Ting Park-Oak Hall Greenway Connector (#23-015)

Town of Holly Springs

101 Sportsmanship Way, Holly Springs, NC 27540

(Wake County P.I.N.: 0649881084)

Proposed Greenway= 1,013 Feet

Construction Drawings
Approval Date: 01/08/2026
Approved By: Nate Lesher

HOLLY SPRINGS Development Services

Condition of Approval (COA);

With Final Plat, existing greenway easement is to be abandoned and new greenway shall be reflected.

Approval of these plans does not relieve developer/owner from responsbility of construction in accordance with town board approvals, ordinances, policies, and/or construction standards and specifications. Issuance of Plan Approval does not constitute approval to commence grading and utility installation activities onsite. These activities may take place only after the required preconstruction meeting has been held and all permits have been issued.

Water Permit #: ____________________

Wastewater Permit #: ____________________

Reclaim Permit #: ____________________

Consultants

Surveyor

WithersRavenel
115 Mackenan Drive
Cary, NC 27511
www.withersravenel.com
P 919.469.3340

Civil Engineer

Alfred Benesch & Company
8000 Regency Parkway, Suite 175
Cary, NC 27518
www.benesch.com
P 984.275.2490

Corp. NC License: F-1320

Structural Engineer

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Geotechnical Engineer

Froehling & Robertson, Inc.
310 Hubert Street
Raleigh, NC 27603
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P 919.719.1973

Environmental Engineer

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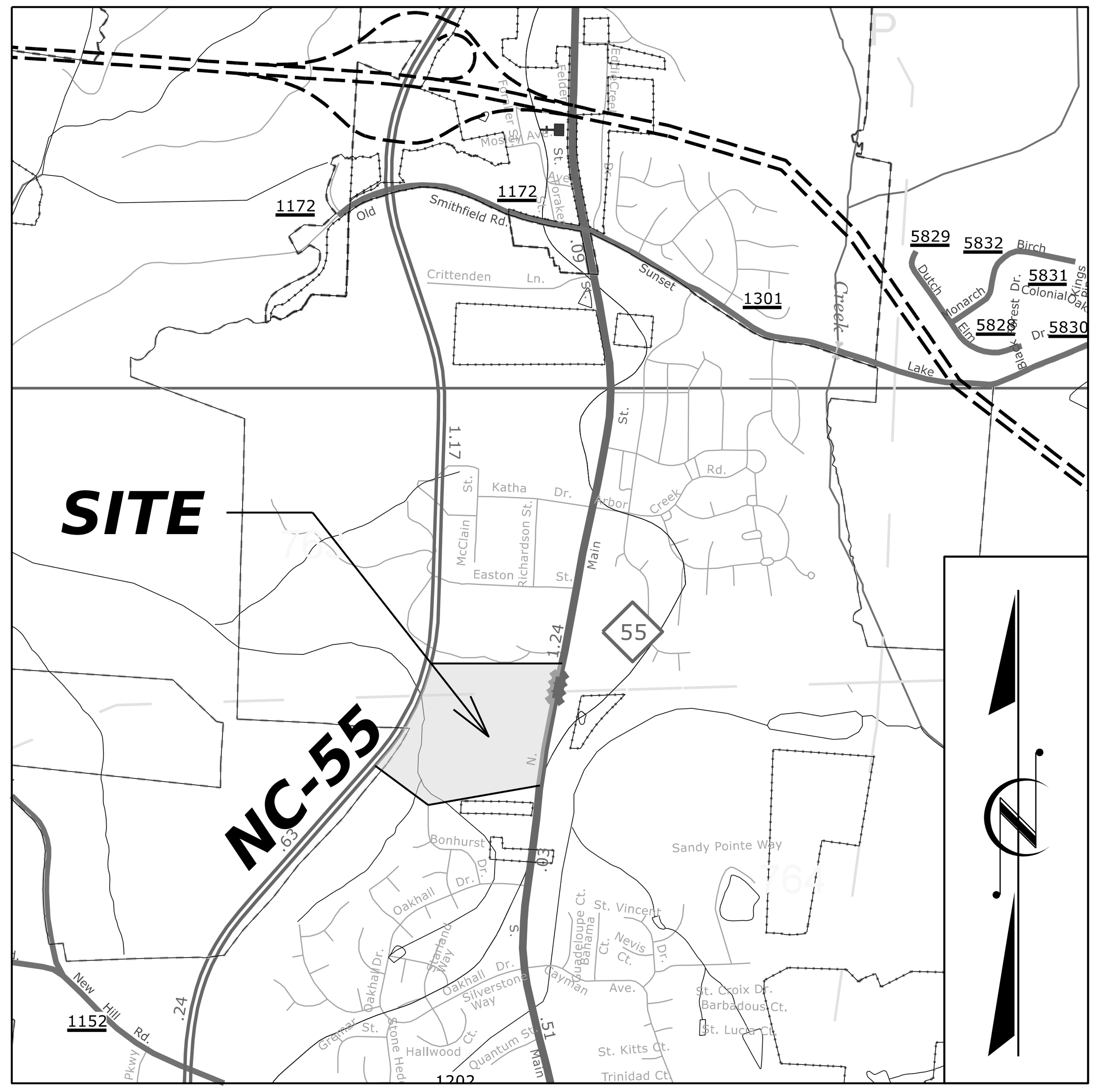
www.FandR.com
P 919.719.1973

ALL CONSTRUCTION SHALL CONFORM TO TOWN OF HOLLY SPRINGS ENGINEERING DESIGN AND CONSTRUCTION STANDARDS

Date of Issue: 12/19/2025



Vicinity Map - N.T.S

100% Design Development

Issued for Owner Review

Schedule of Drawings

CS	COVER SHEET	C4.7	EROSION CONTROL PLANS
C1.0	EXISTING CONDITIONS	C4.8	EROSION CONTROL PLANS
C1.1	LEGEND & GENERAL NOTES	C4.9	EROSION CONTROL PLANS
C2.0	TYPICAL SECTIONS	C5.0	STRUCTURE GENERAL NOTES
C2.1	STANDARD DETAILS	C5.1	STRUCTURE PLAN AND ELEVATION
C2.2	STANDARD DETAILS	C5.2	STRUCTURE ABUTMENTS 1 AND 2
C2.3	STANDARD DETAILS	C5.3	STRUCTURE ABUTMENT DETAILS
C2.4	STANDARD DETAILS	C6.0	CROSS SECTIONS
C2.5	STANDARD DETAILS	C6.1	CROSS SECTIONS
C2.6	GRADING PLANS	C6.2	CROSS SECTIONS
C2.7	GRADING PLANS	C6.3	CROSS SECTIONS
C2.8	CONSTRUCTION ACCESS	C6.4	CROSS SECTIONS
C2.9	TEMPORARY CROSSING	C6.5	CROSS SECTIONS
C3.0	PLAN SHEET LAYOUT	C6.6	CROSS SECTIONS
C3.1	HORIZONTAL ALIGNMENT	C6.7	CROSS SECTIONS
C3.2	HORIZONTAL ALIGNMENT	C6.8	CROSS SECTIONS
C3.3	VERTICAL ALIGNMENT	C6.9	CROSS SECTIONS
C3.4	VERTICAL ALIGNMENT	C6.10	CROSS SECTIONS
C4.0	EROSION CONTROL PLANS	C6.11	CROSS SECTIONS
C4.1	EROSION CONTROL PLANS	C6.12	CROSS SECTIONS
C4.2	EROSION CONTROL PLANS		
C4.3	EROSION CONTROL PLANS		
C4.4	EROSION CONTROL PLANS		
C4.5	EROSION CONTROL PLANS		
C4.6	EROSION CONTROL PLANS		

