

KERN PARK IMPROVEMENTS

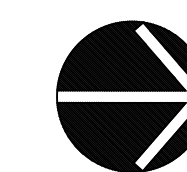
Primrose Lane

Bristol, Connecticut



Project Site

NTS



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Prepared by:



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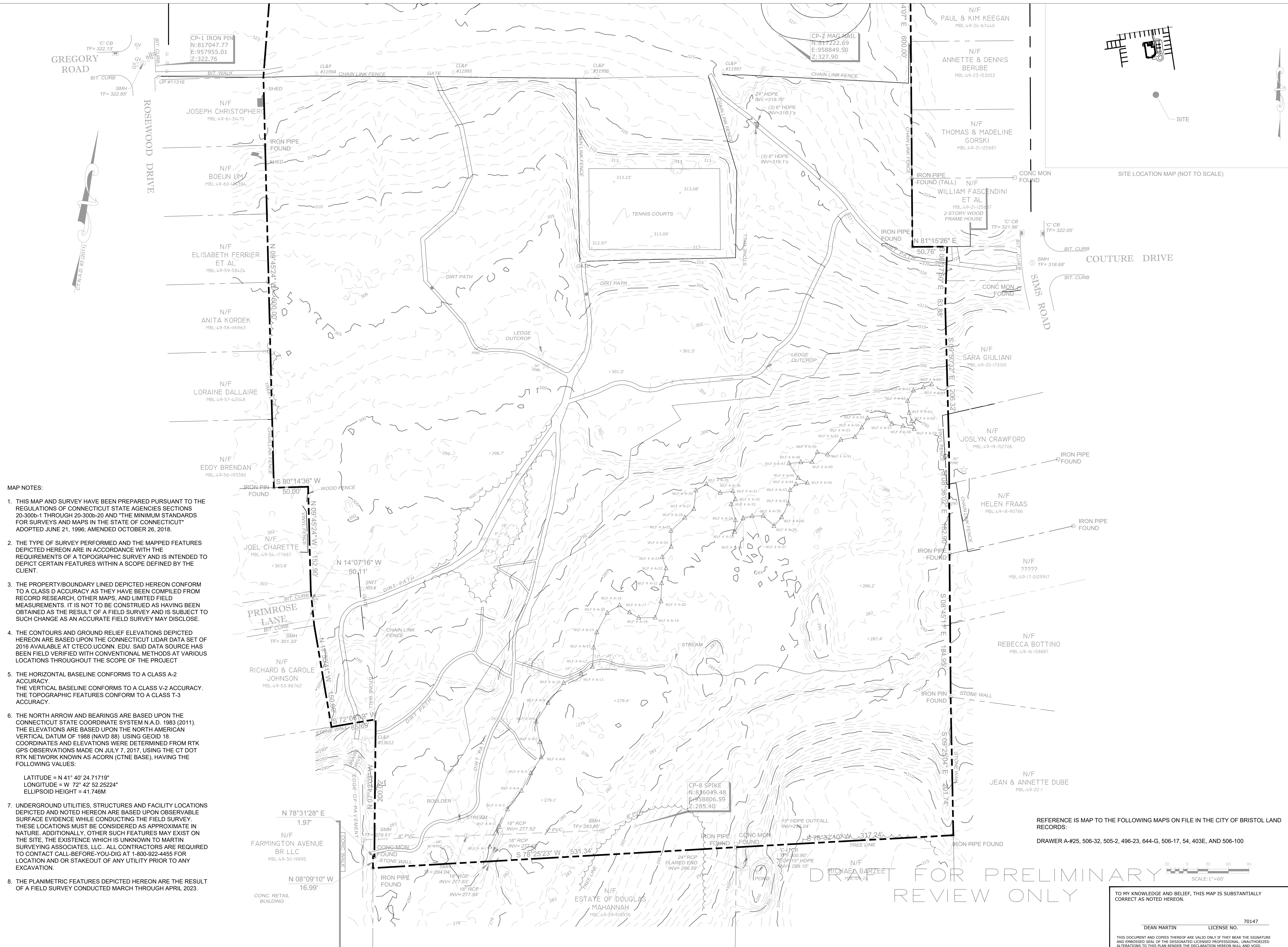
ENGAGE | DESIGN | ADVANCE

BID/CONSTRUCTION DOCUMENTS

7.05.2023

Prepared for The City of Bristol, Connecticut

Superintendent of Parks, Recreation, Youth, and Community Services
Director: Joshua Medeiros



- MAP NOTES:**
- THIS MAP AND SURVEY HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND "THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ADOPTED JUNE 21, 1996; AMENDED OCTOBER 26, 2018.
 - THE TYPE OF SURVEY PERFORMED AND THE MAPPED FEATURES DEPICTED HEREON ARE IN ACCORDANCE WITH THE REQUIREMENTS OF A TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT CERTAIN FEATURES WITHIN A SCOPE DEFINED BY THE CLIENT.
 - THE PROPERTY/BOUNDARY LINED DEPICTED HEREON CONFORM TO A CLASS D ACCURACY AS THEY HAVE BEEN COMPILED FROM RECORD RESEARCH, OTHER MAPS, AND LIMITED FIELD MEASUREMENTS. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
 - THE CONTOURS AND GROUND RELIEF ELEVATIONS DEPICTED HEREON ARE BASED UPON THE CONNECTICUT LIDAR DATA SET OF 2016 AVAILABLE AT CTGeo.UCONN. EDU. SAID DATA SOURCE HAS BEEN FIELD VERIFIED WITH CONVENTIONAL METHODS AT VARIOUS LOCATIONS THROUGHOUT THE SCOPE OF THE PROJECT
 - THE HORIZONTAL BASELINE CONFORMS TO A CLASS A-2 ACCURACY. THE VERTICAL BASELINE CONFORMS TO A CLASS V-2 ACCURACY. THE TOPOGRAPHIC FEATURES CONFORM TO A CLASS T-3 ACCURACY.
 - THE NORTH ARROW AND BEARINGS ARE BASED UPON THE CONNECTICUT STATE COORDINATE SYSTEM N.A.D. 1983 (2011). THE ELEVATIONS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) USING GEOID 18. COORDINATES AND ELEVATIONS WERE DETERMINED FROM RTK GPS OBSERVATIONS MADE ON JULY 7, 2017, USING THE CT DOT RTK NETWORK KNOWN AS ACORN (CTNE BASE), HAVING THE FOLLOWING VALUES:
 LATITUDE = N 41° 40' 24.71719"
 LONGITUDE = W 72° 42' 52.25224"
 ELLIPSOID HEIGHT = 41.746M
 - UNDERGROUND UTILITIES, STRUCTURES AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON ARE BASED UPON OBSERVABLE SURFACE EVIDENCE WHILE CONDUCTING THE FIELD SURVEY. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE WHICH IS UNKNOWN TO MARTIN SURVEYING ASSOCIATES, LLC. ALL CONTRACTORS ARE REQUIRED TO CONTACT CALL-BEFORE-YOU-DIG AT 1-800-922-4455 FOR LOCATION AND OR STAKEOUT OF ANY UTILITY PRIOR TO ANY EXCAVATION.
 - THE PLANIMETRIC FEATURES DEPICTED HEREON ARE THE RESULT OF A FIELD SURVEY CONDUCTED MARCH THROUGH APRIL 2023.

LEGEND:

○ IRON PIN (FOUND)	□ SIGN
● Rebar/Drill Hole (To Be Set)	○ POST
□ MONUMENT (FOUND)	○ LIGHT POLE
○ MANHOLE	○ GUY ANCHOR
○ DRAINAGE MANHOLE	○ UTILITY POLE
○ SANITARY MANHOLE	○ WATER GATE
○ ELEC. MANHOLE	○ WATER METER
○ TELE. MANHOLE	○ GAS VALVE
○ "C" CATCH BASIN	○ GAS METER
□ "C-L" CATCH BASIN	○ TRANSFORMER
○ DECIDUOUS TREES	○ ELEC. METER
○ EVERGREEN TREES	○ MAIL BOX
○ SHRUB/BUSH	○ HAND HOLE
○ FLAG POLE	○ BUTTON BOX
○ TRAFFIC CONTROL BOX	○ A.C. UNIT
	○ TRAFFIC LIGHT POLE

Martin
 Surveying Associates, LLC
 201 CHRISTIAN LANE BERLIN, CT 06037
 860-832-9328
 WWW.MARTINSURVEY.COM

REVISIONS:

**TOPOGRAPHIC SURVEY
 "KERN PARK"
 PORTION OF
 MAP: 49 BLOCK: 8 LOT: 3
 LAND OF
 CITY OF BRISTOL
 160 IVY DRIVE
 BRISTOL, CONNECTICUT**

REFERENCE IS MAP TO THE FOLLOWING MAPS ON FILE IN THE CITY OF BRISTOL LAND RECORDS:
 DRAWER A-#25, 506-32, 505-2, 496-23, 644-G, 506-17, 54, 403E, AND 506-100

MSA PROJECT NO: 23-012	SCALE: 1"=60'	DRAWN BY: G.S.D.
DATE: 2023-04-11	DATE: 2023-04-11	CHECKED BY: D.G.M.
		SHEET:
		1 OF 1

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

DEAN MARTIN LICENSE NO. 70147

THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE SIGNATURE AND EMBOSSED SEAL OF THE DESIGNATED LICENSED PROFESSIONAL, UNAUTHORIZED ALTERATIONS TO THIS PLAN RENDER THE DECLARATION HEREON NULL AND VOID.

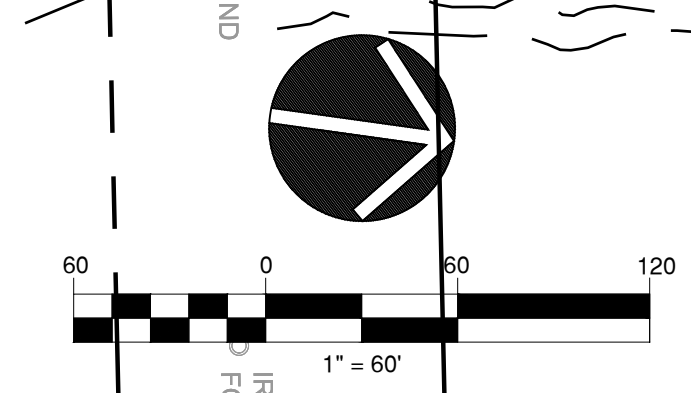
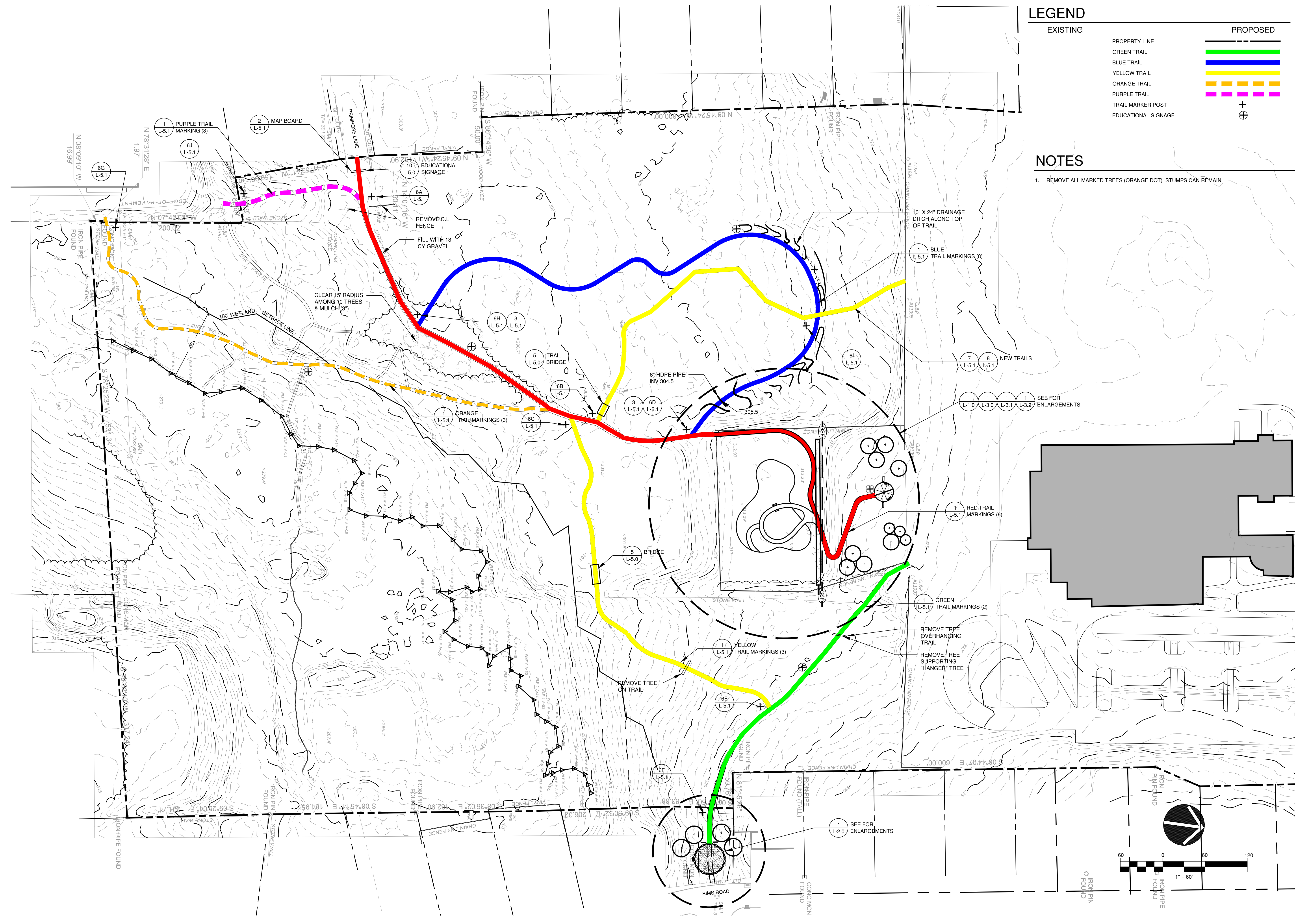
DRAFT FOR PRELIMINARY REVIEW ONLY

LEGEND

EXISTING	PROPOSED
PROPERTY LINE	
GREEN TRAIL	
BLUE TRAIL	
YELLOW TRAIL	
ORANGE TRAIL	
PURPLE TRAIL	
TRAIL MARKER POST	
EDUCATIONAL SIGNAGE	

