

JERICHO MOUNTAIN STATE PARK

NEW RV CAMPGROUND - 30% DESIGN

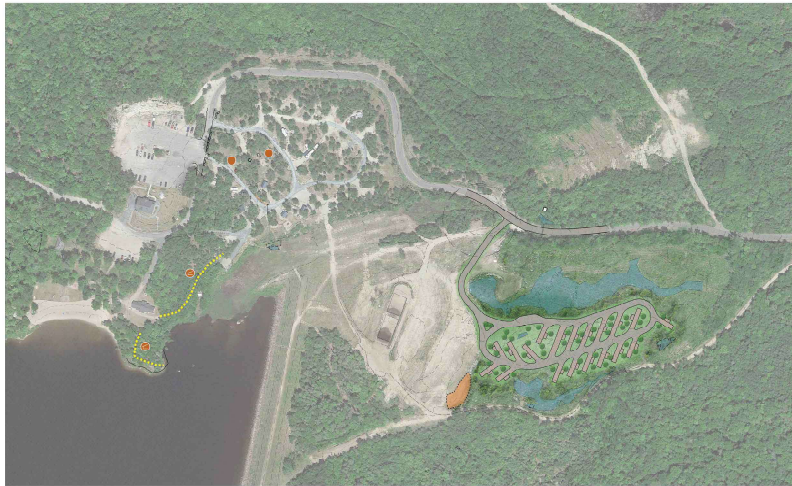
298 Jericho Lake Road
Berlin, NH 03570

SE GROUP
Landscape Architects and Planners
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Burlington, VT 05401
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SHEET LIST

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L0.01	LANDSCAPE GENERAL LEGEND & NOTES
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SITE



NH STATE PARKS

Campground Expansion Project P11
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue

30% DESIGN

Graphic Scale

North

Scale:

Date: August 25, 2023

Drawn By: KS & BD

Checked By: PO

Issues:

No.	Description	Date
1	Name	00/00/00

Title

COVER SHEET

Sheet Number:

G0.00

Project Number: 23045001
File: 10.00-cover sheet.dwg

LANDSCAPE ARCHITECT
SE GROUP
1 MILL STREET, SUITE 190
BURLINGTON, VT 05401

CIVIL ENGINEER
HORIZONS ENGINEERING
8836 POMFRET ROAD, SUITE 2A
NORTH POMFRET, VT 05053

ARCHITECT
SAMYN-DELIA ARCHITECTS, P.A.
6 CENTRAL HOUSE ROAD
HOLDERNESS, NH 03245

GENERAL NOTES

- ALL CONTRACTORS ARE REQUIRED TO CONTACT DIG SAFE, THE MUNICIPALITIES PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCIES NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
- UNDERGROUND UTILITIES WILL EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO CONSTRUCTION. WHERE UNDERGROUND UTILITIES EXIST FIELD ADJUSTMENT MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER PRIOR TO INSTALLATION. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED ELEMENTS ON THE DRAWINGS.
- THE LANDSCAPE ARCHITECT AND CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE WORK PRODUCT THEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITH THE WORK PRODUCT, THE LANDSCAPE ARCHITECT SHALL BE PROMPTLY NOTIFIED SO THAT THEY MAY HAVE THE OPPORTUNITY TO TAKE ANY STEPS NECESSARY TO RESOLVE THE ISSUE. FAILURE TO PROMPTLY NOTIFY THE OWNER AND THE LANDSCAPE ARCHITECT OF SUCH CONDITIONS SHALL ABSOLVE THEM FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE, ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT OF THE OWNER AND THE LANDSCAPE ARCHITECT, OR IN CONTRADICTION TO THE OWNER AND THE LANDSCAPE ARCHITECT'S WORK PRODUCT OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE OWNER AND THE LANDSCAPE ARCHITECT BUT FOR THE PARTIES RESPONSIBLE FOR THE TAKING OF SUCH ACTION.
- IT IS SE GROUP'S UNDERSTANDING THAT THE BASE INFORMATION WAS PROVIDED BY A LICENSED LAND SURVEYOR. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT OF ANY DISCREPANCIES AS SOON AS THEY ARE DISCOVERED AND PRIOR TO ANY ACTION BY THE CONTRACTOR.
- CONTRACTOR TO DEVELOP PLAN WITH OWNER OR OWNERS REPRESENTATIVE FOR PROTECTION OF EXISTING TREES TO REMAIN.

LAYOUT NOTES

- THE CONSULTANT DRAWINGS ARE SUPPLEMENTARY TO THE LANDSCAPE ARCHITECTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CHECK WITH LANDSCAPE ARCHITECTURAL DRAWINGS BEFORE INSTALLATION OF CONSULTANT WORK. SHOULD THERE BE A DISCREPANCY BETWEEN THE LANDSCAPE ARCHITECTURAL DRAWINGS AND THE DRAWINGS OF THE CONSULTING ENGINEERS, IT SHALL BE BROUGHT TO THE LANDSCAPE ARCHITECT'S ATTENTION FOR CLARIFICATION. ANY WORK INSTALLED IN CONFLICT WITH ANY OF THE DRAWINGS SHALL BE CORRECTED AT NO EXPENSE TO THE OWNER OR DESIGN CONSULTANTS.
- ALL SYMBOLS, ABBREVIATIONS AND MATERIAL INDICATIONS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE CONTRACTOR SHALL REQUEST THAT THE LANDSCAPE ARCHITECT ISSUE A CLARIFICATION.
- DO NOT SCALE DRAWINGS. DIMENSIONS MISSING FROM PLANS OR NEEDED FOR EXECUTION OF THE WORK SHALL BE CLARIFIED OR PROVIDED BY THE LANDSCAPE ARCHITECT BEFORE THE WORK IS INSTALLED.
 - ALL DIMENSIONS ARE TO FACE OF FINISH MATERIAL, UNLESS OTHERWISE NOTED.
 - TAKE ALL DIMENSIONS PERPENDICULAR TO ANY REFERENCE LINE, WORK LINE, CENTERLINE, OR FACE OF BUILDING STRUCTURE.
 - ALL DIMENSIONS CALLED OUT AS "EQUAL" ARE CONSIDERED EQUIDISTANT MEASUREMENTS.
- REFERENCE TO NORTH IS TRUE NORTH.
- REFERENCE TO SCALE IS FOR FULL SIZED DRAWINGS, NOT REDUCED PLANS, DO NOT SCALE FROM DRAWINGS.
- ANY CONFLICTS IN WHICH THE METHODS OR STANDARDS OF INSTALLATION OR MATERIALS SPECIFIED DO NOT EQUAL OR EXCEED THE REQUIREMENTS OF THE LAWS OR ORDINANCES GOVERNING THE PROJECT, THE LAWS AND ORDINANCES SHALL TAKE PRECEDENCE. NOTIFY THE LANDSCAPE ARCHITECT OF ALL CONFLICTS.
- THE CONTRACTOR SHALL MAKE CERTAIN THAT THE WORK OF THE NEW CONSTRUCTION WILL NOT OBSTRUCT FIRE DEPARTMENT ACCESS TO NEARBY BUILDINGS. EXITS SHALL BE MAINTAINED CLEAR OF ALL OBSTRUCTIONS.
- THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONDITIONS VARYING FROM INFORMATION HEREIN PRIOR TO PROCEEDING WITH WORK.
- TO ESTABLISH LANDSCAPE ARCHITECTURAL INTENT, EVERY ATTEMPT HAS BEEN MADE TO IDENTIFY MOST CONDITIONS.
- CONTRACTOR TO COMMUNICATE WITH CIVIL ENGINEER / SURVEYOR REGARDING SURVEY HORIZONTAL AND VERTICAL CONTROL. CIVIL ENGINEER CAN PROVIDE INFORMATION REQUIRED FOR SITE LAYOUT, AS NECESSARY.

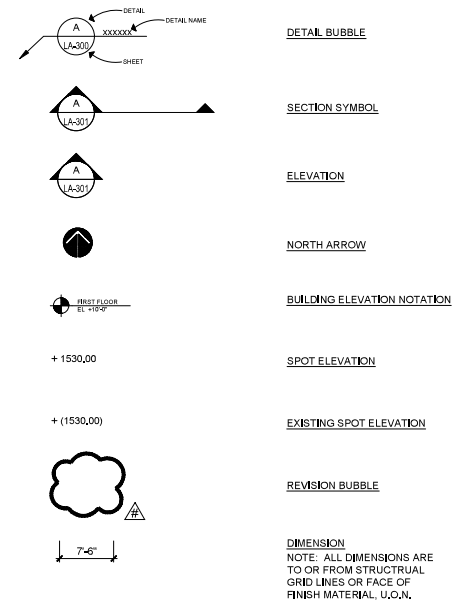
PLANTING NOTES

- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR AND IF NECESSARY OTHER SUB CONTRACTORS AS REQUIRED TO ACCOMPLISH PLANT MATERIAL INSTALLATION.
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO STARTING WORK.
- PLANT MATERIAL INSTALLATION SHALL NOT OCCUR BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN. ALL TREES AND SHRUBS OF THE SAME SPECIES AND SIZE SHALL HAVE MATCHING HEIGHT AND FORM UNLESS OTHERWISE NOTED ON THE PLANS.
- CONTRACTOR SHALL SUPPLY ALL PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN IN THE CONTRACT DOCUMENTS. DISCREPANCIES IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT IMMEDIATELY.
- STAKE LOCATIONS OF PROPOSED PLANT MATERIAL PRIOR TO EXCAVATING PLANT PITS. LOCATION OF ALL PLANT PITS TO BE DETERMINED IN THE FIELD WITH THE LANDSCAPE ARCHITECT. PAINT OUTLINES FOR PLANT BEDS AND GROUND COVER, FINAL LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL FURNISH PLANT MATERIAL FREE OF PESTS OR PLANT DISEASES. PRESELECTED OR "TAGGED" MATERIAL MUST BE INSPECTED BY THE CONTRACTOR AND CERTIFIED PEST AND DISEASE FREE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO WARRANTY ALL PLANT MATERIAL BASED ON THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING HARDSCAPE OR SOFTSCAPE MATERIALS DAMAGED DURING PLANTING OPERATIONS.
- ALL TREES, PLANT BEDS AND GROUNDCOVER SHALL BE COVERED WITH 2" OF ORGANIC BARK MULCH AS NOTED IN THE SPECIFICATIONS.
- AREAS SHOWN AS GROUNDCOVER AT THE BASE OF TREES AND SHRUBS MUST CONFORM TO THE FOLLOWING CRITERIA. THERE SHALL BE NO GROUND COVER INSTALLED AT THE BASE OF TREES OR SHRUBS AS FOLLOWS:
 - 4 FOOT RADIUS AROUND EVERGREENS.
 - 3 FOOT RADIUS AROUND DECIDUOUS TREES.
 - 2 FOOT RADIUS AROUND LARGE SHRUBS.
- ALL SHRUBS AND GROUNDCOVER SHALL BE PLANTED USING A TRIANGULATED METHOD. REFER TO PLANT MATERIAL INSTALLATION DETAILS.

GRADING NOTES

- REFER TO THE CIVIL ENGINEER'S DRAWINGS FOR GENERAL SITE GRADING AROUND THE PROJECT SITE.
- REFER TO THE LANDSCAPE ARCHITECT'S DRAWINGS FOR MICRO GRADING AROUND THE PROJECT SITE. MICRO GRADING IS RELATED TO FINISH ELEVATIONS OF HARDSCAPE SURFACES, I.E. SITE WALLS, TERRACES AND WALKS, UNLESS OTHERWISE NOTED.