I CERTIFY THAT THESE PLANS WERE PREPARED AND THAT THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING PLANS, THE LATEST EDITION OF THE ENGINEERING DESIGN AND CONSTRUCTION STANDARDS OF THE TOWN OF HOLLY SPRINGS AND OTHER APPLICABLE TOWN ORDINANCES AND POLICIES. THE ENGINEER WHOSE SEAL AND SIGNATURE APPEAR BELOW CERTIFIES THAT THE TOWN OF HOLLY SPRINGS ENGINEERING DESIGN AND CONSTRUCTION STANDARDS HAVE BEEN THOROUGHLY REVIEWED FOR APPLICABILITY TO THIS PARTICULAR PROJECT.

DocuSigned by: Eric Spalding
C7E7FA0BA3864D8...
12/19/2025

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045955 ERIC D. SPALDING

NOTE: EXISTING PLATTED GREENWAY EASEMENT, PER DB 2015 PG 842, TO BE ABANDONED WITH NEW PLAT

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Seals:

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C7E7FA0BA3864D8...

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/8/2025
Revisions:

Sheet Title:

Existing Conditions

Sheet No:

C1.0

LEGEND

- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Computed Property Corner
- Property Monument — CM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Safety Rail
- Existing Wetland Boundary — WLB
- Sign — S
- Building
- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream — JS
- Flow Arrow
- Wetland
- Proposed V Ditch
- Proposed Base Ditch
- Class I Rip Rap
- Secondary Horiz and Vert Control Point
- Primary Horiz Control Point
- Primary Horiz and Vert Control Point
- Exist Permanent Easment Pin and Cap
- New Permanent Easement Pin and Cap
- Vertical Benchmark
- Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall — CONC WW
- Head and End Wall
- Pipe Culvert
- Drainage Box: Catch Basin, DI or JB — DI
- Limits of Disturbance
- Standard Temporary Silt Fence (HS401)
- Silt Fence Outlet (HS404)
- Check Dam (HS413)
- Standard Yard Inlet Protection (HS422)
- Pipe Inlet Protection (HS423)
- Construction Entrance (HS432)
- Existing Right of Way Marker
- Existing Right of Way Line
- Existing Control of Access — CA
- Existing Easement Line — E
- New Temporary Construction Easement — E
- New Temporary Drainage Easement — TDE
- New Permanent Greenway Easement
- New Permanent Drainage Easement — PDE
- New Permanent Drainage / Utility Easement — DUE
- New Permanent Utility Easement — PUE
- New Temporary Utility Easement — TUE
- New Aerial Utility Easement — AUE
- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Curb Ramp — CR

GENERAL NOTES

1 THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC. THAT MAY BE REQUIRED.

2 THE CONTRACTOR MUST, AT ALL TIMES, KEEP THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS OR RUBBISH CAUSED BY HIM, HIS EMPLOYEES, OR HIS WORK. ALL DEBRIS SHALL BE REMOVED FROM THE SITE ON A DAILY BASIS.

3 RELOCATION OF EXISTING UTILITIES TO BE COORDINATED WITH THE LOCAL UTILITY PROVIDER(S) IF NECESSARY.

4 EXISTING UTILITIES AND STRUCTURES SHOWN BOTH UNDERGROUND AND ABOVE ARE BASED ON THE BEST AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BEGINNING RELATED CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNERS REPRESENTATIVE IMMEDIATELY.

5 CONTRACTOR SHALL LOCATE ALL UTILITIES AND UTILITY ELEVATIONS PRIOR TO CONSTRUCTION. ALL UTILITIES TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR. ANY UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS EXPENSE.

6 CONTRACTOR SHALL RESTORE ALL LAY DOWN AND STAGING AREAS TO ORIGINAL CONDITIONS AND TO THE SATISFACTION OF THE OWNER, PRIOR TO DEMOBILIZATION AT THE CONCLUSION OF THE PROJECT.

7 CONSTRUCTION/SAFETY FENCING REMOVED TO FACILITATE ACCESS BY THE CONTRACTOR FOR CONSTRUCTION MUST BE REPLACED AT THE END OF EACH WORK PERIOD TO DIRECT PEDESTRIAN TRAFFIC AWAY FROM HAZARDOUS AREAS.

8 CONTRACTOR ACCESS FOR TRAIL CONSTRUCTION SHALL BE CONFIRMED BY CONTRACTOR WITH OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

9 CONTRACTOR SHALL PROVIDE SILT FENCING IN ALL AREAS AND EROSION CONTROL MEASURES AS NEEDED OR DIRECTED BY THE EROSION CONTROL INSPECTOR. IF ADDITIONAL MEASURES ARE REQUIRED IN ADDITION TO THE PLANS, COMPENSATION WILL BE PROVIDED PER THE CONTRACT PROVISIONS.

10 THE ENGINEER AND OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND METHODS ASSOCIATED WITH PROJECT AS SET FORTH IN THESE PLANS. IF DEPARTURES FROM THE SPECIFICATIONS OR DRAWINGS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED TO THE OWNER IN WRITING FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

11 EXISTING CONDITIONS SHOWN HAVE BEEN COMPILED FROM A VARIETY OF SOURCES TO INCLUDE; THIRD PARTY FIELD SURVEY, GIS AND NC FLOODMAPS, LIDAR BARE EARTH. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE COMMENCING CONSTRUCTION ACTIVITIES AND NOTIFY ENGINEER IMMEDIATELY UPON NOTING ANY DISCREPANCIES THAT MAY AFFECT DESIGN AND/OR CONSTRUCTION ACTIVITIES.

12 CONTRACTOR SHALL MAINTAIN ALL ABOVE AND BELOW GROUND STORM WATER DRAINAGE AND PATTERNS AND PIPING AS THEY CURRENTLY EXIST UNLESS NOTED OTHERWISE. ANY DISTURBANCE OF THE PATTERNS OR STRUCTURES BY THE CONTRACTOR SHALL BE CORRECTED BY THE CONTRACTOR TO CONDITION PRIOR TO DISTURBANCE. CLEAN OUT STORM WATER PIPE ONLY IF NOTED ON PLAN AND ACCORDING TO DETAIL.

13 CONTRACTOR SHALL VERIFY ALL STATIONS FOR APPLICABILITY TO EXISTING CONDITIONS PRIOR TO CONSTRUCTION. DEVIATION FROM ALIGNMENT DUE TO LARGE TREES OR OTHER OBSTACLES ETC. SHALL BE APPROVED BY THE TOWN OF HOLLY SPRINGS AND THE ENGINEER OF RECORD.

