



April 9, 2024

Charlemont Planning Board
 P.O. Box 465
 Charlemont, MA 01339

**RE: Supplemental Package #1
 Hinata Resort
 133 Warfield Road,
 Charlemont Massachusetts**

Dear Mr. Board Members;

On behalf of the Applicant, The Neilsen Team, SK Design Group offers the following supplemental information package in support of our Special Permit Application. Included herein please find:

1. Written responses to Planning Board comments (Attachment #1);
2. Updated architectural plans (Attachment #2);
3. Updated sewer estimate; (Attachment #3)
4. Updated Site Plan from the Notice of Intent application. (Attachment #4)

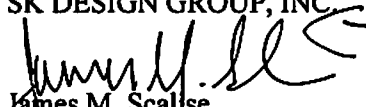
The following responses are offered to facilitate collaboration and resolution of planning comments. The comments are copies below with responses in bold type (see Attachment #1).

Updated architectural plans from Shelter Design illustrate refined cabin concepts to further the process of blending the site attributes with a code compliance energy efficient cabin style (see Attachment #2).

The Sewer Commission is expected to review our sewer flows and project details. We anticipate discussion on the sewer flow estimates. We offer an alternative sewer estimate. Key talking points include overall estimate volume, location of the development with respect to the service area (split lots) and occupancy rates, resort uses and amenities counting twice.

Site Plans have been matured to consider the Wetlands Protection Act more carefully. A design process has instituted an avoid, minimize, and mitigate protocol to meet regulatory performance standards. The resulting plan includes refinements and attributes making the project compliant and more environmentally sensitive.

Please accept this additional information and include it in your deliberations. I look forward to discussing these items at your April 9th meeting.

Sincerely,
 SK DESIGN GROUP, INC.

 James M. Scalise,
 Professional Engineer

Attachments
 Cc: The Neilsen Team
 Berkshire East
 File

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Hinata Mountainside Resort Special Permit Report to the Charlemont Planning Board, 4/4/2024

Responses in Bold Arial text

This report summarizes my observations leading up to the public hearing on April 9, 2024. It is based upon attending a portion of a Planning Board meeting, reading the application materials, conducting several site visits, review of public comments to date, and a review of the property's permitting history.

Community-wide Issues (that may have impacts beyond the site and its immediate surrounds)

1. Intersection of Warfield Road and Route 2: The application identifies this intersection as "tricky," but only elaborates concerning anticipated pedestrian activity. No mention is made of vehicular safety at the intersection. While Level of Service on Warfield Road should not be problematic, the intersection with Route 2 is far less than ideal. This is especially hazardous for outbound Warfield Road traffic making right turns onto Route 2 (the way to Berkshire East Ski Area). It may not be feasible for larger vehicles to stay in the correct lanes while executing this turn. Easterly left-hand turns onto Route 2 are less problematic, but still not ideal given the sharp angle of the intersection (right-side blind spot issues).

For example, I intentionally negotiated a right turn onto Route 2 from Warfield Road. I kept my small Prius in the righthand lane going down, made the turn while barely avoiding the eastbound lane of Route 2, but not without hitting and damaging my rear bumper on the steep pavement of Warfield Road at the intersection. Lower or longer vehicles couldn't have done this. The tendency of drivers would be to swing wide into the center or left side of Warfield Road in order to stay in the westbound lane on Route 2 without hitting their rear bumper as I did. This maneuver will in turn obstruct westbound Route 2 traffic attempting to turn right onto Warfield Road. I've noted some discussion of prohibiting righthand turns onto Route 2.

The intersection has been reviewed by Mass Dot as part of the recent improvements to Main Street/Route 2. This review indicated the access was acceptable for the current traffic generation levels. The proposed change of use is expected to generate less traffic than the existing permitted uses. Thus, the intersection will operate at similar levels of service as was factored into this Mass DOT opinion.

While the intersection geometry is poor it is under the jurisdiction of the Massachusetts Department of Transportation. Any increase in traffic should incorporate design alternatives and possibly mitigation.

2. Sewer Capacity: Regardless of the percentage allocation utilized for the property, there has been raised the issue of townwide sewer plant capacity [see memo from Randy Crochier, Regional Health Agent, dated 3/22/2024]. This should be investigated further with the Conway Sewer Commission, CPHS/FRCOG, and the Conway Board of Health.

The connection to the municipal sewer is governed by the Charlemont Sewer Commission.

3. Trail Network: The project overlies portions of existing trail networks that appear open to the public. Will these trail alignments be relocated or adjusted to maintain any Chapter 61 public access requirements, or other requirements or agreements?

To our knowledge the property is in chapter 61A and has no obligation for public access. The proposal does not include or expand public use of the property.

4. BioMap: Is any portion of the project area within state designated BioMap areas? The site appears to be BioMap Critical Natural Landscape.

"BioMap areas are intended for conservation planning purposes only and should not be used for regulatory purposes. The NHESP layers designed for regulatory use are produced in the Natural Heritage Atlas and include Priority Habitat and Estimated Habitat." according to the Mass. Division of Fisheries and wildlife website.

The proposed project is NOT within any NHESP regulated areas.

Property-Specific Issues (that are largely confined to the site itself)

1. Road Width: The plan shows a uniform travelled lane width of 20 feet. This may be out of scale with a forested "glamping" setting. Maintaining that uniform width throughout, coupled with the intermittent parallel parking, may cause excessive excavation and tree removal (for this type of nature-based use). The board may wish to consider approving the plans with a range of roadway widths from 14-20 feet as conditions dictate (likely similar dimensions to many of Charlemont's unpaved roads today). The parallel parking areas can, if unoccupied, serve as turnouts for passing vehicles.

I agree with this comment but was restricted from a narrower road while trying to comply with the minimum fire road access width per NFPA and AASHTO which recommend a width of 20 feet minimum. I agree that a narrow road has benefits including traffic calming among others. However, AASHTO recommends a width of 20 feet for a gravel road with the estimated traffic for this project. (90 ADTs). (Should this be made a

condition of approval I suggest it be contingent upon fire department approval)

TABLE 3 ROADWAY WIDTHS FOR TWO-LANE GRAVEL ROADS

design speed	Roadway Width								
	Average of Canadian road agencies		AASHTO	NCHRP Report 214		Recommended roadway widths			
	ADT less than 100	ADT greater than 100	ADT less than 250	ADT less than 400	ADTT greater than 14	ADT less than 100	ADTT greater than 15	ADT 100-200	ADTT greater than 15
	ADTT less than 15	ADTT greater than 15	ADTT less than 15	ADTT less than 14	ADTT greater than 14	ADTT less than 15	ADTT greater than 15	ADTT less than 15	ADTT greater than 15
km/h	m	m	m	m	m	m	m	m	m
100	8.4	9.0	7.3	-	-	7.4	7.8	7.4	7.8
90	8.5	8.6	7.3	-	-	7.0	7.4	7.4	7.8
80	7.8	8.0	7.3	9.1	9.1	7.0	7.4	7.0	7.4
70	7.2	7.4	7.3	7.9	7.9	6.6	7.0	7.0	7.4
60	7.4	7.6	-	6.7	7.3	6.6	7.0	6.6	7.0
50	7.2	7.4	6.7	6.1	6.7	6.0	6.4	6.2	6.6
40	7.7	8.0	6.7	6.1	6.7	6.0	6.4	6.2	6.6
30	6.8	7.1	6.7	5.5	6.1	5.6	6.0	6.0	6.4

Note: Roadway width of gravel roads is the distance between the intersections of the side slopes and the roadway surface.

2. Alignment of Roadway from Flag 591-600: This segment of roadway is proposed on steeper lateral grades, necessitating deep cuts and fills to construct across the hillside. The extensive earthwork required on these existing slopes will significantly change the profile of the hillside and could lead to erosion and sedimentation, possibly getting into the two drainageways to Rice Brook (900+ feet downgradient). Repositioning this road segment upgradient could reduce the required earthwork and improve access to the cabins along this section. The board could request at-scale cross-sections at about roadway station 950 showing the finished cuts, fills, roadway, pathway, and cabin at this location.

The roadway alignment was chosen to avoid the row of mature maple trees along the existing farm road/trail. Creating a uniform cross section, providing fire truck access, avoiding the trees, and installing new compliant stream crossings moving the roadway upgradient is not recommended or practical. A condition allowing a narrow road would allow further design and evaluation to occur on this matter.

2. Cabins on Fill: The 2-3 cabins in the area of flags 608-617 may be positioned on or near old, landfilled logging debris (tree trunks and slash).

The cabins will be constructed on drilled screw piles or piers. Site specific remedies for geotechnical evaluation and support will be completed in accordance with the building code under the supervision of a professional engineer.

4. B Road Issues: The construction of the B Road will yield 7 additional cabins, yet there are several issues to consider:

- a. This area is lightly forested with deciduous trees with little understory. The 7 cabins will be conspicuous from most of the upper C Road cabin decks, detracting from the experience.

The applicant has reviewed this from a program standpoint and finds it is acceptable.

- b. The roadway alignment as flagged will require blasting of ledge and rock outcrops to be constructed.

This is anticipated and included in the project budget. The preliminary grading plans match grades in most areas. Please refer to the site plans.

- c. An isolated wetland is proposed to be filled. Roadway construction and parking areas are proposed within the 100-foot wetlands buffer zone.

Updated wetland plans avoid the Isolated wetlands.

- d. The two southerly cabins will require a stream crossing over and direction drilling under for utilities.

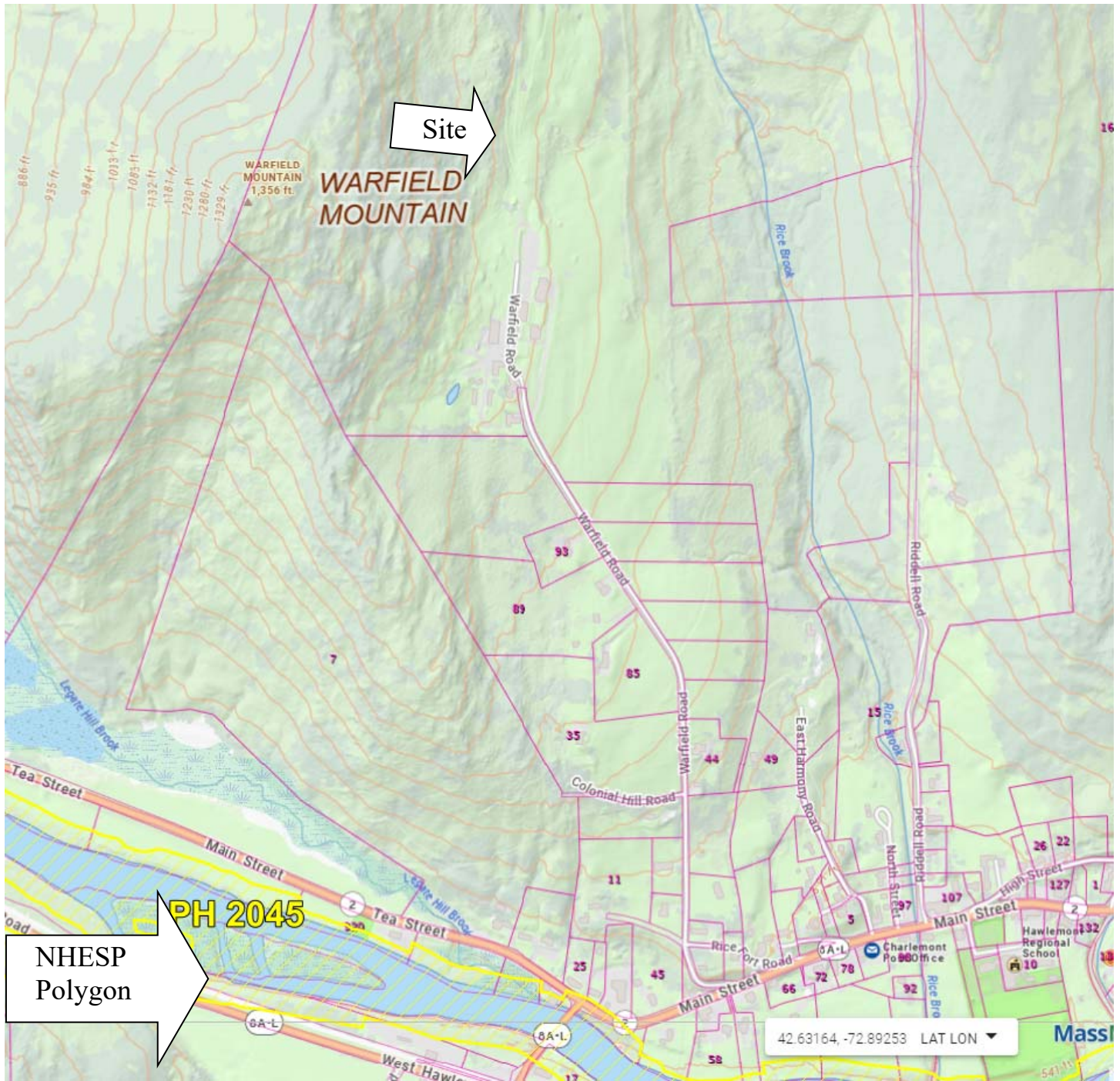
A bridge is proposed thus the impacts to Bank will be temporary.

This B Road section, given its difficulties, might be considered as a final or even later phase once demand for the glamping cabins has been assessed.

The project pro-forma requires the project to be constructed at one time. Further phasing would result in disruption of future use to add a later phase which would shut down the proposed resort during construction. Phasing is not an acceptable alternative for the applicant.

