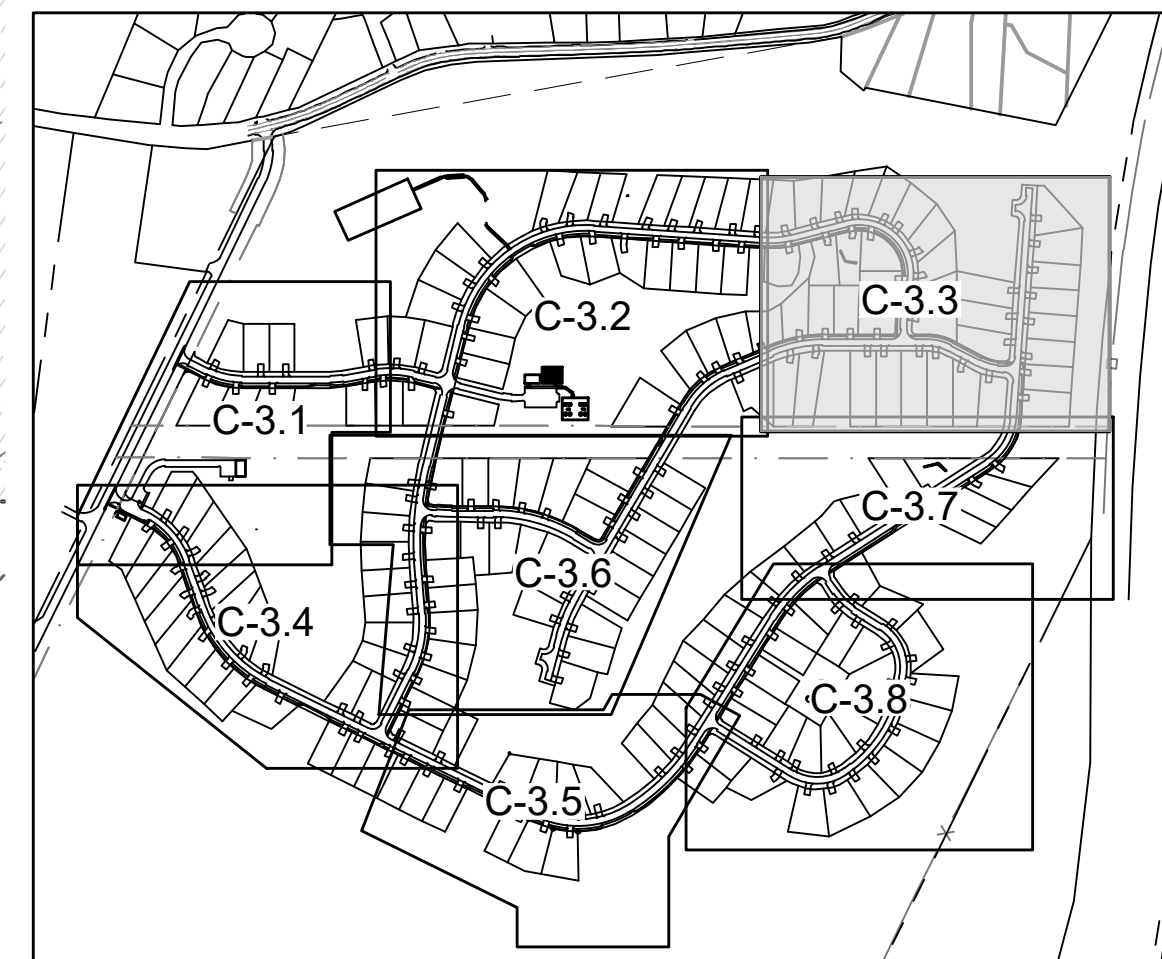
NO.	DATE	REVISIONS
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
A	04-13-2022	PRELIMINARY SUBMISSION
NO		

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



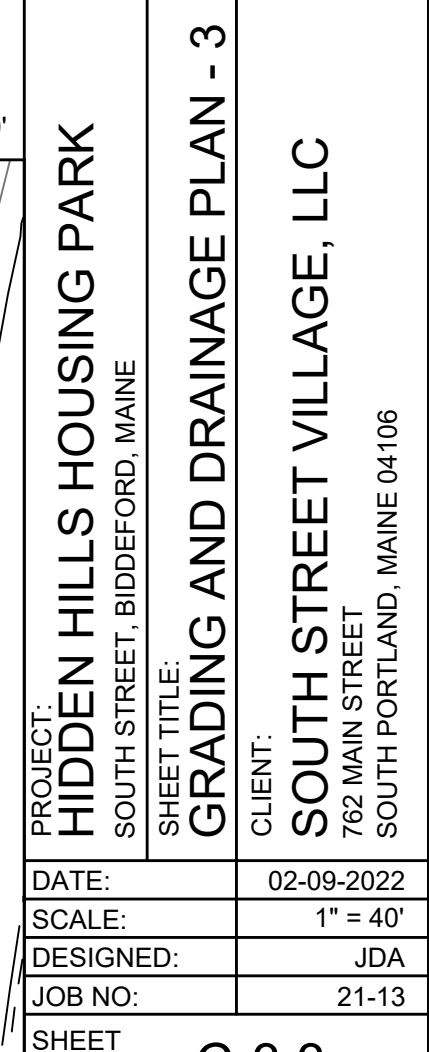
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRADING AND DRAINAGE PLAN - 2
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106
DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.2



STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-21	15"	14'	1.43%
SD-22	15"	215'	0.51%
SD-23	15"	14'	1.43%
SD-24	15"	110'	2.93%
SD-25	15"	14'	1.43%
SD-26	15"	151'	2.81%
SD-27	18"	14'	1.43%
SD-31	15"	14'	1.43%
SD-32	15"	190'	4.73%
SD-33	18"	14'	1.43%
SD-34	18"	47'	0.97%
SD-35	15"	14'	1.43%
SD-36	15"	196'	5.23%
SD-46	15"	14'	1.43%
SD-47	15"	117'	10.58%
SD-66	15"	194'	0.58%
SD-67	15"	14'	1.43%
SD-68	15"	98'	0.52%
SD-90	18"	169'	7.78%
SD-99	15"	14'	1.43%
SD-103	15"	25'	8.15%
SD-104	15"	92'	0.51%
SD-105	15"	27'	15.76%
SD-107	15"	131'	1.45%
SD-108	15"	228'	1.04%

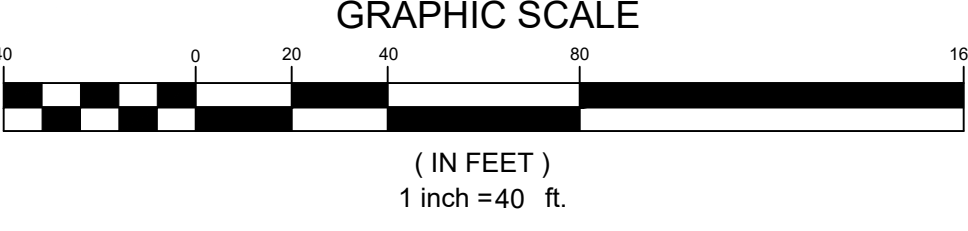
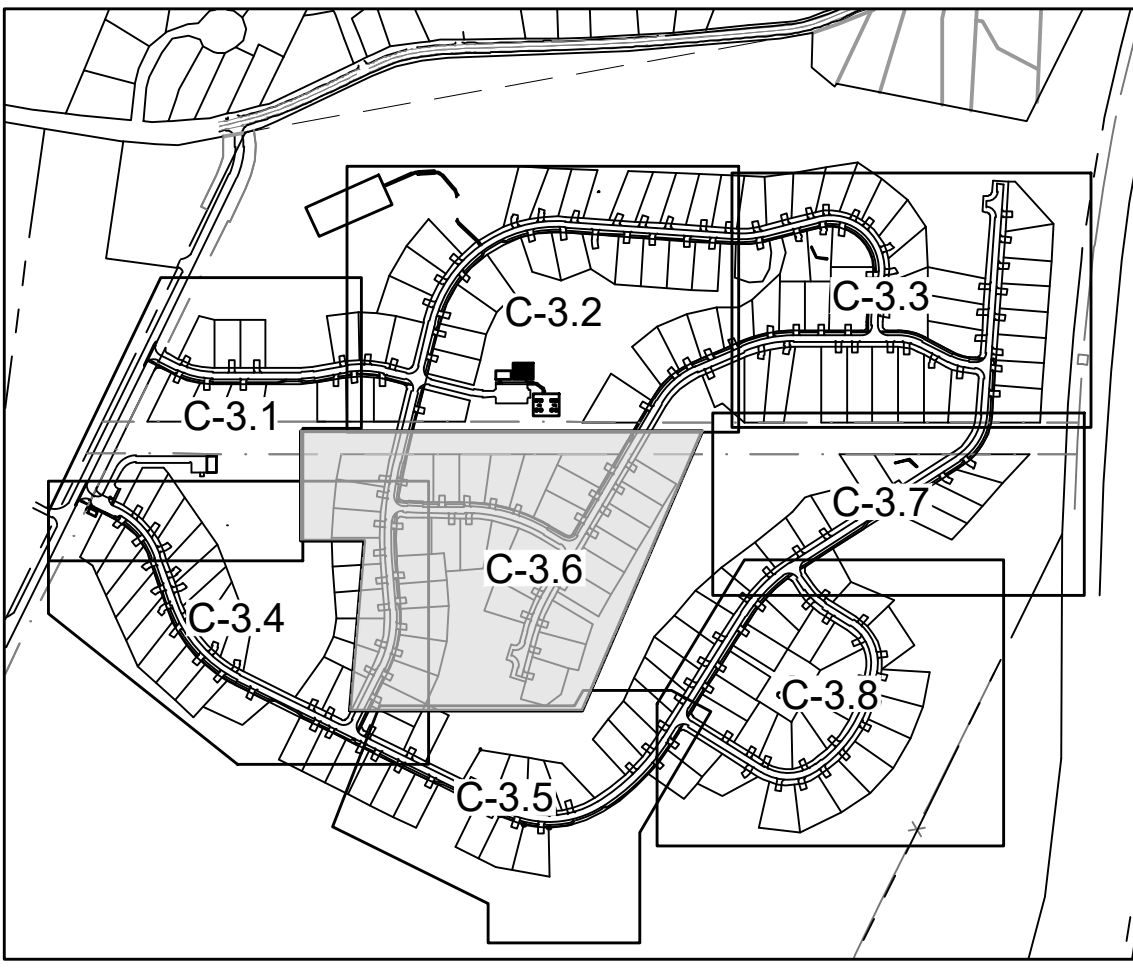




STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-12	15"	15'	1.33%
SD-14	15"	169'	2.02%
SD-28	15"	56'	3.66%
SD-29	15"	14'	1.43%
SD-30	15"	142'	2.32%
SD-39	15"	14'	1.43%
SD-40	15"	23'	0.88%
SD-41	15"	14'	1.43%
SD-42	15"	35'	0.86%
SD-91	15"	14'	1.43%

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-12	108.79		103.76 (SD-12)	48"
CB-13	109.01	103.56 (SD-12)	102.20 (SD-102)	48"
CB-14	114.10	108.35 (SD-93)	108.35 (SD-94)	48"
CB-15	113.78		108.52 (SD-93)	48"
CB-16	113.77		108.25 (SD-28)	48"
CB-19	113.15	106.20 (SD-28)	106.10 (SD-29)	48"
CB-20	113.15	105.90 (SD-29)	105.80 (SD-30)	48"
CB-43	128.42		124.40 (SD-39)	48"
CB-44	128.42	124.20 (SD-39)	124.20 (SD-40)	48"
CB-45	125.39		122.00 (SD-41)	48"
CB-46	125.39	121.80 (SD-41)	121.80 (SD-42)	48"
CB-90	128.76	124.81 (SD-91)	124.81 (SD-101)	48"
CB-91	128.76	125.01 (SD-91)		48"
CB-93	114.10	108.15 (SD-94)	108.15 (SD-95)	48"
DMH-4	115.60	107.00 (SD-95)	107.00 (SD-14)	48"

SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022

P.E.: JEFFREY D. AMOS, PE 10167

REVISIONS

NO	DATE	REVISIONS
A	04-13-2022	PRELIMINARY SUBMISSION
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

PROJECT:

HIDDEN HILLS HOUSING PARK

SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:

GRADING AND DRAINAGE PLAN - 6

CLIENT:

SOUTH STREET VILLAGE, LLC

762 MAIN STREET

SOUTH PORTLAND, MAINE 04106

DATE:

02-09-2022

SCALE:

1" = 40'

DESIGNED:

JDA

JOB NO.:

21-13

SHEET

C-3.6

41 CAMPUS DRIVE

SUITE 301

NEW GLoucester, ME 04260

565 CONGRESS STREET

SUITE 201

PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317

www.terradyndesign.com

PERMIT DRAWING

NOT FOR CONSTRUCTION

PROJECT:

HIDDEN HILLS HOUSING PARK

SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:

GRADING AND DRAINAGE PLAN - 6

CLIENT:

SOUTH STREET VILLAGE, LLC

762 MAIN STREET

SOUTH PORTLAND, MAINE 04106

DATE:

02-09-2022

SCALE:

1" = 40'

DESIGNED:

JDA

JOB NO.:

21-13

SHEET

C-3.6

DATE: 11-16-2022

P.E.: JEFFREY D. AMOS, PE 10167

REVISIONS

NO	DATE	REVISIONS
A	04-13-2022	PRELIMINARY SUBMISSION
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

PROJECT:

HIDDEN HILLS HOUSING PARK

SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:

GRADING AND DRAINAGE PLAN - 6

CLIENT:

SOUTH STREET VILLAGE, LLC

762 MAIN STREET

SOUTH PORTLAND, MAINE 04106

DATE:

02-09-2022

SCALE:

1" = 40'

DESIGNED:

JDA

JOB NO.:

21-13

SHEET

C-3.6

OFFICE: (207) 926-5111 FAX: (207) 221-1317

www.terradyndesign.com

PERMIT DRAWING

NOT FOR CONSTRUCTION

PROJECT:

HIDDEN HILLS HOUSING PARK

SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE:

GRADING AND DRAINAGE PLAN - 6

CLIENT:

SOUTH STREET VILLAGE, LLC

762 MAIN STREET

SOUTH PORTLAND, MAINE 04106

DATE:

02-09-2022

SCALE:

1" = 40'

DESIGNED:

JDA

JOB NO.:

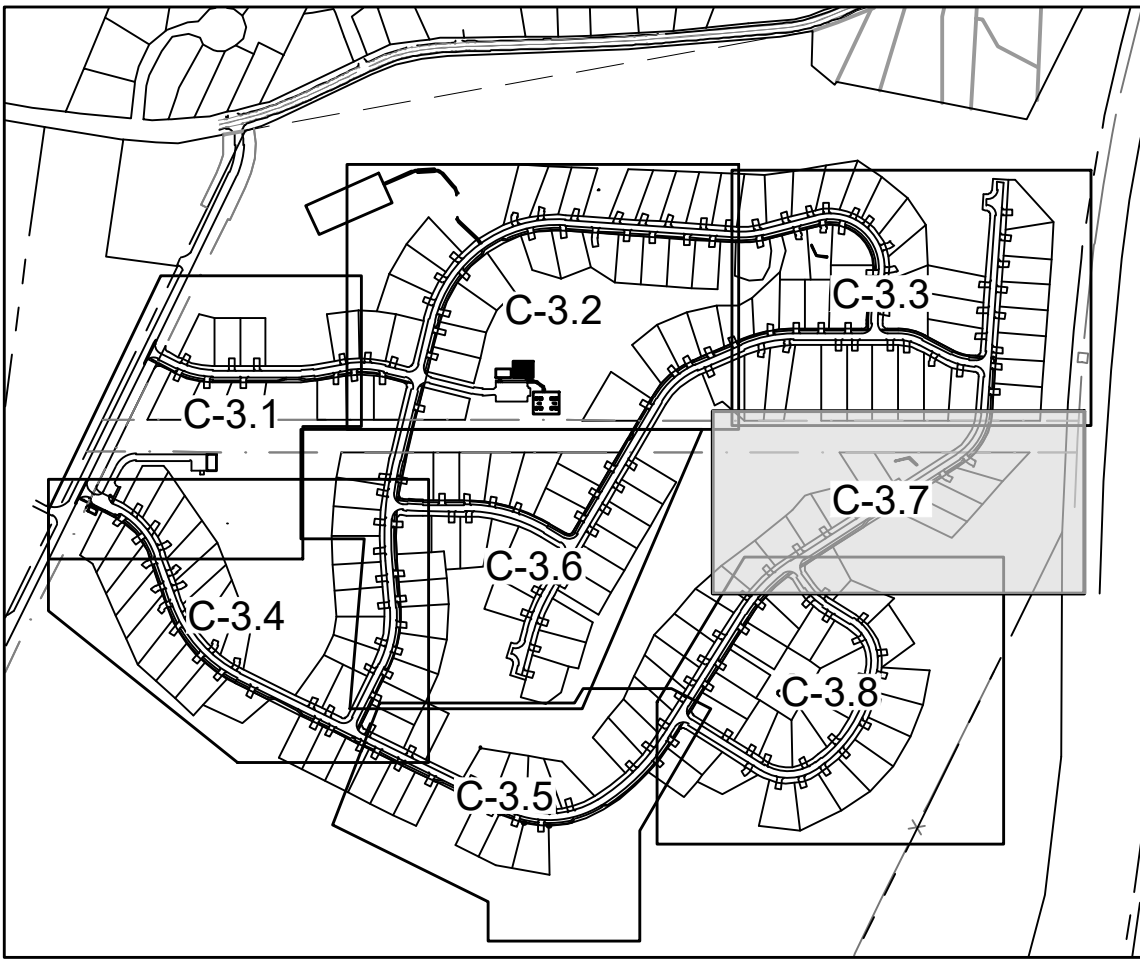
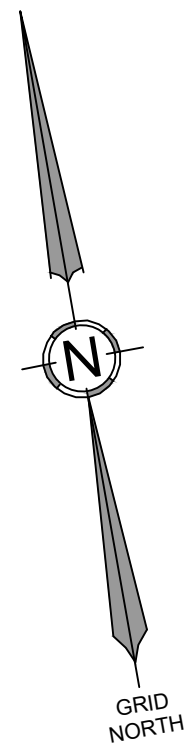
21-13

SHEET

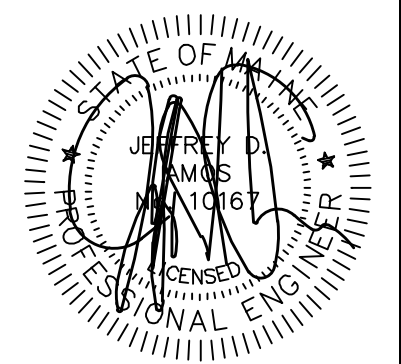
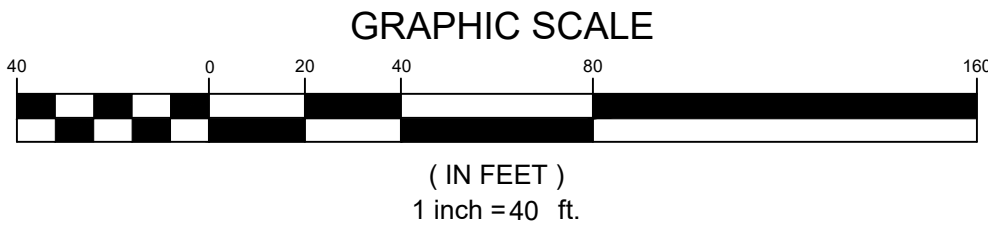
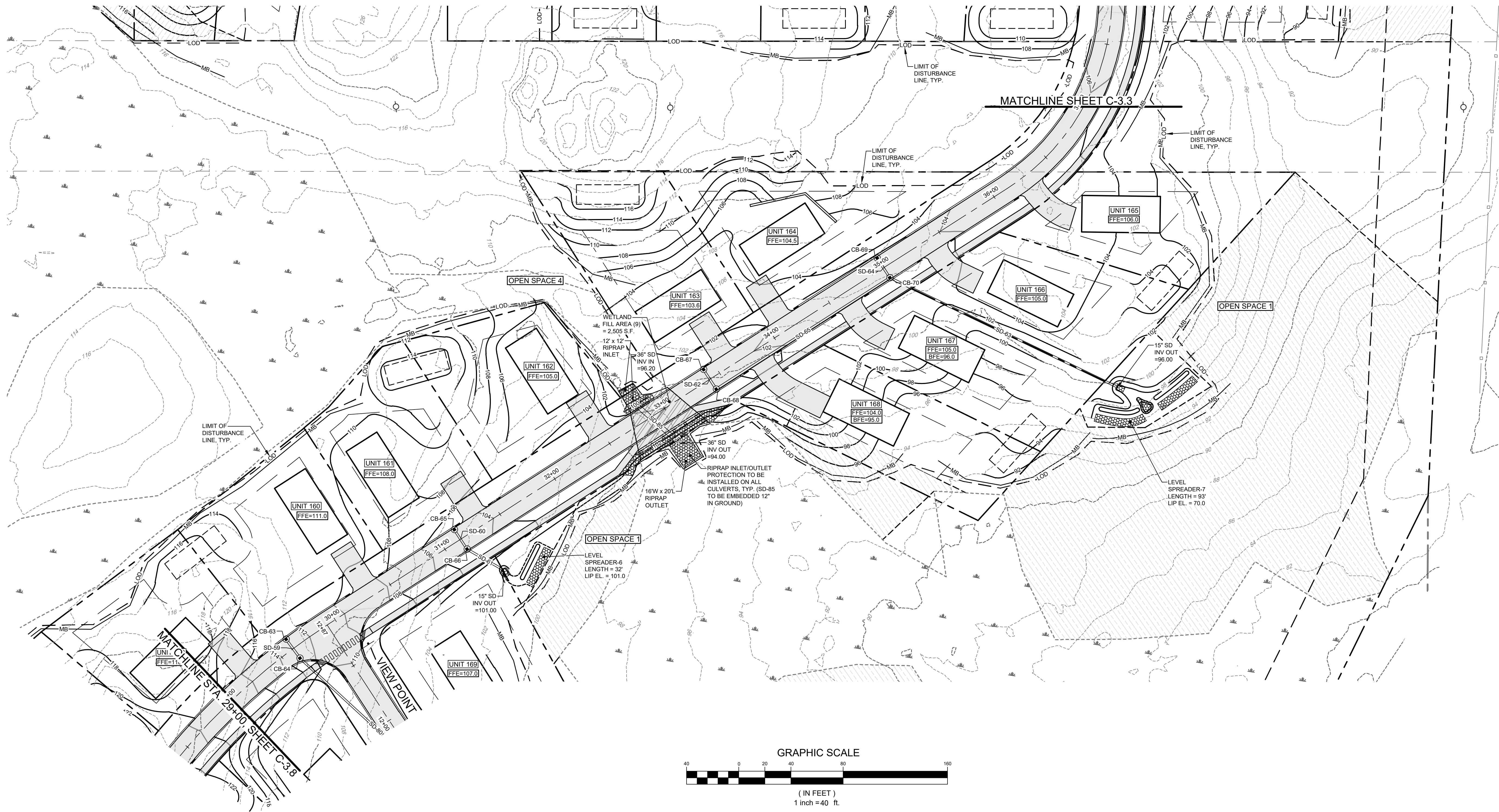
C-3.6

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-63	112.92		107.67 (SD-59)	48"
CB-64	112.92	107.47 (SD-59)	107.47 (SD-80)	48"
CB-65	104.67		101.40 (SD-60)	48"
CB-66	104.66	101.20 (SD-60)	101.20 (SD-61)	48"
CB-67	101.59		97.96 (SD-62)	48"
CB-68	101.59	97.76 (SD-62)	97.76 (SD-65)	48"
CB-69	103.08		97.17 (SD-64)	48"
CB-70	103.08	96.97 (SD-64) 96.97 (SD-65)	96.97 (SD-63)	48"

STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-59	15"	14'	1.43%
SD-60	15"	14'	1.44%
SD-61	15"	30'	0.66%
SD-62	15"	14'	1.43%
SD-63	15"	192'	0.51%
SD-64	15"	14'	1.43%
SD-65	15"	154'	0.51%
SD-80	15"	154'	5.30%
SD-85	36"	48'	4.63%



SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167
BY: JDA

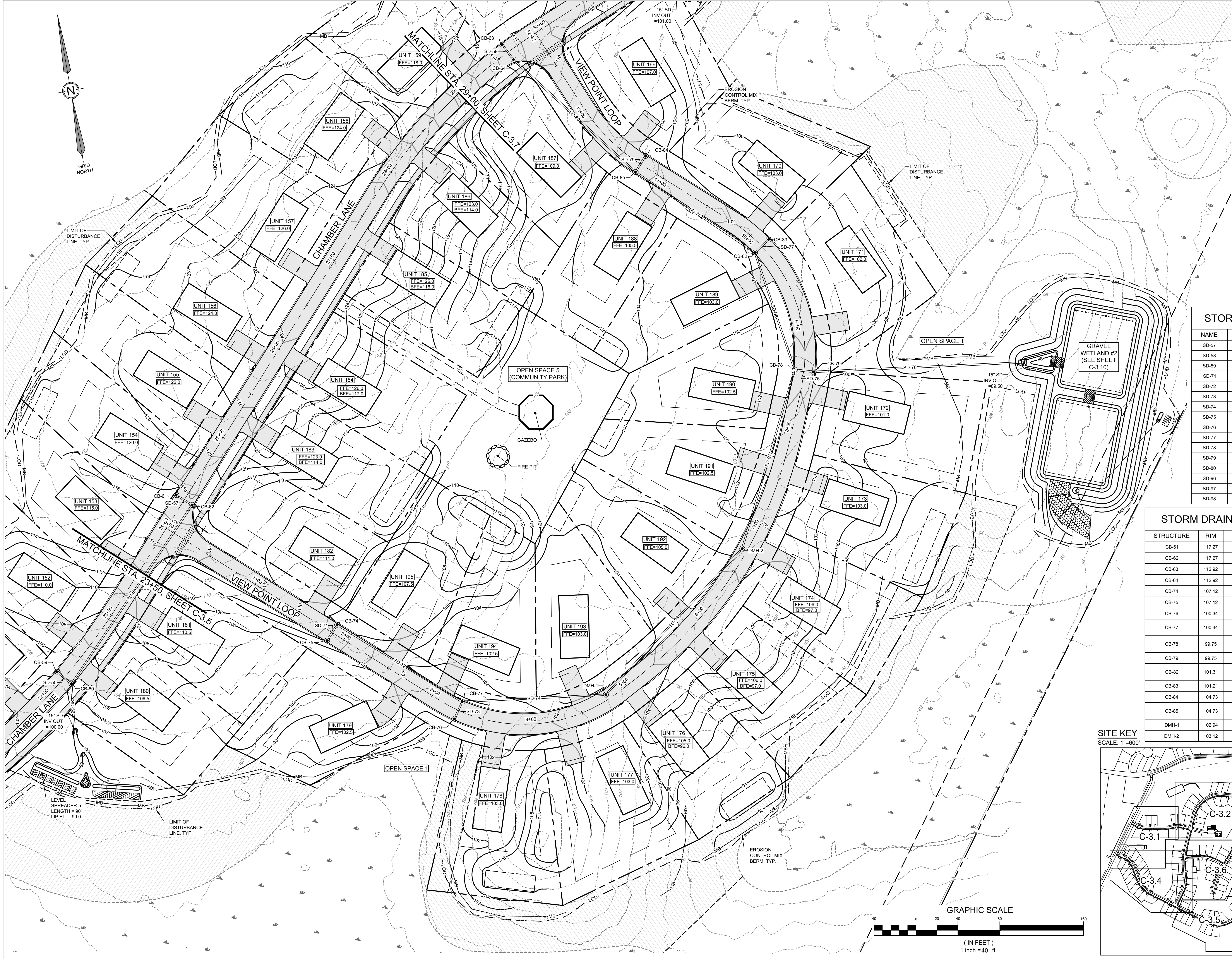
NO	DATE	REVISIONS
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
A	04-13-2022	PRELIMINARY SUBMISSION
NO		

365 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRADING AND DRAINAGE PLAN - 7
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106
DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.7



