

Site Plans

Issued for	Construction
Date Issued	December 2, 2019
Latest Issue	January 12, 2021

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

Applicant

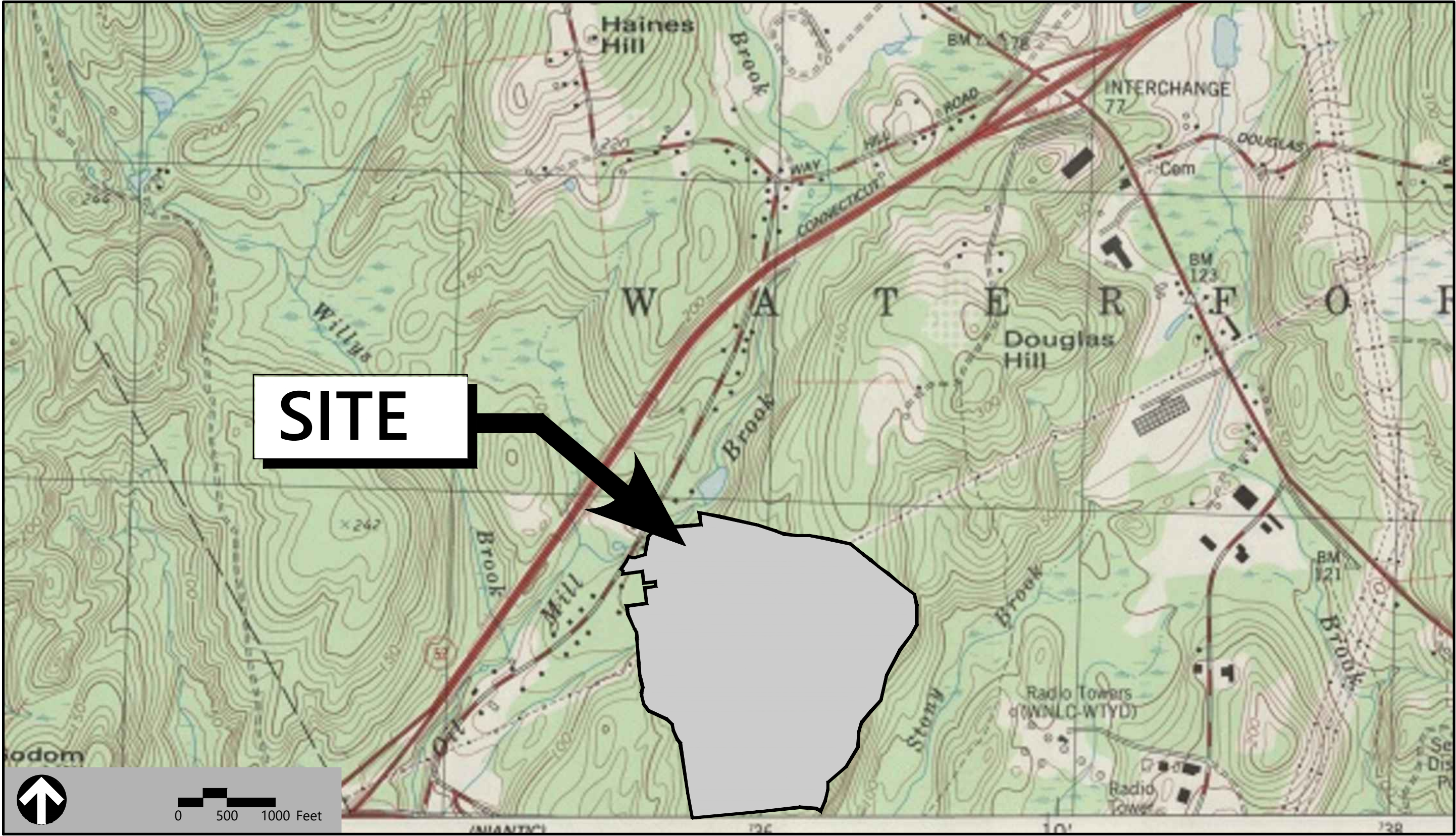
GRE Gacrux, LLC
10 Main Street, Suite E
Middletown, CT 06457

Map / Lot:

80 / 5497

Owner

Rosalie Irene Maguire & Todd Carl Willis
149 Watson Road
Preston, CT 06365



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Reference Drawings		
No.	Drawing Title	Latest Issue
Sheets 1 & 2	Property Survey	February 22, 2018



Legend					
Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT			RIPRAP
		BUILDING SETBACK			CONSTRUCTION EXIT
		PARKING SETBACK			TOP OF CURB ELEVATION
		BASELINE			BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT			SPOT ELEVATION
		ZONING LINE			TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE			BORING LOCATION
		LIMIT OF DISTURBANCE			TEST PIT LOCATION
		WETLAND LINE WITH FLAG			MONITORING WELL
		FLOODPLAIN			
		100-YEAR FLOOD LIMITS			
		GRAVEL ROAD			
		EDGE OF PAVEMENT			
		BITUMINOUS BERM			
		BITUMINOUS CURB			
		CONCRETE CURB			
		CURB AND GUTTER			
		EXTRUDED CONCRETE CURB			
		MONOLITHIC CONCRETE CURB			
		PRECAST CONC. CURB			
		SLOPED GRAN. EDGING			
		VERT. GRAN. CURB			
		LIMIT OF CURB TYPE			
		SAWCUT			
		BUILDING			CATCH BASIN
		BUILDING ENTRANCE			DOUBLE CATCH BASIN
		LOADING DOCK			GUTTER INLET
		BOLLARD			DRAIN MANHOLE
		DUMPSTER PAD			TRENCH DRAIN
		SIGN			PLUG OR CAP
		DOUBLE SIGN			CLEANOUT
					FLARED END SECTION
					HEADWALL
		STEEL GUARDRAIL			SEWER MANHOLE
		WOOD GUARDRAIL			
		PATH			CURB STOP & BOX
		TREE LINE			WATER VALVE & BOX
		WIRE FENCE			TAPPING SLEEVE, VALVE & BOX
		FENCE			SIAMESE CONNECTION
		STOCKADE FENCE			FIRE HYDRANT
		STONE WALL			WATER METER
		RETAINING WALL			POST INDICATOR VALVE
		STREAM / POND / WATER COURSE			WATER WELL
		DETENTION BASIN			
		HAY BALES			GAS GATE
		SILT FENCE			GAS METER
		SILT SOCK / STRAW WATTLE			
		MINOR CONTOUR			ELECTRIC MANHOLE
		MAJOR CONTOUR			ELECTRIC METER
		PARKING COUNT			LIGHT POLE
		COMPACT PARKING STALLS			TELEPHONE MANHOLE
		DOUBLE YELLOW LINE			TRANSFORMER PAD
		STOP LINE			UTILITY POLE
		CROSSWALK			GUY POLE
		ACCESSIBLE CURB RAMP			GUY WIRE & ANCHOR
		ACCESSIBLE PARKING			HAND HOLE
		VAN-ACCESSIBLE PARKING			PULL BOX

Abbreviations	
General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes	
General	
1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (811 OR 1-800-922-4455) AT LEAST 72 HOURS BEFORE EXCAVATING.	4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.	5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
3. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS.	6. VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 72 HOURS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.
4. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.	
5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.	
6. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, TO FACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.	
7. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.	
8. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.	
9. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.	
10. THIS PROJECT DISTURBS MORE THAN FIVE ACRES OF LAND AND WILL REQUIRE ADHERENCE TO AND REGISTRATION FOR THE CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES, EFFECTIVE OCTOBER 1, 2019.	
11. STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ABUTTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE.	
Utilities	
1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.	
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.	
3. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:	
	A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
	B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
	C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.	
5. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.	
6. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.	
Layout and Materials	
1. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.	
2. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.	
3. FINAL LAYOUT SUBJECT TO CONDITIONS ENCOUNTERED IN THE FIELD.	
Demolition	
1. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.	
2. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.	
3. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.	
Erosion Control	
1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.	
2. CONTRACTOR OR QUALIFIED INSPECTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS OR MORE FREQUENTLY AS NEEDED, (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.	
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.	



100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Apprd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK
3	CSC D&M Plan	1/12/2021	SJK

Designed by

Checked by

Issued for

Date

Final Approvals

December 2, 2019

Issued for Construction

Drawing Title

Legend and General Notes

Drawing Number

C-1

Sheet

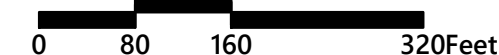
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Project Number

42496.00

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117 Oil Mill Road
Waterford, Connecticut

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Final Approvals December 2, 2019

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Key Plan

Drawing Number

C-2

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Project Number
42496.00

PROJECT INFORMATION

PARCEL SIZE: ±152 ACRES

ZONE DESIGNATION: RU-120 RURAL RESIDENTIAL

LIMIT OF WORK: ±75 ACRES

AREA OF PROPOSED TREE CLEARING: ±75 ACRES (PRE-TIMBER HARVEST)

NON-DISTURBANCE BUFFER TO WETLANDS: > 100'

PROPOSED NUMBER OF PANELS: 45,566

PANEL TYPE: JINKO SOLAR EAGLE HC 72M G2 400W

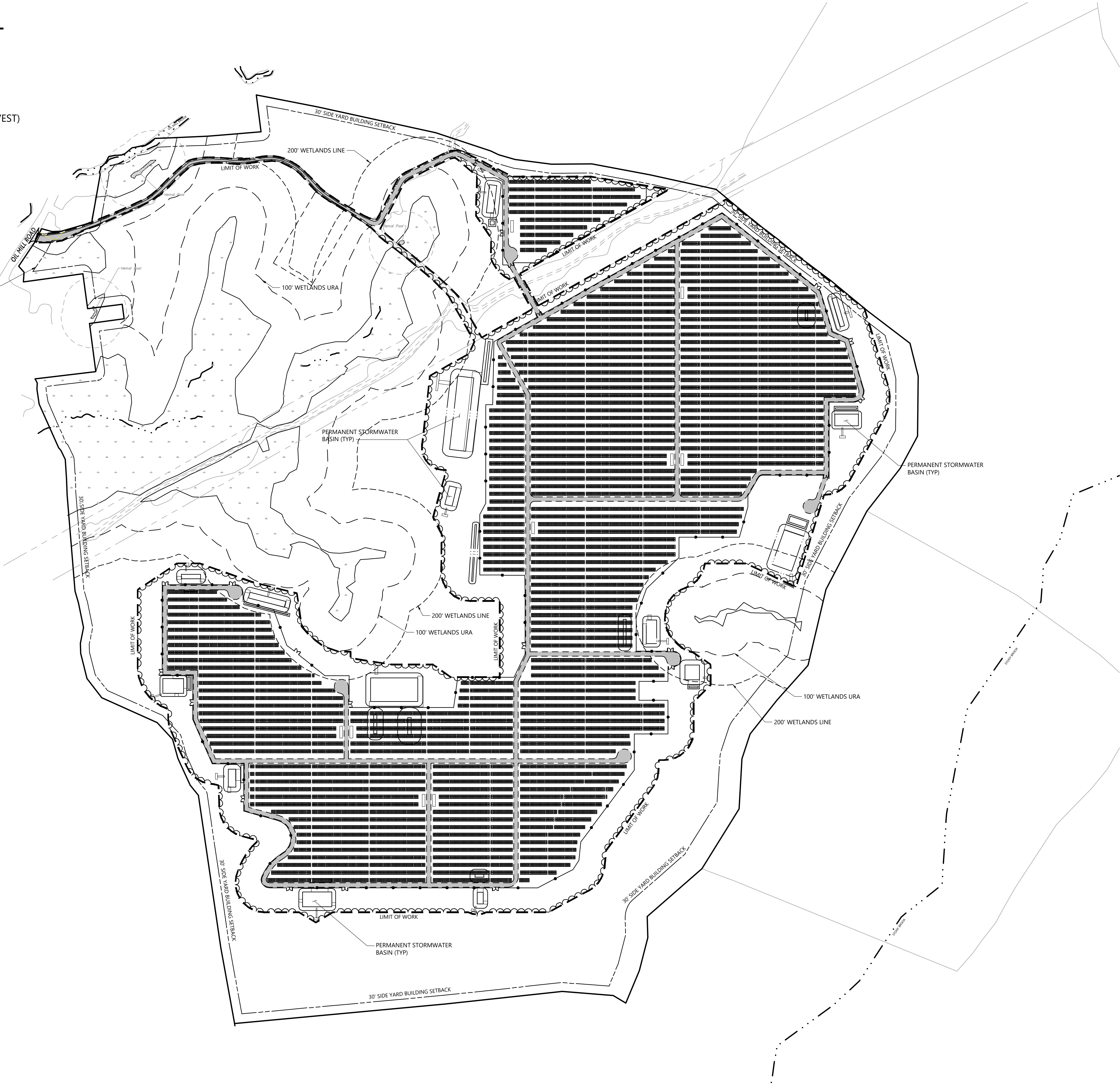
ROW SPACING: 14.5' CLEAR

TILT ANGLE: 25°

INVERTER TYPE: SOLECTRIA RENEWABLES XGI 1000-60/65

SYSTEM POWER: 18.23 MW-DC / ±15.33 MW-AC

50' FRONT YARD BUILDING SETBACK





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C-3.1	C-3.2	C-3.3
C-3.4	C-3.5	C-3.6
C-3.7	C-3.8	C-3.9
C-3.10	C-3.11	C-3.12

Key

Not To Scale



0

80

160

320Feet

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Drawing Title

Layout and
Materials Plan - Overall

Drawing Number

C-3.0

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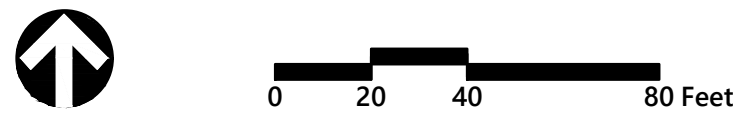
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C-3.4	C-3.5	C-3.6
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Layout and Materials Plan

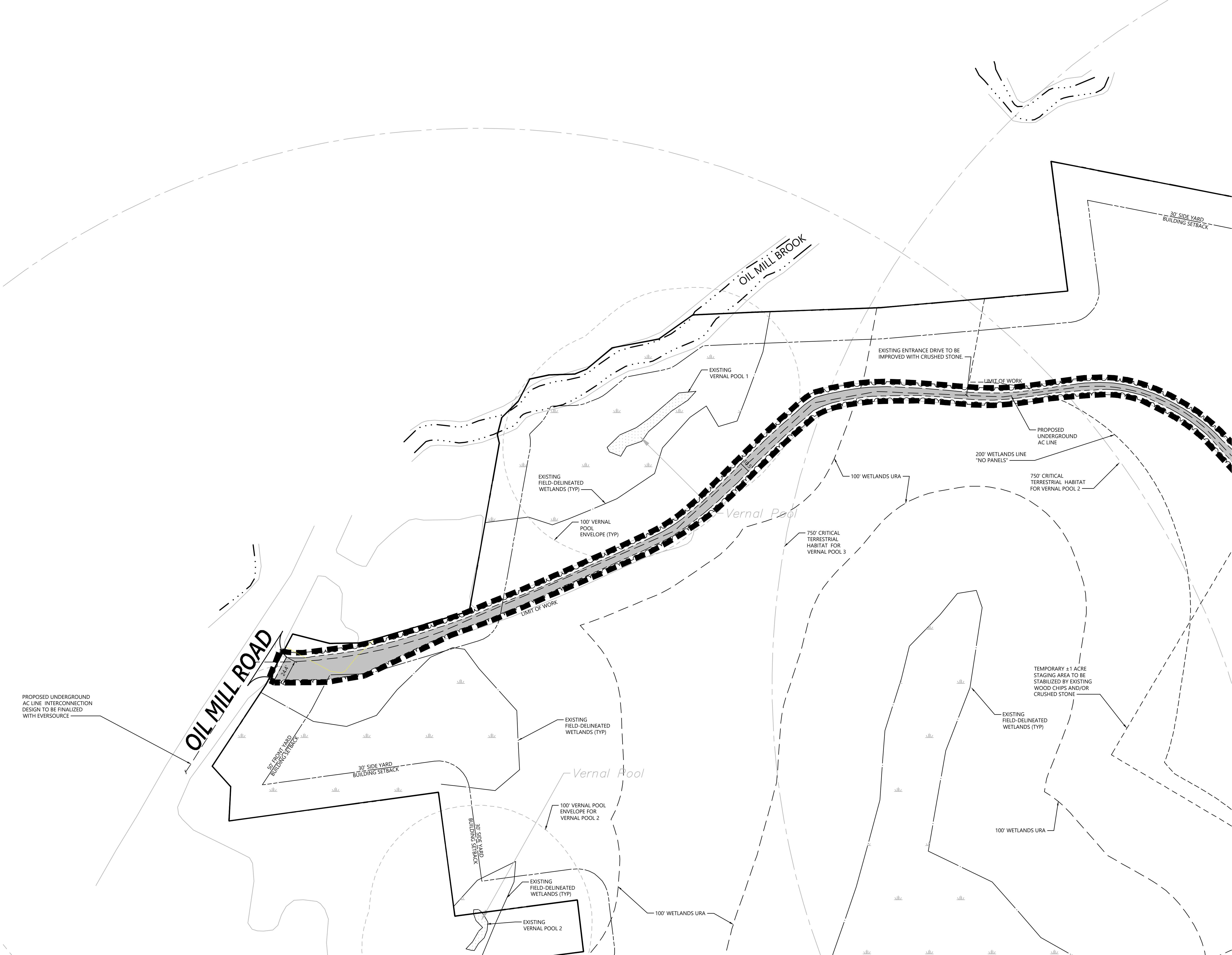
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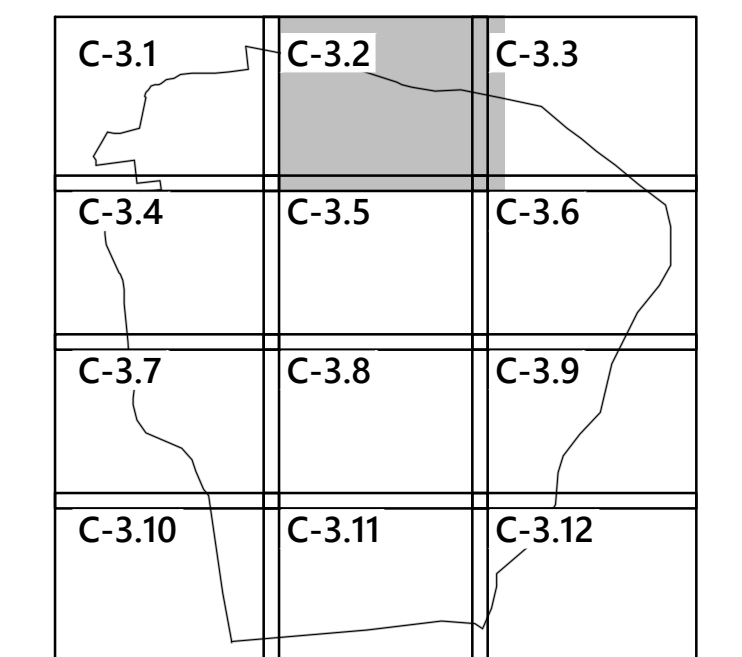
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**Layout and
Materials Plan**

Drawing Number

C-3.2

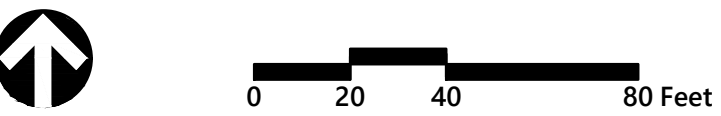
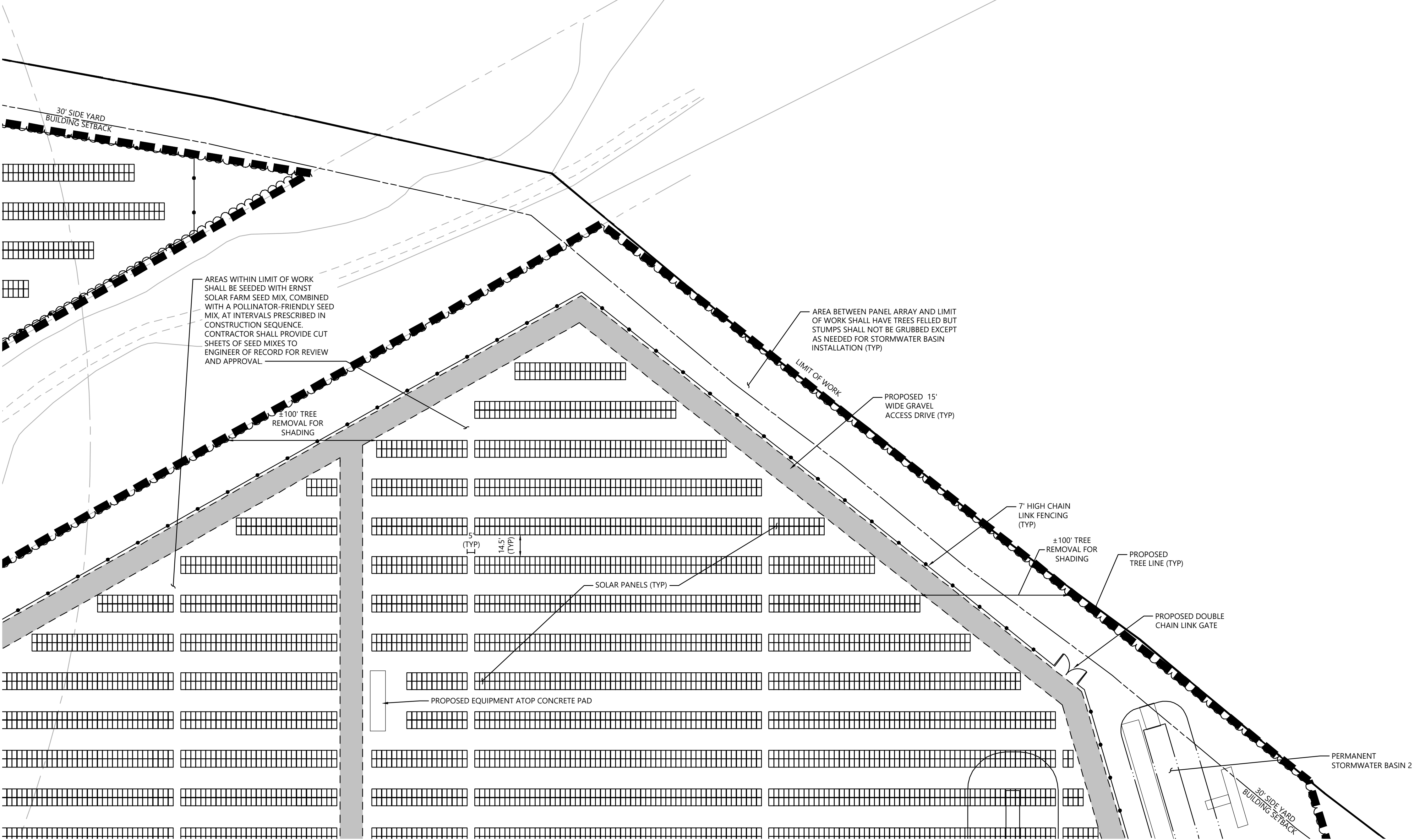
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C-3.1	C-3.2	C-3.3
C-3.4	C-3.5	C-3.6
C-3.7	C-3.8	C-3.9
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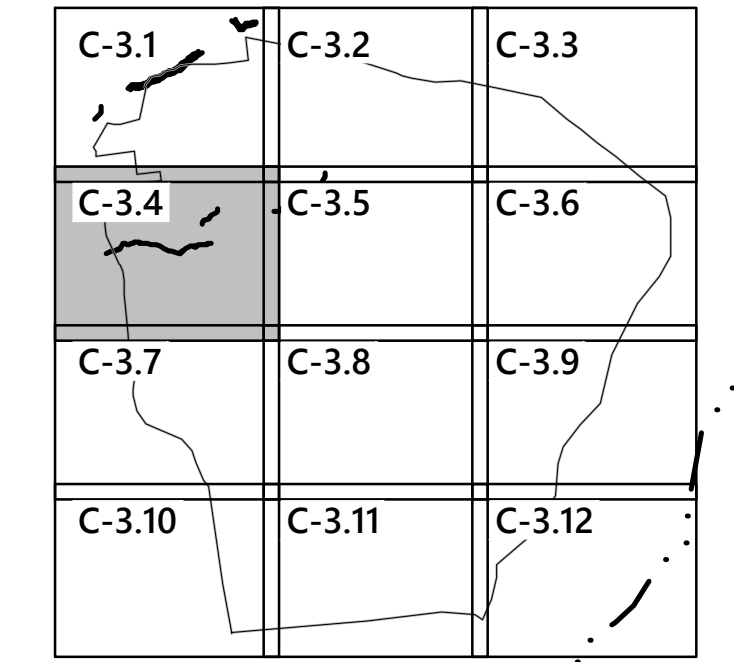
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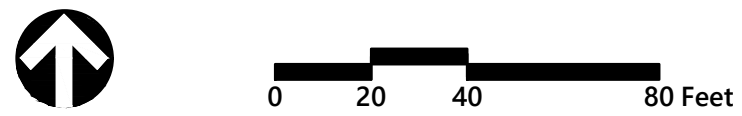
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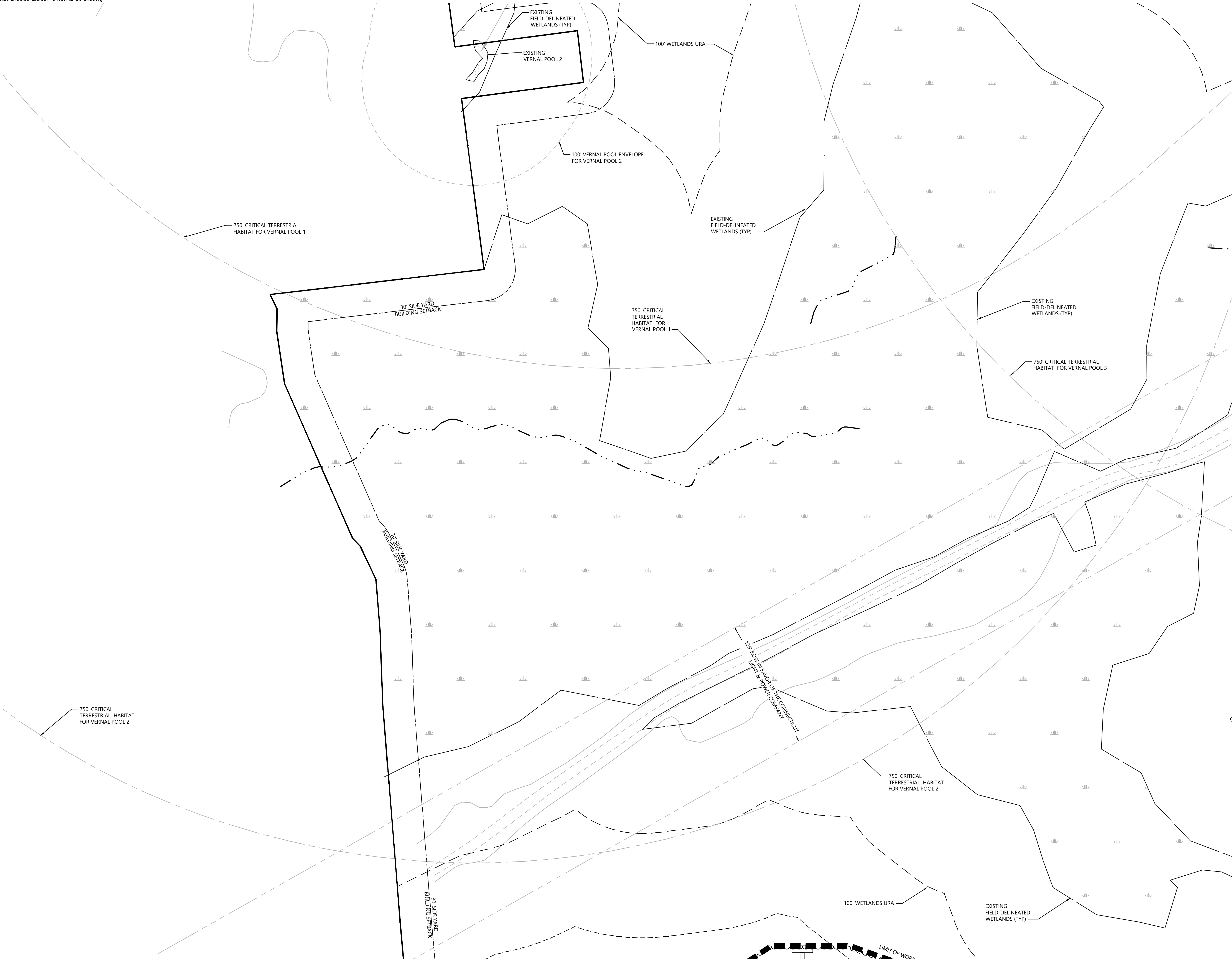
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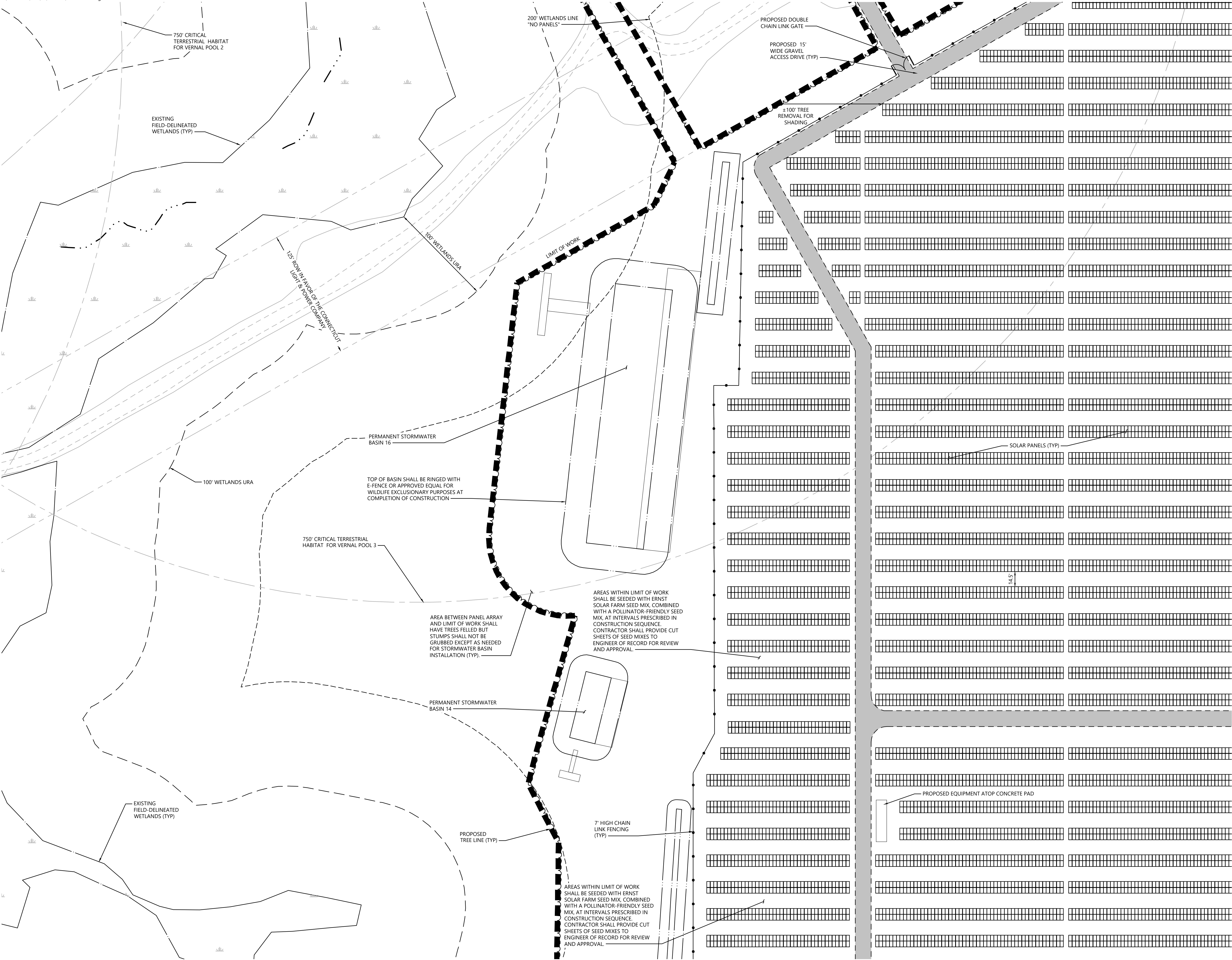
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C-3.4