NOTES

- REMOVE ALL MARKED TREES (ORANGE DOT) STUMPS CAN REMAIN

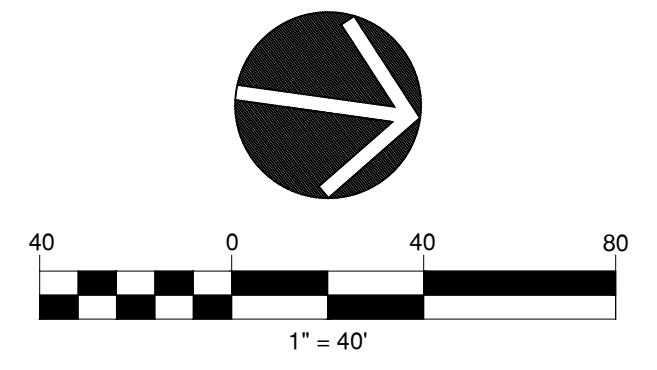
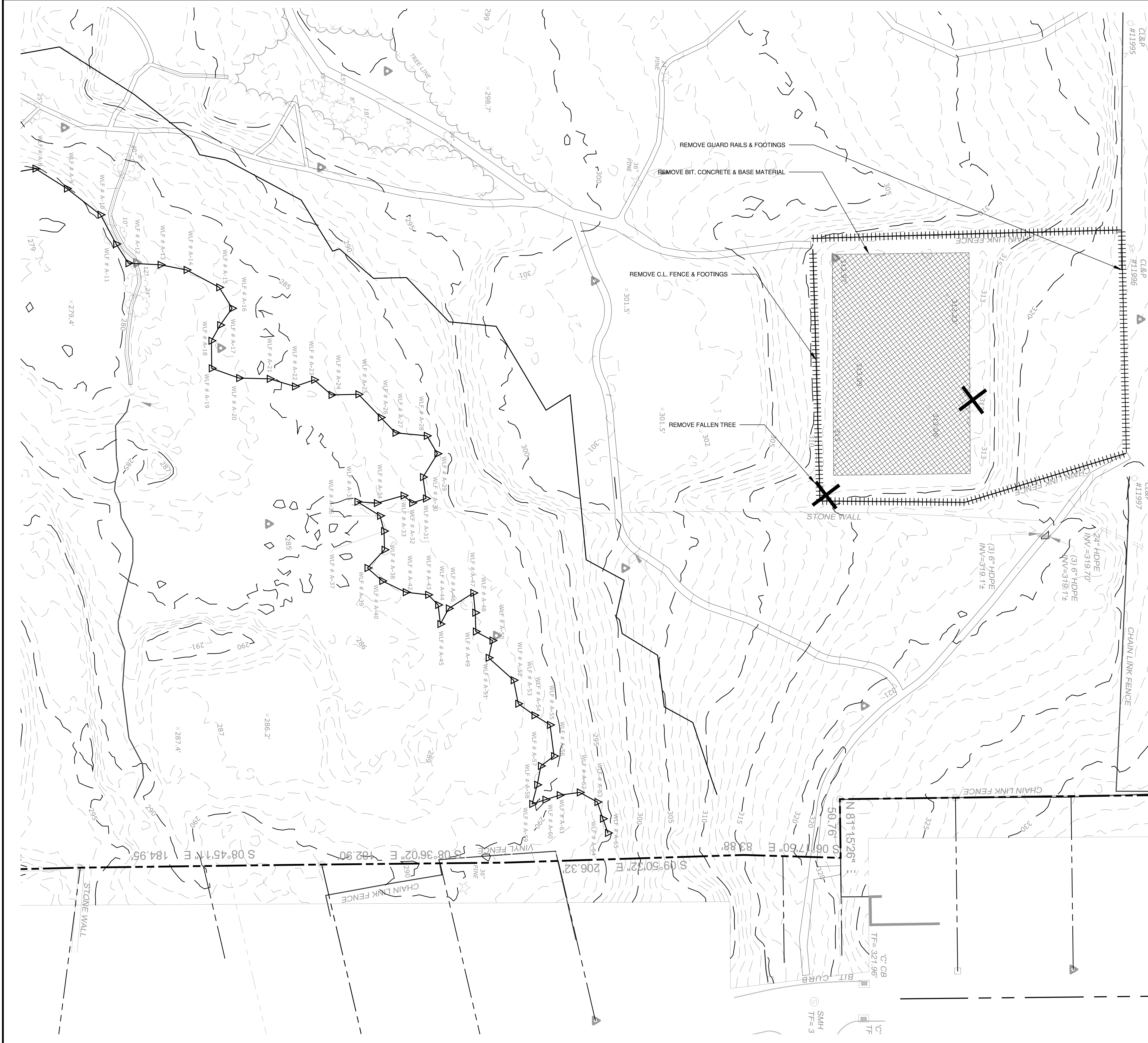


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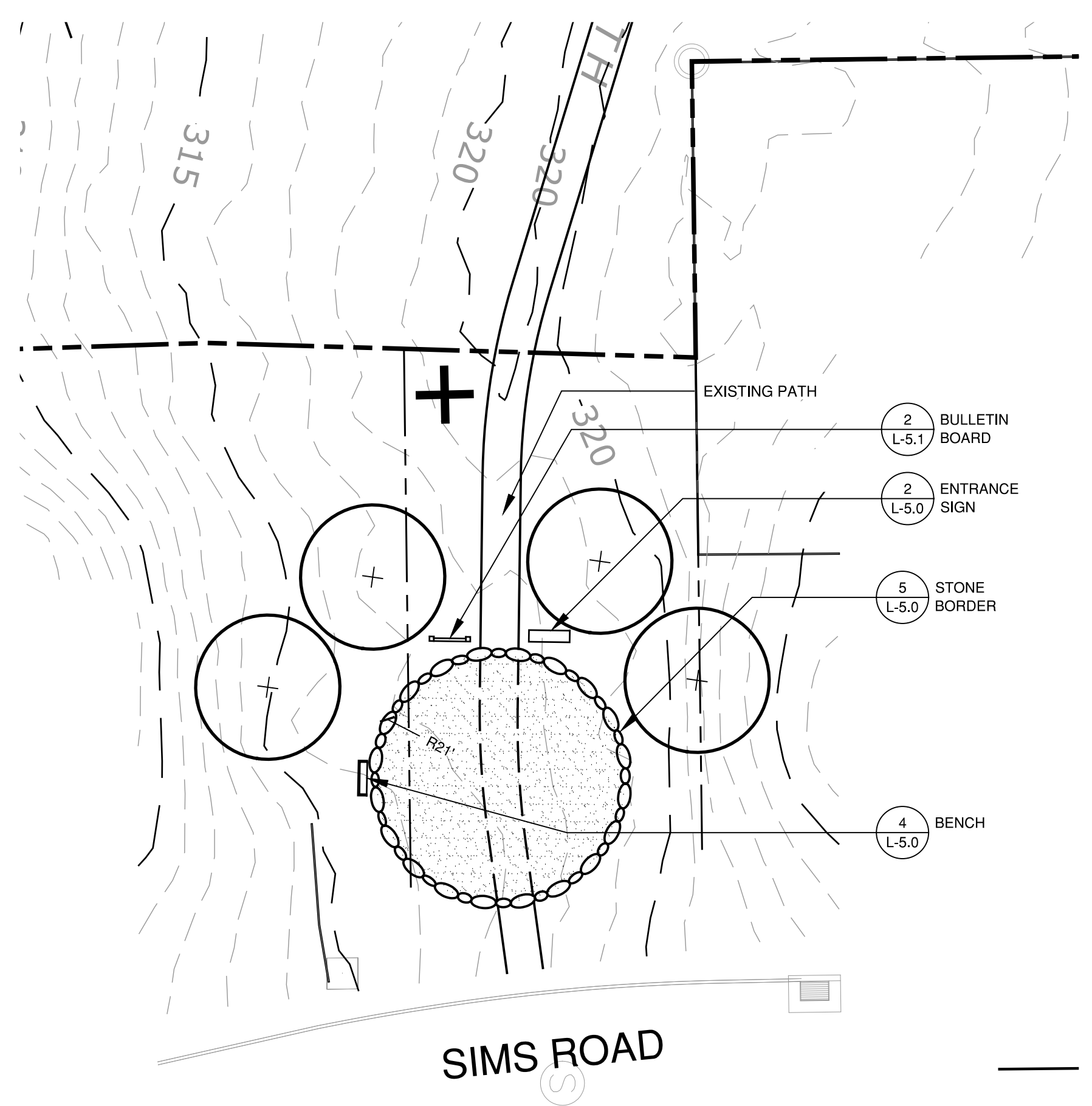
EXISTING	
	PROPERTY LINE
	BUILDING
	CURB
	CONTOUR 1 FT
	CONTOUR 5 FT
	SPOT GRADE
	TREE TO REMAIN
	TREE TO BE REMOVED
	SITE ELEMENT TO BE REMOVED
	SITE ELEMENT TO BE REMOVED

DEMOLITION NOTES

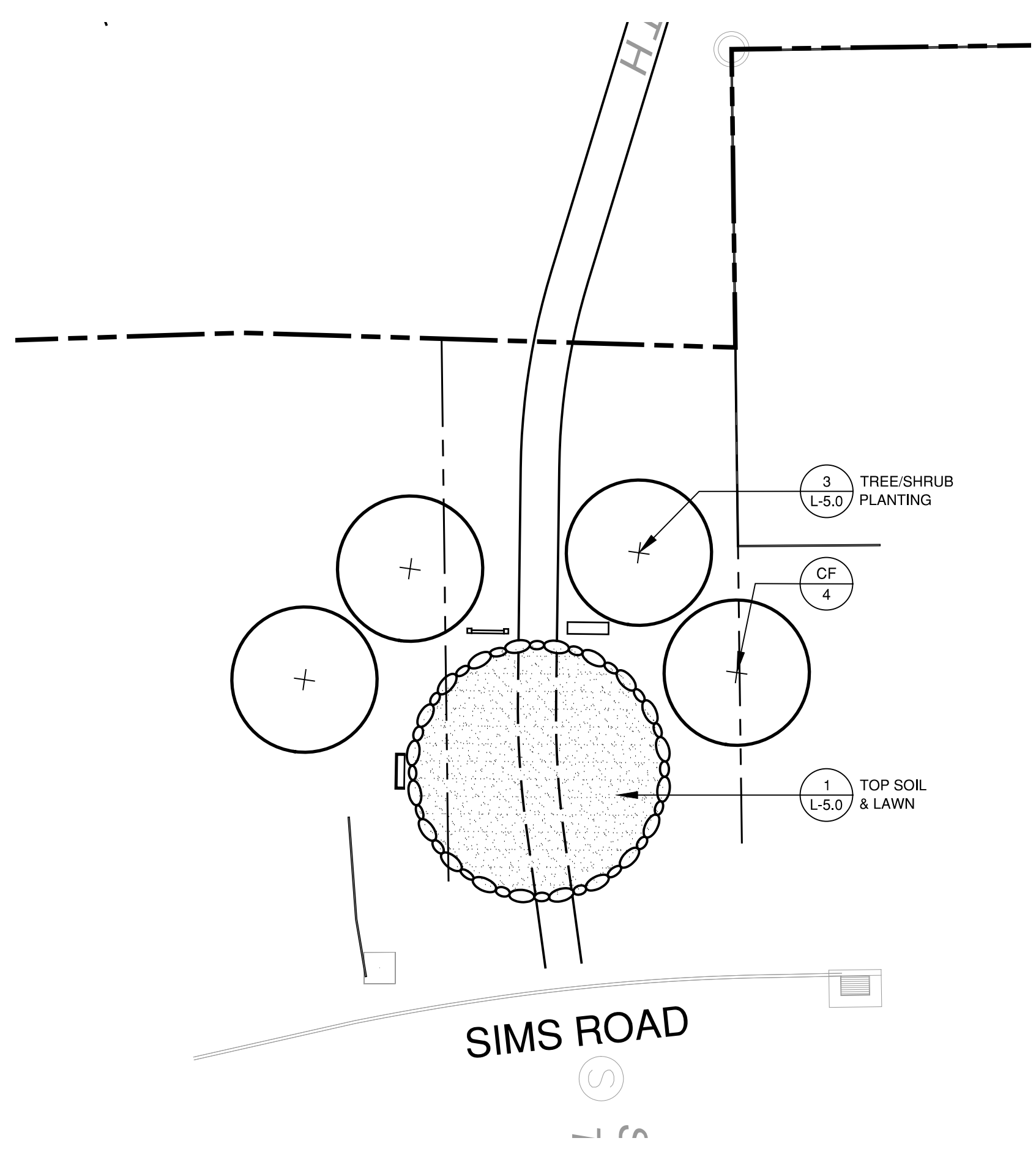
- CONTRACTOR SHALL STRIP AND STORE TOPSOIL IN ALL AREAS TO BE DISTURBED OR REGRADED.
- ALL MATERIAL TO BE REMOVED SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR AWAY FROM THE SITE OR DELIVERED AS DIRECTED BY THE OWNER.
- LOCATION OF ALL UTILITIES ARE SHOWN DIAGRAMMATICALLY & MAY BE INCOMPLETE. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DONE BY THIS WORK SHALL BE REPAIRED BY THE CONTRACTOR.
- PROTECTION OF ALL EXISTING TREES TO REMAIN SHALL BE A PRIORITY. INSTALL TREE PROTECTION AS INDICATED. DO NOT STOCKPILE, PARK OR PERFORM ANY MECHANICAL OPERATIONS WITHIN THE DRIPLINE OF EXISTING TREES AS INDICATED IN THE DETAILS. NO STORAGE OF MATERIALS OR SOIL SHALL BE ALLOWED IN THESE AREAS. ALL FILL AND EXCAVATION REQUIRED WITHIN THE DRIPLINE OF ALL EXISTING TREES TO REMAIN SHALL BE COMPLETED BY HAND UNLESS OTHERWISE APPROVED BY LANDSCAPE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING TREES AND VEGETATION. DAMAGE TO VEGETATION SHALL BE REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS BY THE CONTRACTOR.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 1.800.322.4455. THE RESPECTIVE UTILITY COMPANIES AND LOCAL AUTHORITIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES. ANY COSTS INCURRED BY THE CONTRACTOR AS A RESULT OF FAILURE TO CONTACT PROPER AUTHORITIES SHALL BE BORN BY THE CONTRACTOR.
- OWNER'S REPRESENTATIVE SHALL BE CONSULTED BEFORE ANY WORK SHALL COMMENCE.
- PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FROM ANY UTILITY COMPANY OR OTHER GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE WORK.
- CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES.
- CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO HIS CONTRACT OPERATIONS.
- CONTRACTOR SHALL PROTECT AND SUSTAIN IN NORMAL SERVICE ALL EXISTING UTILITIES, STRUCTURES, EQUIPMENT, ROADWAYS AND DRIVEWAYS.
- CONTRACTOR SHALL MAINTAIN PROPER SIGNS, BARRICADES, AND FENCES TO PROPERLY PROTECT THE WORK EQUIPMENT, PERSONS AND PROPERTY FROM DAMAGE.
- ALL ITEMS REQUIRING REMOVAL SHALL BE REMOVED TO FULL DEPTH TO INCLUDE BASE MATERIAL AND FOOTINGS OR FOUNDATIONS AS APPLICABLE, AND LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR.