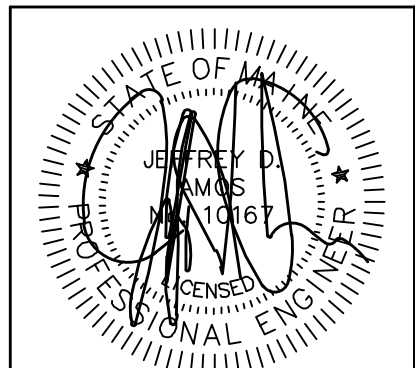
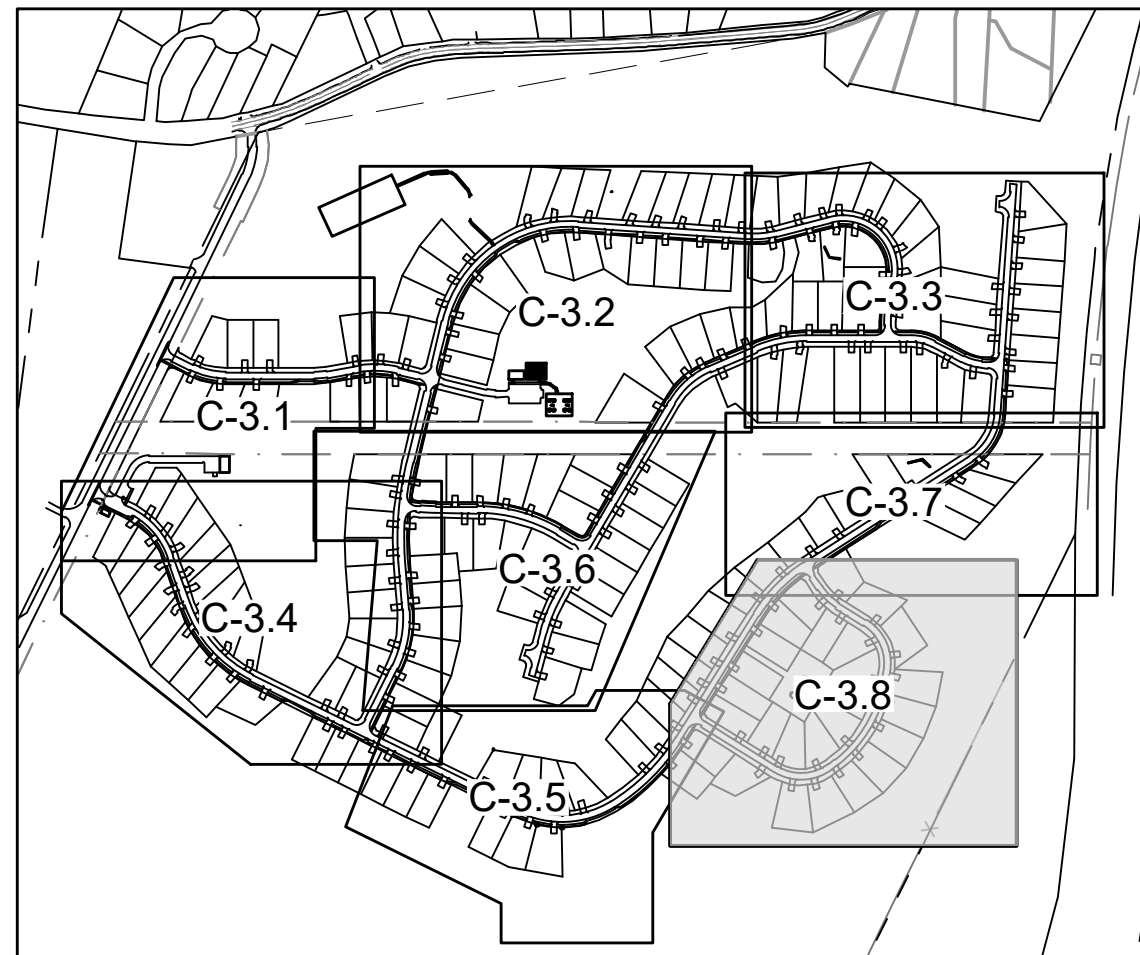
STORM DRAIN PIPE DATA

NAME	SIZE	LENGTH	SLOPE
SD-67	15"	14'	1.43%
SD-68	15"	202'	5.70%
SD-69	15"	14'	1.43%
SD-71	15"	14'	1.43%
SD-72	15"	136'	4.98%
SD-73	15"	14'	1.43%
SD-74	15"	133'	0.66%
SD-75	15"	14'	1.43%
SD-76	15"	195'	1.02%
SD-77	15"	14'	1.43%
SD-78	15"	134'	2.64%
SD-79	15"	14'	1.43%
SD-80	15"	154'	5.30%
SD-96	15"	187'	0.54%
SD-97	15"	174'	0.75%
SD-98	15"	114'	3.55%

STORM DRAIN STRUCTURE DATA

STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-61	117.27		112.02 (SD-57)	48"
CB-62	117.27	111.82 (SD-57)	111.82 (SD-58)	48"
CB-63	112.92		107.67 (SD-59)	48"
CB-64	112.92	107.47 (SD-59)	107.47 (SD-80)	48"
CB-74	107.12	101.67 (SD-71)	101.67 (SD-72)	48"
CB-75	107.12		101.87 (SD-71)	48"
CB-76	100.34		95.08 (SD-73)	48"
CB-77	100.44	94.88 (SD-73) 94.88 (SD-72)	94.88 (SD-74)	48"
CB-78	99.75	91.70 (SD-97) 91.70 (SD-98)	91.70 (SD-75)	48"
CB-79	99.75	91.50 (SD-75)	91.50 (SD-76)	48"
CB-82	101.31	95.76 (SD-77) 95.76 (SD-78)	95.76 (SD-98)	48"
CB-83	101.21		95.96 (SD-77)	48"
CB-84	104.73		99.48 (SD-79)	48"
CB-85	104.73	99.28 (SD-79) 99.28 (SD-80)	99.28 (SD-78)	48"
DMH-1	102.94	94.00 (SD-74)	94.00 (SD-96)	48"
DMH-2	103.12	93.00 (SD-96)	93.00 (SD-97)	48"

SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

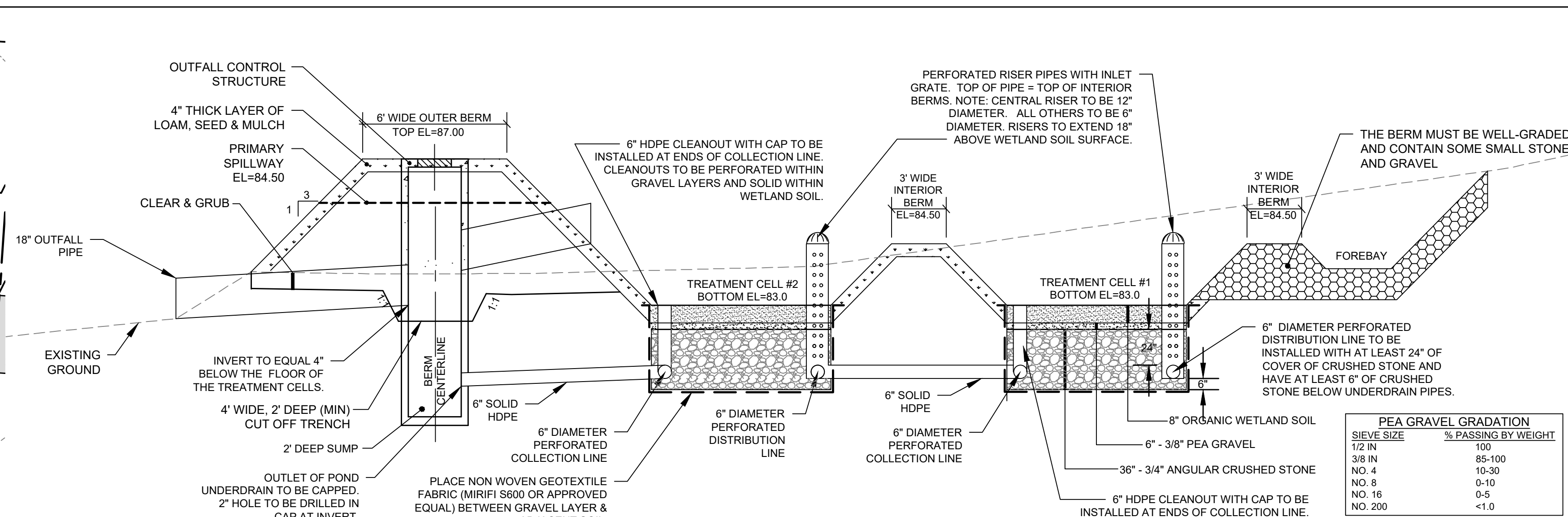
NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION

41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: GRADING AND DRAINAGE PLAN - 8
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106
DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-3.8



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



- NOTES:**
1. SUBMIT SHOP DRAWINGS FOR OWNER/
ENGINEER APPROVAL.
 2. STRUCTURE SHALL BE DESIGNED FOR H-20
LOADING.
 3. CASTINGS SHALL PROVIDE FOR A 24" CLEAR
OPENING.

SCHEDULE A OUTLET CONTROL STRUCTURE		
	ITEM DESCRIPTION	DIMENSION / ELEVATION
A.	TOP OF STRUCTURE	87.50
B.	UNDERSIDE OF SLAB	87.00
C.	BOTTOM OF STRUCTURE	78.50

NOT TO SCALE

DATE:	11-16-2022
P.E.:	JEFFREY D. AMOS, PE 10167

		JDA
		JDA
		JDA
		APPD
		BY
	REVIEW COMMENTS	
	PEER REVIEW	
	REVISIONS	

[illegible]

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyconsultants.com

Stormwater Design | Environmental Permitting



PERMIT DRAWING
NOT FOR CONSTRUCTION

SHEET TITLE:
GRAVEL WETLAND - 1 PLAN

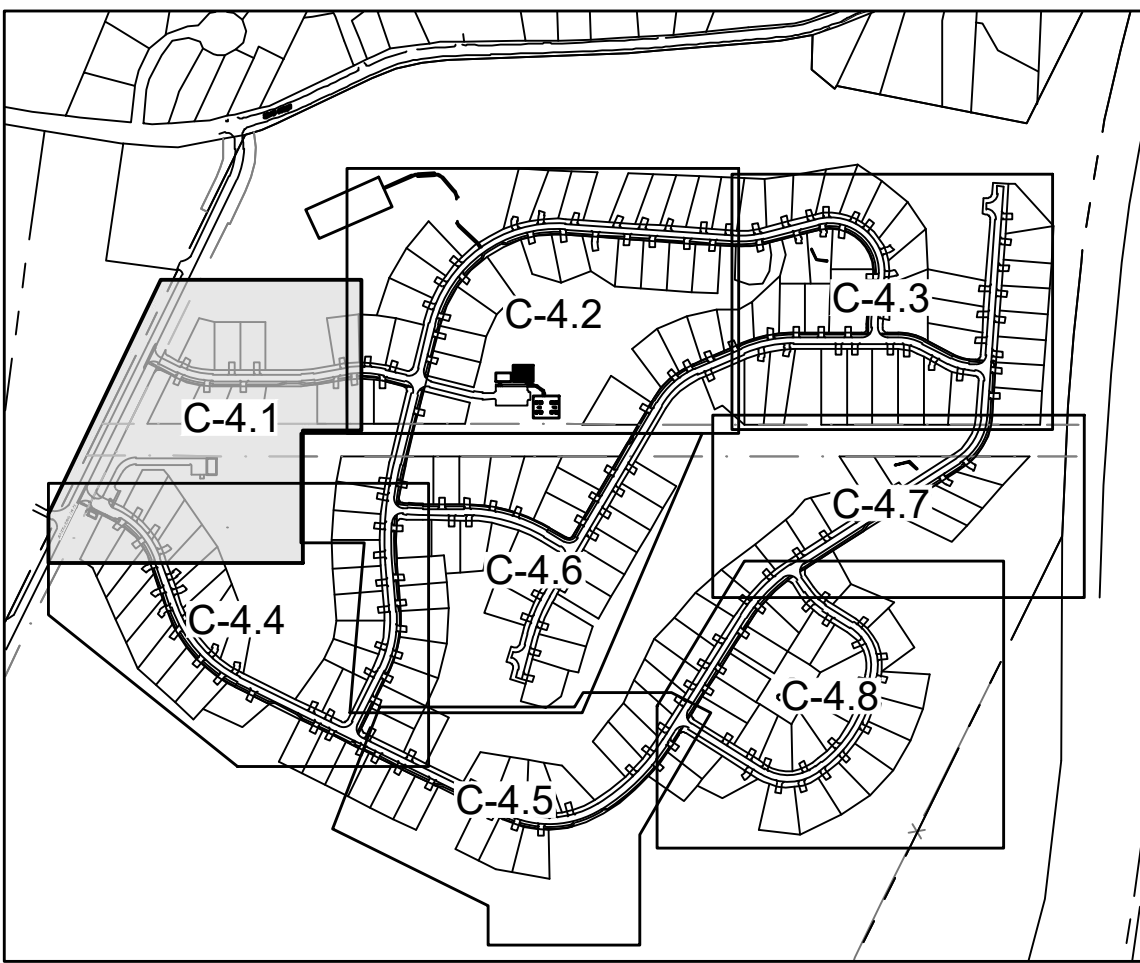
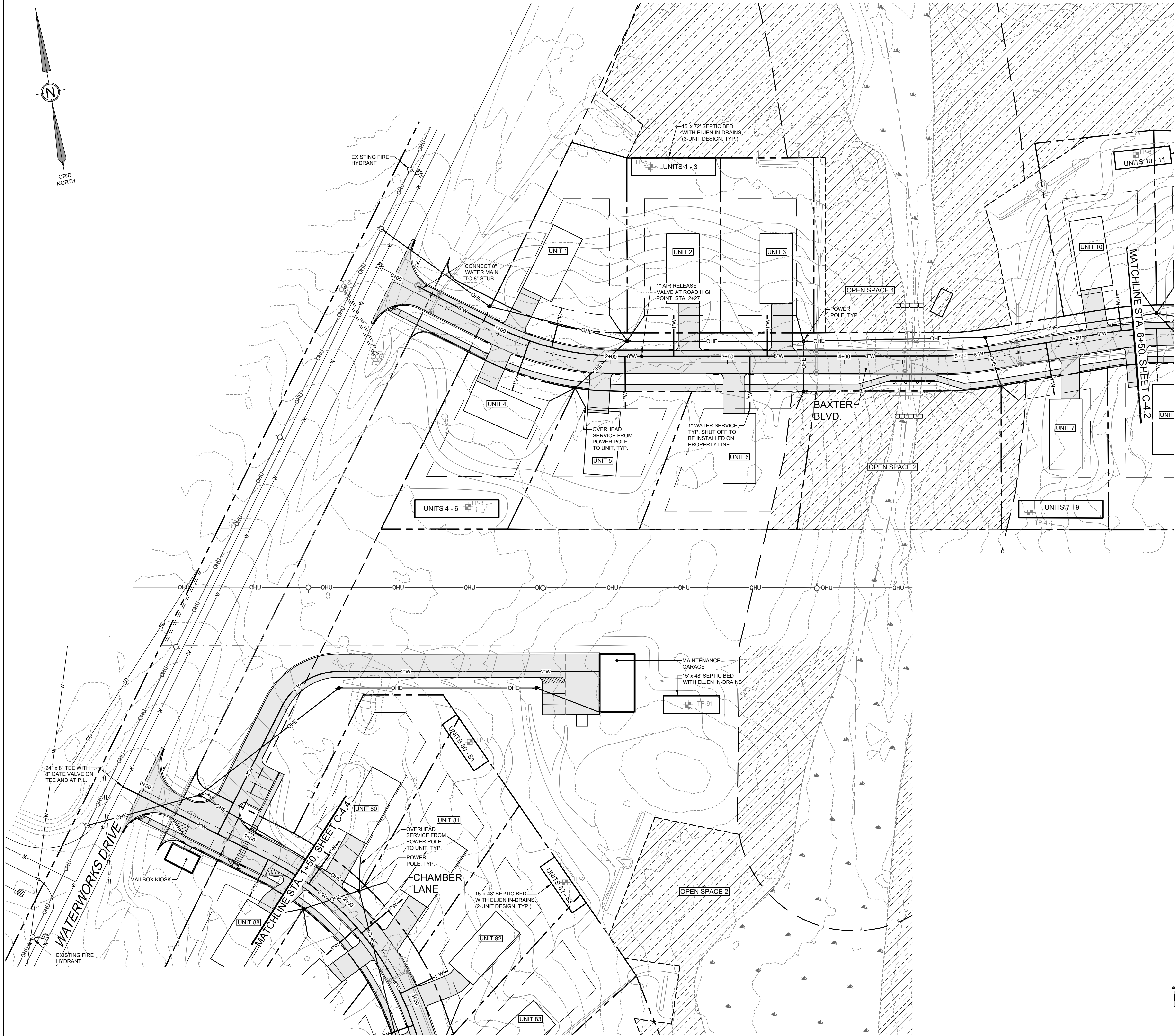
702 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'

DESIGNED:	JDA
JOB NO:	21-13

C-3.9

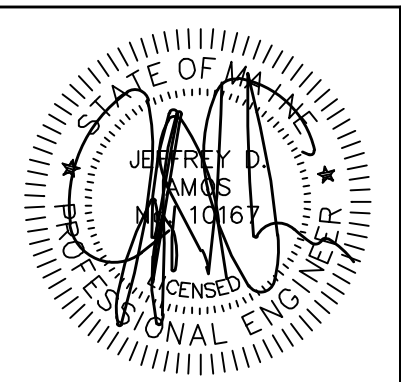
C:\Users\MARKLO~1\AppData\Local\Temp\AcPublish_16928121-13 GD.dwg



SITE KEY
SCALE: 1"=600'

WATER MAIN CONSTRUCTION NOTES:

- 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
- MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS.
INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
- INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
- CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
- 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
- TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

JDA
JDA
JDA
APPD
BY

REVISIONS

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

DATE

NO

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyndesign.com



PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

SHEET TITLE: UTILITY PLAN - 1

CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

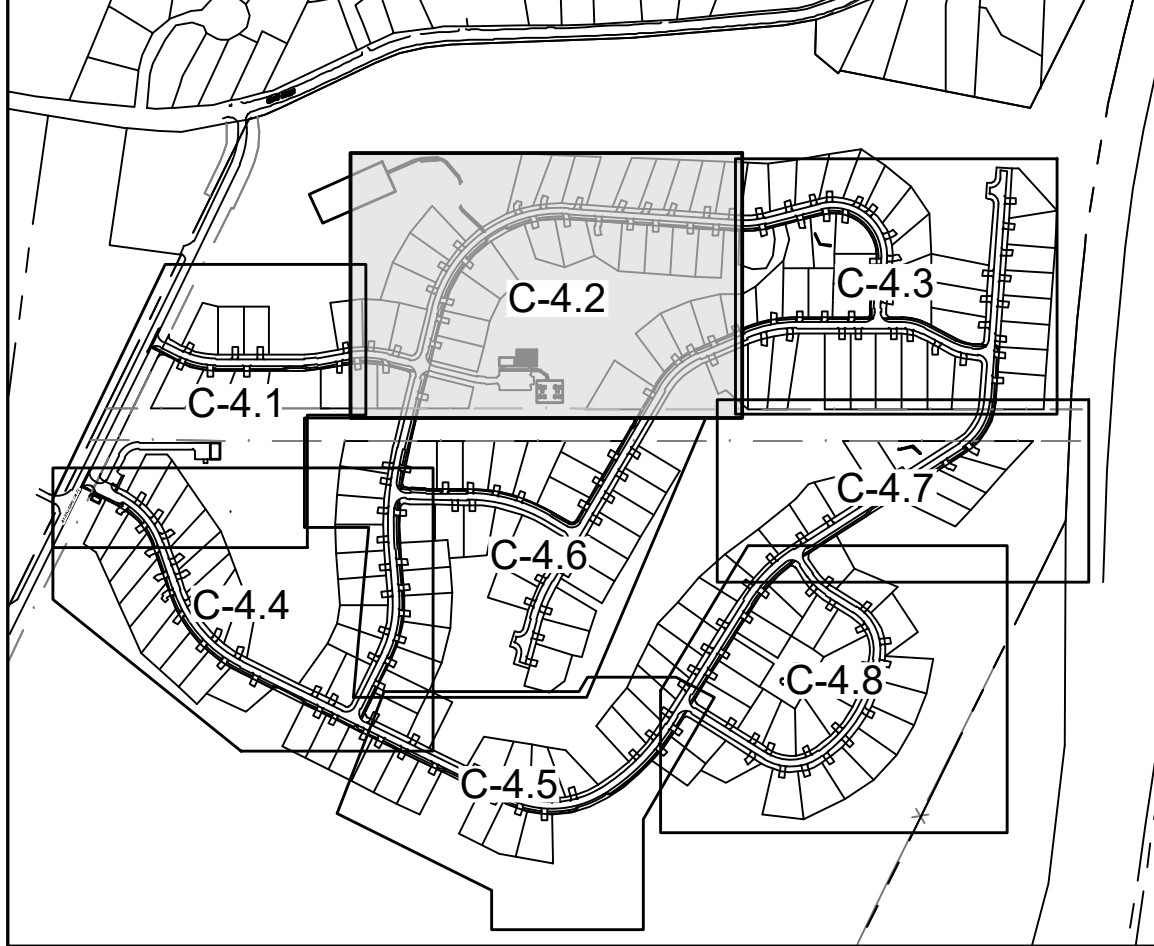
DATE: 02-09-2022

SCALE: 1" = 40'

DESIGNED: JDA

JOB NO: 21-13

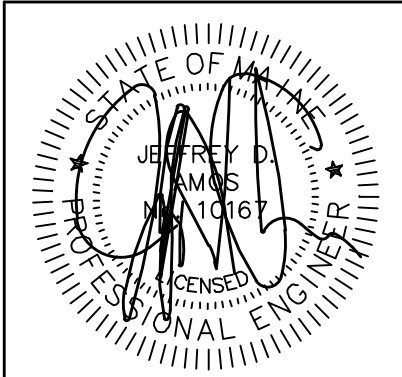
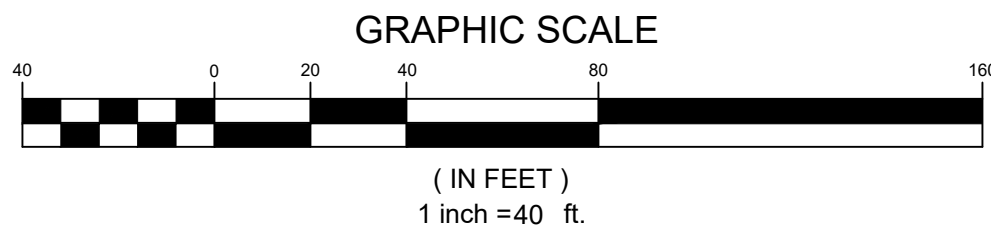
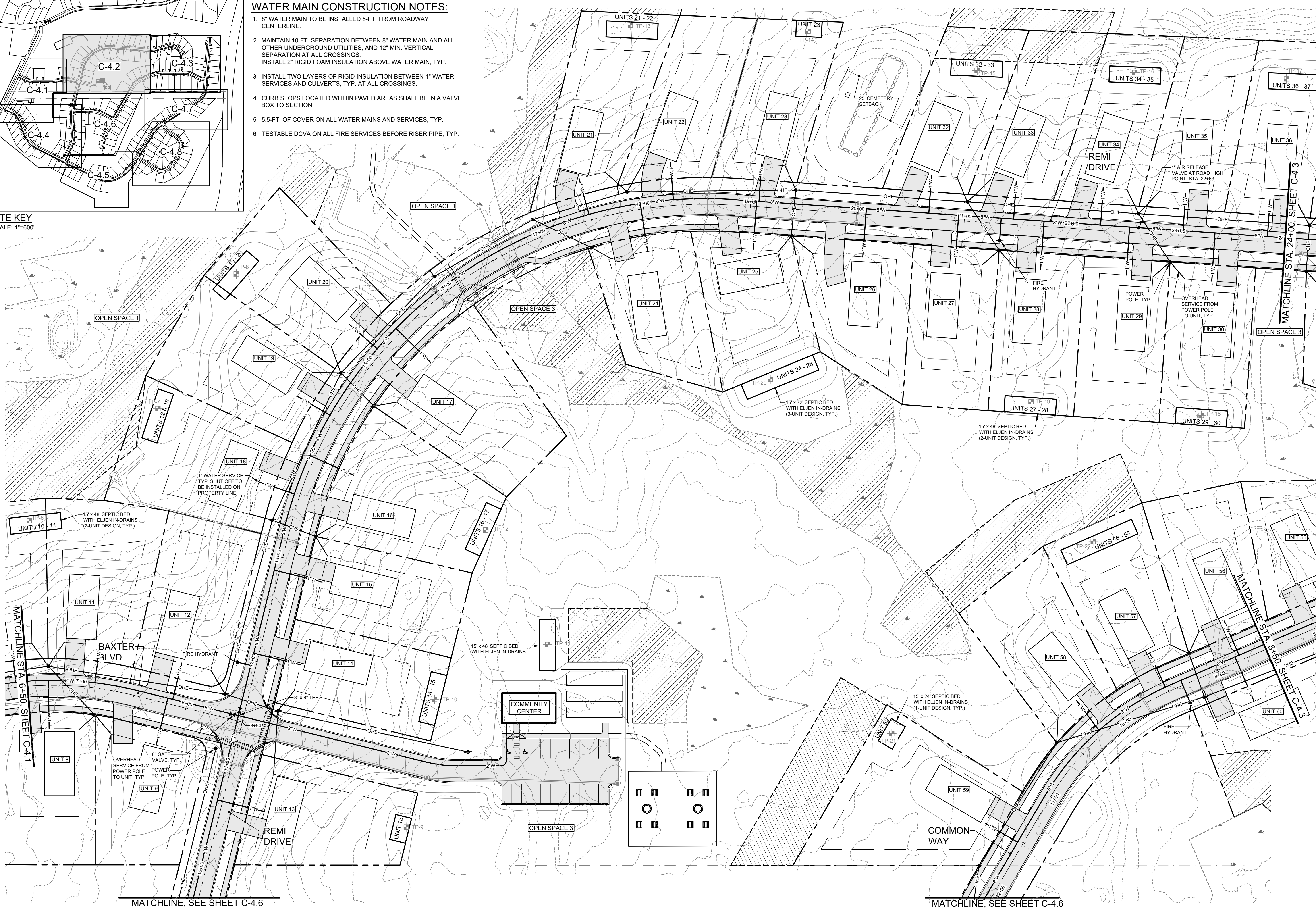
SHEET



SITE KEY
SCALE: 1"=600'

WATER MAIN CONSTRUCTION NOTES:

- 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
- MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS.
INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
- INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
- CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
- 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
- TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