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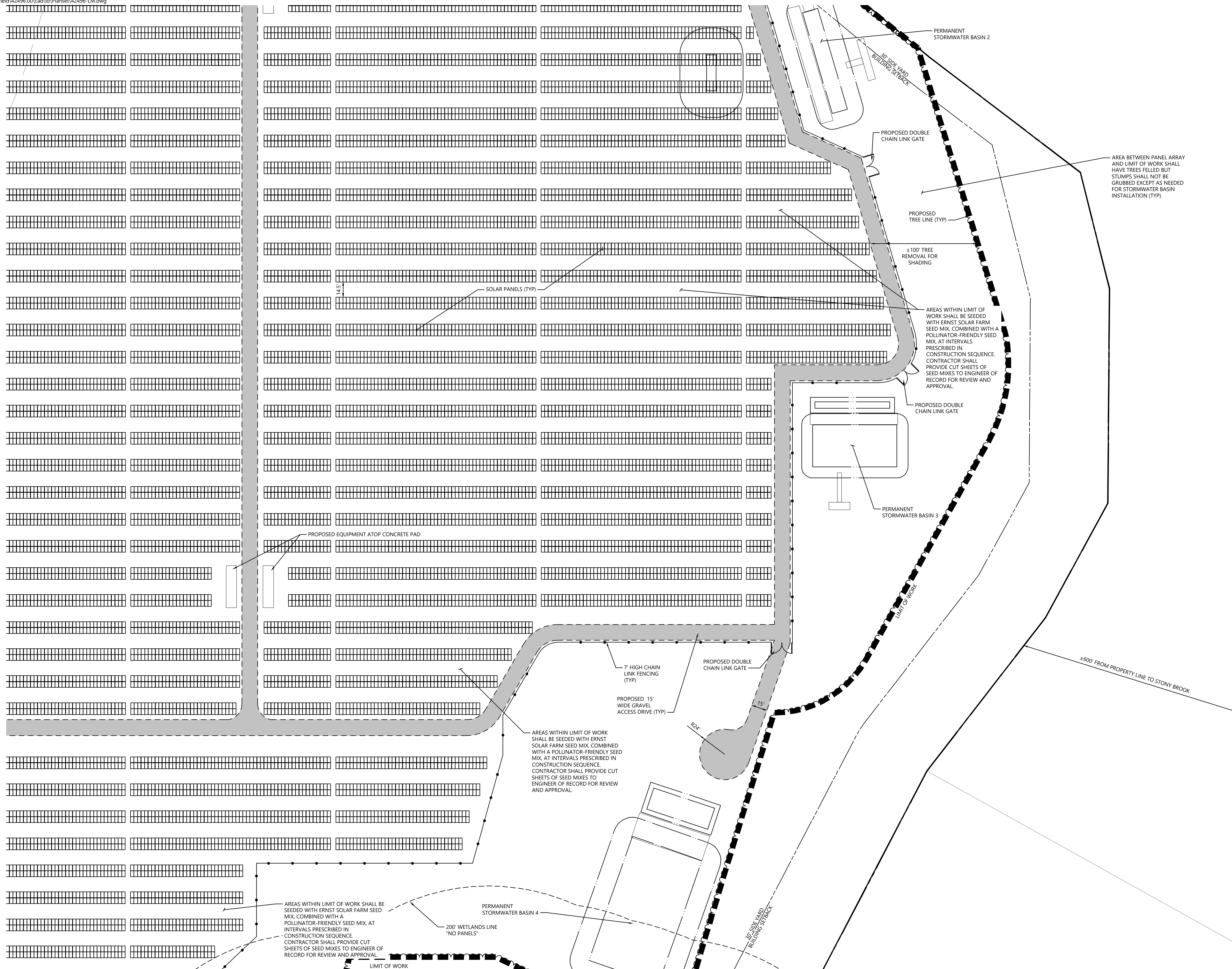
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**Layout and
Materials Plan**

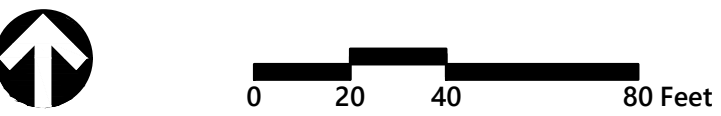
C-3.6

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C-3.1	C-3.2	C-3.3
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No.	Revision	Date	Appvd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK
3	CSC D&M Plan	1/12/2021	SJK

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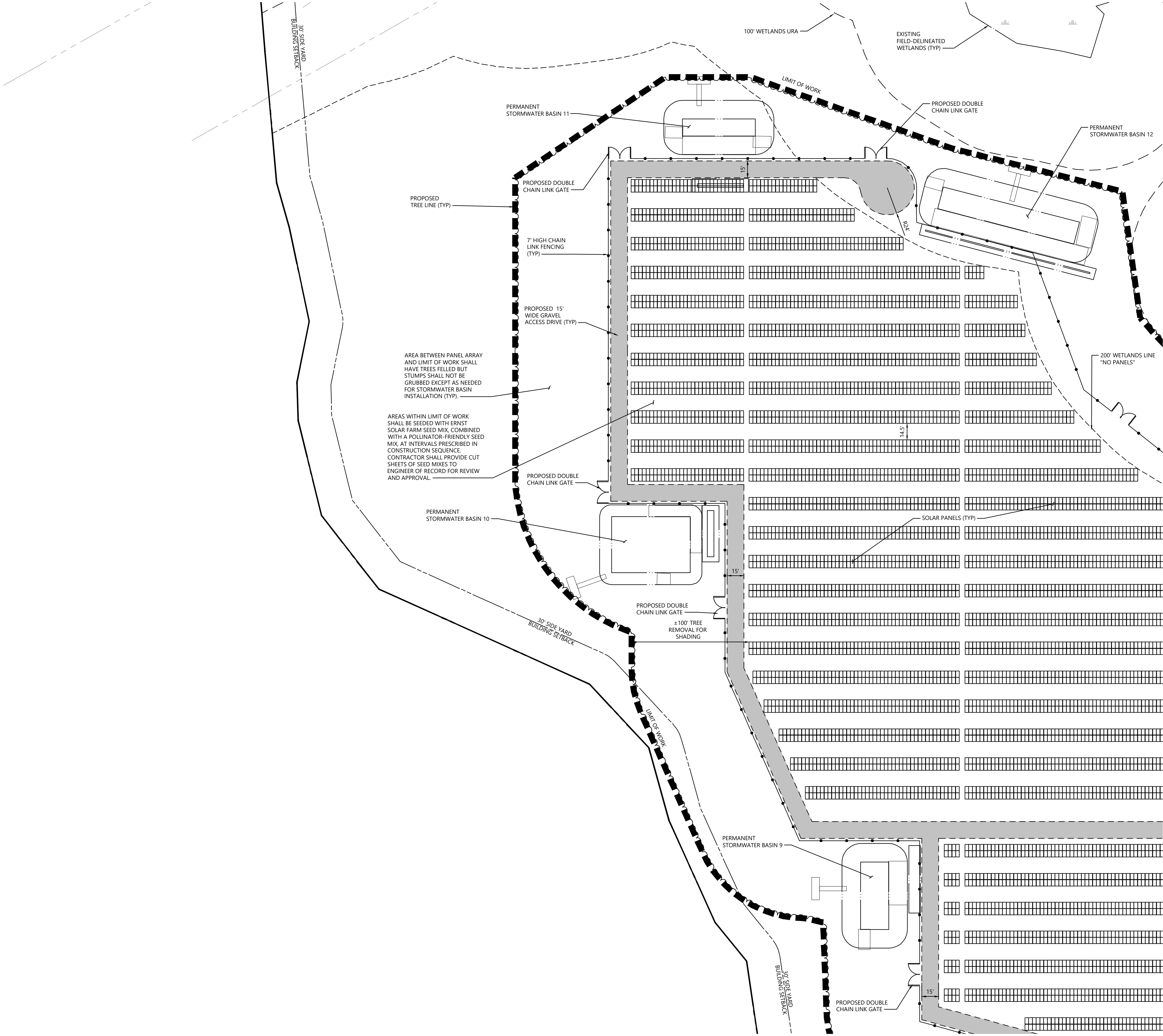
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C-3.4	C-3.5	C-3.6
C-3.7	C-3.8	C-3.9
C-3.10	C-3.11	C-3.12

Key

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117 Oil Mill Road
Waterford, Connecticut

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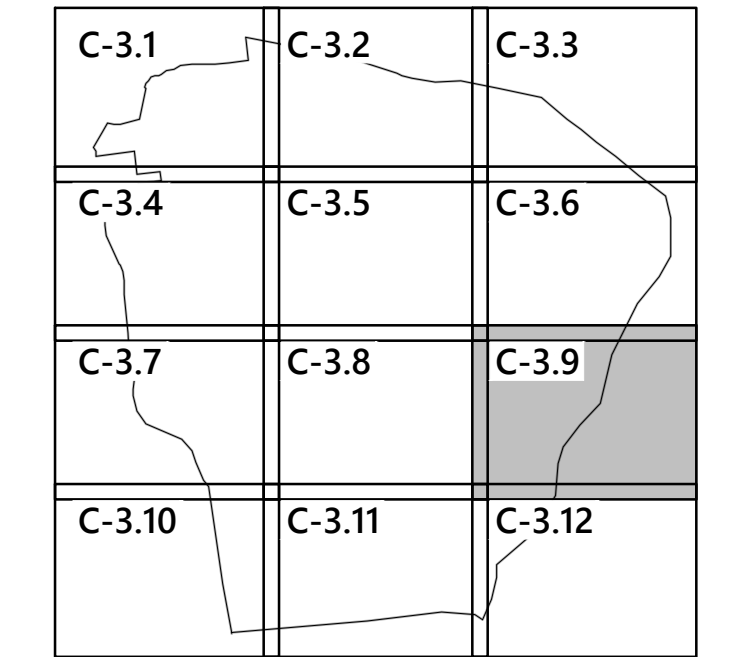
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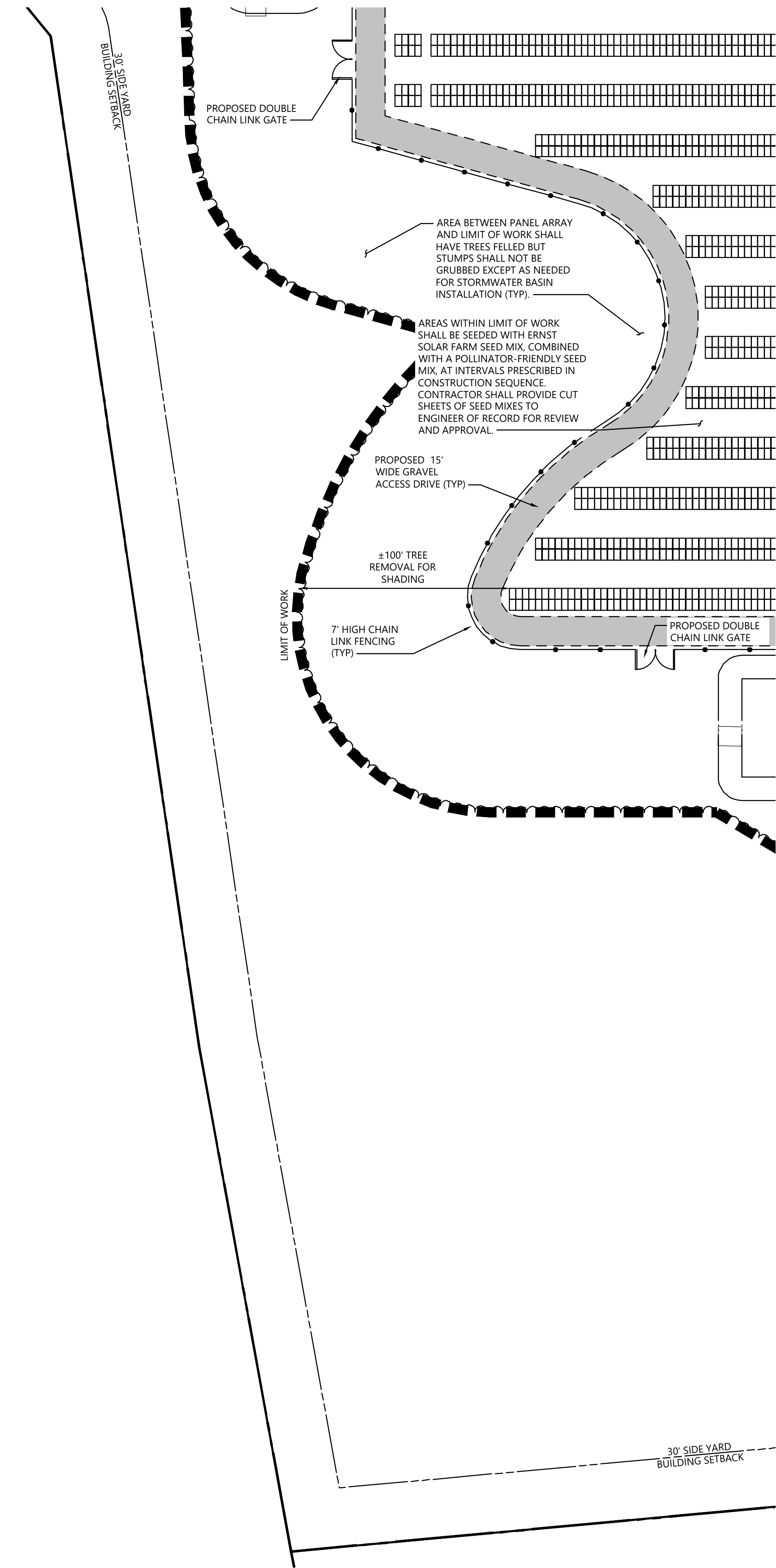
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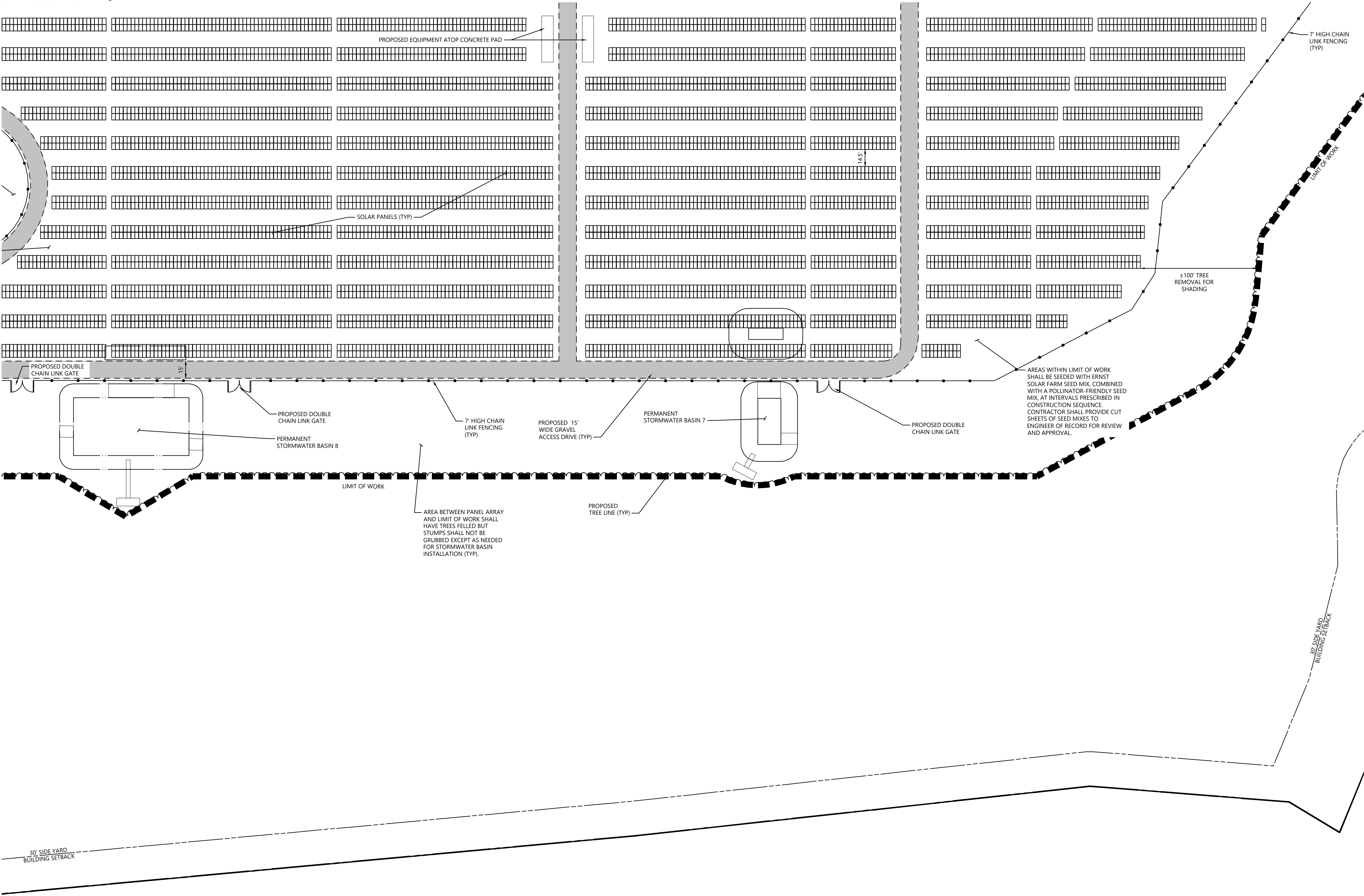
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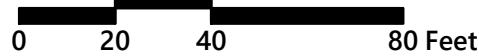
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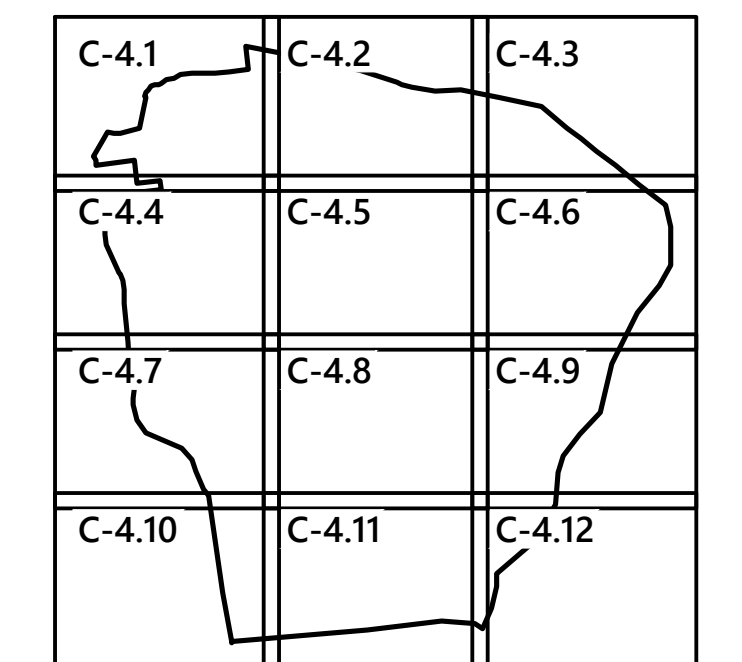
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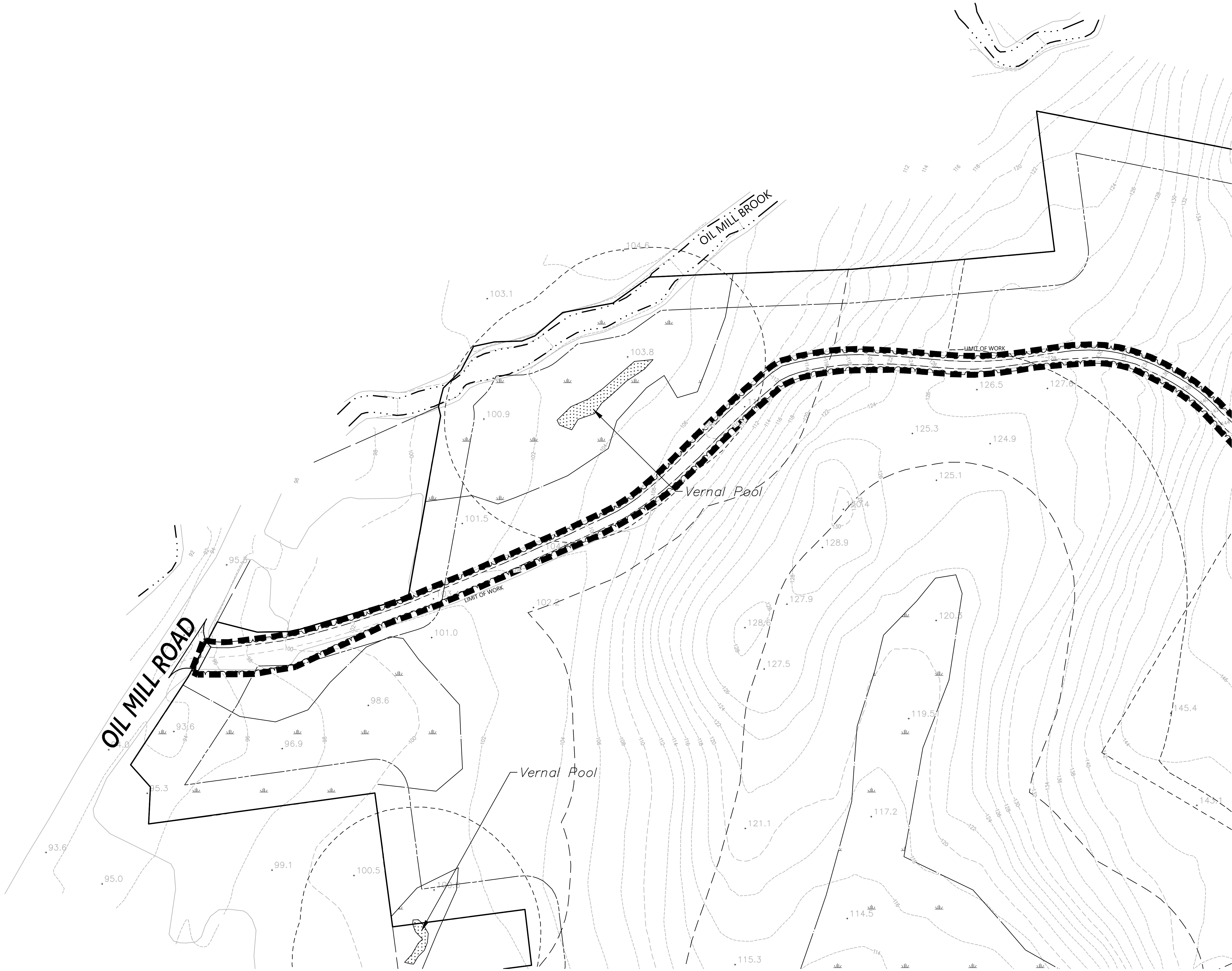
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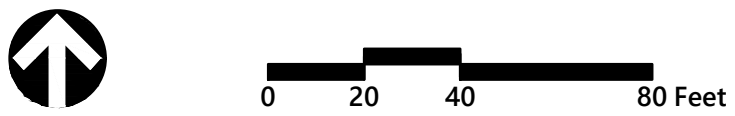
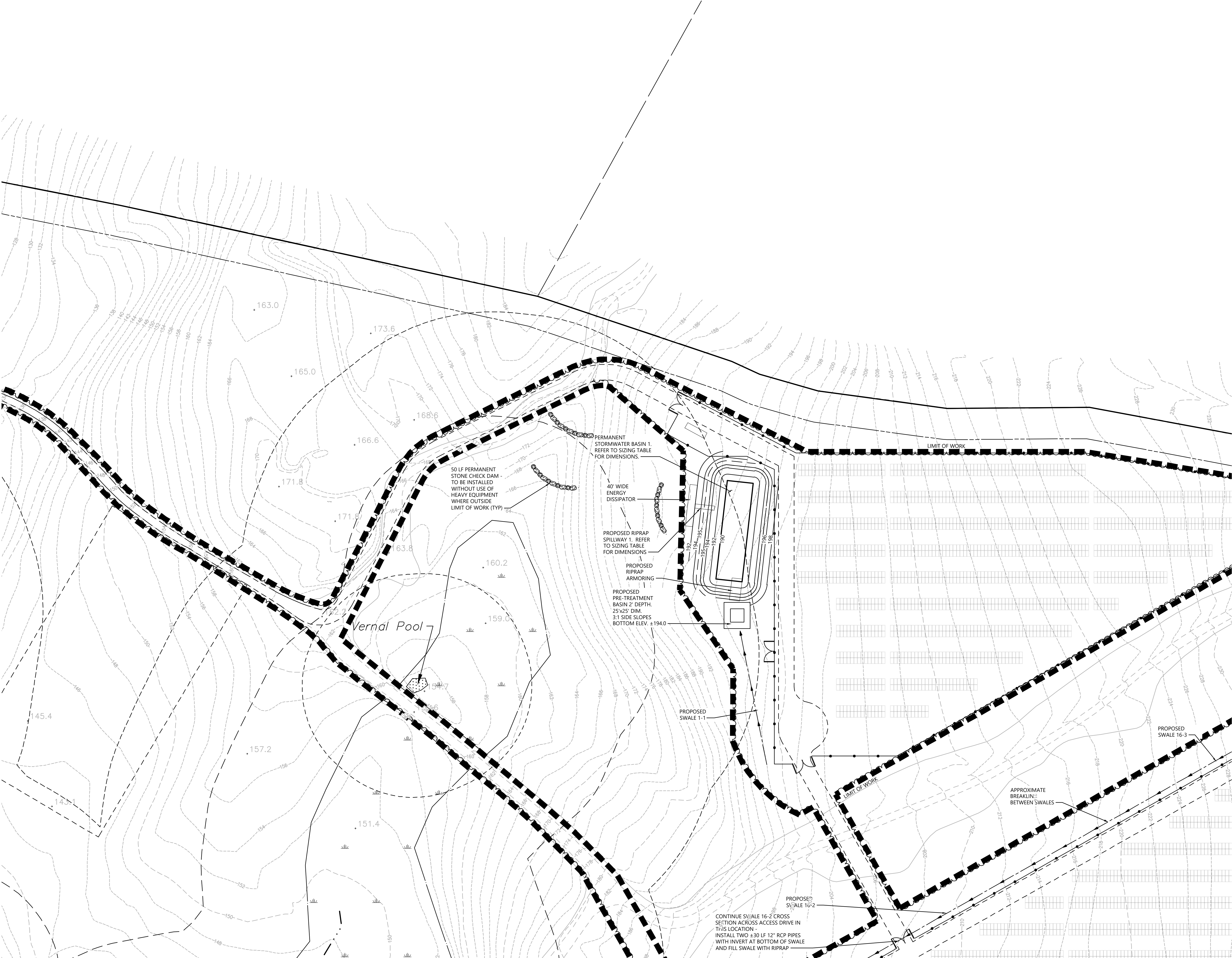
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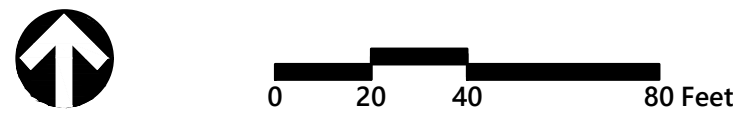
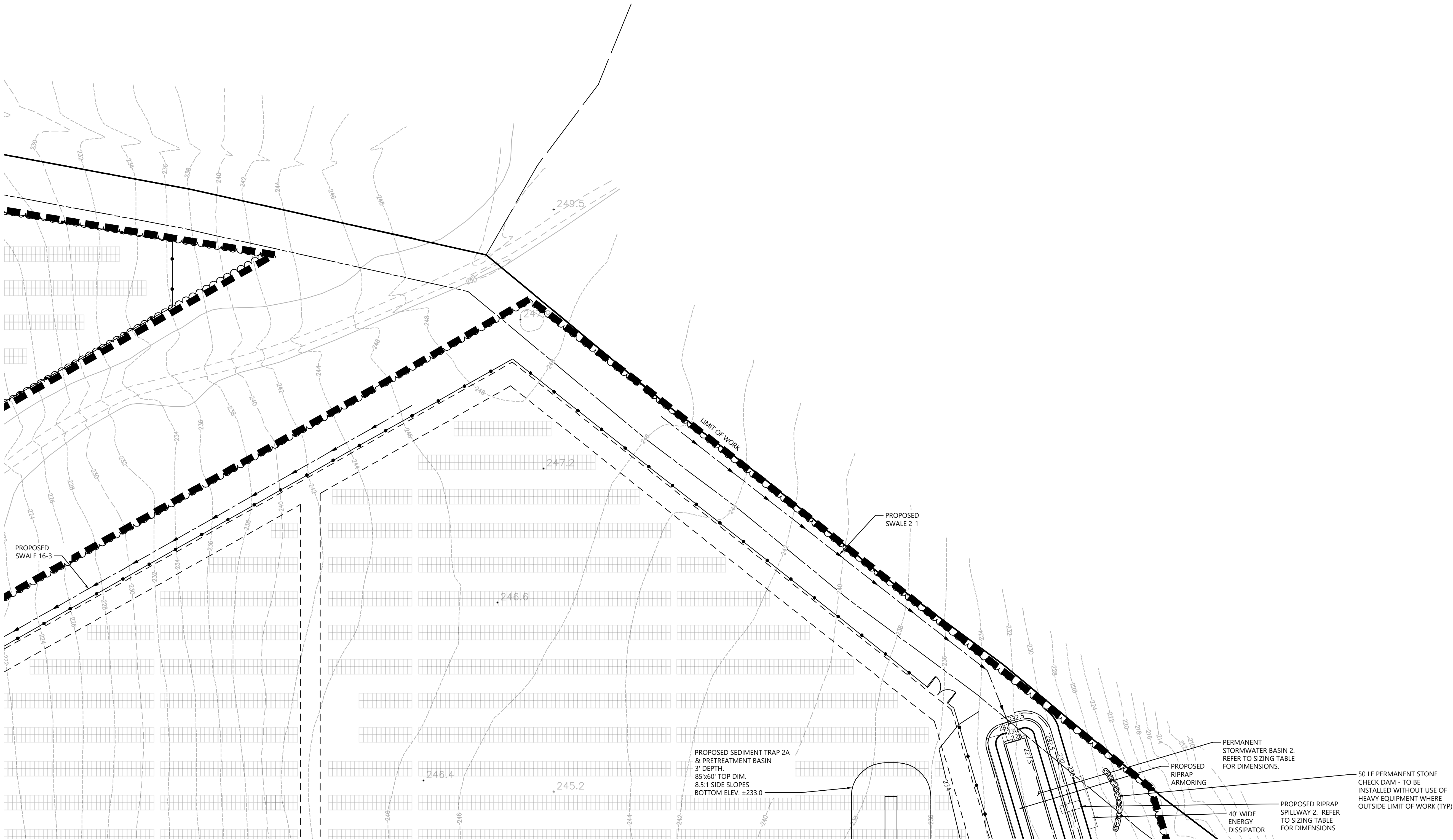
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C-4.10	C-4.11	C-4.12