Trip Generation Worksheet

Use	LUC	# of Units	Unit of Measure	AM Peak Hour	PM Peak hour	WeekdayDaily Trips	Weekend Peak Hour	Weekend Daily Trips
Existing uses								
Motel Room B&B	320	15	Rooms	10	10	138	11	133
Apartment	219	1	Rooms	3	16	7	1	6
Restaurant (275 Seats)	831	5500	SF	31	103	699	110	871
Banquet Hall	W09	275	Seats	44	83	787	91	773
				88	212	1630	213	1783
Proposed Uses								
Campground		32	sites	12.8	12.8	64	19.2	96
Banquet Hall		275	seats	44	83	787	91	773
Restaurant(150 seats) 20sf/seat	831	3000	SF	17	56	381	60	475
Apartment	219	1	Rooms	3	16	7	1	6
Guest Suites Staff		6	Rooms	6	19	40	3	44
				82	186	1279	174	1395
				-5	-26	-352	-39	-388



Source: Mass Mapper

Figure #3

NHESP MAP
 Warfield Property
 Charlemont, Massachusetts



DESIGN GROUP, INC.

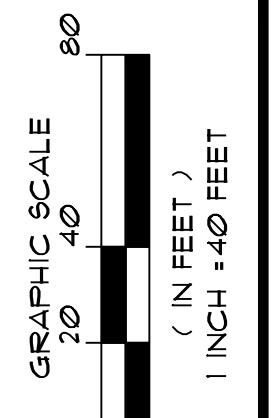
CIVIL ENGINEERS - SURVEYORS - CONSULTANTS

2 FEDERICO DR., PITTSFIELD, MA 01201 (413) 443-3537

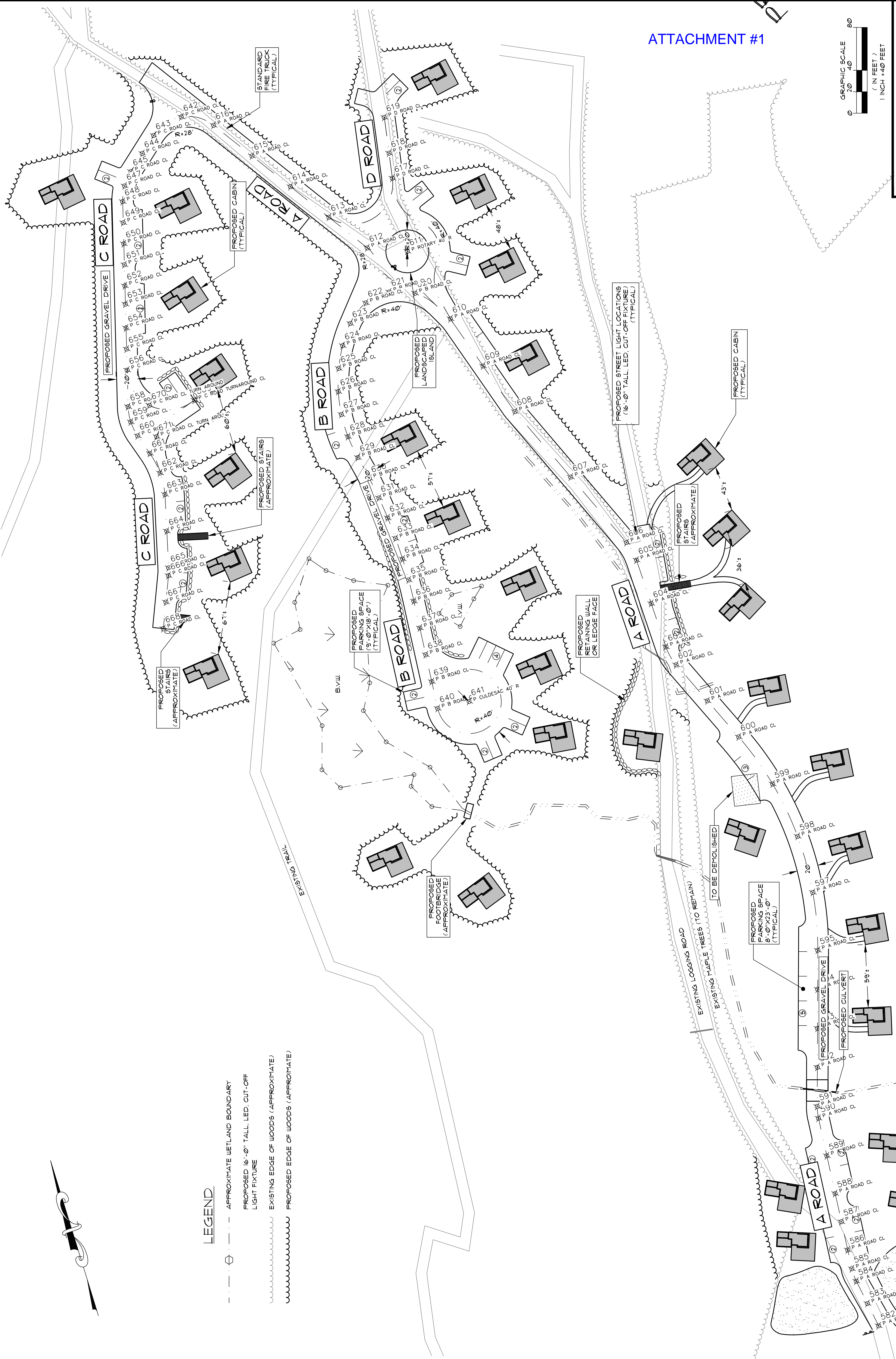
THESE PLANS ARE FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

- NOTES:
1. EXISTING CONDITIONS SURVEY WAS PERFORMED BY SK DESIGN GROUP, INC. ON VARIOUS DATES IN 2021, 2022, & 2023.
 2. ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).
 3. PROPOSED CABINS SHOWN ARE GRAPHICAL ONLY AND MAY VARY IN CONFIGURATION AND ORIENTATION.

1 SITE PLAN
SCALE: 1"=40'



ATTACHMENT #1



SK DESIGN GROUP PROJECT #	230118
DRAWN BY:	PTE
CHECKED BY:	JMS II
DATE:	JUN 11, 2024
ISSUED FOR:	1
SCALE:	AS NOTED
SHEET NO.:	1
OF:	1

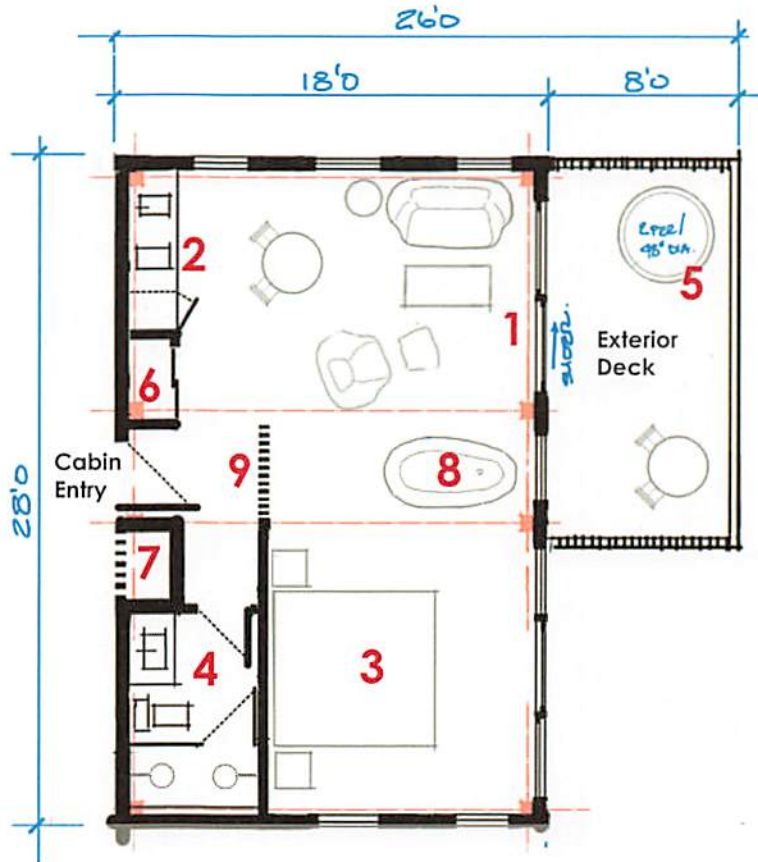
Design Group, Inc.
Civil Engineers & Surveyors & Consultants
2 FEDERICO DRIVE • PITTSFIELD, MASSACHUSETTS 01201 • (413) 443-3537

PLAN DESCRIPTION:
SKETCH PLAN

SKETCH PLAN
PREPARED FOR:
THE NELSEN TEAM
LOCATED AT:
WARFIELD ROAD
CHARLEMONT, MASSACHUSETTS

"Moon" Cabin B: 504sf

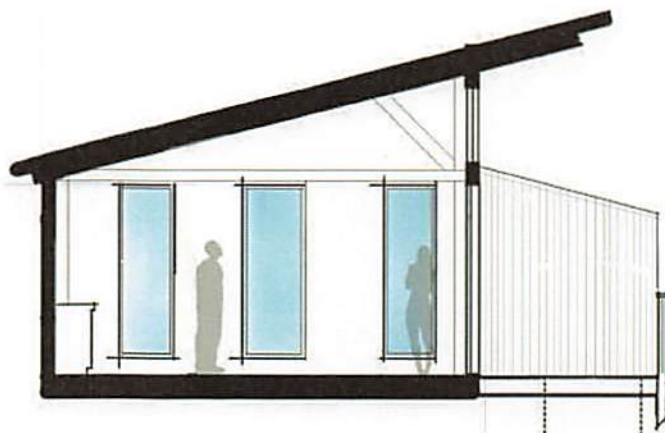
1. Floor to Ceiling windows at principal view. Note, windows may be interrupted at 8' AFF, by timber frame truss to avoid structural complication of bottom chord.
2. "Kitchenette". Approx. six linear feet with shelving above, under-counter 24" Ref, microwave, 2 burner induction and small sink.
3. King size bed
4. Three fixture bathroom with shower for two.
5. Exterior Hot Tub, for two, with privacy screens at short sides of deck.
6. Entry closet
7. Mechanical closet with exterior access louvered doors.
8. Freestanding feature tub with window views.
9. Privacy Screen



Floor Plan

In addition, all cabins will:

- Include pier foundations bearing on adequate soil/rock, and will be laterally braced required.
- Contain conditioned interior spaces meeting applicable MA Energy Code.

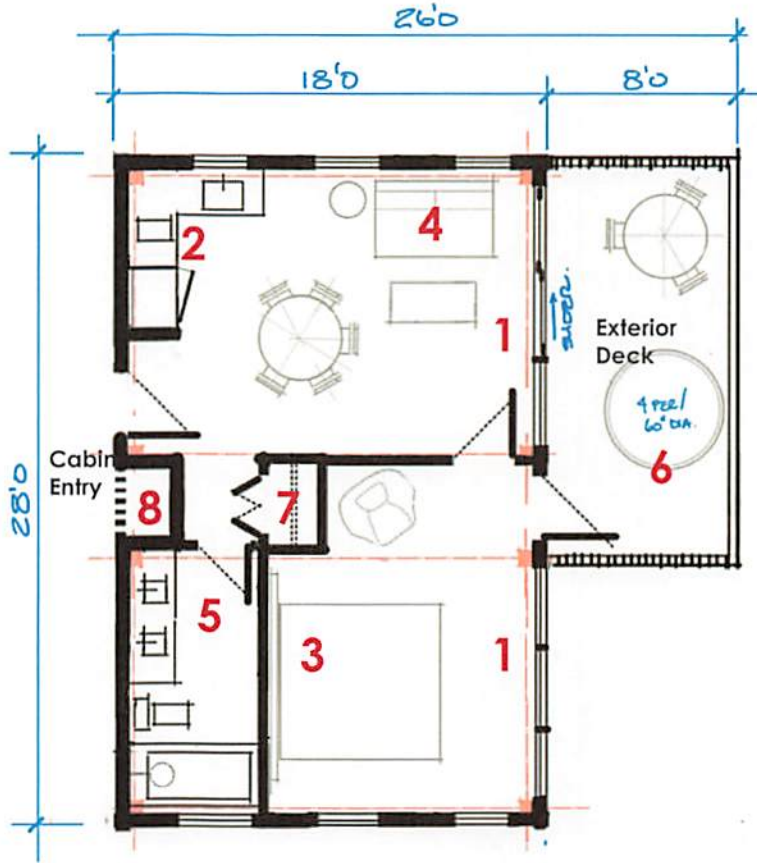


Section

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One Bedroom Cabin, 504sf:

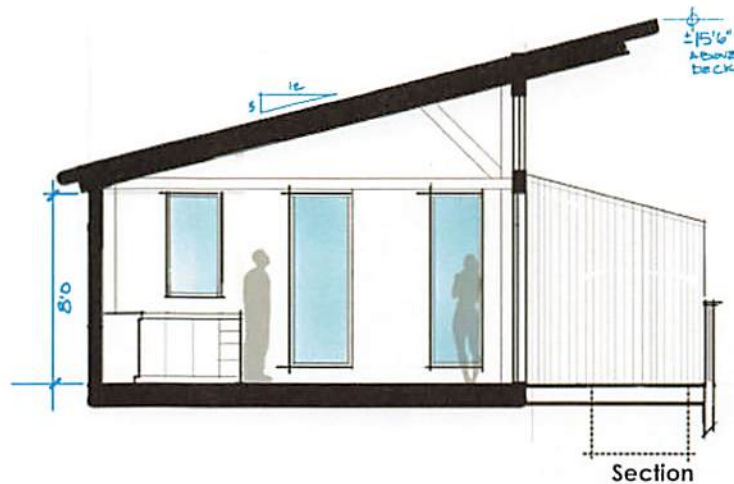
1. **Floor to Ceiling windows** at principal view. Note, windows may be interrupted by timber header to avoid structural complexity.
2. **Kitchen.** Approx. 12 linear feet with shelving above. Full 30" ref, microwave, 2 burner induction and sink.
3. **King Bedrm.** Nightstand features integrated into headboard. Room size: ±11'0" x 14'6"
4. **Pull-out Queen Bed**
5. **Four fixture bathroom** with large alcove tub and shower.
6. **Exterior Hot Tub,** with privacy screens at short sides of deck.
7. **Entry closet**
8. **Mechanical closet** with exterior access louvered doors.