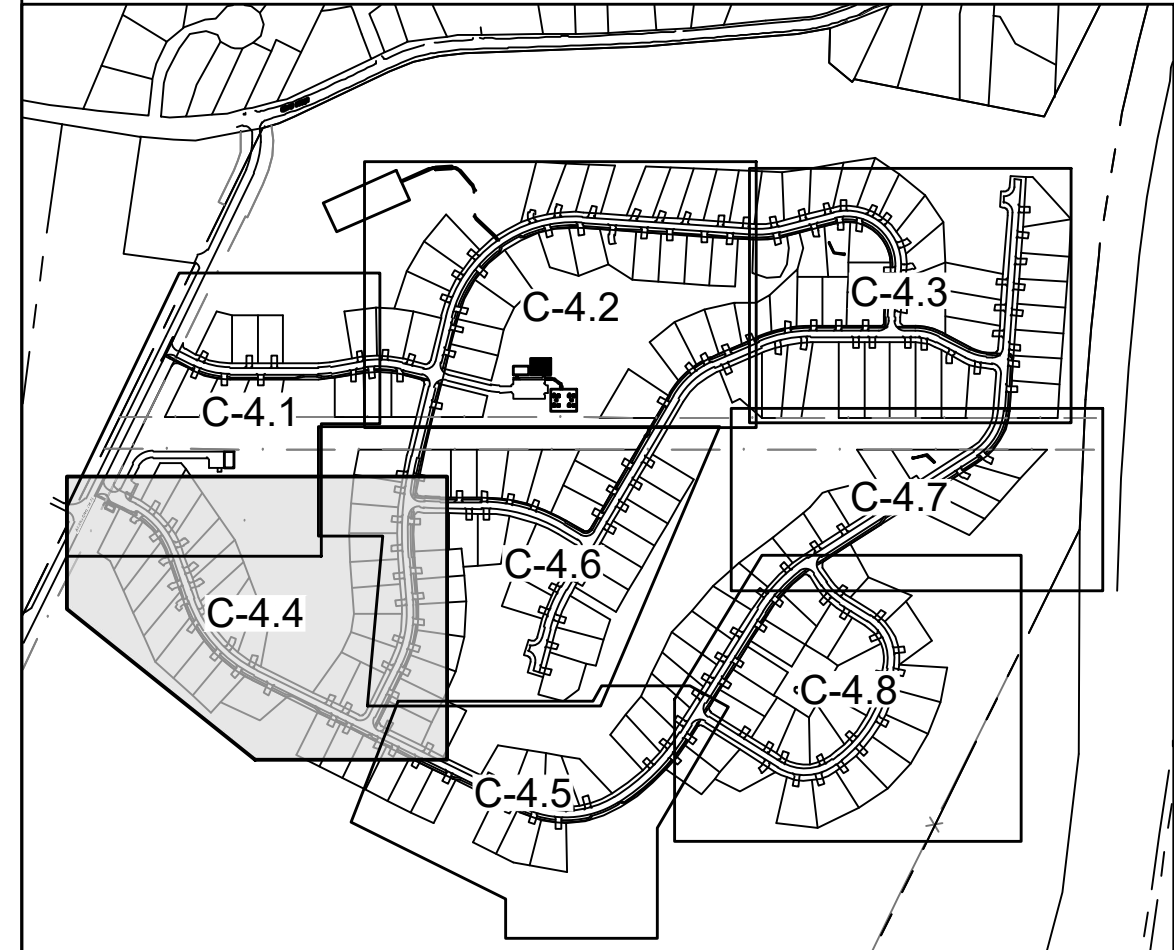
NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:	HIDDEN HILLS HOUSING PARK
CLIENT:	SOUTH STREET VILLAGE, LLC
SHEET TITLE:	UTILITY PLAN - 2
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO.:	21-13
SHEET	C-4.2

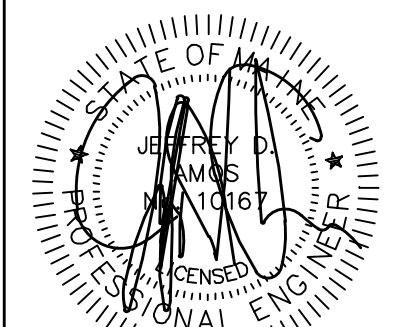
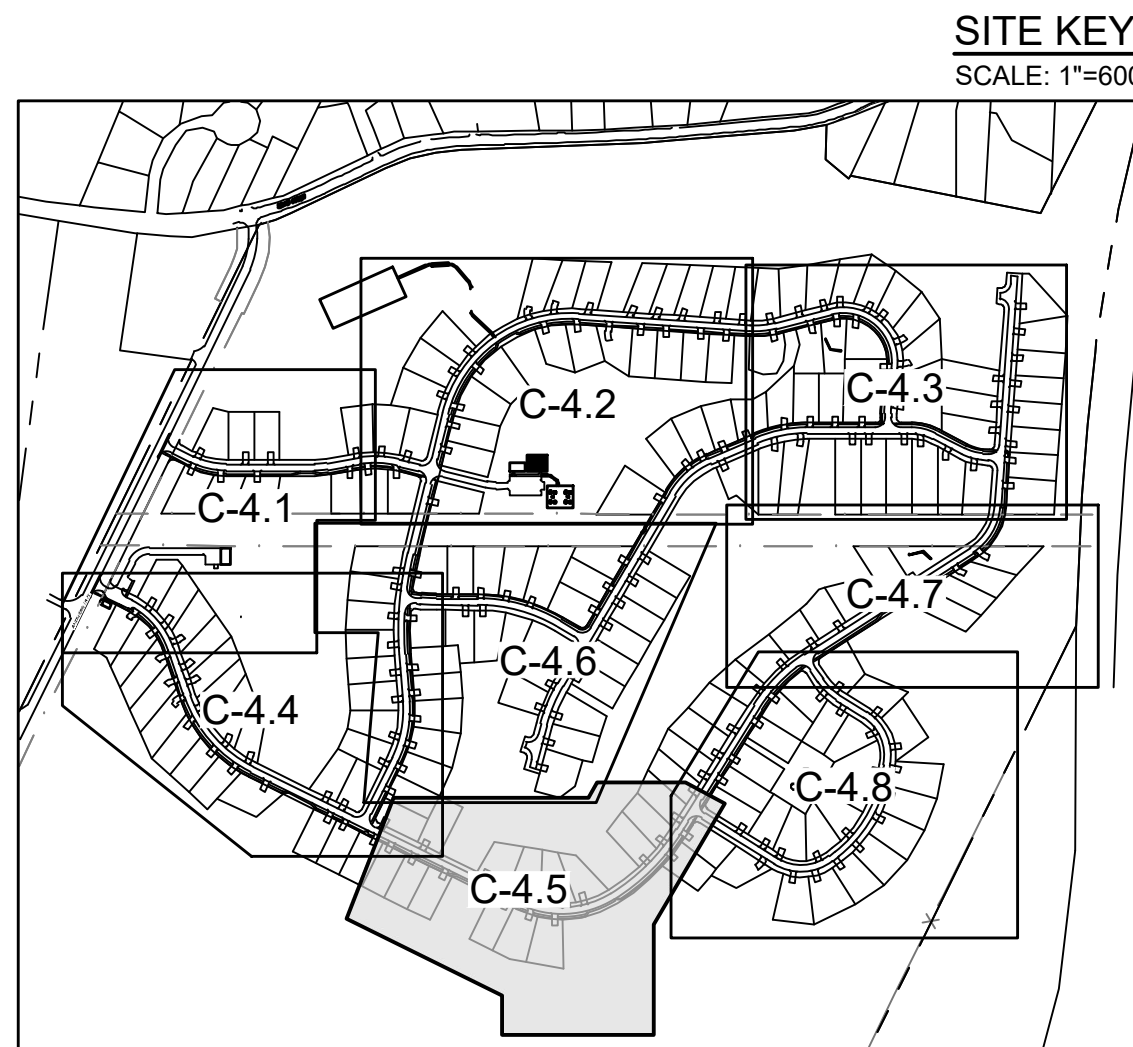
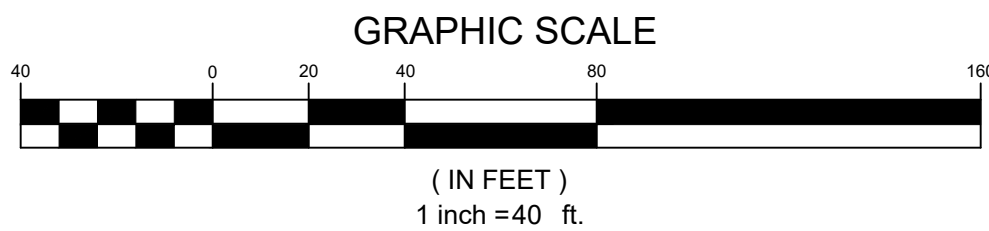


		DATE: 11-16-2022 P.E.: JEFFREY D. AMOS, PE 10167	
PROJECT:		JDA	
SHEET TITLE:		JDA	
DATE:		JDA	
SCALE:		JDA	
DESIGNED:		BY	
JOB NO:		BY	
SHEET		BY	
PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDEFORD, MAINE SHEET TITLE: UTILITY PLAN - 4		565 CONGRESS STREET SUITE 201 PORTLAND, ME 04102 41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04280 OFFICE: (207) 926-5111 FAX: (207) 221-1317 www.terradyndesign.com	
		TERRADYN CONSULTANTS, LLC	
PERMIT DRAWING NOT FOR CONSTRUCTION		Civil Engineering Land Planning Stormwater Design Environmental Permitting	
CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106		DATE: 02-09-2022 SCALE: 1" = 40' DESIGNED: JDA JOB NO: 21-13	
DATE: 02-09-2022 SCALE: 1" = 40' DESIGNED: JDA JOB NO: 21-13		C-4.4	



WATER MAIN CONSTRUCTION NOTES:

- 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
- MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
- INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
- CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
- 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
- TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260



Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

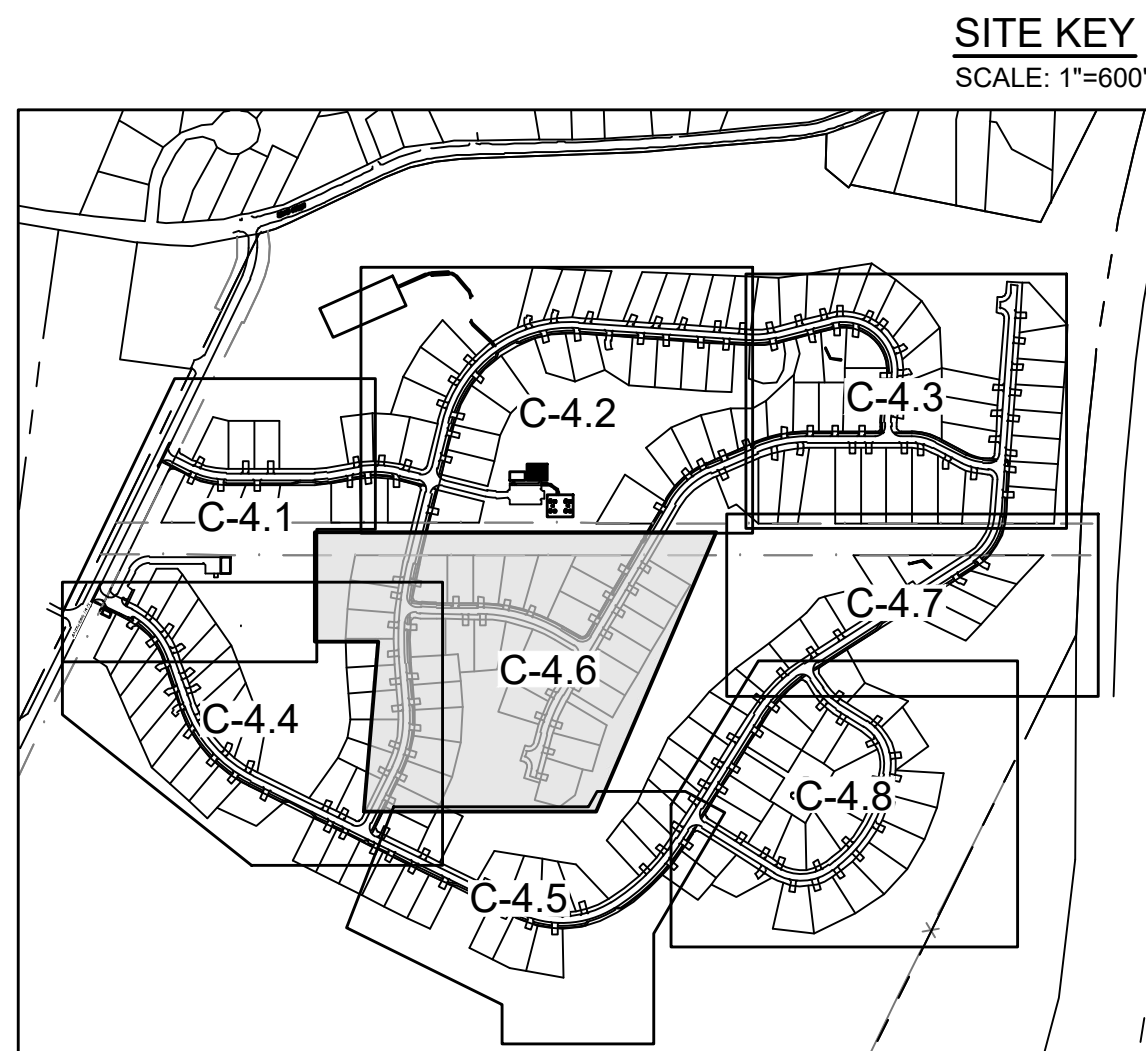
PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE

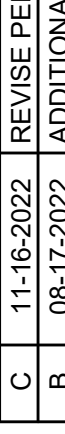
SHEET TITLE: UTILITY PLAN - 5

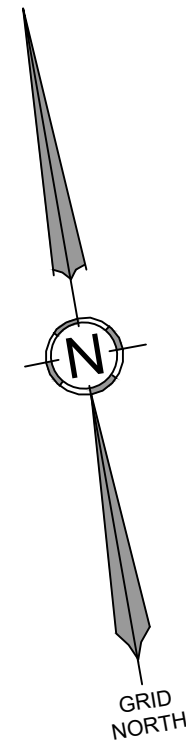
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13

SHEET C-4.5

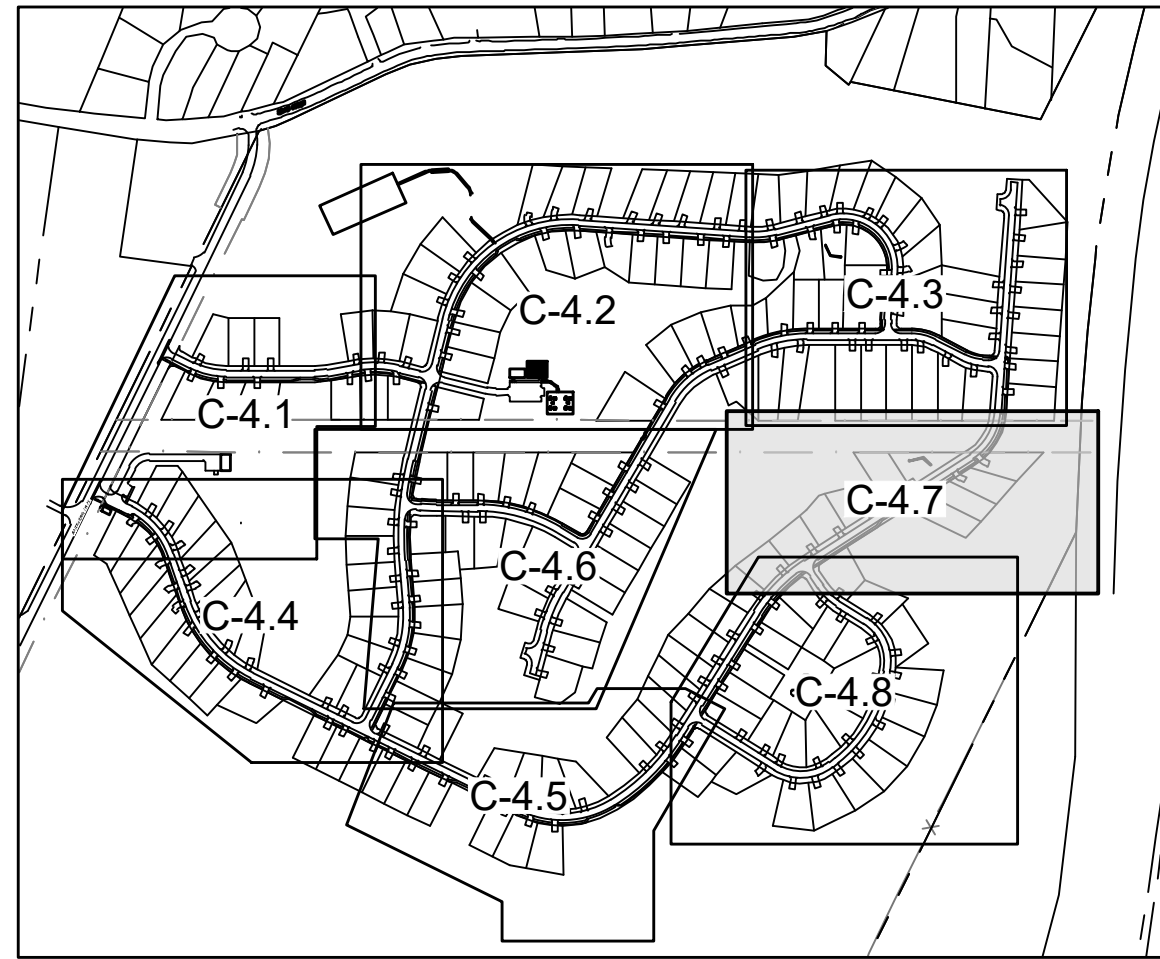


					
DATE:		11-16-2022			
P.E.: JEFFREY D. AMOS, PE 10167					
			JDA		
			JDA		
			JDA		
			JDA		
					BY
			C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
			B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
			A	04-13-2022	PRELIMINARY SUBMISSION
			No.	DATE	REVISIONS
					APPD
PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE		565 CONGRESS STREET SUITE 201 PORTLAND, ME 04102			
SHEET TITLE: UTILITY PLAN - 6		41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04260			
CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106		OFFICE: (207) 926-5111 FAX: (207) 221-1317 www.terradynconsultants.com			
 TERRADYN CONSULTANTS, LLC		Civil Engineering Land Planning Stormwater Design Environmental Permitting			
PERMIT DRAWING NOT FOR CONSTRUCTION					
C-4.6					

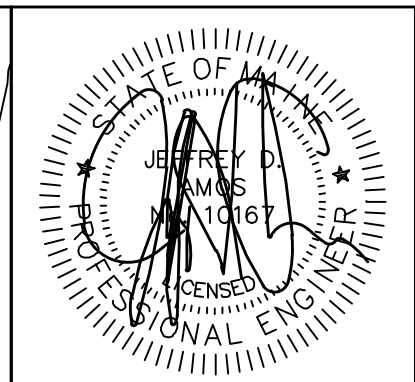
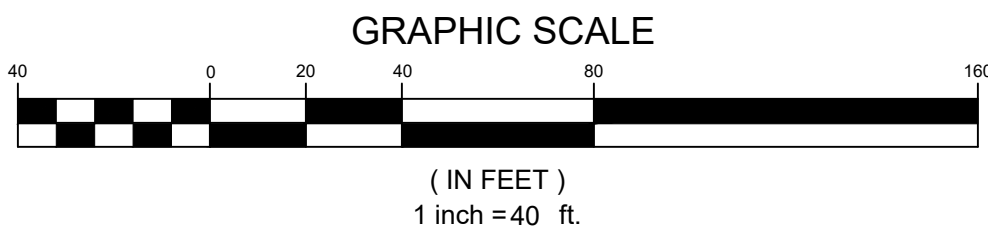
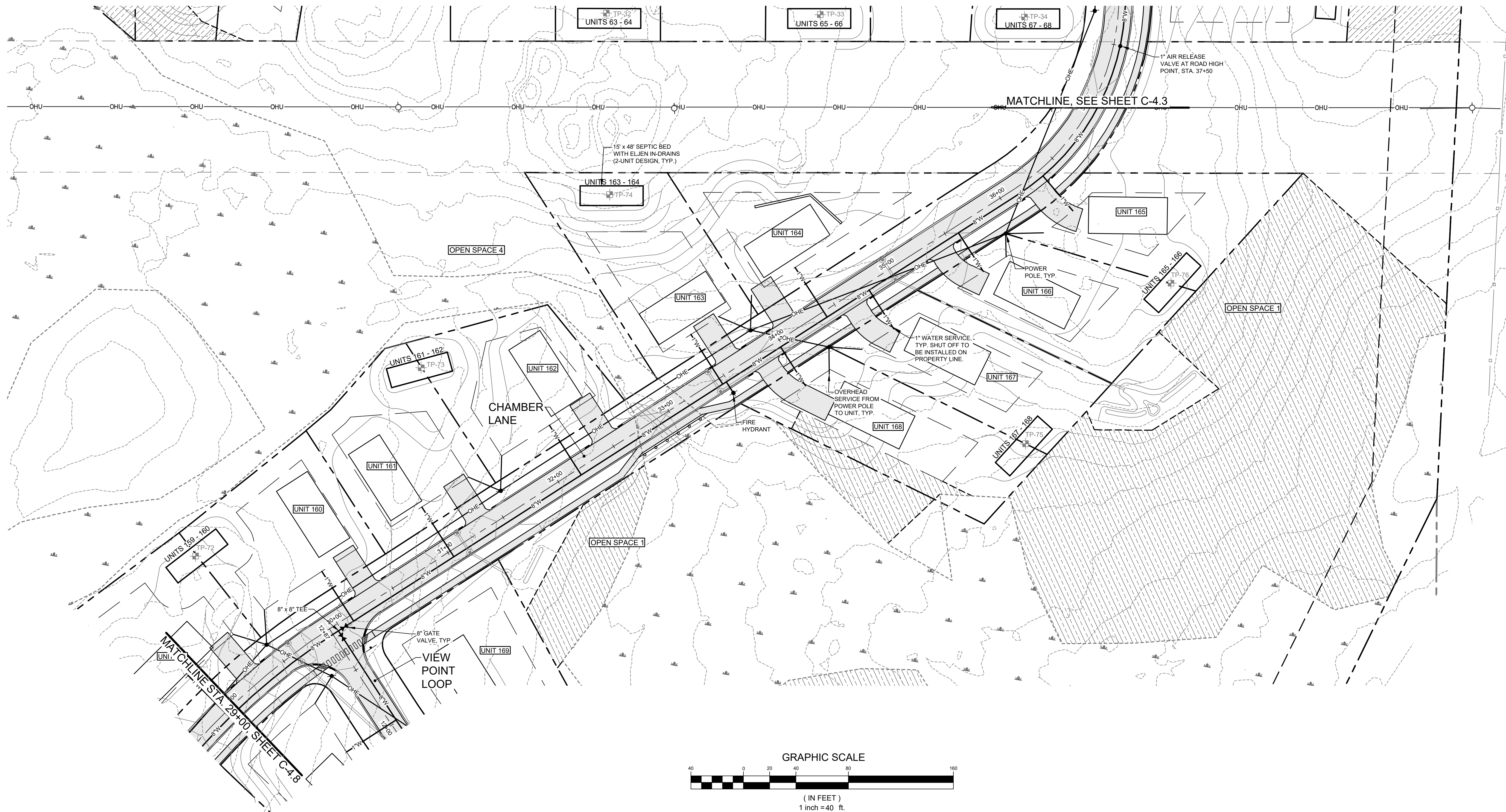


WATER MAIN CONSTRUCTION NOTES:

1. 8" WATER MAIN TO BE INSTALLED 5-FT. FROM ROADWAY CENTERLINE.
2. MAINTAIN 10-FT. SEPARATION BETWEEN 8" WATER MAIN AND ALL OTHER UNDERGROUND UTILITIES, AND 12" MIN. VERTICAL SEPARATION AT ALL CROSSINGS. INSTALL 2" RIGID FOAM INSULATION ABOVE WATER MAIN, TYP.
3. INSTALL TWO LAYERS OF RIGID INSULATION BETWEEN 1" WATER SERVICES AND CULVERTS, TYP. AT ALL CROSSINGS.
4. CURB STOPS LOCATED WITHIN PAVED AREAS SHALL BE IN A VALVE BOX TO SECTION.
5. 5.5-FT. OF COVER ON ALL WATER MAINS AND SERVICES, TYP.
6. TESTABLE DCVA ON ALL FIRE SERVICES BEFORE RISER PIPE, TYP.



SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION

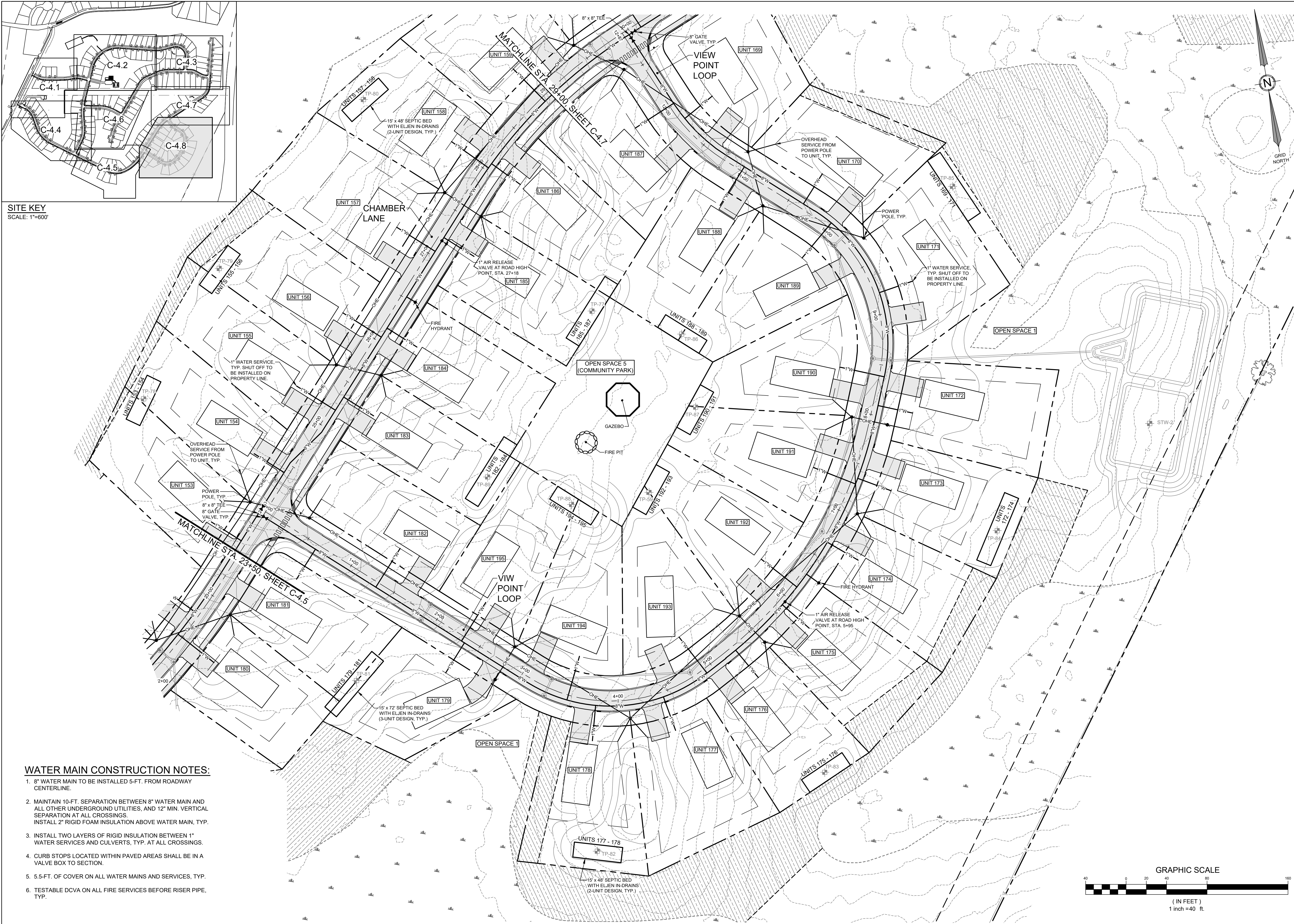
NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

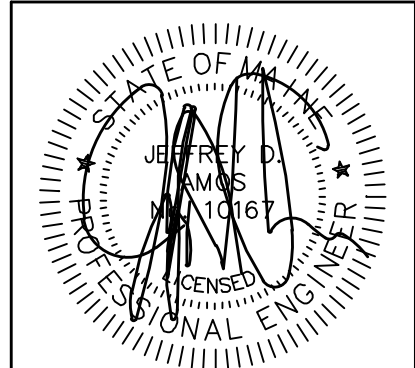


PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:	HIDDEN HILLS HOUSING PARK
SHEET TITLE:	UTILITY PLAN - 7
CLIENT:	SOUTH STREET VILLAGE, LLC
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO.:	21-13
SHEET	C-4.7



SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	04-13-2022	PRELIMINARY SUBMISSION
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