LANDSCAPE ARCHITECTURAL SYMBOLS



NH STATE PARKS

Campground Expansion Project PH
Jericho Mountain State Park
298 Jericho Lake Road
Berlin, NH
03570

Issue

30% DESIGN

Graphic Scale

North

Scale:

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1	Name	00/00/00

Title

GENERAL LEGEND & NOTES

Sheet Number:

L0.00

Project Number: 23045001
File: 10.00-cover sheet.dwg

LEGEND

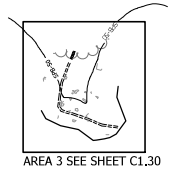
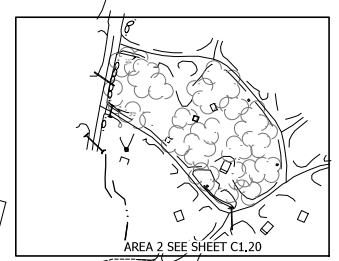
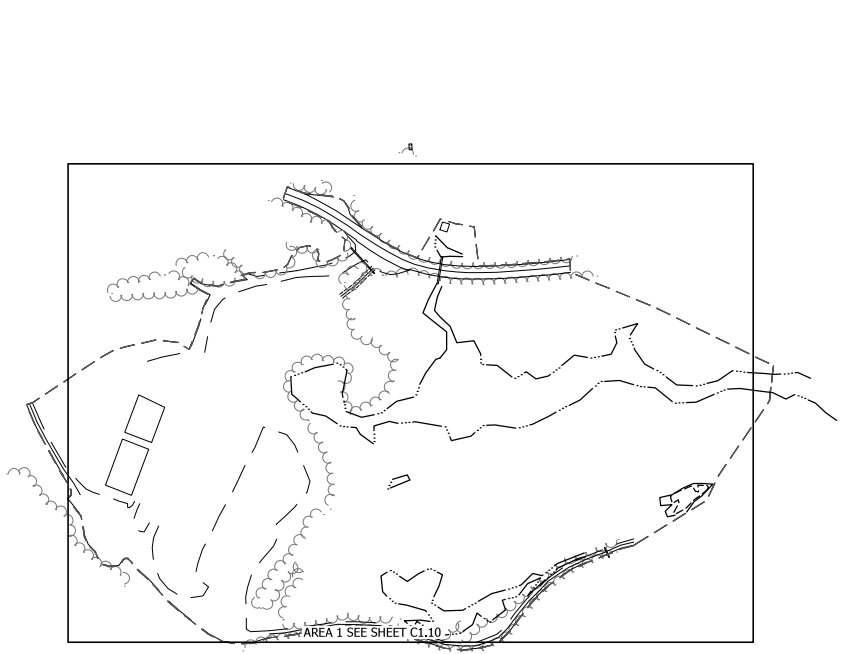
	EXISTING CONTOURS
	PROPOSED CONTOURS
	SWALE
	GRADE BREAK
(430,50) +	EXIST, SPOT GRADE
430,50 +	SPOT GRADE
TS +	TOP OF STEP
BS +	BOTTOM OF STEP
TW +	TOP OF WALL
BW +	BOTTOM OF WALL
TC +	TOP OF CURB
BC +	BOTTOM OF CURB
FC +	FLUSH CURB
TR +	TOP OF RAMP
BR +	BOTTOM OF RAMP
HP +	HIGH POINT
LP +	LOW POINT
RE +	RIM ELEVATION
CB +	CATCH BASIN
AD +	AREA DRAIN
TD +	TRENCH DRAIN
PD +	PLANTER DRAIN
SPD +	SUB SURFACE PLANTER DRAIN

LANDSCAPE DRAWING ABBREVIATIONS

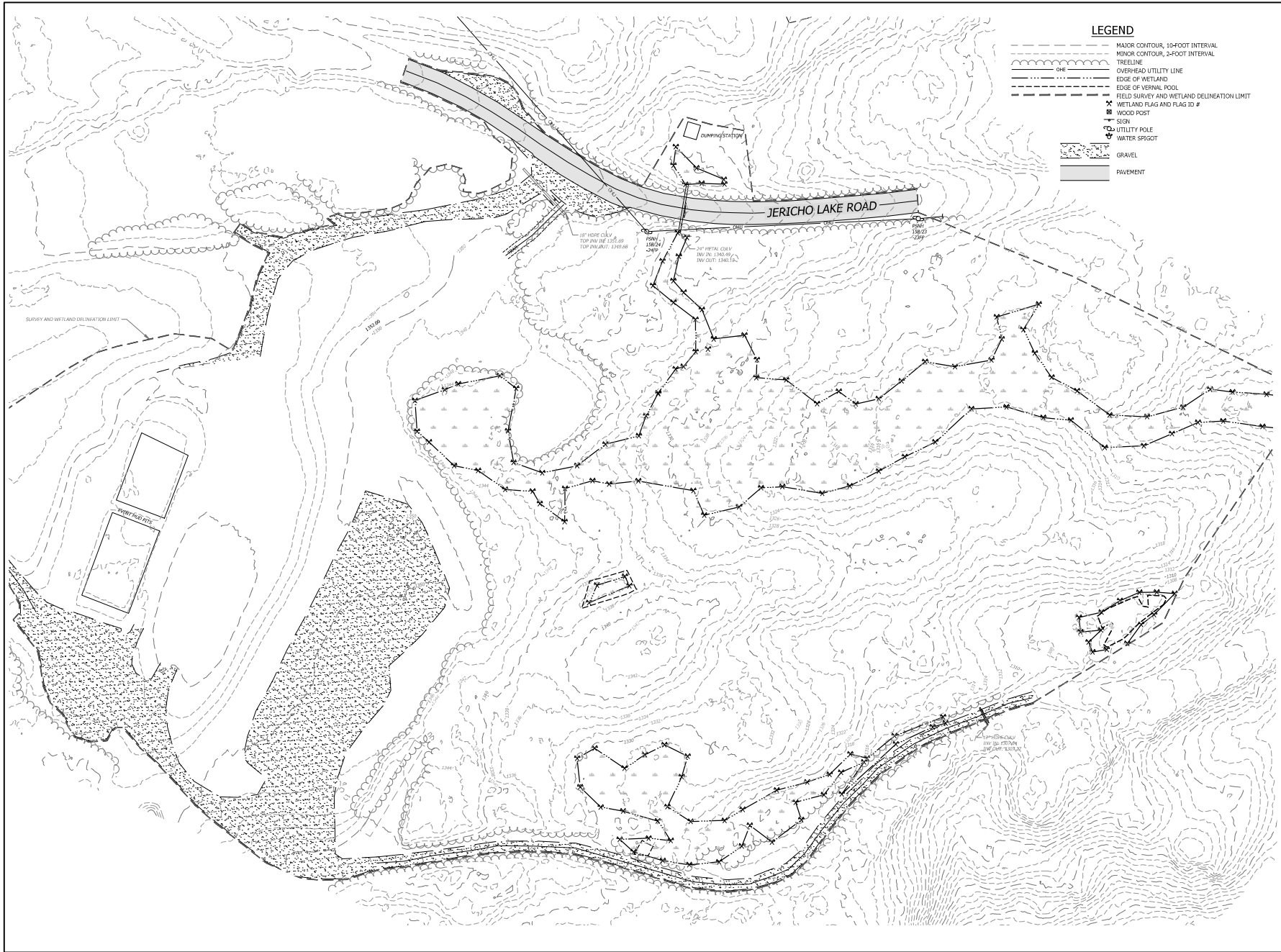
@	AT	HP	HIGH POINT
AD	AREA DRAIN	HT	HEIGHT
AL	ALIGN	LD	INSIDE DIAMETER
ALT	ALTERNATE	LP	LOW POINT
ASPH	ASPHALT	MAX	MAXIMUM
BC	BOTTOM OF CURB	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BS	BOTTOM OF STEP	NIC	NOT IN CONTRACT
BW	BOTTOM OF WALL	O.C.	ON CENTER
CB	CATCH BASIN	O.D.	OUTSIDE DIAMETER
CJ	CONTROL JOINT	QTY	QUANTITY
CL	CENTERLINE	R	RADIUS
CONC	CONCRETE	REINF	REINFORCED
CONST	CONSTRUCTION	REQ	REQUIRED
CONT	CONTINUOUS	SPECS	SPECIFICATIONS
CTR	CENTER	SS	STAINLESS STEEL
DA	DIAMETER	STD	STANDARD
DM	DIMENSION	T.D.	TRENCH DRAIN
DWG	DRAWING	TC	TOP OF CURB
EA	EACH	TS	TOP OF STEP
EJ	EXPANSION JOINT	TW	TOP OF WALL
ELEV	ELEVATION	TYP	TYPICAL
EOP	EDGE OF PAVEMENT	U.O.J.	UNLESS OTHERWISE NOTED
EQ	EQUAL	VIF	VERIFY IN FIELD
EW	EACH WAY	W/	WITH
FC	FLUSH CURB	W/O	WITHOUT
FF	FINISH FLOOR	WWF	WELDED WIRE FABRIC

Issues:

No.	Description	Date
1	Name	00/00/00



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LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL
- PAVEMENT

NH STATE PARKS
Campground Expansion Project PII
Jericho Mountain State Park
288 Jericho Lake Road
Berlin, NH
03570

Issue
30% DESIGN



Scale: 1" = 40'
Date: August 25, 2023
Drawn By: DW
Checked By: RH

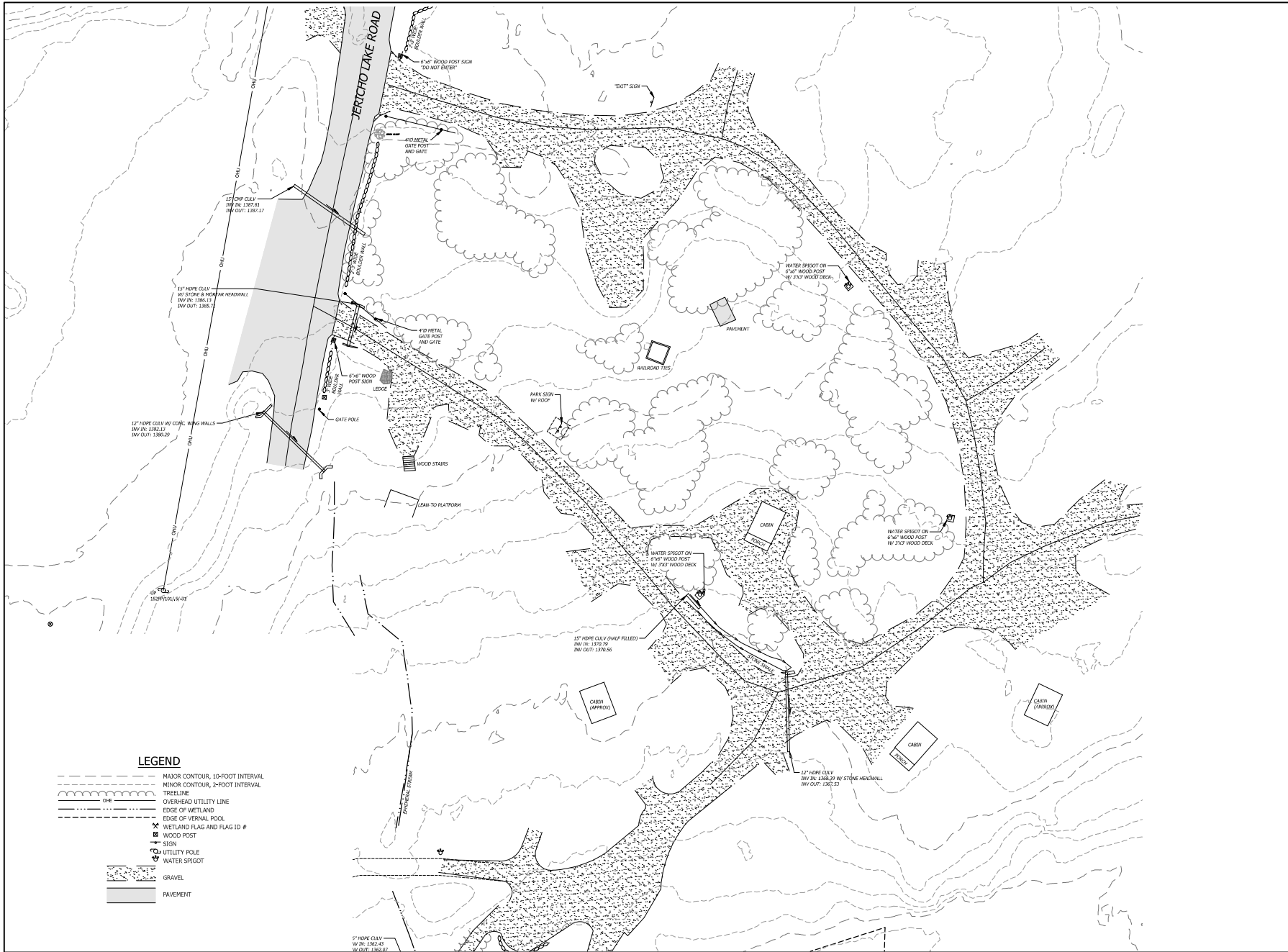
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No.	Description	Date
1	Name	00/00/00