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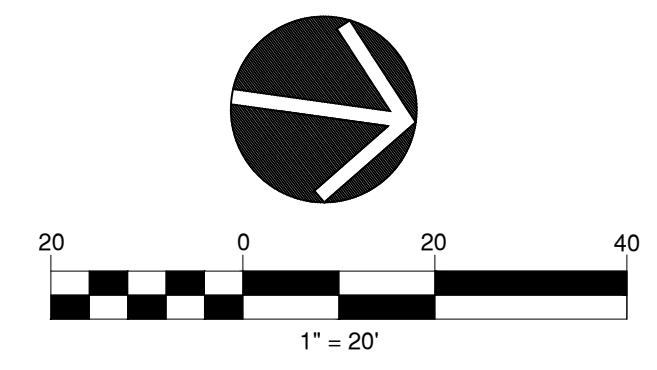


LAYOUT PLAN



PLANTING PLAN

PLANT SCHEDULE						
CATEGORY	SYM.	NO.	BOTANICAL NAME	COMMON NAME	SIZE	COND.
DECIDUOUS TREES	CF	4	CORNUS FLORIDA DOGWOOD	FLOWERING DOGWOOD	24" - 30" HT.	CONTAINER

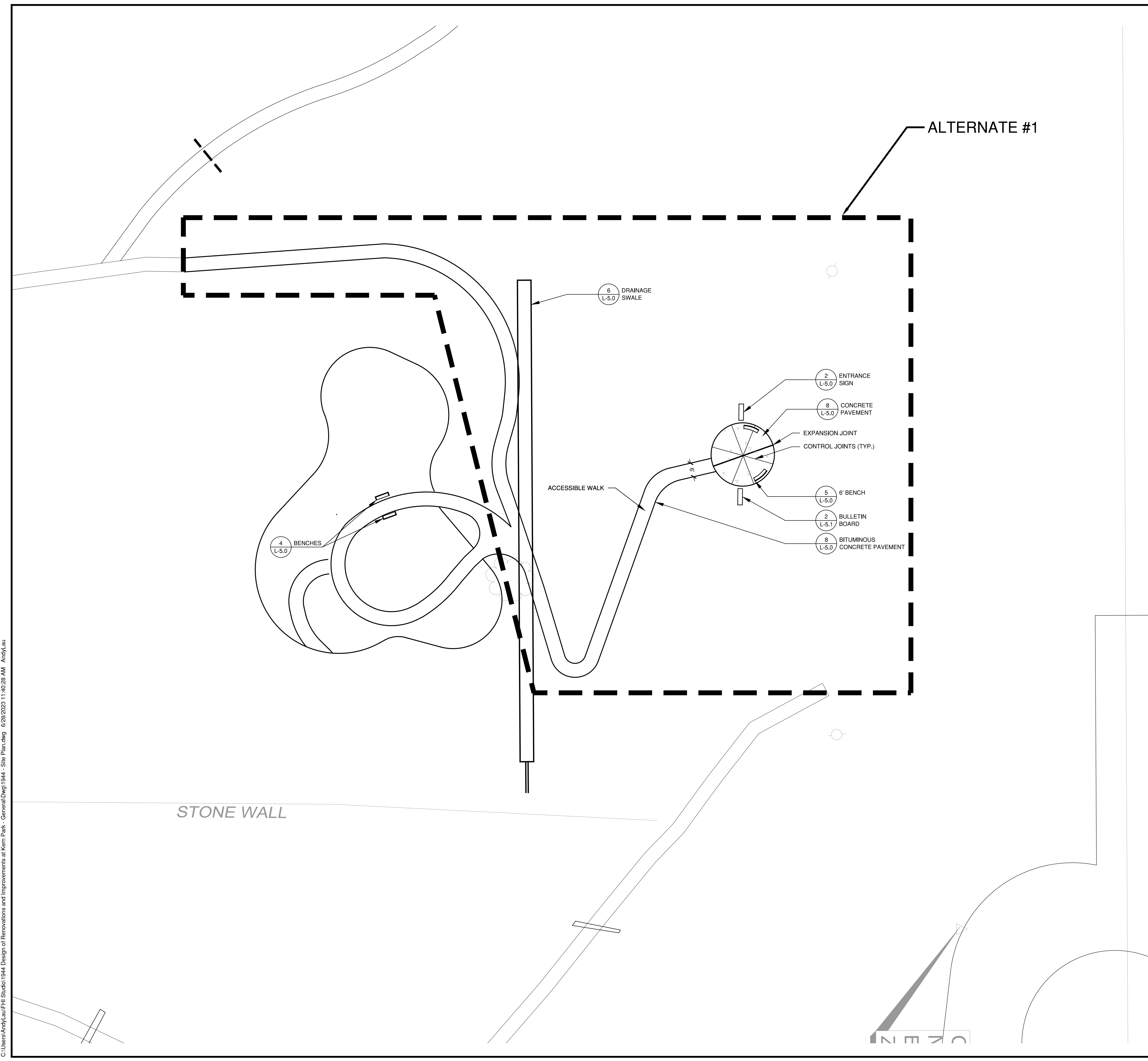
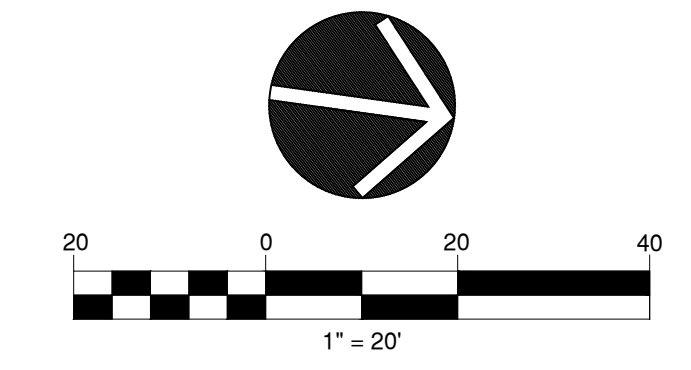


LEGEND

EXISTING	PROPOSED
PROPERTY LINE	CHAIN LINK FENCE
CHAIN LINK FENCE	ORNAMENTAL FENCE
ORNAMENTAL FENCE	BITUMINOUS PAVEMENT
BITUMINOUS PAVEMENT	CONCRETE PAVEMENT
CONCRETE PAVEMENT	SIGN
SIGN	BENCH
BENCH	DETAIL SHEET 1 L-5.0 DETAIL NAME

LAYOUT NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL STATE, LOCAL AND FEDERAL REGULATIONS.
2. MATERIALS AND CONSTRUCTION PROCEDURES SHALL COMPLY WITH CT DOT FORM 816/817 AND THE CITY/TOWN OF ????????? SPECIFICATIONS.
3. CONTRACTOR TO SECURE ALL NECESSARY TRADE PERMITS.
4. NEW PAVEMENT TO MEET LINE & GRADE OF EXISTING PAVEMENTS.
5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONSTRUCTION ACTIVITIES.
6. LOAM AND SEED ALL DISTURBED AREAS NOT COVERED BY OTHER IMPROVEMENTS.
7. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED.
8. ALL LOCATIONS WHERE EXISTING CURBING, BITUMINOUS CONCRETE ROADWAY OR CONCRETE ROADWAY OR CONCRETE SIDEWALK ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO PROVIDE A CLEAN, SMOOTH EDGE. TACK COAT EXPOSED EDGES OF EXISTING CONCRETE PRIOR TO PLACEMENT OF NEW BITUMINOUS CONCRETE PAVEMENT.
9. FIELD ADJUSTMENTS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE AND APPROPRIATE MUNICIPAL OFFICIALS PRIOR TO CONSTRUCTION.
10. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE VERTICAL AND HORIZONTAL POSITION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL CONTROL DUST CAUSED BY HIS OPERATIONS BY APPLYING WATER OR DUST PALLIATIVE, OTHER THAN CALCIUM CHLORIDE.
12. CONTRACTOR SHALL CONTROL NOISE TO AS GREAT AN EXTENT AS POSSIBLE. ALL POWER EQUIPMENT USED DURING CONSTRUCTION SHALL BE EQUIPPED WITH MUFFLERS.
13. MANUFACTURED ITEMS SHALL BE INSTALLED, CONNECTED AND CLEANED ACCORDING TO THE MANUFACTURERS DIRECTIONS.
14. PRIOR TO PROJECT CLOSE-OUT, CONTRACTOR SHALL REMOVE ALL DEBRIS AND EXCESS MATERIALS FROM SITE. ALSO, ANY DAMAGE TO FIELD OR FACTORY APPLIED FINISHES SHALL BE REPAIRED.
15. EXPANSION AND SCORE JOINTS FOR NEW CONCRETE WALKS SHALL BLEND TO MATCH EXISTING PATTERNS. CONTRACTOR TO ARRANGE TIMELY ON-SITE CONFERENCES WITH LANDSCAPE ARCHITECT TO APPROVE LAYOUT OF JOINT PATTERNS.
16. PROVIDE EXPANSION JOINTS FOR NEW CONCRETE PAVING AT ALL CURBS, TREE GRATES, BUILDING WALLS, SITE WALLS, STAIRS, LIGHT POLE BASES, MANHOLES, GRATES/VAULTS, EXISTING CONCRETE PAVING, STOP LIGHTS, FIRE HYDRANTS AND ALL OTHER FIXED MATERIALS. MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS SHALL NOT EXCEED 25 FEET.
17. A DIGITAL CAD FILE CAN BE PROVIDED TO THE CONTRACTOR FOR THE LAYOUT OF SITE IMPROVEMENTS IN THE FIELD.



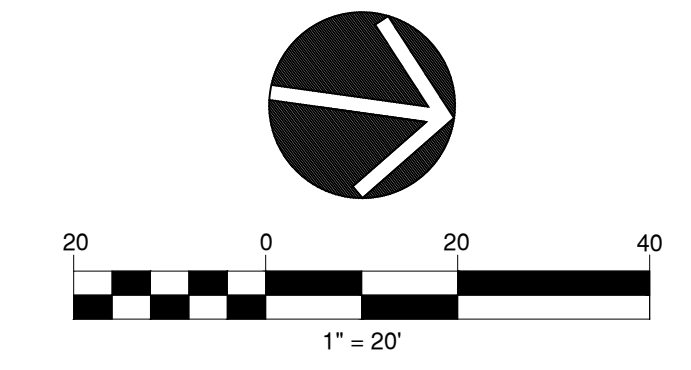
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LEGEND

EXISTING	PROPOSED
	PROPERTY LINE
	YARD LINE
	CONTOUR 1 FT
	CONTOUR 5 FT
	SPOT GRADE
	FLOW ARROW
	FLUSH CONDITION
	ACCESSIBLE ROUTE
	YELLOW TRAIL
	GREEN TRAIL
	PURPLE TRAIL

GRADING AND UTILITY NOTES

1. PROPOSED GRADES INDICATE INTENT. THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS AS REQUIRED TO MEET FIELD CONDITIONS.
2. WHERE FIELD CONDITIONS CALL FOR ON-SITE ADJUSTMENTS OF FINISHED GRADES, THE OWNER'S REPRESENTATIVE SHALL MAKE THE FINAL DETERMINATION.
3. CONTRACTOR TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE JOB AND BE RESPONSIBLE FOR THE SAME. NOTIFY SITE PLANNER OF DISCREPANCIES PRIOR TO BEGINNING WORK.
4. EROSION CONTROL FABRIC TO BE USED ON ALL SLOPES GREATER THEN 3:1.
5. STRIP AND STOCKPILE TOPSOIL FOR REUSE ON SITE.
6. PITCH ALL WALKS AT 2% CROSS SLOPE UNLESS OTHERWISE NOTED.
7. ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE.
8. ALL EXISTING UTILITY LINES TO BE ABANDONED SHALL BE ABANDONED ACCORDING TO UTILITY COMPANY REQUIREMENTS.
9. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE STANDARDS.
10. ALL EXCESS MATERIAL, EXCEPT TOPSOIL, SHALL BE LEGALLY DISPOSED OF OUTSIDE THE PROJECT LIMITS.
11. REFERENCE IS MADE IN THESE DOCUMENTS TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION. FORM 816/817 AND SUPPLEMENTS THERETO.
12. DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S OR ANY OF HIS SUBCONTRACTOR'S ACTIVITIES DURING THE CONSTRUCTION PROCESS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING DURING THE EXECUTION OF HIS WORK.
14. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS DEVELOPED FROM THE BEST AVAILABLE INFORMATION. THE ACTUAL LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF EXCAVATION ACTIVITIES.
15. ACCESS AND UTILITIES TO EXISTING FACILITIES MUST BE MAINTAINED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR MUST MAINTAIN SUFFICIENT TRAVEL LANE(S), APPROVED BY THE OWNER, TO ENABLE ALL EMERGENCY VEHICLES TO ACCESS THE ENTIRE PROJECT SITE.
16. CONTRACTOR TO VERIFY THAT ALL EXISTING UTILITIES TO BE REUSED ARE FUNCTIONAL.