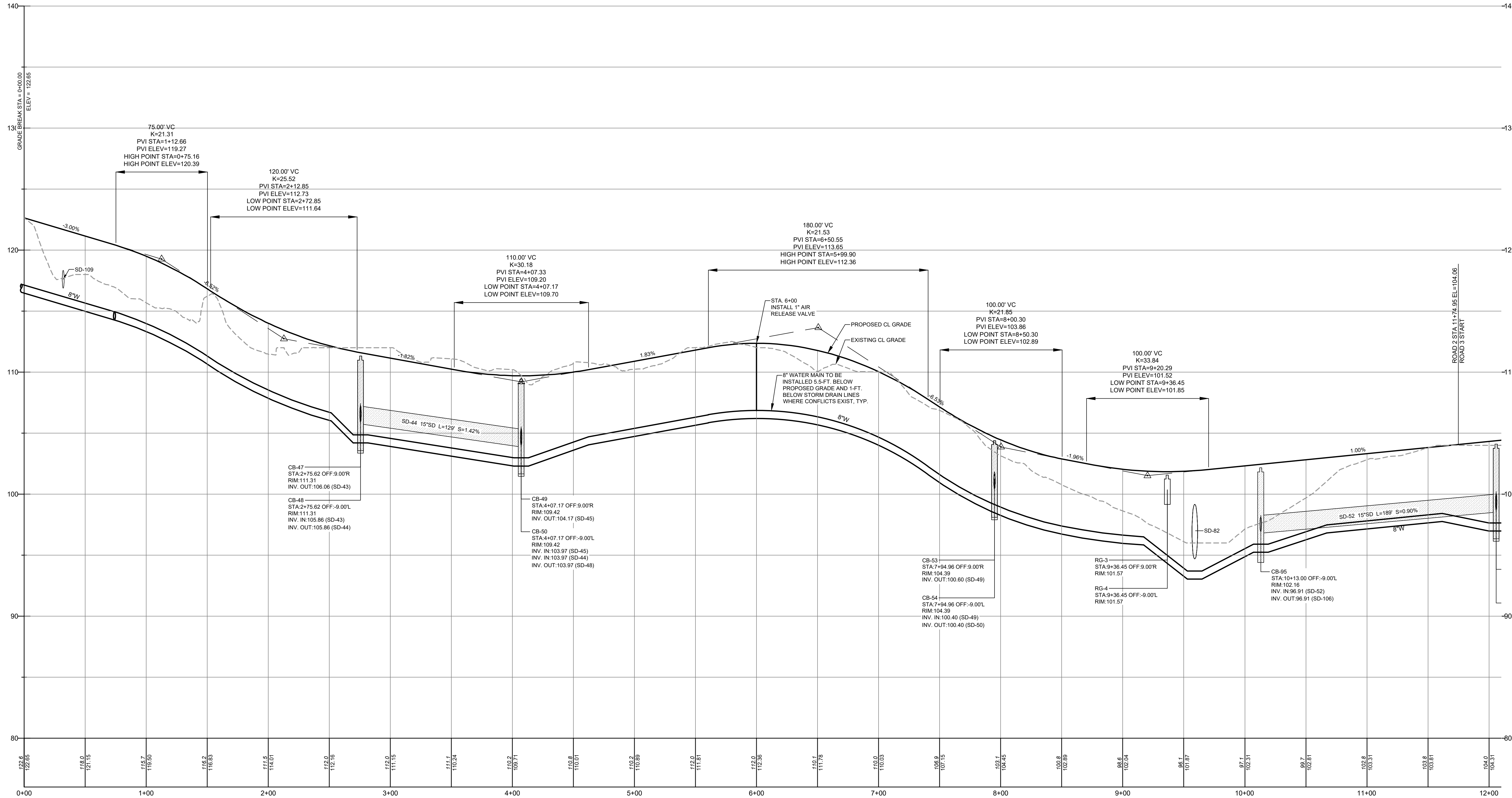
565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102



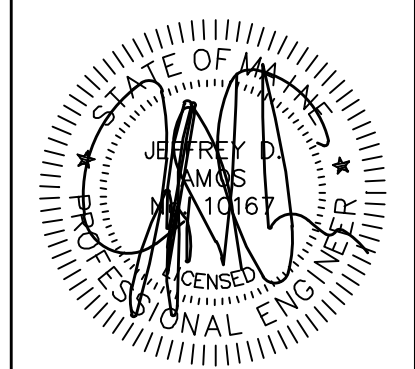
PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT:	HIDDEN HILLS HOUSING PARK
CLIENT:	SOUTH STREET VILLAGE, LLC
SHEET TITLE:	UTILITY PLAN - 8
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO.:	21-13
SHEET	C-4.8

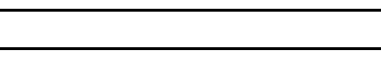
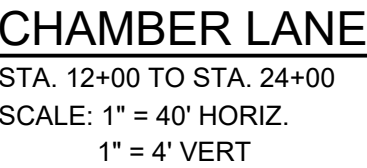
C:\Users\MARRCO-1\AppData\Local\Temp\Ac\pachan_260921-13 UTIL.dwg

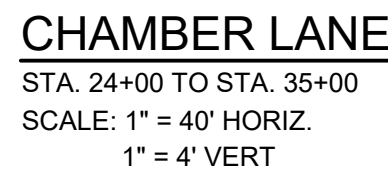


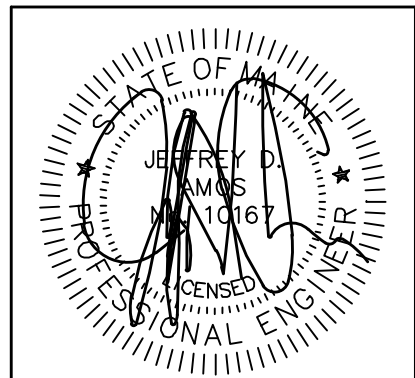
CHAMBER LANE
STA. 0+00 TO STA. 12+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167







	JDA
	JDA
	JDA
	APP'D BY

C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS		
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW		
A	04-13-2022	PRELIMINARY SUBMISSION		
NQ.	DATE	REVISIONS		

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting



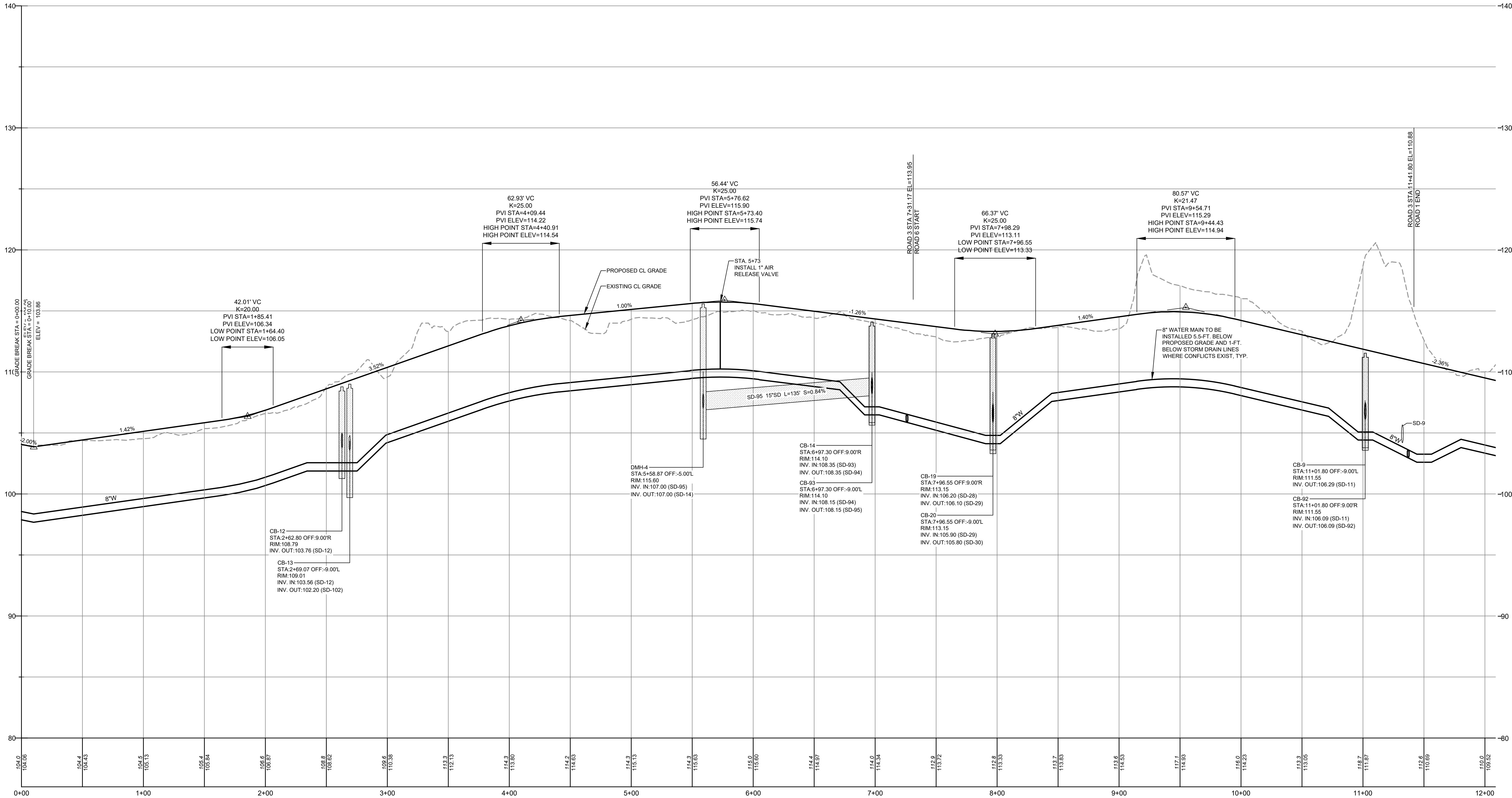
PERMIT DRAWING
NOT FOR CONSTRUCTION

SHEET TITLE:
PROFILE - CHAMBER LANE

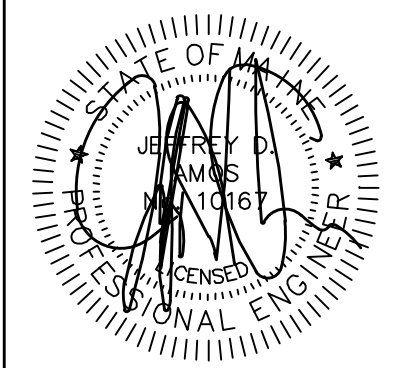
CLIENT:

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	

C-5.5



REMI DRIVE
STA. 0+00 TO STA. 12+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

JDA
JDA
JDA
JDA
BY

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

REVISIONS

NO.

DATE

NO.

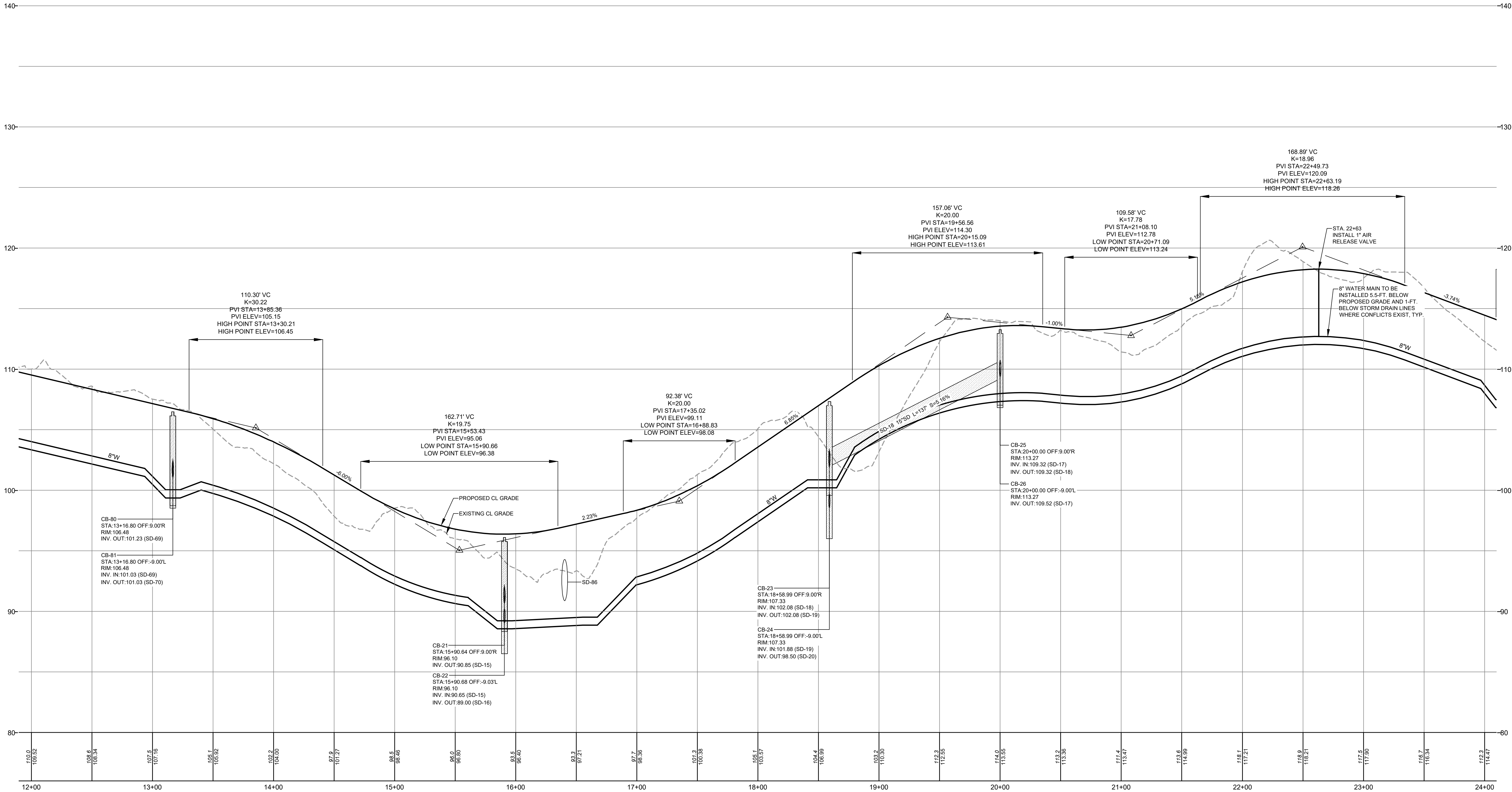
REVISIONS

NO.

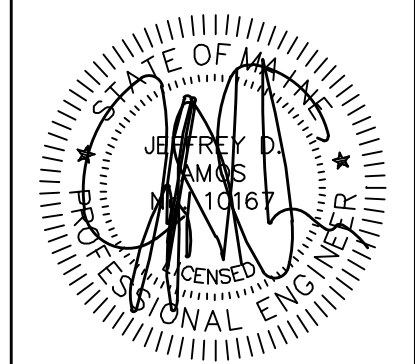
DATE

NO.

REVISIONS

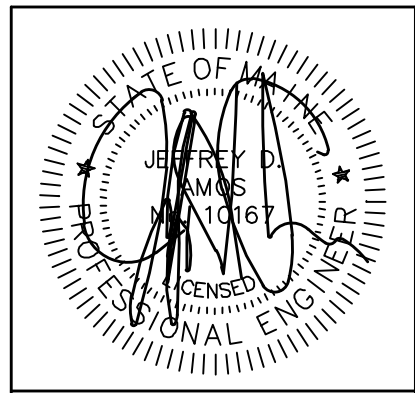
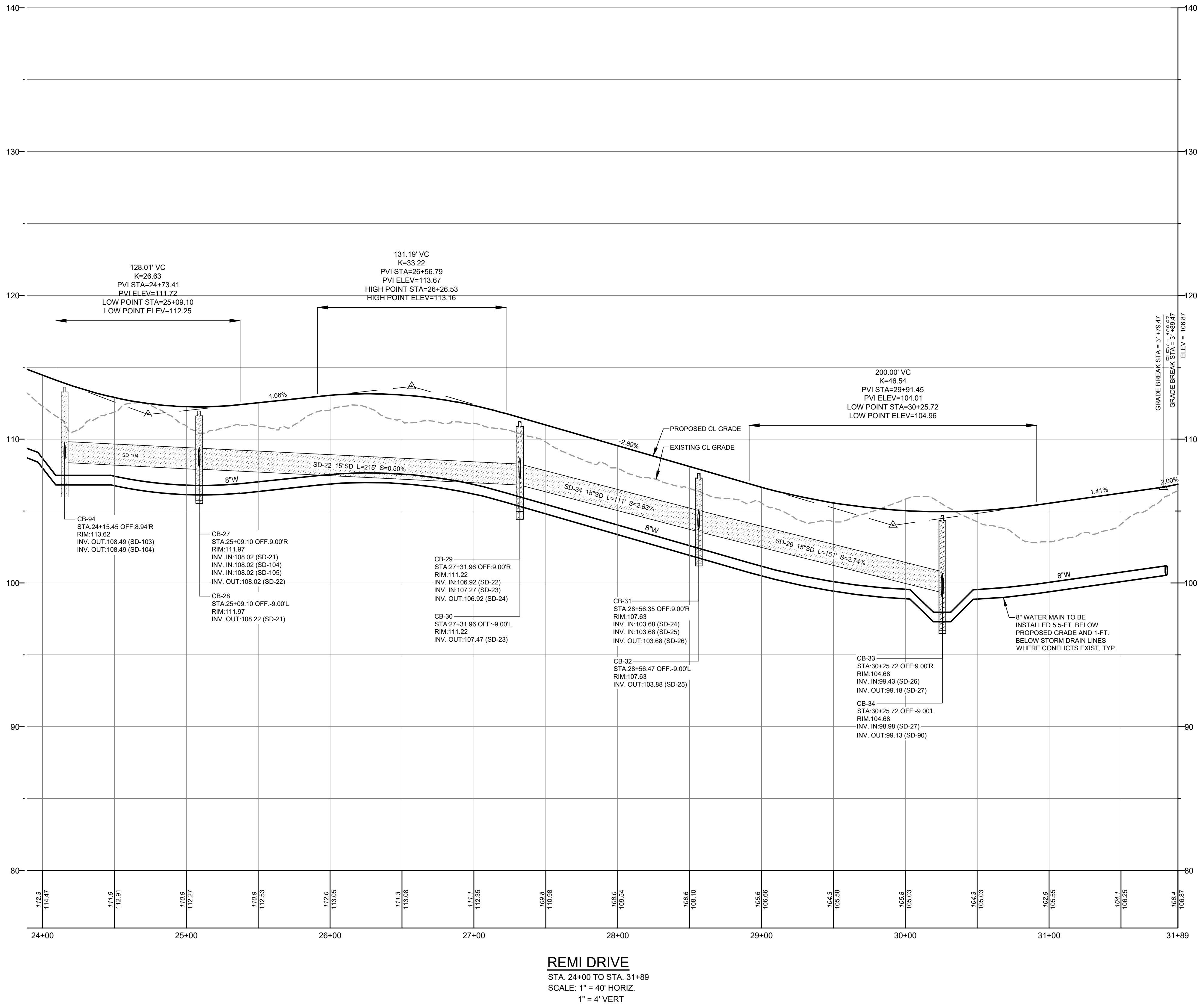


REMI DRIVE
STA. 12+00 TO STA. 24+00
SCALE: 1" = 40' HORIZ.
1" = 4' VERT



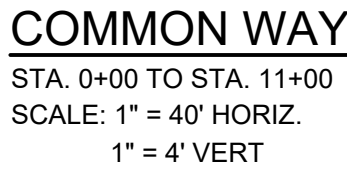
DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

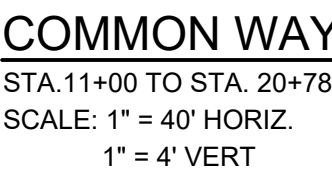
NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		
195		
196		
197		
198		
199		
200		
201		
202		
203		
204		
205		
206		
207		
208		
209		
210		
211		
212		
213		
214		
215		
216		
217		
218		
219		
220		
221		
222		
223		
224		
225		
226		
227		
228		
229		
230		
231		
232		
233		
234		
235		
236		
237		
238		
239		
240		
241		
242		
243		
244		
245		
246		
247		
248		
249		
250		
251		
252		
253		
254		
255		
256		
257		
258		
259		
260		
261		
262		
263		
264		
265		
266		
267		
268		
269		
270		
271		
272		
273		
274		
275		
276		
277		
278		
279		
280		
281		
282		
283		
284		
285		
286		
287		
288		
289		
290		
291		
292		
293		
294		
295		
296		
297		
298		
299		
300		
301		
302		
303		
304		
305		
306		
307		
308		
309		
310		
311		
312		
313		
314		
315		
316		
317		
318		
319		
320		
321		
322		
323		
324		
325		
326		
327		
328		
329		
330		
331		
332		
333		
334		
335		
336		
337		
338		
339		
340		
341		
342		
343		
344		
345		
346		
347		
348		
349		
350		
351		
352		
353		
354		
355		
356		
357		
358		
359		
360		
361		
362		
363		
364		
365		
366		
367		
368		
369		
370		
371		
372		
373		
374		
375		
376		
377		
378		
379		
380		
381		
382		
383		
384		
385		
386		
387		
388		
389		
390		
391		
392		
393		
394		
395		
396		
397		
398		
399		
400		
401		
402		
403		
404		
405		
406		
407		
408		
409		
410		
411		
412		
413		
414		
415		
416		
417		
418		
419		
420		
421		
422		
423		
424		
425		
426		
427		
428		
429		
430		
431		
432		
433		
434		
435		
436		
437		
438		
439		
440		
441		
442		
443		
444		
445		
446		
447		
448		
449		
450		
451		
452		
453		
454		
455		
456		
457		
458		
459		
460		
461		
462		
463		
464		
465		
466		
467		
468		
469		
470		
471		
472		
473		
474		
475		
476		
477		
478		
479		
480		
481		
482		
483		
484		
485		
486		
487		
488		
489		
490		
491		
492		
493		
494		
495		
496		
497		
498		
499		
500		
501		
502		
503		
504		
505		
506		
507		
508		
509		
510		
511		
512		
513		
514		
515		
516		
517		
518		
519		
520		
521		
522		
523		
524		
525		
526		
527		
528		
529		
530		
531		
532		
533		
534		
535		
536		



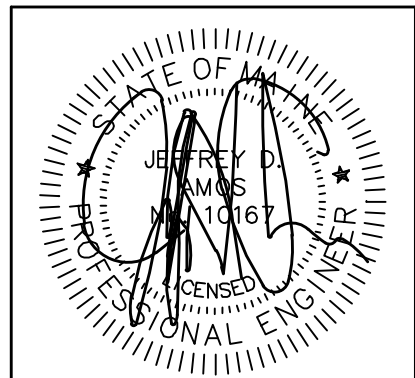
DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
1	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS
2	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
3	04-13-2022	PRELIMINARY SUBMISSION
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		
195		
196		
197		
198		
199		
200		
201		
202		
203		
204		
205		
206		
207		
208		
209		
210		
211		
212		
213		
214		
215		
216		
217		
218		
219		
220		
221		
222		
223		
224		
225		
226		
227		
228		
229		
230		
231		
232		
233		
234		
235		
236		
237		
238		
239		
240		
241		
242		
243		
244		
245		
246		
247		
248		
249		
250		
251		
252		
253		
254		
255		
256		
257		
258		
259		
260		
261		
262		
263		
264		
265		
266		
267		
268		
269		
270		
271		
272		
273		
274		
275		
276		
277		
278		
279		
280		
281		
282		
283		
284		
285		
286		
287		
288		
289		
290		
291		
292		
293		
294		
295		
296		
297		
298		
299		
300		
301		
302		
303		
304		
305		
306		
307		
308		
309		
310		
311		
312		
313		
314		
315		
316		
317		
318		
319		
320		
321		
322		
323		
324		
325		
326		
327		
328		
329		
330		
331		
332		
333		
334		
335		
336		
337		
338		
339		
340		
341		
342		
343		
344		
345		
346		
347		
348		
349		
350		
351		
352		
353		
354		
355		
356		
357		
358		
359		
360		
361		
362		
363		
364		
365		
366		
367		
368		
369		
370		
371		
372		
373		
374		
375		
376		
377		
378		
379		
380		
381		
382		
383		
384		
385		
386		
387		
388		
389		
390		
391		
392		
393		
394		
395		
396		
397		
398		
399		
400		
401		
402		
403		
404		
405		
406		
407		
408		
409		
410		
411		
412		
413		
414		
415		
416		
417		
418		
419		
420		
421		
422		
423		
424		
425		
426		
427		
428		
429		
430		
431		
432		
433		
434		
435		
436		
437		
438		
439		
440		
441		
442		
443		
444		
445		
446		
447		
448		
449		
450		
451		
452		
453		
454		
455		
456		
457		
458		
459		
460		
461		
462		
463		
464		
465		
466		
467		
468		
469		
470		
471		
472		
473		
474		
475		
476		
477		
478		
479		
480		
481		
482		
483		
484		
485		
486		
487		
488		
489		
490		
491		
492		
493		
494		
495		
496		
497		
498		
499		
500		
501		
502		
503		
504		
505		
506		
507		
508		
509		
510		
511		
512		
513		
514		
515		
516		
517		
518		
519		
520		
521		
522		
523		
524		
525		
526		
527		
528		
529		
530		
531		
532		
533		
534		
535		
536		
537		
538		
539		
540		
541		
542		
543		
544		
545		
546		
547		
548		
549		
550		
551		
552		
553		
554		
555		
556		
557		
558		
559		
560		
561		
562		
563		
564		
565		
566		
567		
568		
569		
570		
571		
572		
573		
574		
575		
576		
577		
578		
579		
580		
581		
582		
583		
584		
585		
586		
587		
588		
589		
590		
591		
592		
593		
594		
595		
596		
597		
598		
599		</





SHEET C-5.10



	JDA
	JDA
	JDA
	APP'D BY

C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS			
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW			
A	04-13-2022	PRELIMINARY SUBMISSION			
NQ.	DATE	REVISIONS			



TERRADYN
CONSULTANTS, LLC

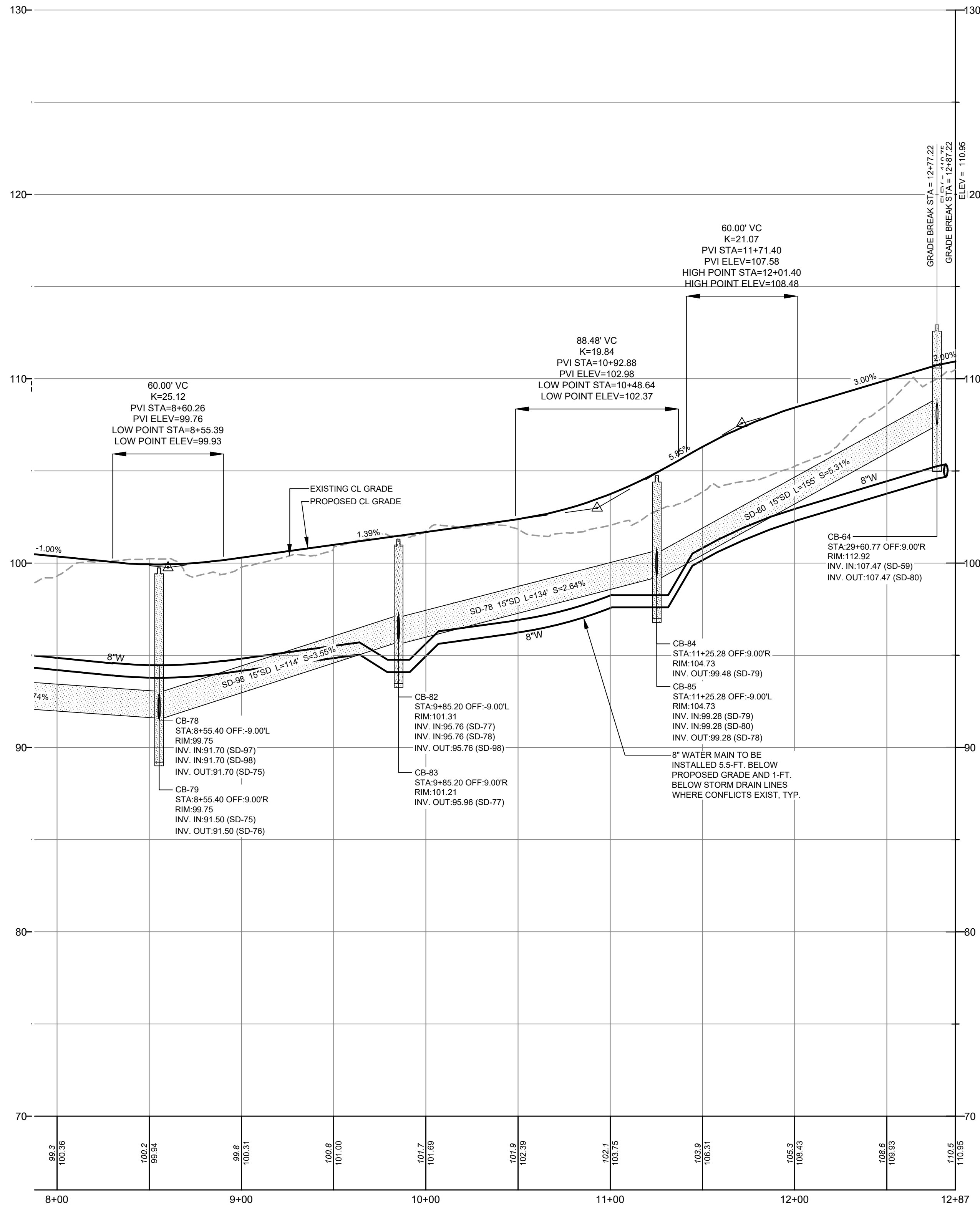
Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

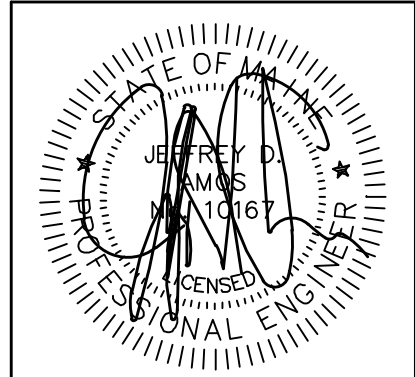
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	0511

C-5.11



VIEW POINT LOOP
STA. 8+00 TO STA. 12+87
SCALE: 1" = 40' HORIZ.
1" = 4' VERT



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

JDA
JDA
JDA
BY

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

REVISIONS

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
41 CAMPUS DRIVE
SUITE 301
NEW GLoucester, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: PROFILE - VIEW POINT LOOP
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106
DATE: 02-09-2022
SCALE: 1" = 40'
DESIGNED: JDA
JOB NO: 21-13
SHEET C-5.12

C:\ODI\terrady\Consultants\Project\Folders - Documents\2021 Jobs\21-13 South Street MFP\CAD\Permitting\01-13 P.dwg

STORMWATER MANAGEMENT SYSTEM, INSPECTION, MAINTENANCE & HOUSEKEEPING - CONSTRUCTION PHASE

1. **INSPECTION:** FOR THE DURATION OF CONSTRUCTION ACTIVITY, IT IS THE SITE CONTRACTORS' RESPONSIBILITY TO COMPLY WITH THE INSPECTION AND MAINTENANCE PROCEDURES OUTLINED IN THIS SECTION. THESE RESPONSIBILITIES INCLUDE INSPECTING DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE SOILS ENTER OR EXIT THE SITE. THESE AREAS SHALL BE INSPECTED AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER A STORM EVENT, AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN ANY APPLICABLE PERMITS, SHALL CONDUCT THE INSPECTIONS.
2. **MAINTENANCE:** ALL MEASURES SHALL BE MAINTAINED IN AN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE MAINTAINED OR MODIFIED, ADDITIONAL BMPs ARE NECESSARY, OR OTHER CORRECTIVE ACTION IS NEEDED, IMPLEMENTATION MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL).
3. **DOCUMENTATION:** A LOG SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN MUST BE MAINTAINED ON-SITE. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND A BRIEF DESCRIPTION OF THE INSPECTION AND THE MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE SITE. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATIONS 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 THE APPROPRIATE REGULATORY AGENCY UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
4. **SPECIFIC INSPECTION AND MAINTENANCE TASKS:** THE FOLLOWING IS A LIST OF EROSION CONTROL AND STORMWATER MANAGEMENT MEASURES AND THE SPECIFIC INSPECTION AND MAINTENANCE TASKS TO BE PERFORMED DURING CONSTRUCTION.