Title
**EXISTING
CONDITIONS
AREA 1
C1.10**

Project Number: 23045001
File: 220338-jericho-k-site 6.dwg

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LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- - - MINOR CONTOUR, 2-FOOT INTERVAL
- ~ TREELINE
- OVERHEAD UTILITY LINE
- - - EDGE OF WETLAND
- - - EDGE OF VERNAL POOL
- ✕ WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPRIGOT
- GRAVEL
- PAVEMENT

5" HORN CULV
 INV IN: 1362.49
 INV OUT: 1362.67

NH STATE PARKS
 Campground Expansion Project PII
 Jericho Mountain State Park
 288 Jericho Lake Road
 Berlin, NH
 03570

Issue
30% DESIGN



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 Date: August 25, 2023
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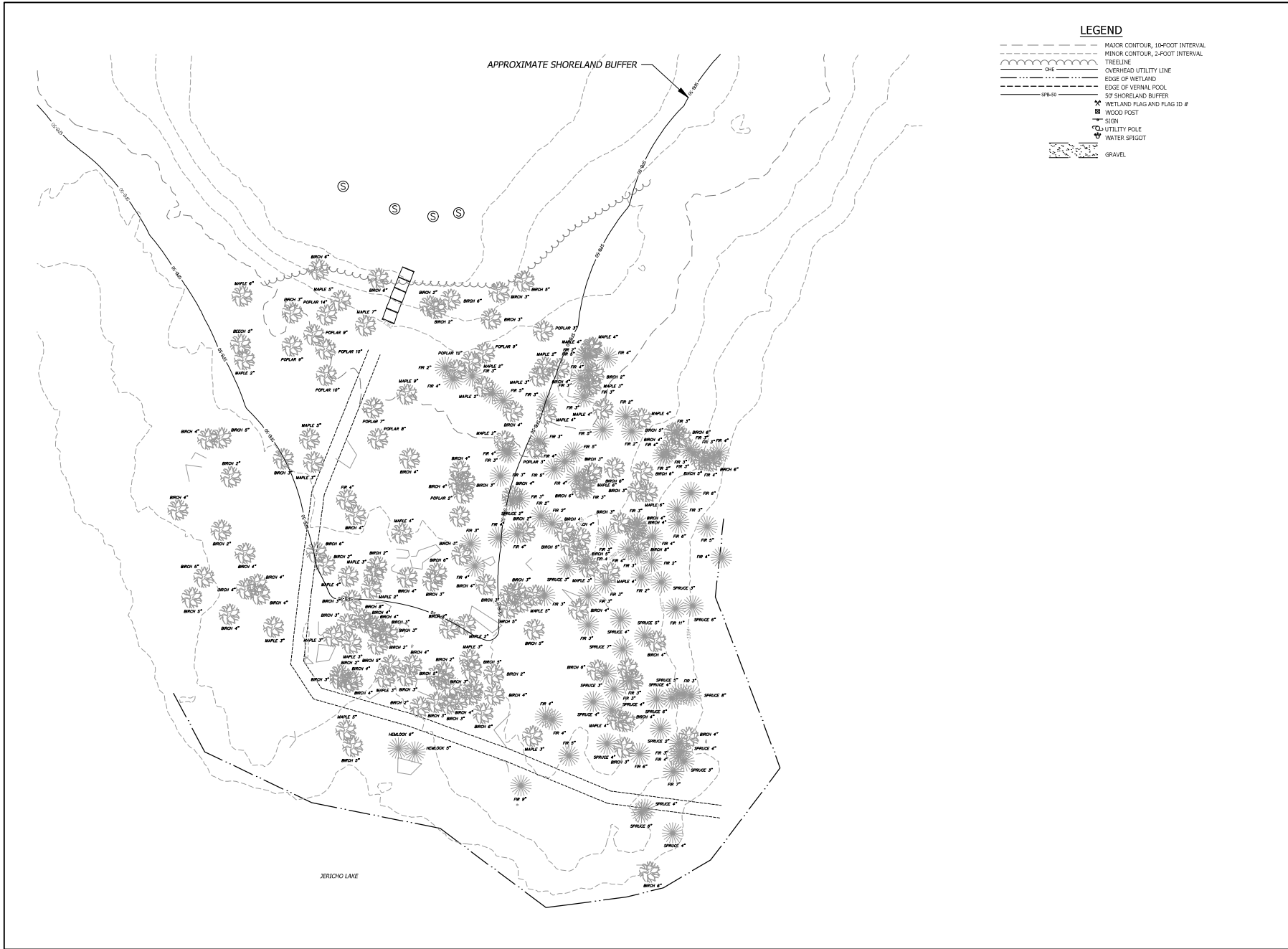
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Title
EXISTING CONDITIONS
AREA 2
C1.20

Project Number: 23045001
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LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- 50' SHORELAND BUFFER
- 25'-50'
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- GRAVEL

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Drawn By: DW
Checked By: RH

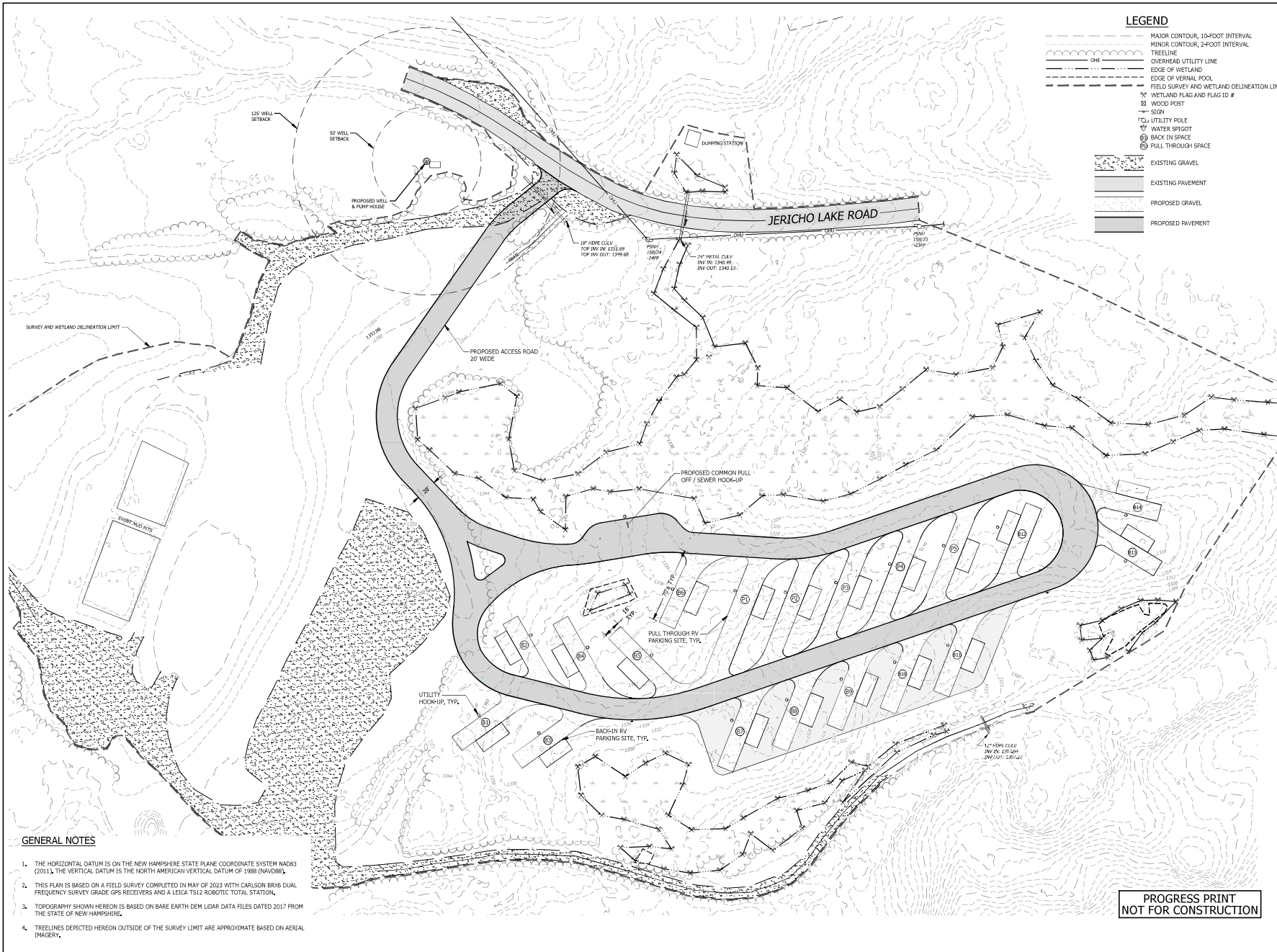
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EXISTING CONDITIONS
AREA 3
Sheet Number:
C1.30

Project Number: 23045001
File: 230338-jericho-k-site 6.dwg

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LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TRELLINE
- OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- BACK IN SPACE
- PULL THROUGH SPACE
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PAVEMENT

GENERAL NOTES

1. THE HORIZONTAL DATUM IS ON THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83 (2011), THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).
2. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN MAY OF 2023 WITH CARLSON BRX6 DUAL FREQUENCY SURVEY GRADE GPS RECEIVERS AND A LEICA TS12 ROBOTIC TOTAL STATION.
3. TOPOGRAPHY SHOWN HEREON IS BASED ON BARE EARTH DEM LIDAR DATA FILES DATED 2017 FROM THE STATE OF NEW HAMPSHIRE.
4. TRELLINES DETECTED HEREON OUTSIDE OF THE SURVEY LIMIT ARE APPROXIMATE BASED ON AERIAL IMAGERY.

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NH STATE PARKS

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Issue

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Graphic Scale



North



Scale: 1" = 40'

Date: August 25, 2023

Drawn By: DW

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Issues:

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Title

**SITE PLAN
AREA 1**

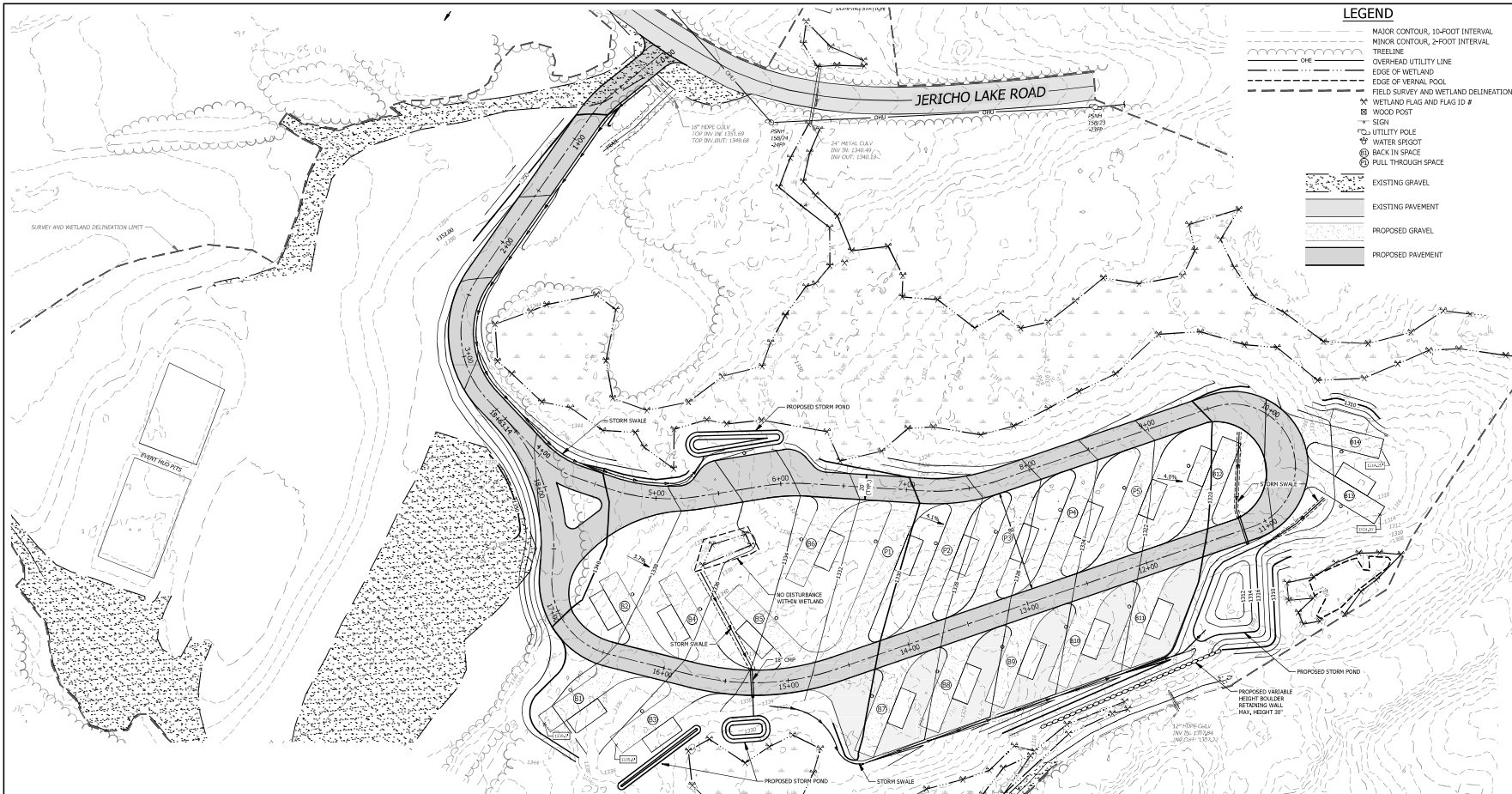
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Project Number: 23045001