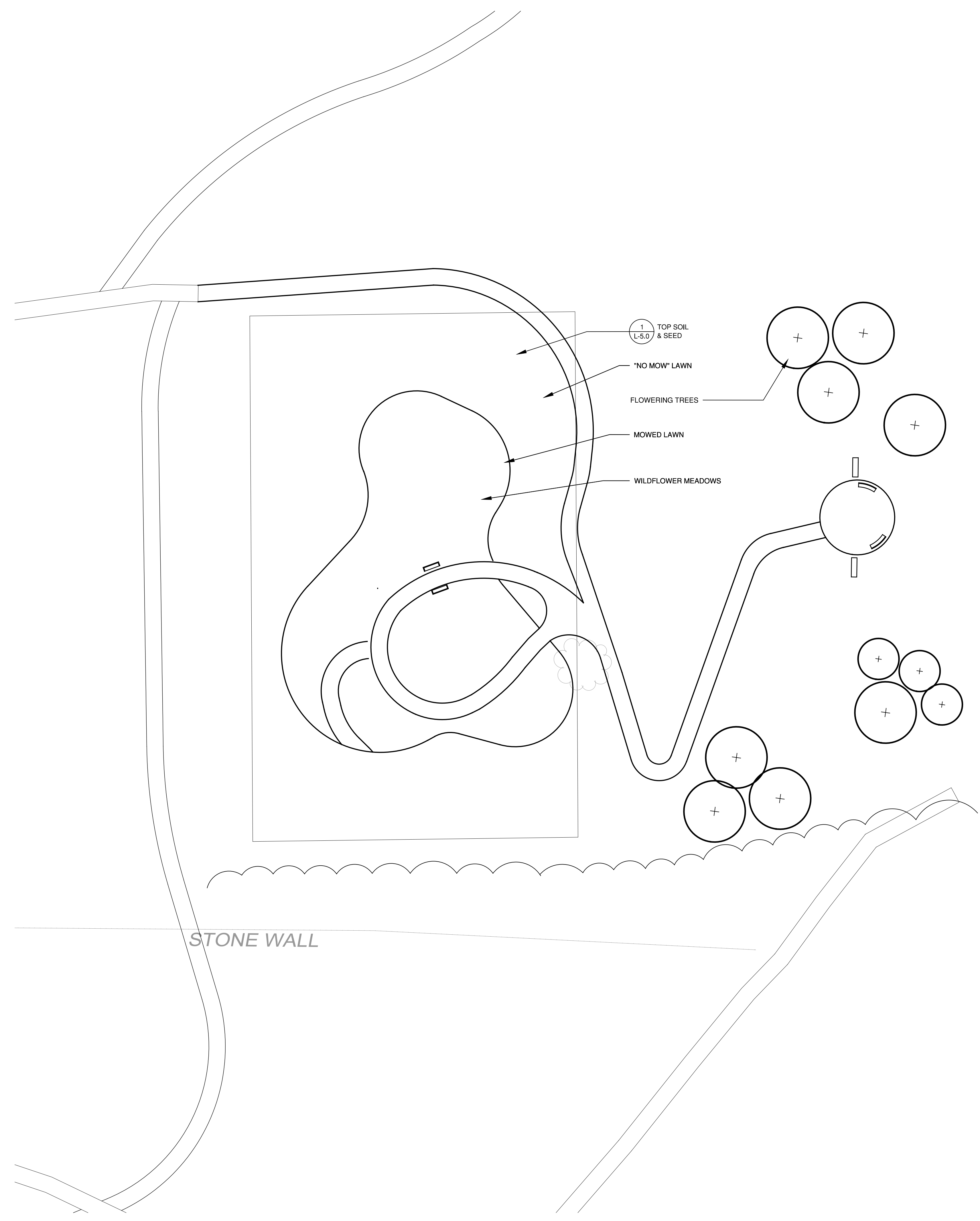
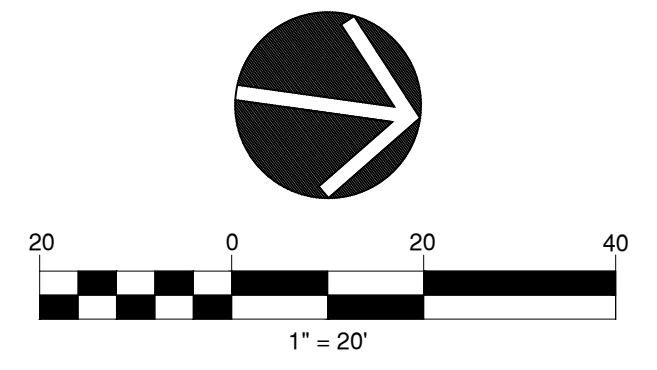
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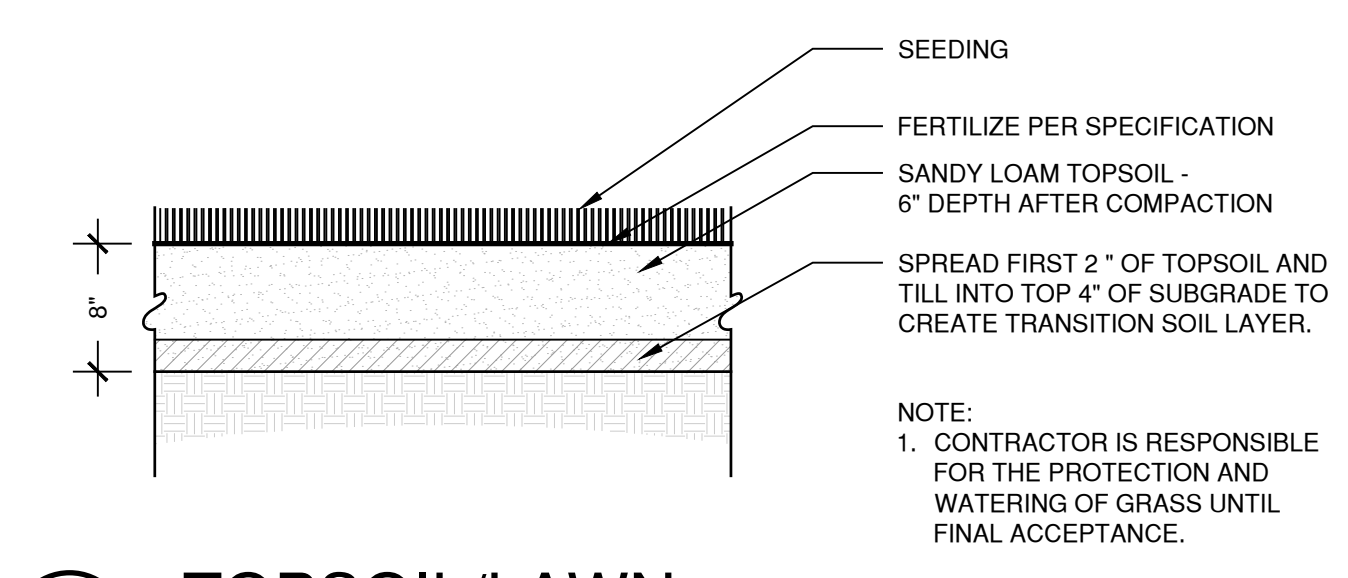
LEGEND

EXISTING		PROPOSED
	BUILDING	
	DECIDUOUS TREE	
	EVERGREEN TREE	
	FLOWERING TREE	
	DECIDUOUS SHRUBS	
	EVERGREEN SHRUBS	
	LAWN	

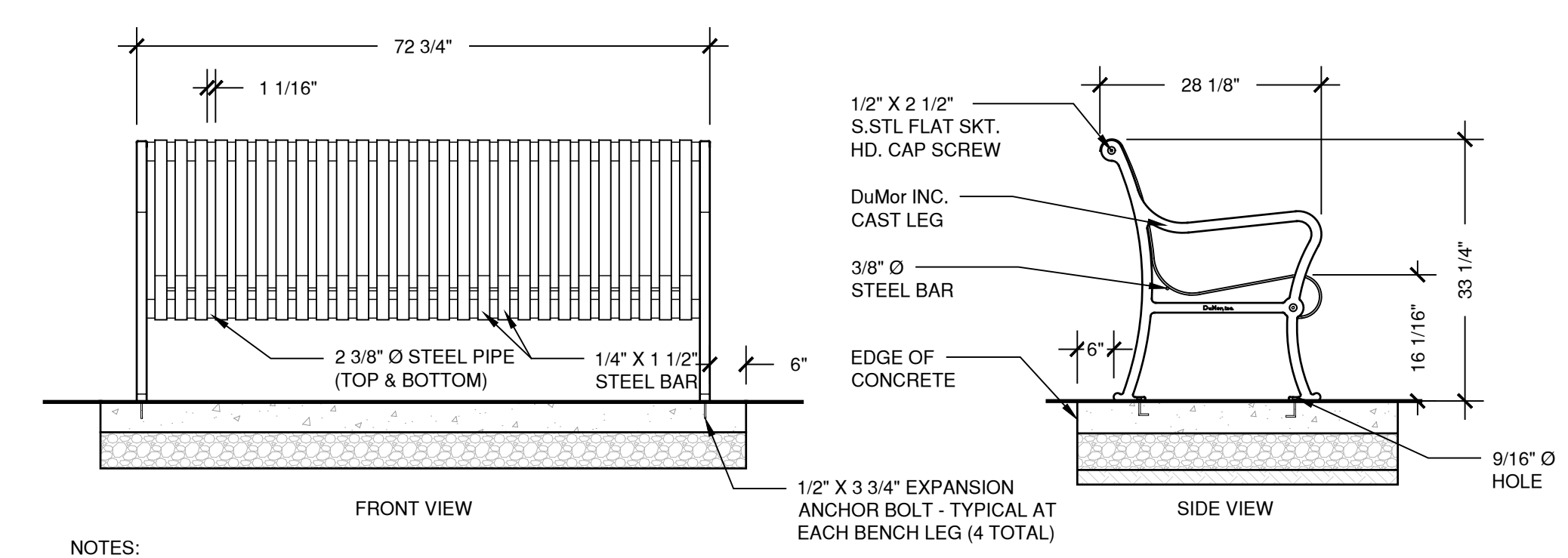
PLANTING NOTES

1. ALL PLANTING MATERIAL TO BE NURSERY GROWN STOCK SUBJECT TO APPLICABLE A.A.N. STANDARDS.
2. THE CONTRACTOR SHALL SUPPLY ALL PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND LISTED IN THE PLANT LIST. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT LIST AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER NUMBER SHALL APPLY.
3. ALL PLANTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION AND SHALL BE LOCATED AT THE GROWING SITE BY THE CONTRACTOR, FOR THE APPROVAL OF THE LANDSCAPE ARCHITECT. ANY INSTALLATIONS WHICH WERE NOT APPROVED BY THE LANDSCAPE ARCHITECT AND WHICH ARE SUBSEQUENTLY REQUESTED TO BE REMOVED, WILL BE DONE AT THE CONTRACTORS EXPENSE.
4. PRECISE LOCATION OF ITEMS NOT DIMENSIONED ON THE PLAN ARE TO BE FIELD STAKED BY THE CONTRACTOR AND SHALL BE SUBJECT TO THE REQUIREMENTS SPECIFIED IN THE PREVIOUS NOTE.
5. ALL SHRUB AND TREE PITS SHALL BE MULCHED TO A DEPTH OF 3" WITH SHREDDED PINE BARK MULCH.
6. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGED VEGETATION AND SHALL REPLACE OR REPAIR ANY DAMAGE, AT HIS OWN EXPENSE.
7. ALL SHRUB AND GROUND COVER PLANTING AREAS SHALL HAVE CONTINUOUS BEDS OF TOPSOIL, 18" DEEP.
8. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES IN THE FIELD. WHERE PLANT MATERIAL MAY INTERFERE WITH UTILITIES, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT TO COORDINATE THEIR INSTALLATION.
9. PLANTINGS INSTALLED IN THE DRY SUMMER MONTHS AND/OR LAWN SEEDED OUT OF SPRING OR FALL PERIODS, IF ALLOWED BY OWNER, WILL REQUIRE AGGRESSIVE IRRIGATION PROGRAMS AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
10. SUBSTITUTIONS PERMITTED ONLY UPON WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
11. PLANT TAGS TO REMAIN ON ALL PLANT MATERIAL UNTIL FINAL ACCEPTANCE. CONTRACTOR TO THEN REMOVE ALL PLANT TAGS.
12. WHERE A SIZE RANGE IS GIVEN IN THE PLANT SCHEDULE, AT LEAST 50% OF THE PLANTS PROVIDED SHALL BE OF THE LARGER SIZE.
13. CONTRACTOR TO GUARANTEE ALL PLANT MATERIAL FOR ONE YEAR AFTER DATE OF FINAL ACCEPTANCE.
14. CONTRACTOR TO MAINTAIN ALL PLANT MATERIAL UNTIL 60 DAYS AFTER FINAL ACCEPTANCE UNLESS NOTED OTHERWISE IN SPECS.
15. TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND NOT COVERED BY OTHER SITE IMPROVEMENTS.



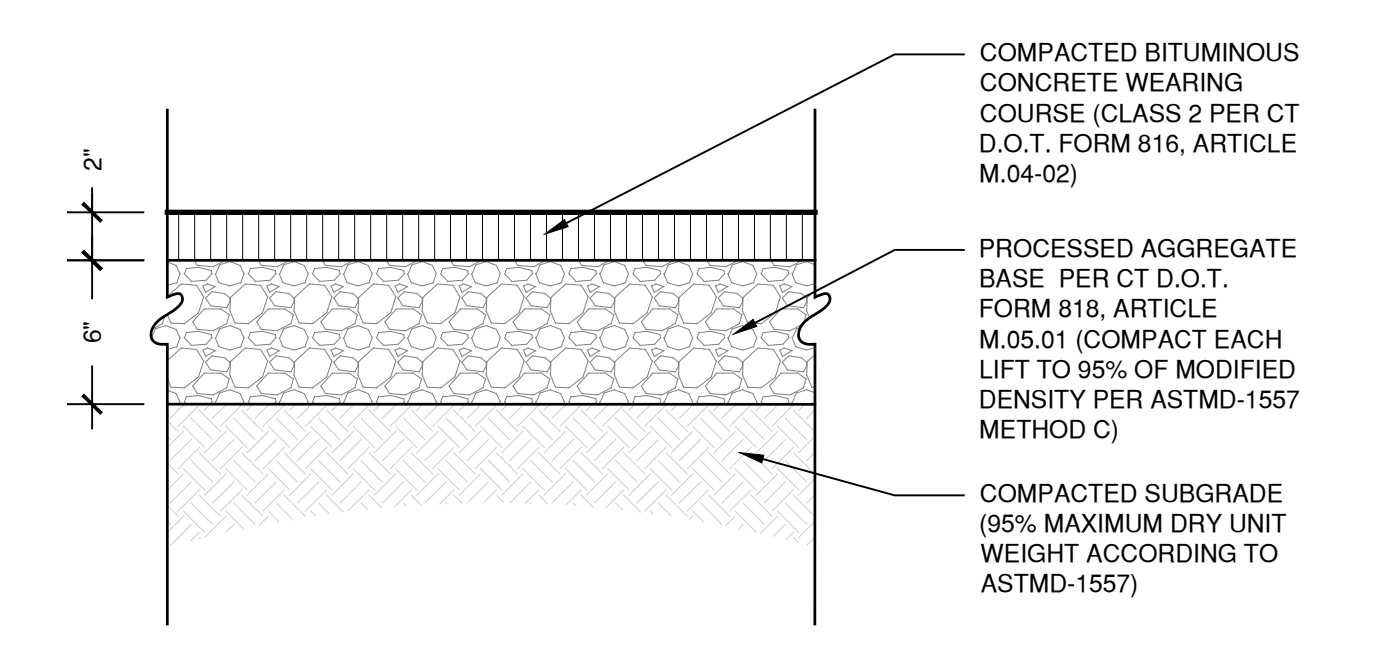


1 TOPSOIL/LAWN
SCALE 1" = 1'-0"

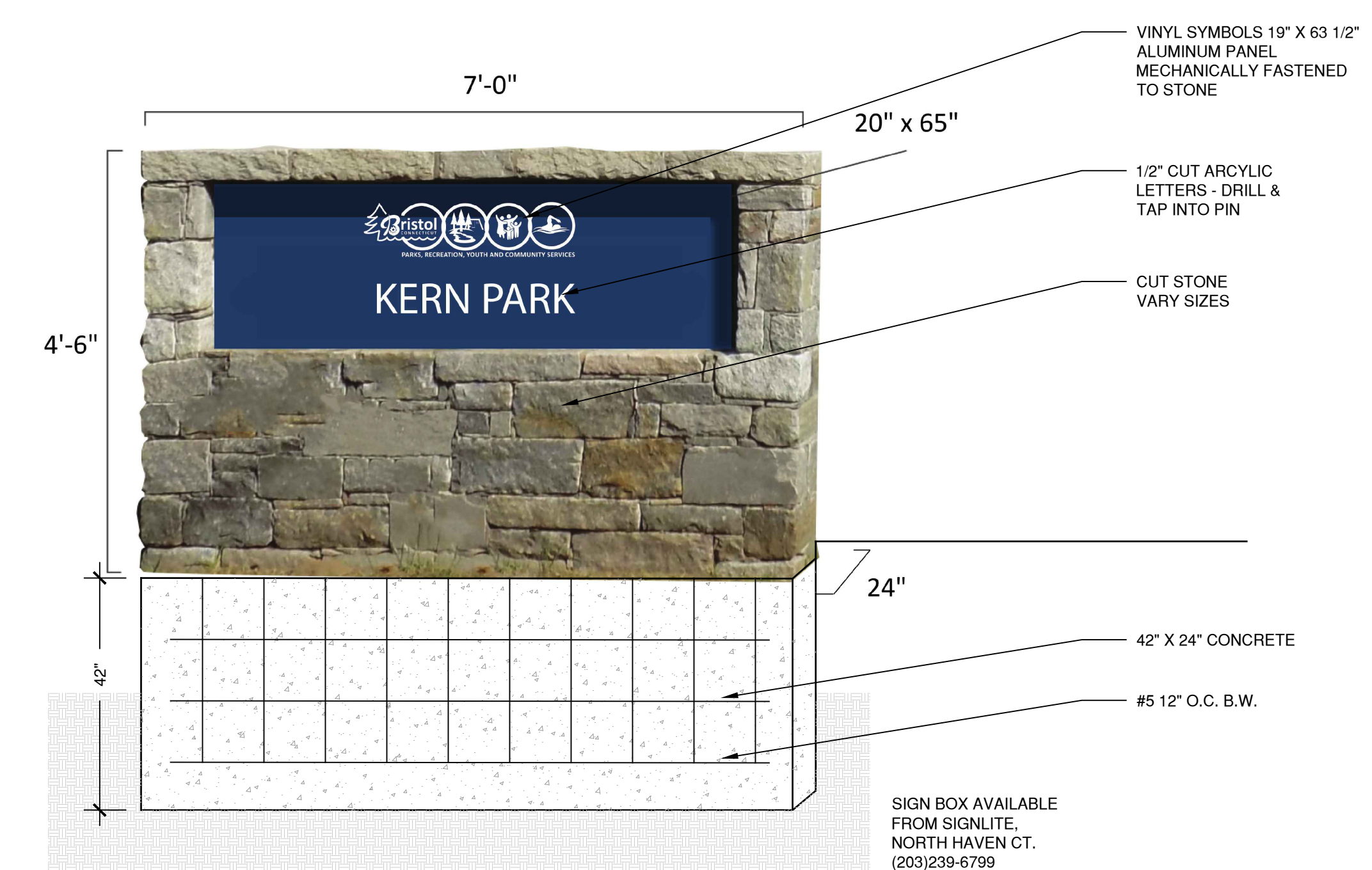


NOTES:
1. BENCH SHALL BE MODEL STERLING, BC1350 PRODUCTS BARCO AS MANUFACTURED BY DUMOR SITE FURNISHINGS, BENCH COLOR: BLACK.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.