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C-4.1	C-4.2	C-4.3
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C-4.7	C-4.8	C-4.9
C-4.10	C-4.11	C-4.12

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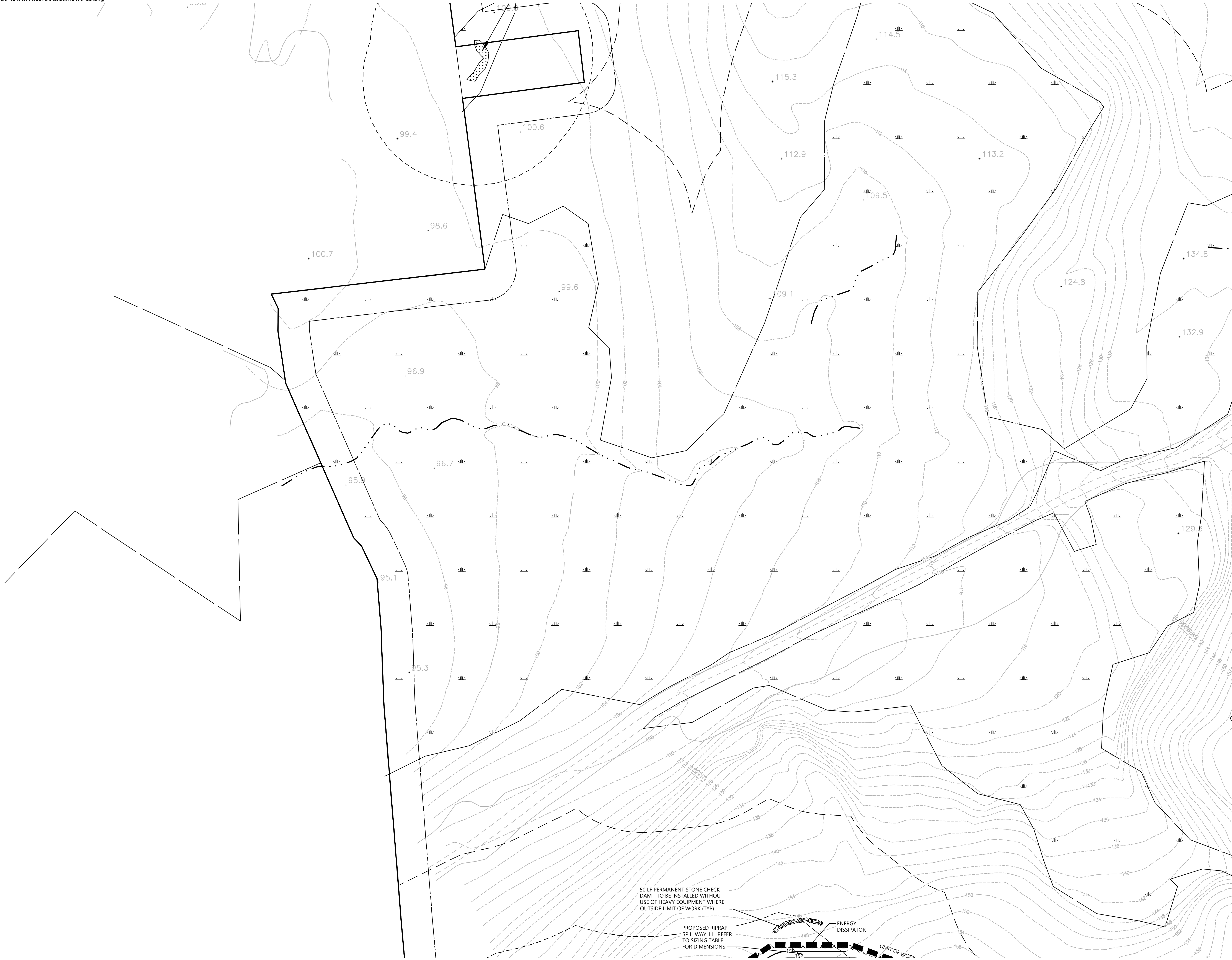
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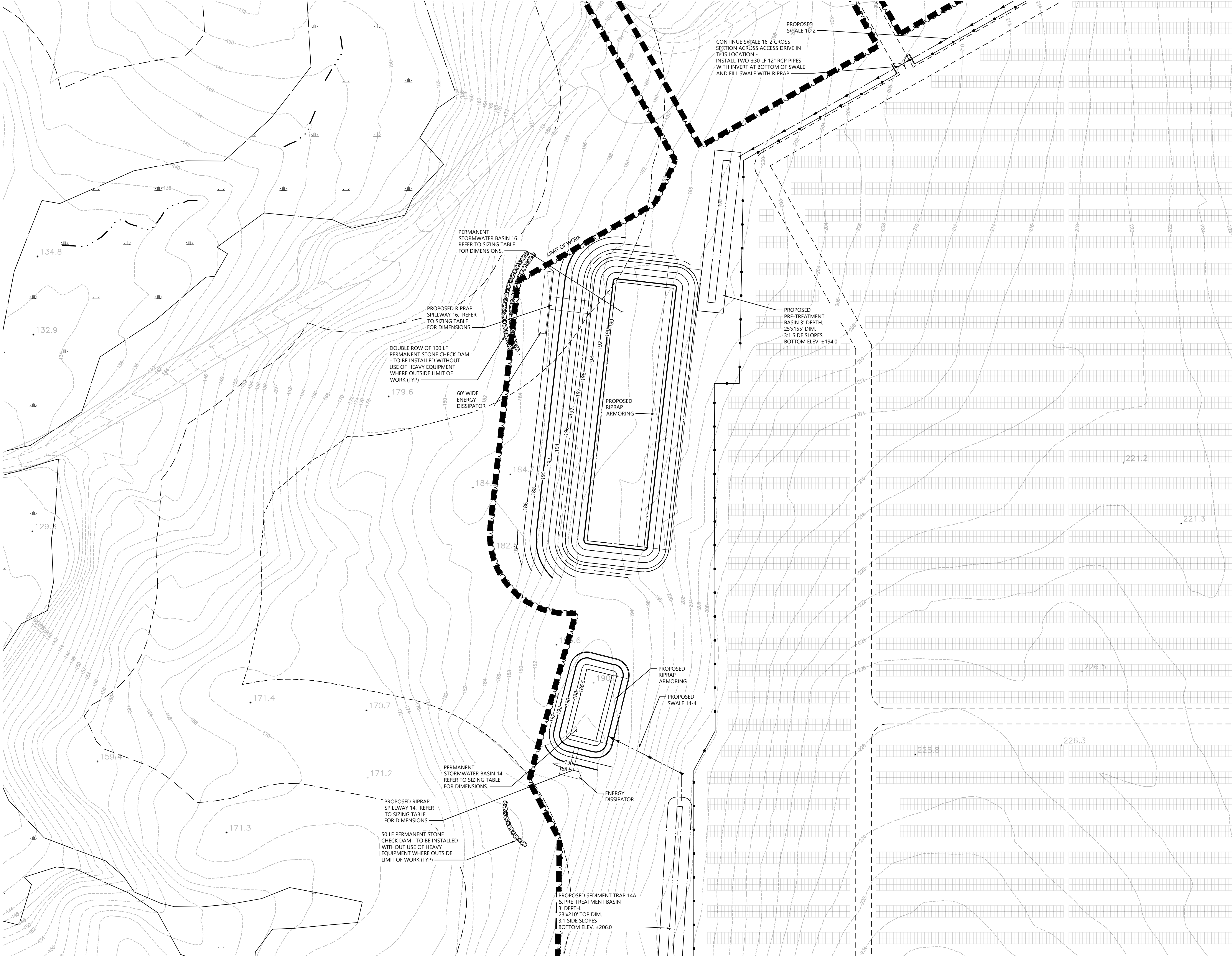
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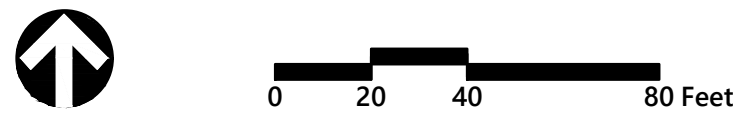
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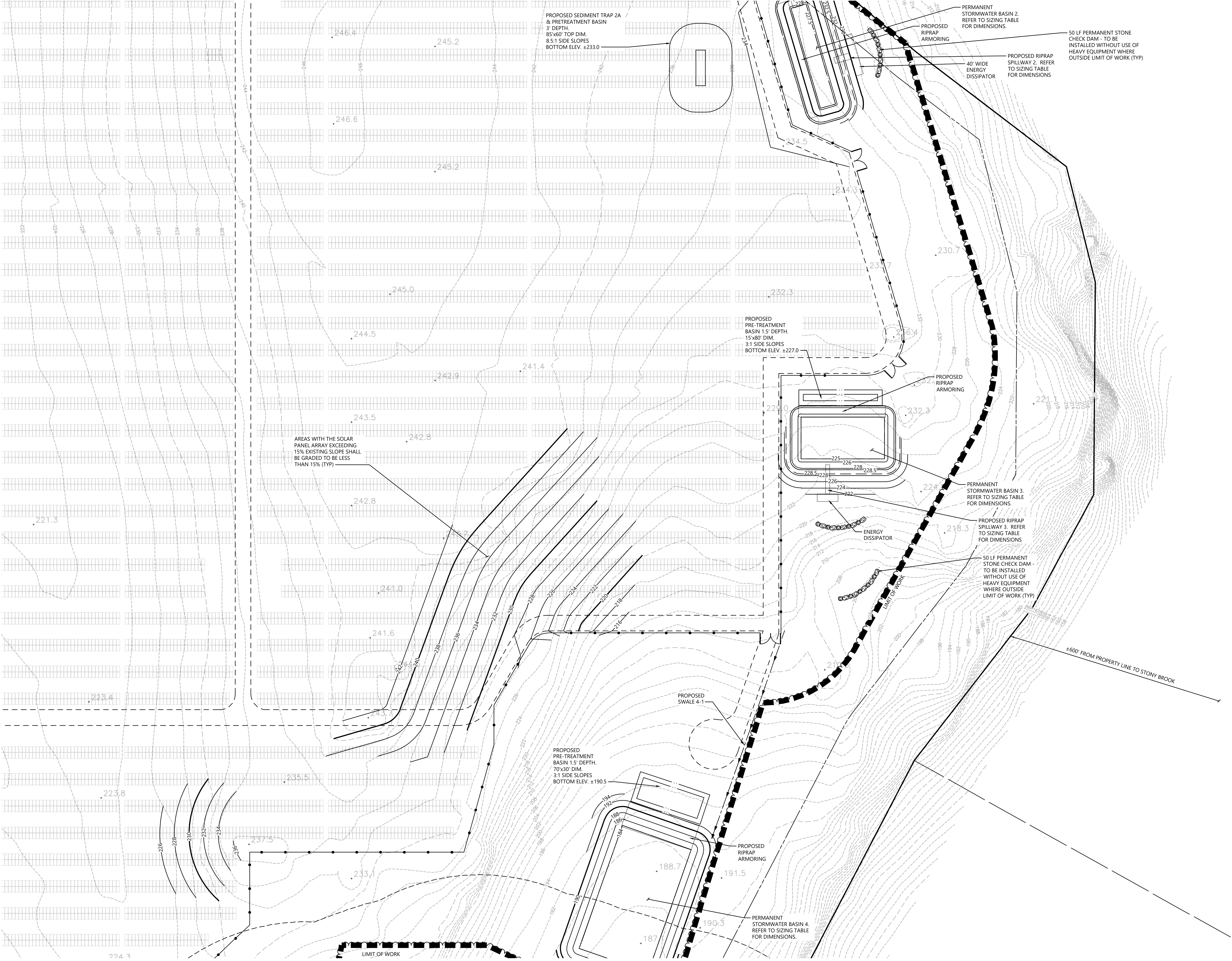
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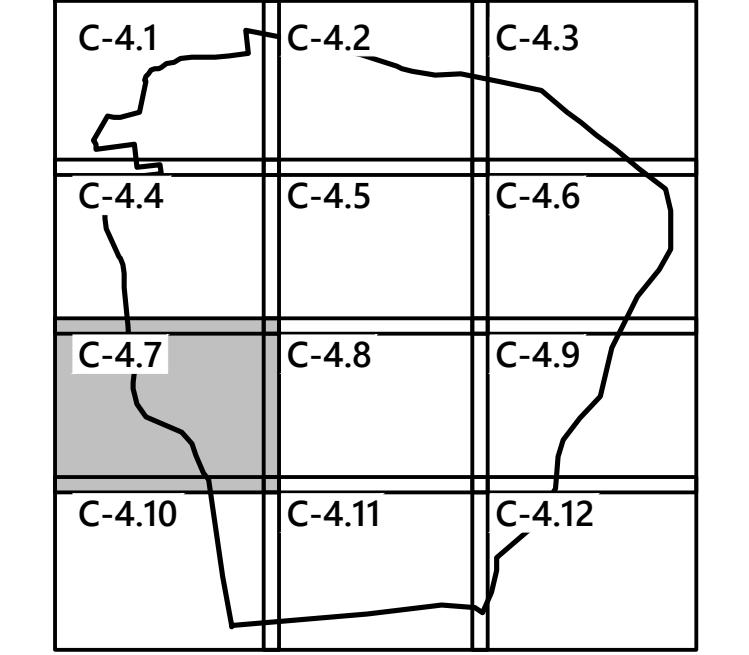
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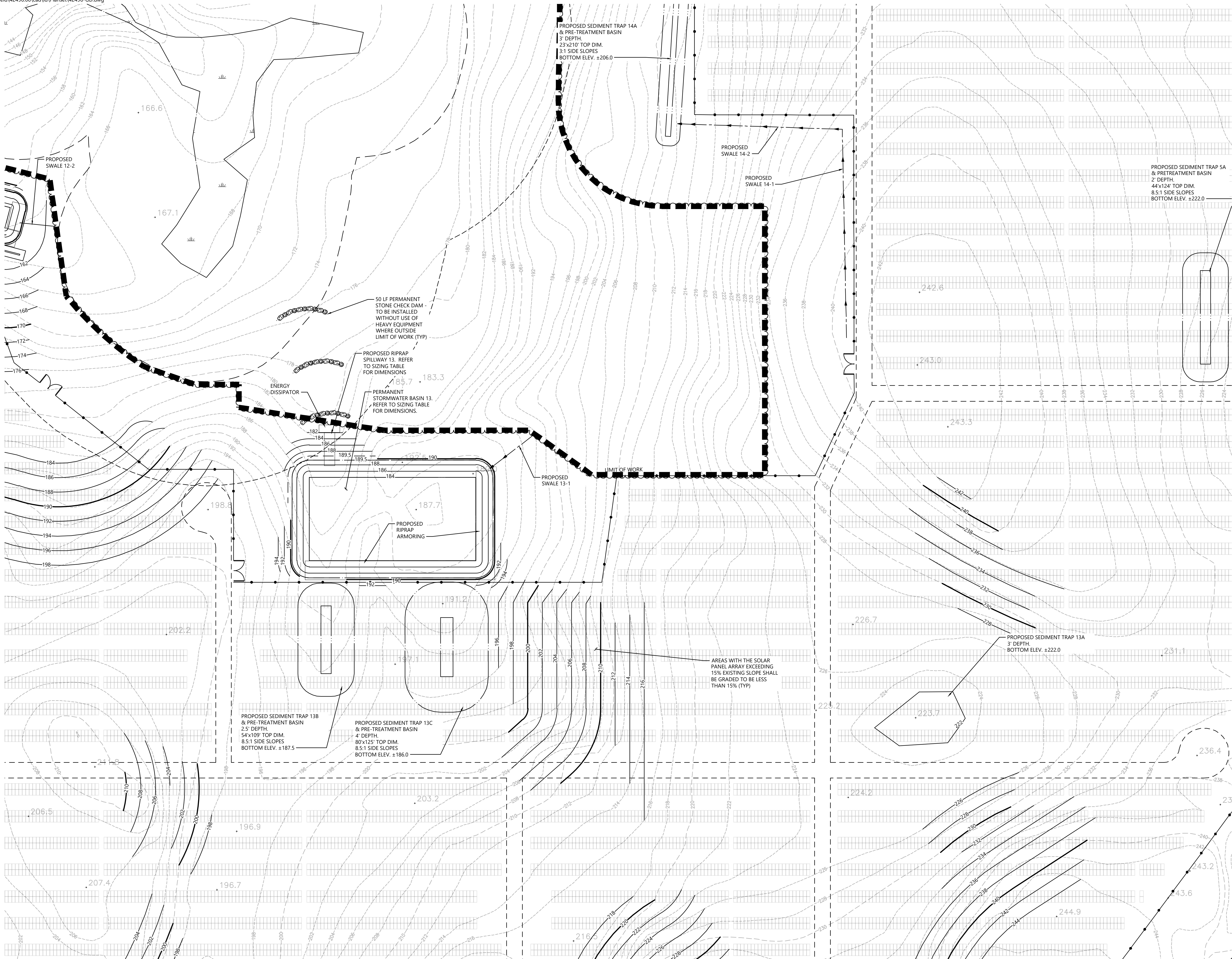
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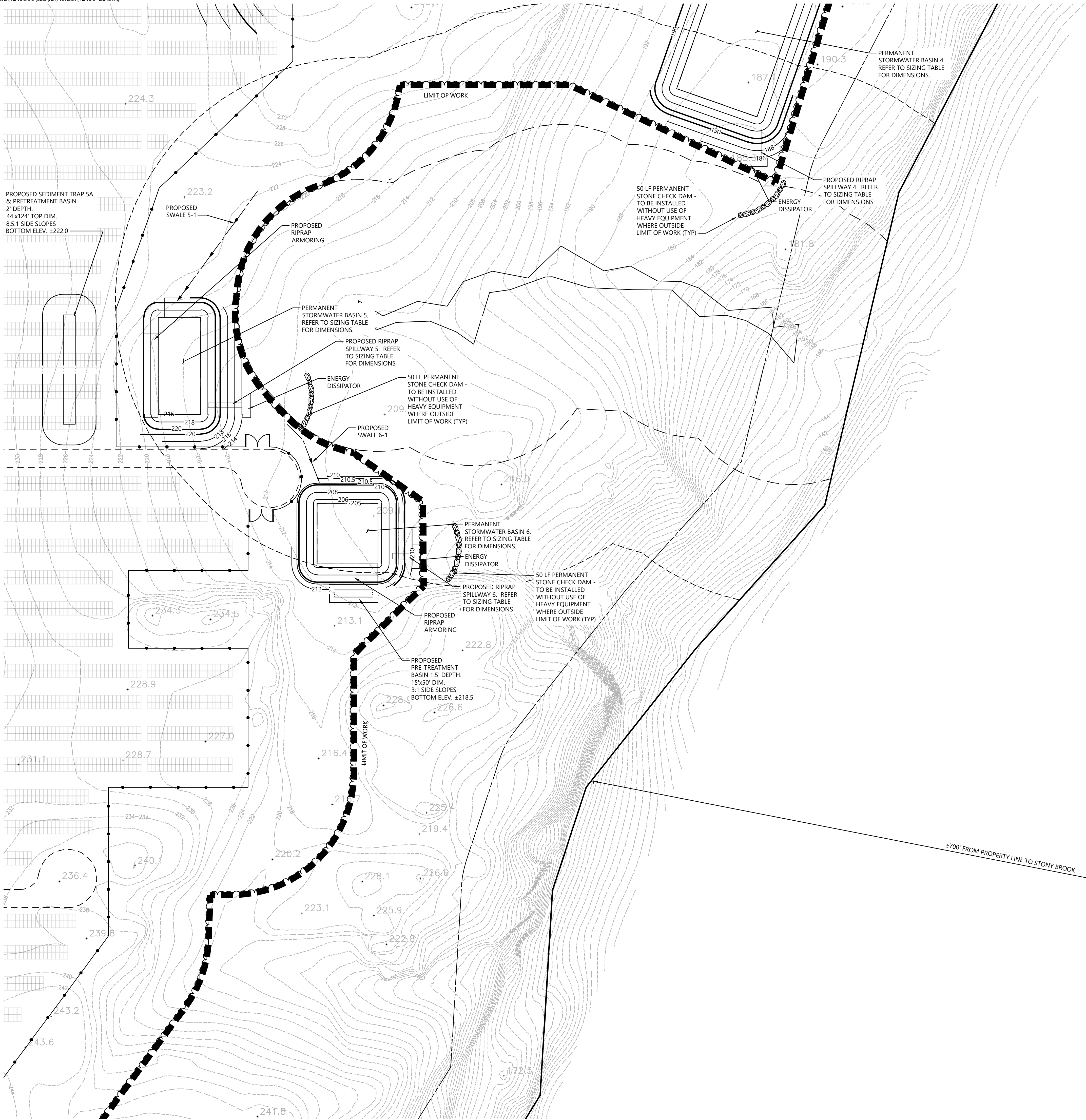
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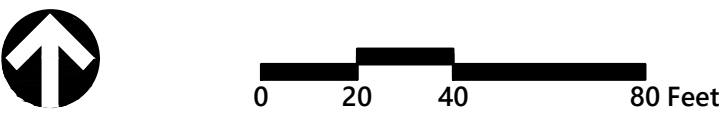