Floor Plan

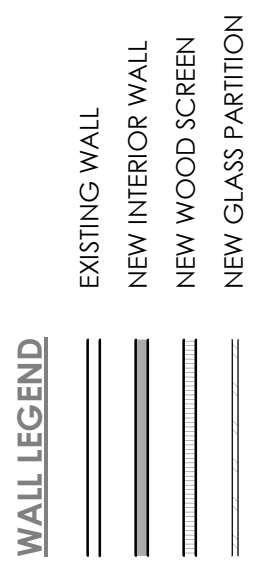
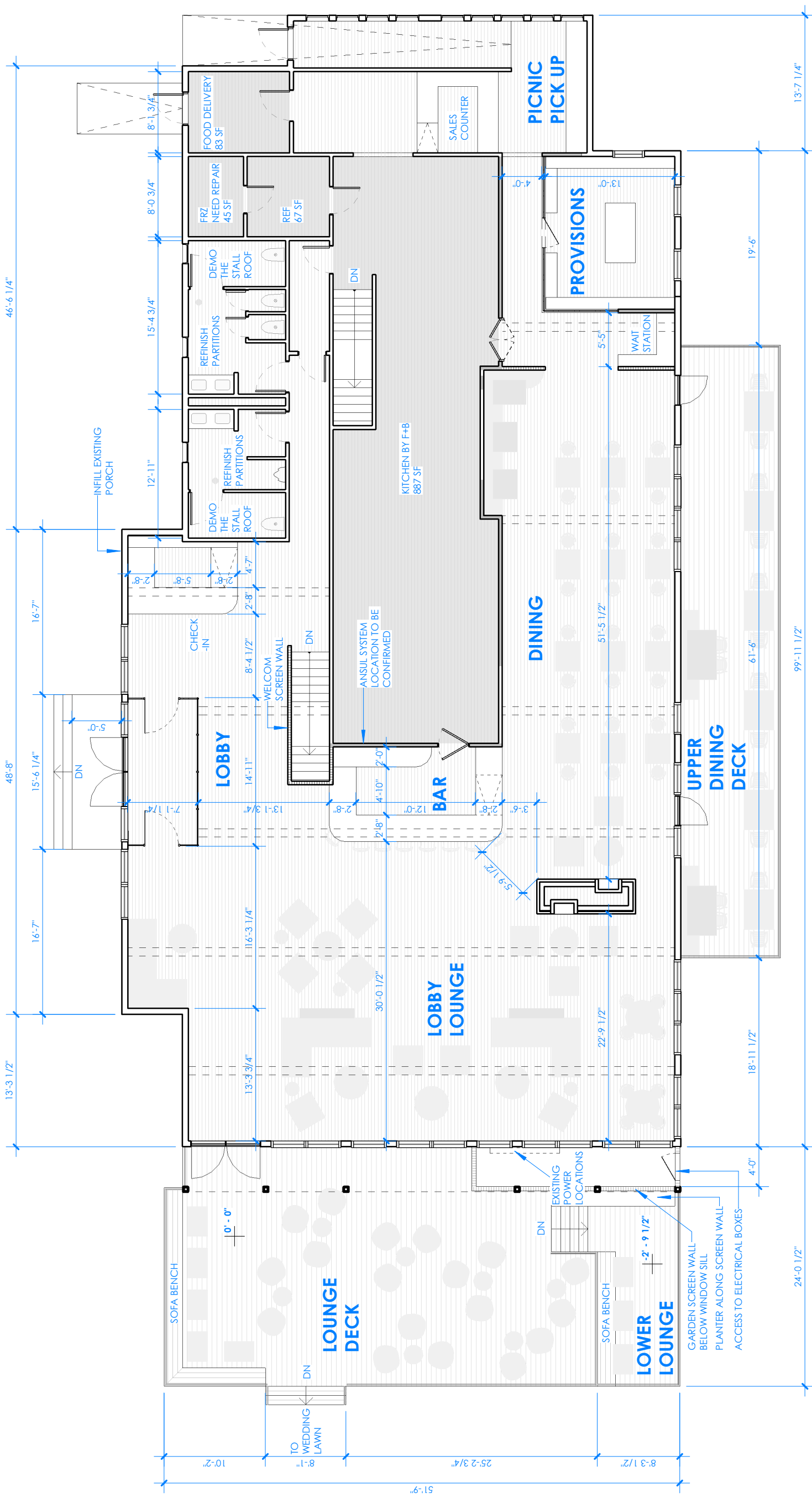
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- Include pier foundations bearing on adequate soil/rock, and will be laterally braced required.
- Contain conditioned interior spaces meeting applicable MA Energy Code.



Section

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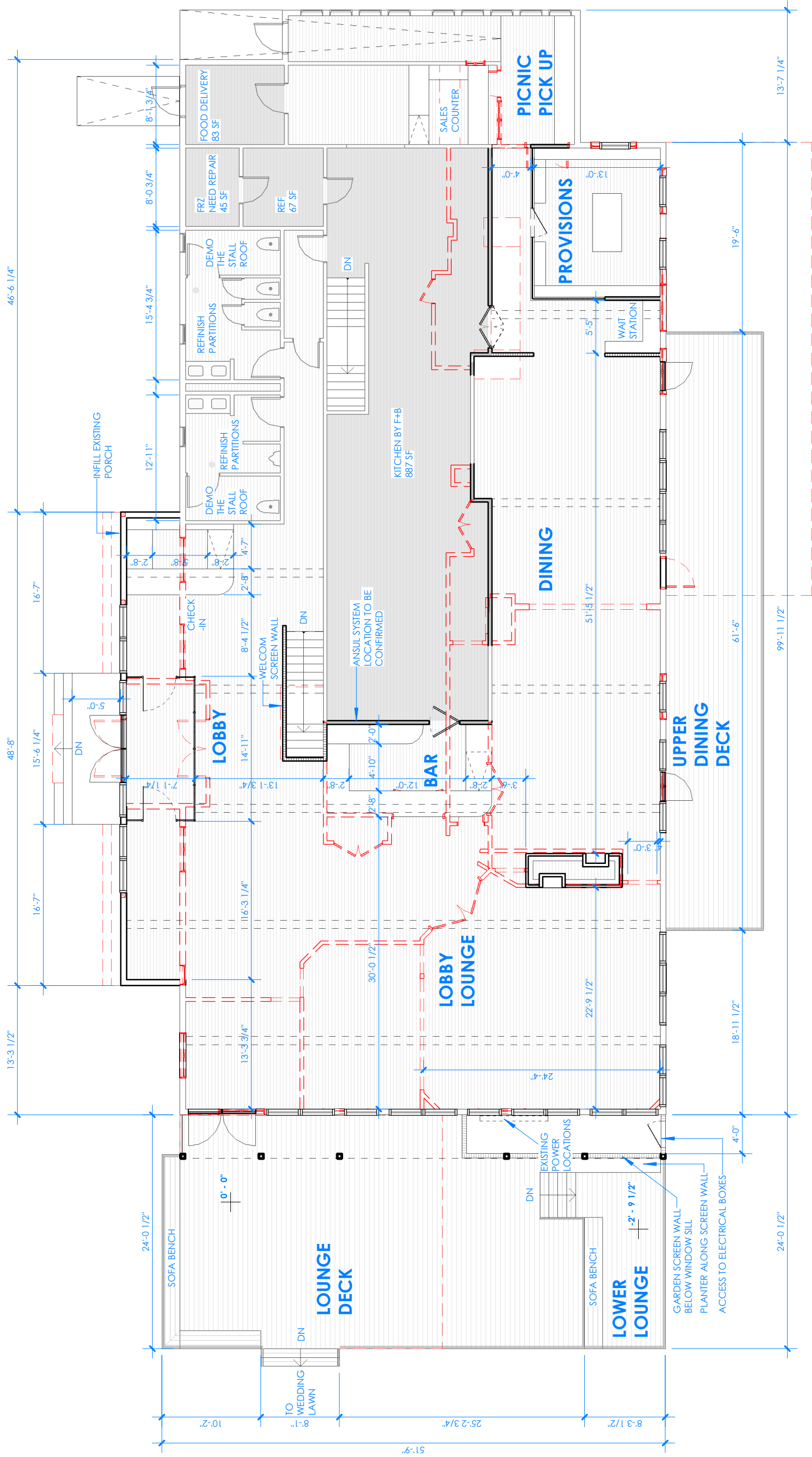
SEATING:

- Indoor Dining: 35 +/-
- Outdoor Dining Deck: 35 +/-
- Indoor Lounge: 35 +/-
- Outdoor Lounge: 35 +/-

TOTAL: 140 +/- Use 150 for Design

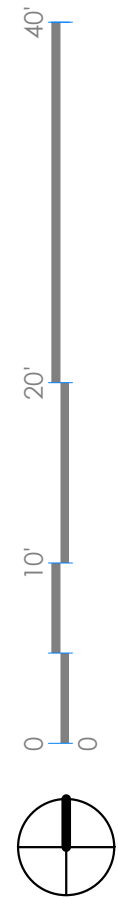


Banquet Hall - Proposed Upper Floor Plan



WALL LEGEND

- EXISTING WALL
- DEM'D WALL
- NEW INTERIOR WALL
- NEW WOOD SCREEN
- NEW GLASS PARTITION



Banquet Hall - Upper Floor Plan - Proposed & Demo

Title V Flows

Proposed use	Unit	unit qty	Unit flow (GPD)	WW production (GPD)	Remarks
Campground	Bedroom	32	110	3520	
Function Hall	person			429	Part time use
Restaurant	seat	150	35	5250	Public Restaurant
Main House B & B	Bedroom	9	110	990	
Bungalow B & B	Bedroom	6	110	660	
Apartment Sugar house	Bedroom	0	110	0	

10849

infiltration

650

11499

Table 1
Warfield House Estate, Charlemont, MA
Wastewater Flow Calculations

Wastewater Source	Unit	Unit Quantity	Unit Flow ¹ (gal/day/unit)	Wastewater Production (gpd)
Bed & Breakfast (The Main House)	Bedroom	9	110	990
Bed & Breakfast (The Bungalow)	Bedroom	6	110	660
Apartment (The Sugar House)	Bedroom	1	110	110
Restaurant	Seat	275	35	9,625
Seasonal Use - Function Hall (Pavilion) ²	--	--	--	429
TOTAL SANITARY FLOW:				11,814
Infiltration - 4" PVC Pipe ³	mile	0.65	1000	6,47
TOTAL WASTEWATER FLOW:				12,461

Notes:

1. Wastewater unit flows based upon 310 CMR 15.203

2. For Pavilion flows see Table 2, below.

3. TR-16 2.2.3.3 - Infiltration: 250 - 500 gpd/in diameter/mile pipe. Use 250 gpd for low groundwater area.

ATTACHMENT #3 UPDATED
SEWER FLOWS

NOTICE OF INTENT
 PREPARED FOR HINATA RESORT
 APPLICANT: THE NEILSEN TEAM
 ADDRESS: 133 WARFIELD ROAD,
 CHARLEMONT, MA.

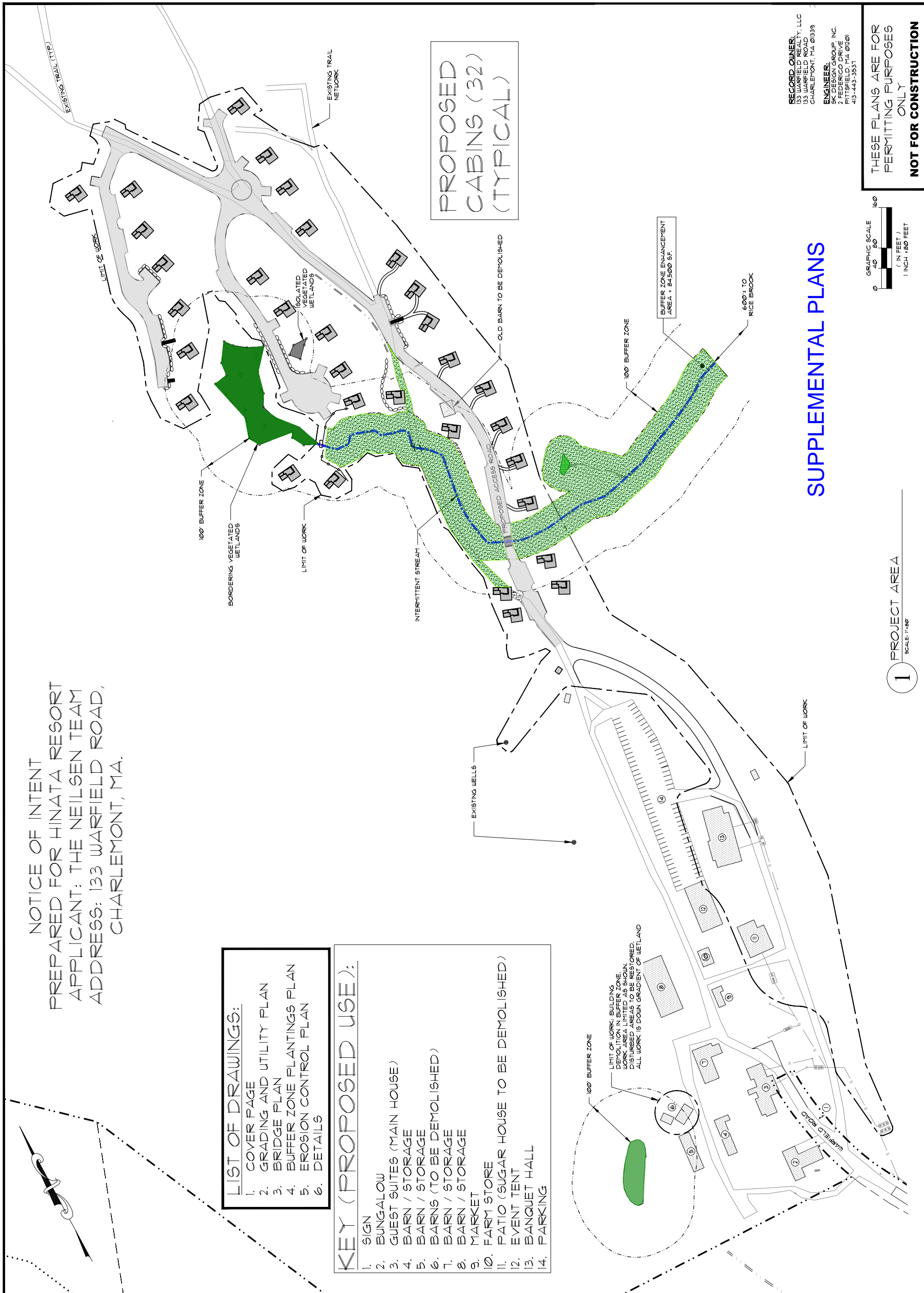
LIST OF DRAWINGS:

1. COVER PAGE
2. GRADING AND UTILITY PLAN
3. BRIDGE PLAN
4. BUFFER ZONE PLANTINGS PLAN
5. EROSION CONTROL PLAN
6. DETAILS

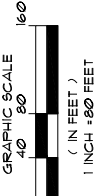
KEY (PROPOSED USE):

1. SIGN
2. BUNGALOW
3. GUEST SUITES (MAIN HOUSE)
4. BARN / STORAGE
5. BARN / STORAGE
6. BARN (TO BE DEMOLISHED)
7. BARN / STORAGE
8. BARN / STORAGE
9. MARKET
10. FARM STORE
11. PATIO (SUGAR HOUSE TO BE DEMOLISHED)
12. EVENT TENT
13. BANQUET HALL
14. PARKING

100' BUFFER ZONE
 LIMIT OF WORK: BUILDING
 DEMOLITION IN BUFFER ZONE
 SHALL BE LIMITED TO 45% OF
 DISTURBED AREA / 45% OF
 ALL WORK IS DOWN GRADIENT OF WETLAND



SUPPLEMENTAL PLANS



1 PROJECT AREA
 SCALE: 1"=80'

THESE PLANS ARE FOR
 PERMITTING PURPOSES
 ONLY
NOT FOR CONSTRUCTION

RECORD OWNER:
 133 WARFIELD ROAD
 CHARLEMONT, MA 01339

ENGINEER:
 SK DESIGN GROUP, INC.
 2 FERRO DRIVE
 PITTSFIELD, MA 01201
 413-443-3331



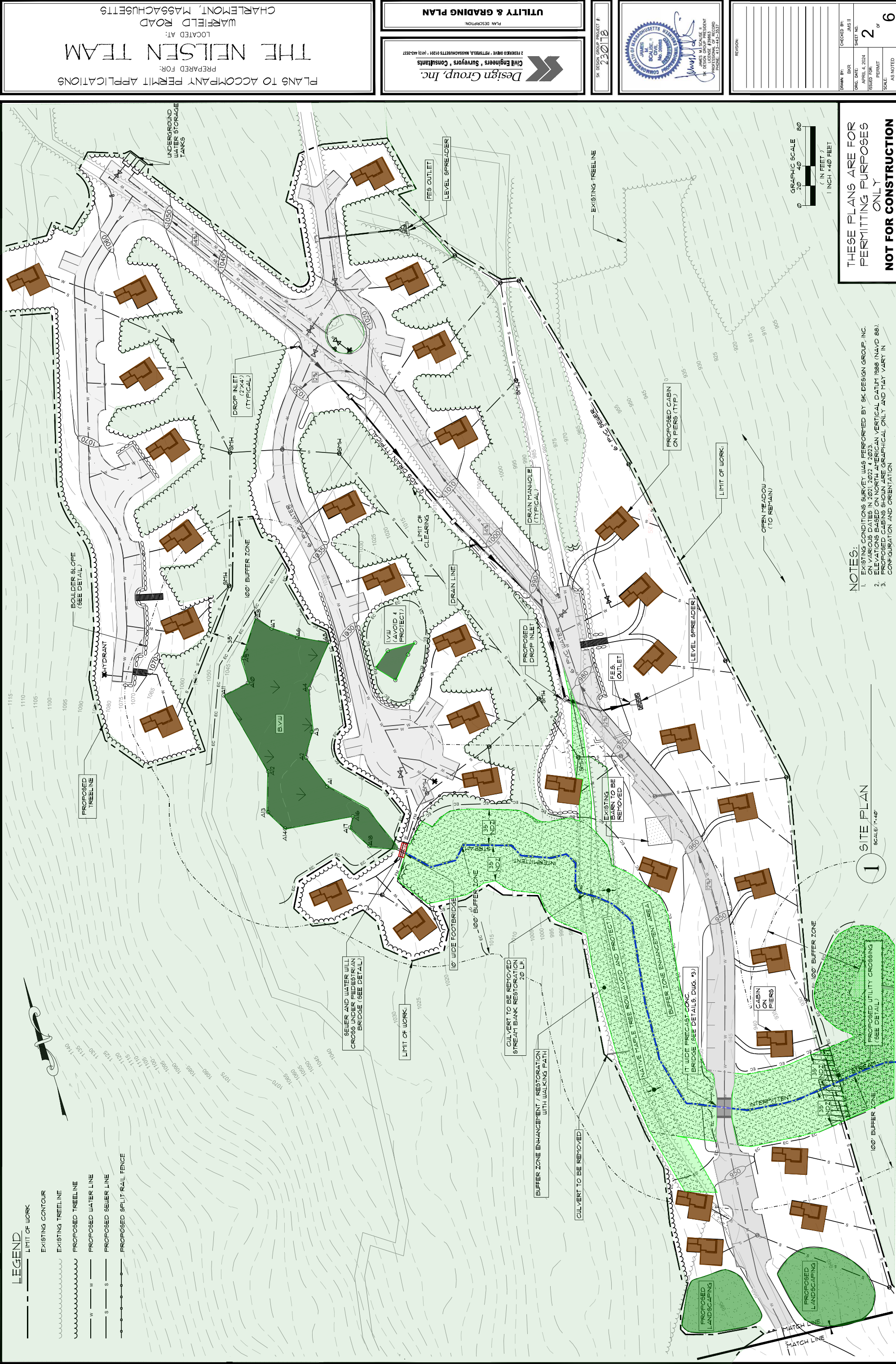
SK DESIGN GROUP PROJECT #:
230178

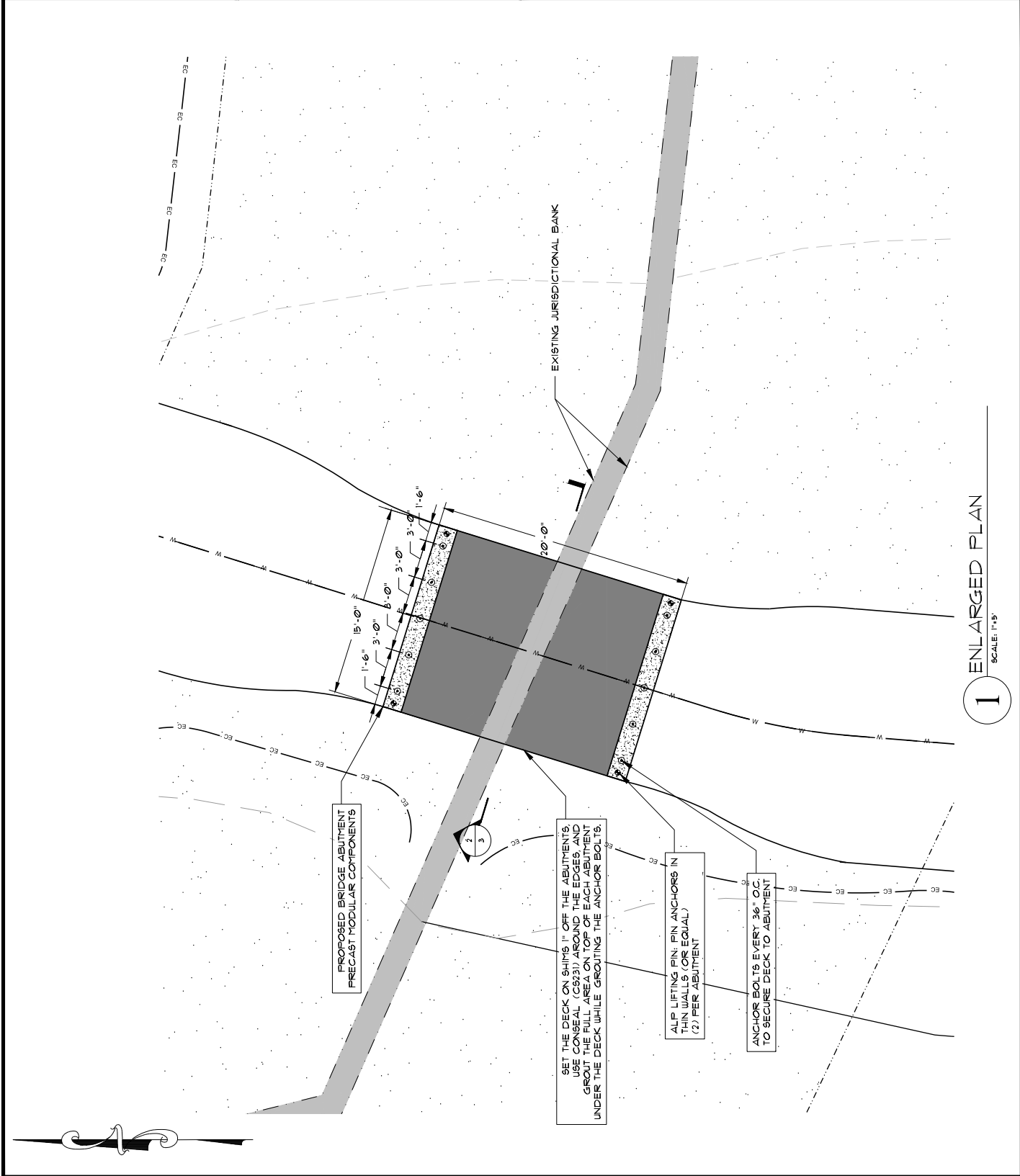
Design Group, Inc.
 Civil Engineers' Surveyors' Consultants
 2 FERRO DRIVE • PITTSFIELD, MASSACHUSETTS 01201 • (413) 443-3331

PLAN DESCRIPTION:
OVERALL SITE PLAN

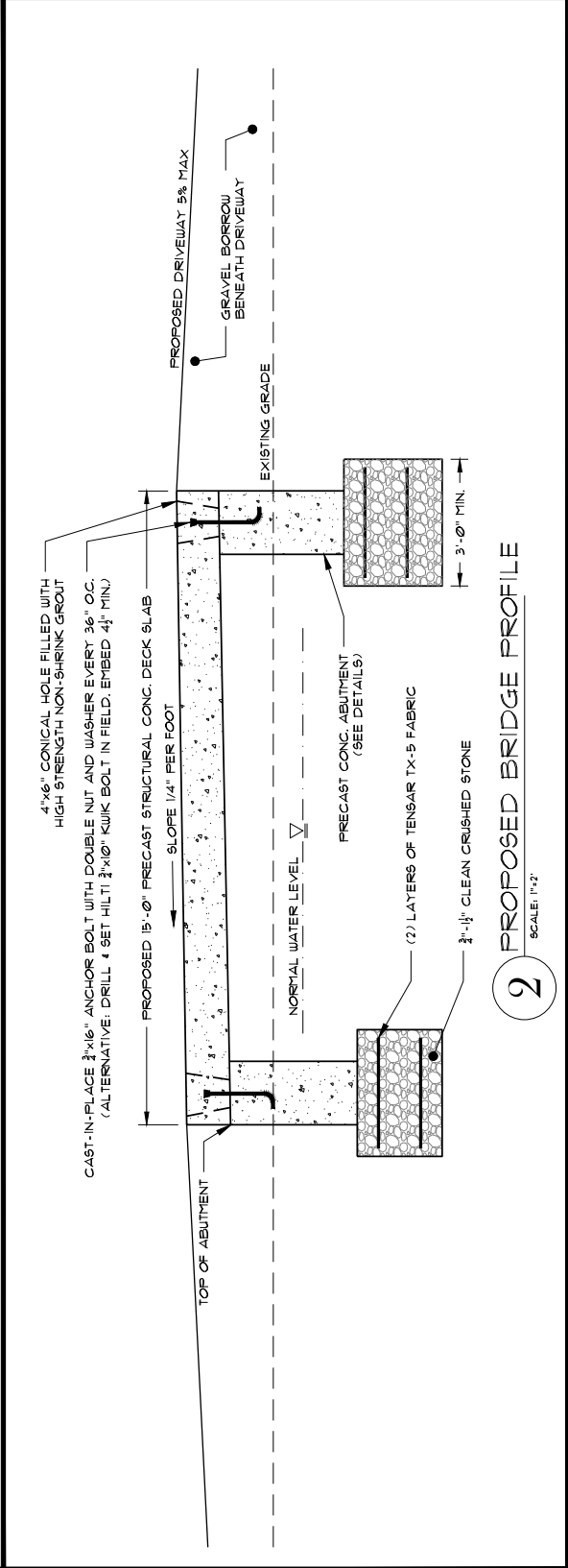
PLANS TO ACCOMPANY PERMIT APPLICATIONS
 PREPARED FOR:
NEILSEN TEAM
 LOCATED AT:
 133 WARFIELD ROAD
 CHARLEMONT, MASSACHUSETTS