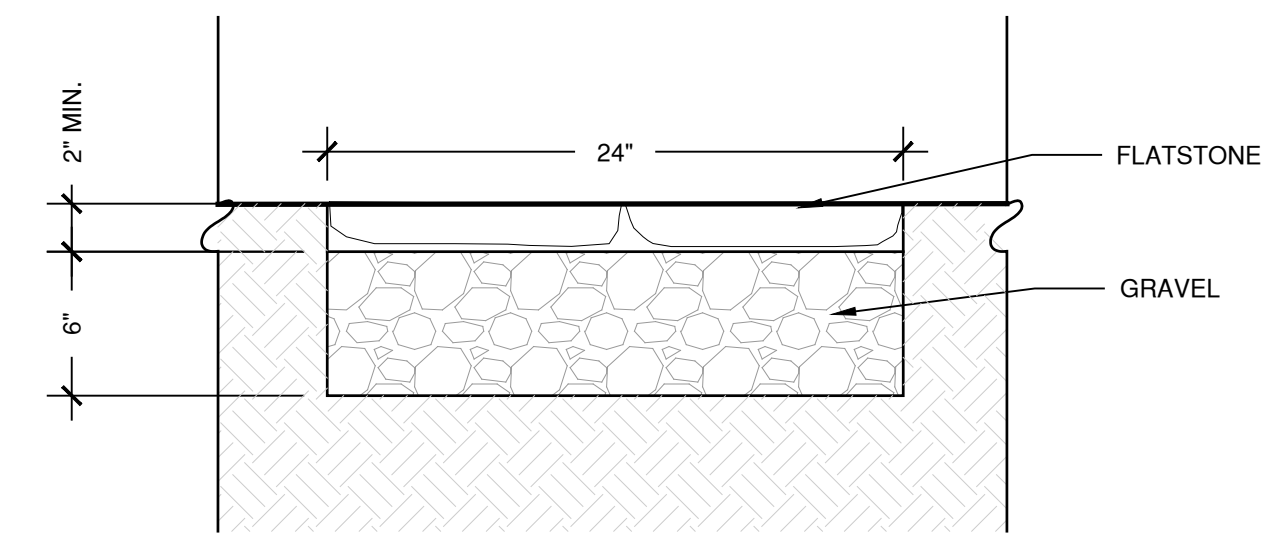
4 BENCH
NOT TO SCALE



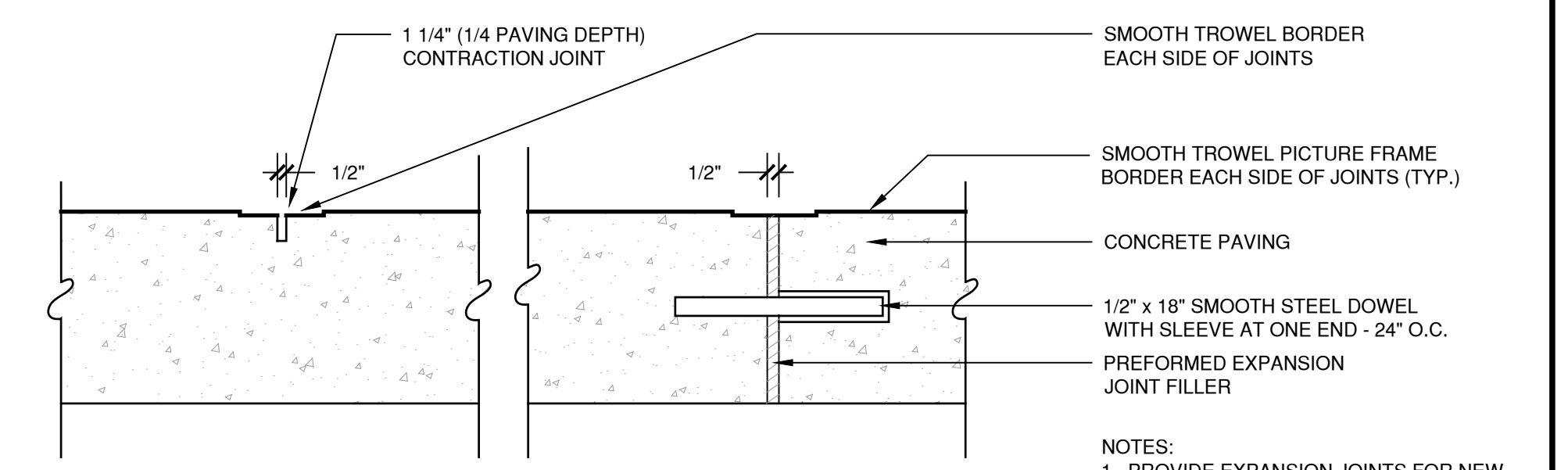
8 BITUMINOUS CONC. PAVEMENT
SCALE 1 1/2" = 1'-0" (PEDESTRIAN)



2 ENTRANCE SIGN
N.T.S. (1 SIGN IN BASE BID 3 IN ALT#3)

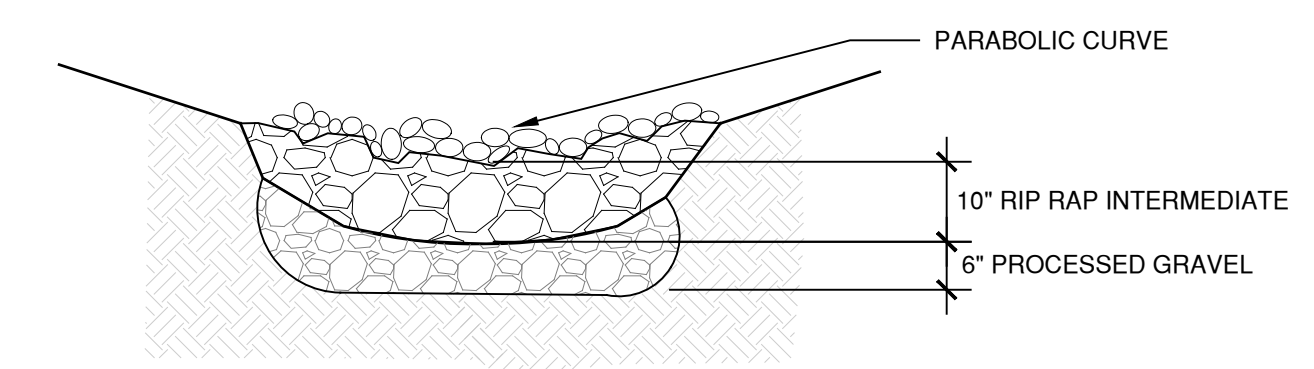


5 STONE EDGE
SCALE 1 1/2" = 1'-0"

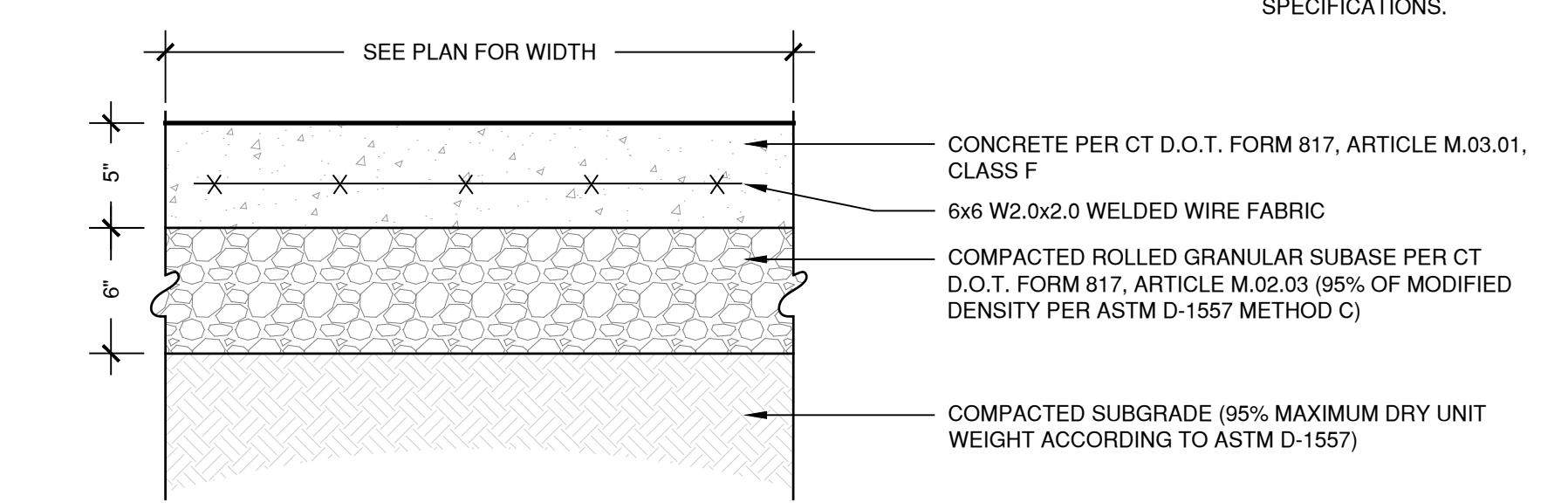


EXPANSION & CONTRACTION JOINTS

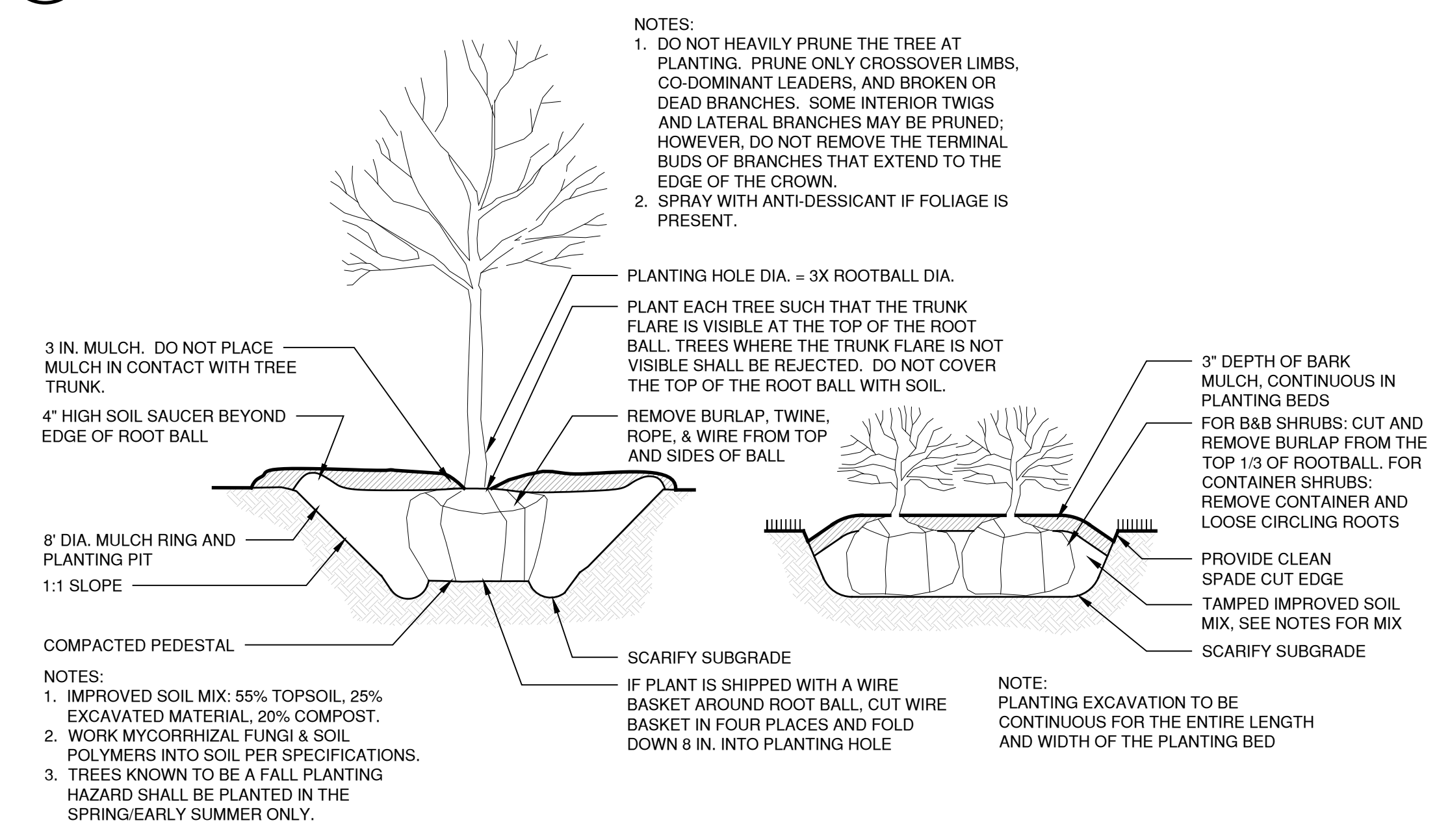
NOTES:
1. PROVIDE EXPANSION JOINTS FOR NEW CONCRETE PAVING AT ALL CURBS, BUILDING WALLS, SITE WALLS, STAIRS, LIGHT POLE BASES, MANHOLES, GRATES/VAULTS, EXISTING CONCRETE PAVING AND ALL OTHER FIXED MATERIALS.
2. AIR CURING IS NOT ACCEPTABLE. SEE SPECIFICATIONS.