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C-4.10	C-4.11	C-4.12

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C-4.4	C-4.5	C-4.6
C-4.7	C-4.8	C-4.9
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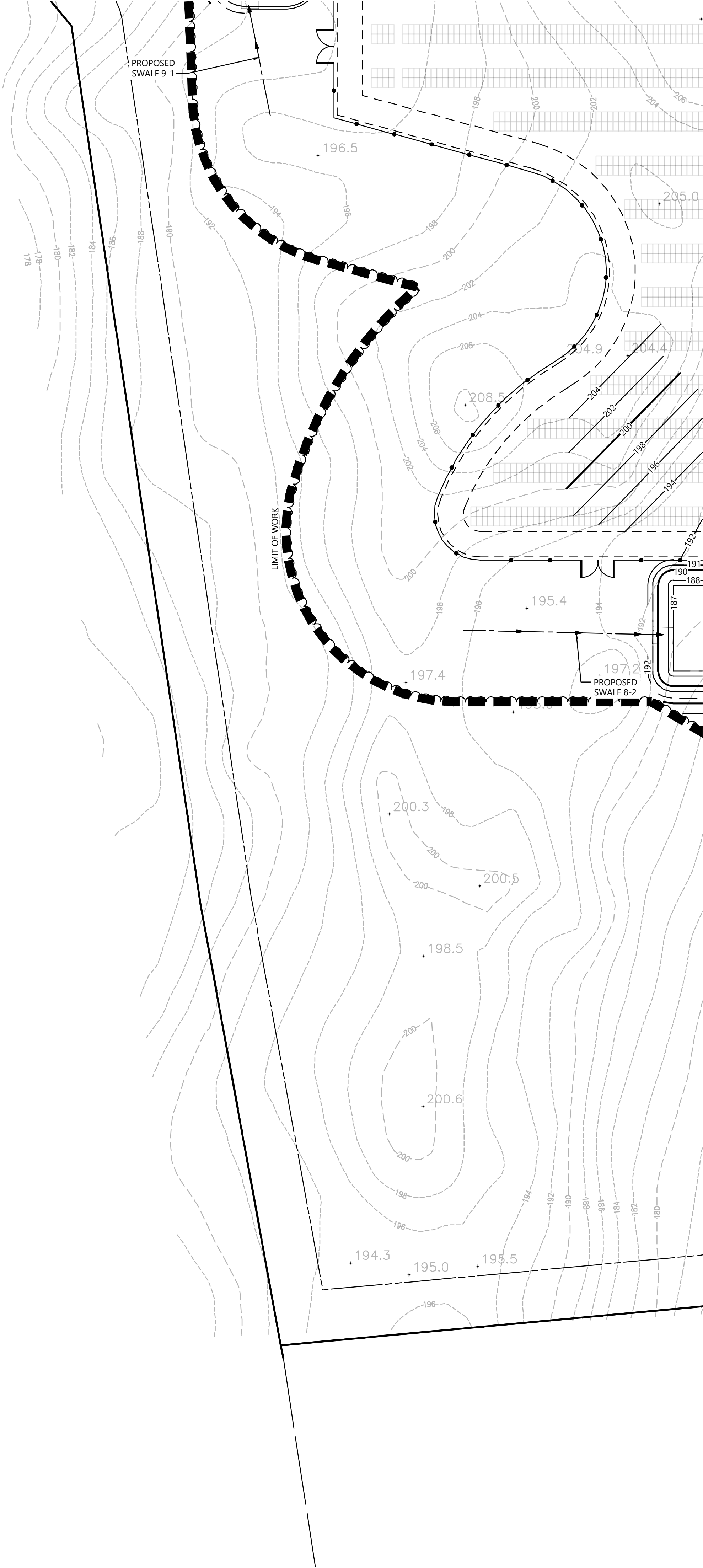
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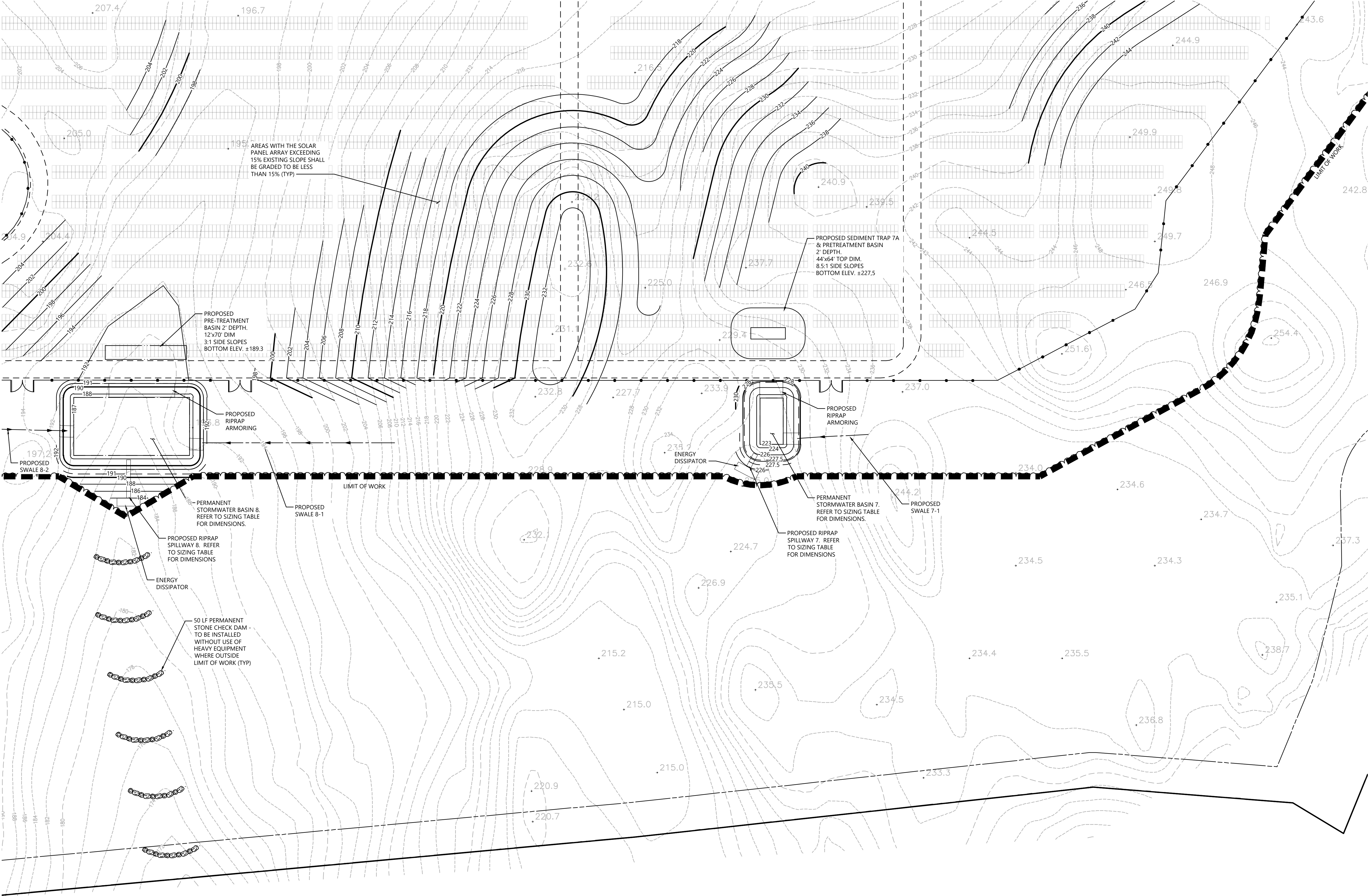
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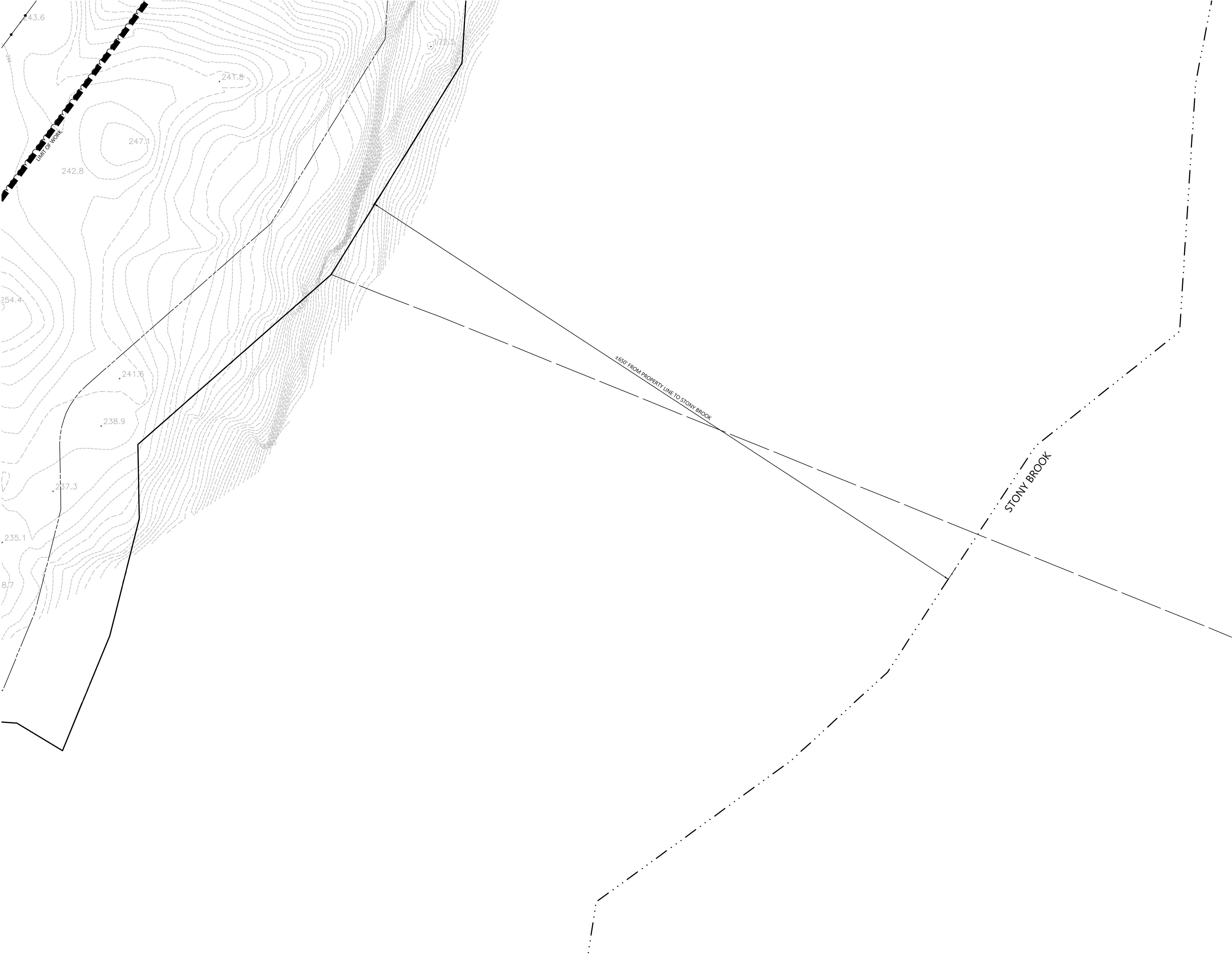
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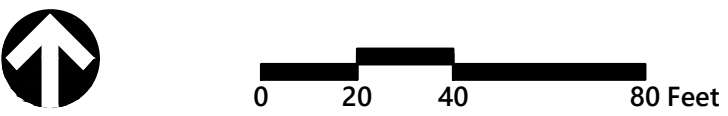


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CONSTRUCTION SEQUENCING

- ALL CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN THE SUMMER/FALL OF 2020 AND BE COMPLETED BY THE END OF 2021. THE GENERAL CONSTRUCTION NOTES ARE AS FOLLOWS:
1. THE SITE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT ROADS/HIGHWAYS AND THEIR DRAINAGE SYSTEM, NEIGHBORING PROPERTIES, WETLANDS AND REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT. DESIGNATED ACCESS DRIVES MUST BE USED TO THE MAXIMUM EXTENTS POSSIBLE. IT IS REQUIRED THAT THE SITE CONTRACTOR PERFORM A DAILY INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES EMPLOYED AT THE SITE.
 2. A CTDEEP-APPROVED QUALIFIED INSPECTOR SHALL BE ASSIGNED TO BE RESPONSIBLE FOR PERFORMING INSPECTIONS AND PREPARING REPORTS IN ACCORDANCE WITH SECTION 5(B)(4)(B) OF THE CONSTRUCTION GENERAL PERMIT. THESE INSPECTIONS SHALL TAKE PLACE WEEKLY, AT A MINIMUM, AND SHALL BE REQUIRED WITHIN 24 HOURS OF A RAINFALL EVENT EXCEEDING 0.5 INCHES. IT IS ALSO ANTICIPATED THAT REPRESENTATIVES FROM CTDEEP AND/OR THE STATE CONSERVATION DISTRICT WILL PERFORM PERIODIC INSPECTIONS.
 3. ENGINEER OF RECORD SHALL PERFORM THREE (3) MONTHLY PLAN IMPLEMENTATION INSPECTIONS WITHIN THE FIRST 90 DAYS OF CONSTRUCTION ACTIVITY, AS REQUIRED BY CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION.
 4. THROUGHOUT THE COURSE OF THE CONSTRUCTION PROJECT, ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE WARRANTED AT THE DISCRETION OF THE QUALIFIED INSPECTOR AND/OR DESIGN ENGINEER. THESE IMPROVEMENTS MUST BE IMPLEMENTED IN A TIMELY FASHION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT. ADDITIONALLY, AREAS OF PROPOSED COMPACTED NATIVE SOIL ROADS SHALL BE CONVERTED TO STABLE GRAVEL ROADS IF/AS DETERMINED BY THE QUALIFIED INSPECTOR OR ENGINEER OF RECORD.
 5. PRIOR TO CONSTRUCTION, THE APPLICANT SHALL PROVIDE THE TOWN OF WATERFORD WITH THE NAME OF CONTACT AND 24-HOUR CONTACT INFORMATION.
 6. CONTRACTOR SHALL ADHERE TO 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL, AS AMENDED.
 7. THE CONTRACTOR SHALL FLAG THE LIMITS OF CLEARING NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
 8. THE CONTRACTOR SHALL HOLD PRE-CONSTRUCTION MEETING(S). ATTENDEES SHALL INCLUDE, BUT NOT BE LIMITED TO, REPRESENTATIVES OF THE GENERAL CONTRACTOR, SITE CONTRACTOR, CTDEEP, TOWN OF WATERFORD, ENGINEER OF RECORD, AND QUALIFIED SWPPP INSPECTOR.
 9. THE CONTRACTOR SHALL CONTACT CALL-BEFORE-YOU-DIG (1-800-922-4455) PRIOR TO ENGAGING IN ANY EXCAVATION ACTIVITIES AT THE SITE.
 10. THE CONTRACTOR SHALL NOTIFY THE TOWN OF WATERFORD AGENT, ZONING ENFORCEMENT OFFICER, AND ENGINEERING DEPARTMENT, 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
 11. NO CONSTRUCTION OR SITE IMPROVEMENTS MAY BEGIN UNTIL THE PROPER EROSION CONTROL MEASURES SERVING THE AREA TO BE DISTURBED ARE IN PLACE.
 12. ANTICIPATED WORK HOURS WILL BE BETWEEN 6:30 AM AND 5:00 PM.
 13. HIGH FLOTATION TIRE EQUIPMENT SHALL BE USED TO THE MAXIMUM EXTENTS PRACTICABLE IN LIEU OF TRACK CONSTRUCTION EQUIPMENT IN AN EFFORT TO AVOID COMPACTION OF THE NATIVE SOILS.

PRE-CONSTRUCTION SITE PROTECTION SEQUENCE (2021)

1. INSTALL STABILIZED VEHICLE CONSTRUCTION EXIT AT THE EXISTING ROAD INTERSECTING WITH OIL MILL ROAD.
2. SURVEY AND MARK ALL WOODLAND CLEARING LIMITS.
3. MARK TREES TO BE FELLED WITHIN 10 FEET OF CLEARING LIMITS AND INSTALL TREE PROTECTION FOR TREES TO BE PRESERVED WITHIN 10 FEET OF CLEARING LIMITS.
4. FIELD SURVEY AND MARK BOUNDARY BETWEEN CLEARING LIMITS AND GRUBBING LIMITS.
5. THE USE OF A TUB GRINDER IS RECOMMENDED FOR THE MULCHING OF FELLED TREES.
6. AS TREES ARE CLEARED AND GRUBBED, GRIND TOPS AND ROOT BALLS IN TUB GRINDER TO CREATE MATERIAL FOR WOOD CHIP MULCH BERM. TO THE EXTENTS FEASIBLE, GRUBBING SHALL TAKE PLACE FOLLOWING THE INSTALLATION OF THE SEDIMENT BASINS.
7. ACCESS ROADS SHALL BE DESIGNATED AS EARLY AS FEASIBLE AND USED PRIMARILY FOR CONSTRUCTION TRAFFIC.
8. AS MATERIAL IS PRODUCED, INSTALL MULCH BERM AT THE LIMIT OF DISTURBANCE GENERALLY IN AREAS OF CLEARED FOREST. MULCH BERM HAS NOMINAL DIMENSIONS OF 1.5 TO 2 FEET HIGH BY 4-FOOT WIDE.
9. IMMEDIATELY INSIDE THE PERIMETER MULCH BERM, INSTALL ENTRENCHED SILT FENCE FOLLOWING STANDARDS OF THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL. MULCH BERM AND PERIMETER SILT FENCE SHALL BE MAINTAINED IN PERPETUITY UNTIL COMPLETION OF CONSTRUCTION. NO WORK SHALL BE ALLOWED OUTSIDE OF THESE LIMITS.
10. CONCURRENT WITH ITEMS 2 THROUGH 9 ABOVE, THE CONTRACTOR SHALL ADDRESS ONGOING EROSION PROBLEMS USING TEMPORARY DIVERSIONS AND FILLING AND GRADING GULLIES. TRACK GULLIES UP AND DOWN SLOPE AND HYDROSEED WITH A THERMALLY-TREATED WOOD BONDIDED FIBER MATRIX (BFM) MULCH WITH TACKIFIER. A STAPLED BIODEGRADABLE EROSION CONTROL BLANKET WITHOUT MONOFILAMENT MESH IS AN ACCEPTABLE ALTERNATIVE FOR HYDROSEED AND BFM.
11. INSTALL TEMPORARY SEDIMENT TRAPS IN ACCORDANCE WITH THE APPROVED SITE-SPECIFIC SWPCP AND CT GUIDELINES. THE ENGINEER OF RECORD SHALL INSPECT FEATURES TO CONFIRM REQUIRED STORAGE CAPACITIES ARE PROVIDED AND THAT OUTLETS AND/OR SPILLWAYS ARE CONSTRUCTED CORRECTLY. DISCHARGE AREAS BELOW OUTFALLS MUST BE INSPECTED TO CONFIRM FLOW WILL BE OVER STABLE GROUND AND SHEET FLOW IS ENCOURAGED. IF DISTURBED SOILS ARE PRESENT, THE ENGINEER OF RECORD TO PROVIDE CORRECT MEASURES TO ADDRESS CONDITION.
12. SEED AND PROTECT DISTURBED SOILS AROUND SEDIMENT TRAPS AND BASINS WITHIN 72 HOURS OF COMPLETION. SECURE SEED WITH A THERMALLY-TREATED BFM APPLIED FOLLOWING MANUFACTURER'S SPECIFICATIONS FOR USE AT SPECIFIED APPLICATION RATES. AN ANIONIC POLYACRYLAMIDE PRODUCT MAY BE INCLUDED WITH THE TACKIFIER TO PROMOTE SOIL STABILITY. ALL OTHER AMENDMENTS SHOULD BE PRESCRIBED BASED ON THE RESULT OF SOIL TESTS.
13. INSTALL OTHER EROSION AND SEDIMENT CONTROLS FOLLOWING THE CT GUIDELINES AND MANUFACTURER'S DIRECTIONS. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL MEASURES AS REQUIRED BY THE ENGINEER OF RECORD OR QUALIFIED INSPECTOR, TO PREVENT SEDIMENT-LADEN RUNOFF FROM REACHING WETLANDS OR DISCHARGING OFFSITE.
14. ESTABLISH DESIGNATED VEHICULAR TRAFFIC ACCESS ROADS (GRAVEL OR COMPACTED NATIVE SOIL PER PLANS) THAT SHALL BE USED AS PRIMARY ACCESSSES. EFFORTS MUST BE MADE TO MINIMIZE VEHICULAR TRAFFICKING ACROSS NON-DESIGNATED AREAS TO THE EXTENTS POSSIBLE.
15. AREAS DISTURBED DURING THIS SEQUENCE MUST BE HYDROSEEDED AND ALLOWED TO GROW THROUGH A GROWING SEASON (SPRING, OR FALL) PRIOR TO INITIATION OF CONSTRUCTION SEQUENCE.
16. SPREADD MULCH AND FELLED BRANCHES FROM PRE-EXISTING TIMBER HARVEST ON SITE SHALL BE CLEANED AND AREAS SEEDED. MATERIAL CLEANED IN THIS WAY MAY BE REPURPOSED FOR THE USE OF WOOD CHIP MULCH BERMS ALONG THE SITE PERIMETER OR REMOVED FROM THE SITE. THE USE OF HYDROSEED COMBINED WITH TACKIFIER AND POLYACRLAMIDE (PAM) IS RECOMMENDED FOR THIS RESEEDING. THE CLEANUP AREAS SHALL BE LEFT UNDISTURBED THROUGH A FULL GROWING SEASON BEFORE INITIATION OF THE CONSTRUCTION SEQUENCE CAN TAKE PLACE.

CONSTRUCTION SEQUENCE (2022)

1. PERFORM MASS EARTHWORK ON THE SITE AND INSTALL PERIMETER FENCE TO SERVE AS CONSTRUCTION BARRIER. MASS EARTHWORK SHALL ONLY MEAN REGRADING TO MEET THE PROPOSED GRADING DEPICTED ON THE PLANS. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADING. EXCESS SOIL WHICH IS NOT REUSED IN PROPOSED SITE GRADING AS DEPICTED ON PLANS SHALL BE HAULED OFF-SITE.
2. TOPSOIL SHALL BE REPLACED TO 3" MINIMUM DEPTH OVER REGRADED AREAS UPON COMPLETION OF MASS EARTHWORK ACTIVITIES AND AREAS WHICH WERE DISTURBED BY MASS EARTHWORK OPERATIONS SHALL BE RESEEDD WITHIN 72 HOURS OF COMPLETION.
3. AREAS DISTURBED BY MASS EARTHWORK SHALL BE RESEEDD WITH HYDROSEED, COMBINED WITH TACKIFIER AND PAM.
4. DRIVE PILES FOR SOLAR PANEL RACKING.
5. THE INSTALLATION OF RACKING SHALL FOLLOW THE PILE DRIVING BY ROUGHLY ONE WEEK STARTING FROM THE SAME POINT. IT IS ANTICIPATED THAT APPROXIMATELY 13 ACRES OF PILES WILL BE IN AHEAD OF RACKING ON AVERAGE.
6. RESEED AND REGRADE ALL AREAS DISTURBED BY CONSTRUCTION TRAFFIC WITHIN THE ARRAYS WHERE RACKS ARE INSTALLED AS EARLY AS POSSIBLE. RUTS AND RILLS SHALL BE SMOOTHED AND GRADED AS DISCOVERED.
7. INSTALL SOLAR PANEL MODULES IN THE RACKING. MUCH OF THIS WORK IS ANTICIPATED TO BE PERFORMED BY HAND AND LIGHT CONSTRUCTION EQUIPMENT WHICH WILL CAUSE MINIMAL DISTURBANCE COMPARED TO THE USE OF HEAVY EQUIPMENT. DESIGNATED ACCESS ROADS SHALL STILL BE USED TO THE MAXIMUM EXTENTS POSSIBLE.
8. UPON COMPLETION OF CONSTRUCTION, RE-SEED ALL DISTURBED AREAS WITHIN 72 HOURS AND PREVENT VEHICULAR TRAFFICKING OVER THESE AREAS. INSTALL FINAL LANDSCAPING.
9. THE TEMPORARY SEDIMENT TRAPS/BASINS AND THEIR ASSOCIATED DIVERSION CHANNELS MAY BE REMOVED ONCE ALL TRIBUTARY AREAS UPSTREAM OF THEM HAVE BEEN COMPLETED AND STABILIZED WITH 80 PERCENT VEGETATED COVER, AT THE DIRECTION OF THE QUALIFIED INSPECTOR AND/OR DESIGN ENGINEER.
10. AFTER SITE IS STABILIZED, AND AFTER INSPECTION BY DESIGN ENGINEER, OR OTHER OWNER'S REPRESENTATIVE, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. ENTIRE SITE SHALL BE CHECKED FOR AND CLEANED OF SEDIMENT AS NEEDED.

EASTERN RIBBONSNAKE NOTES:

1. A CONTRACTOR AWARENESS PROGRAM SHALL BE DEVELOPED AND IMPLEMENTED TO ENSURE THAT CONTRACTORS WORKING ON THE SITE HAVE BEEN INSTRUCTED ON THE PROPER RESPONSE IN THE EVENT THAT AN EASTERN RIBBONSNAKE IS OBSERVED IN THE WORK AREA. THE DETAILS OF THE PROGRAM SHALL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.
2. IF ANY SNAKES ARE OBSERVED, CONSTRUCTION PERSONNEL SHALL SAFELY RELOCATE THEM TO AN AREA IMMEDIATELY OUTSIDE OF THE WORK AREA.
3. ANY SILT FENCE UTILIZED WILL BE REMOVED UPON CTDEEP STORMWATER GENERAL PERMIT NOTICE OF TERMINATION OF THE PROJECT.
4. ANY CONFIRMED EASTERN RIBBONSNAKE SIGHTINGS WILL BE REPORTED TO THE CTDEEP NATURAL DIVERSITY DATABASE WILDLIFE DIVISION.

APPROXIMATE EXTENTS
OF TIMBER HARVEST
PERFORMED BY LAND
OWNER

C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key

Not To Scale



0 80 160 320.00feet

Photovoltaic Installation

117 Oil Mill Road
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1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK
3	CSC D&M Plan	1/12/2021	SJK

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Drawing Title
**Erosion and Sediment
Control Plan - Overall**

Drawing Number

C-5.0

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29 43

Project Number
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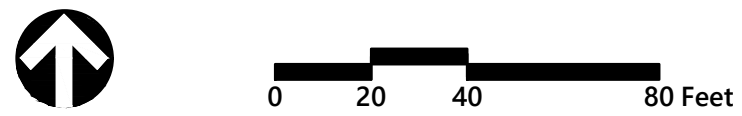
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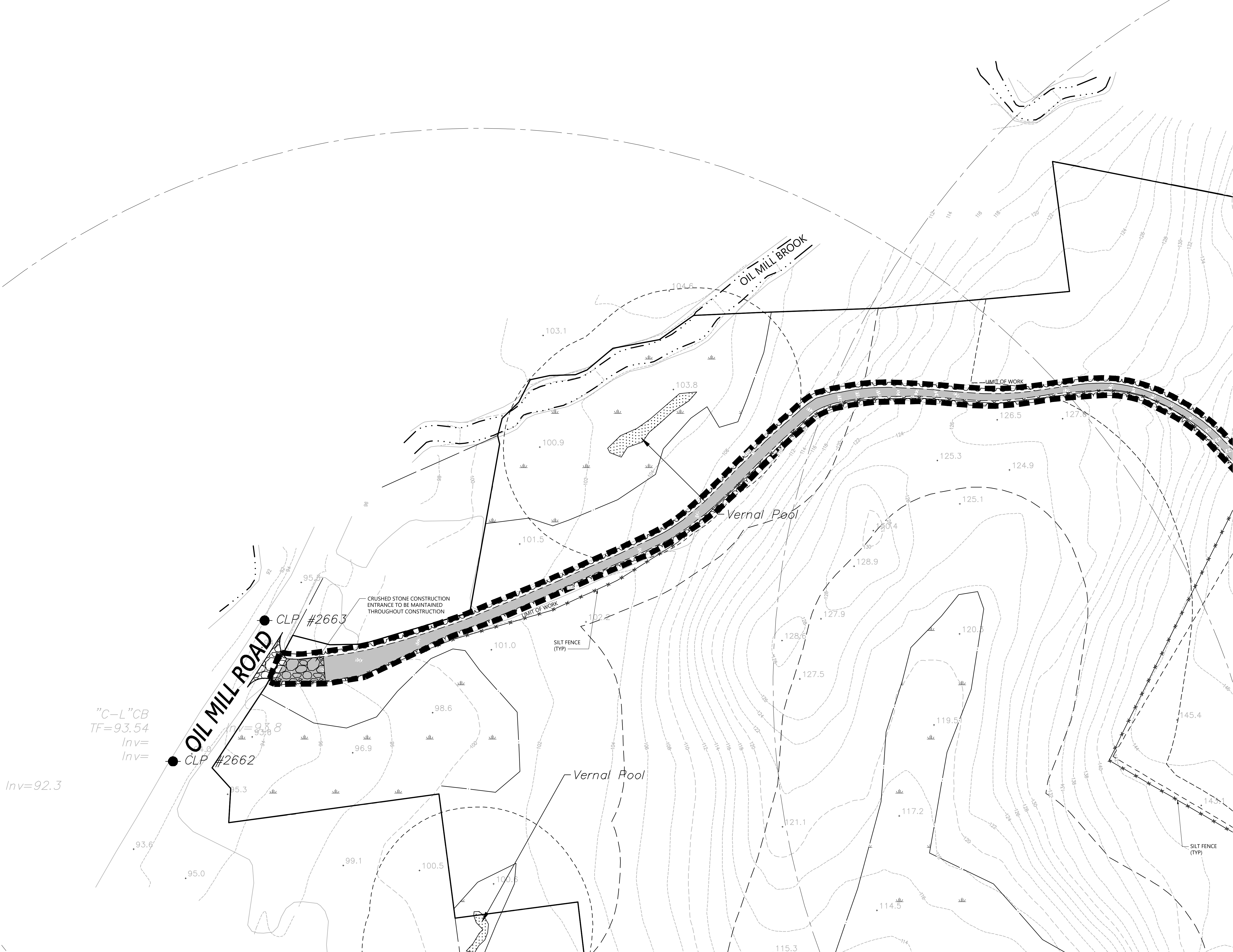
Erosion and Sediment
Control Plan