File: 220838-jericho-site 6.dwg

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LEGEND

- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREELINE
- OVERHEAD UTILITY LINE
- EDGE OF WETLAND
- EDGE OF VERNAL POOL
- FIELD SURVEY AND WETLAND DELINEATION LIMIT
- WETLAND FLAG AND FLAG ID #
- WOOD POST
- SIGN
- UTILITY POLE
- WATER SPIGOT
- BACK IN SPACE
- PULL THROUGH SPACE
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED GRAVEL
- PROPOSED PAVEMENT

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Issue
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0 20 40 80
North

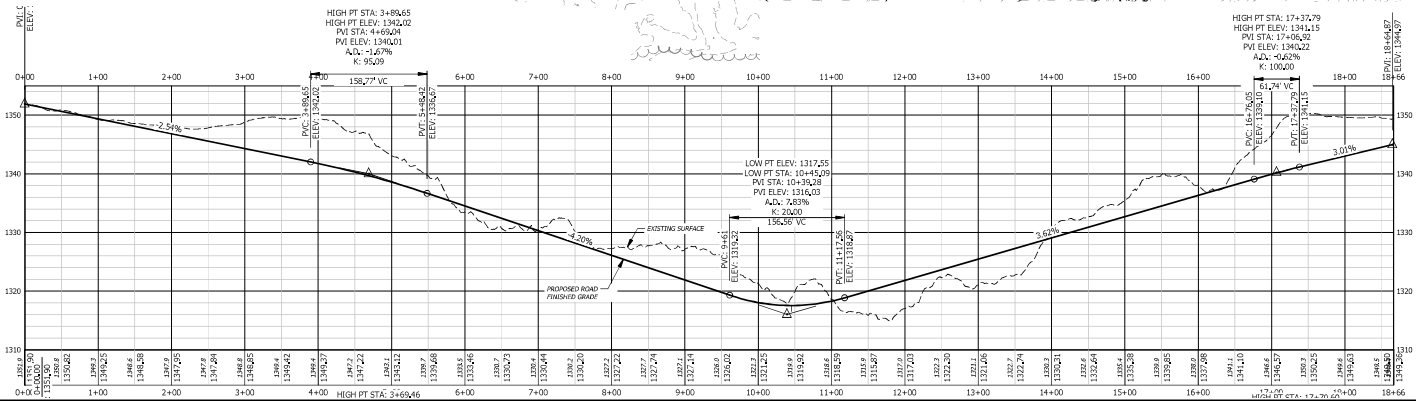
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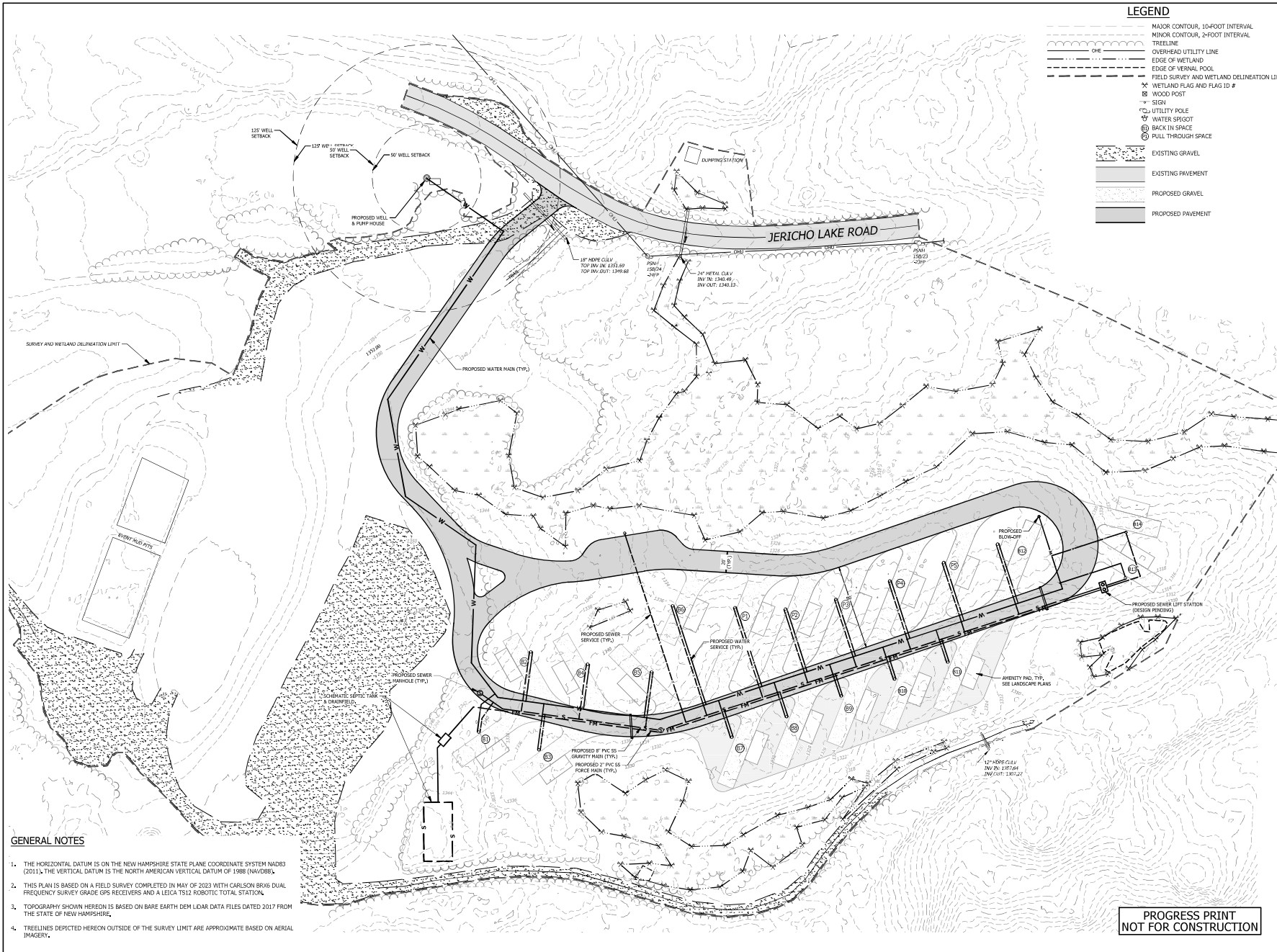
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**GRADING PLAN
AREA 1**
Sheet Number:
C2.10

Project Number: 23045001
File: 220838-jericho-site 6.dwg



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LEGEND

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- TREELINE
- OVERHEAD UTILITY LINE
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- FIELD SURVEY AND WETLAND DELINEATION LIMIT
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Title
**UTILITY PLAN
AREA 1**
Sheet Number:
C2.20

Project Number: 23045001
File: 220838-jericho-site 6.dwg

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SEEDING RECOMMENDATIONS

- GRADING AND SHAPING**
A. SLOPES SHALL NOT BE STEEPER THAN 2:1. 3:1 SLOPES OR FLATTER ARE PREFERRED, WHERE MOVING WILL BE DONE. 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SEEDING PREPARATION**
A. SURFACE AND SEEDING WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE PORES OF THE SOIL SHOULD BE SPREAD WITH ORGANIC MATTER AND TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHERE PRACTICAL.
- ESTABLISHING VEGETATION**
A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
- AMMONIUM NITRATE LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.
- NITROGEN (N), 50 LBS. PER ACRE OR 14 LBS. PER 1,000 SQ. FT.
- PHOSPHATE (P₂O₅), 100 LBS. PER ACRE OR 22 LBS. PER 1,000 SQ. FT.
- POTASH (K₂O), 100 LBS. PER ACRE OR 22 LBS. PER 1,000 SQ. FT.
(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10.)
B. SEED SHOULD BE SPREAD UNIFORMITY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 25 INCH OF SOIL OR LESS, BY CLAYPACKING OR RAKING.
- SEEDING GUIDE:**

SOIL TYPE	SEEDING RATE (SEE 3D)		WELL DRAINAGE	POORLY DRAINAGE
	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.		
USE STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	FAIR
	B	POOR	GOOD	FAIR
	C	FAIR	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD
	B	GOOD	GOOD	FAIR
	C	GOOD	GOOD	POOR

D. SEEDING RATES:

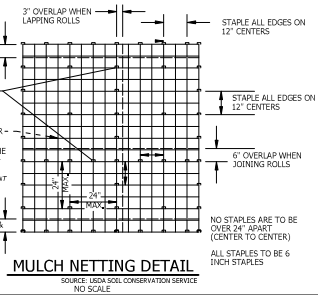
MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A. TALL FESCUE CREEPING RED FESCUE REEDTOP	20 20 42	0.45 0.45 0.85
B. TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR FLATPEA	15 15 15 OR 55	0.35 0.35 0.35 OR 1.25
C. TALL FESCUE FLATPEA	20 30	0.45 0.75

E. WHEN SEEDING AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDING AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 15.

F. TEMPORARY SEEDING RATES:

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 15TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
ONTS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY. BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE NOT IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 15TH AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

- MULCH**
A. ANY STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.
- MAINTENANCE TO ESTABLISH A STAND**
A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WOOD GROWTH.
B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
C. IN WATERWAYS, CHANNELS, OR SWALES UNDER UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

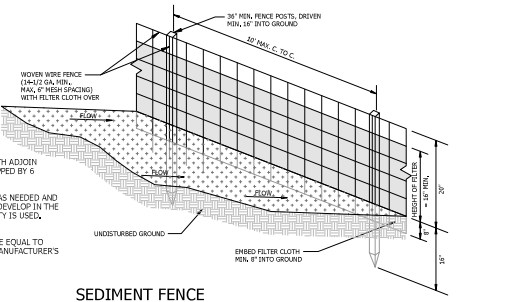


EROSION CONTROL GENERAL NOTES

- KEEP SITE MODIFICATION TO A MINIMUM**
A. CONSIDER SITING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
B. EXPOSE AREAS OF BARE SOIL TO EROSION ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
C. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
D. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
E. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.
- MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES**
1. STOOPPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOOPPILES MUST BE PROTECTED FROM EROSION.
2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.
- PROTECT AREA AFTER CONSTRUCTION.**
1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE BEST MANAGEMENT PRACTICES DURING THE CONSTRUCTION PERIOD.
3. MAINTAIN NEEDED STRUCTURAL BEST MANAGEMENT PRACTICES AND REMOVE SEDIMENT FROM DETENTION POND AND SEDIMENT BASINS AS NEEDED.
4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT BEST MANAGEMENT PRACTICES.
5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, REFER TO COLD WEATHER SITE STABILIZATION REQUIREMENTS.
- INVASIVE SPECIES AND FUGITIVE DUST**
1. THE PROJECT SHALL NOT CONTRIBUTE TO THE SPREAD OF INVASIVE SPECIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE WORK AREAS FOR THE PRESENCE OF INVASIVE SPECIES, AND IF FOUND SHALL TAKE NECESSARY MEASURES TO PREVENT THEIR SPREAD IN ACCORDANCE WITH RSA 330:1-SF AND AGR 3800. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES BY INSPECTING AND CLEANING ALL EQUIPMENT ARRIVING ON SITE.
2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENH-A-1000.