REVISION:	DRAWN BY: BKH CHECKED BY: JMS/II SHEET NO. 1 of 6 ISSUED FOR: PERMIT SCALE: AS NOTED
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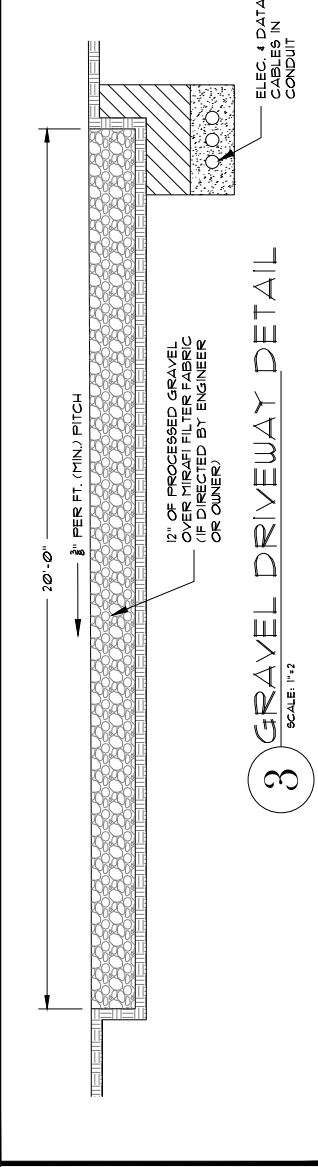




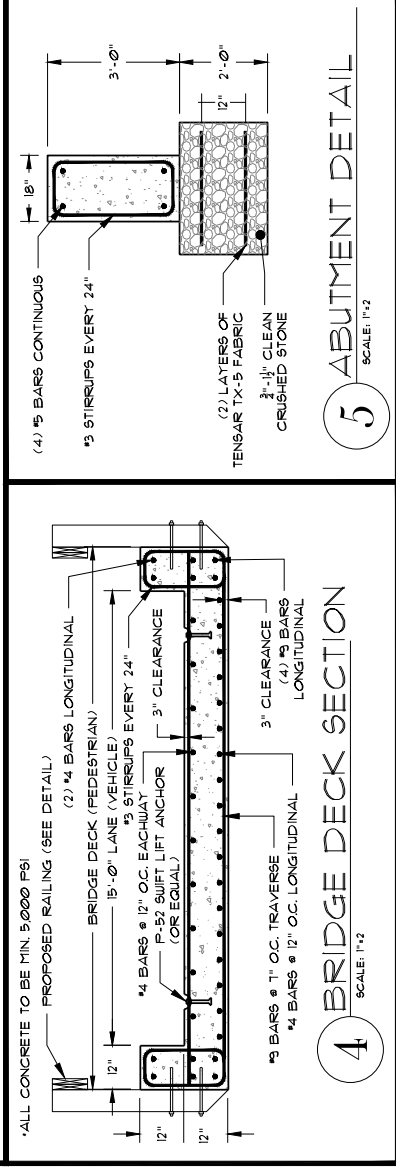
1 ENLARGED PLAN
SCALE: 1"=5'



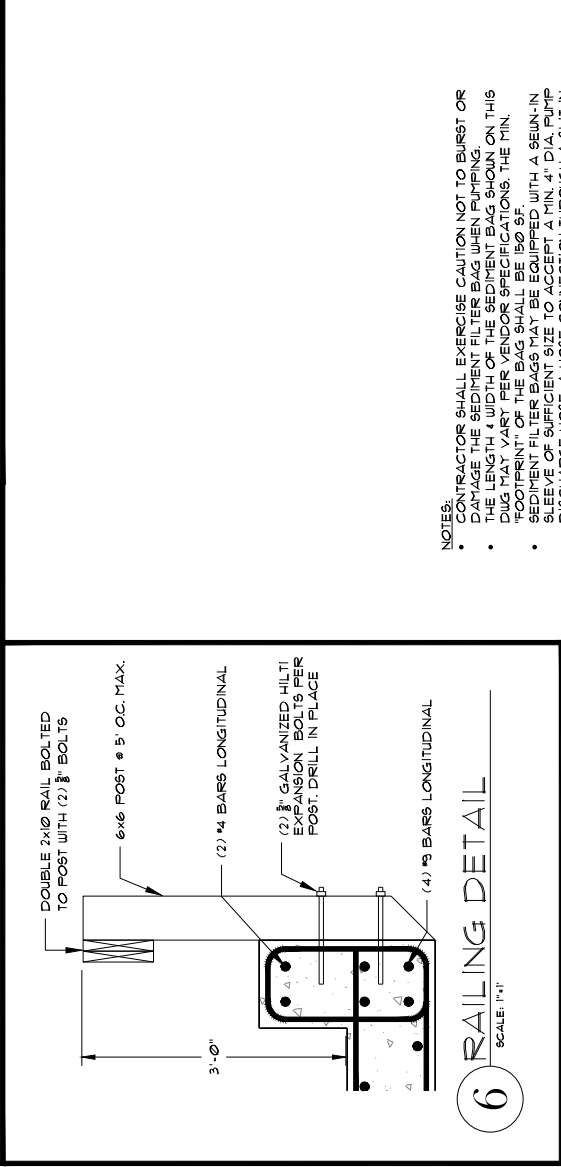
2 PROPOSED BRIDGE PROFILE
SCALE: 1"=2'



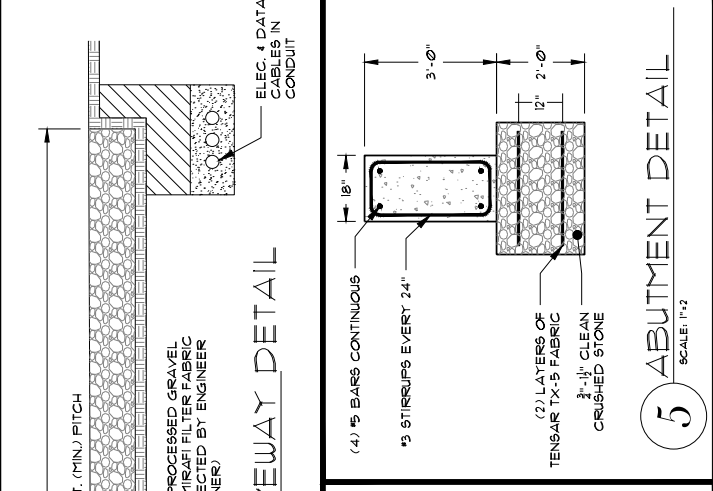
3 GRAVEL DRIVEWAY DETAIL
SCALE: 1"=2'



4 BRIDGE DECK SECTION
SCALE: 1"=2'



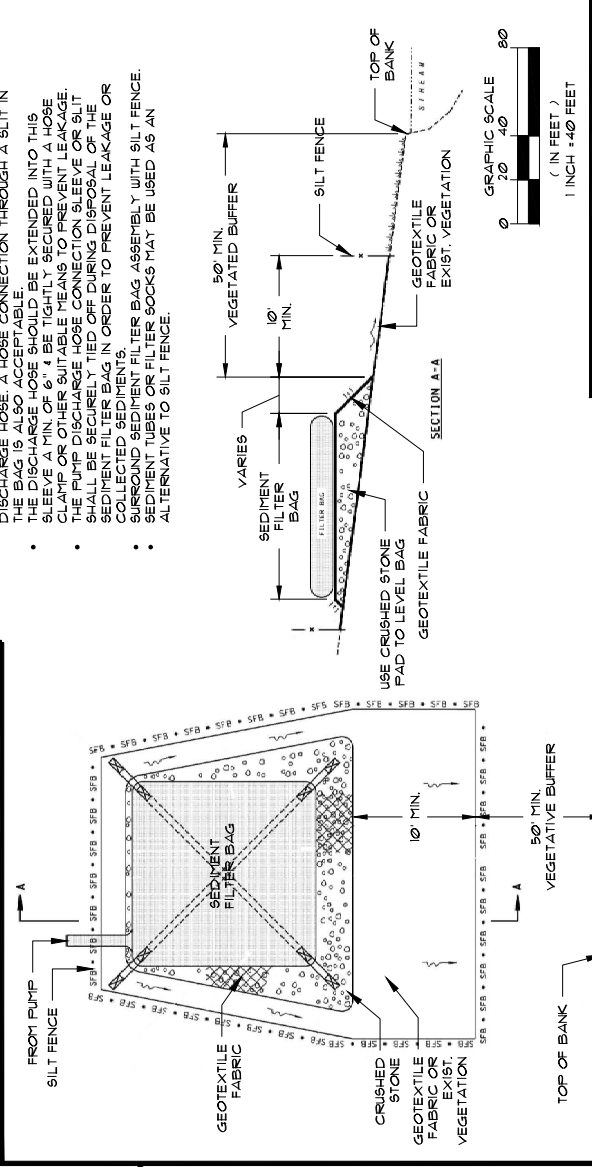
6 RAILING DETAIL
SCALE: 1"=1'



5 ABUTMENT DETAIL
SCALE: 1"=2'

NOTES:

- CONTRACTOR SHALL EXERCISE CAUTION NOT TO BURST OR DAMAGE THE SEDIMENT FILTER BAG WHEN PUMPING. THE LENGTH & WIDTH OF THE SEDIMENT BAG SHOWN ON THIS DRAWING MAY VARY PER VENDOR SPECIFICATIONS. THE MIN. FOOTPRINT OF THE BAG SHALL BE 150 SF.
- THE BAG SHALL BE SECURED WITH A SEAL-IN SLEEVE OF SUFFICIENT SIZE TO ACCEPT MIN. 4" (D) PUMP DISCHARGE HOSE. A HOSE CONNECTION THROUGH A SLIT IN THE BAG IS ALSO ACCEPTABLE.
- THE DISCHARGE HOSE SHOULD BE EXTENDED INTO THIS SLEEVE A MIN. OF 6" & BE TIGHTLY SECURED WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE.
- THE PUMP DISCHARGE HOSE CONNECTION SLEEVE OR SLIT SHOULD BE SECURED TO THE SEDIMENT BAG WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE OR COLLECTED SEDIMENTS.
- SURROUND SEDIMENT FILTER BAG ASSEMBLY WITH SILT FENCE. SEDIMENT TUBES OR FILTER SOCKS MAY BE USED AS AN ALTERNATIVE TO SILT FENCE.



7 DIRTBAG DEWATERING SYSTEM
SCALE: N.T.S.

THESE PLANS ARE FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

PLANS TO ACCOMPANY PERMIT APPLICATIONS
PREPARED FOR:
THE NEILSEN TEAM
LOCATED AT:
WARFIELD ROAD
CHARLEMONT, MASSACHUSETTS

Design Group, Inc.
Civil Engineers' Surveyors' Consultants
2 FERRO DRIVE • PITTSFIELD, MASSACHUSETTS 01201 • (413) 443-5377