Drawing Number

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C-5.10	C-5.11	C-5.12

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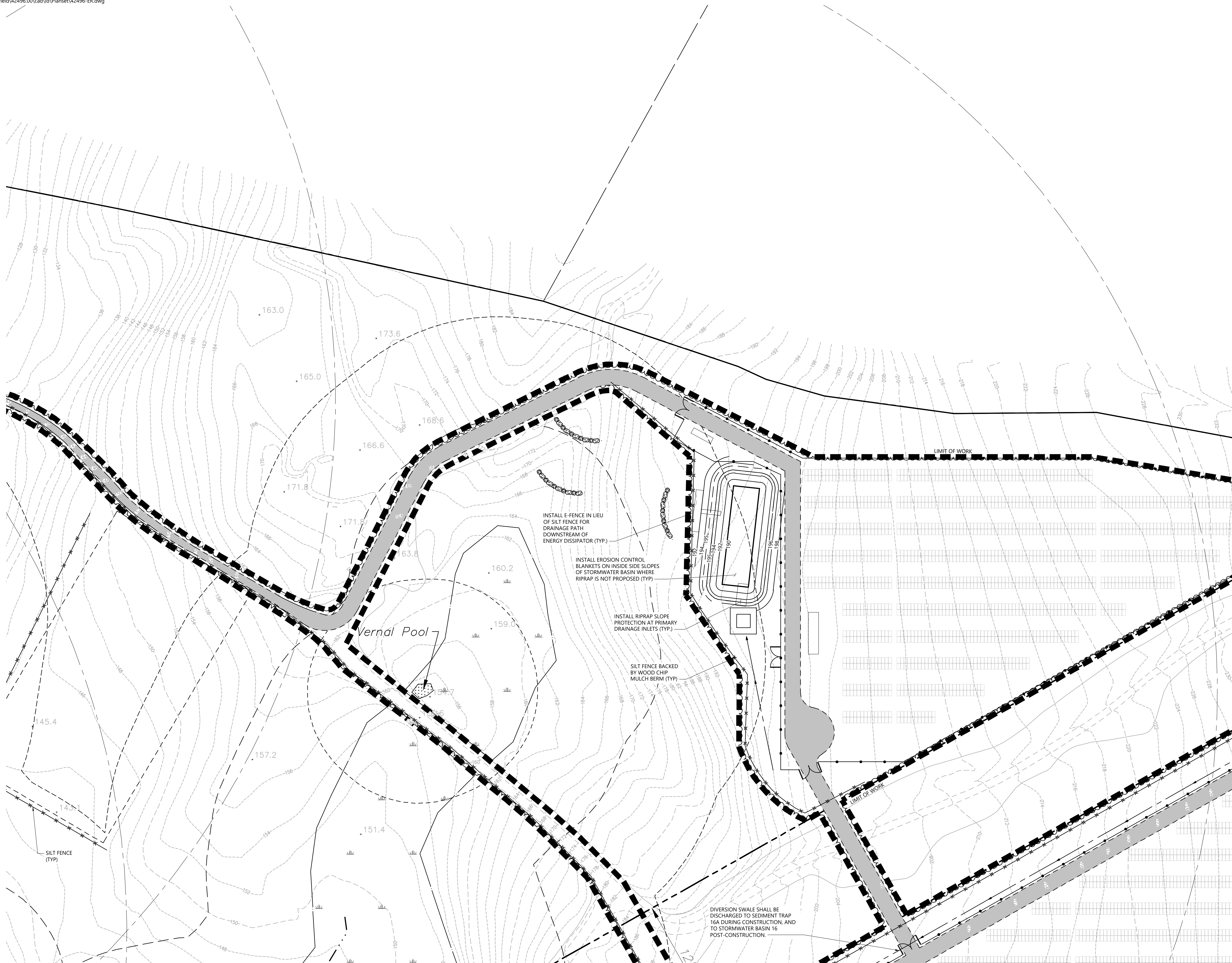
Erosion and Sediment Control Plan

Drawing Number

C-5.2

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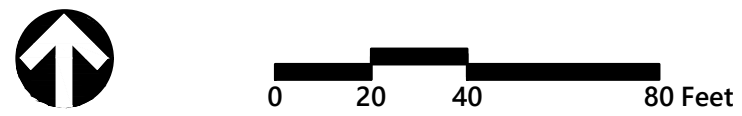
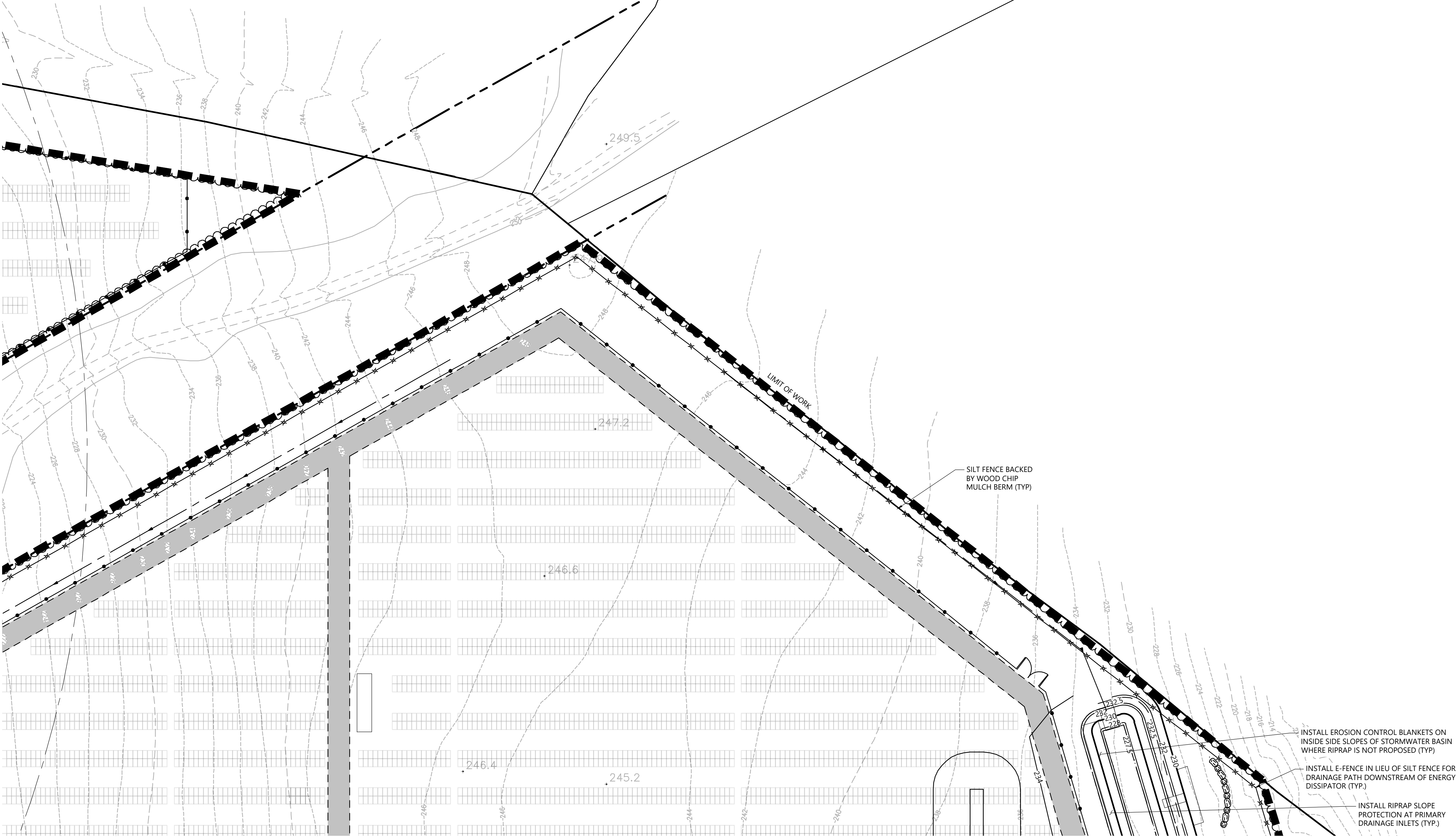
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C-5.10	C-5.11	C-5.12

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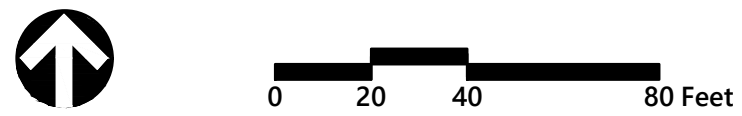
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C-5.10	C-5.11	C-5.12

Key
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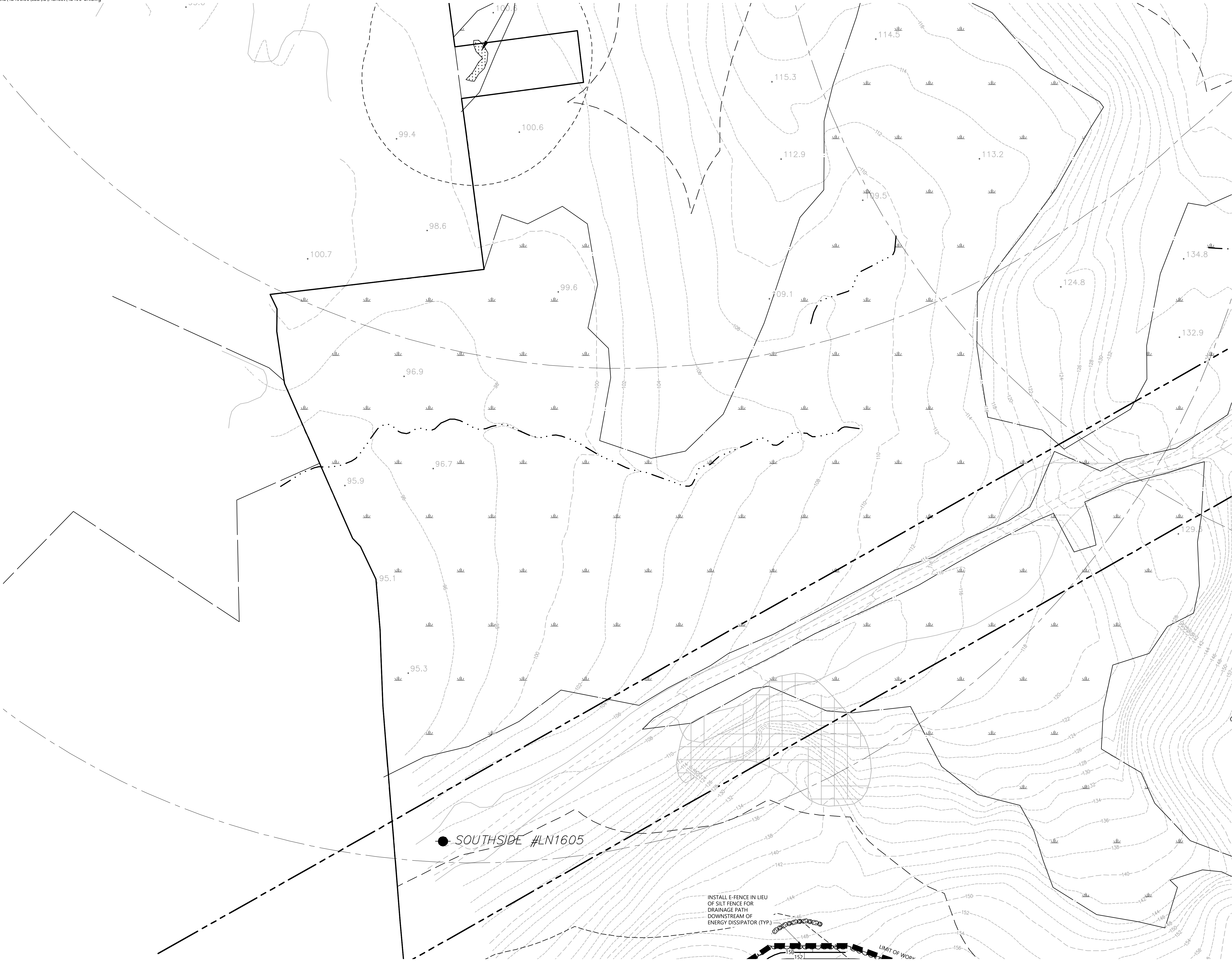
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Drawing Title
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Control Plan

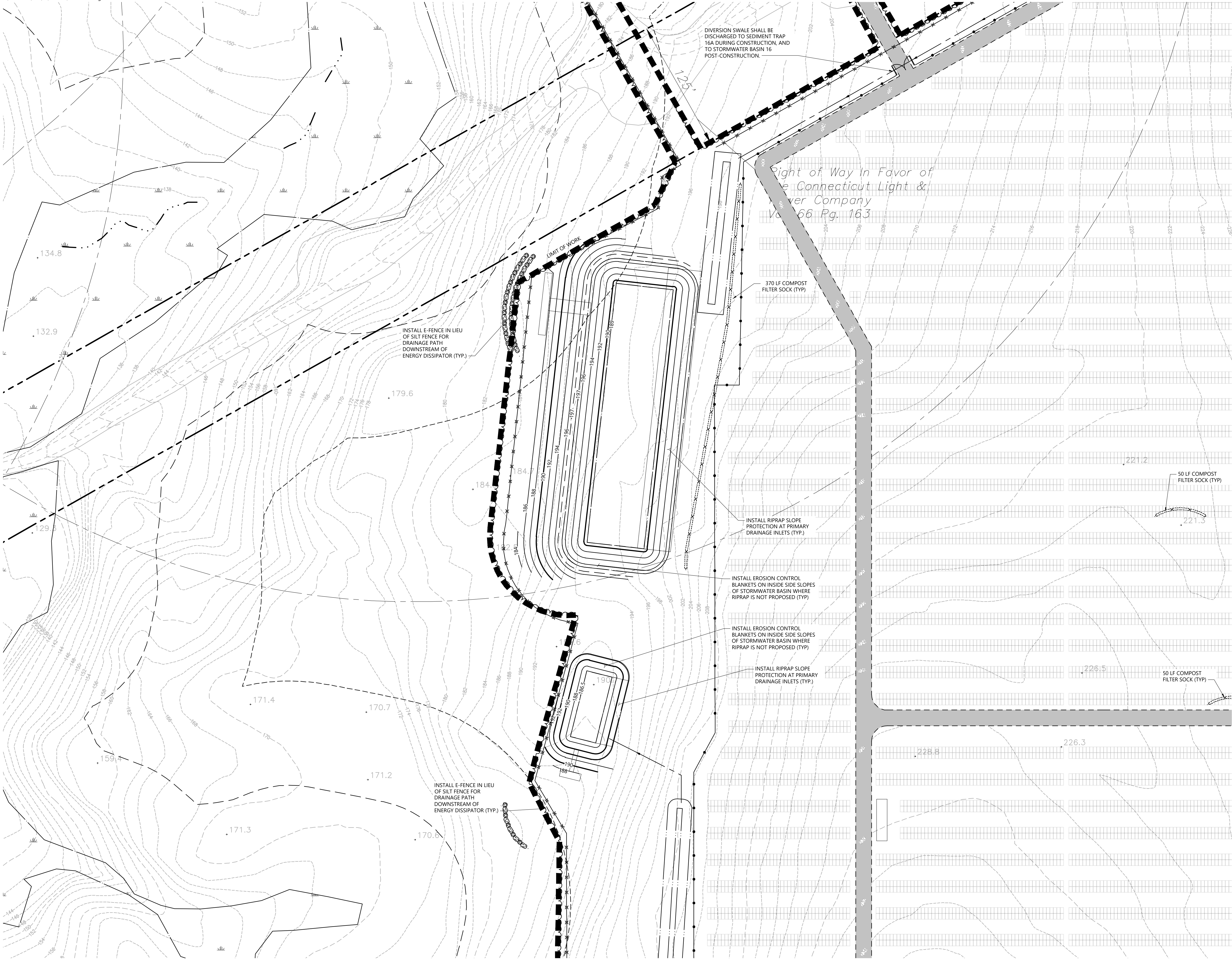
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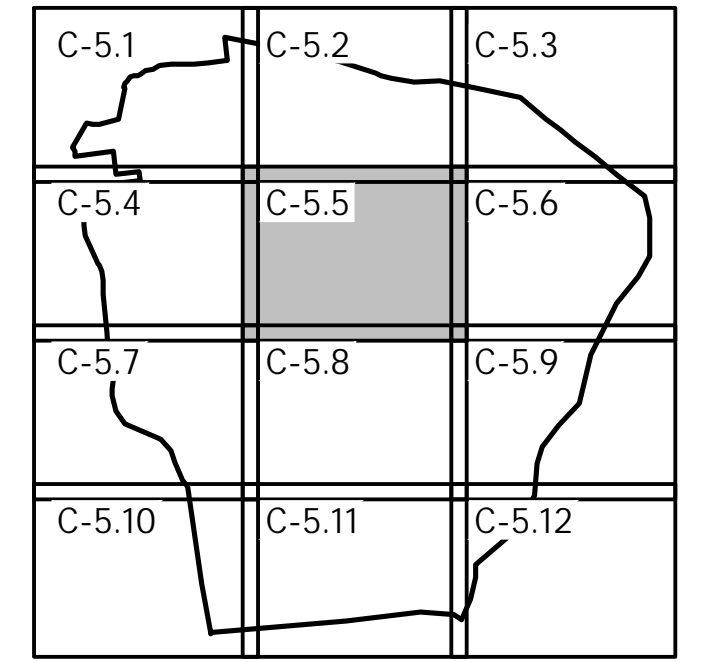




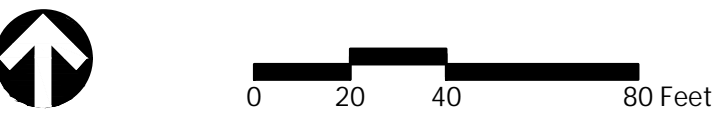


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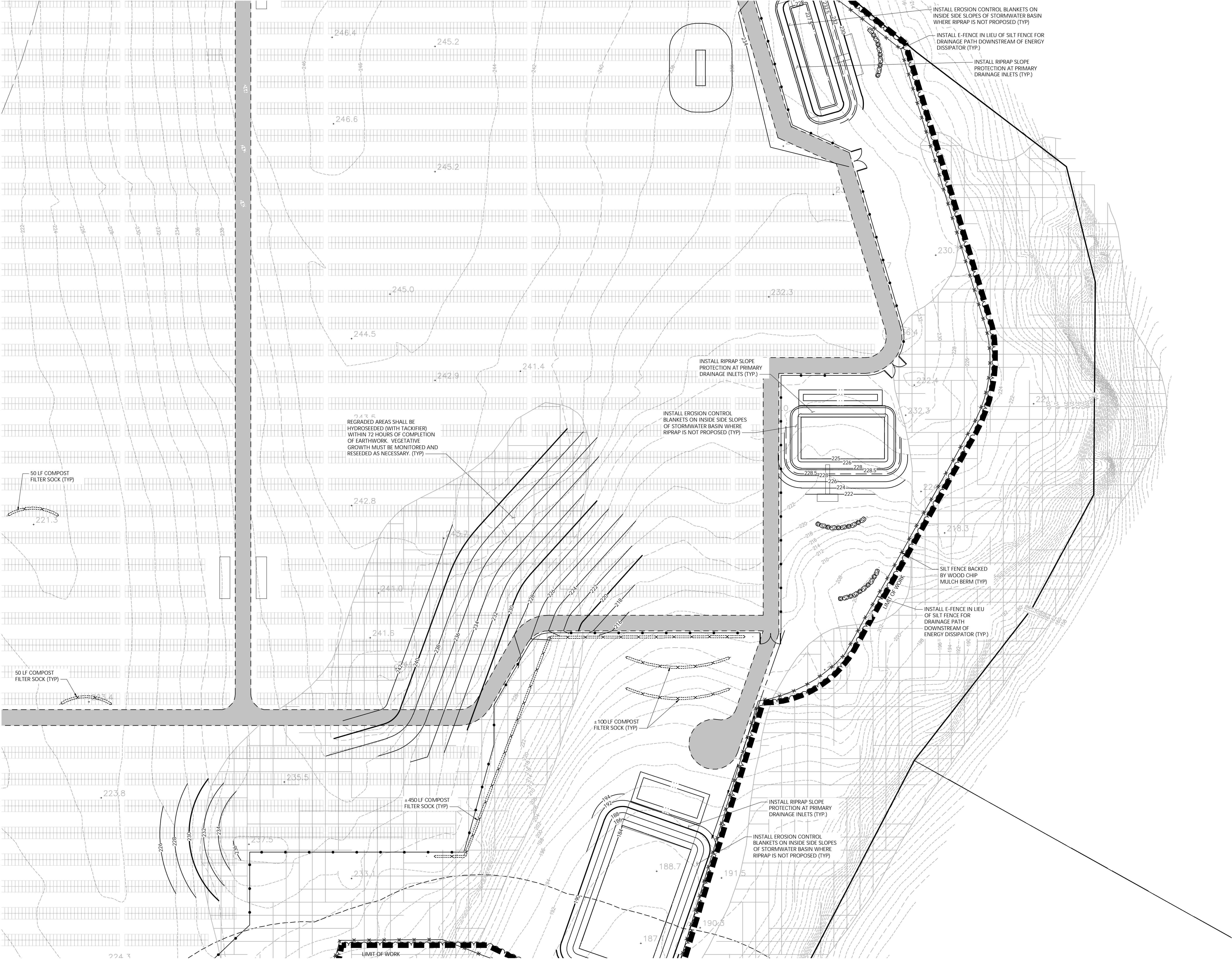
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Erosion and Sediment
Control Plan

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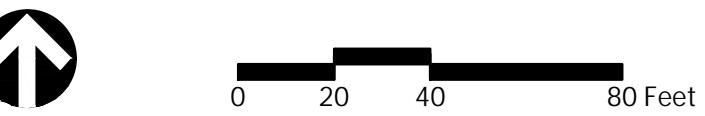
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C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

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Control Plan

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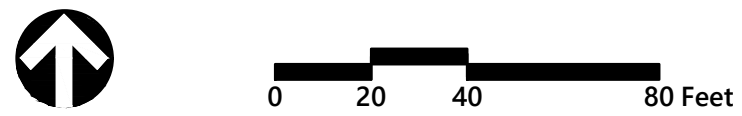
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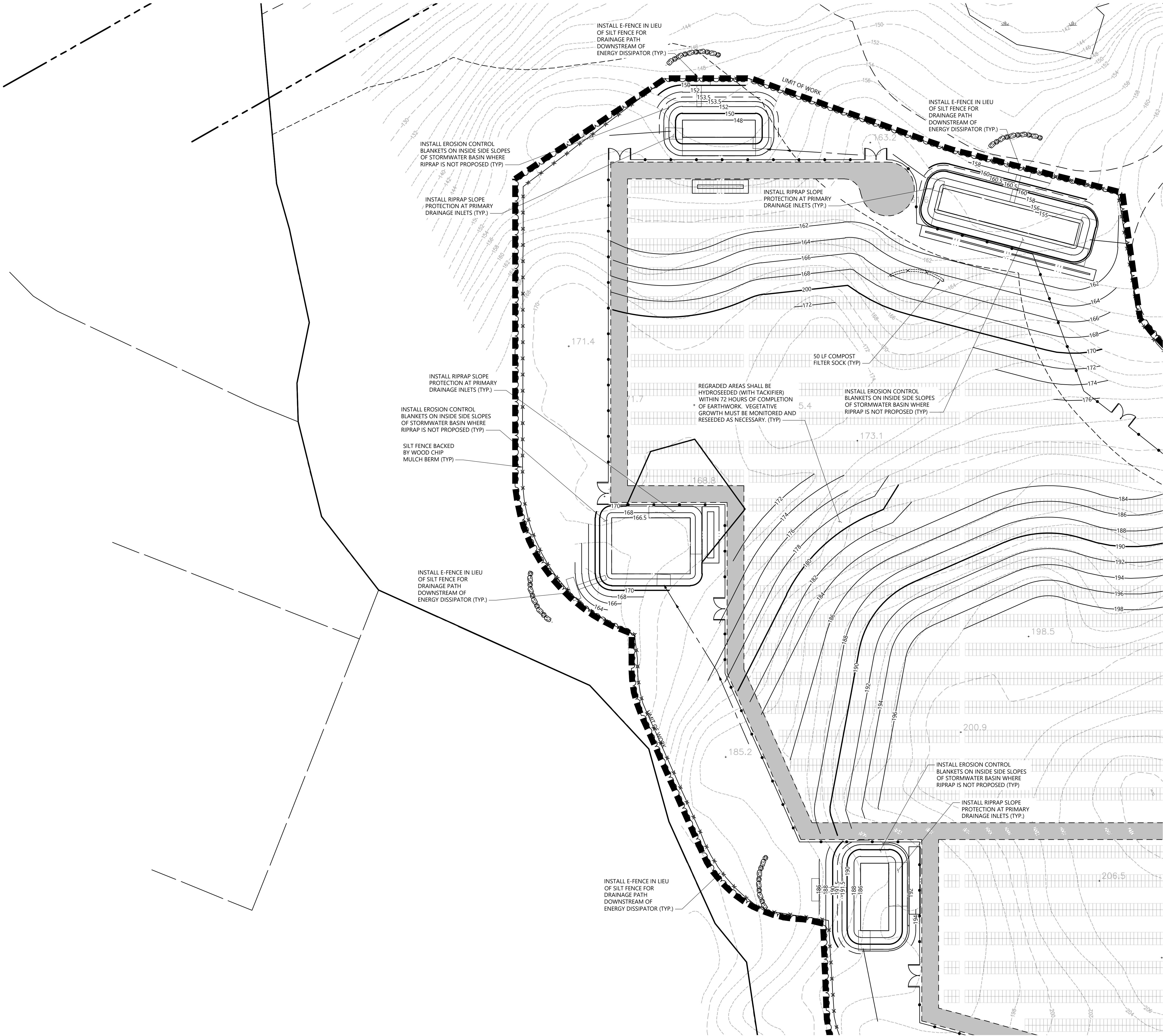
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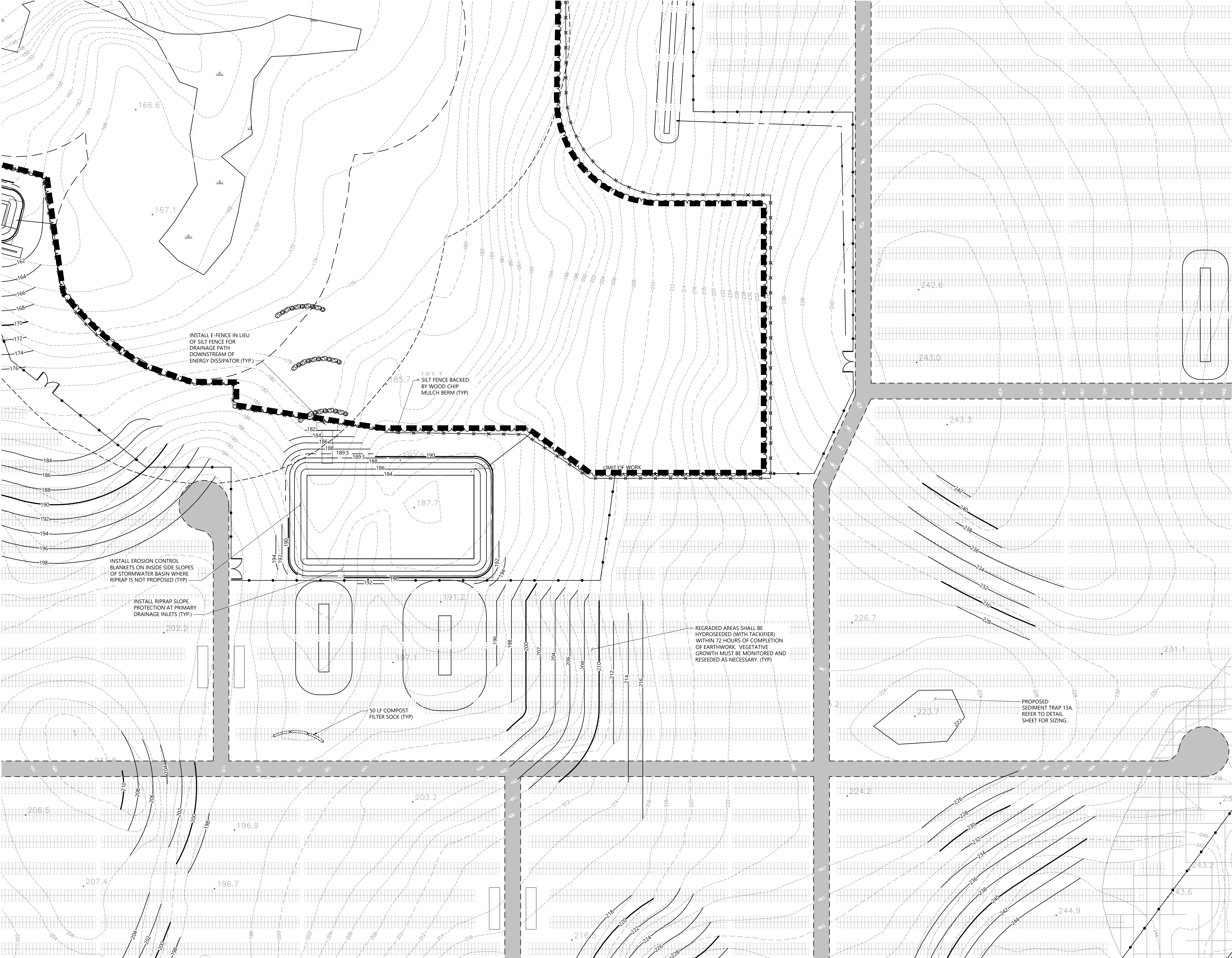
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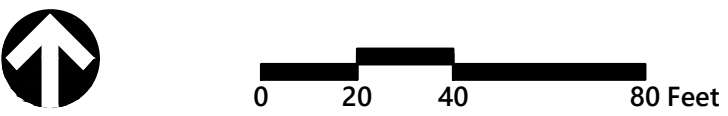
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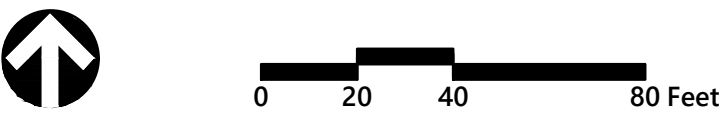
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C-5.10	C-5.11	C-5.12