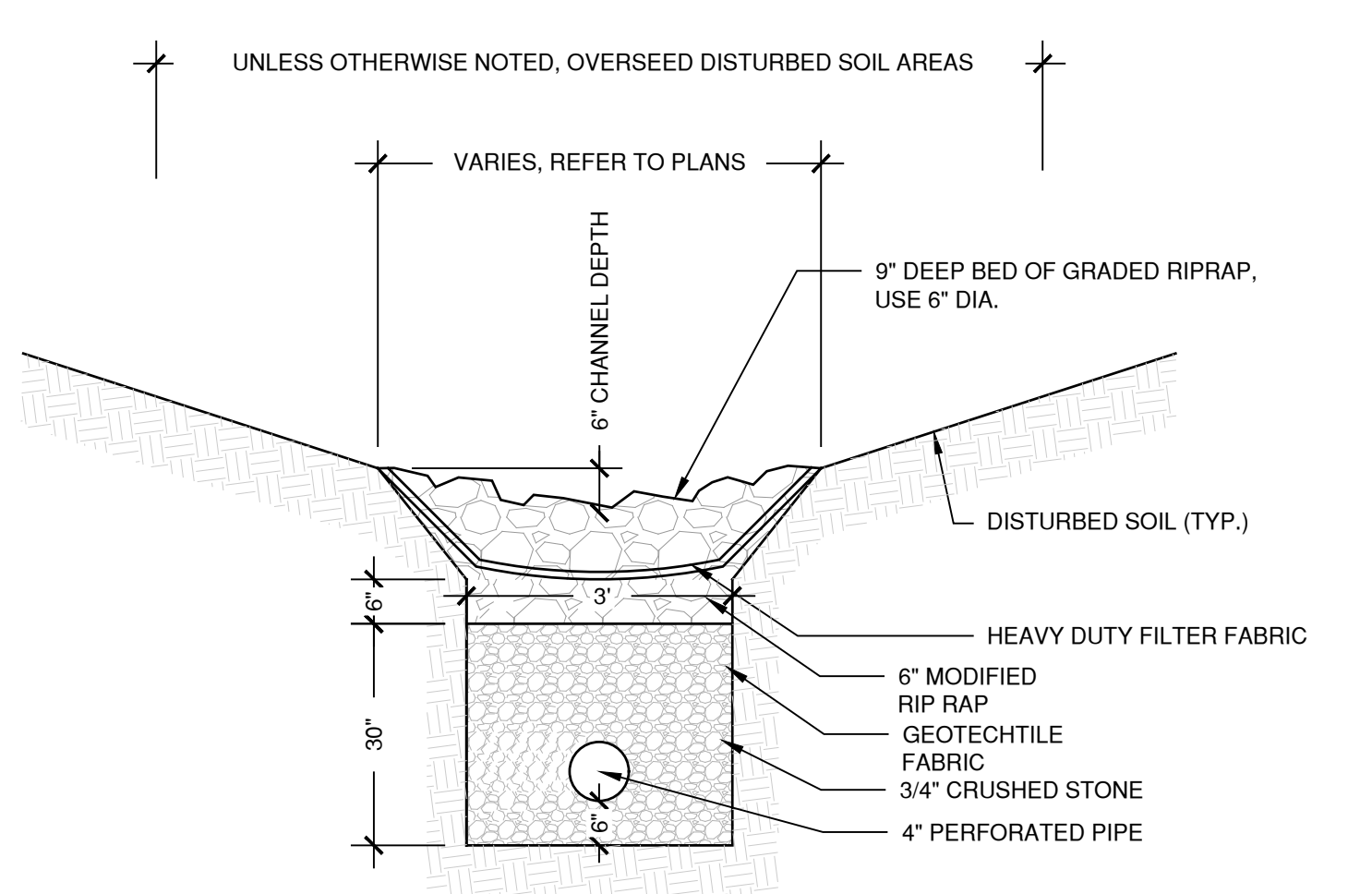
6 DRAINAGE SWALE
SCALE 1/2" = 1'-0"



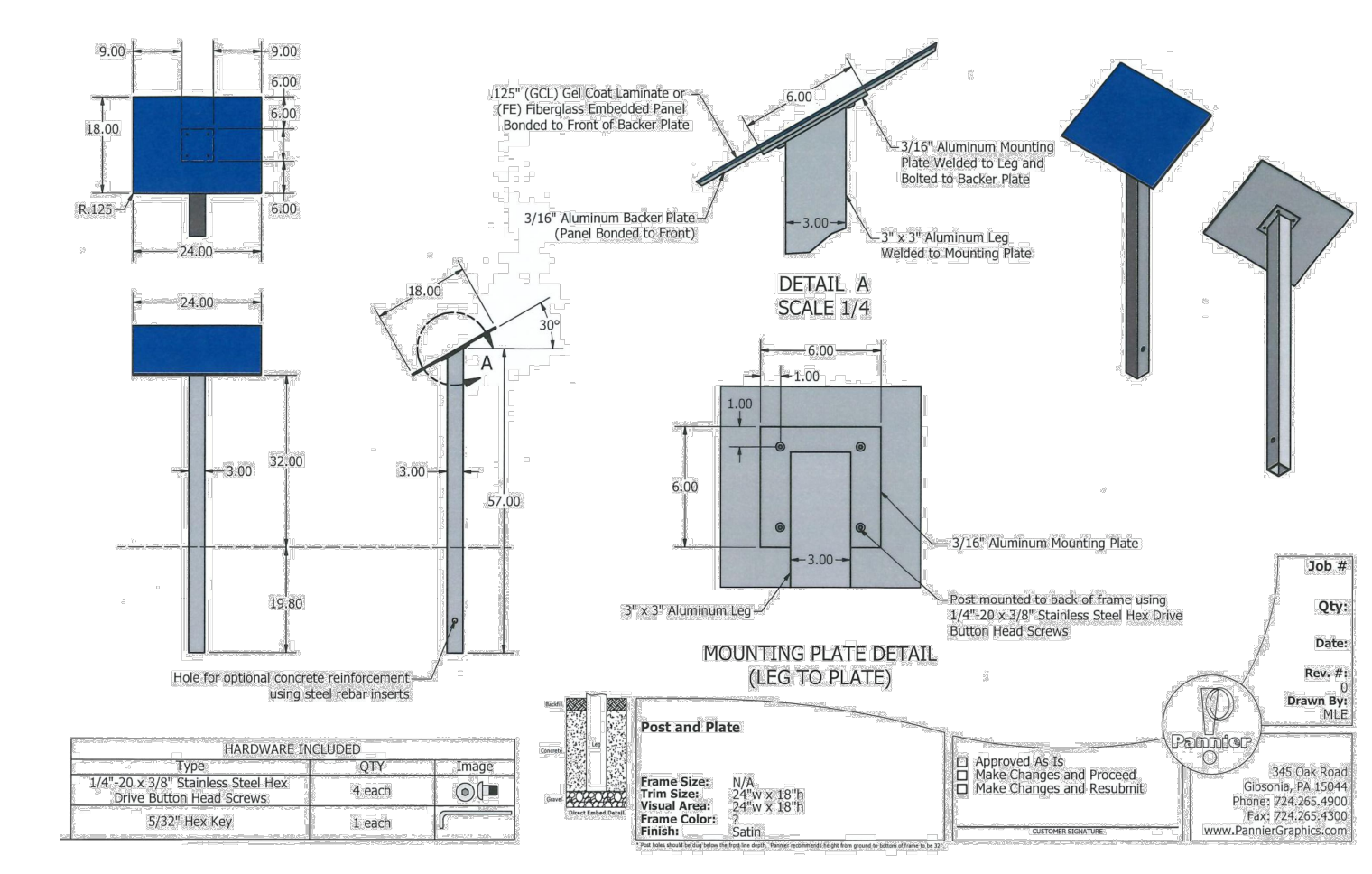
9 CONCRETE PAVEMENT
SCALE 1 1/2" = 1'-0"



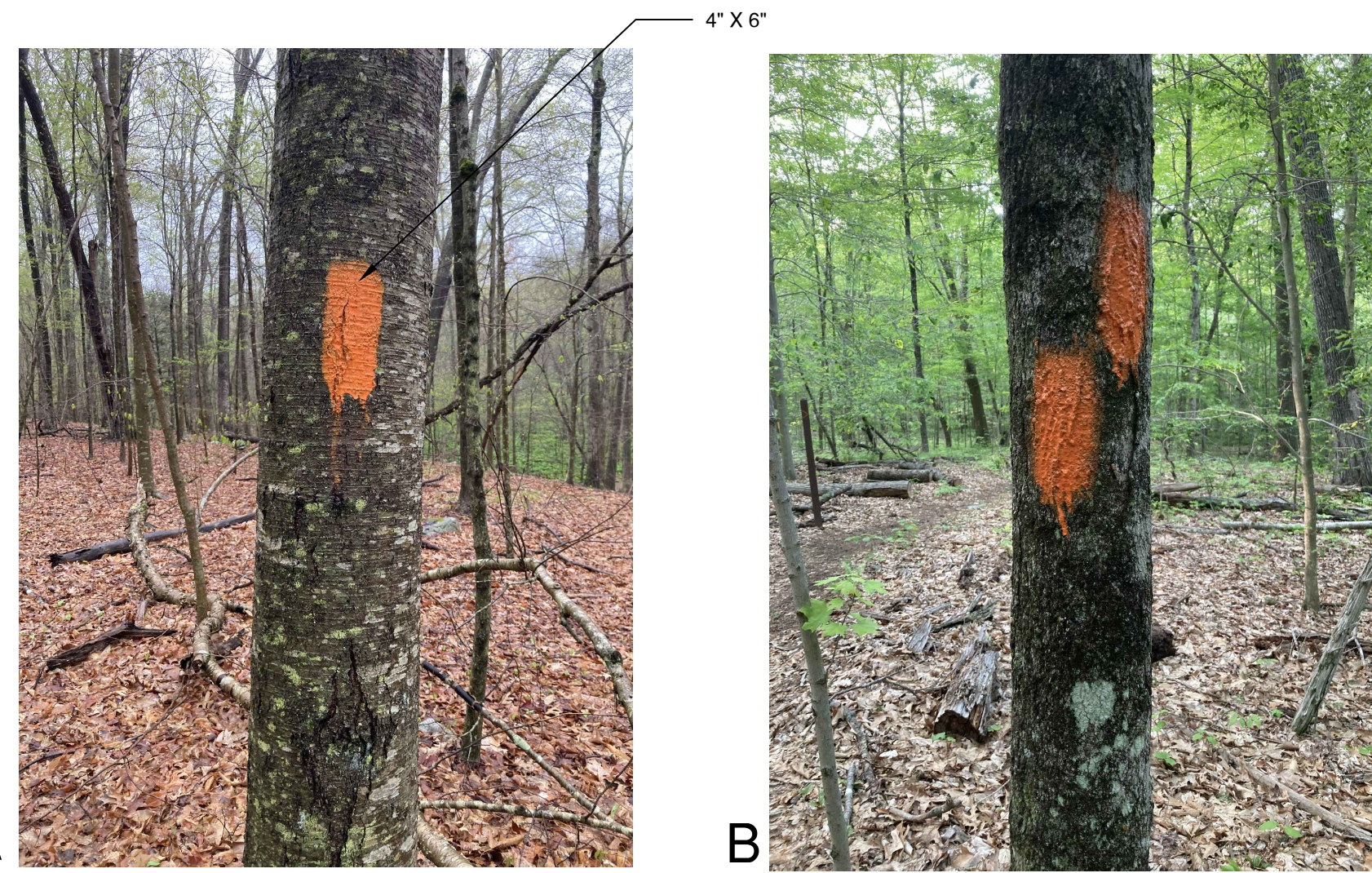
3 TREE / SHRUB PLANTING
SCALE 1" = 1'-0"



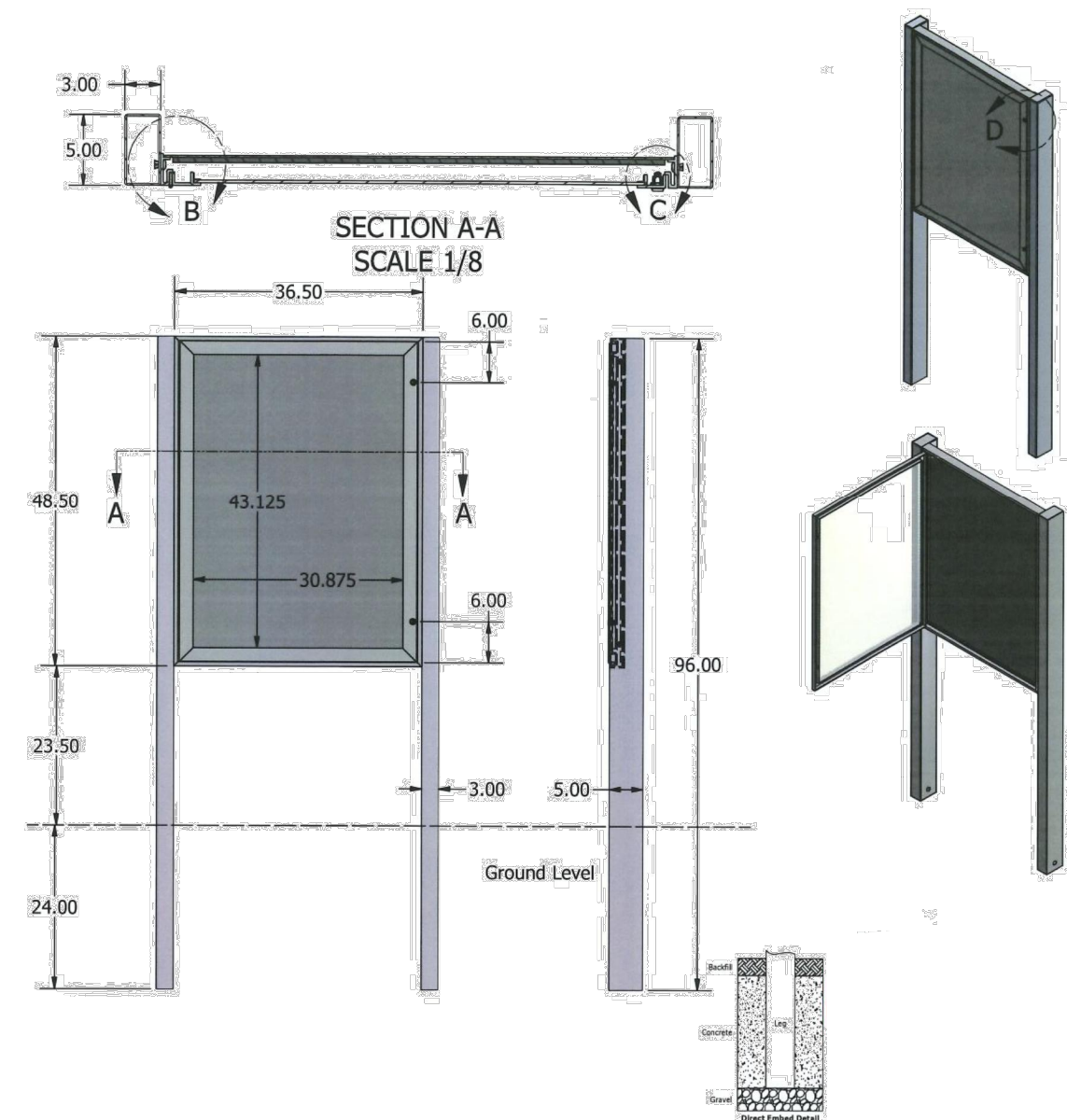
7 INFILTRATION TRENCH
SCALE 1/2" = 1'-0"



10 EDUCATIONAL SIGNAGE
NOT TO SCALE



1 TRAIL MARKINGS
N.T.S.



2 BULLETIN BOARD
N.T.S.



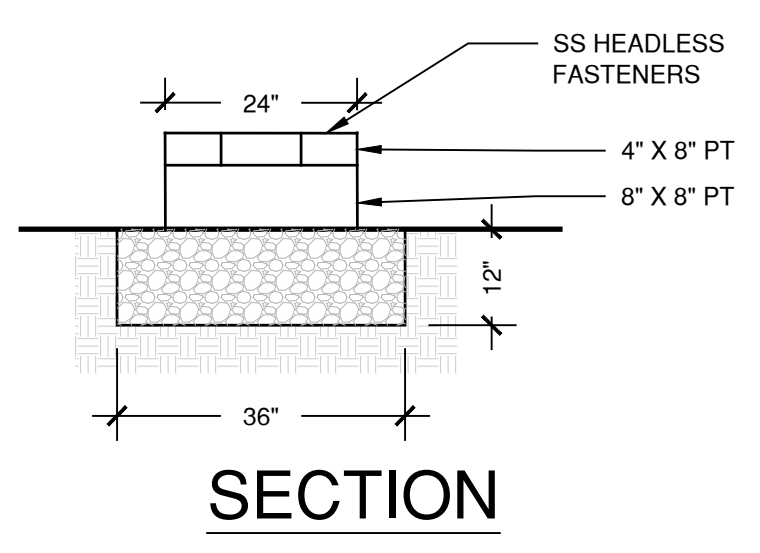
3 LOOP SIGN (2)
N.T.S.