- A. SEDIMENT BARRIERS
- HAY BALE BARRIERS, SILT FENCES, AND FILTER BERMS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
 - IF THE FABRIC ON A SILT FENCE OR FILTER BARRIER SHOULD DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE BARRIER IS STILL NECESSARY, IT SHALL BE REPLACED.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED BEFORE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
 - FILTER BERMS SHALL BE RESHAPED AS NEEDED.
 - ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, AND SEEDED.

- B. RIPRAP MATERIALS:
- ONCE A RIPRAP INSTALLATION HAS BEEN COMPLETED, IT SHOULD REQUIRE VERY LITTLE MAINTENANCE. IT SHALL, HOWEVER, BE INSPECTED PERIODICALLY TO DETERMINE IF HIGH FLOW EVENTS HAVE CAUSED SCOUR BENEATH THE RIPRAP OR DISLODGED ANY OF THE STONE.
 - ANNUALLY INSPECT RIPRAP AND REMOVE WOODY VEGETATION WHEN DISCOVERED.

- C. EROSION CONTROL BLANKETS
- INSPECT THESE MULCH AREAS SEMI-ANNUALLY AND AFTER SIGNIFICANT RAINFALL EVENTS FOR SLUMPING, SLIDING, SEEPAGE, AND SCOUR. PAY CLOSE ATTENTION TO UNREINFORCED AREAS ADJACENT TO THE EROSION CONTROL BLANKETS, WHICH MAY EXPERIENCE ACCELERATED EROSION.
 - REVIEW ALL APPLICABLE INSPECTION AND MAINTENANCE PROCEDURES RECOMMENDED BY THE SPECIFIC BLANKET MANUFACTURER. THESE TASKS SHALL BE INCLUDED IN ADDITION TO THIS PLAN.

- D. TEMPORARY STORM DRAIN INLET PROTECTION:
- THE INLET PROTECTION STRUCTURE SHALL BE INSPECTED BEFORE EACH RAIN EVENT AND REPAIRED AS NECESSARY.
 - SEDIMENT SHALL BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO HALF OF THE DESIGN DEPTH OF THE TRAP.
 - STRUCTURES SHALL BE REMOVED UPON PERMANENT STABILIZATION OF THE TRIBUTARY AREA.
 - UPON REMOVAL OF THE STRUCTURE, ALL ACCUMULATED SEDIMENTS DOWNSTREAM OF THE STRUCTURE SHALL BE CLEARED FROM THE STORM DRAIN SYSTEM.
 - THE PERMANENT STORM DRAINAGE SYSTEM SHALL BE FLUSHED AND CLEANED ONCE THE SITE IS STABILIZED AND PRIOR TO DEMOBILIZATION FROM THE SITE.

- E. STABILIZED CONSTRUCTION ENTRANCES:
- THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY.
 - WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED.
 - AREAS THAT HAVE RECEIVED MUD-TRACKING OR SEDIMENT DEPOSITS SHALL BE SWEEPED OR WASHED. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE (NOT INTO STORM DRAINS, DITCHES, OR WATERWAYS).

- F. TEMPORARY SEED AND MULCH:
- MULCHED AREAS SHOULD BE INSPECTED AFTER RAIN EVENTS TO CHECK FOR RILL EROSION.
 - IF LESS THAN 80% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE APPLIED IN BARE AREAS.
 - IN APPLICATIONS WHERE SEEDING AND MULCH HAVE BEEN APPLIED IN CONJUNCTION WITH EROSION CONTROL BLANKETS, THE BLANKETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR UNDERCUTTING.
 - MULCH SHALL CONTINUE TO BE REAPPLIED UNTIL 95% OF THE SOIL SURFACE HAS ESTABLISHED TEMPORARY VEGETATIVE COVER.

- G. STABILIZED DRAINAGE SWALES:
- CONSTRUCT AND STABILIZE THE ESTABLISHMENT IN ADVANCE OF ANY OTHER CHANNELS OR STRUCTURES DISCHARGING INTO IT. DIVERT ALL FLOW FROM THE WATERWAY DURING THE ESTABLISHMENT OF VEGETATION.
 - SEDIMENT ACCUMULATION IN THE SWALE SHALL BE REMOVED ONCE THE CROSS SECTION OF THE SWALE IS REDUCED BY 25%.
 - THE SWALES SHALL BE INSPECTED AFTER RAINFALL EVENTS. ANY EVIDENCE OF SLOUGHING OF THE SIDE SLOPES OR CHANNEL EROSION SHALL BE REPAIRED AND CORRECTIVE ACTION SHOULD BE TAKEN TO PREVENT REOCCURRENCE OF THE PROBLEM.
 - IN ADDITION TO THE STABILIZED LINING OF THE CHANNEL (I.E. EROSION CONTROL BLANKETS), STONE CHECK DAMS MAY BE NEEDED TO FURTHER REDUCE CHANNEL VELOCITY.

- H. DEWATERING
- THE SITE CONTRACTOR SHALL ESTABLISH AN ON-SITE CONTAINMENT AREA WHICH SHALL INCLUDE SEDIMENT BARRIER TO MITIGATE THE TRANSPORT OF THE SEDIMENT TO THE ENVIRONMENT FROM DEWATERING ACTIVITY.
 - THE CONTAINMENT AREA SHALL BE LOCATED A MINIMUM OF 25 FEET FROM ANY STORM DRAIN STRUCTURE OR CULVERT AND A MINIMUM OF 25 FEET FROM ANY SLOPE GREATER THAN 4:1.
 - THE CONTAINMENT AREA SHALL INCLUDE A DIRT BAG OR SIMILAR SEDIMENT TRAP FOR TREATMENT OF THE COLLECTED WATER.
 - THE CONTAINMENT AREA SHALL BE INSPECTED AFTER EACH USE TO ENSURE THAT NO DOWNGRADIENT EROSION OR SEDIMENTATION OFFSITE IS OCCURRING.

5. **HOUSEKEEPING:** THE FOLLOWING GENERAL PERFORMANCE STANDARDS APPLY TO THE PROPOSED PROJECT.

- A. SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON-SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SIFT, PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

- B. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN "IN PROTECTION AREA." THE "IN PROTECTION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL, DIKES, BERMS, SLUMPS, AND OTHER FORMS OF SECONDARY CONTAMINANT THAT PREVENT DISCHARGE TO GROUNDWATER. MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

- C. FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO INSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

- D. DEBRIS AND OTHER MATERIALS: LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

- E. TRENCH OR FOUNDATION DEWATERING: TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFERDAMS, PONDS, AND OTHER AREAS. WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION IN MOST CASES, THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED.

EROSION AND SEDIMENT CONTROL PLAN

PRE-CONSTRUCTION PHASE

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-A M.R.S. 480-B. EROSION 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. THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.

BMP CONSTRUCTION PHASE

A. SEDIMENT BARRIERS: PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

C. RIPRAP: SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF THE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION, THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

D. TEMPORARY STABILIZATION: STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODIBLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 14 DAYS EXCEPT, STABILIZE AREAS WITHIN 100 FEET OF A WETLAND OR WATERBODY WITHIN 7 DAYS OR PRIOR TO A PREDICTED STORM EVENT. WHENEVER COMES FIRST, IF HAY OR STRAW MULCH IS USED, THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING. ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO ON.

E. VEGETATED WATERWAY: UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED TO PERMANENT VEGETATION AND MULCHED AND WILL NOT BE USED AS OUTLETS UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED. ONCE SOIL IS EXPOSED FOR WATERWAY CONSTRUCTION, IT SHOULD BE IMMEDIATELY SHARPED, GRADED AND STABILIZED. VEGETATED WATERWAYS NEED TO BE STABILIZED EARLY DURING THE GROWING SEASON (PRIOR TO SEPTEMBER 15). IF FINAL SEEDING OF WATERWAYS IS DELAYED PAST SEPTEMBER 15, EMERGENCY PROVISIONS SUCH AS SOD OR RIPRAP MAY BE REQUIRED TO STABILIZE THE CHANNEL. WATERWAYS SHOULD BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

F. PERMANENT STABILIZATION DEFINED

G. SEEDING AREAS: FOR SEEDING AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS: FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

C. PERMANENT MULCH: FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROXIMATE MULCH MATERIAL: EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

D. RIPRAP: FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT THE RIPRAP IS FULLY STABILIZED WITH AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

E. AGRICULTURAL USE: FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.

F. PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

G. DITCHES, CHANNELS, AND SWALES: PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.

H. GENERAL CONSTRUCTION PHASE

I. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT:

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.

B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.

G. AREAS SHALL BE SCARPED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.

H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILLS INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.

J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.

K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.

L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.

N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

O. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

P. PERMANENT VEGETATION

PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.

Q. SEEDING PREPARATION

A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION. SEEDING, MULCH APPLICATION AND ANCHORING AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES.

C. CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P205-K20) OR EQUIVALENT. APPLY GROUND LIME TO SOILS EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT).

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUING UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

F. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

F. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL. WHEN CROWN WATERS IS SEEDING IN LATER SUMMER, AT LEAST 35% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, MULCH ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

G. FOLLOWING SEED BED PREPARATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS./1,000 SF, WITH A MIXTURE OF 35% CREEPING RED FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

I. AREAS WHICH HAD BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING.

J. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

WINTER CONSTRUCTION PHASE

IF AN AREA IS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES.

A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASES OR RIPRAP.

B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.

C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.

D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.

E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.

F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.

I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.

J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.

K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.

L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.

M. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

MAINTENANCE AND INSPECTION PHASE

A. MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED.

HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL, INSPECTIONS AND MAINTENANCE.

B. A LOG (REPORT) MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES.

MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE.

A. SEEDING AREAS: FOR SEEDING AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS: FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

C. PERMANENT MULCH: FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROXIMATE MULCH MATERIAL: EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.

D. RIPRAP: FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT THE RIPRAP IS FULLY STABILIZED WITH AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.

E. AGRICULTURAL USE: FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.

F. PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

G. DITCHES, CHANNELS, AND SWALES: PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE CHANNEL.

H. GENERAL CONSTRUCTION PHASE

I. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT:

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.

B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.

G. AREAS SHALL BE SCARPED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.

H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILLS INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.

J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.

K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.

L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.

N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

O. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

P. PERMANENT VEGETATION

PERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.

Q. SEEDING PREPARATION

A. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION. SEEDING, MULCH APPLICATION AND ANCHORING AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES.

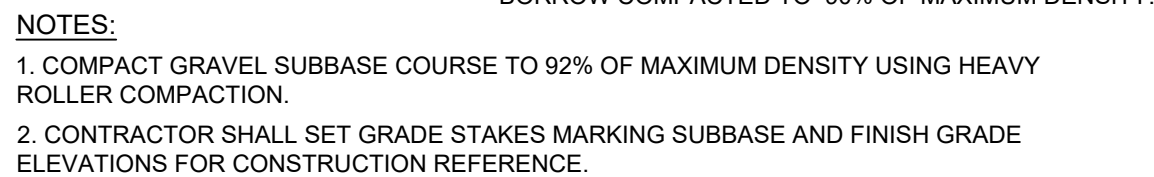
C. CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P205-K20) OR EQUIVALENT. APPLY GROUND LIME TO SOILS EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT).

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUING UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

F. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

F. PERMANENT



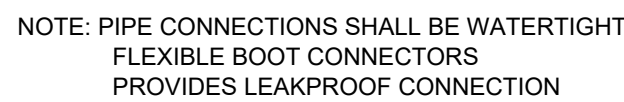
NOT TO SCALE



1. ALL CONCRETE TO HAVE A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..

NOTE:
CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF GUTTER. IF PROFILE GRADE EXCEEDS 5% GRATES SHALL BE DEPRESSED BELOW NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT.

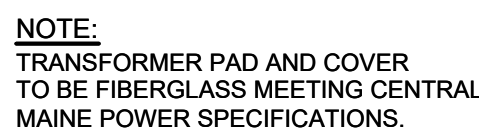
NOT TO SCALE



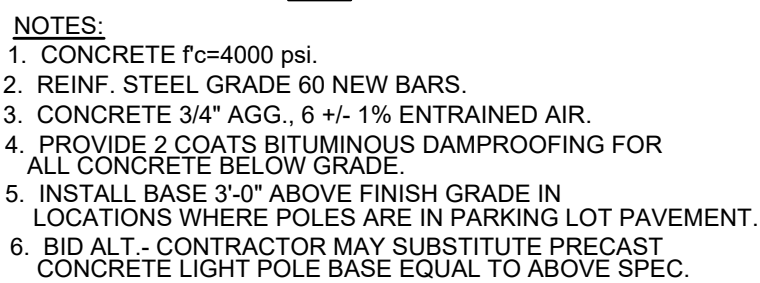
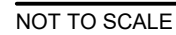
NOT TO SCALE



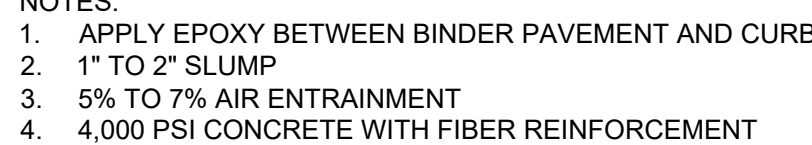
NOT TO SCALE



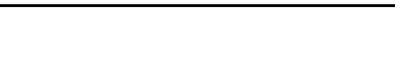
NOT TO SCALE

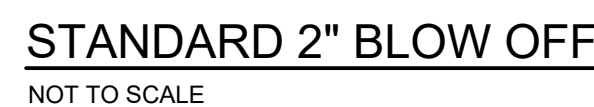
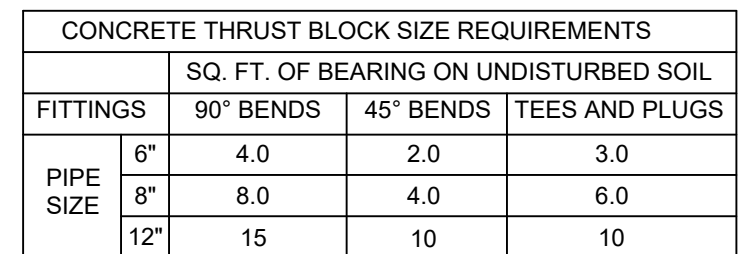
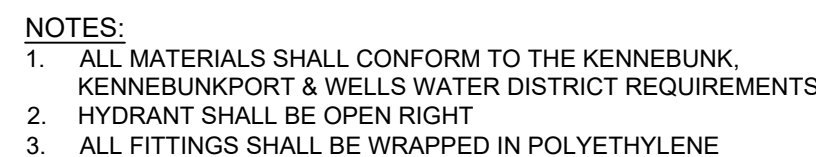
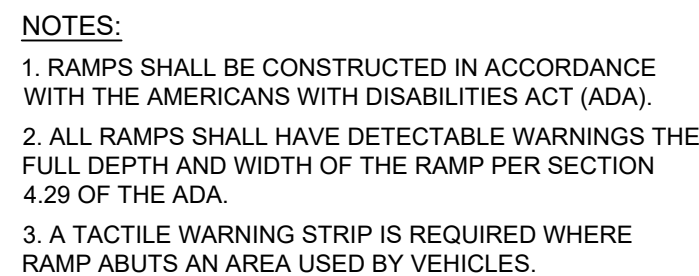
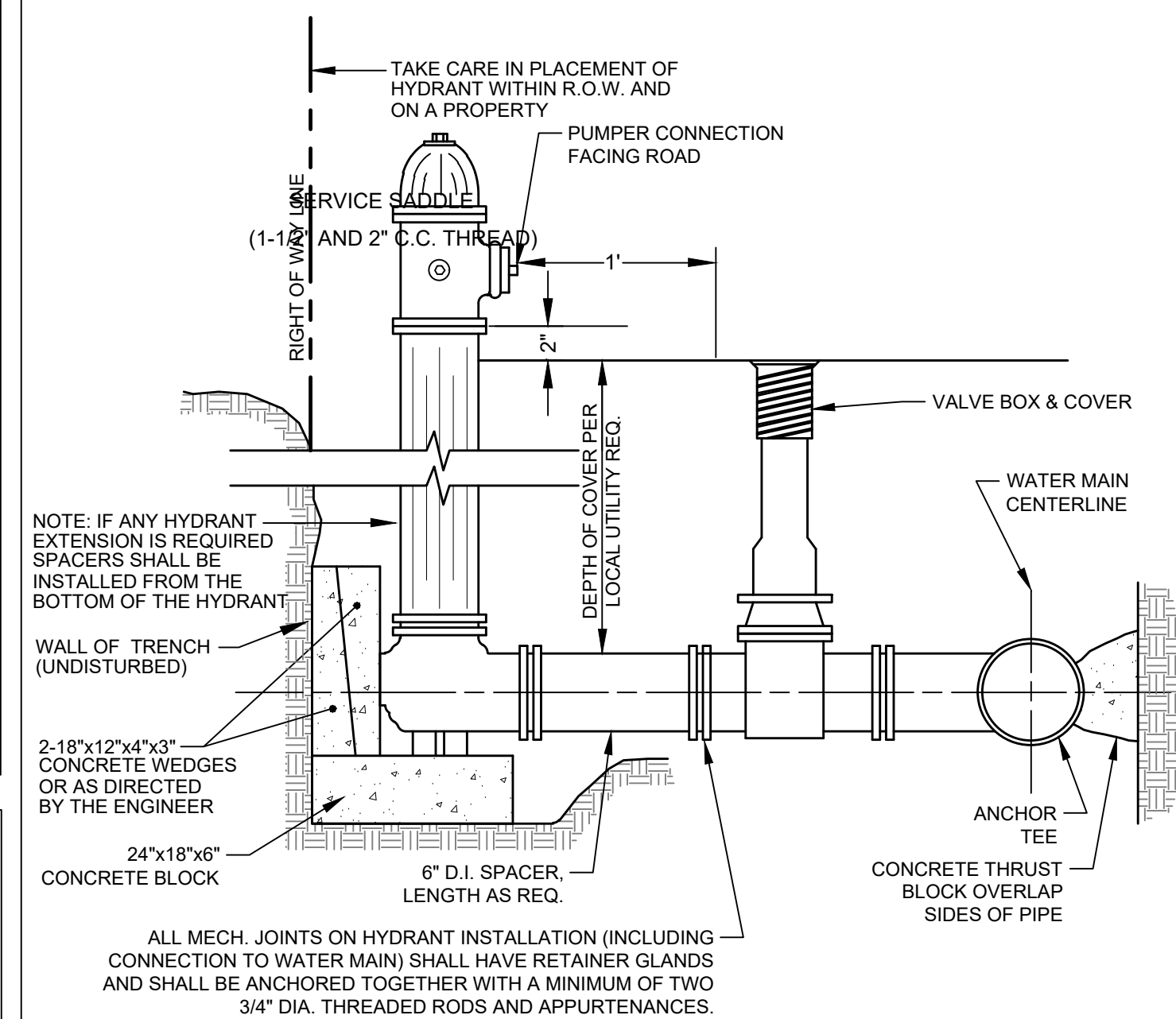
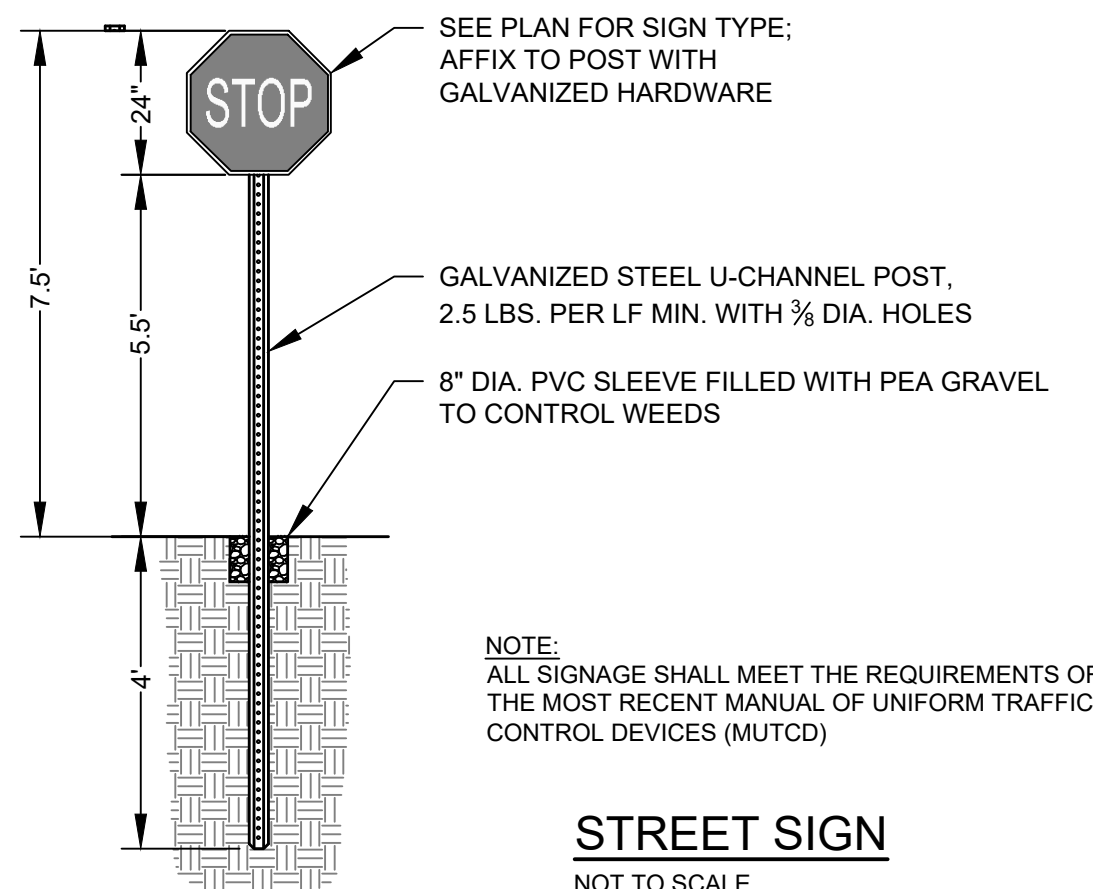
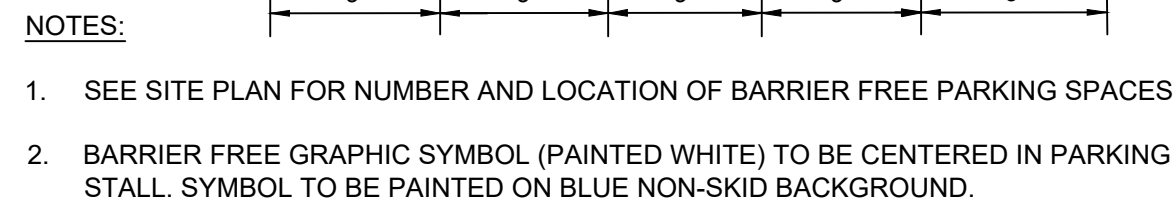