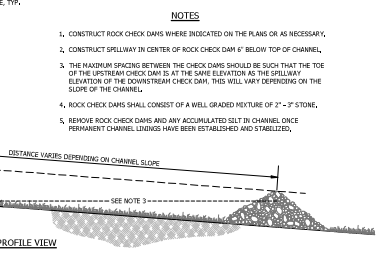
CONSTRUCTION NOTES FOR SEDIMENT FENCE

- WOVEN WIRE FENCE (14x12 OR 16x12, MAX. 6' HIGH SPACING) WITH FILTER CLOTH OVER
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.
- 12" DIAMETER FILTERTEX SILT/SOIL SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO OTHER TYPES IF MANUFACTURER'S RECOMMENDATIONS.



ROCK CHECK DAM DETAIL

NO SCALE

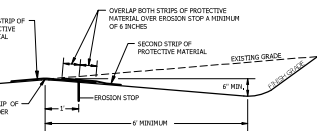


NOTES

- CONSTRUCT ROCK CHECK DAMS WHERE INDICATED ON THE PLANS OR AS NECESSARY.
- CONSTRUCT SPILLWAY IN CENTER OF ROCK CHECK DAM 6" BELOW TOP OF CHANNEL.
- THE MAXIMUM SPACING BETWEEN THE CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK DAM IS AT THE SAME ELEVATION AS THE SPILLWAY ELEVATION OF THE DOWNSTREAM CHECK DAM. THIS WILL VARY DEPENDING ON THE SLOPE OF THE CHANNEL.
- ROCK CHECK DAMS SHALL CONSIST OF A WELL GRADED MIXTURE OF 2" - 7" STONE.
- REINFORCE ROCK CHECK DAMS AND ANY ACCUMULATED SILT IN CHANNEL ONCE PERMANENT CHANNEL LINES HAVE BEEN ESTABLISHED AND STABILIZED.

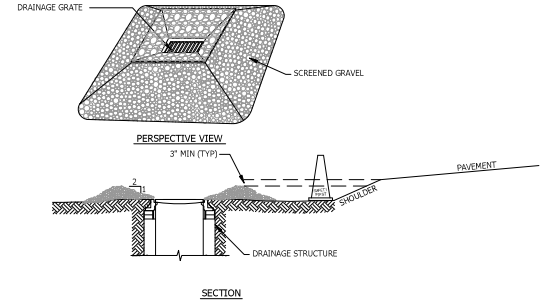
LEVEL LIP SPREADER INSTALLATION

- CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM SPREADING OF RUNOFF.
- LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL AND NOT ON FILL.
- AN EROSION STOP SHALL BE PLACED VERTICALLY A MINIMUM OF SIX INCHES DEEP IN A SLIT TRENCH ONE FOOT BACK OF THE LEVEL LIP AND PARALLEL TO THE LIP. THE EROSION STOP SHALL EXTEND THE ENTIRE LENGTH OF THE LEVEL LIP.
- THE ENTIRE LEVEL LIP AREA SHALL BE PROTECTED BY PLACING TWO STRIPS OF JUTE OR EXCELLENT MATTINGS ALONG THE LIP. EACH STRIP SHALL OVERLAP THE EROSION STOP BY AT LEAST SIX INCHES.
- THE ENTRANCE CHANNEL TO THE LEVEL SPREADER SHALL NOT EXCEED A 1 PERCENT GRADE FOR AT LEAST 50 FEET BEFORE ENTERING INTO THE SPREADER.
- THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT RE-CONCENTRATE IMMEDIATELY BELOW THE SPREADER.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.
- PROTECTIVE MATERIAL AND EROSION STOP SHALL BE NORTH AMERICAN GREEN C123 EROSION CONTROL BLANKET OR APPROVED EQUAL.



LEVEL SPREADER DETAIL

NO SCALE
SOURCE: ROCKINGHAM COUNTY CONSERVATION SERVICE



MATERIALS SPECIFICATIONS:

- SCREENED GRAVEL: UNIFORMITY GRADED 1" TO 4" DIA. STONE.

CONSTRUCTION SPECIFICATIONS:

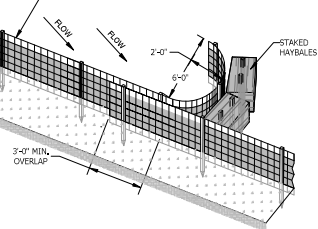
- INSTALL GRAVEL INLET PROTECTION WHERE INDICATED OR WARRANTED.
- FOR ALL INSTALLATIONS WHERE INLET PROTECTION IS WITHIN 8' OF EDGE OF PAVEMENT, A ROADWAY CATCH BASIN SHALL BE USED BETWEEN CATCH BASIN AND SHOULDER.
- ENSURE CREST OF GRAVEL PLACED AROUND CATCH BASIN IS AT LEAST 3" BELOW ELEVATION OF EDGE OF PAVEMENT.

CONSTRUCTION SEQUENCE

- PREPARE AN EROSION CONTROL PLAN OR A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL.
- CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
- INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
- GRUB SITE WITH GRADING LIMITS.
- STRIP AND STOOPPILE TOPSOIL AND INSTALL EROSION CONTROL MEASURES.
- INSTALL/ADJUST SEDIMENT FENCE, CHECK DAMS, AND HAYBALES, AS REQUIRED.
- CONSTRUCT PERMANENT STORMWATER CONTROLS AS SOON AS PRACTICAL. DO NOT DIRECT STORMWATER TOWARD TREATMENT BASINS, PONDS, SWALES, DITCHES AND LEVEL SPREADERS UNTIL THEY HAVE BEEN STABILIZED.
- PROCEED WITH WORK LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM OF UNCOVERED DISTURBED EARTH AT ANY ONE TIME IS FIVE ACRES. THE MAXIMUM LENGTH OF TIME THAT DISTURBED EARTH WILL BE LEFT UNSTABILIZED IS 65 DAYS.
- BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED.
D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.2 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
- PAVE ROADWAYS AND/OR PARKING AREAS.
- PLACE TOPSOIL, SEED AND MULCH.
- COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
- MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.

CATCH BASIN INLET PROTECTION DETAIL

NO SCALE



SEDIMENT FENCE POCKET

NO SCALE

**PROGRESS PRINT
NOT FOR CONSTRUCTION**

NH STATE PARKS
Companion Expansion Project PH
Jericho Mountain State Park
289 Jericho Lake Road
Berlin, NH
03570

Issue
30% DESIGN
Graphic Scale

North

Scale: 1" = 40'

Date: August 25, 2023

Drawn By: DW

Checked By: RH

Issues:	No.	Description	Date
	1	Name	00/00/00

**EROSION CONTROL
DETAILS
C3.00**

Project Number: 23045001
File: 220838-jericho-k-6.dwg

STANDARD TRENCH NOTES - WATER

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.
- BEDDING:** SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90-100% PASSING	3/4 INCH SCREEN
75-95% PASSING	3/8 INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

- SAND BLANKET:** CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A 20 SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.
- SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, MAJORWAYS, AND TRAVELEDWAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUD, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUD, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUND TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE.

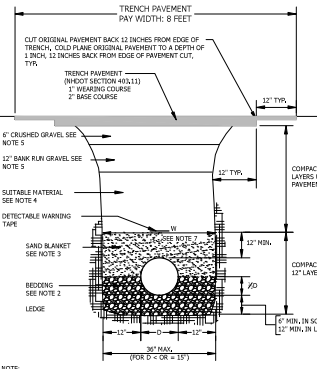
- BASE COURSE FOR TRENCH REPAIR** SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

- SHRETTING:** ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.

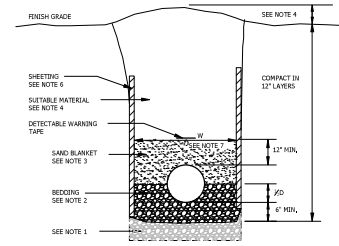
- TRENCH DIMENSIONS:** W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.

- WATER/SEWER SEPARATION:** WATER MAINS SHALL BE SEPARATED FROM SANITARY SEWER BY A MINIMUM OF 10 FEET HORIZONTALLY AND A MINIMUM OF 18 INCHES VERTICALLY, WITH THE WATER MAIN ABOVE THE SEWER.

- PIPE COVER:** COVER OVER WATER SHALL BE 6 FEET MINIMUM IN ALL LOCATIONS.



LEDGE/SUB PAVEMENT CONSTRUCTION



EARTH CONSTRUCTION WITH OR WITHOUT SHEETING

- BLOCKS MUST BE POURED AGAINST UNDISTURBED SOIL
- THE PIPE JOINT AND JOINTS MUST BE ACCESSIBLE
- CONCRETE SHOULD BE CURED FOR AT LEAST 5 DAYS AND SHOULD HAVE A COMPRESSION STRENGTH OF 3,000 PSI AT 28 DAYS.
- BLOCKS MUST BE POSITIONED TO COUNTERACT THE DIRECTION OF THE RESULTANT THRUST FORCES.

RESTRAINED JOINTS MAY BE USED FOR RESISTING THRUST FORCES WHERE THERE IS A SHORTAGE OF SPACE OR WHERE THE SOIL BEHIND A FITTING WILL NOT PROVIDE ADEQUATE SUPPORT. THIS RESTRAINING METHOD INVOLVES PLACEMENT OF THESE SPECIAL JOINTS AT APPROPRIATE FITTINGS AND A PRE-DETERMINED NUMBER OF PIPE LENGTHS ON EACH SIDE (MINIMUM 15 FEET).

NOMINAL PIPE DIA. (INCHES)	TOTAL THRUST (POUNDS)			
	DEAD END	90° BEND	45° BEND	14° BEND
4	1,810	2,209	1,383	759
6	3,739	5,188	2,861	1,499
8	6,433	9,097	4,923	2,510
10	9,877	13,685	7,466	3,776
12	13,885	19,353	10,474	5,340
14	18,385	26,021	14,072	7,124
16	23,779	33,828	18,399	9,278
18	29,865	42,235	23,898	11,663
20	36,644	51,822	28,946	14,298
24	52,078	72,536	40,023	20,249

NOTE: TO DETERMINE THRUST AT PRESSURES OTHER THAN 100 PSI, MULTIPLY THE THRUST SHOWN IN THE TABLE BY THE RATIO OF THE PRESSURE TO 100. FOR EXAMPLE, THE THRUST ON A 12 INCH, 90° BEND AT 225 PSI IS:

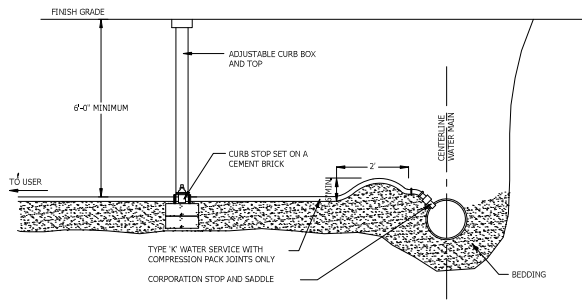
$13,885 \times 2.25 = 31,219$ POUNDS

TO DETERMINE THE SIZE OF A CONCRETE THRUST BLOCK, OBTAIN THE TOTAL FORCE BY THE BEARING VALUE OF THE SOIL. THE QUANTITY WILL BE THE SIZE OF THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET. APPROPRIATE VALUES FOR VARIOUS TYPES OF SOIL ARE LISTED BELOW.