4 CUSTOM CEDAR BENCH
N.T.S.



5 TRAIL BRIDGE
N.T.S.



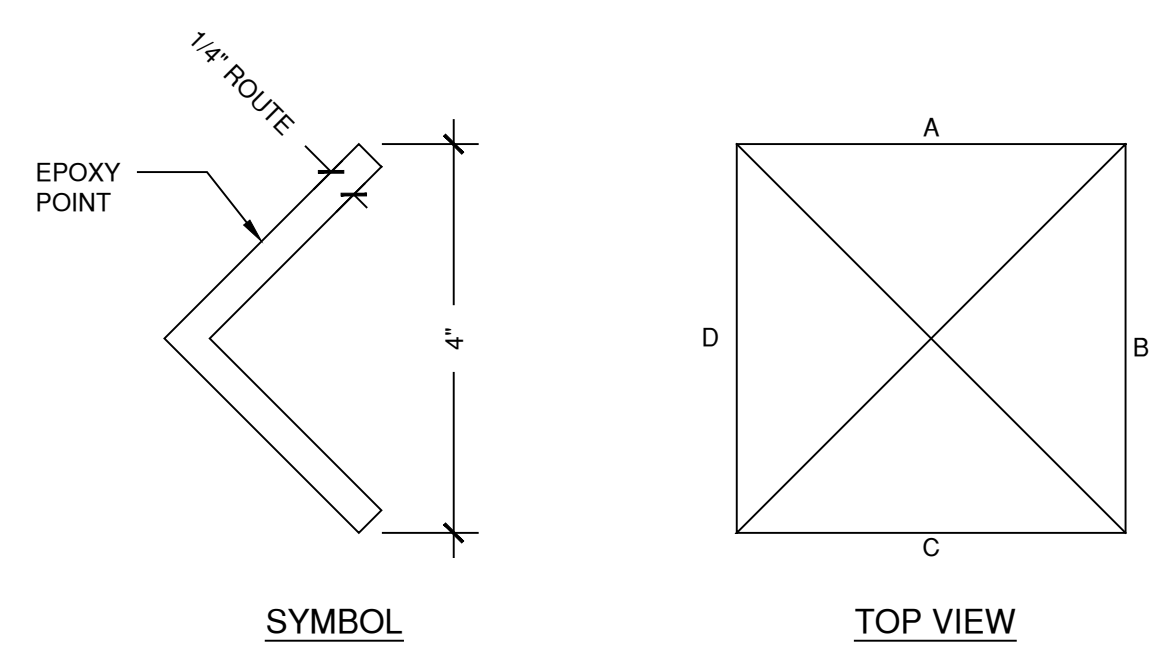
6 DIRECTIONAL MARKER POST
N.T.S. (ALTERNATE #2)



7 TYPICAL NEW TRAIL
N.T.S.



8 TYPICAL NEW TRAIL
N.T.S.



9 DIRECTIONAL MARKER SYSTEM
N.T.S. (PART OF ALT. #2)

SEE SPECIFICATIONS FOR SCHEDULE SYMBOL

SEDIMENTATION AND EROSION CONTROL

PER STATE OF CONNECTICUT PUBLIC ACT 83-388

All applicable practices recommended by the 2002 CT Guidelines for Soil Erosion & Sediment Control are included by reference.

1. DESCRIPTION

The project consists of road widening along an 1100 foot portion of Straits Turnpike and at the intersection of State Routes 63 and 64 in Middlebury. It also includes construction of a new driveway entrance on Park Road Extension in Middlebury.

2. SCHEDULE

The project is anticipated to be constructed in 2023.

3. DESIGN AND CRITERIA

Note: The Contractor shall name one individual as his Sediment and Erosion Control Supervisor whose primary responsibility will be the maintenance of all on-site erosion control measures. He will keep a daily log of his activities and an updated schedule of proposed construction activities. The log will be made available to inspectors.

A. GEOTEXTILE SILT FENCE (GSF) - Shall be non-woven material, minimum 36" high and fastened to wood stakes (see detail this sheet). Silt fence shall be installed with end runs turned up grade at 45 degrees for a distance of 10 feet.

B. TEMPORARY SEEDING (TS)

- Contractor shall scarify the soil to a depth of 2" before applying fertilizer, limestone and seed.
- Seed may be applied by hand or mechanically. Seed application shall be uniform. Seed rate shall be in accordance with the 2002 "Guidelines for Soil Erosion and Sediment Control" (increase seeding rates by 10% when hydroseeding. Limestone, fertilizer and seed may be applied in slurry.)
- Contractor shall mulch area (MS) immediately following seeding. (Note: In the event seeding operations are not feasible due to seasonal restrictions or extended inclement weather patterns, the Contractor shall install an Erosion Control Blanket over exposed soils.)

C. PERMANENT SEEDING (PS)

- Contractor shall apply topsoil and fine grade all areas before the application of permanent seed. Apply limestone and fertilizer as needed, in accordance with soil tests.
- Remove all surface stones 1/2 inch and larger. Remove all other debris and rake seed bed.
- Apply seed within 7 days after establishing final grades. See planting plan.

D. HAY BALE BARRIER (HB) - Shall be made of hay or straw with 40 pounds minimum weight and 120 pounds maximum weight, held together by twine or wire. (See detail this sheet.)

E. CONSTRUCTION ENTRANCE (CE) - Shall be an angular stone (DOT Standard Spec Section M.01.01 size #3) pad, a minimum of 12' wide and 50' long. (See detail this sheet.)

F. EROSION CONTROL BLANKET (ECB) - Erosion mat shall be placed on all exposed outfill slopes steeper than 3:1 (including swales & ditches) to protect against rainfall and hold moisture content to enhance vegetation growth in seeded areas. Mat (or blankets) shall be straw or straw/coconut fiber combination sewn together with lightweight netting. Use North American green BioNet 100% biodegradable blankets. Temporary hay mulch to be applied to areas less than 3:1 slope and all areas to be left barren over the winter, mulch rate to be 70 pounds/1000 s.f.

4. APPLICATION/GENERAL PROCEDURES

- Soil erosion and sediment control measures will be installed prior to any site disturbance, and development will proceed according to a specific construction sequence. The objective is to maximize the reduction of sediment-laden runoff through implementation of conventional soil sedimentation and erosion control practices currently recommended by the 2002 "CT Guidelines for Soil Erosion and Sediment Control".
- Earthwork will be scheduled for periods when soil saturation is low and Soil loss hazard is at a minimum.
- Suspend earthwork for major storm events and implement additional sedimentation and erosion control measures as necessary.
- There shall be no cuts or fill left exposed for longer than 30 days. The established procedure of temporarily seeding and/or cover with erosion protection (mat or hay) shall be followed to insure minimal soil loss.

5. MONITORING AND MAINTENANCE PROGRAM

- For the duration of the project construction, the Contractor shall maintain all sedimentation and erosion control devices to insure their efficient operation.
- The responsibility for performing periodic checks of the protection system in-place and to coordinate cleaning and repair operations shall be assigned to the General Contractor's project representative.
- All sedimentation and erosion control devices shall be checked for the adequacy of the control systems prior to severe storm weather forecasts. Inspect control system during and after storms to determine necessary repairs.
- Repairs to sedimentation control systems directed by the project representative shall be done within 24 hours of the directive or as soon as possible prior to storm warnings.
- Replacement materials for the devices utilized must be readily available for repairs.
- Clean sedimentation and erosion control devices as directed by the projects representative.
- Placement of temporary sedimentation and erosion control devices that are not shown on plans, but are required due to Contractor's operations, shall be placed at the direction of the projects representative.
- Dust control and off-site debris caused by the Contractor's earthwork operations shall be prevented, or cleaned-up in accordance with the standard state specification "Form 816".

6. SPECIFIC MAINTENANCE MEASURES SHALL BE AS FOLLOWS:

A. GEOTEXTILE SILT FENCE (GSF) - Inspect GSF at least once a week and within 24 hours of the end of any storm event of 0.5-inch or greater. Repair or replace the fence within 24-hours of observed failure.

B. HAY BALE BARRIER (HB) - Inspect HB at least once a week and within 24 hours of the end of any storm event of 0.5-inch or greater. Repair or replace the hay bales within 24-hours of observed failure.

C. CONSTRUCTION ENTRANCE (CE) - Maintain the entrance in a condition which will prevent tracking and washing of sediment onto paved surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Repair any measures used to trap sediment as needed. Immediately remove all sediment spilled, dropped, washed or tracked onto paved surfaces. Roads adjacent to a construction site shall be left clean at the end of each day.

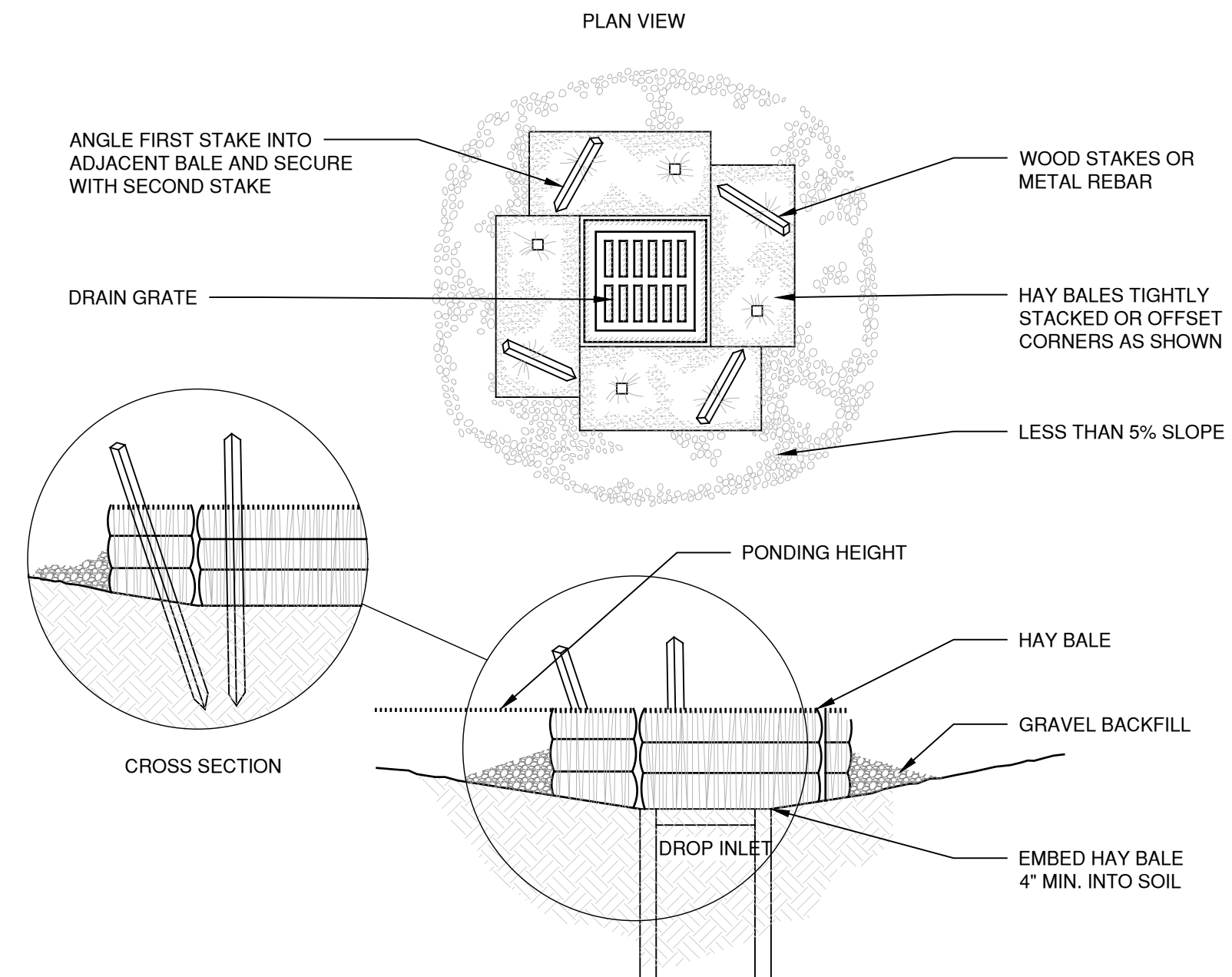
If the construction entrance is being properly maintained and the action of a vehicle traveling over the stone pad is not sufficient to remove the majority of the sediment, then either (1) increase the length of the construction entrance, (2) modify the construction access road surface, or (3) install washing racks and associated settling area or similar devices before the vehicle enters a paved surface.