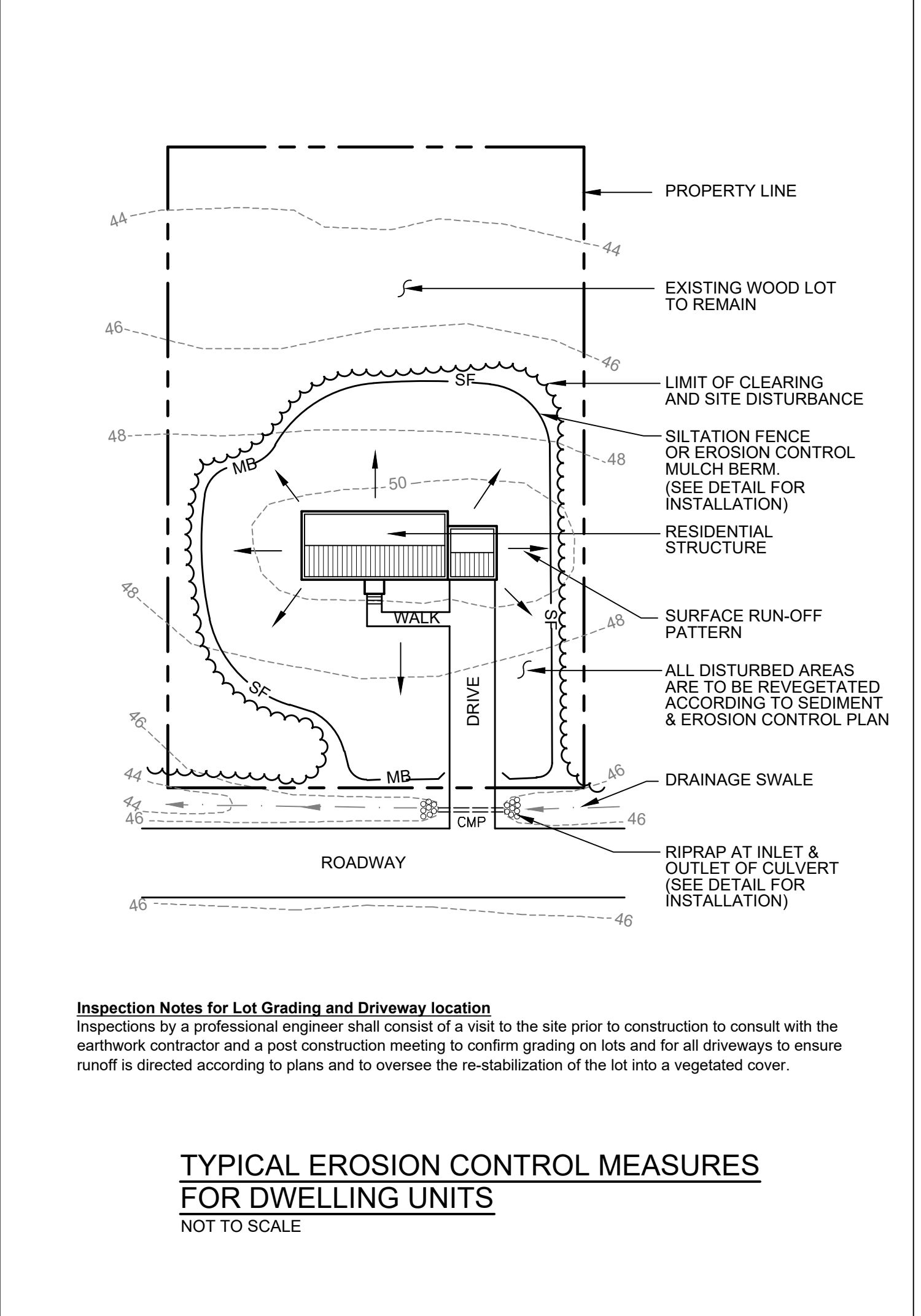
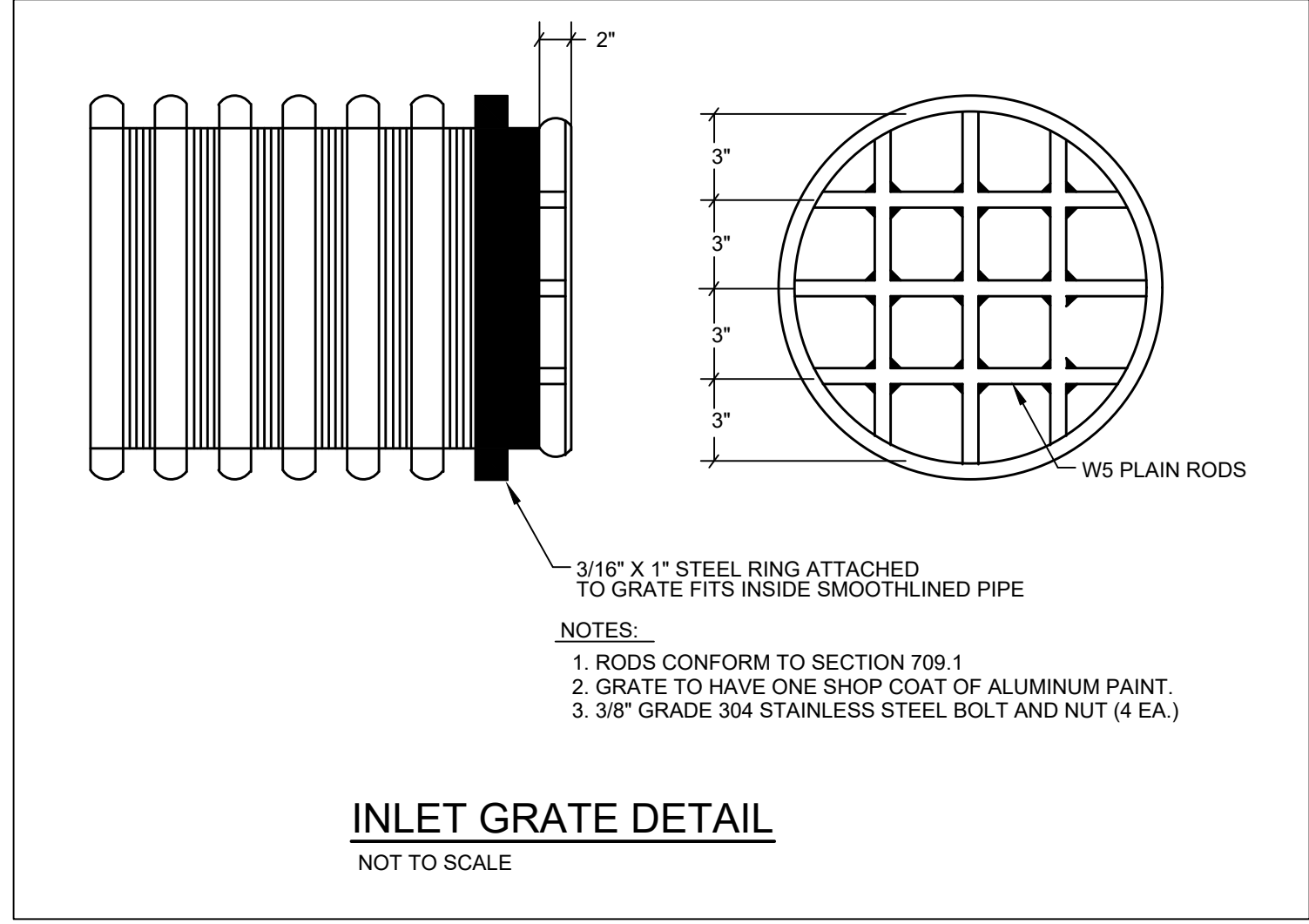
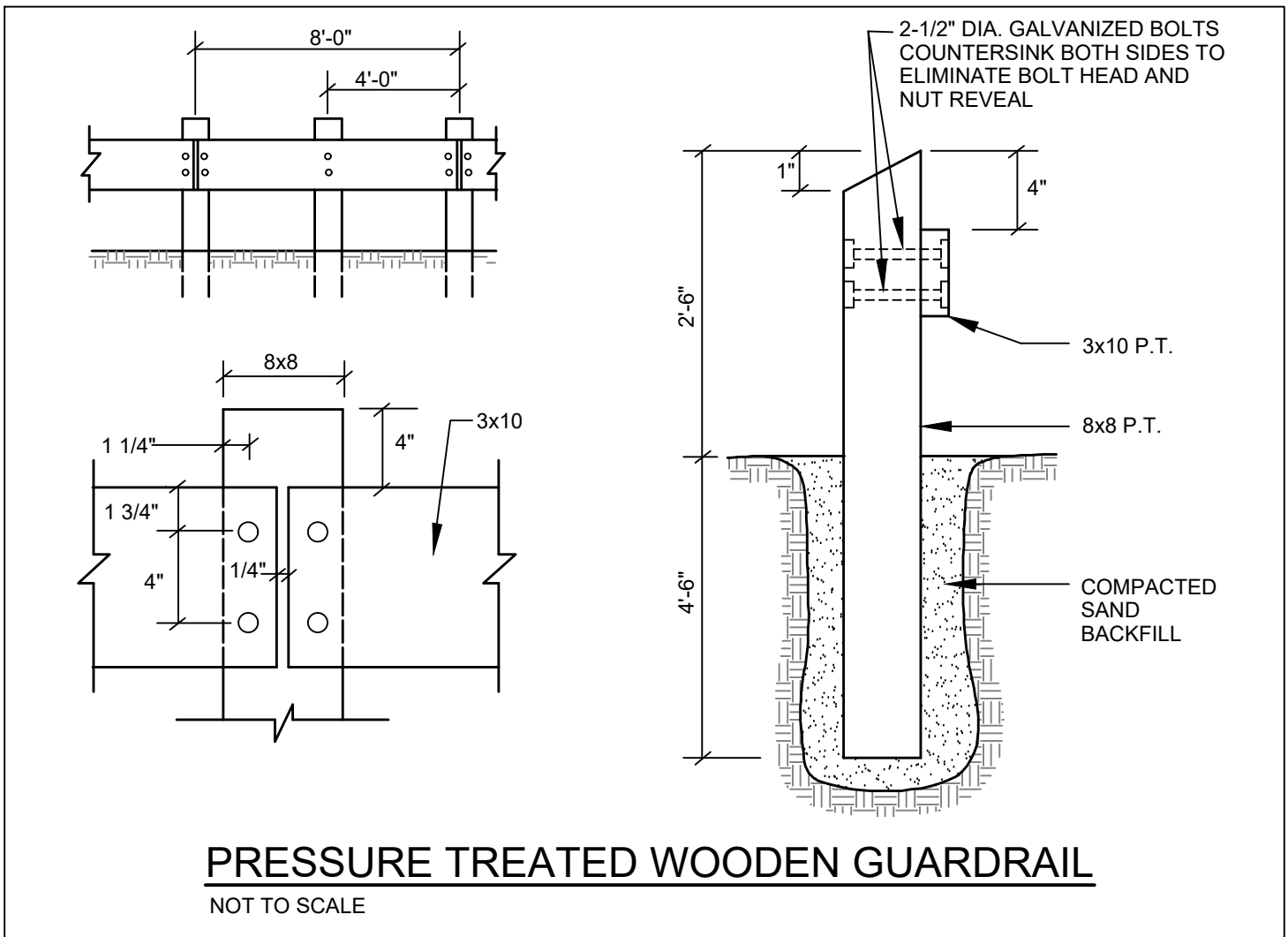
NOT TO SCALE



NOT TO SCALE



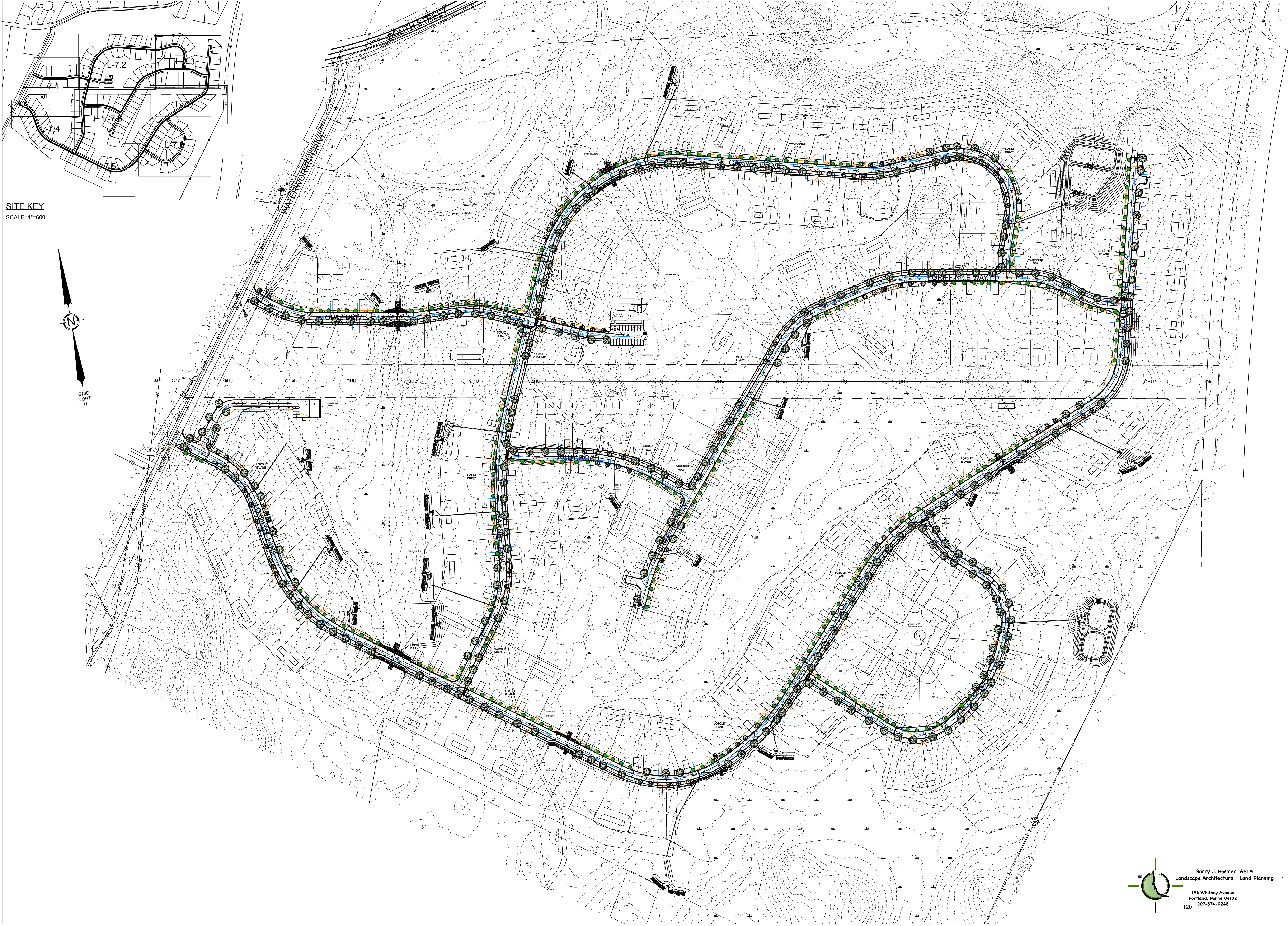




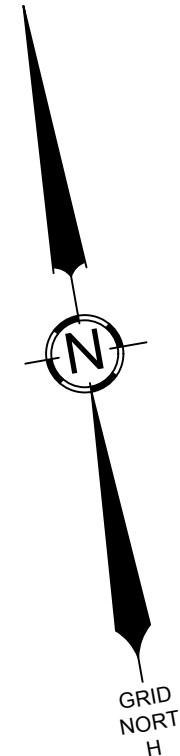
CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
4. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
7. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
11. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
12. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.
17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.
18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
19. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKSMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
20. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
21. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.
22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
25. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
26. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

[illegible]

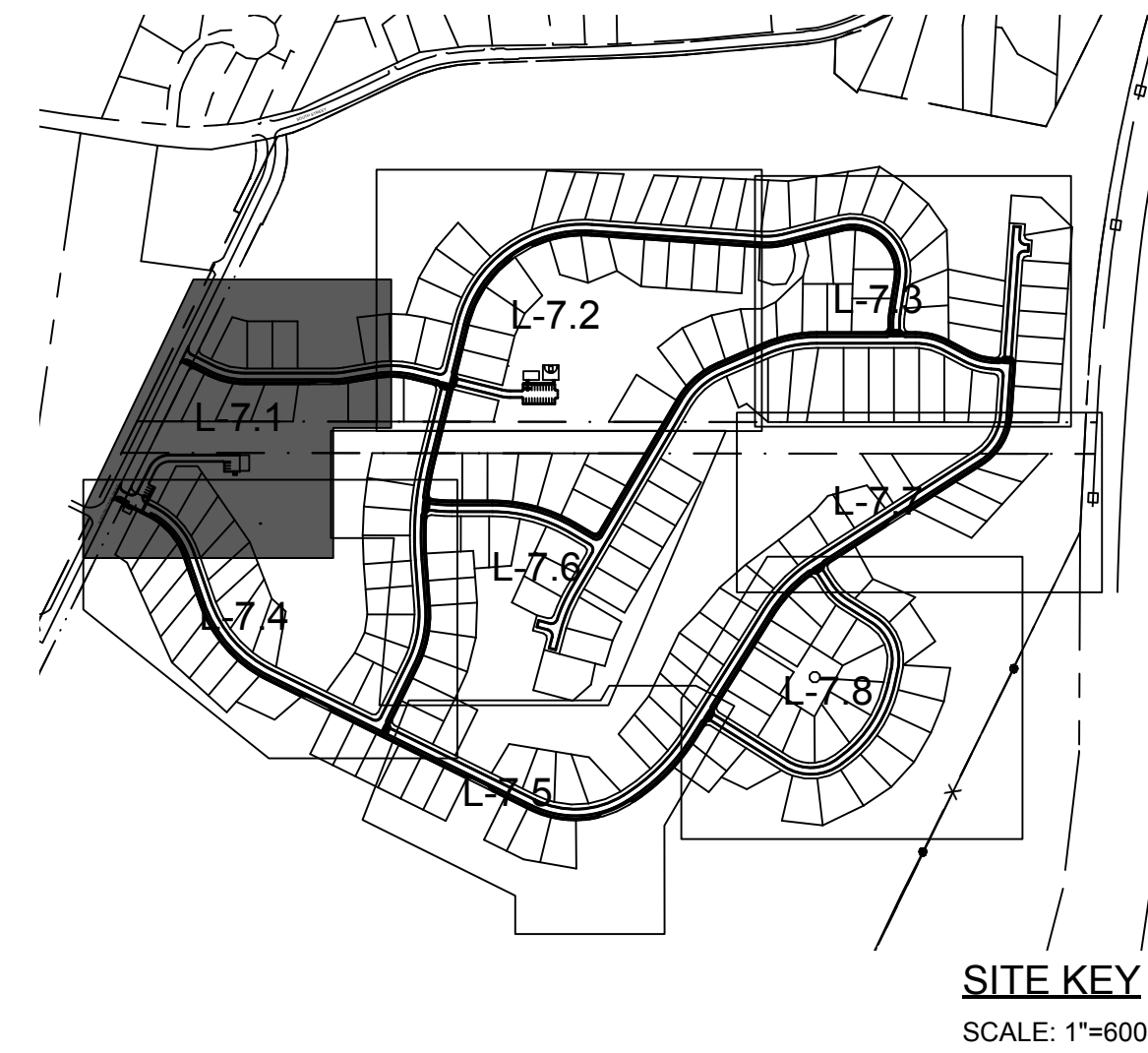
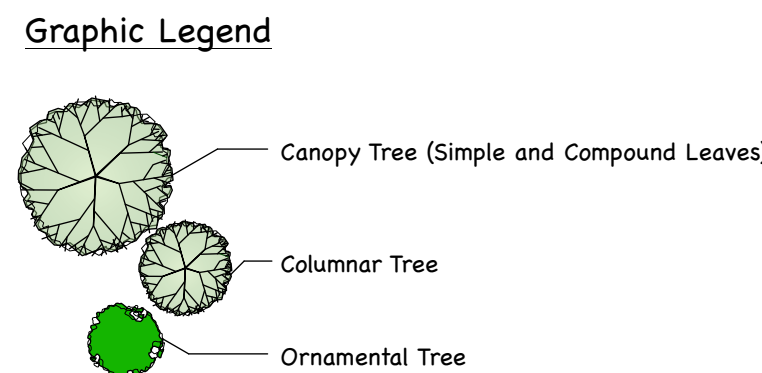


SITE KEY
SCALE: 1"=600'



Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

DATE: 02-09-2022		DATE: 02-09-2022	
SCALE: 1" = 120'		SCALE: 1" = 120'	
DESIGNED: BJH		DESIGNED: BJH	
JOB NO: 21-13		JOB NO: 21-13	
SHEET L-7.0		SHEET L-7.0	
PROJECT: HIDDEN HILLS HOUSING PARK		PROJECT: HIDDEN HILLS HOUSING PARK	
SHEET TITLE: OVERALL LANDSCAPE PLAN		SHEET TITLE: OVERALL LANDSCAPE PLAN	
CLIENT: SOUTH STREET VILLAGE, LLC		CLIENT: SOUTH STREET VILLAGE, LLC	
SOUTH STREET, BIDDEFORD, MAINE		SOUTH STREET, BIDDEFORD, MAINE	
41 CAMPUS DRIVE		41 CAMPUS DRIVE	
SUITE 301		SUITE 301	
NEW GLOUCESTER, ME 04330		NEW GLOUCESTER, ME 04330	
OFFICE: (207) 926-5111 FAX: (207) 221-1317		OFFICE: (207) 926-5111 FAX: (207) 221-1317	
www.terradyconsultants.com		www.terradyconsultants.com	
TERRADYN CONSULTANTS, LLC		TERRADYN CONSULTANTS, LLC	
PERMIT DRAWING		PERMIT DRAWING	
NOT FOR CONSTRUCTION		NOT FOR CONSTRUCTION	
NO. DATE		NO. DATE	
REVISION		REVISION	
APPROD BY		APPROD BY	
DATE		DATE	
P.E.		P.E.	
DATE		DATE	



SITE KEY
SCALE: 1"=600'

DATE:		DATE	
P.E.:		P.E.	
			APPROVED BY
			REVISIONS
			REVISION
		DATE	DATE
		NO.	NO.

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04803
565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyniconsultants.com



PERMIT DRAWING
NOT FOR
CONSTRUCTION

PROJECT:
HIDDEN HILLS HOUSING PARK

SHEET TITLE:
LANDSCAPE PLAN - 1

CLIENT:
SOUTH STREET VILLAGE, LLC

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13
SHEET	
L-7.1	

Users/b...

Hidden Hills Selected Street Tree List (Potential Species)

Upright/Oval Trees with simple leaves

Acer x Freemanii, Hybrid Maples: Firefall, Marmo, Sienna Glen
Acer miyabei, Miyabe Maple: State Street
Acer rubrum, Red Maple: Autumn Radiance, Northwood, Red Sunset
Acer saccharum, Sugar Maple: Green Mountain
Celtis occidentalis, Common Hackberry: Magnifica
Corylus colurna, Turkish Filbert
Liquidambar styraciflua, Sweetgum: Moraine
Liriodendron tulipifera, TulipTree: Emerald City
Nyssa sylvatica, Black Tupelo (Gum): Green Gable, Northern Splendor, Tupelo Tower
Platanus x acrofolia, London Planetree: Exclamation
Quercus bicolor, Swamp White Oak: American Dream
Quercus imbricaria, Shingle Oak:
Quercus macrocarpa, Burr Oak: Urban Pinnacle
Quercus rubra, Red Oak
Tilia americana, American Linden: American Sentry
Tilia tomentosa, Silver Linden: Sterling
Ulmus americana, American Elm: Prairie Expedition, Princeton, Valley Forge

Upright/Oval Trees with compound leaves

Cladrastis kentuckea, Yellowwood
Gleditsia Triacanthos inermis, Honeylocust: Halka, Northern Acclaim, Street Keeper
Gymnocladus dioicus, Kentucky Coffeetree: Espresso, Prairie Titan

Columnar Trees

Acer x Freemanii, Hybrid Maples: Armstrong
Acer rubrum, Red Maple: Bowhall, Karpick
Carpinus caroliniana, American Hornbeam: Firespire, Rising Fire
Celtis occidentalis, Common Hackberry: Prairie Sentinel
Liquidambar styraciflua, Sweetgum: Slender Silhouette
Liriodendron tulipifera, Tuliptree: Arnold
Parrotia persica, Persian Parrotia: Vanessa
Quercus bicolor, Swamp White Oak: Beacon
Quercus robur x alba, Hybrid Oak: Crimson Spire, Skinny Genes, Streetspire

Smaller Stature Ornamental Trees (Under Power lines)

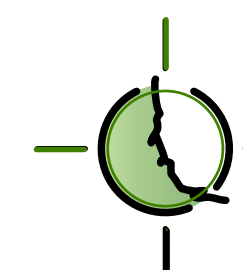
Amelanchier x laevis and grandiflora: Serviceberry: Spring Flurry, Robin Hill
Betula platyphylla, Asian White Birch: Dakota Pinnacle, Parkland Pillar
Carpinus caroliniana, American Hornbeam: Firespire
Cornus mas, Cornelian Cheery Dogwood: Golden Glory
Maackia amurensis, Amur Maackia: Starburst, Summertime

Malus, Crabapples: Adirondack, Emerald Spire, Pink Spires, Spring Snow
Prunus sargentii, Sargent Cherry: Pink Flair
Prunus sargentii x subhirtella, Hybrid Cherry: Accolade
Pyrus calleryana, Ornamental Pear: Jack
Syringa reticulata, Japanese Tree Lilac: Ivory Silk, Snowcap

Limit the same genus to 15% to 20% of the total trees.
Trees shall be at least 1.75" - 2" caliper in size for street trees.
All trees shall be staked. Ample soil volume shall be provided for each tree prior to planting.