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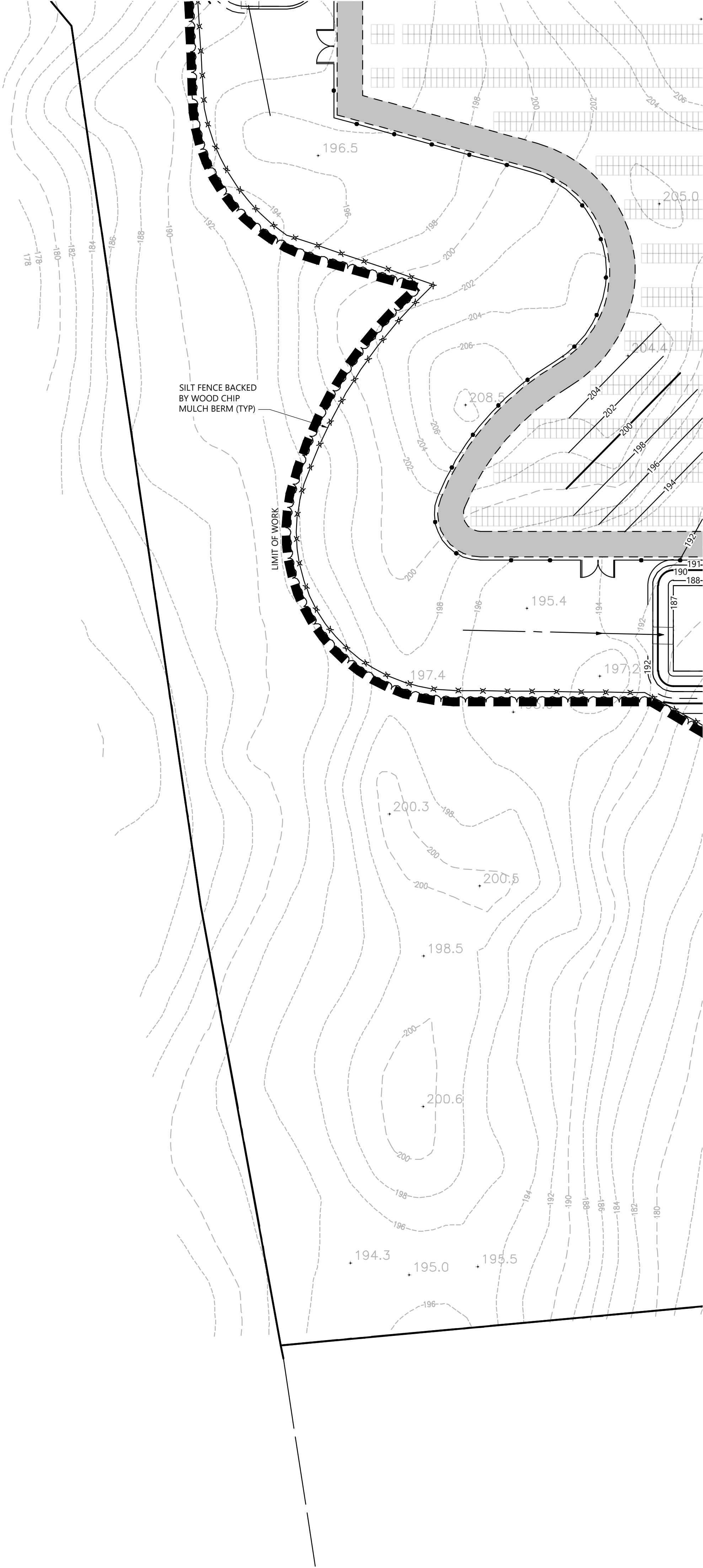
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**Erosion and Sediment
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38 43

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C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

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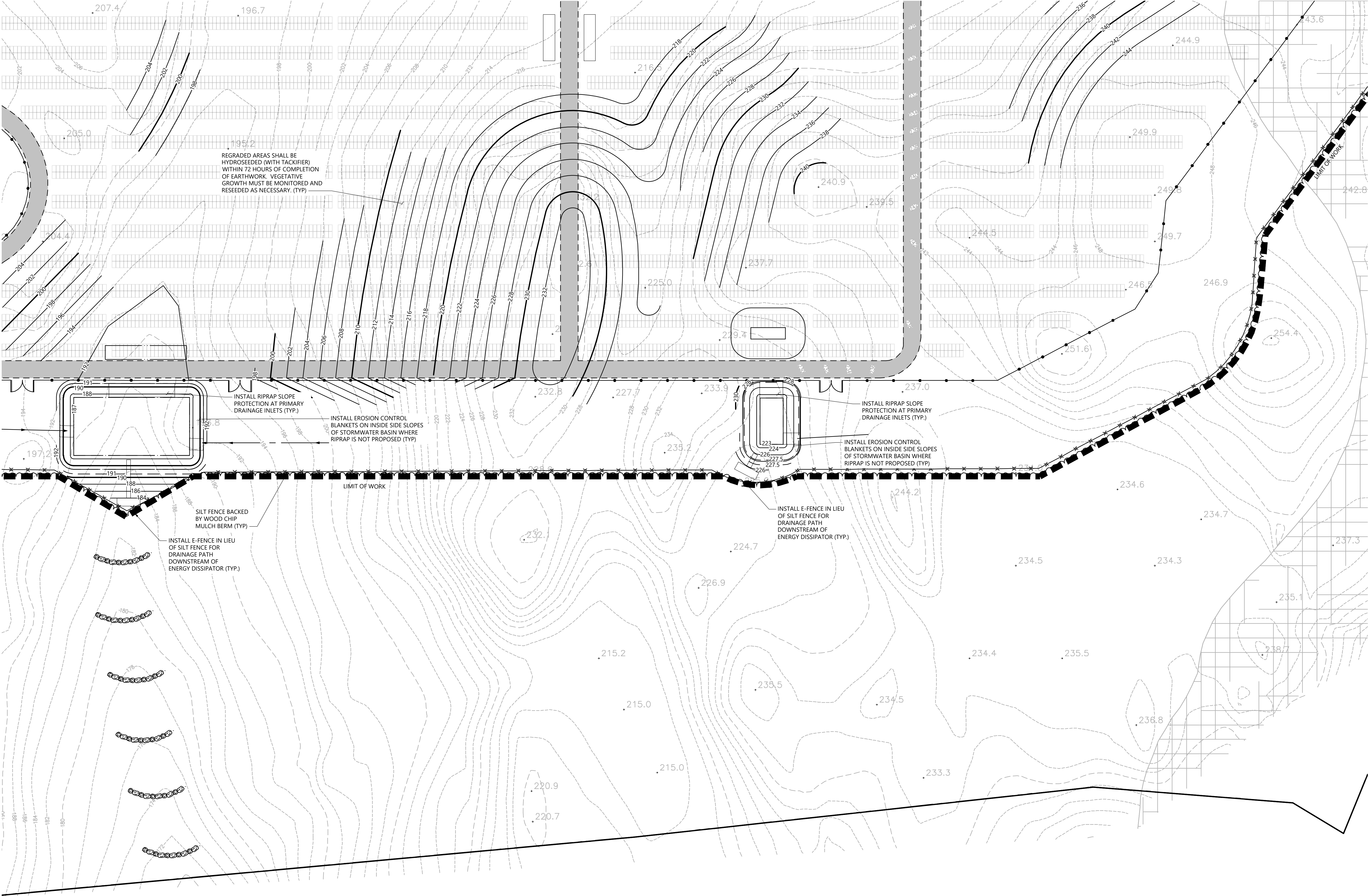
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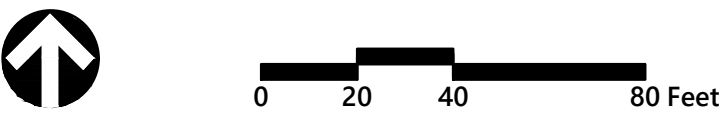
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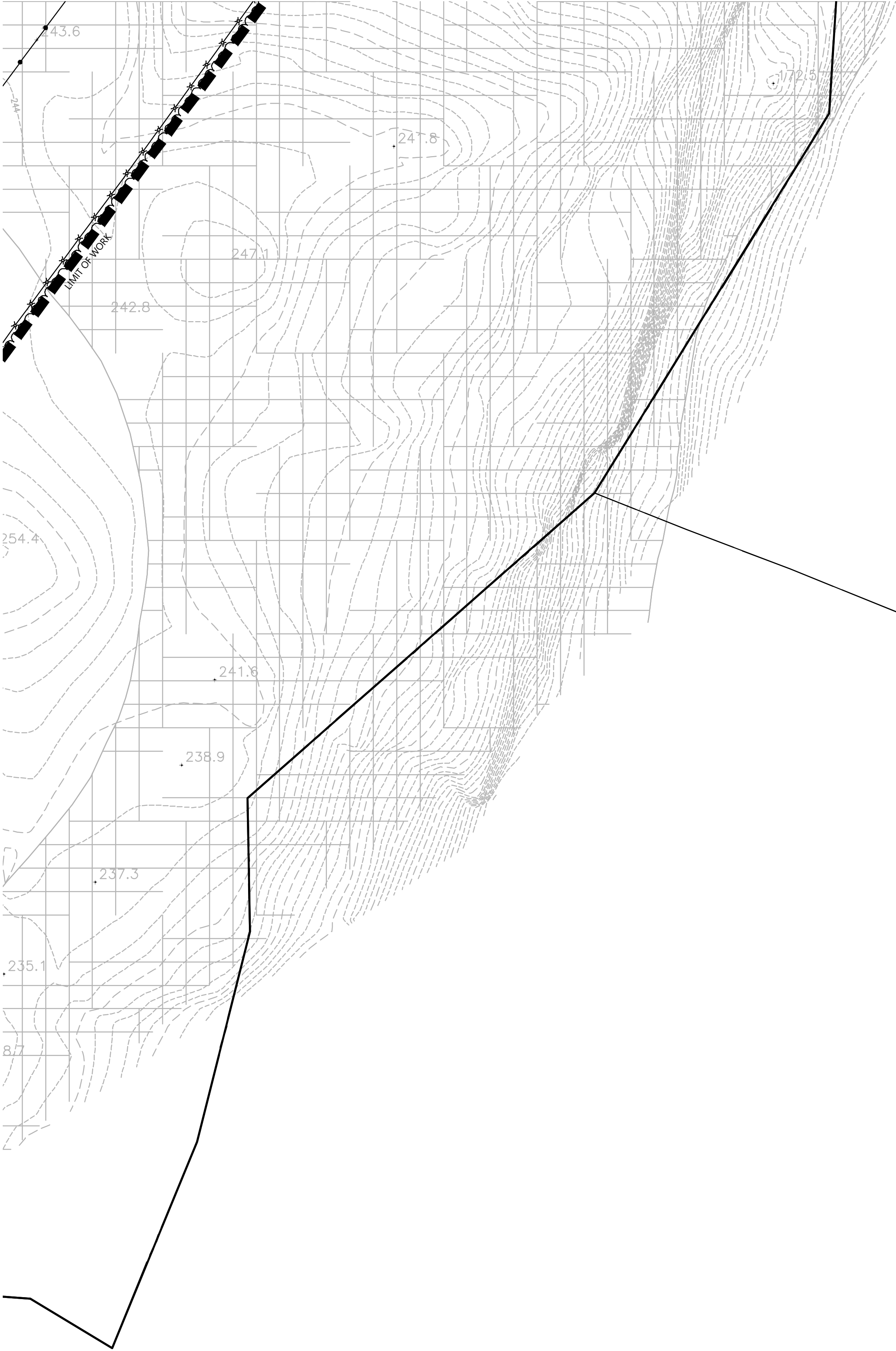
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40 43

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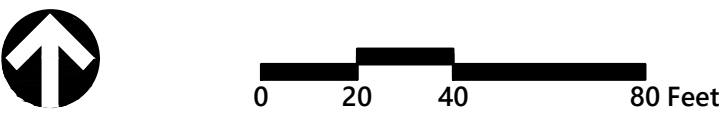


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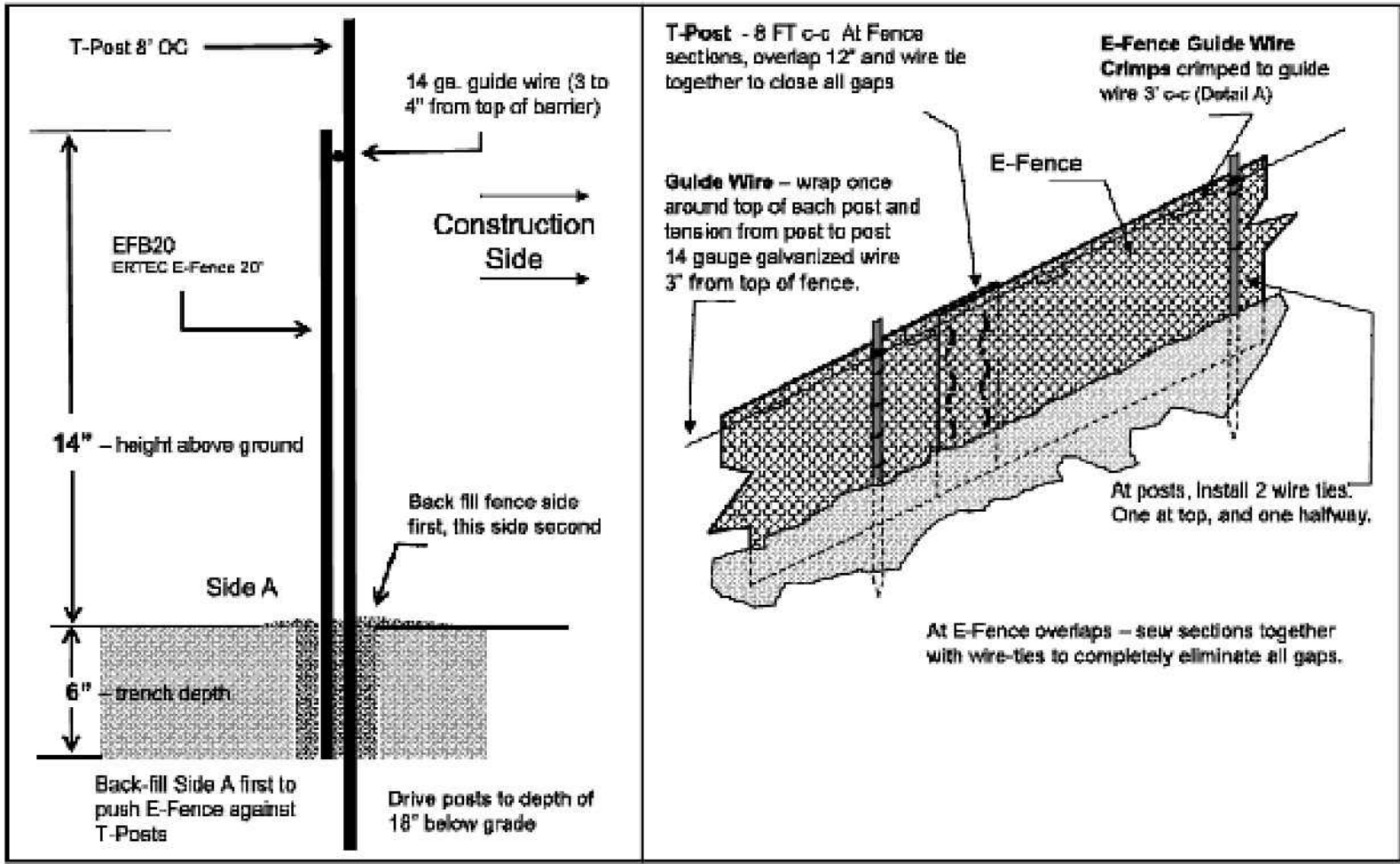
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41 43

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E-Fence DETAILS – Wildlife Exclusion - WPT



E-Fence™ (Patent #US8402830, other patents pending)

E-Fence™ DETAILS – Wildlife Exclusion

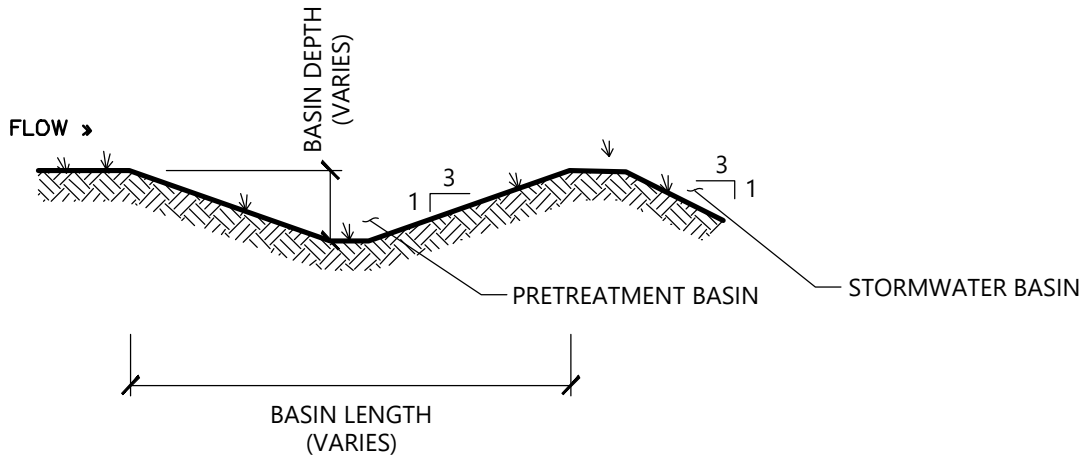
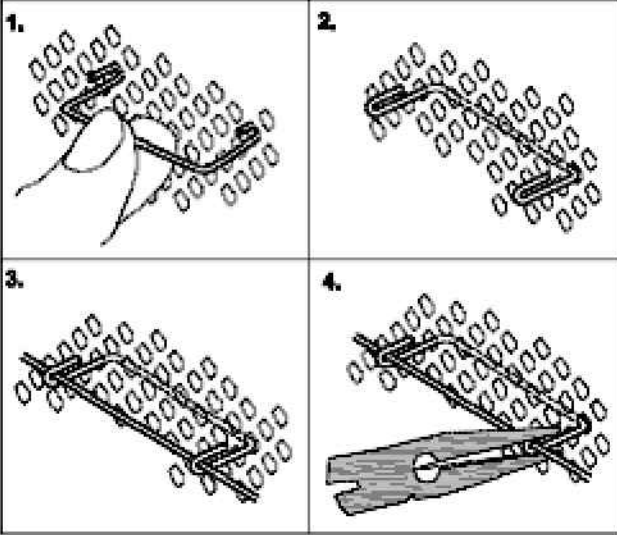
Installation Notes:

1. Excavate a trench a minimum of 4" wide and a minimum of 5" deep.
2. T-posts shall be a minimum of 0.95 lbs/ft. T-posts shall be driven a minimum 18" deep into the ground 8' centers
3. Insert barrier material into trench and attach to post in two places:
1) at 3" below top of fence and at 2) mid-height
4. At 3 inches from top of fence (above wire tie), wrap 14 gauge galvanized wire once around each T-post and pull the guide wire from post to post, wrap, secure and pull wire tight between each post.
5. At segment overlaps (roll length 100 or 150 LF), overlap segments a minimum of 12". Eliminate all gaps by tying sections together with tie wire in two vertical rows, as shown.
6. Push E-Fence Guide Wire Crimps through the E-Fence and crimp the ties to the guide wire on the other side of the fence (two crimps per tie) at 3' intervals, as illustrated in Detail A of the installation guidelines. Crimp to the guide-wire securely.
7. E-Fence must be installed in continuous lengths (100 or 150 feet rolls). Do not cut segments into shorter lengths unless necessary due to sudden changes in elevation.
8. Backfill trench with trench spoils. Backfill from E-Fence side of posts first so that E-Fence is pushed up against T-posts. Back fill other side to complete backfill.

E-Fence DETAILS – Guidewire Crimp

Detail A: Installing E-Fence Wire Ties

- 1) Push E-Fence tie through barrier. 2) Expose hooks on side near guide wire. 3) Insert guide wire. 4) Crimp tightly.

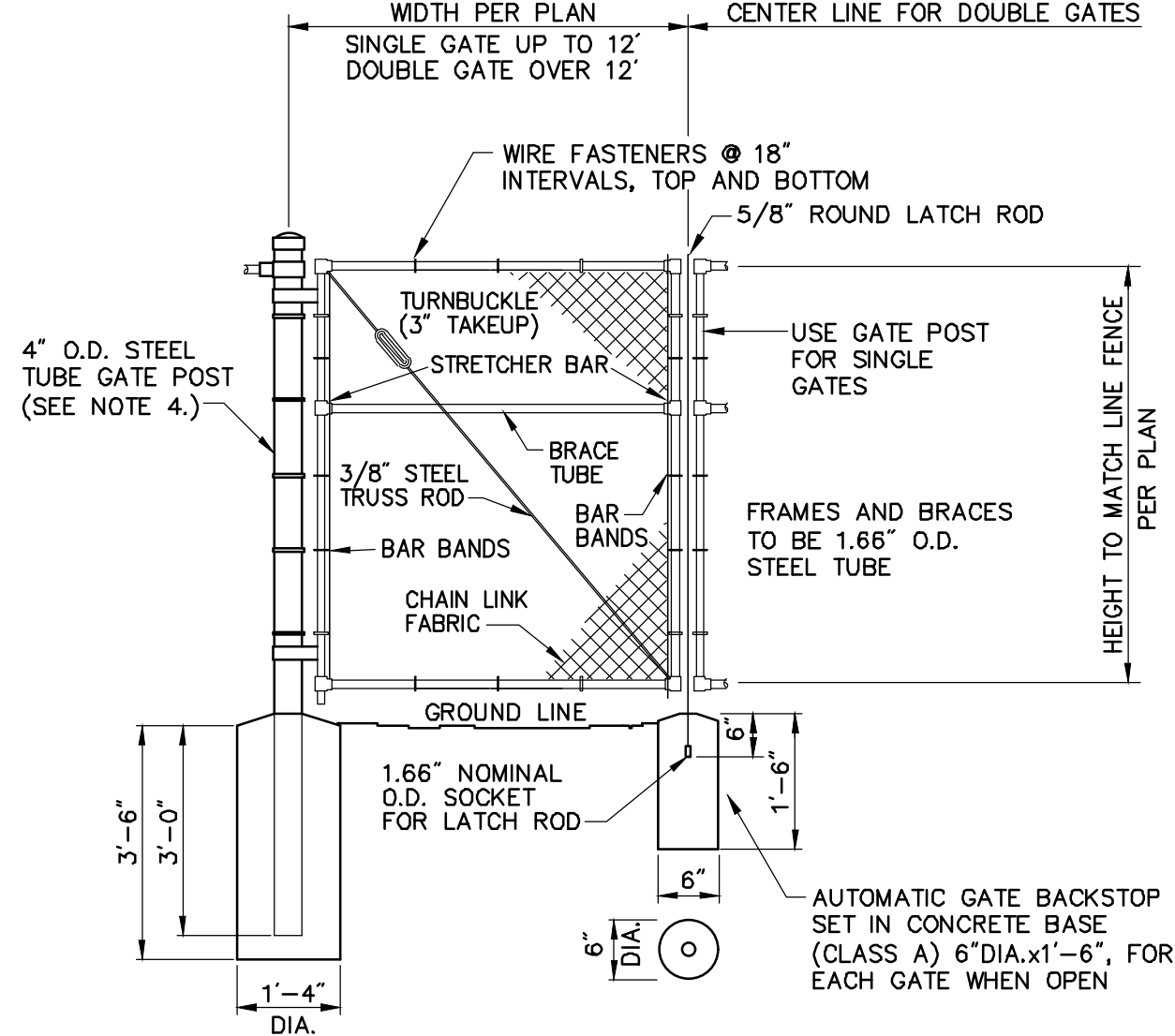


- NOTE:
1. PRETREATMENT BASIN LENGTH, WIDTH, AND DEPTH AS NOTED ON SITE PLANS.
 2. SIDE SLOPES SHALL BE 3:1.

Pretreatment Basin

N.T.S.

Source: VHB



Notes:

1. CHAIN LINK FABRIC FOR GATES TO BE THE SAME AS REQUIRED FOR FENCE.
2. GATE POST BASE--PORTLAND CEMENT CONCRETE (3000 PSI).
3. FENCE FABRIC, POSTS, FRAMEWORKS, AND HARDWARE SHALL BE GALVANIZED STEEL OR BLACK VINYL (AS INDICATED ON PLANS) PER SPECIFICATIONS.
4. GATE POSTS TO BE USED ON EACH SIDE OF SINGLE AND DOUBLE GATE OPENINGS.

Chain Link Fence Gate

6/08

N.T.S.

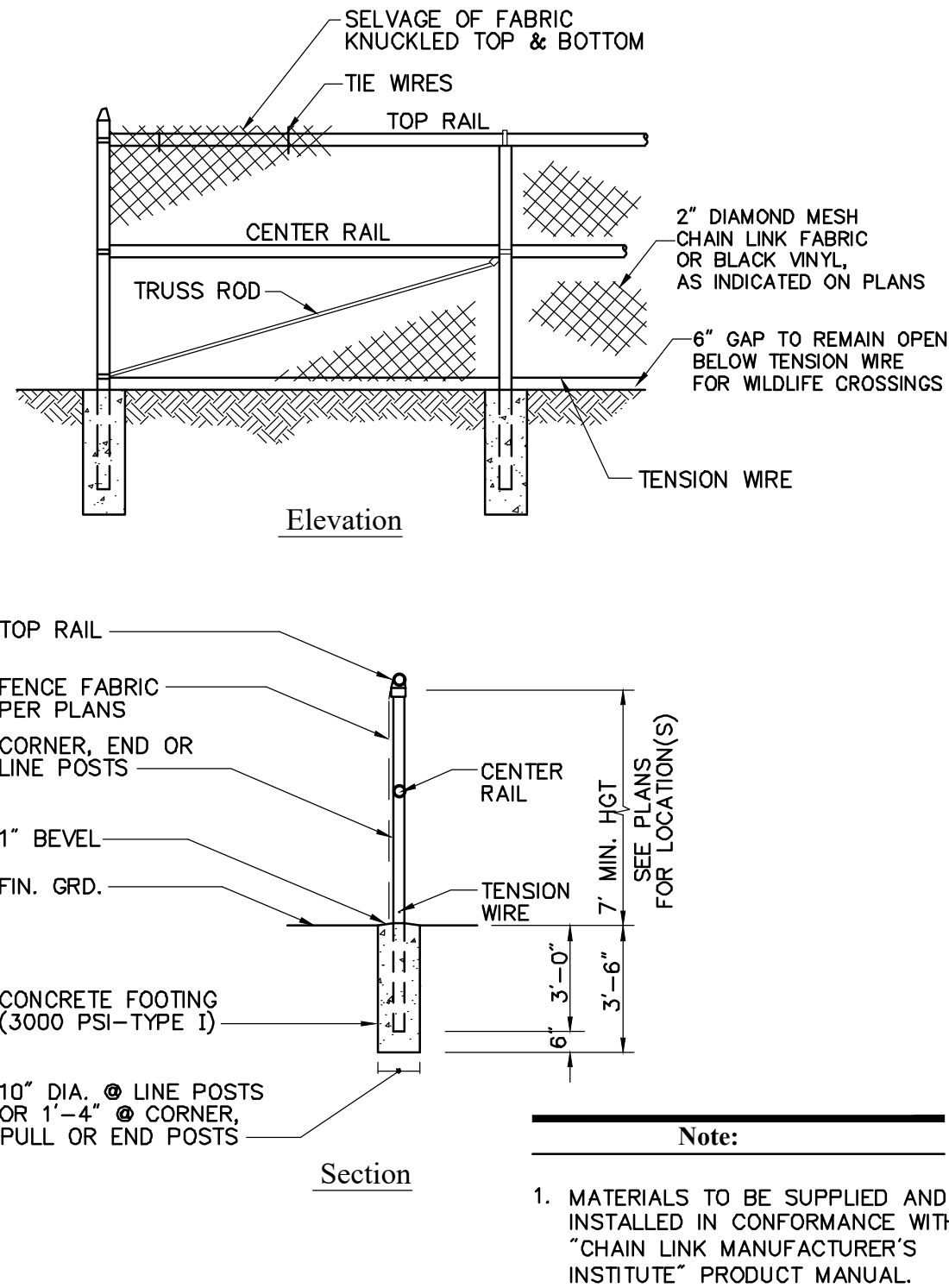
Source: VHB

LD_482

E-Fence Installation Details

N.T.S.