D. SEEDING (TEMPORARY & PERMANENT)

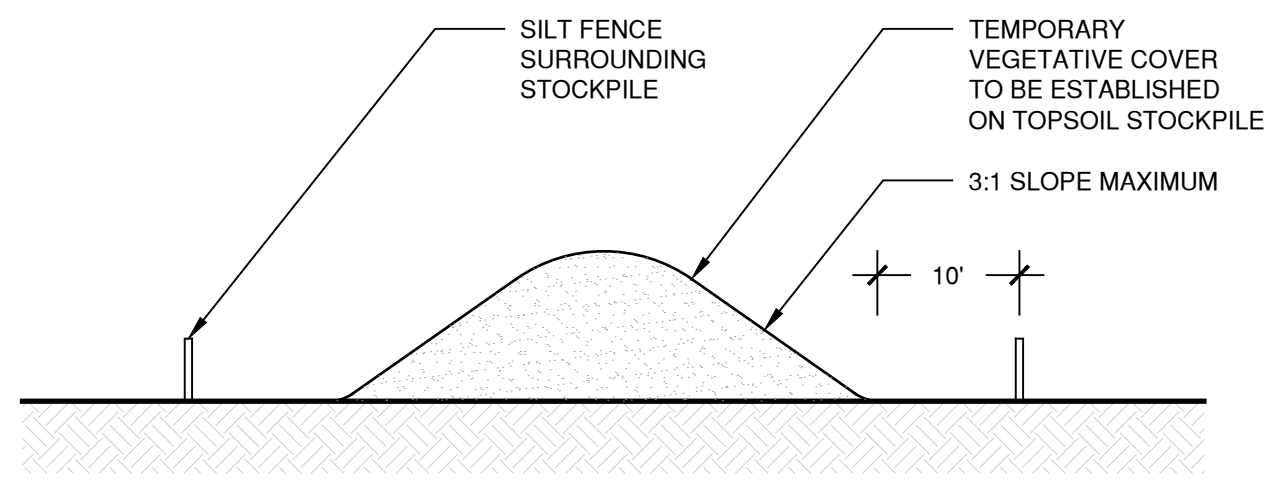
Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Bird feeding may be a problem if mulch was applied too thinly to protect seed. Re-seed and re-mulch. If movement was the result of wind, then repair erosion damage (if any), reapply seed and mulch and apply mulch anchoring. If failure was caused by concentrated runoff, install additional measures to control water and sediment movement, repair erosion damage, re-seed and re-apply mulch with anchoring or use Temporary Erosion Control Blanket measure.

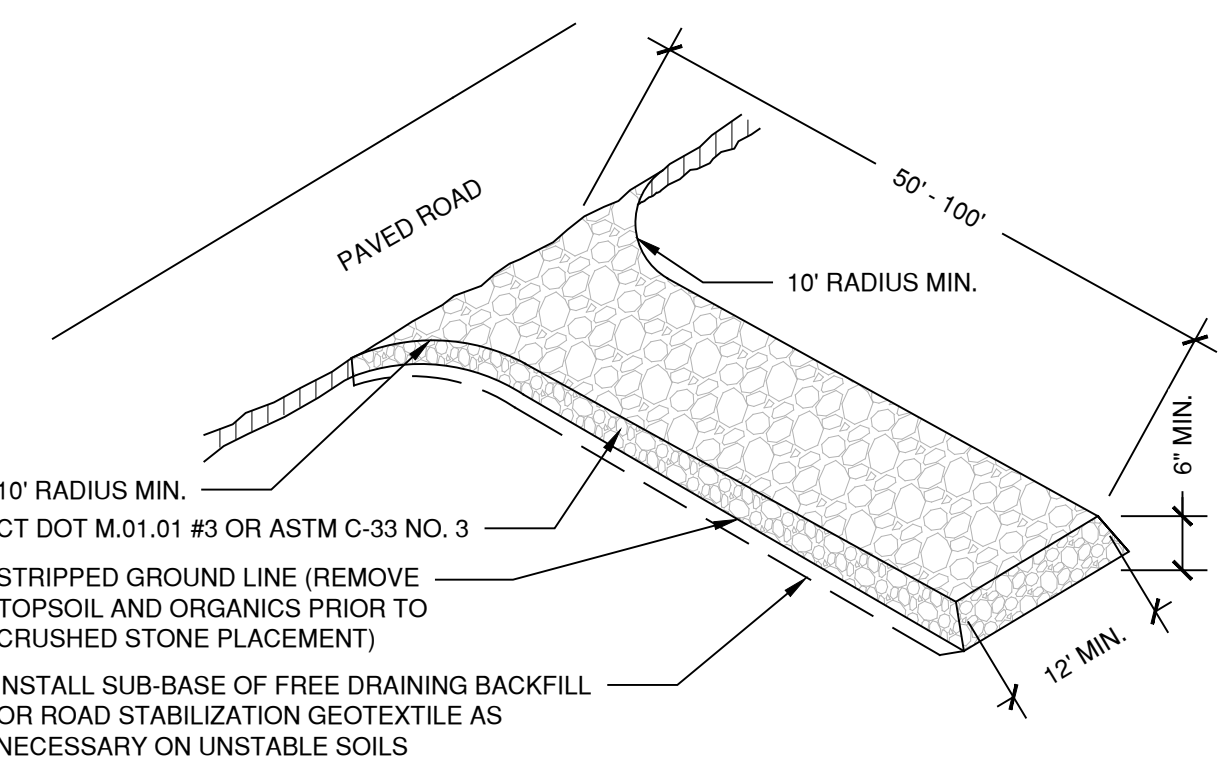
Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative surface cover).



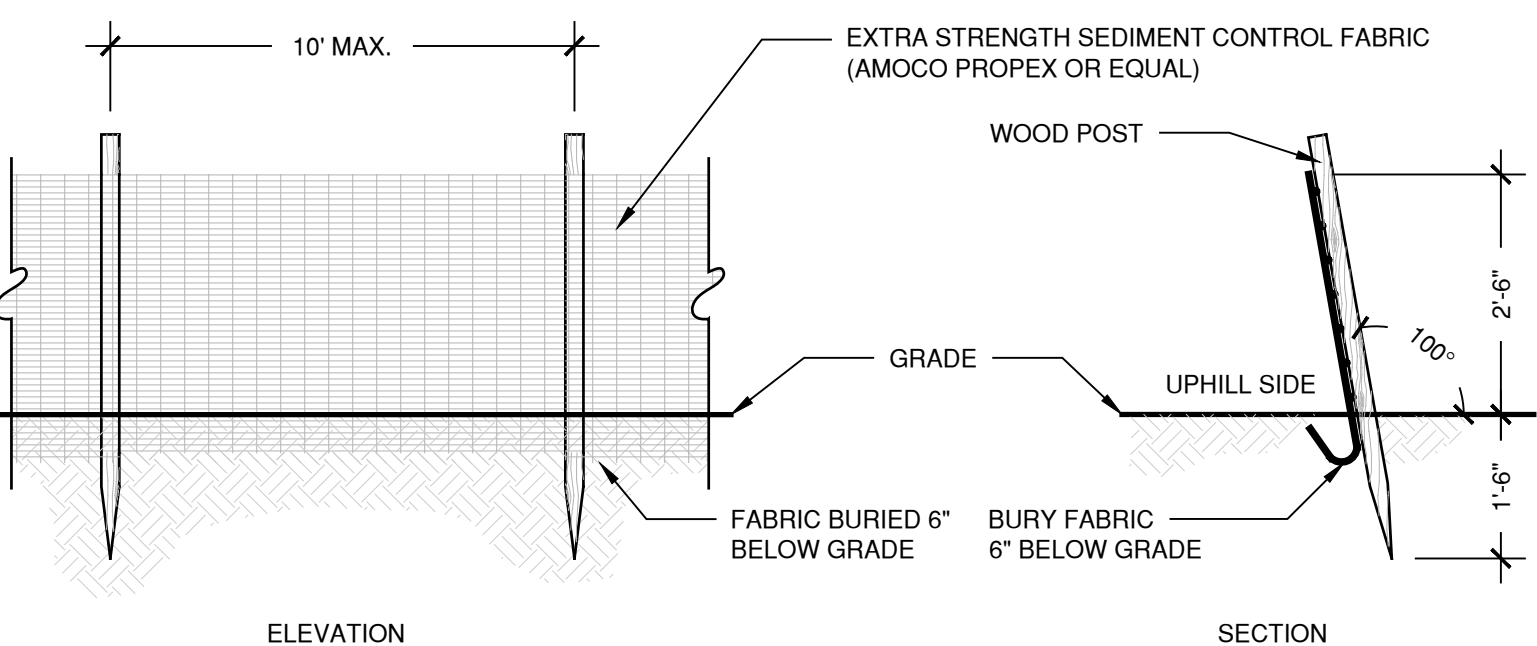
4 HAY BALE BARRIER (HB) AT CATCHBASIN
N.T.S.



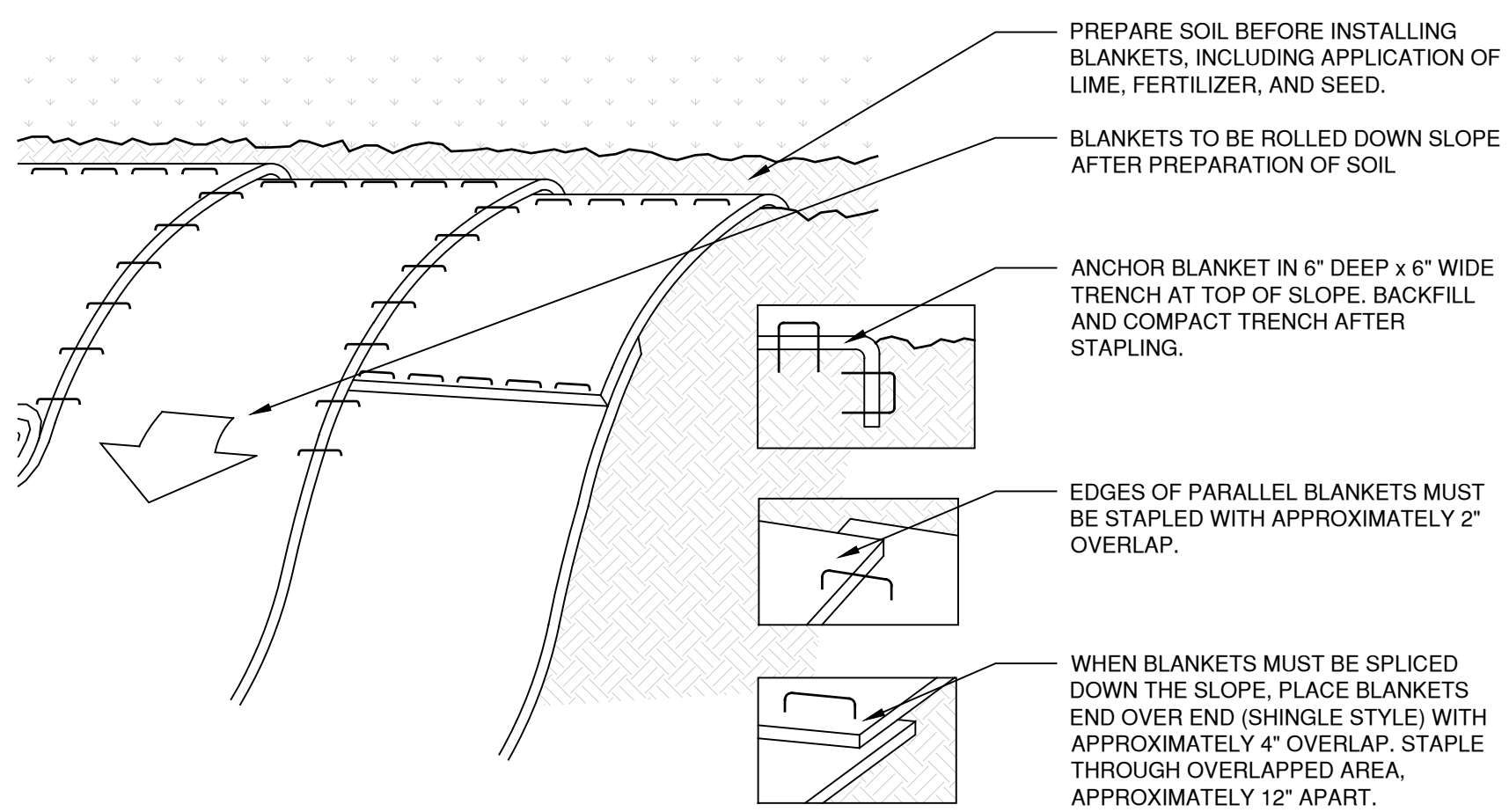
1 TOPSOIL STOCK PILE AREA
N.T.S.



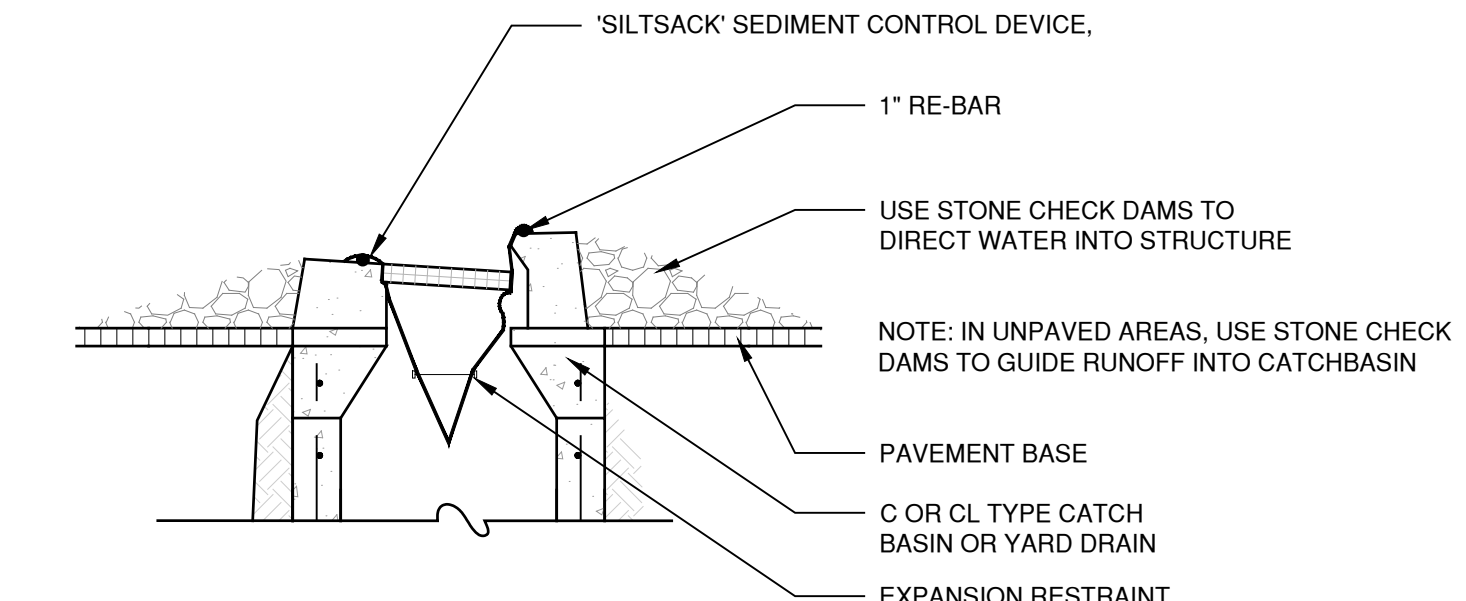
2 CONSTRUCTION ENTRANCE (CE)
N.T.S.



3 GEOTEXTILE SILT FENCE (GSF)
N.T.S.



5 SLOPE STABILIZATION USING EROSION CONTROL BLANKET (ECB)
N.T.S.



6 SILT SACK (SS)
N.T.S.



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ENGAGE | DESIGN | ADVANCE

Prepared For:
CITY OF BRISTOL

Consultant

PROPOSED:
KERN PARK IMPROVEMENTS
PRIMROSE LANE
BRISTOL, CT

Sheet Description:
Erosion and Soil Sedimentation Control Notes and Details

Rev:

Issue Date:
JUNE 13, 2023

Scale: AS NOTED
Drawn by: AL

Project number:
1944

Sheet #:
ES-1