14 CONTRACTOR SHALL TRIM UP BRANCHES OF TREES TO PROVIDE 10' VERTICAL CLEARANCE ABOVE PAVEMENT SURFACE.

15 SUPERELEVATION TRANSITIONS ARE SHOWN ON THE PLAN VIEW.

TING PARK - OAK HALL GREENWAY CONSTRUCTION SEQUENCING

PHASE I (INITIAL SETUP/MOBILIZATION):

1. UTILIZE DESIGNATED AREAS IN TING PARK PARKING LOT FOR MOBILIZATION/STAGING/ETC.
2. PLACE NECESSARY EROSION CONTROL MEASURES AROUND PARKING LOT/STAGING AREAS
3. PLACE NECESSARY TRAFFIC CONTROL DEVICES AROUND PARKING LOT & STAGING AREA
4. CLOSE OFF PEDESTRIAN ACCESS TO EXISTING TING STADIUM GREENWAY
5. PLACE NECESSARY EROSION CONTROL MEASURES ALONG THE EXISTING TING STADIUM GREENWAY
6. REMOVE EXISTING BOLLARDS ON TING STADIUM GREENWAY (3 SETS) [TO BE REPLACED AFTER PROJECT COMPLETION BY PARKS & REC DEPARTMENT USING NEW TOWN STANDARD]
7. CONSTRUCTION VEHICLES TO USE THE EXISTING TING STADIUM GREENWAY TO ACCESS THE SITE

PHASE II (TEMPORARY CROSSING & BRIDGE INSTALLATION):

1. UTILIZING THE CONSTRUCTION ACCESS OUTLINED ON SHEET C2.7, CONSTRUCTION VEHICLES TO ACCESS THE PROJECT SITE AND CLEAR NECESSARY AREA TO PLACE THE TEMPORARY CROSSING.
2. INSTALL CONSTRUCTION ENTRANCES AND BOUNDARY PROTECTIONS WHERE ACCESSIBLE ALONG TEMPORARY ACCESS ROAD. SEE SHEET C2.8.
3. INSTALL IMPERVIOUS DIKE, PUMP AROUND, SILT FENCE AND ROCK CHECK TO PREPARE FOR INSTALLATION OF TEMPORARY CROSSING.
4. DEWATER THE STREAM AREAS AROUND THE PROPOSED AND TEMPORARY CROSSINGS.
5. EXCAVATE AREAS WHERE PIPES ARE TO BE PLACED, AND STOCKPILE THE STREAMBED MATERIALS ON SITE, BUT OUTSIDE OF THE RIPARIAN BUFFER AND WITHIN LOD.
6. PLACE TWO TEMPORARY 36" HDPE PIPES (60' LONG EACH), ALONG WITH TEMPORARY HEADWALLS ON BOTH ENDS.
7. PLACE RIPRAP OVER TEMPORARY CULVERTS PER DETAIL HS418 ON SHEET C2.3 AND STABILIZE ANY AREAS DISTURBED IN TEMPORARY CROSSING INSTALLATION.
8. ONCE TEMPORARY CROSSING IS COMPLETELY STABILIZED REMOVE ROCK CHECK AND RELOCATE SILT FENCE ABOVE HEADWALL OF THE TEMPORARY CROSSING CULVERT.
9. REMOVE IMPERVIOUS DIKE AND PUMP AROUND.
10. CONSTRUCT TEMPORARY PATH/CROSSING TO THE EAST OF THE PROPOSED BRIDGE LOCATION (SEE SHEET C2.8, AND TOWN DETAIL HS418 FOR ADDITIONAL INFORMATION)
11. UTILIZE NEWLY CONSTRUCTED TEMPORARY PATH FOR CONSTRUCTION VEHICLES TO ACCESS THE SITE.
12. CONSTRUCT ABUTMENTS FOR PROPOSED PEDESTRIAN BRIDGE, UTILIZING AREA NORTH OF THE CREEK AS A LOCATION FOR EQUIPMENT/CRANE PAD.
13. PLACE PEDESTRIAN FIBERGLASS BRIDGE.

PHASE III (PATH CONSTRUCTION):

1. CLEAR SITE ACCORDING TO DESIGN PLANS
2. GRADE THE SITE PER SHEETS C2.5 & C2.6
3. PLACE SECOND PHASE OF EROSION CONTROL DEVICES
4. PLACE PERMANENT DRAINAGE DEVICES ON SITE ACCORDING TO DESIGN PLANS
5. PLACE SUBGRADE/AGGREGATE BASE COURSE ALONG PATH CORRIDOR
6. CONSTRUCT GREENWAY CURB RAMP AT MUSES MILL CT.
7. LAY ASPHALT ALONG PATH CORRIDOR
8. PLACE RAILINGS, MARKERS, SIGNS, ETC. AS NOTED PER THE DESIGN PLANS

PHASE IV (TEMPORARY CROSSING REMOVAL):

1. ONCE SITE WORK, GREENWAY CONSTRUCTION AND PEDESTRIAN BRIDGE INSTALLATION IS ADVANCED THAT THE TEMPORARY CONSTRUCTION ACCESS IS NO LONGER REQUIRED BY CONTRACTOR TO ACCESS THE PROJECT SITE, THE TEMPORARY STREAM CROSSING CAN BE REMOVED
2. BACKFILL THE STOCKPILED STREAMBED MATERIAL TO MATCH PRE CONSTRUCTION CONDITIONS
3. REMOVE EROSION CONTROL DEVICES ON PROJECT SITE

PHASE V (EXISTING GREENWAY REPAIR):

1. UPON COMPLETION OF THE PROPOSED GREENWAY CONSTRUCTION REMOVE ALL EQUIPMENT AND TEMPORARY CONSTRUCTION/EROSION CONTROL DEVICES FROM THE PROJECT SITE
2. REPAIR ANY DAMAGES CAUSED DURING CONSTRUCTION TO THE EXISTING TING STADIUM GREENWAY
3. GATHER AND REMOVE ALL REMAINING CONSTRUCTION EQUIPMENT AND TEMPORARY CONSTRUCTION DEVICES FROM THE PROJECT SITE AND STAGING AREAS
4. OPEN BOTH THE NEWLY CONSTRUCTED GREENWAY CONNECTOR AND THE SECTION OF TING STADIUM GREENWAY FOR PEDESTRIAN USE

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:
-
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HOLLY SPRINGS North Carolina

Sheet Title:

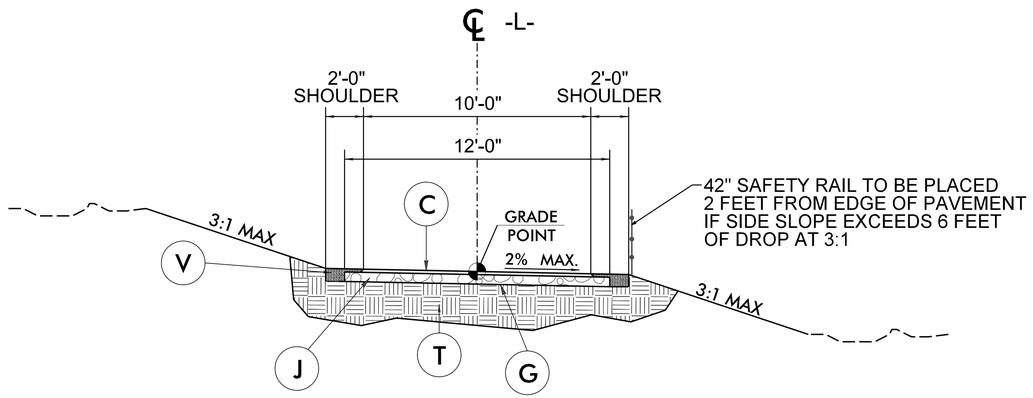
Legend & General Notes

Sheet No:

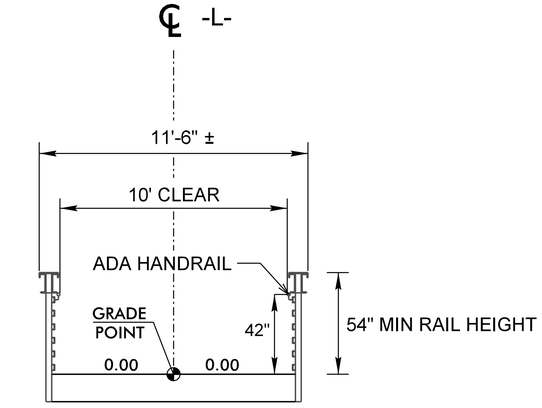
C1.1

	FINAL PAVEMENT DESIGN
C	2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
G	GEOTEXTILE FABRIC
J	6" AGGREGATE BASE COURSE
T	EXISTING EARTH MATERIAL
V	8" STONE SHOULDER

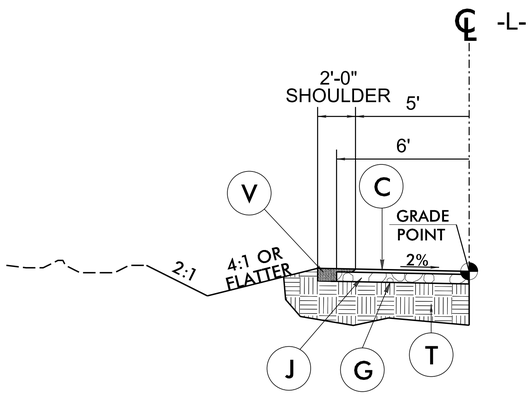
NOTES:
1. CROSS SLOPE DIRECTION WILL VARY, MAX 2%. SEE SHEETS C3.1 THRU C3.2 FOR SUPER ELEVATION TRANSITIONS
2. SHOULDERS TO MATCH CROSS SLOPE OF TRAIL.



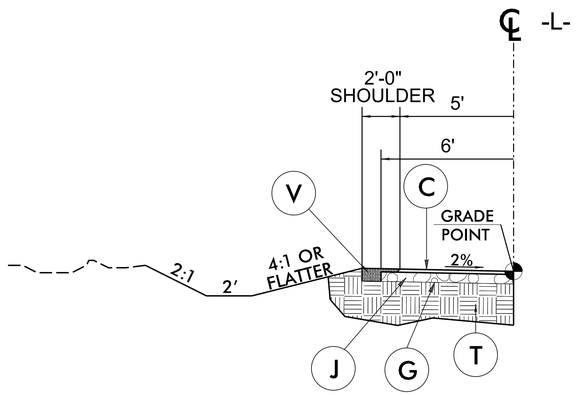
TYPICAL SECTION NO. 1 (GREENWAY)
-L- STA. 10+00.00 TO -L- STA. 18+60.20 (BEGIN BRIDGE)
-L- STA. 19+22.74 (END BRIDGE) TO -L- STA. 20+13.00



TYPICAL SECTION NO. 2 (BRIDGE)
-L- STA. 18+60.20 TO -L- STA. 19+22.74



SPECIAL CUT DITCH
PARTIAL TYPICAL SECTION NO. 1A (GREENWAY)
-L- STA. 10+65.00 TO -L- STA. 11+35.00 LT.
-L- STA. 18+30.00 TO -L- STA. 18+73.00 LT.
-L- STA. 12+15.00 TO -L- STA. 16+33.00 RT. *
(* REVERSE TYPICAL FOR RIGHT SIDE)



SPECIAL CUT BASE DITCH
PARTIAL TYPICAL SECTION NO. 1B (GREENWAY)
-L- STA. 15+20.00 TO -L- STA. 18+15.00 LT.
-L- STA. 16+33.00 TO -L- STA. 18+16.00 RT. *
(* REVERSE TYPICAL FOR RIGHT SIDE)

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
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Revisions:
-
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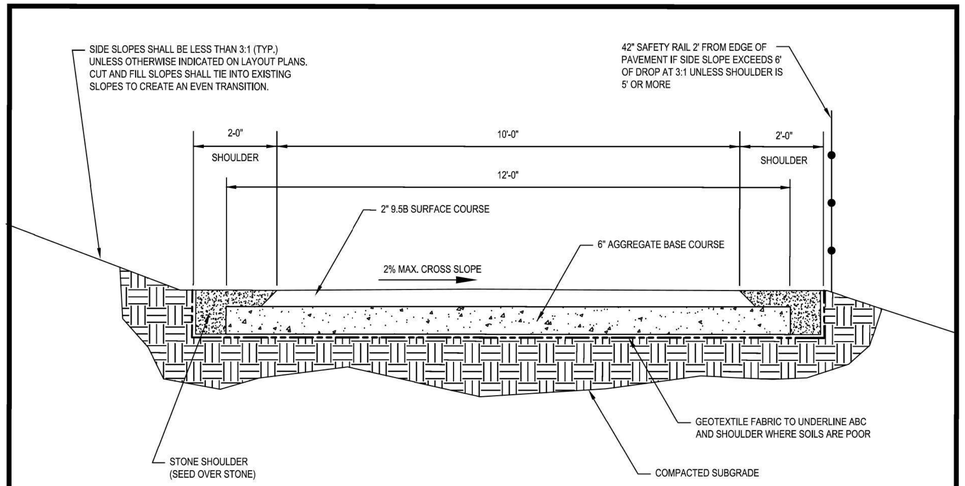
HOLLY SPRINGS North Carolina

Sheet Title:

Typical Sections

Sheet No:

C2.0



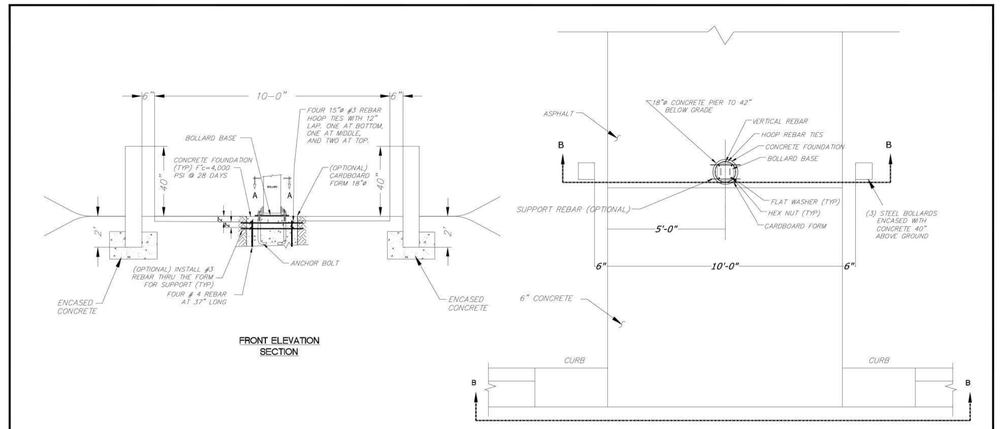
NOTES:

1. CROSS SLOPE DIRECTION VARIES. SEE LAYOUT PLANS FOR DIRECTION OF SLOPE.
2. CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING ALL SLOPES DISTURBED BY CONSTRUCTION.
3. CONCENTRATED FLOW MUST CROSS THE GREENWAY IN AN APPROVED STORM DRAIN

DRAWING NOT TO SCALE

10' ASPHALT GREENWAY TRAIL	STANDARD DETAIL NUMBER: HS340	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	7/24/18	
	11/18/24	

HOLLY SPRINGS North Carolina

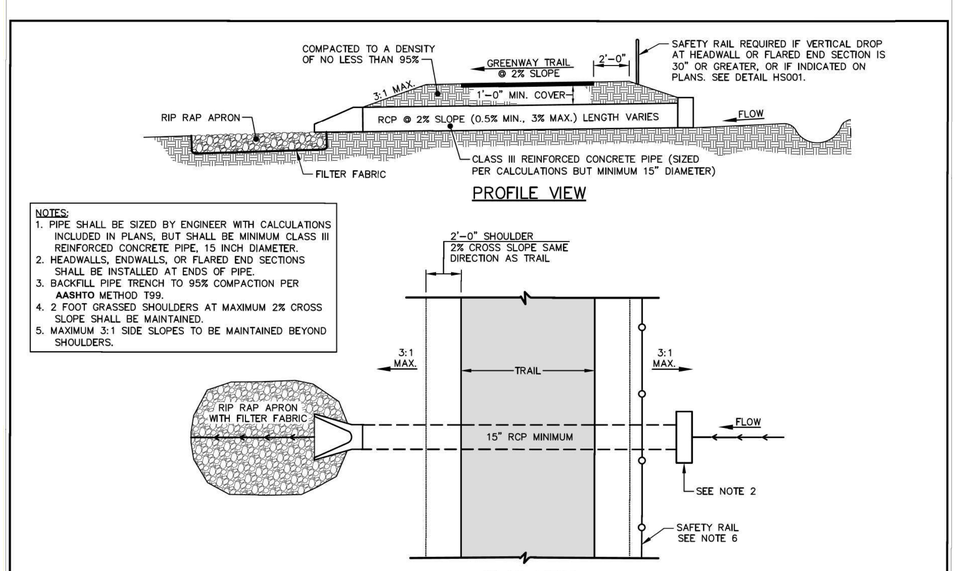


NOTE:
1. BOLLARD CAN BE ROUND, SQUARE OR RECTANGULAR.
2. CENTER COLLAPSIBLE BOLLARD TO BE TRAFFICGUARD® – MODEL LPHDHB OR SIMILAR.
3. INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH CHOSEN MANUFACTURER'S SPECIFICATIONS.
4. CENTER BOLLARD POST TO COLLAPSE TO A MIN OF 5".
5. CENTER BOLLARD POST MUST HAVE A STAINLESS STEEL LOCK PIN & PADLOCK.

DRAWING NOT TO SCALE

COLLAPSIBLE AND FIXED BOLLARD POST DETAIL	STANDARD DETAIL NUMBER: HS341	
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE	REVISIONS
	6/1/20	

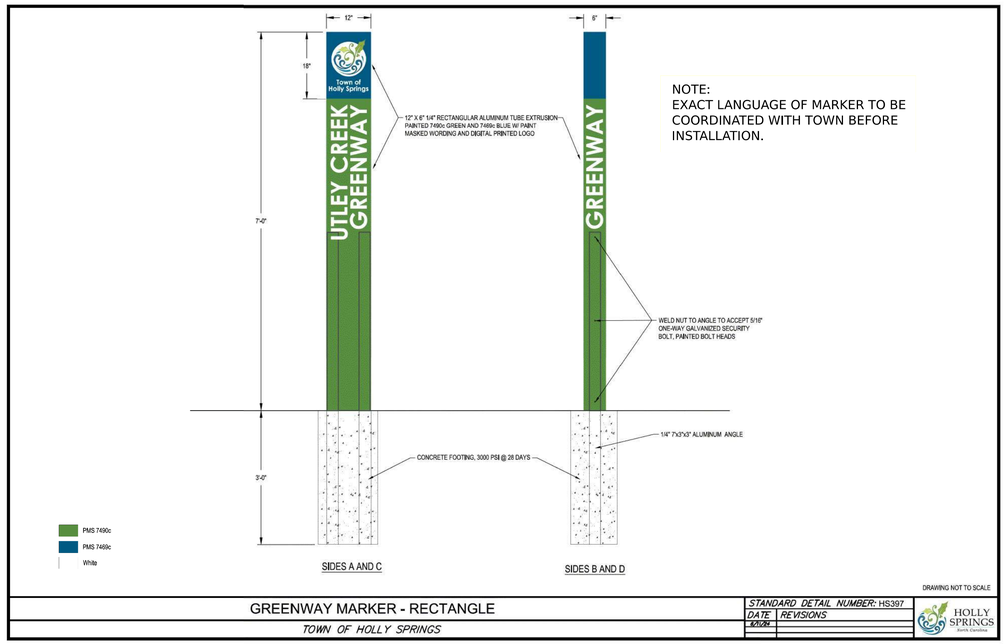
HOLLY SPRINGS Discover the Source



NOTES:
1. PIPE SHALL BE SIZED BY ENGINEER WITH CALCULATIONS INCLUDED IN PLANS, BUT SHALL BE MINIMUM CLASS III REINFORCED CONCRETE PIPE, 15 INCH DIAMETER.
2. HEADWALLS, ENDWALLS, OR FLARED END SECTIONS SHALL BE INSTALLED AT ENDS OF PIPE.
3. BACKFILL PIPE TRENCH TO 95% COMPACTION PER **AASHTO** METHOD T99.
4. 2 FOOT GRASSED SHOULDERS AT MAXIMUM 2% CROSS SLOPE SHALL BE MAINTAINED.
5. MAXIMUM 3:1 SIDE SLOPES TO BE MAINTAINED BEYOND SHOULDERS.

GREENWAY CULVERT	STANDARD DETAIL NUMBER: HS383	
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE	REVISIONS
	1/3/22	

HOLLY SPRINGS Discover the Source



DRAWING NOT TO SCALE

GREENWAY MARKER - RECTANGLE	STANDARD DETAIL NUMBER: HS397	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	8/5/25	

HOLLY SPRINGS North Carolina

PROJECT NAME TO BE USED ON MARKER: TING PARK - OAK HALL GREENWAY

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Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
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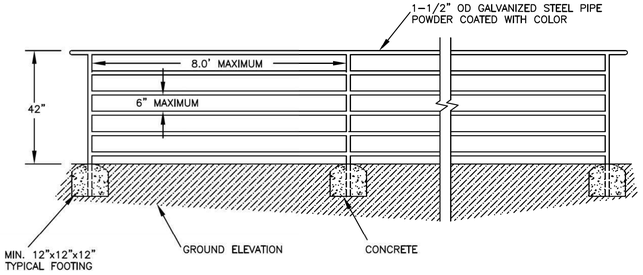
HOLLY SPRINGS North Carolina

Sheet Title:

Standard Details

Sheet No:

C2.1



NOTE:
THIS DETAIL TO BE USED OUTSIDE OF RIGHT OF WAY ONLY.