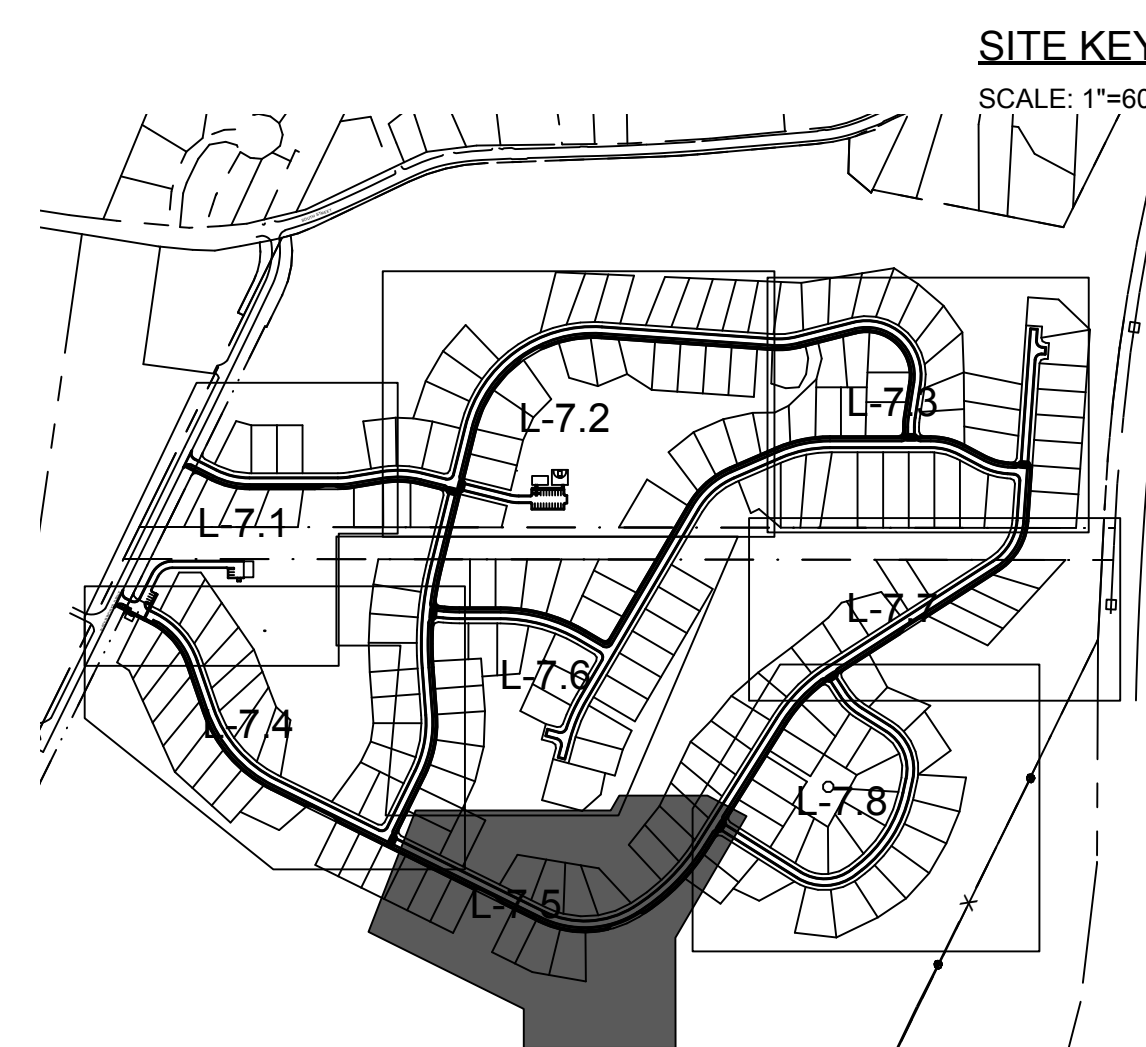
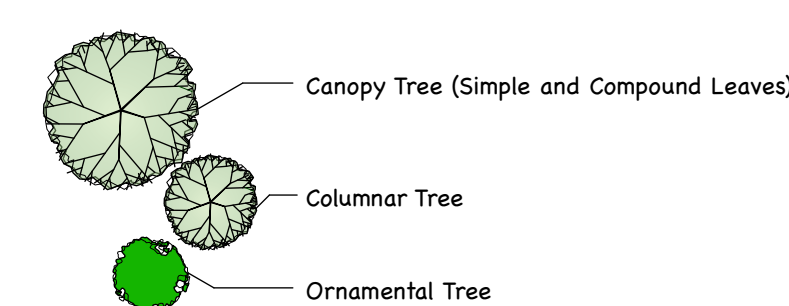
Street Tree Totals:

Canopy Trees: 251
Columnar Trees: 93
Ornamental Trees": 255



Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

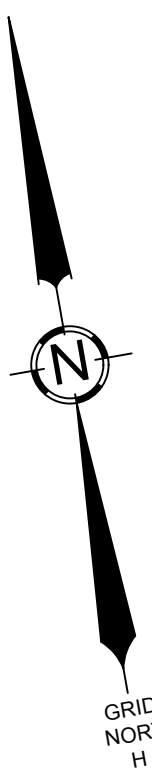




Barry J. Hosmer ASLA
Landscape Architecture Land Planning

196 Whitney Avenue
Portland, Maine 04102
207-874-0248

[illegible]



DATE:							DATE					
P.E.:							P.E.					
												APPR BY

[illegible][illegible]

41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com



PERMIT DRAWING
NOT FOR
CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK
COUTH STREET SIDEPOD, MAINE

SOUTH STREET, BIDDEFORD, MAINE

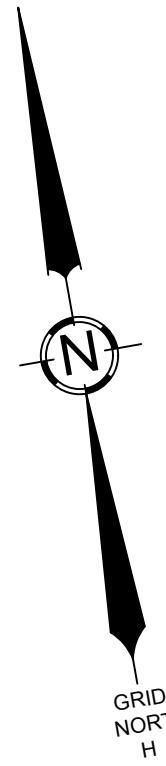
LANDSCAPE PLAN - 6

CLIENT:
SOUTH STREET VILLAGE, LLC

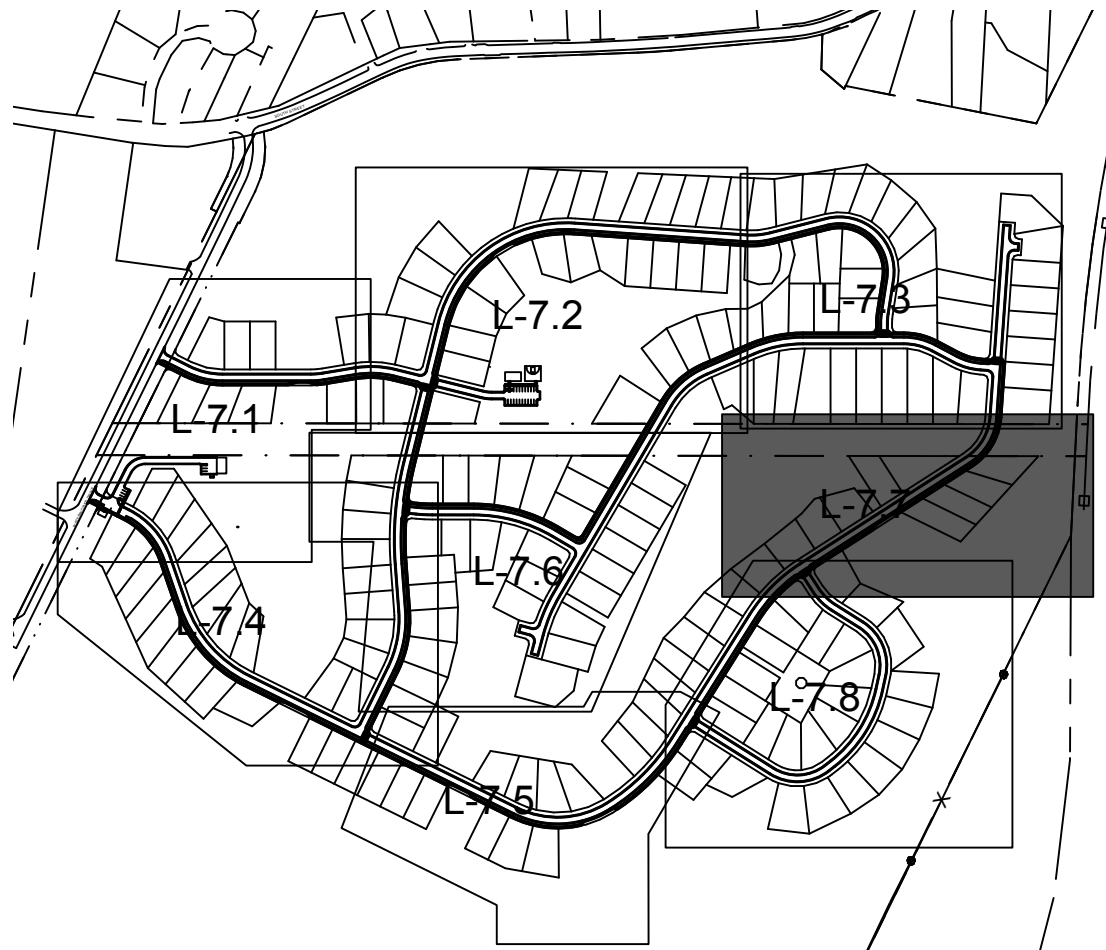
DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	BJH
JOB NO:	21-13

SHEET L-7.6

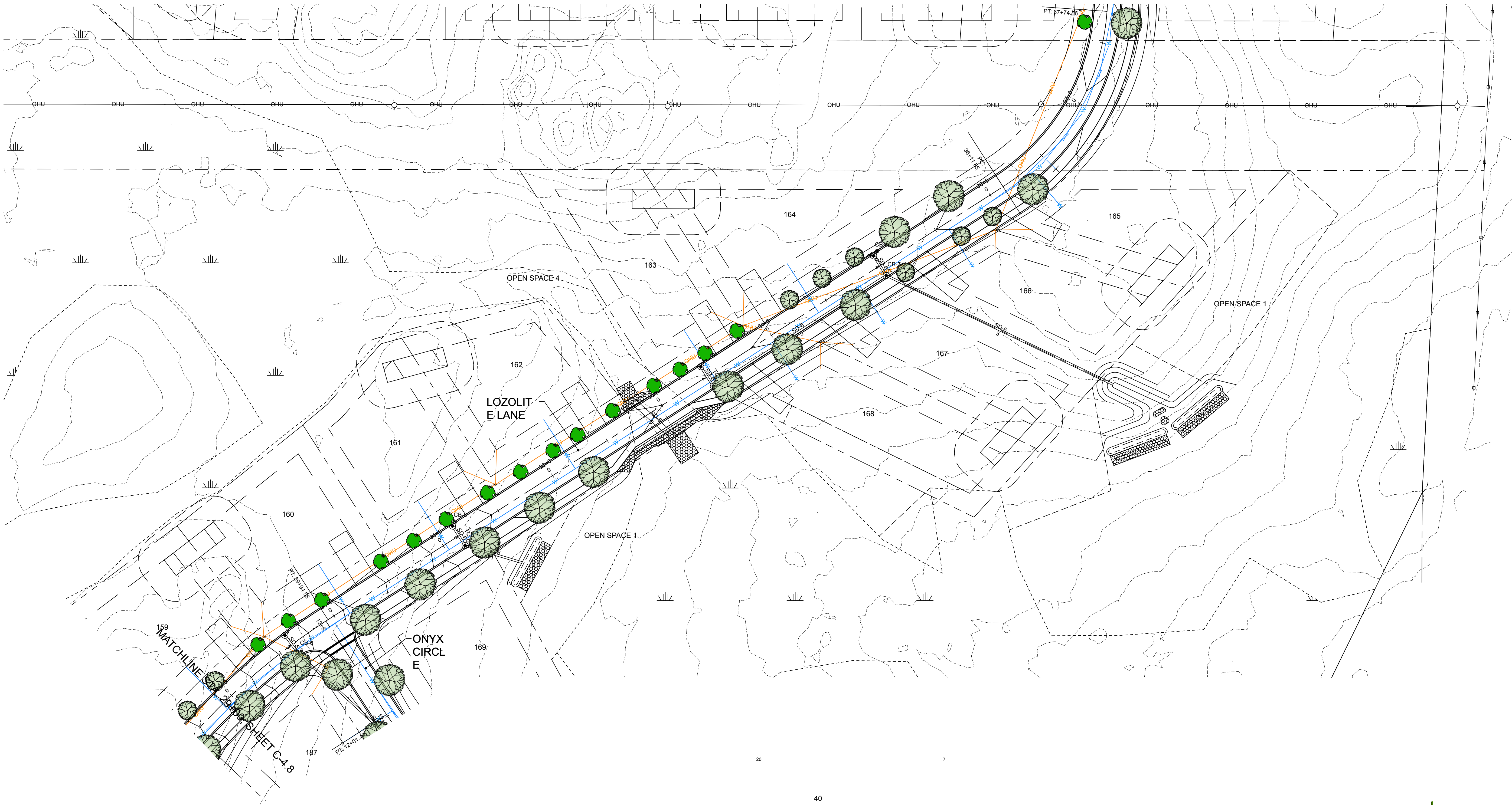
Users/ba
S.dwg



- Graphic Legend
- Canopy Tree (Simple and Compound Leaves)
 - Columnar Tree
 - Ornamental Tree



SITE KEY
SCALE: 1"=600'



Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

DATE:	DATE:
P.E.:	P.E.:
	APP'D BY:
	REVISIONS
	NO. DATE
	NO. DATE
41 CAMPUS DRIVE SUITE 301 NEW GLOUCESTER, ME 04324 OFFICE: (207) 926-5111 FAX: (207) 221-1317 www.terradyconsultants.com	565 CONGRESS STREET SUITE 201 PORTLAND, ME 04102
TERRADYN CONSULTANTS, LLC	
PERMIT DRAWING NOT FOR CONSTRUCTION	
PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	
SHEET TITLE: LANDSCAPE PLAN - 7	
CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106	
DATE: 02-09-2022	
SCALE: 1" = 40'	
DESIGNED: BJH	
JOB NO: 21-13	
SHEET L-7.7	



Graphic Legend

- Canopy Tree (Simple and Compound Leaves)
- Columnar Tree
- Ornamental Tree

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

DATE: 02-09-2022		DATE: 02-09-2022	
P.E.: BJH		P.E.: BJH	
APPROVED BY: BJH		APPROVED BY: BJH	
NO. 21-13		NO. 21-13	
DATE: 21-13		DATE: 21-13	
REVISIONS		REVISIONS	
NO. 21-13		NO. 21-13	
DATE: 21-13		DATE: 21-13	
PROJECT: HIDDEN HILLS HOUSING PARK		PROJECT: HIDDEN HILLS HOUSING PARK	
SHEET TITLE: LANDSCAPE PLAN - 8		SHEET TITLE: LANDSCAPE PLAN - 8	
CLIENT: SOUTH STREET VILLAGE, LLC		CLIENT: SOUTH STREET VILLAGE, LLC	
SOUTH STREET, BIDEFORD, MAINE		SOUTH STREET, BIDEFORD, MAINE	
762 MAIN STREET		762 MAIN STREET	
SOUTH PORTLAND, MAINE 04106		SOUTH PORTLAND, MAINE 04106	
SHEET L-7.8		SHEET L-7.8	

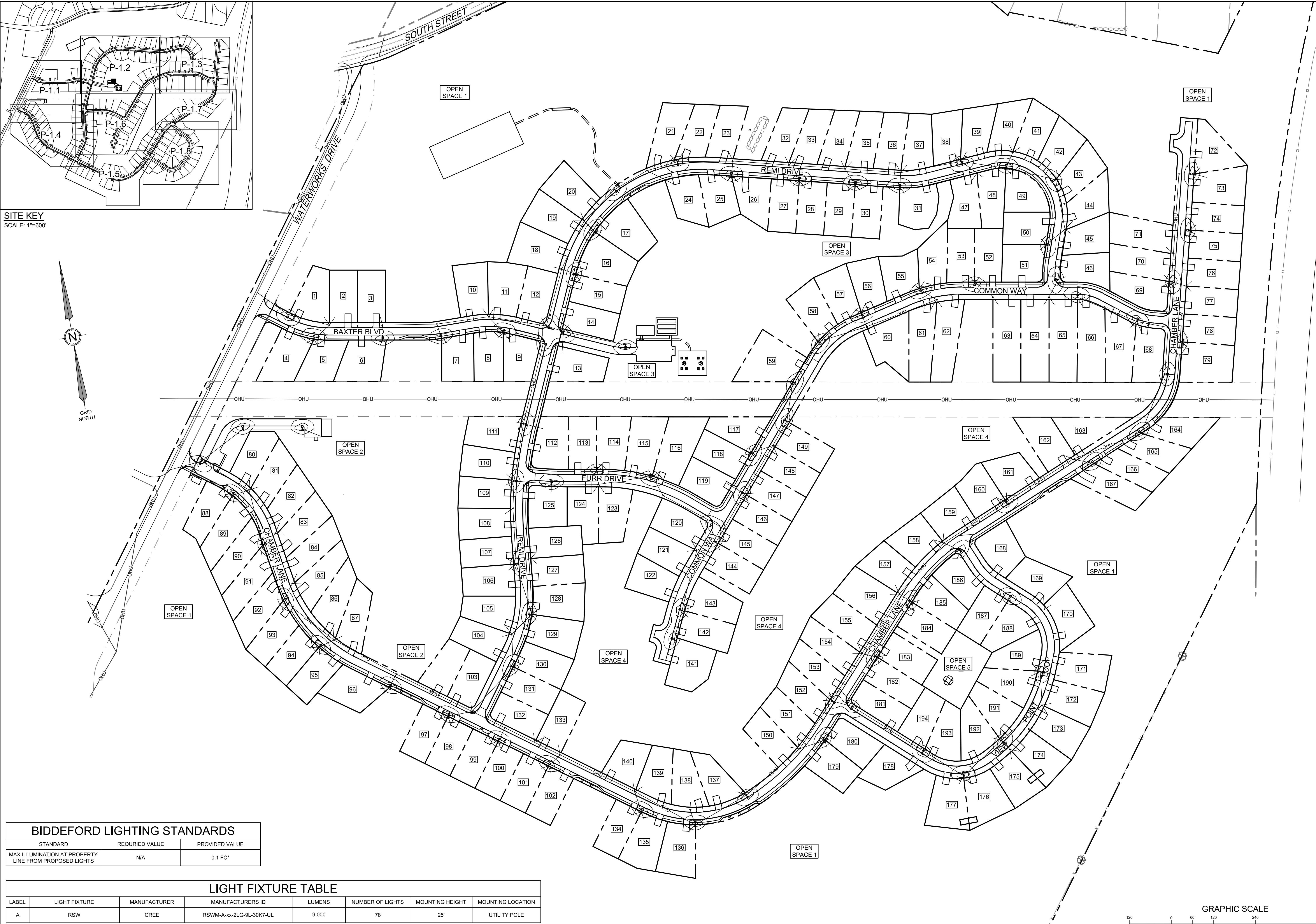
41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04330
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyconsultants.com

562 CONGRESS STREET
SUITE 201
NEW GLOUCESTER, ME 04330
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyconsultants.com

PERMIT DRAWING
NOT FOR
CONSTRUCTION

Barry J. Hosmer ASLA
Landscape Architecture Land Planning
196 Whitney Avenue
Portland, Maine 04102
207-874-0248

227

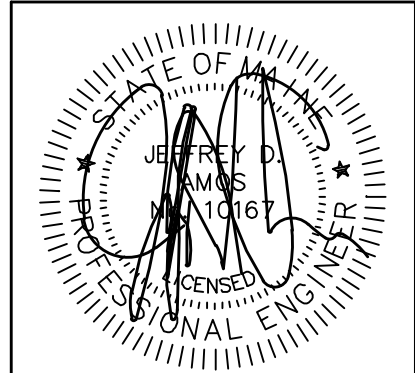


SITE KEY
SCALE: 1"=600'

BIDDEFORD LIGHTING STANDARDS		
STANDARD	REQUIRED VALUE	PROVIDED VALUE
MAX ILLUMINATION AT PROPERTY LINE FROM PROPOSED LIGHTS	N/A	0.1 FC*

LIGHT FIXTURE TABLE							
LABEL	LIGHT FIXTURE	MANUFACTURER	MANUFACTURERS ID	LUMENS	NUMBER OF LIGHTS	MOUNTING HEIGHT	MOUNTING LOCATION
A	RSW	CREE	RSWM-A-xx-2LG-9L-30K7-UL	9,000	78	25'	UTILITY POLE

NOTES:
1. LIGHTING PLAN PREPARED USING DESIGN MASTER PHOTOMETRICS SOFTWARE
2. ONLY PROPOSED LIGHTING FIXTURES ARE MODELED
3. DEPRECIATION FACTOR FOR LED IS 0.90



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
A	04-13-2022	PRELIMINARY SUBMISSION
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

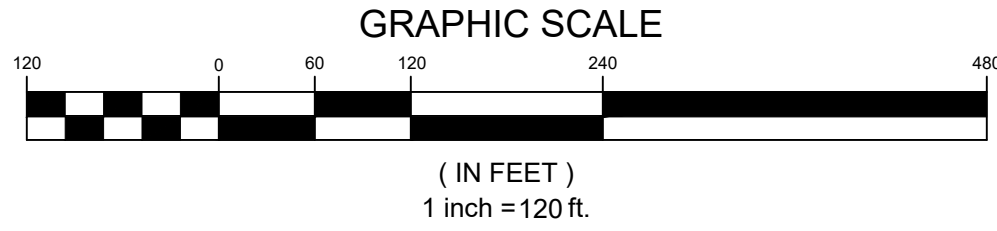
41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102



PERMIT DRAWING
NOT FOR CONSTRUCTION

PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106
SHEET TITLE: OVERALL PHOTOMETRIC PLAN	DATE: 02-09-2022
JDA	SCALE: 1" = 120'
JDA	DESIGNED: JDA
JDA	JOB NO.: 21-13
P-1.0	SHEET





41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyneconsultants.com

Stormwater Design | Environmental Permitting



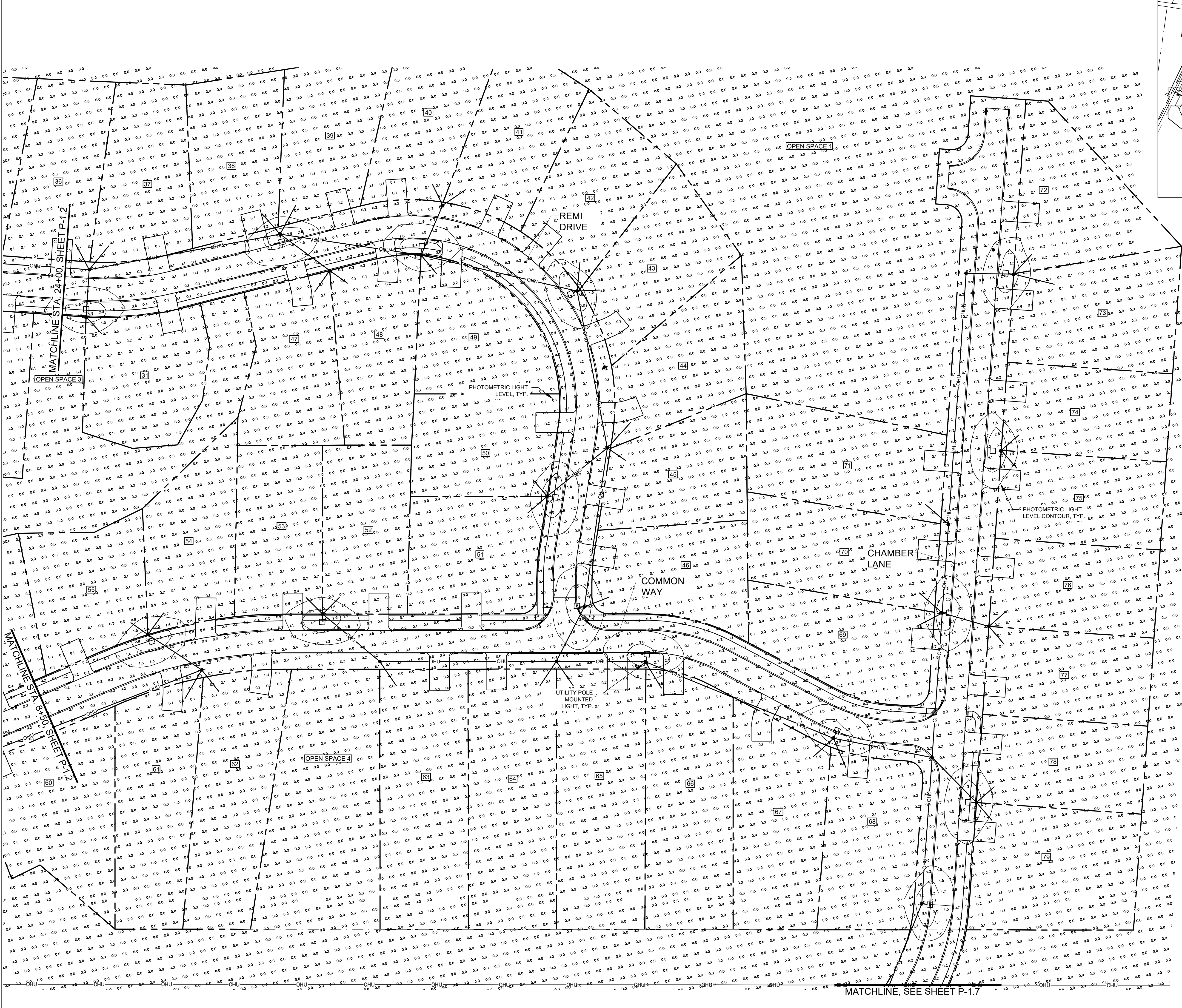
Civil En

PERMIT DRAWING
NOT FOR CONSTRUCTION

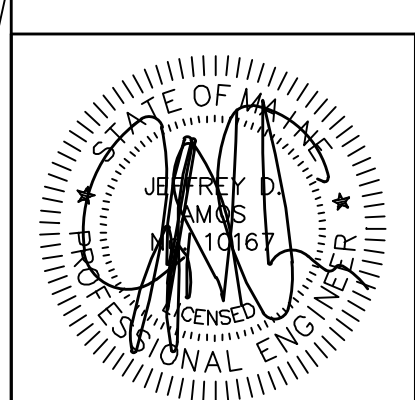
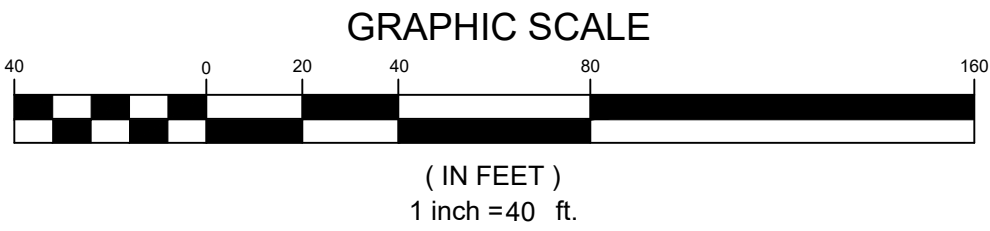
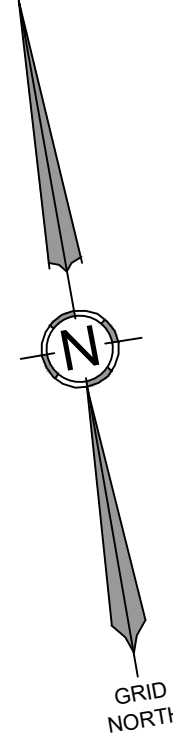
PROJECT: HIDDEN HILLS HOUSING PARK SOUTH STREET, BIDDEFORD, MAINE	SHEET TITLE: PHOTOMETRIC PLAN - 2	CLIENT: SOUTH STREET VILLAGE, LLC 762 MAIN STREET SOUTH PORTLAND, MAINE 04106
---	--------------------------------------	--

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO:	21-13
SHEET	

SHEET P-1.2



SITE KEY
SCALE: 1"=600'



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

NO.	DATE	REVISIONS
A	04-13-2022	PRELIMINARY SUBMISSION
B	08-17-2022	ADDITIONAL INFORMATION PER PEER REVIEW
C	11-16-2022	REVISE PER PLANNING BOARD REVIEW COMMENTS

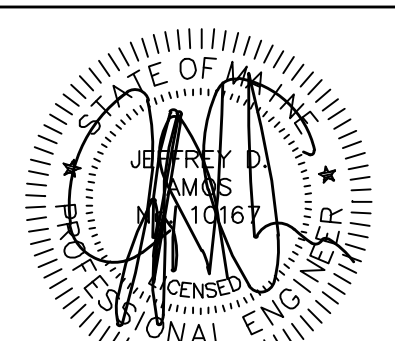
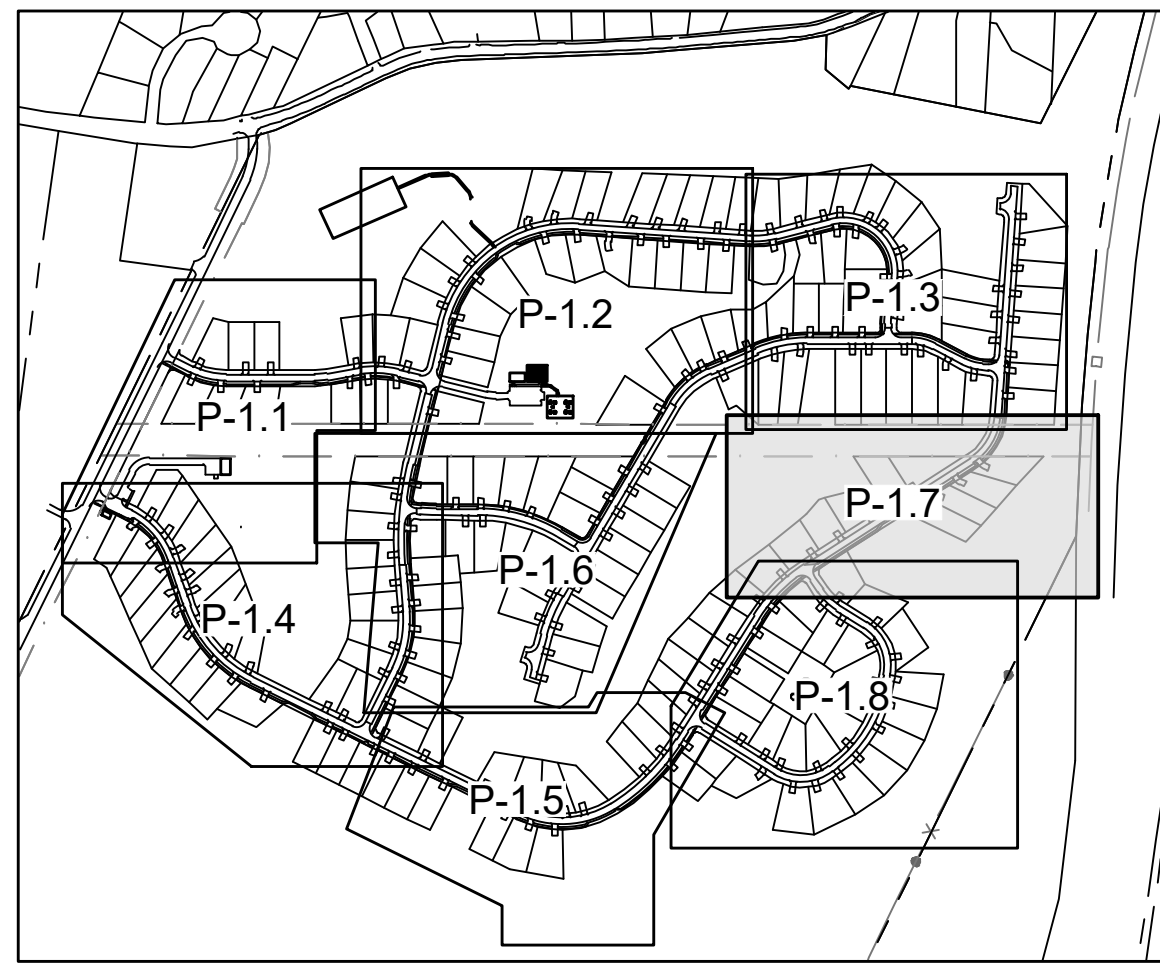
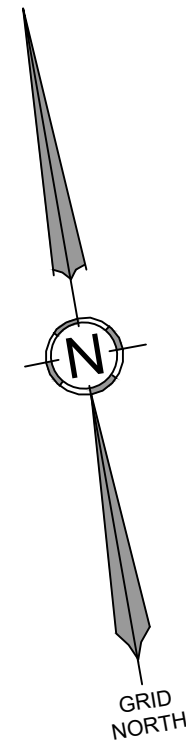
PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: PHOTOMETRIC PLAN - 3
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradyndesign.com