SOIL	BEARING LOAD (LBS./SQ. FT.)
ROCK	1
SOFT CLAY	1,000
SILT	1,500
SANDY SILT	3,000
SAND	4,000
SANDY CLAY	6,000

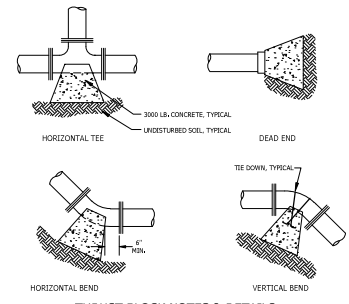
STANDARD TRENCH SECTIONS

NOT TO SCALE



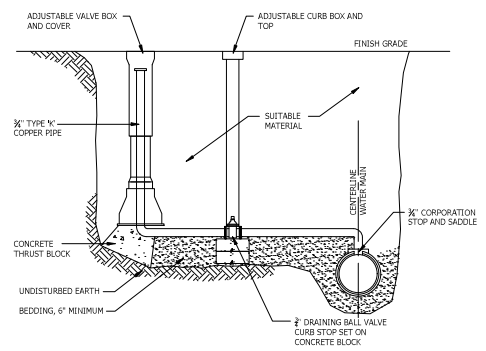
WATER SERVICE CONNECTION

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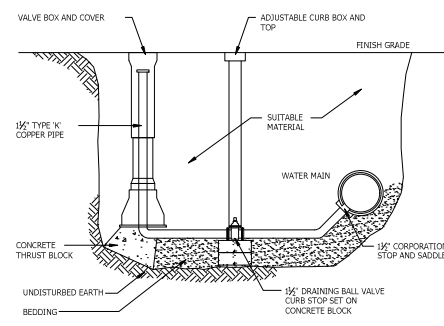
THRUST BLOCK NOTES & DETAILS

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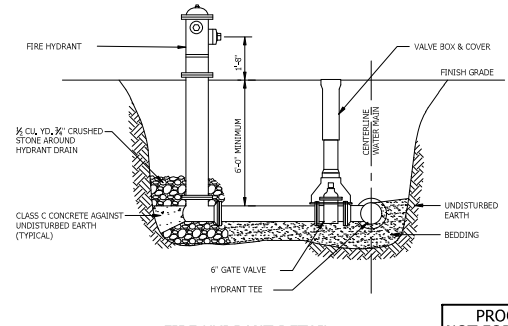
AIR RELEASE DETAIL

NOT TO SCALE



BLOWOFF DETAIL

NOT TO SCALE



FIRE HYDRANT DETAIL

NOT TO SCALE

PROGRESS PRINT NOT FOR CONSTRUCTION

Issues:

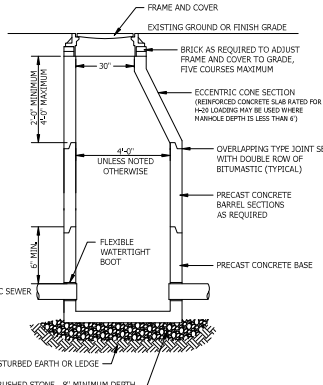
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SEWER NOTES

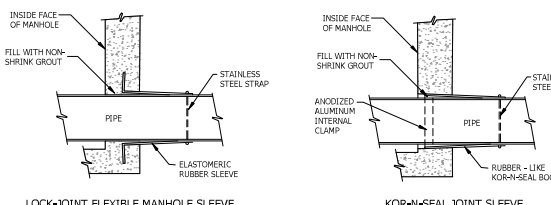
- GENERAL**
CONSTRUCTION OF ALL COMPONENTS OF THE SANITARY SEWER SYSTEM SHALL CONFORM TO THE MOST CURRENT EDITION OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENH-400.700 AND TECHNICAL SPECIFICATIONS ENTITLED "SEWER".
- TYPES OF SEWERS**
A. THERE SHALL BE NO CONNECTION BETWEEN SANITARY SEWERS AND STORM SEWERS.
B. RUNOFF FROM ROOFS, STREETS, AND OTHER AREAS AND GROUNDWATER FROM FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SUBSURFACE DRAINS SHALL BE EXCLUDED FROM SANITARY SEWERS.
- SEWER SIZE AND COVER**
A. MINIMUM PIPE SIZE FOR GRAVITY SEWER MAINS SHALL BE 8 INCHES.
B. MINIMUM PIPE SIZE FOR GRAVITY SEWER SERVICES SHALL BE 4 INCHES.
C. MINIMUM PIPE SIZE FOR FORCE MAIN SEWER SERVICES SHALL BE 2 INCHES.
D. SANITARY SEWERS SHALL HAVE 6 FEET MINIMUM COVER IN ALL ROADWAY LOCATIONS AND 4 FEET MINIMUM COVER IN ALL CROSS-COUNTRY LOCATIONS.
- PIPE AND FITTINGS MATERIALS:**
A. DUCTILE IRON PIPE
DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION:
(1) AWWA C151 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
(2) AWWA C150 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A 536 IRON CASTINGS; AND
(3) JOINTS SHALL BE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL-AND-SOCKET TYPE;
B. PVC (POLY VINYL CHLORIDE) PIPE
PVC PIPE AND FITTINGS SHALL BE APPROVED FOR SEWAGE SERVICE AND CONFORM TO THE FOLLOWING:
(1) 1 1/2" PVC PIPE USED FOR GRAVITY SEWERS SHALL BE TYPE SDR 35 CONFORMING TO ASTM D3034;
(2) 2" PVC PIPE USED FOR FORCE MAINS SHALL BE TYPE SDR 26 CONFORMING TO ASTM D2241 OR ASTM D2733;
(3) JOINTS SHALL BE PUSH-ON, BELL-AND-SPOUT TYPE HAVING OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212.
- BEDDING**
PIPE BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67, BEDDING SHALL EXTEND FROM THE SPRING LINE OF THE PIPE TO A MINIMUM DEPTH OF 6" BELOW THE BOTTOM OF THE PIPE OUTSIDE SURFACE.
100% PASSING 1/2" INCH SCREEN
90-100% PASSING 3/4" INCH SCREEN
20-50% PASSING #4 INCH SCREEN
0-10% PASSING #4 SIEVE
0-5% PASSING #8 SIEVE
- MANHOLES**
A. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C476.
B. MANHOLES SHALL BE DESIGNED FOR H-20 LOADING.
C. HORIZONTAL JOINTS BETWEEN BARREL SECTIONS SHALL BE OF AN OVERLAPPING TYPE WHICH SHALL DEPEND UPON A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT FOR WATER TIGHTNESS.
D. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
(1) ELASTOMERIC RUBBER SLEEVE WITH WATER TIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
(2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
(3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
(4) NON-SHRINK GROUTED JOINTS WHERE WATER TIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
E. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
- PROTECTION OF WATER SUPPLIES**
A. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.
B. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADIUS ESTABLISHED IN ENH-400.300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.
C. SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
D. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (B) OR (C) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENH-400.704.06.
E. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
(1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
(2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.

STANDARD TRENCH NOTES - SEWER

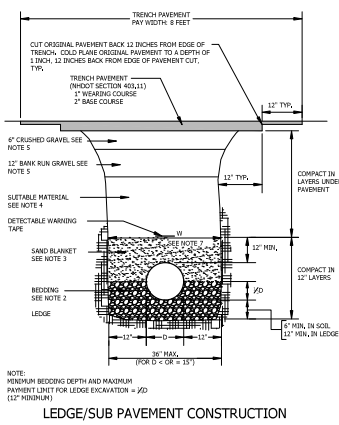
- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.
- BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67,
100% PASSING 1/2" INCH SCREEN
90-100% PASSING 3/4" INCH SCREEN
20-50% PASSING #4 INCH SCREEN
0-10% PASSING #4 SIEVE
0-5% PASSING #8 SIEVE
- SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A #2 INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.
- SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELLED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.
TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE HENCED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
- SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS, CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.
- TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 26 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.
- PIPE INSULATION AT STORM DRAIN CROSSING: INSTALL 2" THICK RIGID FOAM INSULATION OVER SEWER AT STORM DRAIN CROSSINGS, EXTEND INSULATION 4 FEET EITHER SIDE OF STORM DRAIN ALONG SEWER.



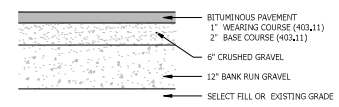
SANITARY SEWER MANHOLE DETAIL
NOT TO SCALE



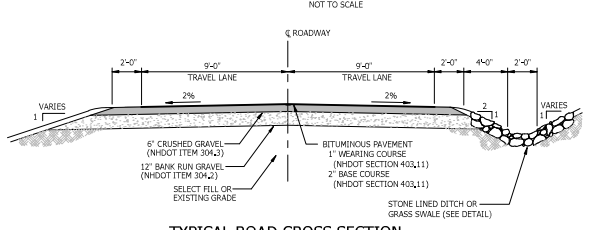
JOINTING DETAILS
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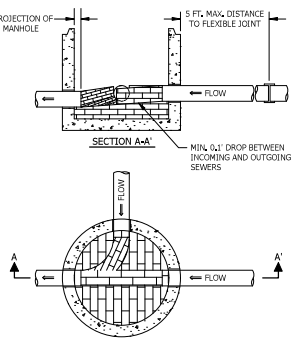
STANDARD TRENCH SECTIONS
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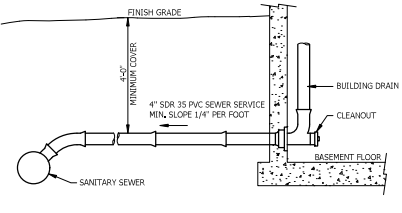
TYPICAL PAVEMENT SECTION
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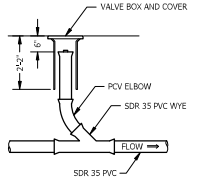
TYPICAL ROAD CROSS SECTION WITHOUT GUARD RAIL
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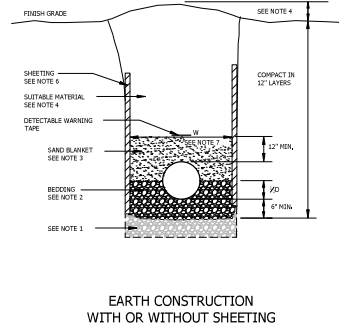
MANHOLE INVERT DETAILS
NOT TO SCALE



SEWER SERVICE DETAIL
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SEWER CLEANOUT DETAIL
NOT TO SCALE



EARTH CONSTRUCTION WITH OR WITHOUT SHEETING

**PROGRESS PRINT
NOT FOR CONSTRUCTION**

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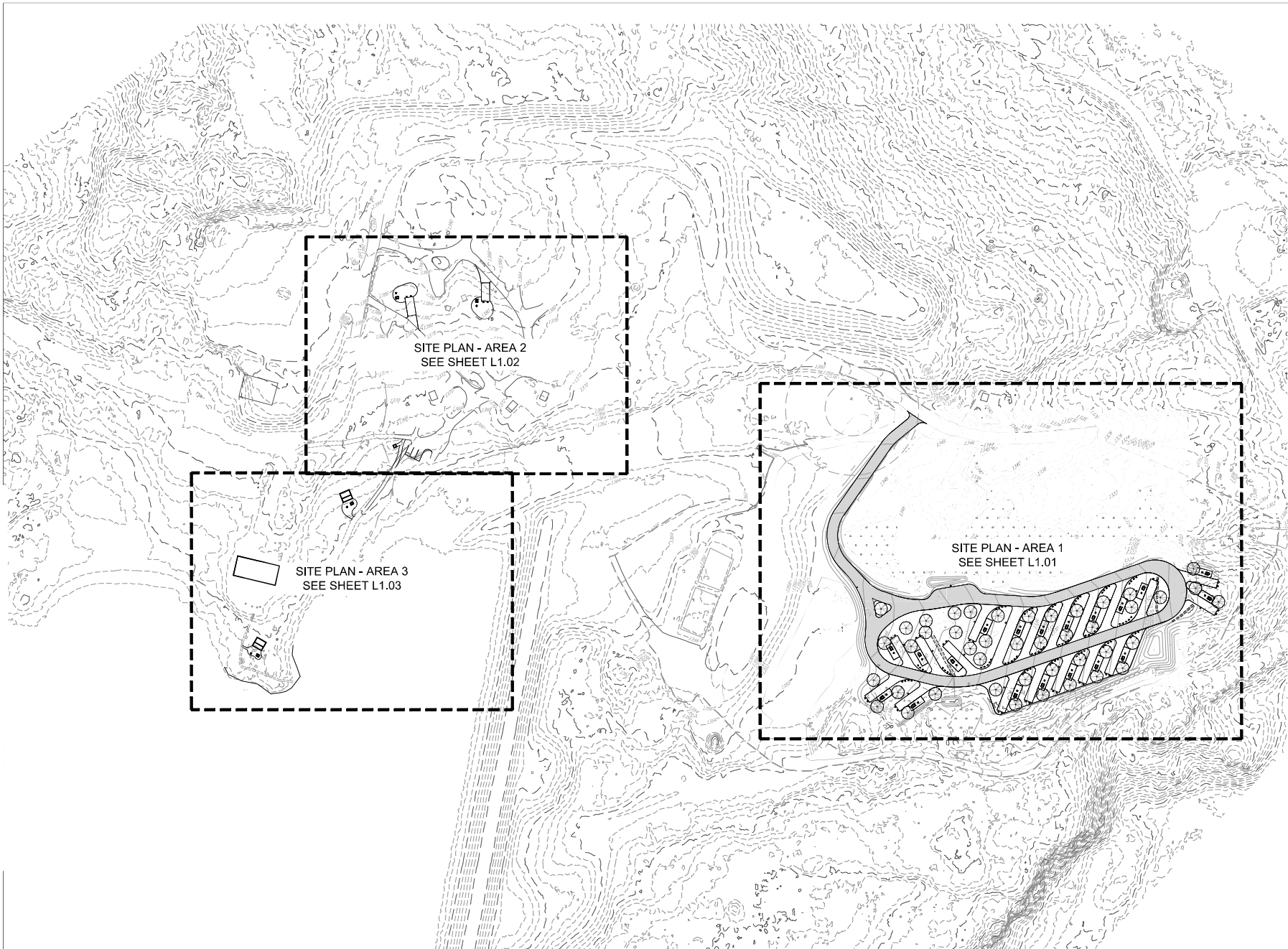
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SEWER & ROAD DETAILS