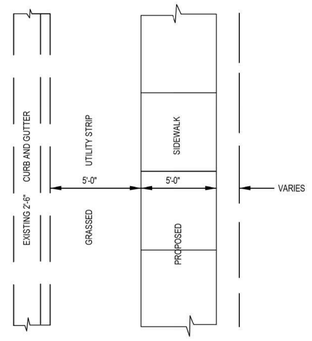
DRAWING NOT TO SCALE

STANDARD EXTERIOR HANDRAIL DETAIL	STANDARD DETAIL NUMBER: HS001	
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE	REVISIONS
	7/24/09	

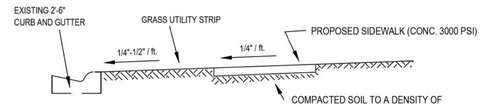
HOLLY SPRINGS Discover the Source

NOTES:
1. SIDEWALK SHALL BE 6" DEPTH AT ALL DRIVEWAYS.
2. SIDEWALK SHALL BE 6" DEPTH AT ALL HANDICAP RAMPS.
3. TRANSVERSE EXPANSION JOINT TO BE A MAX OF 50 FEET.

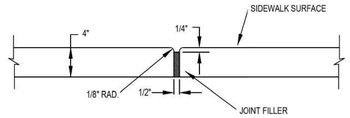
* VARIES - SEE APPROVED PROJECT PLANS



PLAN VIEW



TYPICAL SECTION

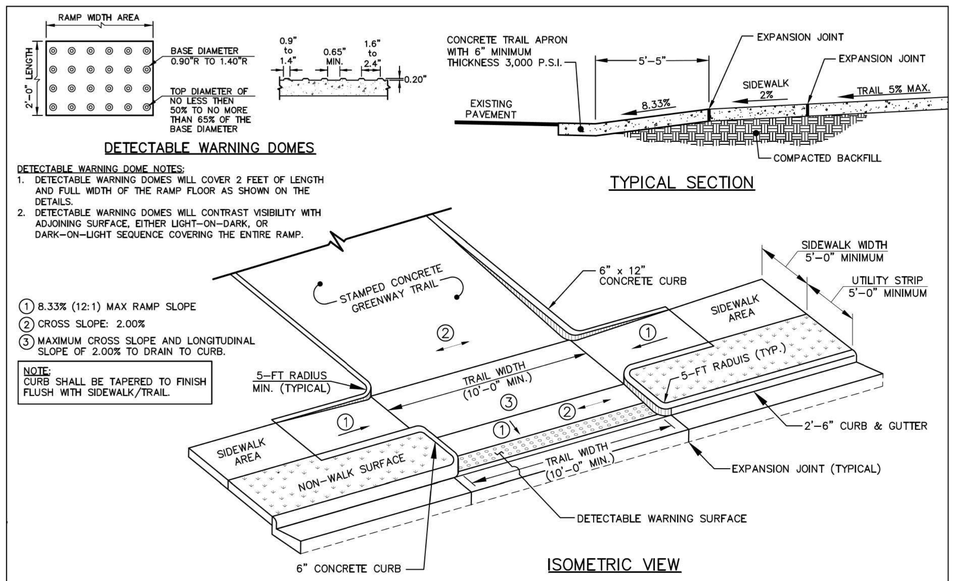


TRANSVERSE EXPANSION JOINT

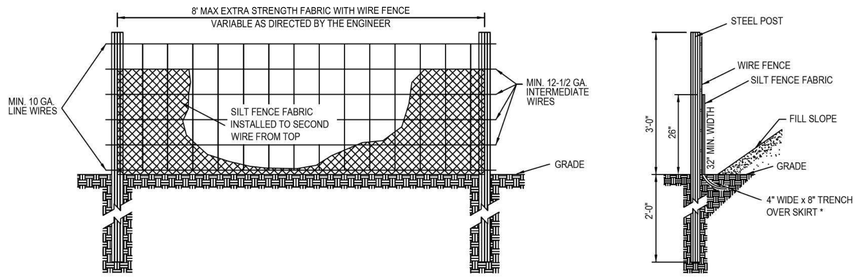
DRAWING NOT TO SCALE

STANDARD CONCRETE SIDEWALK	STANDARD DETAIL NUMBER: HS327	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	12/19/23	

HOLLY SPRINGS North Carolina



STANDARD GREENWAY DRIVEWAY APRON



NOTES:

1. USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.
2. UV RESISTANT SILT FENCE FABRIC MUST BE USED NO ORANGE SILT FENCE PERMITTED.

MAINTENANCE:
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY

REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.

DRAWING NOT TO SCALE

STANDARD TEMPORARY SILT FENCE	STANDARD DETAIL NUMBER: HS401	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	7/24/09	
	6/11/24	

HOLLY SPRINGS North Carolina

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:
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HOLLY SPRINGS North Carolina

Sheet Title:

Standard Details

Sheet No:

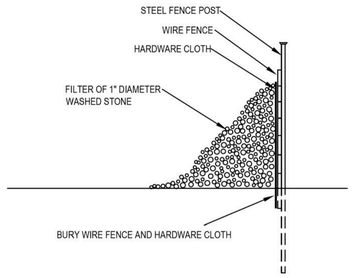
C2.2

NOTES:
1. MINIMUM 6" OVERLAP OF HARDWARE CLOTH AND SILT FENCE.
2. HARDWARE CLOTH TO BE INSTALLED ON UPSLOPE SIDE OF SILT FENCE.

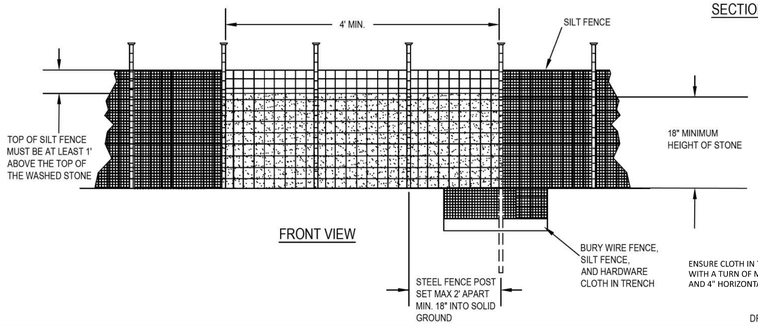
MAINTENANCE:
INSPECT SILT FENCE OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

SHOULD THE STONE BECOME INUNDATED WITH SEDIMENT OR OTHER DEBRIS, OR HARDWARE CLOTH AND STONE DAMAGED OR WASHED OUT, REPLACE IMMEDIATELY WITH CLEAN WASH STONE AND NEW HARDWARE CLOTH. REPAIR OR REPLACE T-POSTS IF NEEDED.

REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE PROPER FLOW THROUGH THE STONE. TAKE CARE TO AVOID DAMAGING THE HARDWARE CLOTH DURING CLEANOUT.