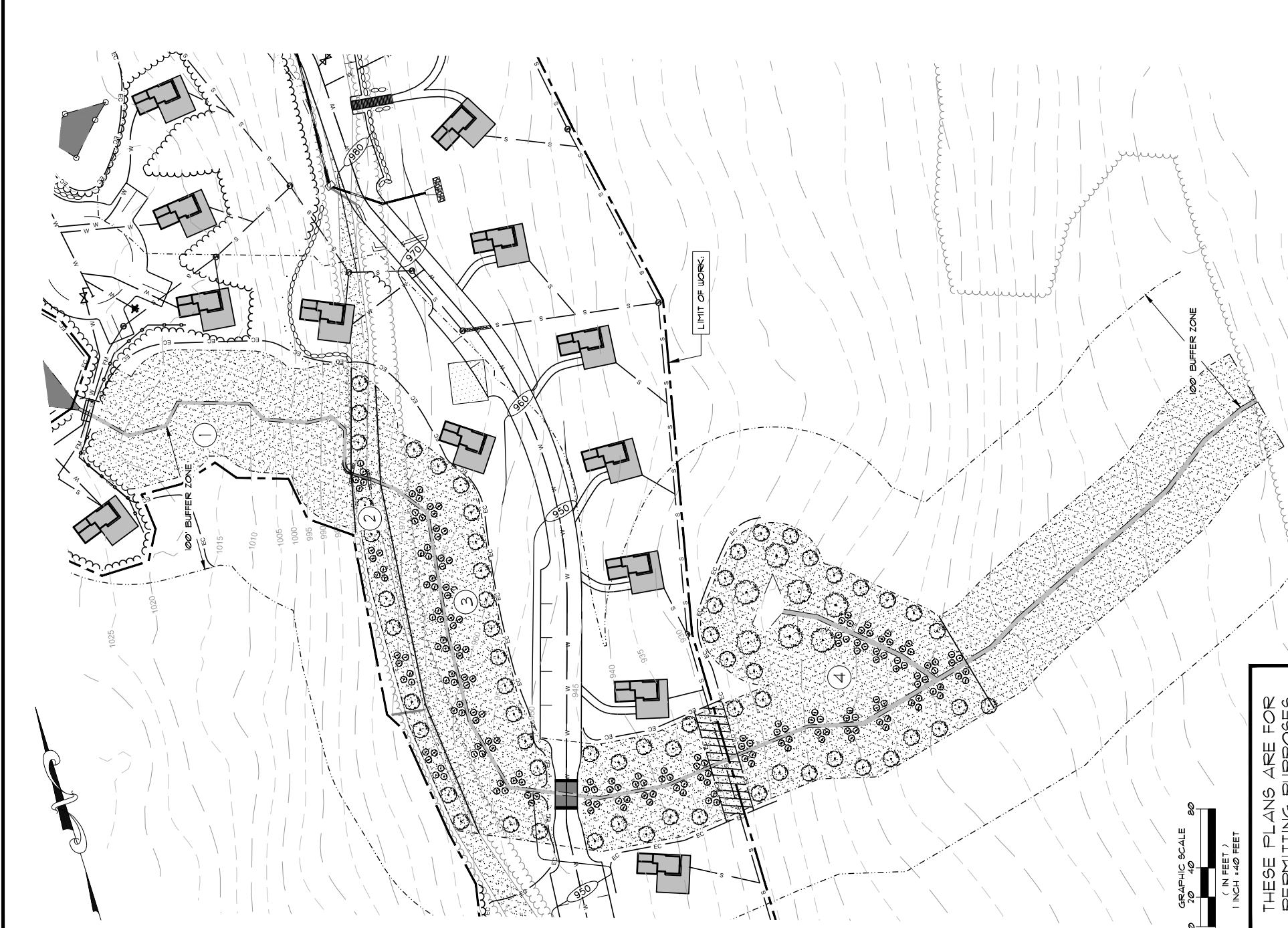
PLAN DESCRIPTION:
BRIDGE PLAN

SK DESIGN GROUP PROJECT #: **230178**



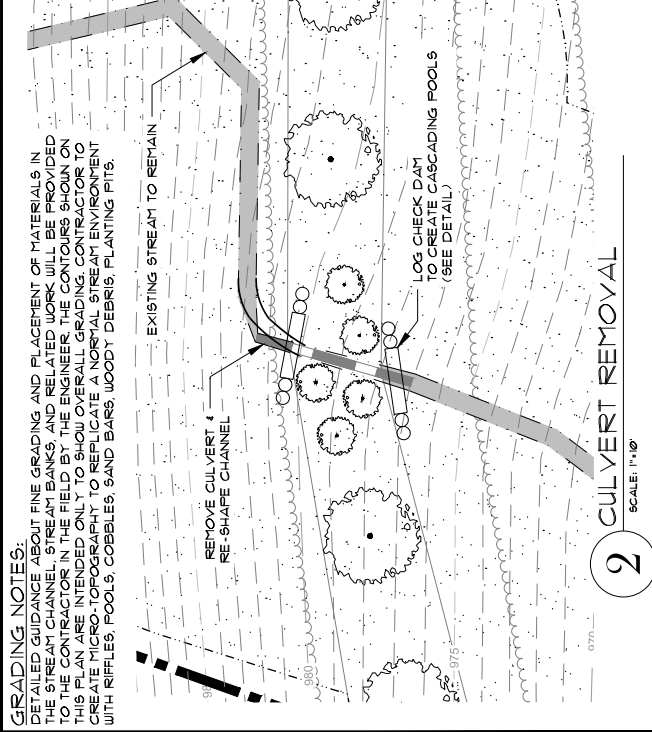
REVISION:	DATE:	BY:	CHKD BY:	SHEET NO.:	OF
	APRIL 4, 2024		JNIS II	3	6
ISSUED FOR:			SCALE:	AS NOTED	
PERMIT					

**THESE PLANS ARE FOR PERMITTING PURPOSES ONLY
 NOT FOR CONSTRUCTION**

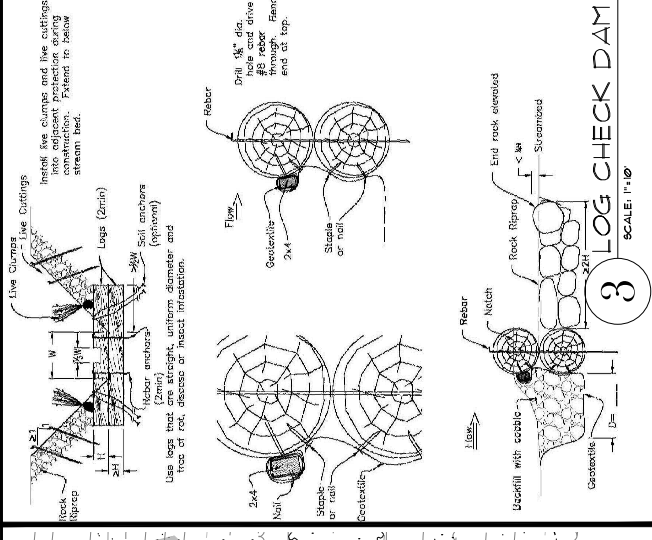


1 SITE PLAN
 SCALE: 1"=40'

GRADING NOTES:
 DETAILED GUIDANCE ABOUT FINE GRADING AND PLACEMENT OF MATERIALS IN THE STREAM CHANNEL, STREAM BANKS, AND RELATED WORK WILL BE PROVIDED TO THE CONTRACTOR IN THE FIELD BY THE ENGINEER. THE CONTOURS SHOWN ON THIS PLAN ARE INTENDED ONLY TO SHOW OVERALL GRADING. CONTRACTOR TO CREATE MICRO-TOPOGRAPHY TO REPLICATE A NORMAL STREAM ENVIRONMENT WITH RIFLES, POOLS, COBBLES, SAND BARS, WOODY DEBRIS, PLANTING PITS, etc.



2 CULVERT REMOVAL
 SCALE: 1"=10'



3 LOG CHECK DAM DETAILS
 SCALE: 1"=10'

BUFFER ZONE ENHANCEMENT/RESTORATION AREAS:

AREA 1 - THIS AREA IS ESTABLISHED AS A STEEP, MATURE FOREST WITH A MIX OF NORTHERN HARDWOOD SPECIES. THE APPLICANT PROPOSES TO PROVIDE PROTECTION IN THIS AREA WITH THE INSTALLATION OF A WOODEN SPLIT RAIL FENCE IN THE AREAS WITH CLOSE PROXIMITY TO THE PROPOSED PROJECT

AREA 2 - THIS AREA CURRENTLY EXISTS AS A COMPACTED GRAVEL WOOD ROAD. THE APPLICANT PROPOSES TO LOOSEN THE EXISTING COMPACTED SOIL AND ADD 6" TO 12" OF CLEAN TOPSOIL TO PROVIDE ROOT GROWTH OF THE PROPOSED RESTORATION PLANTINGS. THE FOLLOWING PLANTINGS HAVE BEEN SELECTED TO MATCH ADJACENT UNALTERED BUFFER ZONE AREAS (AREA 1).

Common Name	Scientific Name	Indicator
Virginia Wild Rice	<i>Zizania aquatica</i>	FWC1R
Canada Wild Rice	<i>Zizania microcarpa</i>	FWC1C
Hard Fern	<i>Polystichum acrostichoides</i>	FWC1P
Christmas Fern	<i>Polystichum acrostichoides</i>	FWC1M
Common Blueberry	<i>Vaccinium corymbosum</i>	FWC1V
High-bush Blueberry	<i>Vaccinium corymbosum</i>	FWC1B
Low-bush Blueberry	<i>Vaccinium corymbosum</i>	FWC1L
Swamp Milkweed	<i>Asclepias tuberosa</i>	FWC1S
White Milkweed	<i>Asclepias tuberosa</i>	FWC1W
Common Milkweed	<i>Asclepias tuberosa</i>	FWC1M
Wild Bergamot	<i>Monarda didyma</i>	FWC1B
Common Noddy	<i>Asclepias tuberosa</i>	FWC1N
White Noddy	<i>Asclepias tuberosa</i>	FWC1W
Common Noddy	<i>Asclepias tuberosa</i>	FWC1M
Wild Bergamot	<i>Monarda didyma</i>	FWC1B
Common Noddy	<i>Asclepias tuberosa</i>	FWC1N
White Noddy	<i>Asclepias tuberosa</i>	FWC1W
Common Noddy	<i>Asclepias tuberosa</i>	FWC1M
Wild Bergamot	<i>Monarda didyma</i>	FWC1B
Common Noddy	<i>Asclepias tuberosa</i>	FWC1N
White Noddy	<i>Asclepias tuberosa</i>	FWC1W
Common Noddy	<i>Asclepias tuberosa</i>	FWC1M
Wild Bergamot	<i>Monarda didyma</i>	FWC1B
Common Noddy	<i>Asclepias tuberosa</i>	FWC1N
White Noddy	<i>Asclepias tuberosa</i>	FWC1W
Common Noddy	<i>Asclepias tuberosa</i>	FWC1M

AREA II BUFFER ZONE RESTORATION PLANTINGS

Key	# Proposed	Common	Latin	Size
Pa		Groundcover Herbaceous		
		(to be planted in dense communities)		
		Christmas Fern	<i>Polystichum acrostichoides</i>	1-gal
Shrubs				
		(to be planted in dense communities)		
Kl		Mountain Laurel	<i>Kalmia latifolia</i>	3-4'
Trees				
As		Sugar Maple	<i>Acer saccharum</i>	8-10'
Tc		American Hemlock	<i>Tsuga canadensis</i>	8-10'
Ba		Yellow Birch	<i>Betula alleghaniensis</i>	8-10'

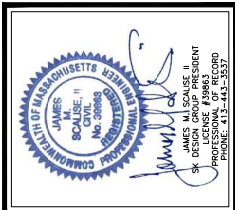
AREAS 3 + 4 - THESE AREAS CURRENTLY CONSIST OF MAINLY OPEN MEADOW WITH A HARDWOOD TREE ROW ALONG AREA 2'S EASTERN BORDER. THE APPLICANT PROPOSES THE PLANTING OF NATIVE SHRUBS ALONG THE INTERMITTENT STREAM TO PROVIDE IMMEDIATE SHADE AND WILDLIFE HABITAT ALONG THE BANK. THE OUTER PORTIONS OF THE BUFFER ZONE AREA PROPOSED TO BE PLANTED WITH NATIVE HARDWOOD SPECIES TO PROVIDE SHADE TO THE STREAM, ESTABLISHING A HEALTHY CANOPY TO LOWER THE TEMPERATURE OF SURFACE WATER IS IMPORTANT FOR MAINTAINING A PRODUCTIVE COLD WATER FISHERY TRIBUTARY. NO SEED MIX OR HERBACEOUS PLANTINGS ARE REQUIRED IN THESE AREAS AS THE EXISTING VEGETATION IS WELL ESTABLISHED

AREA III & IV BUFFER ZONE RESTORATION PLANTINGS

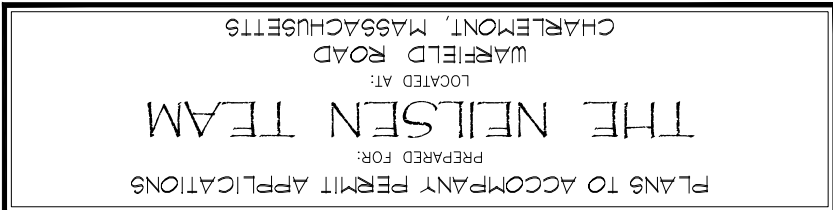
Key	# Proposed	Common	Latin	Size
(to be planted along streambank in dense communities)				
Os		Sensitive Fern	<i>Osmunda sensibilis</i>	1-gal
Ms		Osnich Fern	<i>Mateuccia struthiopteris</i>	1-gal
Shrubs				
		(to be planted along streambank in dense communities)		
Sd		Rusky Willow	<i>Salix discolor</i>	3-4'
Cs		Red-osier Dogwood	<i>Cornus sericea</i>	3-4'
Al		Speckleleaf Alder	<i>Alnus incana</i>	3-4'
Vc		High-bush Blueberry	<i>Vaccinium corymbosum</i>	3-4'
Trees				
		(to be planted in outer Buffer Zone limits)		
As		Sugar Maple	<i>Acer saccharum</i>	8-10'
Qr		Northern Red Oak	<i>Quercus rubra</i>	8-10'
Sh		Black Willow	<i>Salix nigra</i>	8-10'
Ar		Red Maple	<i>Acer rubrum</i>	8-10'
Bp		Paper Birch	<i>Betula papyrifera</i>	8-10'