Sheet Number:
C3.20

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NH STATE PARKS
 Campground Expansion Project P11
 Jericho Mountain State Park
 298 Jericho Lake Road
 Berlin, NH
 03570

Issue
30% DESIGN



Scale: 1" = 80'
 Date: August 25, 2023
 Drawn By: KS & BD
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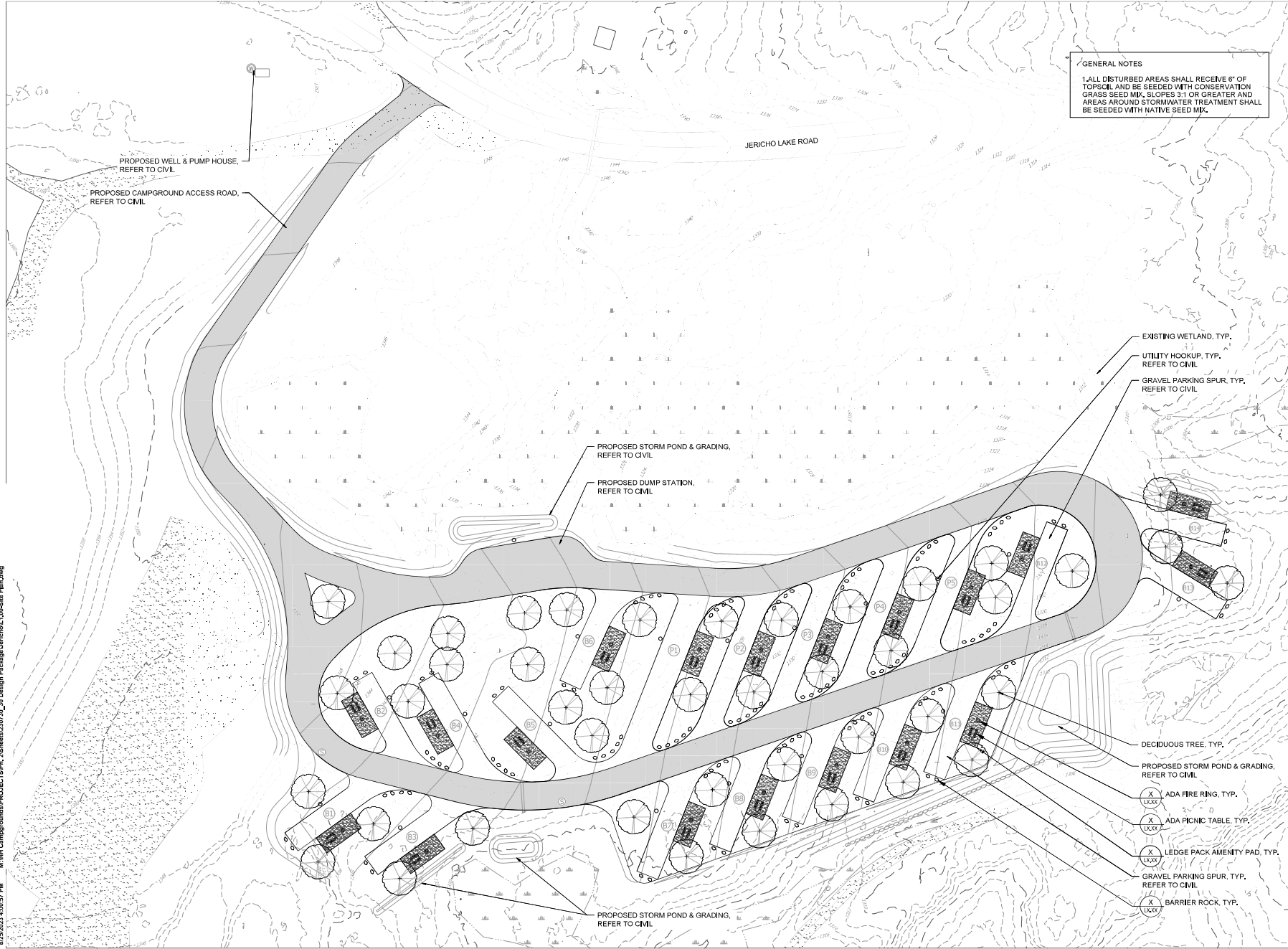
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No.	Description	Date
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Title
OVERALL SITE PLAN
 Sheet Number:
L1.00

Project Number: 23045001
 File: 11_00-site plan.dwg

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GENERAL NOTES

1. ALL DISTURBED AREAS SHALL RECEIVE 6" OF TOPSOIL AND BE SEEDED WITH CONSERVATION GRASS SEED MIX. SLOPES 3:1 OR GREATER AND AREAS AROUND STORMWATER TREATMENT SHALL BE SEEDED WITH NATIVE SEED MIX.

PROPOSED WELL & PUMP HOUSE, REFER TO CIVIL

PROPOSED CAMPGROUND ACCESS ROAD, REFER TO CIVIL

PROPOSED STORM POND & GRADING, REFER TO CIVIL

PROPOSED DUMP STATION, REFER TO CIVIL

EXISTING WETLAND, TYP.

UTILITY HOOKUP, TYP., REFER TO CIVIL

GRAVEL PARKING SPUR, TYP., REFER TO CIVIL

DECIDUOUS TREE, TYP.

PROPOSED STORM POND & GRADING, REFER TO CIVIL

X UXXX ADA FIRE RING, TYP.

X UXXX ADA PICNIC TABLE, TYP.

X UXXX LEDGE PACK AMENITY PAD, TYP.

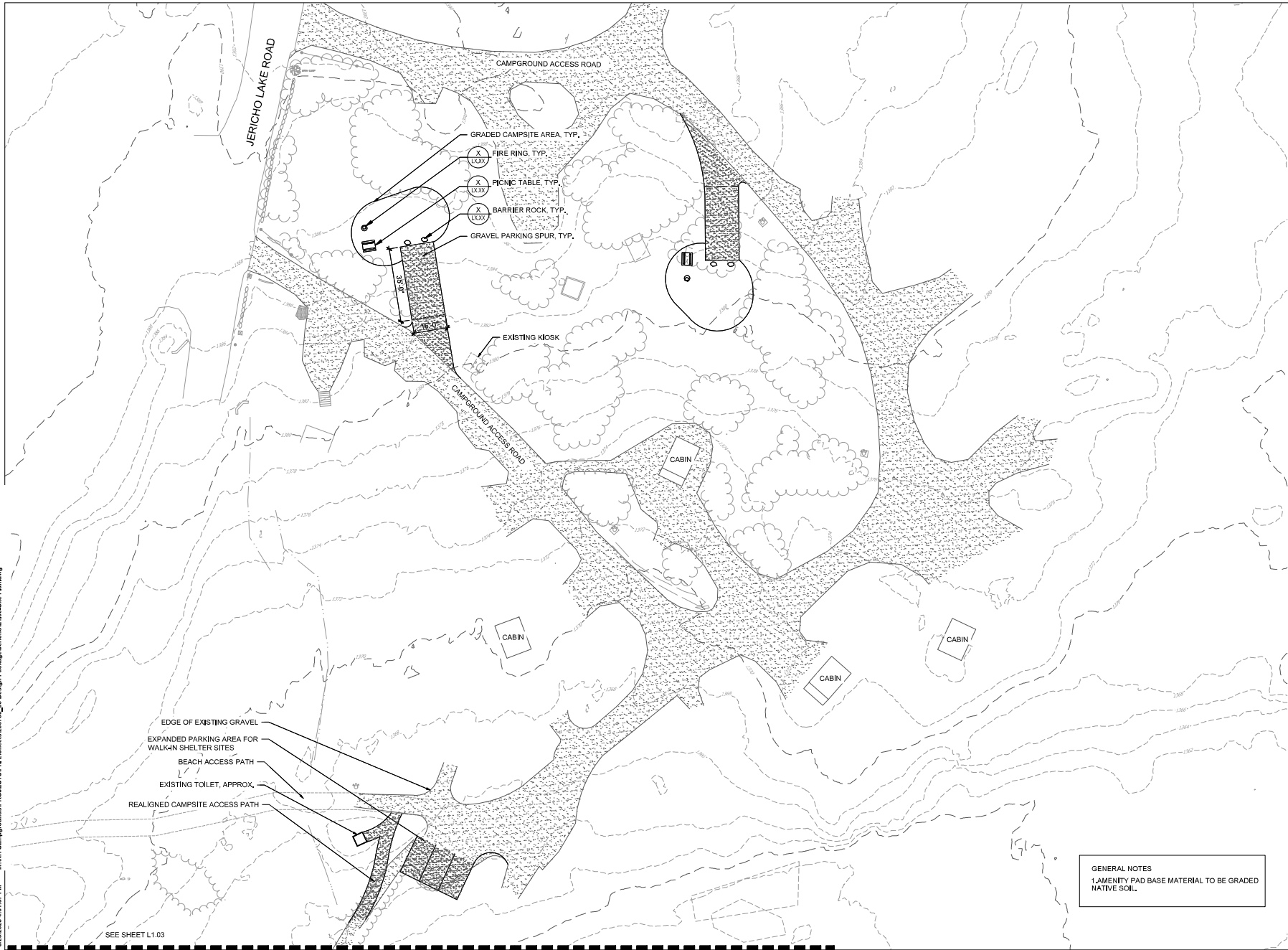
GRAVEL PARKING SPUR, TYP., REFER TO CIVIL

X UXXX BARRIER ROCK, TYP.

PROPOSED STORM POND & GRADING, REFER TO CIVIL

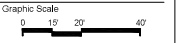
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NH STATE PARKS
 Campground Expansion Project P11
 Jericho Mountain State Park
 298 Jericho Lake Road
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 03570

Issue
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 Date: August 25, 2023
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Issues:

No.	Description	Date
1	Name	00/00/00

Title
SITE PLAN - AREA 2
 Sheet Number:
L1.02

GENERAL NOTES
 1. AMENITY PAD BASE MATERIAL TO BE GRADED NATIVE SOIL.