Source: Ertec Environmental Systems



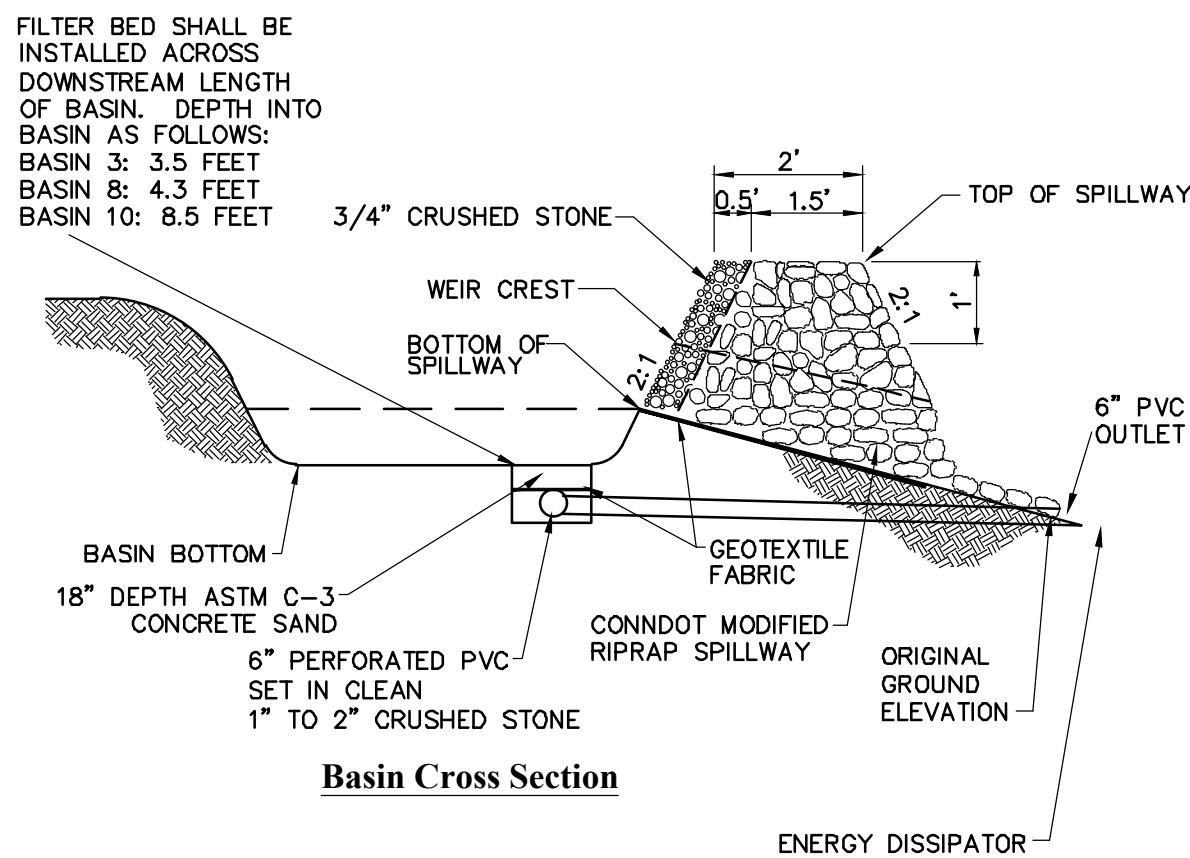
7' Chain Link Fence

6/08

N.T.S.

Source: VHB

LD_480

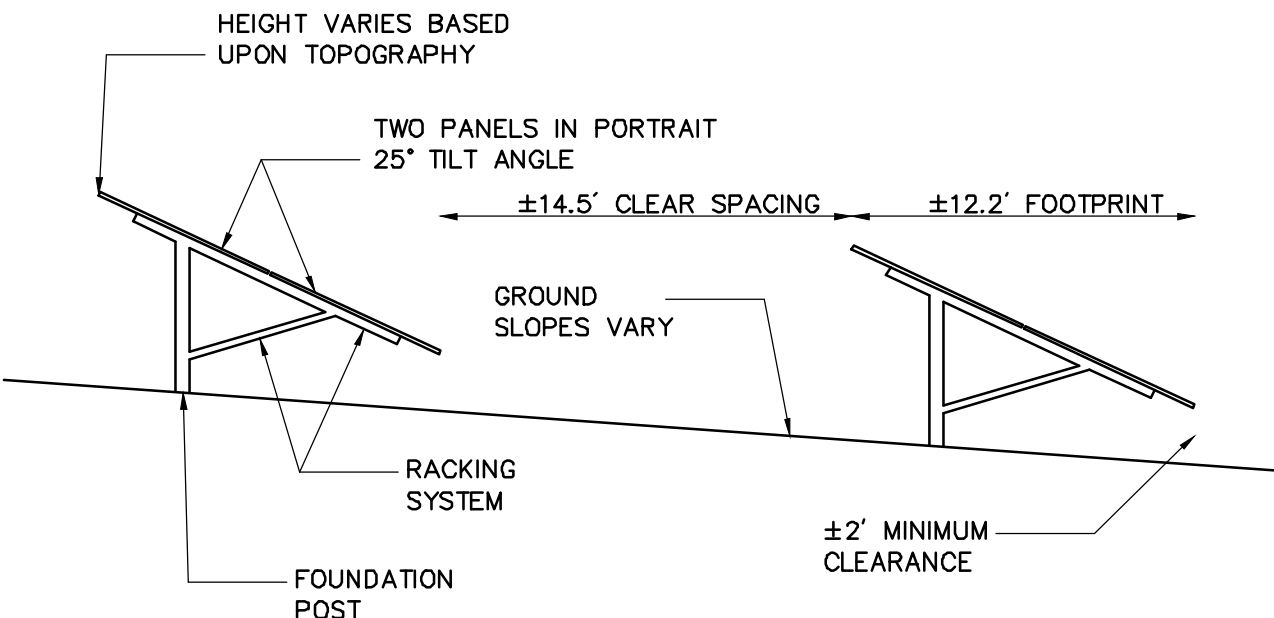


- NOTE:
1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1
 2. TOP OF EMBANKMENT SHALL BE 2' (MIN.) WIDTH AND 1' (MIN.) ABOVE TOP OF SPILLWAY.
 3. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY TEMPORARY SEEDING OR EROSION CONTROL BLANKETS AS DIRECTED BY THE ENGINEER.
 4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.
 5. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY AND REPLACED WITH E-FENCE.
 6. PERFORATED PVC AND CONCRETE SAND FOR SAND FILTERS SHALL BE INSTALLED ONLY UPON FULL STABILIZATION OF UPSTREAM AREAS. 6" PVC SHALL BE INSTALLED AND CAPPED AT TIME OF BASIN EXCAVATION.
 7. PERFORATIONS IN UNDERDRAIN PIPING SHALL BE 0.5 INCH SPACED 6 INCHES APART.
 8. FILTER BEDS HAVE BEEN SIZED TO DRAIN THE STORMWATER BASIN WITHIN ONE DAY IN ACCORDANCE WITH 2004 STORMWATER QUALITY MANUAL. ASSUMPTION OF 20 FEET/DAY HYDRAULIC CONDUCTIVITY FOR MEDIUM SAND AND BASIN VOLUME UNDER BOTTOM OF SPILLWAY.

Earthen Surface Sand Filter Basin

N.T.S.

Source: VHB



Notes:

1. FINAL DETERMINATION OF PANEL TYPE, RACKING SYSTEM, AND FOUNDATION POSTS TO BE DETERMINED PENDING BEST AVAILABLE TECHNOLOGY AT TIME OF CONSTRUCTION AND STRUCTURAL GROUND TESTING.

Cross Section of Panel Array

7/20

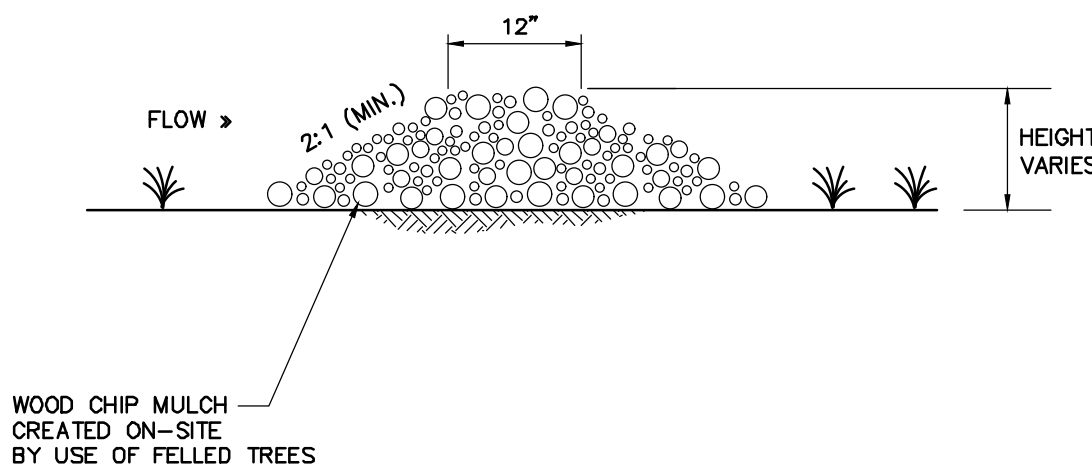
N.T.S.

Source: VHB

Wood Chip Mulch Berm

N.T.S.

Source: VHB



NOTES:

1. WOOD CHIP MULCH BERM TO BE INSTALLED DOWNSTREAM OF PERIMETER SILT FENCE IN VARIOUS LOCATIONS AROUND SITE.

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

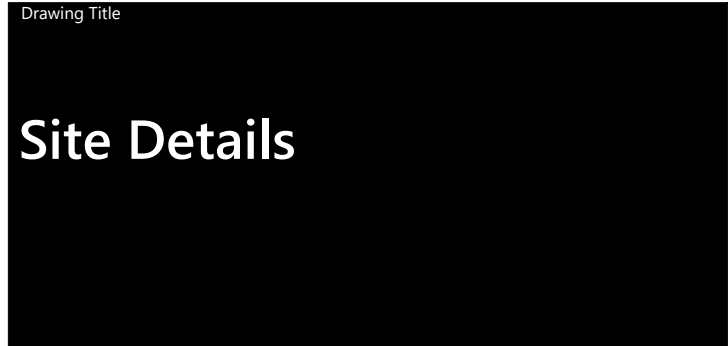
No.	Revision	Date	Apprd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK
3	CSC D&M Plan	1/12/2021	SJK

Designed by	Checked by
Issued for	Date

Final Approvals

December 2, 2019

Issued for Construction



Drawing Title

Drawing Number

Sheet

of

42

43

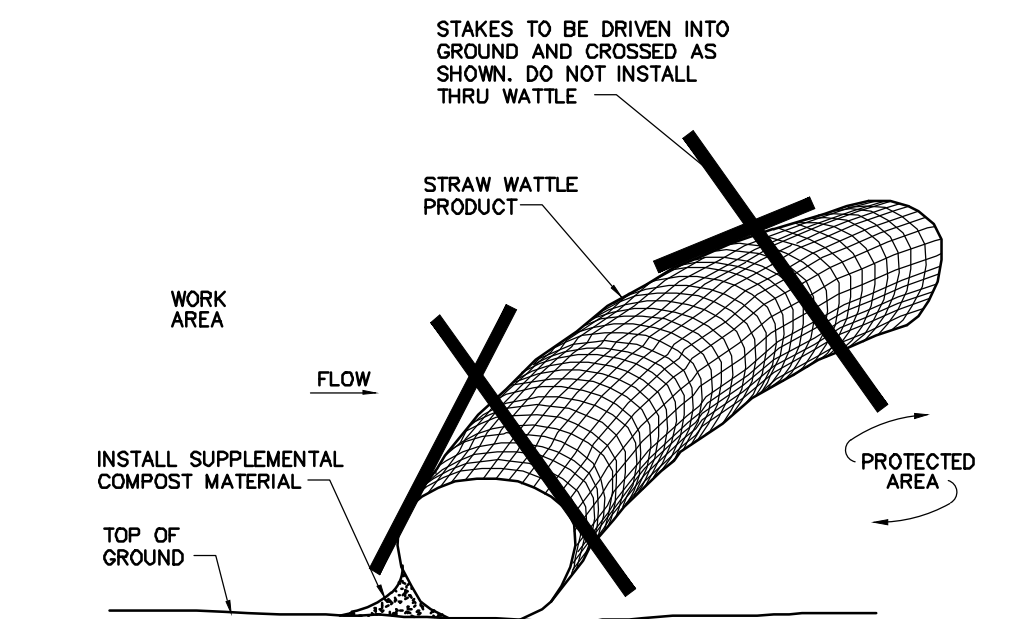
Project Number

42496.00

vhb.com

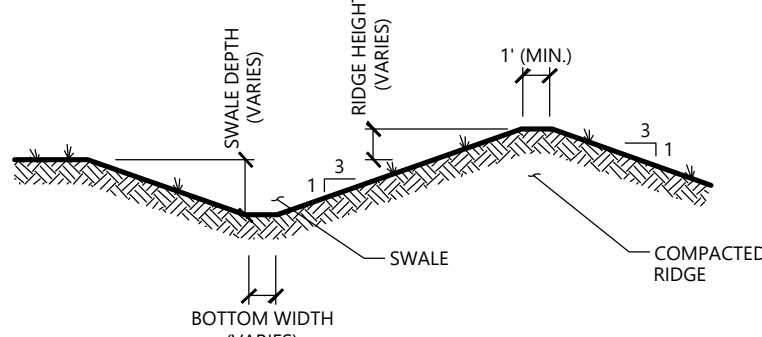
vhb

100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300



Straw Wattle Installation

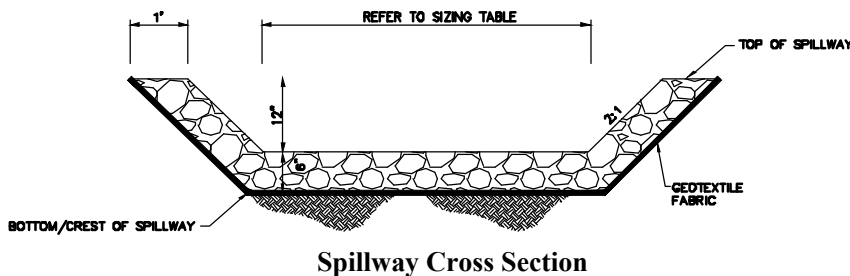
N.T.S. Source: VHB 8/12 LD_658



- NOTE:
1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1
 2. REFER TO "DIVERSION SWALE SIZING" TABLE FOR SELECTION OF LINING MATERIAL TO BE INSTALLED OVER ENTIRE SWALE AREA.
 3. REFER TO "DIVERSION SWALE SIZING" TABLE FOR VARIABLE SIZING.
 4. THE INTENT IS TO USE THE MATERIAL EXCAVATED FROM THE SWALE TO CONSTRUCT THE RIDGE.

Diversion Swale

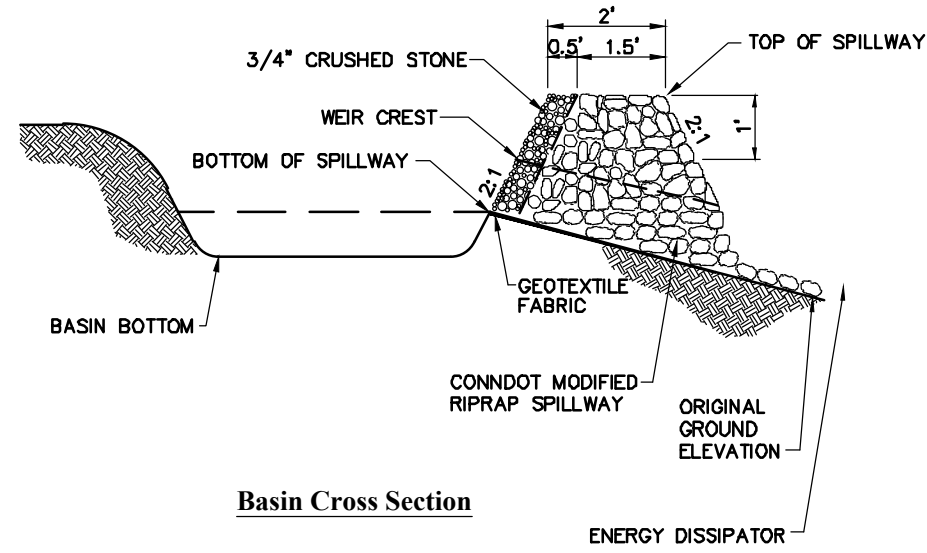
N.T.S. Source: VHB



- NOTE:
1. ALL SIDE SLOPES SHALL NOT EXCEED 2:1
 2. TOP OF EMBANKMENT SHALL BE 2' (MIN) WIDTH AND 1' (MIN) ABOVE TOP OF SPILLWAY.
 3. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY TEMPORARY SEEDING OR EROSION CONTROL BLANKETS AS DIRECTED BY THE ENGINEER.
 4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.
 5. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY.

Stormwater Basin Spillway

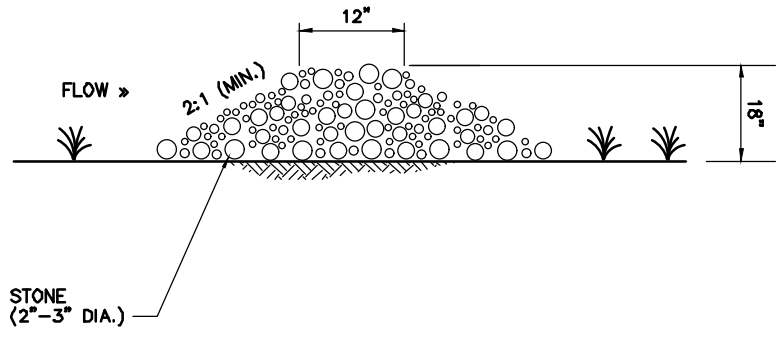
N.T.S. Source: VHB



- NOTE:
1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1
 2. TOP OF EMBANKMENT SHALL BE 2' (MIN) WIDTH AND 1' (MIN) ABOVE TOP OF SPILLWAY.
 3. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY TEMPORARY SEEDING OR EROSION CONTROL BLANKETS AS DIRECTED BY THE ENGINEER.
 4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.
 5. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY AND REPLACED WITH E-FENCE.

Permanent Stormwater Basin

N.T.S. Source: VHB



- NOTES:
1. STONE CHECKDAM TO BE A PERMANENT STRUCTURE AFTER CONSTRUCTION.

Stone Check Dam

N.T.S. Source: VHB



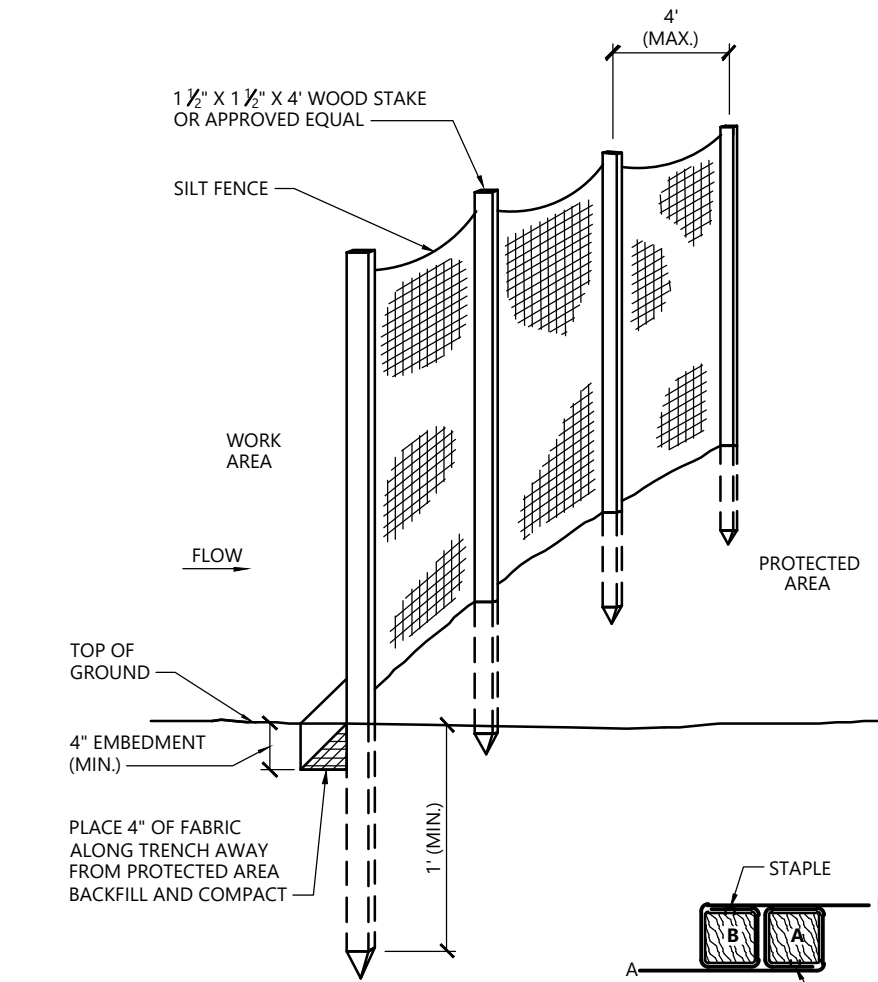
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Site Location: 117 Oil Mill Road, Waterford, CT 06385
Owner: GRE Gacurx, LLC
Attn: Jean-Paul LaMarche
363 Centennial Parkway, Suite 105
Louisville, CO 80027
IN CASE OF EMERGENCY CALL 911
WATERFORD POLICE DEPARTMENT - (860) 442-9451

Notes:

1. THE SITE FACILITY SIGN IS A DRAFT SHOWING THE MINIMUM AMOUNT OF INFORMATION THAT WILL BE PROVIDED. SIGN WILL BE 18" X 24".
2. ALL SIGNS WILL BE MOUNTED ONTO THE CHAIN LINK FENCE.

Danger and Site Facility Signs

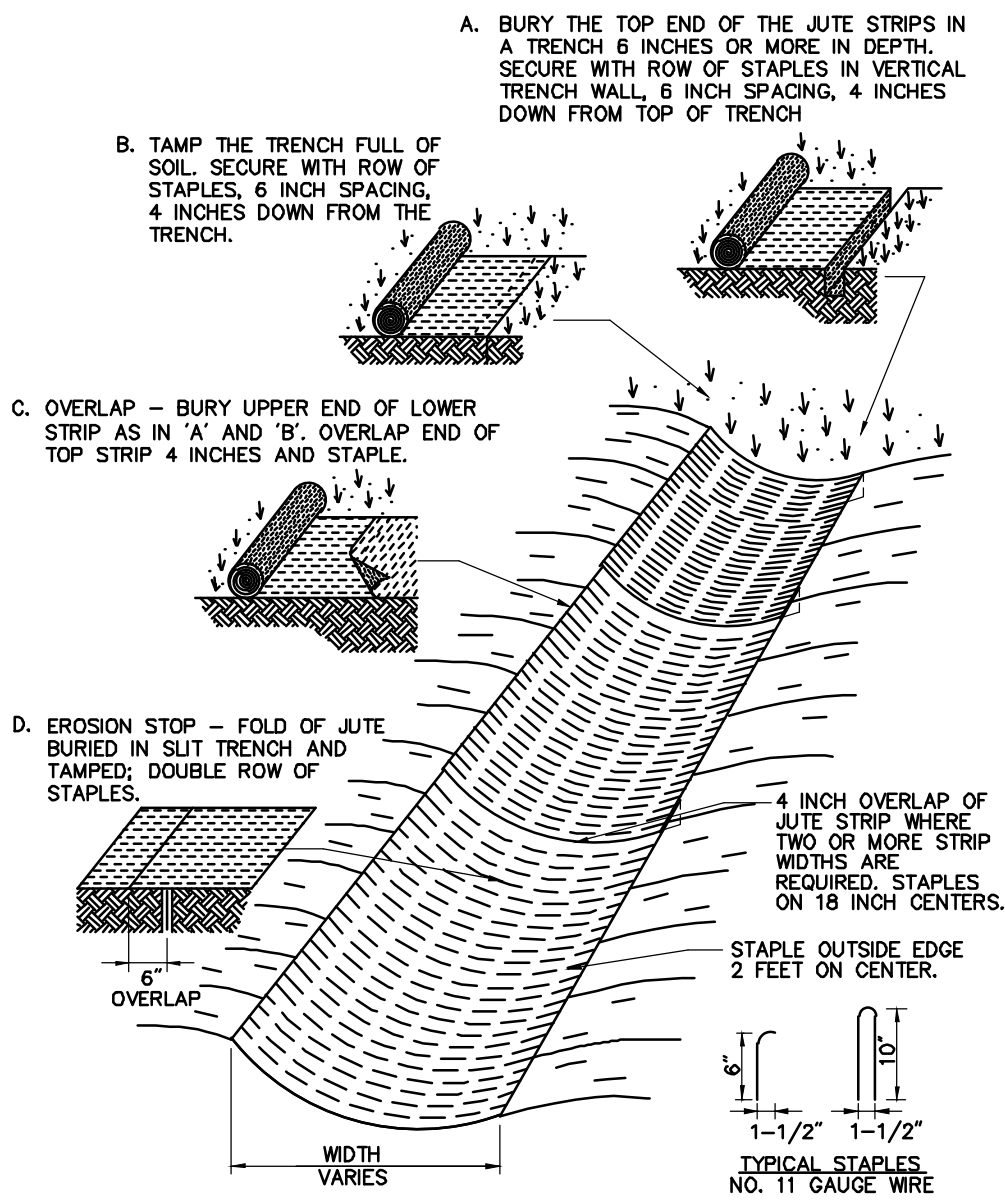
N.T.S. Source: VHB 1/16



- NOTE:
1. IN THE EVENT THAT BOULDERS OR SHALLOW LEDGE ARE ENCOUNTERED WHERE SILT FENCE IS PROPOSED, THE CONTRACTOR SHALL REMOVE THE OBSTRUCTION IN ORDER TO BE ABLE TO ACHIEVE PROPER EMBEDMENT DEPTHS, OR RELOCATE THE SILT FENCE UPHILL SUCH THAT IT DOES IMPACT THE PROJECT.

Silt Fence Barrier

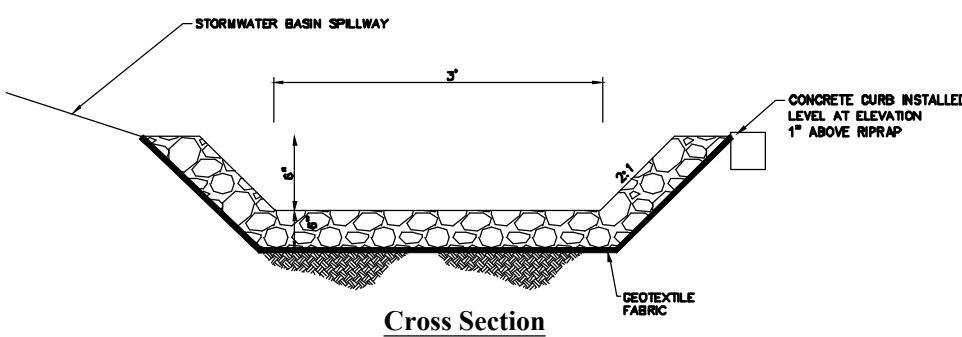
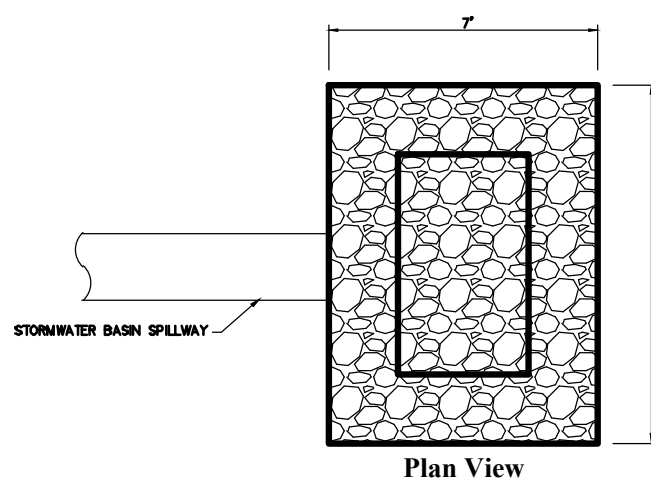
N.T.S. Source: VHB 1/16 LD_650



- * INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS
** MATERIAL MUST BE APPROVED BY DESIGN ENGINEER

Erosion Control Blanket Swale Installation

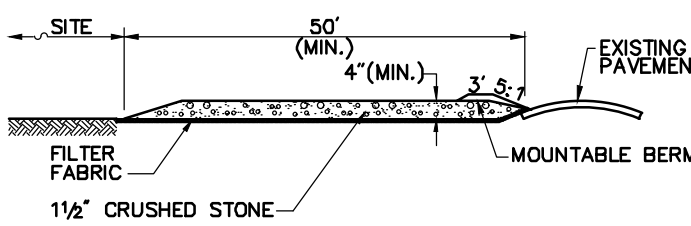
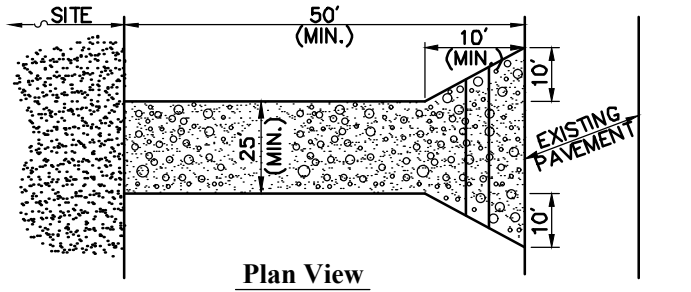
N.T.S. Source: VHB 6/08 LD_681



- NOTE:
1. SHALL BE INSTALLED AT THE OUTLET FROM EACH STORMWATER BASIN SPILLWAY.