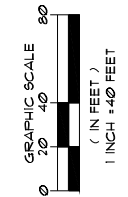
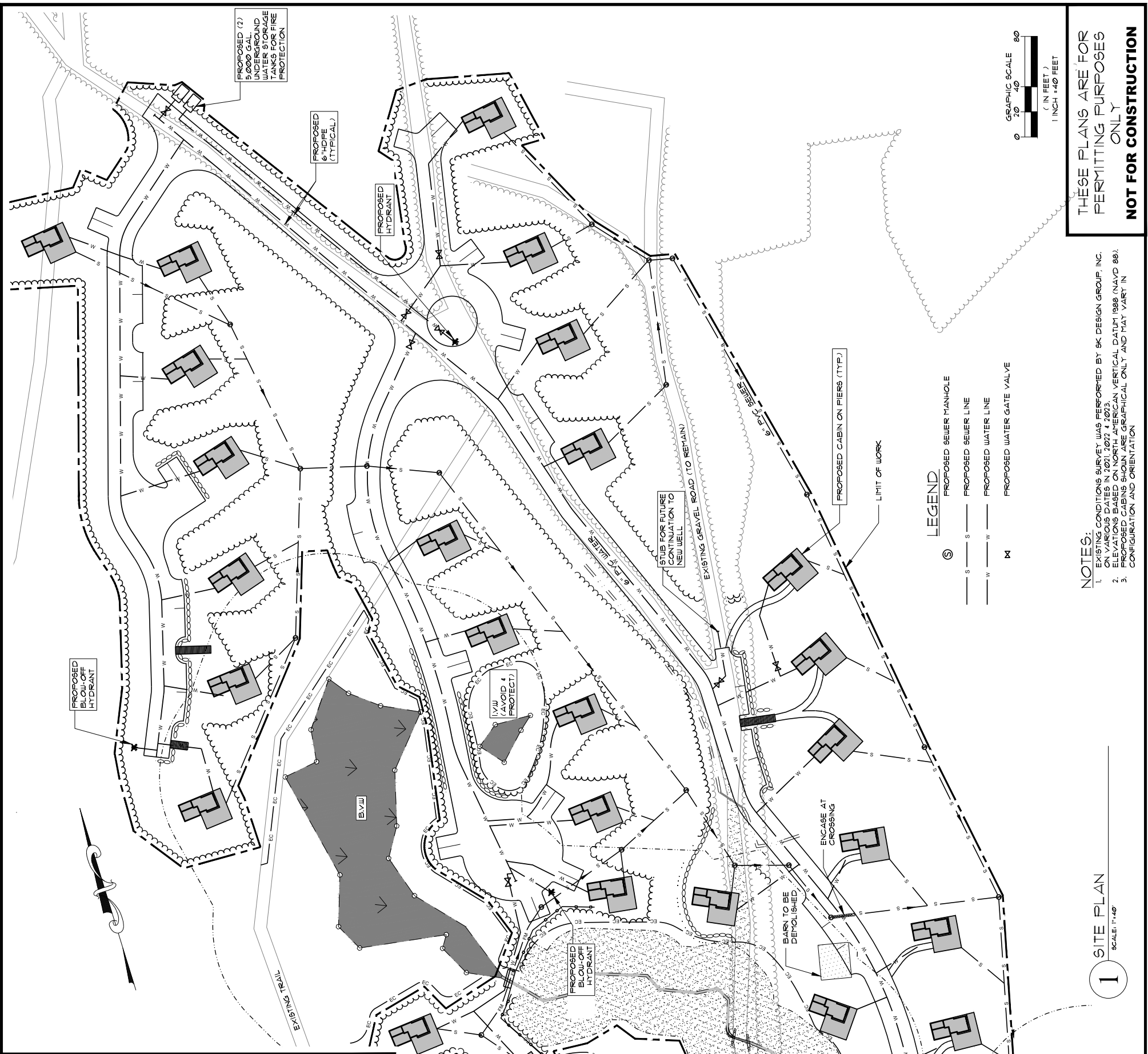
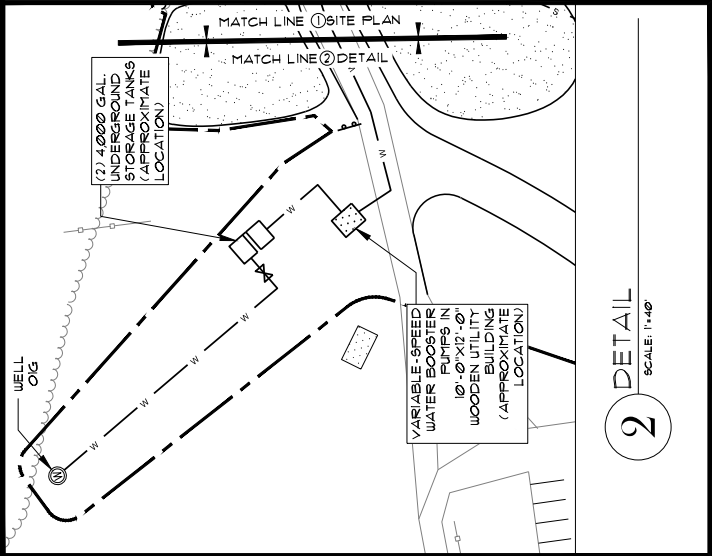
SK DESIGN GROUP PROJECT #:
230178



<p>REVISION:</p>	<p>DRAWN BY: JNL</p> <p>CHECKED BY: JNL</p> <p>DATE: APRIL 4, 2024</p> <p>ISSUED FOR: PERMIT</p> <p>SCALE: AS NOTED</p>	<p>4 of 6 SHEET NO.</p>
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- CONSTRUCTION PROCEDURE:**
- MARK OUT AND MAINTAIN LIMITS OF AUTHORIZED WORK AREAS WITH FENCING OR FLAGGING TAPE TO AVOID UNNECESSARY DISTURBANCE OF VEGETATION. ENSURE OPERATORS WORKING ON THE CROSSING HAVE BEEN BRIEFED ABOUT THE PLAN AND THE MEASURE NEEDED TO PROTECT WATER QUALITY.
 - ALL NECESSARY EQUIPMENT AND MATERIALS TO BUILD THE FUME MUST BE ON SITE OR READILY AVAILABLE PRIOR TO COMMENCING IN WATER WORK.
 - TO THE EXTENT POSSIBLE, MAINTAIN A MINIMUM 10 FT. VEGETATIVE BUFFER STRIP BETWEEN DISTURBED AREAS AND THE WATERCOURSE. INSTALL AND MAINTAIN A SILT FENCE OR STRAW BALE BARRIER UPSTREAM OF THE BUFFER STRIP ON EACH SIDE OF THE WATERCOURSE.
 - CONTRACTOR SHALL SUPPLY, INSTALL, AND MAINTAIN SEDIMENT CONTROL STRUCTURES, AS DEPICTED OR ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVILY SILT-LADEN WATER ENTERS STREAM.
 - NO HEAVILY SILT-LADEN WATER SHALL BE DISCHARGED DIRECTLY INTO THE STREAM.
 - EROSION AND SEDIMENT CONTROL STRUCTURES LOCATIONS AS DERIVED ARE APPROXIMATE AND MAY BE CHANGED OR MODIFIED AS NECESSARY TO ACCOMMODATE FIELD CONDITIONS.
 - SILT FENCE OR STRAW BALE INSTALLATIONS SHALL INCLUDE REMOVABLE SECTIONS TO FACILITATE ACCESS DURING CONSTRUCTION. UTILIZE STRAW BALE BARRIERS ONLY IN LIEU OF A SILT FENCE WHERE FREQUENT ACCESS IS REQUIRED.
 - SEDIMENT LADEN WATER FROM TRENCH DEWATERING SHALL BE DISCHARGED TO A WELL VENTILATED UPLAND AREA INTO A STRAW BALE DEWATERING STRUCTURE OR GEOTEXTILE FILTER BAG.
 - SEDIMENT CONTROL STRUCTURES MUST BE IN PLACE AT ALL TIMES ACROSS THE DISTURBED PORTIONS OF THE RIGHT OF WAY EXCEPT DURING EXCAVATION/INSTALLATION OF THE CROSSING PIPE.
 - SOFT DITCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE MAINLINE DITCH FROM THE RIVER CROSSING UNTIL THE RIVER CROSSING IS INSTALLED AND BACKFILLED.
 - PIPE SHALL BE STRING FOR READY INSTALLATION PRIOR TO WATERCOURSE TRENCHING.
 - EXCAVATED MATERIAL MUST NOT BE STOCKPILED WITHIN 100 FT. OF THE WATERCOURSE. THIS MATERIAL SHALL BE CONTAINED TO PREVENT SATURATED SOIL FROM FLOWING BACK INTO WATERCOURSE.
 - DEWATERING OF THE ON-LAND TRENCH SHOULD OCCUR IN A STABLE VEGETATED AREA A MINIMUM OF 50 FT. FROM ANY WATERBODY. THE PUMP DISCHARGE SHOULD BE DIRECTED ONTO A STABLE SPILL PAD CONSTRUCTED OF ROCK/FILL OR TIMBERS TO PREVENT LOCALIZED EROSION. THE DISCHARGE WATER SHOULD ALSO BE FORCED INTO A SHEET PILE IMMEDIATELY BEYOND THE SPILL PAD BY USING STRAW BALES AND NATURAL TOPOGRAPHY.
 - RESTORE THE STREAMBED AND BANKS TO APPROXIMATE PRE-CONSTRUCTION CONTOURS, BUT NOT TO EXCEED 2:1 SLOPE.
 - INSTALL PERMANENT EROSION AND SEDIMENT CONTROL STRUCTURES AS INDICATED ON A SITE SPECIFIC BASIS. IN THE ABSENCE OF SITE SPECIFIC INFORMATION, A FLEXIBLE CHANNEL LINER SUCH AS NAG C175 OR C350 WHICH IS CAPABLE OF WITHSTANDING ANTICIPATED FLOW SHALL BE INSTALLED.
 - ANY MATERIALS PLACED IN THE STREAM TO FACILITATE CONSTRUCTION SHALL BE REMOVED DURING RESTORATION. BANKS SHALL BE STABILIZED AND TEMPORARY SEDIMENT BARRIERS INSTALLED AS SOON AS POSSIBLE AFTER CROSSING, BUT WITHIN 74 HOURS OF COMPLETING THE CROSSING.
 - MAINTAIN SILT FENCE OR STRAW BALE BARRIER ALONG THE WATER COURSE UNTIL VEGETATION IS ESTABLISHED IN ADJACENT DISTURBED AREAS.