SECTION VIEW



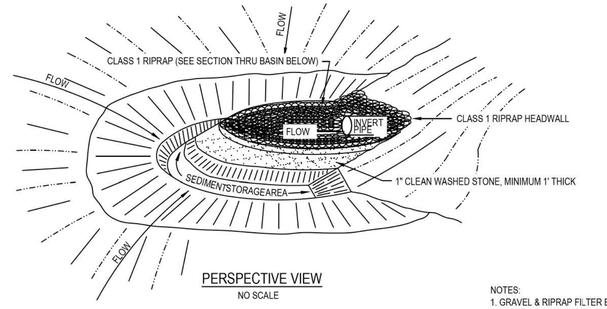
FRONT VIEW

ENSURE CLOTH IN TRENCH IS ANCHORED WITH A TURN OF MINIMUM 8" VERTICAL AND 4" HORIZONTAL PER HS401

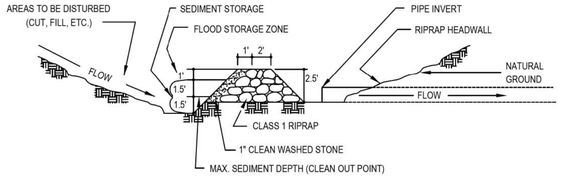
DRAWING NOT TO SCALE

SILT FENCE OUTLET	STANDARD DETAIL NUMBER: HS404	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	4/6/17	
	6/11/24	

HOLLY SPRINGS North Carolina



PERSPECTIVE VIEW
NO SCALE



SECTION THROUGH BASIN, FILTER AND CULVERT PIPE
NO SCALE

NOTES:
1. GRAVEL & RIPRAP FILTER BERM BASIN DETAIL IS DESIGNED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 5 ACRES OR LESS.
2. DIMENSIONS ARE MINIMUM ACCEPTABLE UNLESS OTHERWISE NOTED.

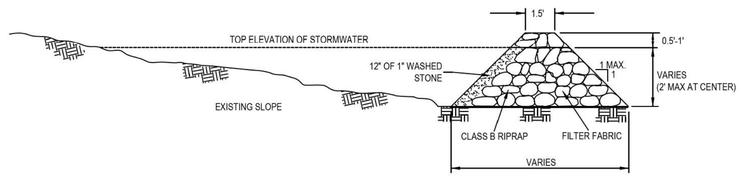
MAINTENANCE:
INSPECT ROCK PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.

CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY.

DRAWING NOT TO SCALE

(EXISTING PIPE INVERTS) GRAVEL & RIPRAP FILTER BERM BASIN	STANDARD DETAIL NUMBER: HS407	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	8/18/09	
	6/11/24	

HOLLY SPRINGS North Carolina

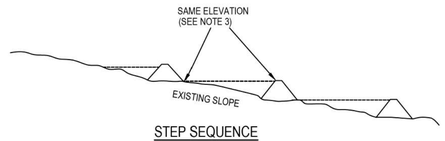


SIDE VIEW

NOTES:
1. HEIGHT & WIDTH DETERMINED BY EXISTING TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
2. KEY RIPRAP INTO THE DAM FOR STABILIZATION.
3. TOP OF DOWNHILL CHECK DAM IS TO BE SAME ELEVATION OF BOTTOM OF UPHILL CHECK DAM.

MAINTENANCE;
INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL AND STONE AS NEEDED.

INSPECT FOR EROSION AROUND EDGES OF CHECK DAM AND UNDERMINING. CORRECT ALL DAMAGE IMMEDIATELY. REPLACE STONE AS NEEDED.

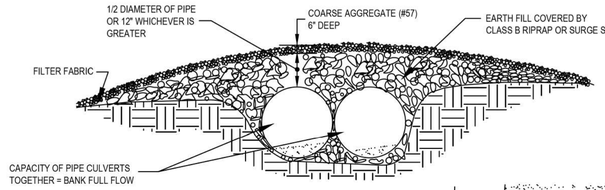


STEP SEQUENCE

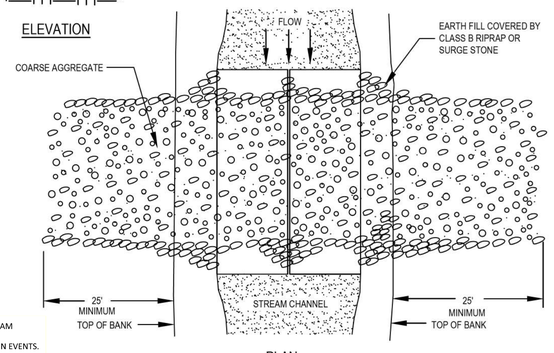
DRAWING NOT TO SCALE

CHECK DAM	STANDARD DETAIL NUMBER: HS413	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	8/31/16	
	6/11/24	

HOLLY SPRINGS North Carolina



ELEVATION



PLAN

NOTE: TEMPORARY HEADWALLS TO BE INSTALLED AT DOWNSTREAM AND UPSTREAM ENDS OF TWO TEMPORARY 36" HDPE PIPES (PIPE CULVERTS) TO CONTAIN EMBANKMENT/COARSE AGGREGATE AND PREVENT WASHOUT DURING RAIN EVENTS.

MAINTENANCE:
INSPECT TEMPORARY STREAM CROSSINGS AFTER RUNOFF-PRODUCING RAINS TO CHECK FOR BLOCKAGE IN CHANNEL, EROSION OF ABUTMENTS, CHANNEL SCOUR, RIPRAP DISPLACEMET, OR PIPING. MAKE ALL REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE TO THE INSTALLATION.

DRAWING NOT TO SCALE

TEMPORARY STREAM CROSSING	STANDARD DETAIL NUMBER: HS418	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	2/21/20	
	6/11/24	

HOLLY SPRINGS North Carolina

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DocuSigned by: Eric Spalding CTE7FA0BA3864D8... 12/19/2025

Corp. NC License: F-1320

Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:
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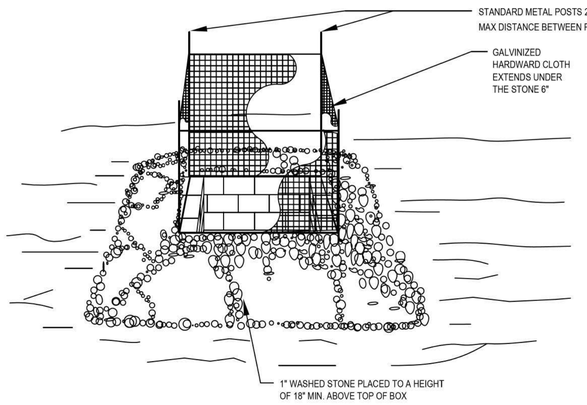
HOLLY SPRINGS North Carolina

Sheet Title:

Standard Details

Sheet No:

C2.3



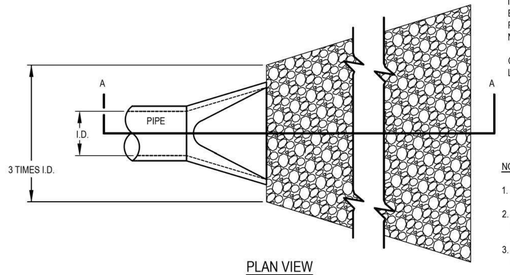
MAINTENANCE:
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT RAIN EVENT. CLEAR THE HARDWARE CLOTH OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE HARDWARE CLOTH DURING SEDIMENT REMOVAL.