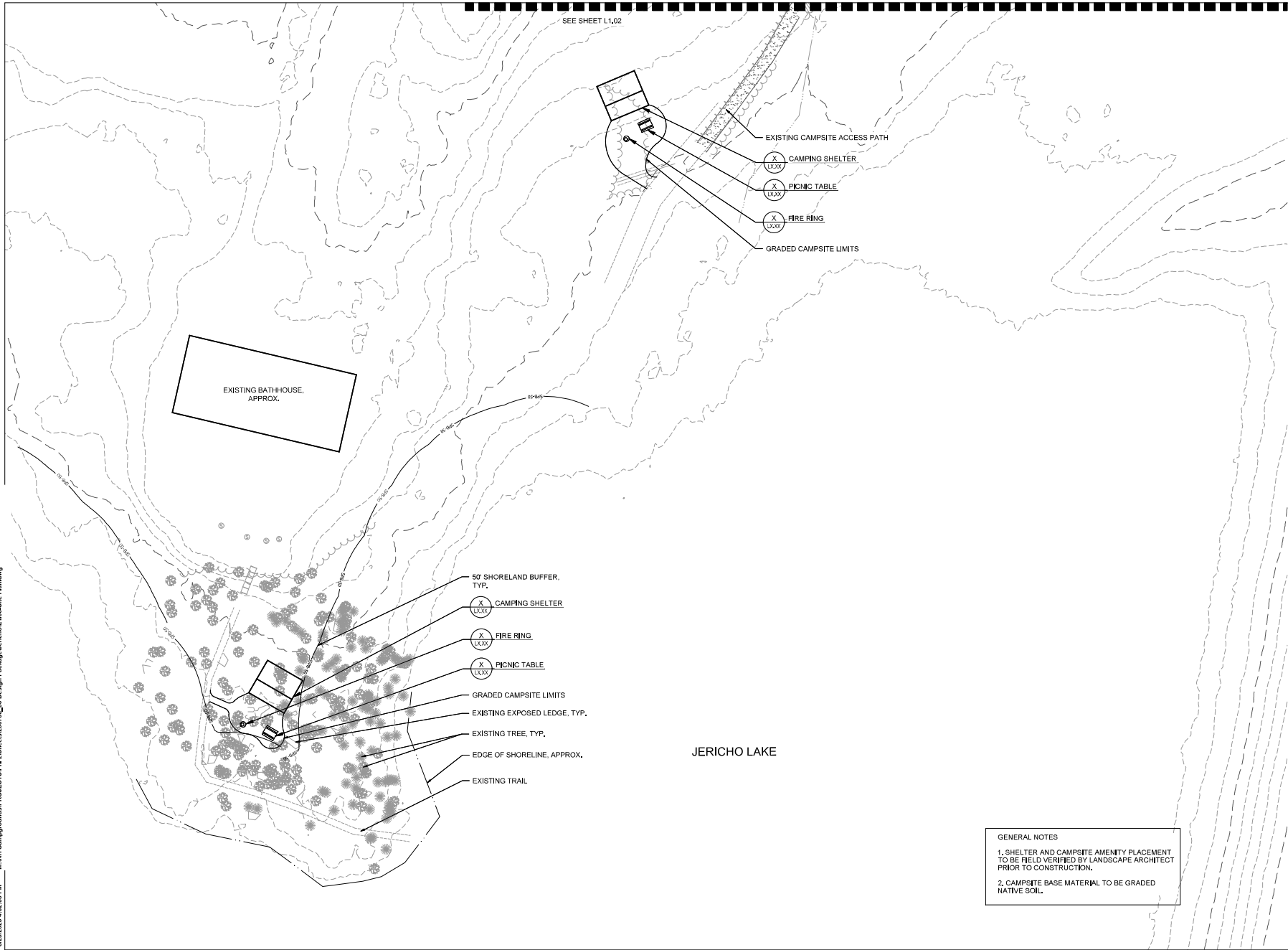
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SEE SHEET L1.03

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SEE SHEET L1.02



NH STATE PARKS

Campground Expansion Project PH
 Jericho Mountain State Park
 298 Jericho Lake Road
 Berlin, NH
 03570

Issue
30% DESIGN

Graphic Scale
 0 15' 30' 45'



Scale: 1" = 20'
 Date: August 25, 2023
 Drawn By: KS & BD
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Issues:

No.	Description	Date
1	Name	00/00/00

Title
SITE PLAN - AREA 3
 Sheet Number:
L1.03

Project Number: 23045001
 File: 11_00-site plan.dwg

GENERAL NOTES
 1. SHELTER AND CAMPSITE AMENITY PLACEMENT TO BE FIELD VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.
 2. CAMPSITE BASE MATERIAL TO BE GRADED NATIVE SOIL.



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NH STATE PARKS
Campground Expansion Project #11
Jericho State Park
Berlin, New Hampshire

Issue

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Graphic Scale

North

Scale: As Indicated

Date: Aug. 25, 2023

Drawn By: CPB

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Title:

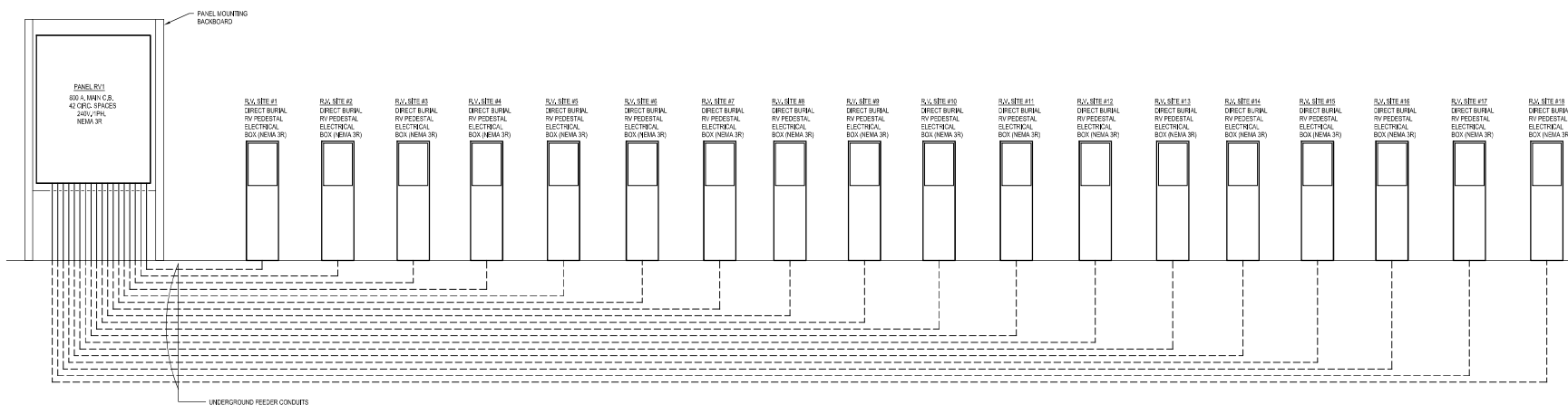
ELECTRICAL RISER DIAGRAMS -
RV PARK AND CAMP SITE CABINS

Sheet Number:

E1.01J

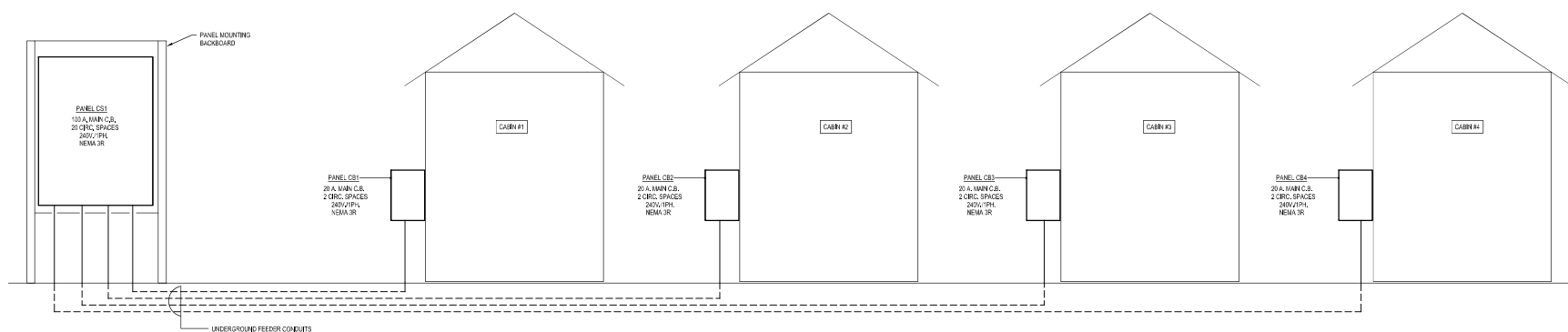
Project Number: 2136

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ELECTRICAL RISER DIAGRAM - RV PARK

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ELECTRICAL RISER DIAGRAM - CAMP SITE CABINS

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NH STATE PARKS
 Campground Expansion Project PII
 Jericho State Park
 Berlin, New Hampshire

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Date: Aug. 25, 2023

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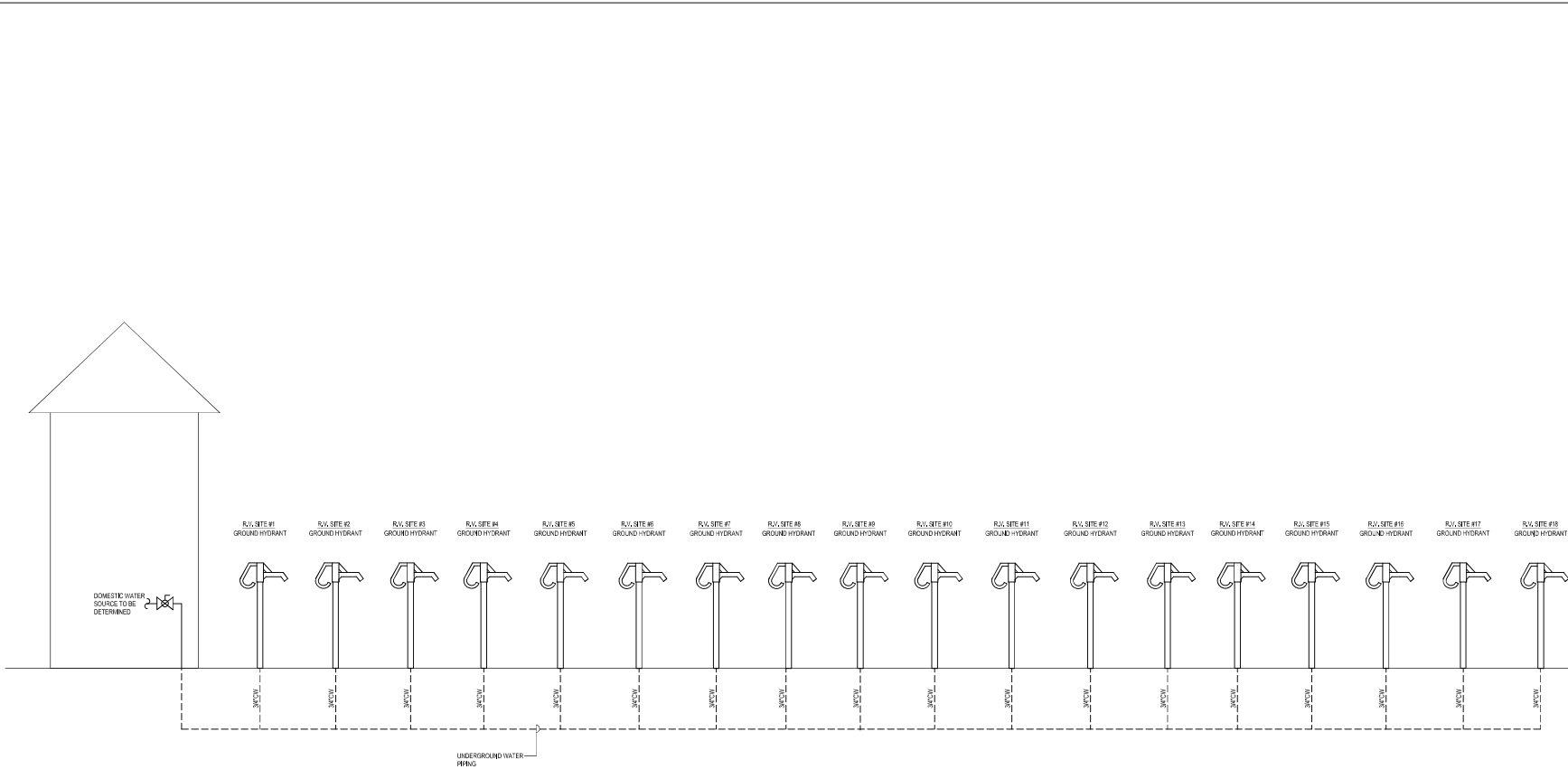
DOMESTIC WATER RISER DIAGRAM -
 RV PARK

Sheet Number:

P1.01J

Project Number: 2136

File:



DOMESTIC WATER RISER DIAGRAM - RV PARK

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