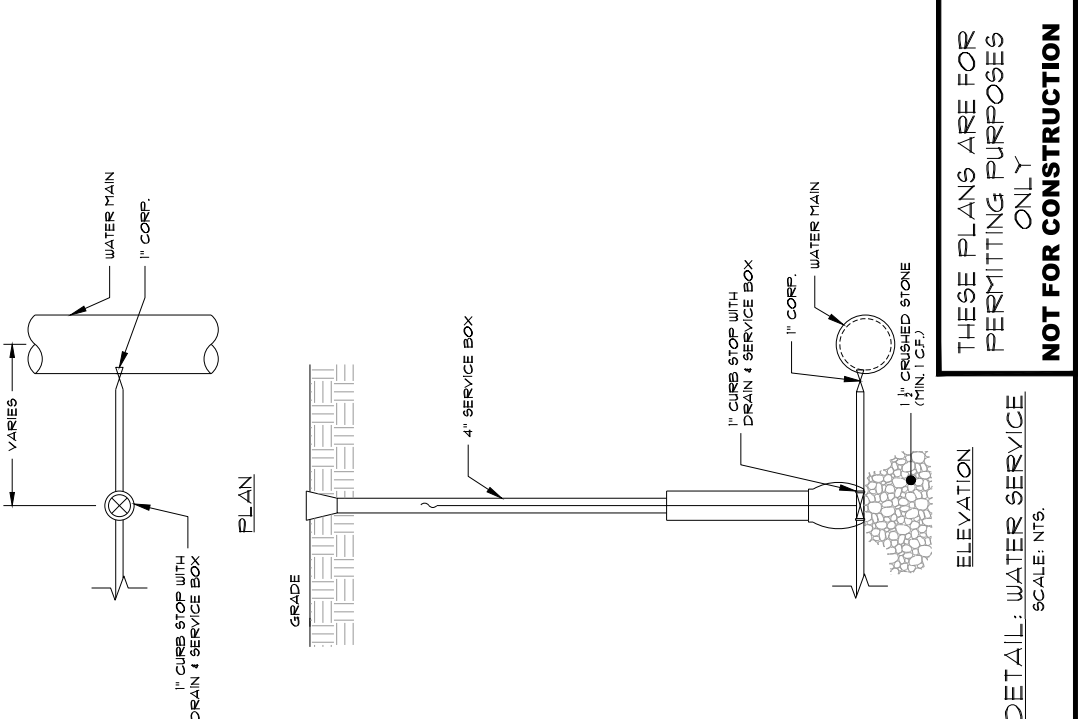
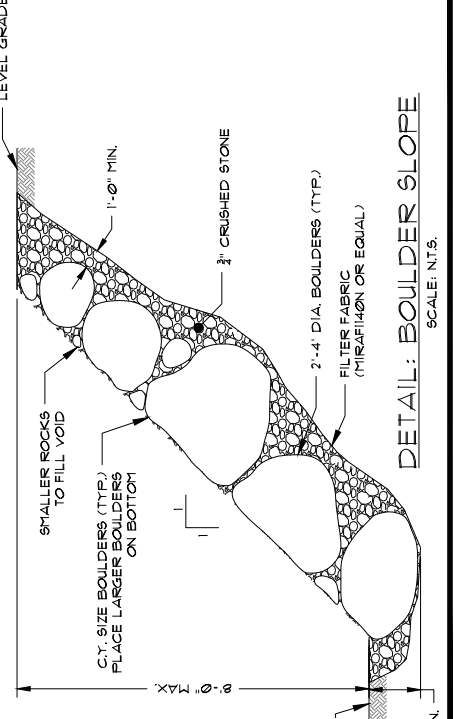
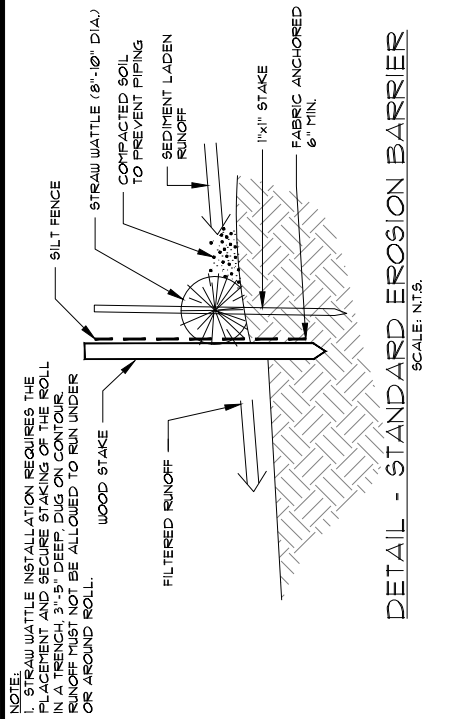
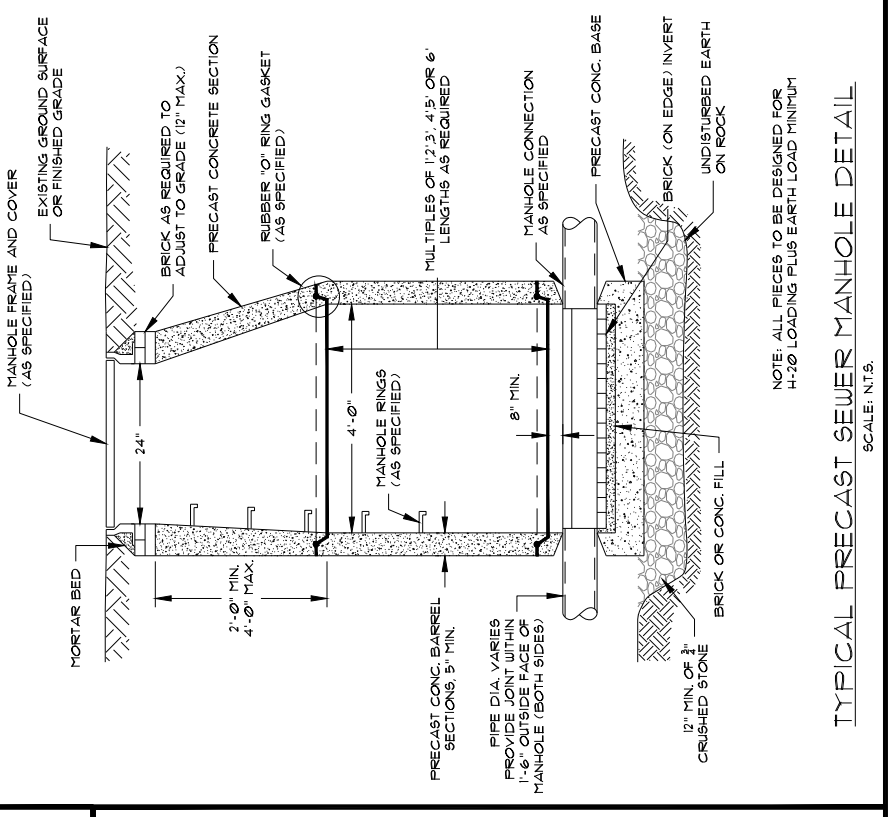
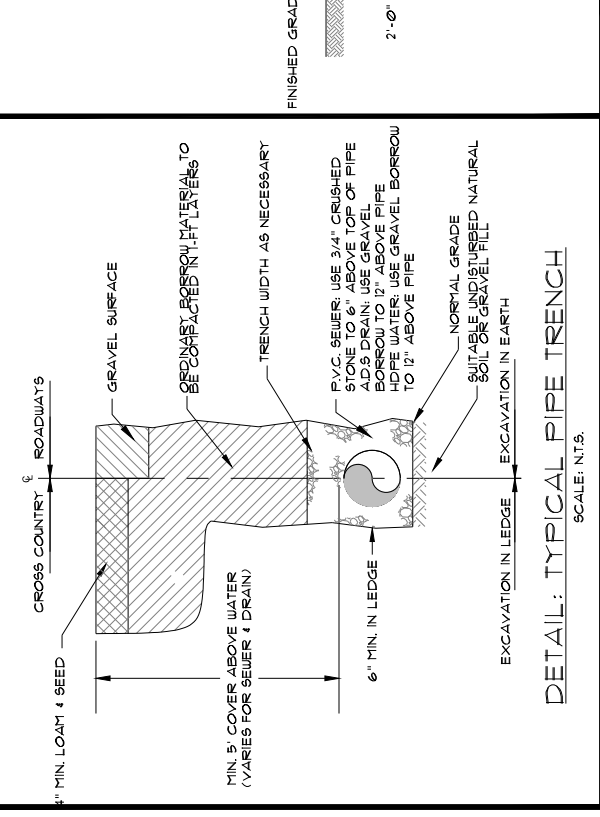
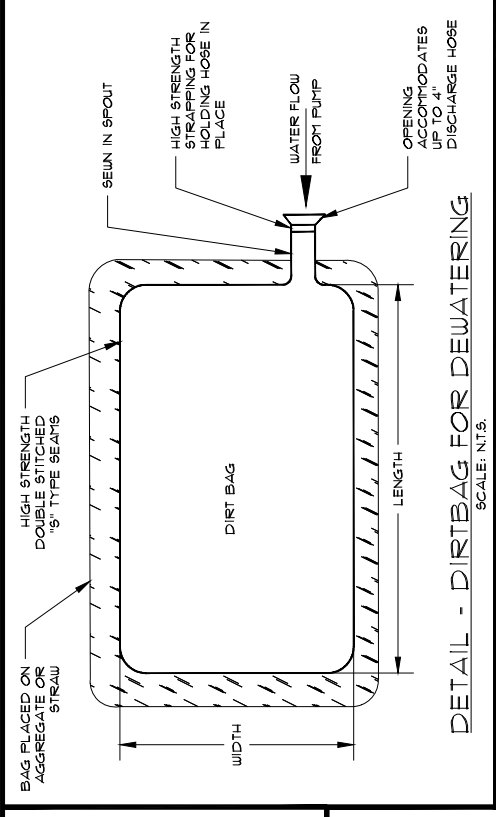
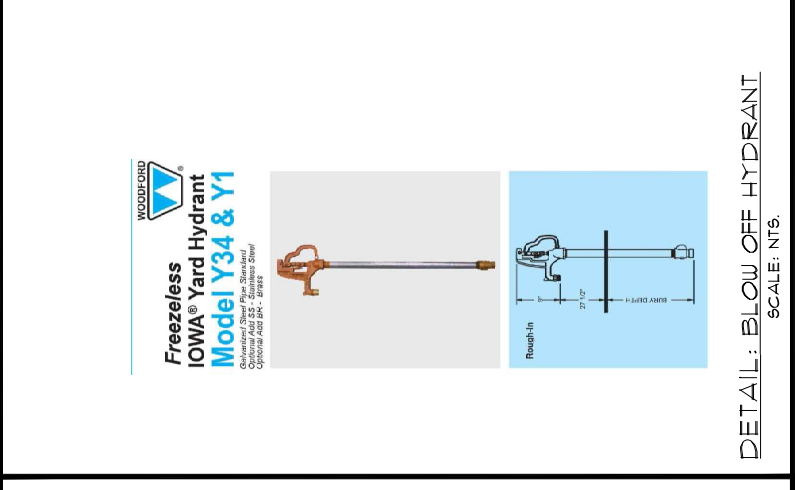
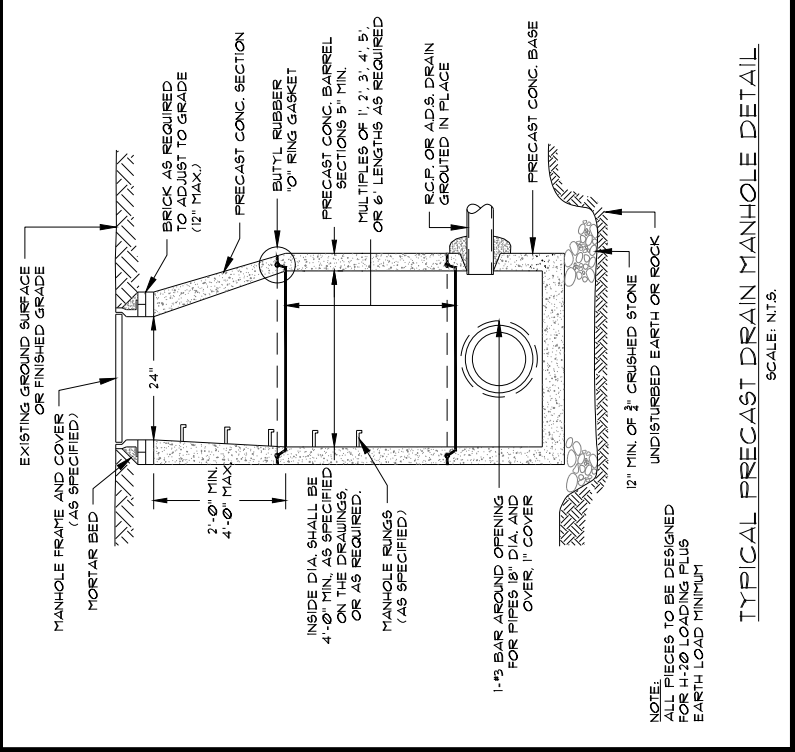
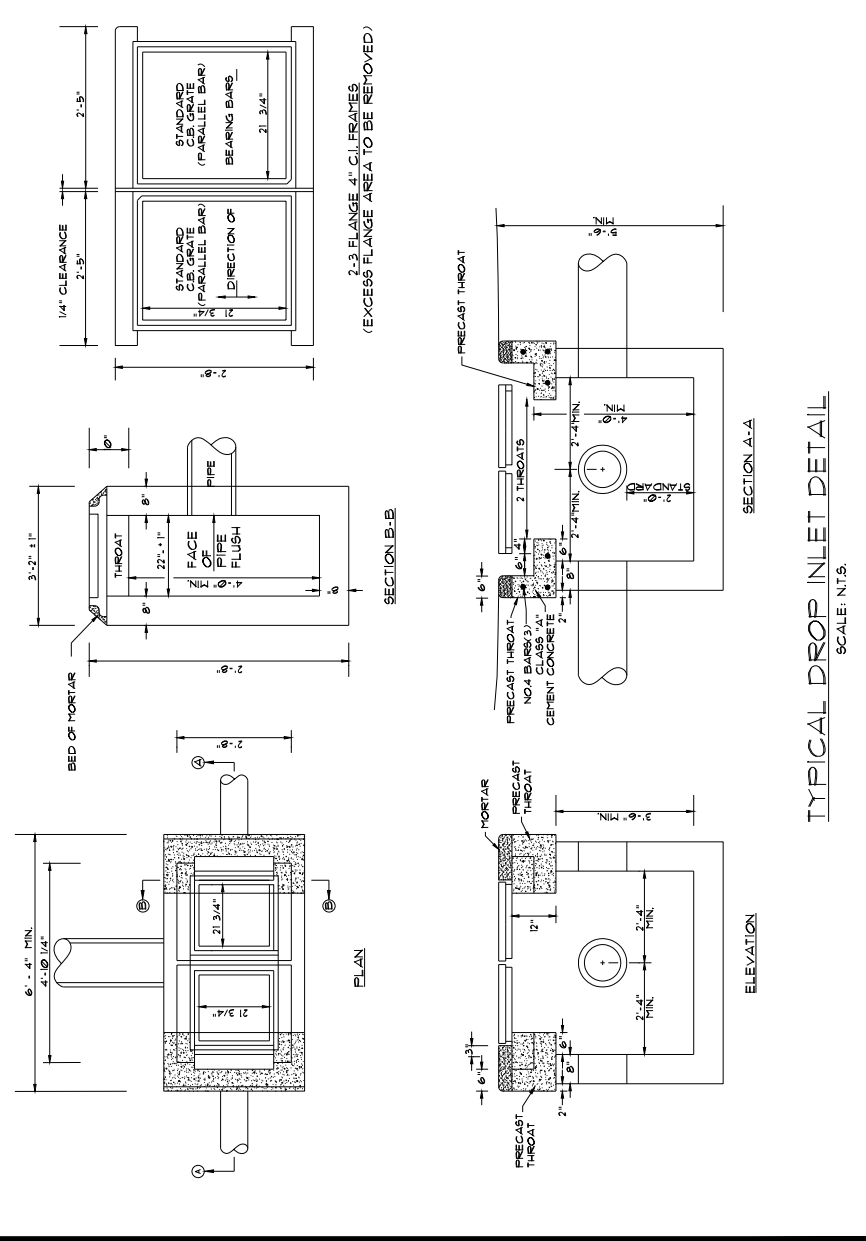
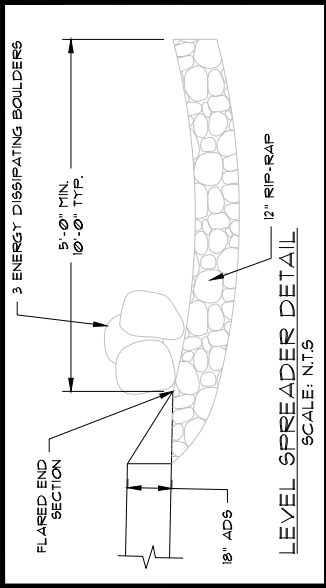
- NOTES:**
- EXISTING CONDITIONS SURVEY WAS PERFORMED BY SK DESIGN GROUP, INC. DATE: APRIL 4, 2024.
 - ELEVATIONS BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).
 - PROPOSED CABINS SHOWN ARE GRAPHICAL ONLY AND MAY VARY IN CONFIGURATION AND ORIENTATION AS NOTED.

THESE PLANS ARE FOR PERMITTING PURPOSES ONLY

NOT FOR CONSTRUCTION

1 SITE PLAN
SCALE: 1" = 40'

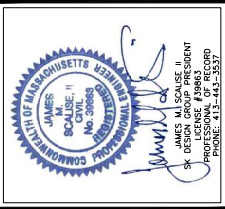
2 DETAIL
SCALE: 1" = 40'



PLANS TO ACCOMPANY PERMIT APPLICATIONS
 PREPARED FOR:
THE NEILSEN TEAM
 LOCATED AT:
 133 WARFIELD ROAD
 CHARLEMONT, MASSACHUSETTS

Design Group, Inc.
 Civil Engineers' Surveyors' Consultants
 2 FERRO DRIVE • PITSFIELD, MASSACHUSETTS 01201 • (413) 463-3377

SK DESIGN GROUP PROJECT #
230178



REVISION:	AS NOTED
DATE:	APRIL 4, 2024
ISSUED FOR:	PERMIT
SCALE:	AS NOTED
SHEET NO.:	6 of 6
CHIEF ENGINEER:	JM L
DESIGNER:	BRK
DRAWN BY:	JM L

THESE PLANS ARE FOR PERMITTING PURPOSES ONLY
NOT FOR CONSTRUCTION

NOTE: ALL PIECES TO BE DESIGNED FOR H-20 LOADING PLUS EARTH LOAD MINIMUM

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