PERMIT DRAWING
NOT FOR CONSTRUCTION

DATE:	02-09-2022
SCALE:	1" = 40'
DESIGNED:	JDA
JOB NO.:	21-13
SHEET	P-1.3



DATE: 11-16-2022
P.E.: JEFFREY D. AMOS, PE 10167

JDA
JDA
JDA
APPD
BY

REVISIONS

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

NO. DATE

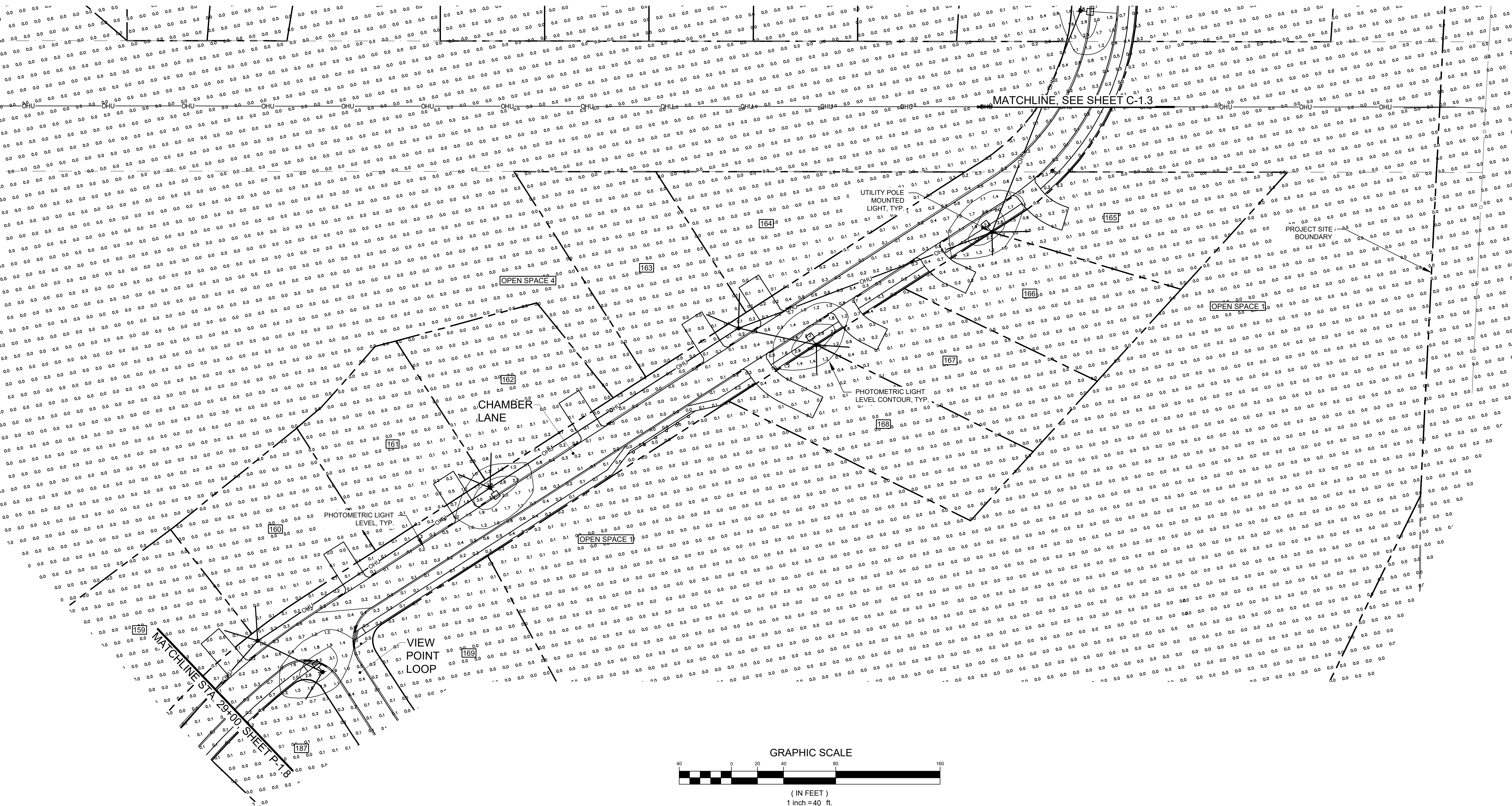
NO. DATE

NO. DATE

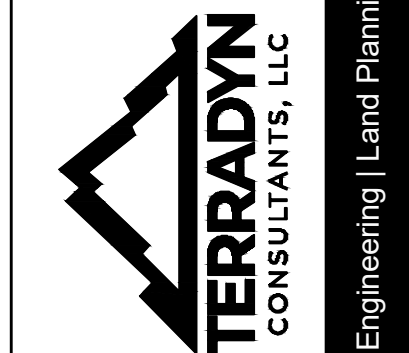
NO. DATE

NO. DATE

NO. DATE



PROJECT: HIDDEN HILLS HOUSING PARK
SOUTH STREET, BIDDEFORD, MAINE
SHEET TITLE: PHOTOMETRIC PLAN - 7
CLIENT: SOUTH STREET VILLAGE, LLC
762 MAIN STREET
SOUTH PORTLAND, MAINE 04106



Civil Engineering | Land Planning | Stormwater Design | Environmental Permitting

PERMIT DRAWING
NOT FOR CONSTRUCTION

DATE: 02-09-2022

SCALE: 1" = 40'

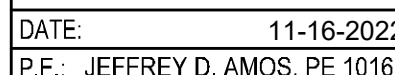
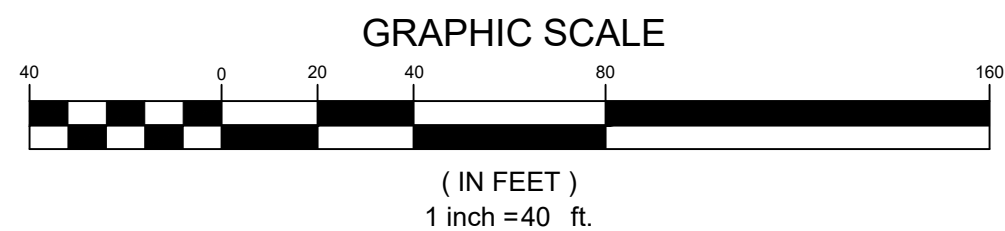
DESIGNED: JDA

JOB NO: 21-13

SHEET

P-1.7

C:\ODI\Terradyn\Consultants\Project Folders - Documents\2021\Jobs\21-13 South Street MHP\CAD\Permitting\Photometric\21-13 PHOTO.dwg



41 CAMPUS DRIVE
SUITE 301
NEW GLOUCESTER, ME 04260

565 CONGRESS STREET
SUITE 201
PORTLAND, ME 04102

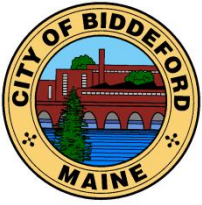
OFFICE: (207) 926-5111 FAX: (207) 221-1317
www.terradynconsultants.com

Stormwater Design | Environmental Permitting



PERMIT DRAWING
NOT FOR CONSTRUCTION

P-1.8



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board – Staff Report

David.Galbraith@biddefordmaine.org

TO: Chair Patoine and Members of the Biddeford Planning Board

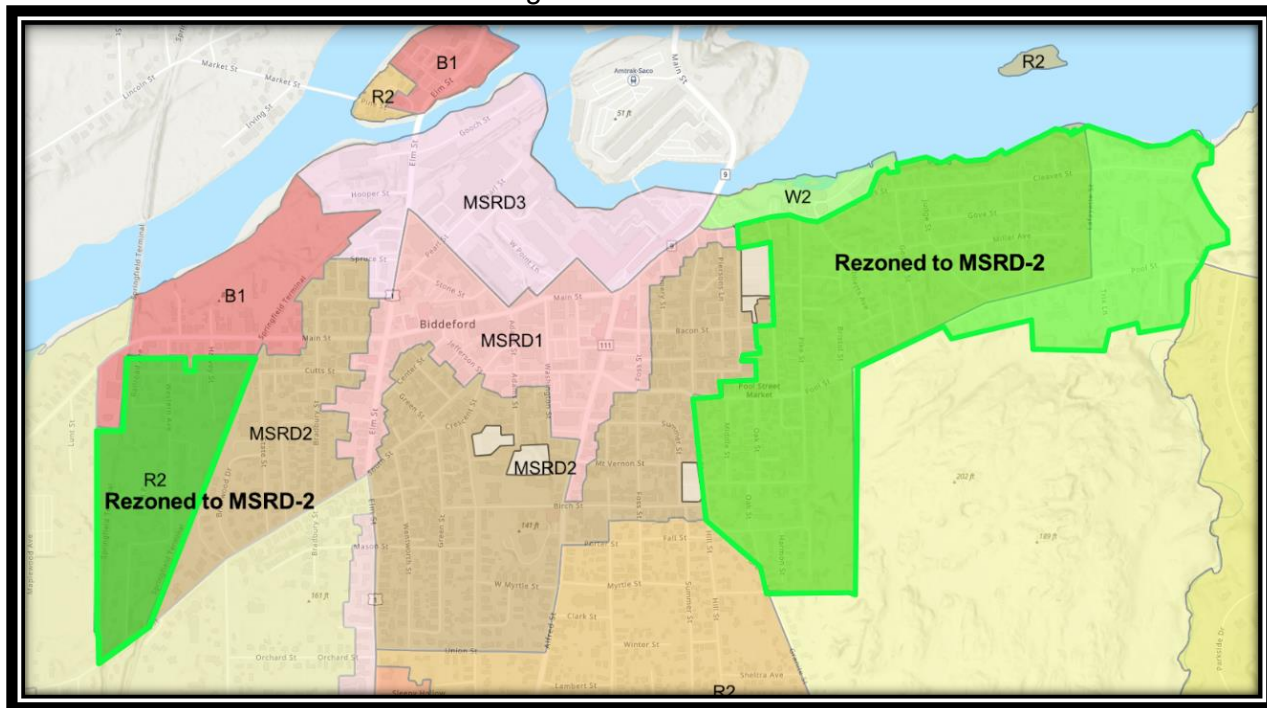
FROM: David C.M. Galbraith, Deputy Director / City Planner

DATE: November 28, 2023

RE: **Planner's Business: Zoning Map Amendment: Rezoning Portions of the City's R-2 Zoning and R-1-A Zoning Districts to MSRD-2.**

MEETING DATE: December 6, 2023

1. Overview: Staff is recommending a Zoning Map Amendment to portions of the R2 and R1A zones, as illustrated on the proposed Zoning map (below and attached) to MSRD2 so that they may also benefit from the affordable housing incentives.



Proposed Rezoning Areas from R-2 and R-1-A to MSRD-2 (highlighted in green)

Detailed Review:

This matter was originally discussed at the Policy Committee (June 22, 2023) who were evaluating our land use policies / zoning to create additional housing opportunities within the downtown. The easiest way to accomplish this goal, is to convert a portion of the R-2 and R-1-A zones, as illustrated on the proposed Zoning map amendment, to MSRD-2 so that they may also benefit from the affordable housing incentives. The proposed rezoning areas are within the downtown and currently adjacent to the MSRD2 zone. The

Planner's Business: Zoning Map Amendment: Rezoning Portions of the City's R2 Zoning and R1A Districts to MSRD2.

Planning Board Date: December 6, 2023

primary difference between the proposed map amendments is one of a series of land use amendments (text / map) toward compliance with "LD 2003".

Establishment of Zones – Table B – Dimensional Standards

Zoning District	Minimum Lot Size, Square Feet Per Unit A				Frontage			Minimum Setback, Feet**				Maximum Heights+	
	Water and Sewer	Water, No Sewer	Sewer, No Water	Neither Water Nor Sewer	Water and Sewer	Water or Sewer	Neither Water Nor Sewer	From Major R.O.W.	From Other R.O.W.	Side	Rear	Stories	Feet
SR-1	15,000 C	20,000 C	20,000 C	40,000 C	100	100	200	40	25	10	10	3	35
CR	See Table C below				150	150	150	40	25	25	25	3	35
R-1-A	10,000 B	20,000	10,000	20,000	100	100	100	40	25	10	10	3	35
R-1-B	5,000 B	20,000	5,000	20,000	50	50	50	25	10	5	5	3	35
R-2	4,500 B	N/A	N/A	N/A	45	N/A	N/A	25	15	5	5	3	35
R-3, single-family	10,000	20,000	20,000	40,000	100	120	200	40	25	10	10	3	35
R-3, duplex	7,500 B	30,000	N/A	N/A	120	120	120	40	25	15	15	3	35
R-3, multifamily	15,000 1st 2 units, then 6,000/unit D	N/A	N/A	N/A	150	N/A	N/A	40	40	25	25	3	35
R-3, all other	10,000	N/A	N/A	N/A	100	120	200	40	25	10	10	3	35

Zoning District	Minimum Lot Size, Square Feet Per Unit A				Frontage			Minimum Setback, Feet**				Maximum Heights+	
	Water and Sewer	Water, No Sewer	Sewer, No Water	Neither Water Nor Sewer	Water and Sewer	Water or Sewer	Neither Water Nor Sewer	From Major R.O.W.	From Other R.O.W.	Side	Rear	Stories	Feet
MSRD-1	None	N/A	N/A	N/A	None	None	None	None	None	None	None	Min. 2 stories or 26 feet; Max. 60 feet	
MSRD-2	2,000 B	N/A	N/A	N/A	50	N/A	N/A	15 R	15 R	10	10	3	35
MSRD-3	None	N/A	N/A	N/A	None	None	None	None	None	None	None	Min. 2 stories or 26 feet	

The primary difference between R2 and R1A zones when compared to the MSRD2 zoning district is the minimum square footage requirements per unit, as illustrated above. The proposed map amendment is one of a series of land use amendments (text / map) toward compliance with "LD 2003".

Staff Recommendation:

Staff is supportive of the proposed rezoning but is seeking input from the Planning Board prior to forwarding a formal recommendation for adoption of this amendment to the City Council.

SAMPLE MOTION #1: An amendment to the City's Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations.

- A. Motion to Approve: I motion to APPROVE the proposed Map Amendments to Rezoning Areas from R-2 and R-1-A to MSRD-2, as proposed and illustrated.

Planner's Business: Zoning Map Amendment: Rezoning Portions of the City's R2 Zoning and R1A Districts to MSRD2.

Planning Board Date: December 6, 2023

- B. Motion to Deny I motion to DENY the proposed Map Amendments to Rezoning Areas from R-2 and R-1-A to MSRD-2, as proposed and illustrated for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

- C. Motion to Table: I motion to TABLE the proposed Map Amendments to Rezoning Areas from R-2 and R-1-A to MSRD-2, as proposed and illustrated for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

ATTACHMENTS: Proposed Map Amendment Area



Policy Committee

Meeting Date: September 25, 2023

Meeting Time: 6:00 PM

Agenda Item No:

Item Description: Zoning Map Amendment – Additional Housing Units

Submitted by: Roby Fecteau, Director of Code Enforcement
David C.M. Galbraith, City Planner

Supporting Information/Documentation:

Attached is a map of the proposed rezoning area from R2 and R1A zones to MSRD2.

Key Terms:

N/A

Executive Summary:

Staff is recommending a Zoning Map Amendment to portions of the R2 and R1A zones, as illustrated on the proposed Zoning map amendment, to MSRD2 so that they may also benefit from the affordable housing incentives

Detailed Review:

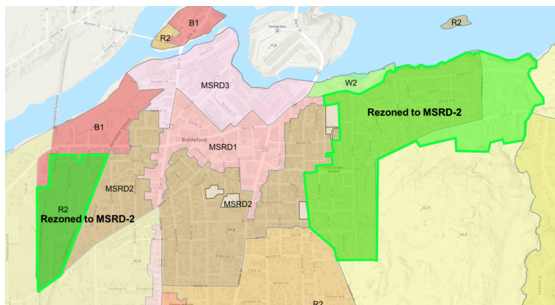
As previously discussed at the Policy Committee (June 22, 2023) the City has been reviewing our land use policies / zoning to create additional housing opportunities within the downtown. The easiest way to accomplish this goal, is to convert a portion of the R2 and R1A zones, as illustrated on the proposed Zoning map amendment, to MSRD2 so that they may also benefit from the affordable housing incentives. The proposed rezoning areas are within the downtown and currently adjacent to the MSRD2 zone. The proposed map amendment is one of a series of land use amendments (text / map) toward compliance with "LD 2003".

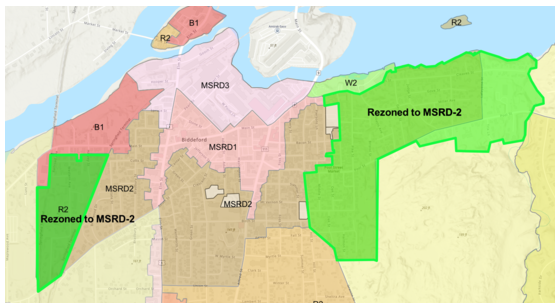
Funding Source:

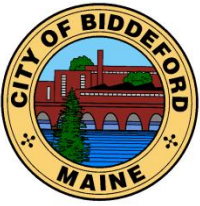
N/A

Staff Recommendation:

Staff is proposing that the Policy Committee forward this rezoning request to the City Council for their input and a recommendation to forward the proposed map amendment to the Planning Board for discussion and a formal Council recommendation towards adoption.







CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115
David.Galbraith@biddefordmaine.org

Planning Board – Staff Report

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Acting Planning Director / City Planner

DATE: November 28, 2023

RE: **Ordinance Review: City Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations and City Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.**

MEETING DATE: December 6, 2023

1. Overview:

There are two (2) related Ordinance Amendments before the Planning Board related to subsurface wastewater disposal systems, namely:

- A. An amendment to the City's Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations, and;
- B. An amendment to the City's Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

These Amendments were last discussed at a special Planning Board “Workshop” on November 8, 2023 as a “Workshop Item” and the Board was supportive of the proposed text amendments. In addition to the proposed amendments, the Board recommended removing all references to sludge spreading to prohibit such use within the City as it is no longer a desired practice.

Attached are proposed amendments to Section 66-21 Soil Evaluations and amendments to Section 58 Subsurface wastewater disposal and sludge spreading. Text deletions are illustrated in ~~Red strike-thru~~ and text additions are shown in Blue Underline.

It should be noted that as these amendments are located within two different sections of the Code of Ordinances, two separate actions are required. As such, below are recommended motions to approve, deny or table these items.

Ordinance Review: City Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations and City Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

Planning Board Hearing Date: December 6, 2023, 1st Hearing

SAMPLE MOTION #1: An amendment to the City's Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations.

- A. Motion to Approve: I motion to APPROVE the proposed Amendments to Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations, as proposed and written.
- B. Motion to Deny I motion to DENY the proposed Amendments to the City's Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations for the following reasons:
- 1) _____.
 - 2) _____.
 - 3) _____.
- C. Motion to Table: I motion to TABLE the proposed Amendments to the City's Code of Ordinances, An amendment to the City's Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations for the following reasons:
- 1) _____.
 - 2) _____.
 - 3) _____.

SAMPLE MOTION #2: An amendment to the City's Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

- A. Motion to Approve: I motion to APPROVE the proposed amendment to the City's Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading as written and proposed.
- B. Motion to Deny: I motion to DENY the proposed Amendments to the City's Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading, for the following reasons:
- 1) _____.
 - 2) _____.
- C. Motion to Table: I motion to TABLE the proposed An amendment to the City's Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading, for the following reasons:
- 1) _____.
 - 2) _____.

Staff Recommendation:

Staff requests that the Planning Board forward a positive recommendation for adoption of these amendments to the City Council to bring the Ordinance into compliance with our current operating procedures and to eliminate sludge spreading / disposal from the City Code of Ordinances.

ATTACHMENT: Attachment # 1: Proposed Text Amendments to Section 66-21 Soil Evaluations, and an amendment to Section 58 Subsurface wastewater disposal and sludge spreading.

Ordinance Review: City Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations and City Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

Planning Board: Public Hearing December 6, 2023

EXISTING Ordinance Language:

Sec. 66-21 Soils evaluations.

[Ord. of 6-20-1995]

- (a)** Soil tests shall be taken according to the State Plumbing Code, and ~~the evaluator shall be accompanied by~~ the City Plumbing Inspector or his designated agent in accordance with City ordinances shall inspect the original ground scarification prior to the fill that will establish the elevation where the septic bed will be built upon.
- (b)** The City ~~Planning~~ Plumbing Inspector shall ~~be present and witness the excavation of each test pit. A certification with his signature shall be presented by the subdivider at time of preliminary plan application.~~ inspect the top of the disposal device and septic components.
- (c)** A completed HHE 200 Form for each lot shall be submitted with the final application. This requirement shall also hold in cases where a common or communal system is proposed.

EXISTING Ordinance Language:

Section 58 Subsurface wastewater disposal ~~and sludge spreading.~~

[Ord. of 3-5-1991(2)]

I. Subsurface wastewater disposal systems.

- A.** All subsurface sewage disposal systems shall be installed in conformance with the State of Maine Subsurface Wastewater Disposal Rules (rules).

 - 1.** The minimum setback for new subsurface sewage disposal systems shall be no less than 100 horizontal feet from the normal high-water line of a perennial water body, such as a lake, pond or year-round stream, and wells or other drinking water supplies.
 - 2.** Replacement systems shall meet the standards for the replacement systems as contained in the rules.
- B.** Any lot proposed shall have a separate soils test and HHE-200 form prepared by a licensed site evaluator. Disposal system locations shall be indicated on plats presented to the Building Inspector or Planning Board.

Ordinance Review: City Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations and City Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

Planning Board: Public Hearing December 6, 2023

1. The certified plumbing inspector (LPI) of the City of Biddeford shall ~~be present when test pits are being dug to ensure that the pit meets all standards and that the pit is filled after digging to avoid a potential safety hazard~~ inspect the original ground scarification prior to the fill that will establish the elevation where the septic bed will be built upon.
2. Further, the LPI shall ~~be notified prior to placement of any tanks or leach field. He shall be present to verify installation~~ inspect the top of the disposal device and septic components.
3. In the case that the LPI is not available, the Building Inspector may ~~observe~~ inspect.

C. Not exclusive of Subsection B above, common or shared disposal systems may be allowed by the Planning Board upon presentation of detailed plans approved by the Maine Department of Health and Human Services, Division of Health Engineering, and documents detailing plans and agreements for system maintenance.

~~II. Sewage and industrial sludge spreading (including land spreading of contaminated soils as defined by Maine Department of Environmental Protection).~~

~~A. The City of Biddeford recognizes the advantages that the spreading of selected sludges has for agricultural lands. The City also realizes that this spreading can pose problems for abutting property owners. The City of Biddeford therefore requires that any proposal for the spreading of sewage or industrial sludge, or contaminated soils be reviewed by the Planning Board prior to permitting by the Maine Department of Environmental Protection (DEP). This review will allow for public input and allow concerns to be presented to the applicant and the DEP prior to any action by the State Department.~~

~~B. Any proposed spreading or storage of sewage or industrial sludge, or contaminated soil, shall submit an application to the City planning office. The Planning Board shall schedule a site review of the application within 30 days of receipt of the application.~~

~~C. Ten copies of the application shall be submitted. Such application shall include:~~

~~1. A narrative description of proposed spreading operation to include:~~

~~a. The application submitted to DEP.~~

~~D. The City Planner shall provide copies of the DEP application to the City Engineer and the City's environmental specialist for review and comment. These comments shall be submitted to the Planning Board and shall be made part of the permanent record for the application.~~

Ordinance Review: City Code of Ordinances, Part II: Code of Ordinances / Subdivisions – Article I, Section 66-21 Soil Evaluations and City Code of Ordinances, Part III: Code of Ordinances, Article VI – Performance Standards Section 58 Subsurface wastewater disposal and sludge spreading.

Planning Board: Public Hearing December 6, 2023

~~E. The Board may conduct a public hearing concerning the application. The Bureau of Remediation and Solid Waste Management, Division of Solid Waste Management, shall be notified of the meeting.~~

~~F. The Bureau of Remediation and Solid Waste Management, Division of Solid Waste Management, shall be notified of the board's decision concerning the application. In the case of a negative/disapproval of the application, a copy of the findings of fact and supporting materials shall be forwarded along with the decision.~~

Galbraith, David

From: Fecteau, Roby
Sent: Monday, September 25, 2023 12:20 PM
To: Galbraith, David
Subject: FW: Questions

From: Lawson, Brent <Brent.Lawson@maine.gov>
Sent: Wednesday, January 25, 2023 8:00 AM
To: Fecteau, Roby <Roby.Fecteau@Biddefordmaine.org>
Subject: Re: Questions

EXTERNAL: This email originated from outside of the City of Biddeford email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

As far as the septic as long as it's not engineered we don't have to see them. I assume each lot has a tank going into one field. Each lot will have to be permitted.

The second question is I agree.

Brent

Get [Outlook for iOS](#)

From: Fecteau, Roby <Roby.Fecteau@Biddefordmaine.org>
Sent: Wednesday, January 25, 2023 7:35:03 AM
To: Lawson, Brent <Brent.Lawson@maine.gov>
Subject: FW: Questions

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Brent

Thanks for your response to yesterday's question. Here is the email I sent

Thanks
Roby

From: Fecteau, Roby
Sent: Monday, December 12, 2022 9:01 AM
To: 'brent.lawson@maine.gov' <brent.lawson@maine.gov>
Subject: Questions

Good morning Brent.

I have a couple of questions that I hope you can assist with.

As you know, we have a proposed Mobile/ Manufactured Housing park that is being proposed in Biddeford. There will be approximately 200 homes. The owner of the park has submitted all the soil profile tests and test pit locations as part of the planning board packages. The homes will have a non-engineered septic system that will serve 2 to 3 homes at the

most. All land will remain with the park owner and they will be responsible for the septic maintenance and to fix any malfunctions.

Under the current proposal would this need your office approval?

My second question has to do with test pits. Biddeford has a requirement that dates back to the 70's and 90's that requires test pits to be inspected by the LPI. These rules were written a long time ago and seem redundant with the current requirements and inspection processes.

Prior to the current rules, septic inspections would include 3 inspections: 1st soil elevation prior to building the bed. 2nd top of disposal device and septic components. 3rd back fill and final grading.

Current rules are different. 1st original ground scarification prior to fill that would establish the elevation where the bed would start to be built on. 2nd top of disposal device and septic components

Would the department agree that the current rules and inspection process is better than checking individual test pits? A lot has changed with technology and rules since the 70's and 90's.

Thanks in advance and Happy Holidays Brent.

Roby Fecteau
Director of Code Enforcement &
Emergency Management
City of Biddeford
205 Main St. Suite 104
207-284-9236
robby.fecteau@biddefordmaine.org

Monday & Tuesday – 7:00 a.m. to 5:00 p.m.
Wednesday & Thursday – 8:00 a.m. to 4:00 p.m.
Closed on Fridays

The contents of this e-mail message and any attachments are confidential and are intended solely for addressee. The information may also be legally privileged. This transmission is sent in trust, for the sole purpose of delivery to the intended recipient. If you have received this transmission in error, any use, reproduction or dissemination of this transmission is strictly prohibited. If you are not the intended recipient, please immediately notify the sender by reply e-mail or phone and delete this message and its attachments, if any.

Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.