Energy Dissipator

N.T.S. Source: VHB



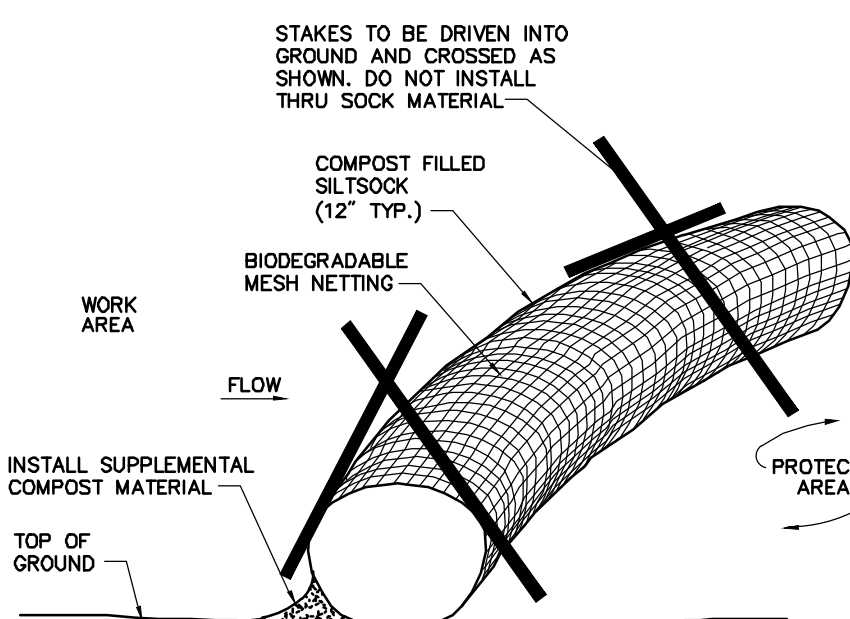
Cross-section

Notes:

1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit

N.T.S. Source: VHB 6/08 LD_682



Notes:

1. SILT SOCK SHALL BE 12" DIAMETER FILTREXX SILT SOCK, OR APPROVED EQUAL.
2. SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILT SOCKS SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

Compost Filter Sock (CFS)

N.T.S. Source: VHB 8/12 LD_658

DIVERSION SWALE SIZING						
NAME	APPROXIMATE TRIBUTARY AREA, AC	APPROXIMATE LENGTH, FT	BOTTOM WIDTH, FT	SIDE SLOPES	SWALE DEPTH, FT	LINING MATERIAL
1-1	2.2	160	1	3:1	1.5	ECB
2-1	0.5	360	1	3:1	1	ECB
4-1	0.2	210	1	3:1	1	ECB
5-1	0.5	140	1	3:1	1.5	ECB
6-1	0.1	60	1	3:1	1	ECB
7-1	0.1	60	1	3:1	1	ECB
8-1	0.4	170	2	3:1	1	ECB
8-2	0.1	120	1	3:1	1	ECB
9-1	0.6	70	1	3:1	1	ECB
10-1	0.5	160	2	3:1	1	ECB
11-1	0.2	50	1	3:1	1	ECB
11-2	0.2	80	1	3:1	1	ECB
12-1	0.1	40	1	3:1	1	ECB
12-2	1.5	40	1	3:1	1.5	ECB
13-1	0.4	60	1	3:1	1	ECB
14-1	0.3	200	1	3:1	1	ECB
14-2	0.3	150	2	3:1	1.5	15" RIPRAP
14-4	1.5	90	5	3:1	1.5	15" RIPRAP
16-2	4.1	400	6	3:1	2	15" RIPRAP
16-3	1.3	400	6	3:1	1	ECB



100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

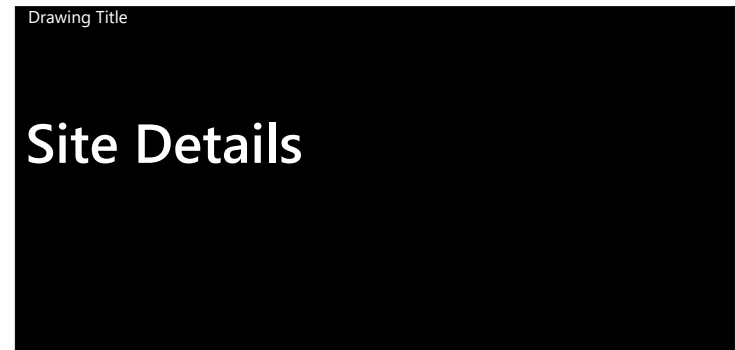
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1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK
3	CSC D&M Plan	1/12/2021	SJK

Designed by: _____
Checked by: _____

Issued for: _____
Date: December 2, 2019

Final Approvals

Issued for Construction

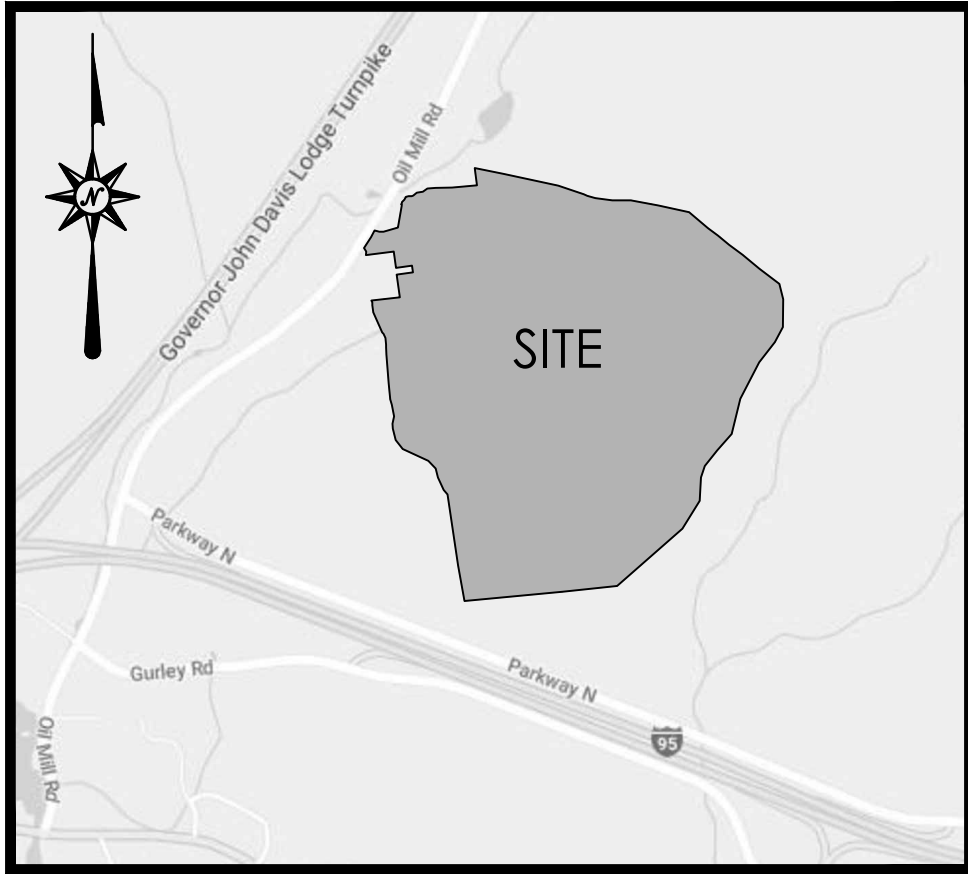


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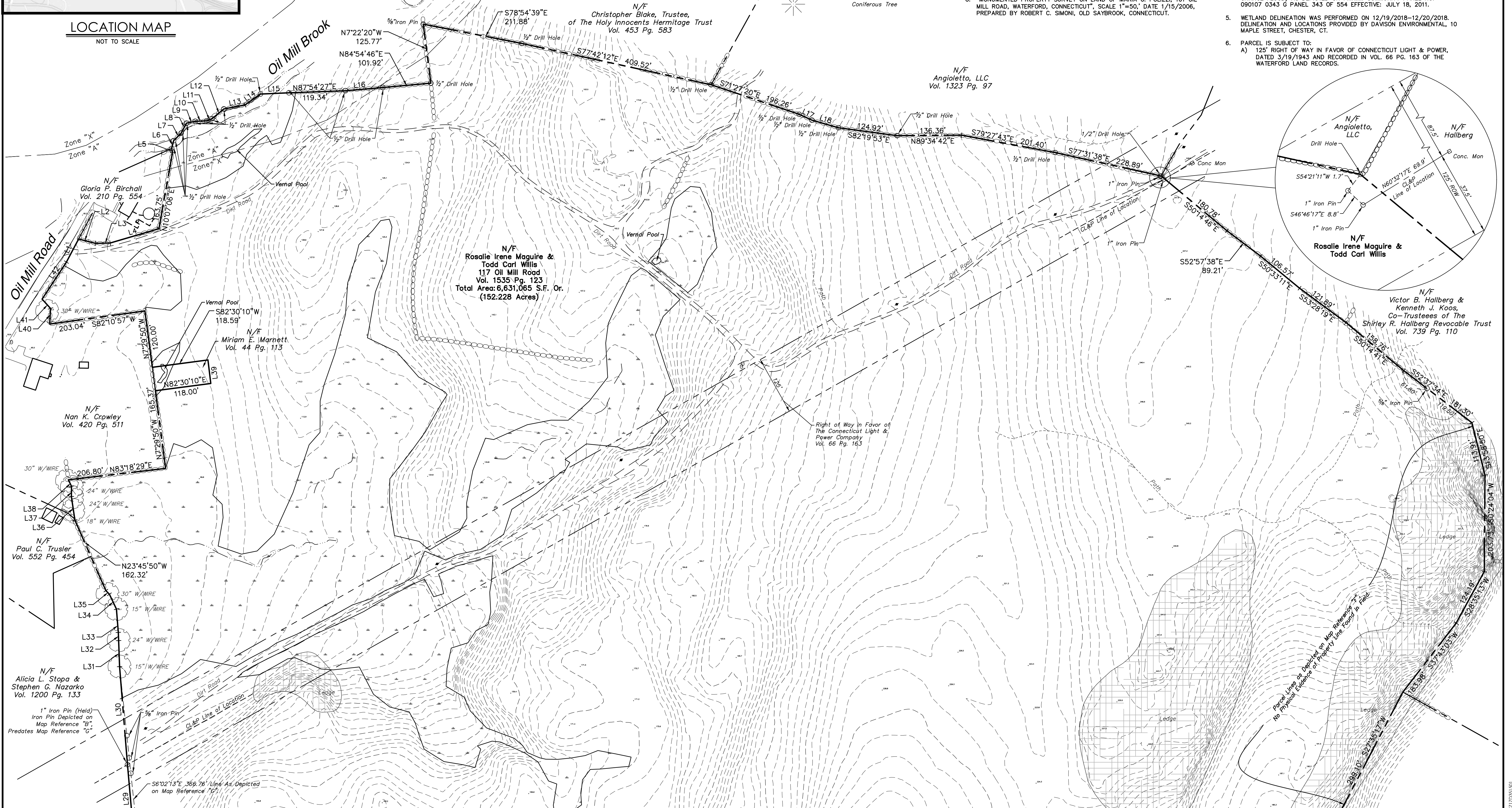
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Sheet of
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Project Number
42496.00



LOCATION MAP
NOT TO SCALE



LEGEND

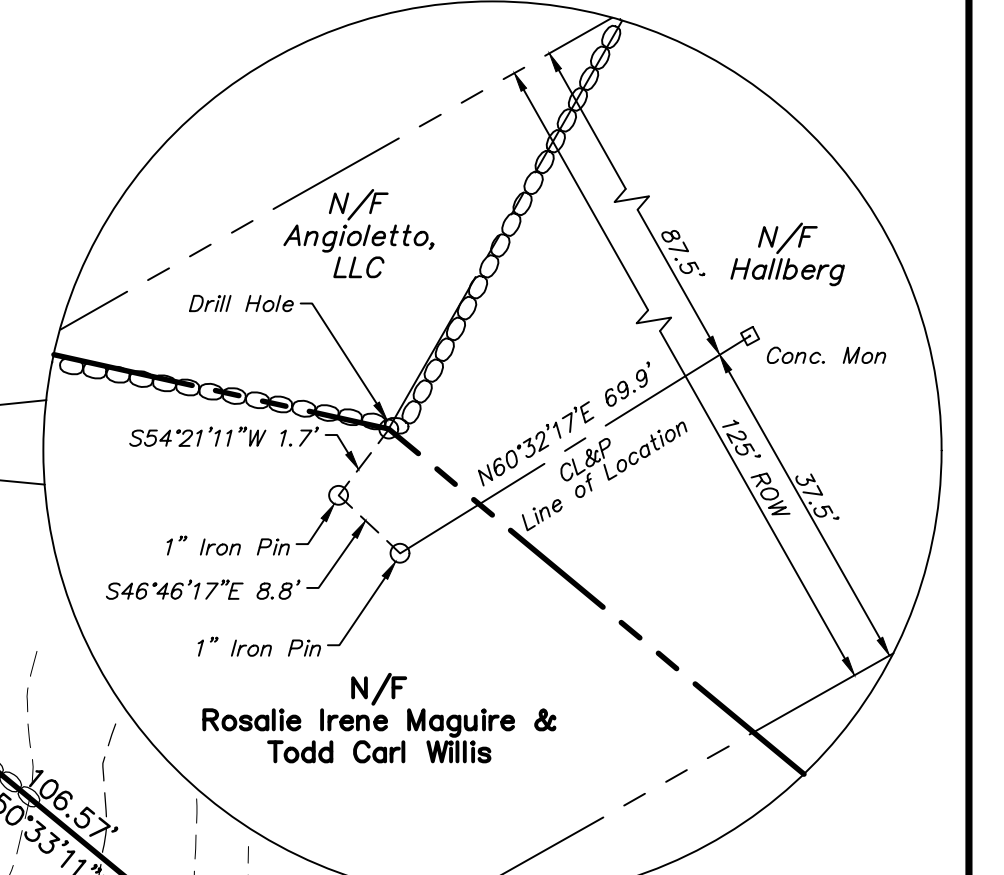
- Property Line
- Easement Line
- FEMA FIRM Zone Line
- Limit of Wetlands
- Stone Wall
- Fence
- Edge of Water
- Treeline
- Major Contour
- Minor Contour
- Transmission Utility Pole
- Deciduous Tree
- Coniferous Tree

MAP REFERENCES

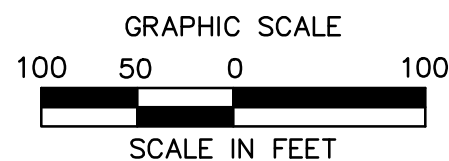
- "PLAN OF BARRETT HEIGHTS PARK, WATERFORD, NEW LONDON COUNTY, CONNECTICUT", SCALE 1"=100', DATE 10/1926, PREPARED BY K.H. HOLMES, NEW LONDON, CT.
- "LOCATION OF RIGHT OF WAY OF THE CONNECTICUT LIGHT & POWER COMPANY ACROSS THE PROPERTY OF SARAH S. HOLBROOK, TOWN OF WATERFORD COUNTY OF NEW LONDON, STATE OF CONNECTICUT", SCALE 1"=200', DATE 2/1943, SHEETS 1 & 2, MONTVILLE-FLANDERS LINE.
- "SURVEY OF PROPERTY ON OIL MILL ROAD, TOWN OF WALLINGFORD, CONN. BELONGING TO ESTATE OF ROBERT A. BRUBECK", DATE 9/1949, SCALE 1"=100', PREPARED BY ERNEST L. DESHEFY, NEW LONDON, CT.
- "PLAN OF SALTER PROPERTY, OIL MILL ROAD, WATERFORD, CONN", SCALE 1"=40', DATE 5/1956, PREPARED BY KENNETH H. HOLMES.
- "PLAT OF LANDS OF ANNIE G. KRAVCHUCK, GILEAD & OIL MILL ROADS, WATERFORD CONN.", SCALE 1"=100', DATE 5/1981, PREPARED BY ROBERT L. BUCHER, NEW LONDON, CT.
- "PROPERTY MAP PARCELS ABUTTING CLAM LANE AND FARGO ROAD, WATERFORD, CONNECTICUT, FOR: BERNHARD ASSOCIATES, NO. HAVEN, CT", SCALE 1"=100', DATE 4/7/1989, PREPARED BY CASCIO, BECHIR & ASSOCIATES, INC. NORTH HAVEN, CT.
- "MONUMENTED PROPERTY SURVEY ON LAND OF MARIA G. POLIZZI, 101 OIL MILL ROAD, WATERFORD, CONNECTICUT", SCALE 1"=50', DATE 1/15/2006, PREPARED BY ROBERT C. SIMONI, OLD SAYBROOK, CONNECTICUT.

GENERAL NOTES

- THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
 - THIS PLAN CONFORMS TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHICAL ACCURACY 1-3.
 - BOUNDARY DETERMINATION IS BASED UPON A FIRST SURVEY.
 - THE TYPE OF SURVEY PERFORMED IS A PROPERTY/TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT THE EXISTING CONDITIONS WITH RESPECT TO MONUMENTATION FOUND, STRUCTURES, EASEMENTS, ENCROACHMENTS, VISIBLE UTILITIES, ROADWAYS AND CONTOURS.
- NORTH ARROW AND BEARINGS REFER TO NAD 83 AND ARE BASED ON GPS OBSERVATIONS PERFORMED BY BL COMPANIES ON 2/15/2018.
- ELEVATIONS REFER TO NAVD 88 AND ARE BASED ON GPS OBSERVATIONS PERFORMED BY BL COMPANIES ON 2/15/2018.
- PARCEL IS LOCATED IN A FLOOD HAZARD AREA "X", (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD) WITH A PORTION OF PARCEL IN SPECIAL FLOOD HAZARD AREA "A", (AREAS SUBJECT TO THE 1% ANNUAL CHANCE FLOOD) AS DEPICTED ON F.I.R.M. COMMUNITY PANEL NO. 090107 0343 G PANEL 343 OF 554 EFFECTIVE: JULY 18, 2011.
- WETLAND DELINEATION WAS PERFORMED ON 12/19/2018-12/20/2018. DELINEATION AND LOCATIONS PROVIDED BY DAWSON ENVIRONMENTAL, 10 MAPLE STREET, CHESTER, CT.
- PARCEL IS SUBJECT TO:
 - 125' RIGHT OF WAY IN FAVOR OF CONNECTICUT LIGHT & POWER, DATED 3/19/1943 AND RECORDED IN VOL. 66 PG. 163 OF THE WATERFORD LAND RECORDS.



MATCHLINE ~ SEE SHEET 2 OF 2



TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ROBERT H. ROPER L.S. #18469

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE ABOVE NAMED LAND SURVEYOR.



355 Research Parkway
Meriden, CT 06450
(203) 630-1406
(203) 630-2615 Fax

ROSALIE IRENE MAGUIRE &
TODD CARL WILLIS
117 OIL MILL ROAD
WATERFORD, CONNECTICUT

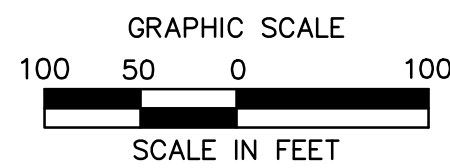
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2	Drawn	AV	
3	Reviewed	RHR	
4	Scale	1"=100'	
5	Project No.	17D3515	
6	Date	2/22/2018	
7	Field Book	519	
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9	Title	PROPERTY SURVEY	

Sheet No. 1 OF 2

BS-1

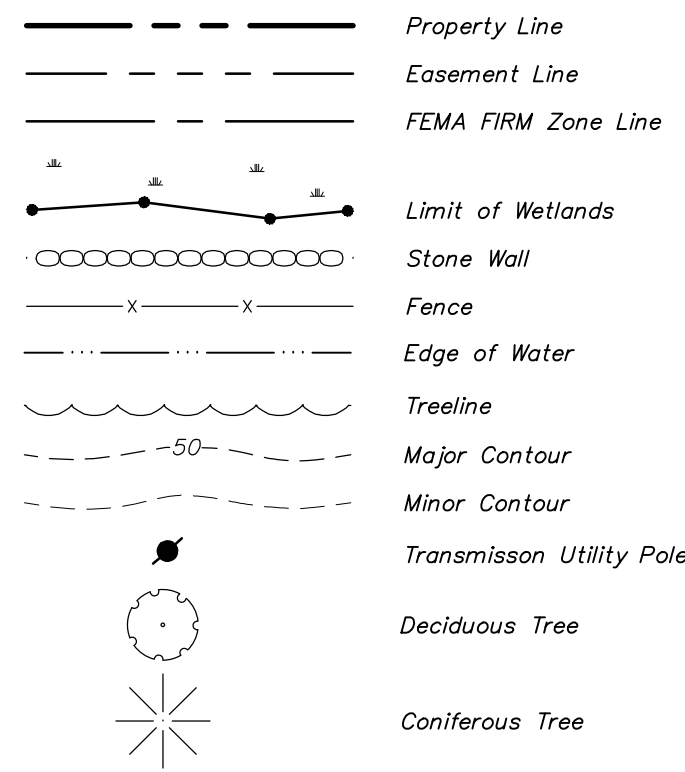
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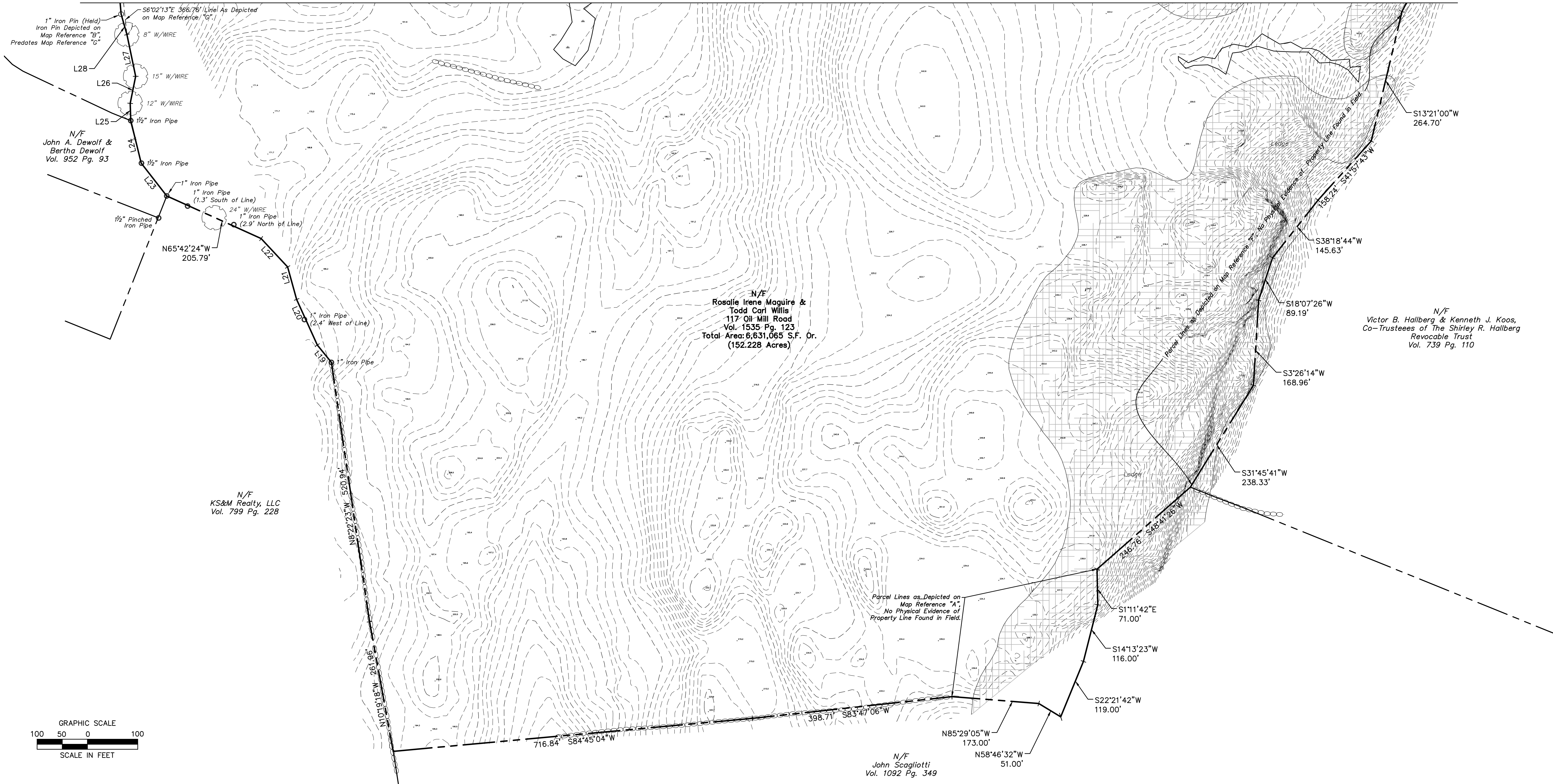


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L1	N 27° 59' 52" E	55.18	L15	N 87° 27' 40" E	60.38	L29	N 05° 02' 35" W	117.66
L2	S 75° 32' 39" E	36.59	L16	N 85° 03' 09" E	79.20	L30	N 04° 37' 15" W	207.69
L3	N 88° 48' 53" E	31.12	L17	S 65° 18' 56" E	29.37	L31	N 02° 01' 32" W	55.03
L4	N 73° 31' 18" E	107.42	L18	S 73° 57' 46" E	58.40	L32	N 02° 20' 19" W	17.34
L5	N 13° 15' 04" W	8.28	L19	N 39° 05' 54" W	44.40	L33	N 04° 38' 16" W	49.37
L6	N 14° 24' 24" E	17.08	L20	N 24° 21' 09" W	99.55	L34	N 25° 21' 29" W	34.74
L7	N 45° 11' 11" E	22.36	L21	N 15° 27' 19" W	66.91	L35	N 43° 52' 10" W	10.74
L8	N 27° 32' 22" E	23.84	L22	N 42° 58' 29" W	77.22	L36	N 08° 25' 41" W	50.50
L9	N 77° 52' 03" E	19.12	L23	N 37° 52' 55" W	82.77	L37	N 00° 39' 54" E	21.55
L10	N 88° 03' 07" E	24.45	L24	N 13° 49' 05" W	86.87	L38	N 25° 32' 45" W	15.38
L11	N 67° 30' 14" E	12.22	L25	N 01° 44' 11" W	34.34	L39	N 06° 49' 36" W	50.00
L12	N 50° 13' 40" E	32.18	L26	N 11° 25' 11" E	54.86	L40	N 03° 05' 11" E	33.00
L13	N 79° 16' 06" E	45.36	L27	N 11° 52' 16" W	84.79	L41	N 42° 00' 53" W	26.55
L14	N 54° 51' 09" E	39.98	L28	N 15° 50' 40" W	42.11	L42	N 33° 17' 06" E	93.49

LEGEND



MATCHLINE ~ SEE SHEET 1 OF 2



**ROSALIE IRENE MAGUIRE &
TODD CARL WILLIS**
117 OIL MILL ROAD
WATERFORD, CONNECTICUT

REVISIONS
No. Date Desc.

Surveyed AV/SB
Drawn AV
Reviewed RHR
Scale 1"=100'
Project No. 17D3515
Date 2/22/2018
Field Book 519
CAD File: BS17D351501

Title
**PROPERTY
SURVEY**

Sheet No. 2 OF 2

BS-1

Xref (g): \\NY170351501\100\scale - X170351501