REPLACE STONE AND REPAIR HARDWARE CLOTH AS NEEDED.

DRAWING NOT TO SCALE

STANDARD CATCH BASIN/YARD INLET PROTECTION	STANDARD DETAIL NUMBER: HS422	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	8/20/09	
	6/11/24	

HOLLY SPRINGS North Carolina



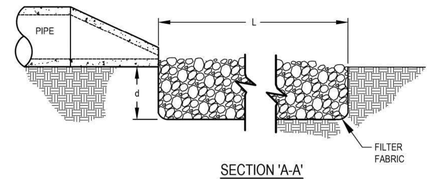
PLAN VIEW

MAINTENANCE:
INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT RAIN EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

CLEAN OUT SEDIMENT/REPLACE ONCE INUNDATED WITH SEDIMENT AND NO LONGER FUNCTIONING TO DIFFUSE OR SLOW DOWN FLOW.

NOTES:

1. L = THE LENGTH OF THE RIPRAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
3. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.
4. TOP OF STONE MUST BE BELOW OUTLET ELEVATION TO PREVENT OBSTRUCTION.

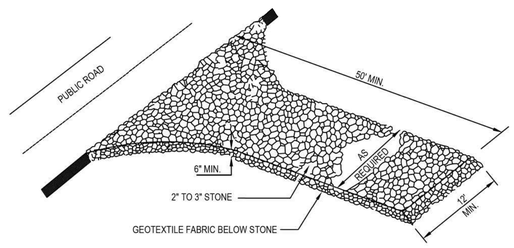


SECTION 'A-A'

DRAWING NOT TO SCALE

PIPE OUTLET TO FLAT AREA (NO WELL-DEFINED CHANNEL)	STANDARD DETAIL NUMBER: HS427	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	7/24/09	
	6/11/24	

HOLLY SPRINGS North Carolina



APPLICABLE AT ALL POINTS OF INGRESS & EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.

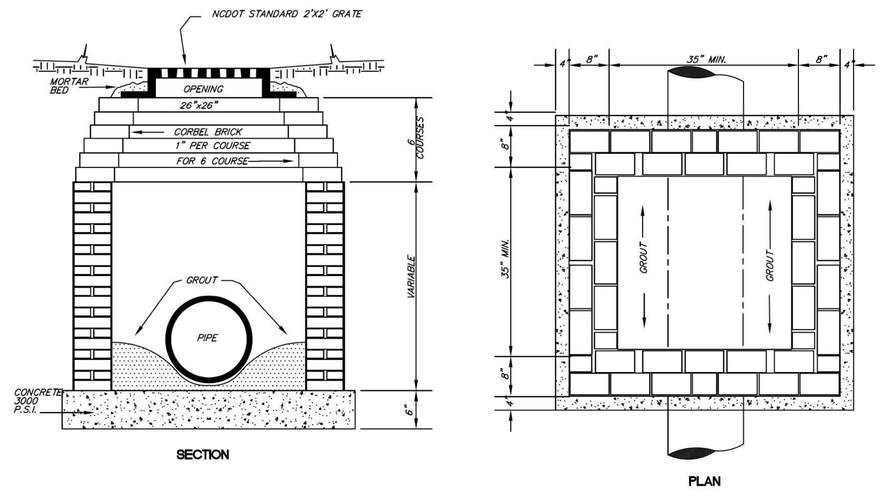
NOTES:

1. TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGER TRUCKS IS TO BE PROVIDED.
2. ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILIZATION BY ALL CONSTRUCTION TRUCKS.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF TRAFFIC ONTO STREETS. PERIODIC TOP DRESSING WITH STONE WILL BE NECESSARY, KEEP SOME ON HAND.
4. ANY MATERIAL WHICH STILL MAKES IT ONTO THE ROAD MUST BE CLEANED IMMEDIATELY.

DRAWING NOT TO SCALE

CONSTRUCTION ENTRANCE	STANDARD DETAIL NUMBER: HS432	
TOWN OF HOLLY SPRINGS	DATE	REVISIONS
	8/20/09	
	6/11/24	

HOLLY SPRINGS North Carolina



SECTION

PLAN

NOTES:

1. EITHER SOLID BRICK, SOLID BLOCK OR PRECAST CONCRETE MAY BE USED.
2. FOR 24" R.C.P. AND LARGER USE PIPE DIA. PLUS 12" FOR MINIMUM INSIDE DIMENSION.
3. GRATED INLETS SHALL NOT BE USED WITHIN TRAVEL AREAS WITHOUT APPROVAL OF DIRECTOR OF ENGINEERING.
4. STANDARD STEPS REQUIRED @ 16" O.C. WHERE DEPTH EXCEEDS 3'.

DRAWING NOT TO SCALE

STANDARD YARD INLET WITH GRATE AND FRAME	STANDARD DETAIL NUMBER: HS802	
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE	REVISIONS
	7/24/09	

Holly Springs Discover The Source.

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Seals:

NORTH CAROLINA PROFESSIONAL SEAL 045955 ENGINEER ERIC D SPALDING

DocuSigned by: Eric Spalding CTE7FA0BA3864D8... 12/19/2025

Corp. NC License: F-1320

Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

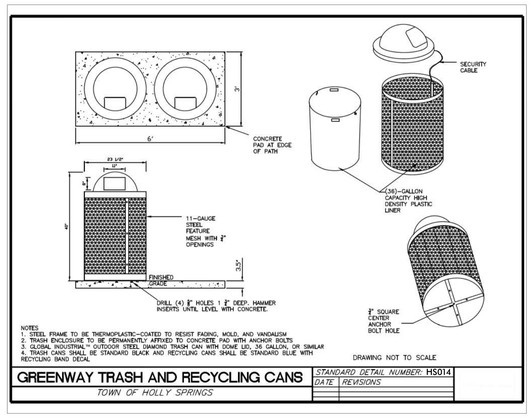
HOLLY SPRINGS North Carolina

Sheet Title:

Standard Details

Sheet No:

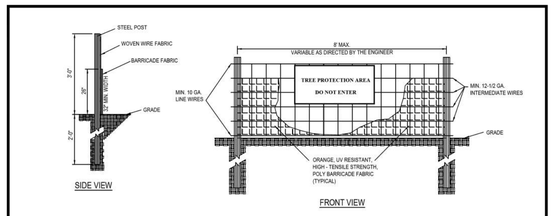
C2.4



NOTES:
1. STEEL FRAME TO BE THERMOPLASTIC-COATED TO RESIST FADING, MOLD, AND VANDALISM.
2. TRASH ENCLOSURE TO BE PERMANENTLY AFFIXED TO CONCRETE PAD WITH ANCHOR BOLTS.
3. GLOBAL INDUSTRIAL™ OUTDOOR STEEL DIAMOND TRASH CAN WITH DOME LID, 36 GALLON, OR SIMILAR
4. TRASH CANS SHALL BE STANDARD BLACK AND RECYCLING CANS SHALL BE STANDARD BLUE WITH RECYCLING SAND DECAL.

DRAWING NOT TO SCALE

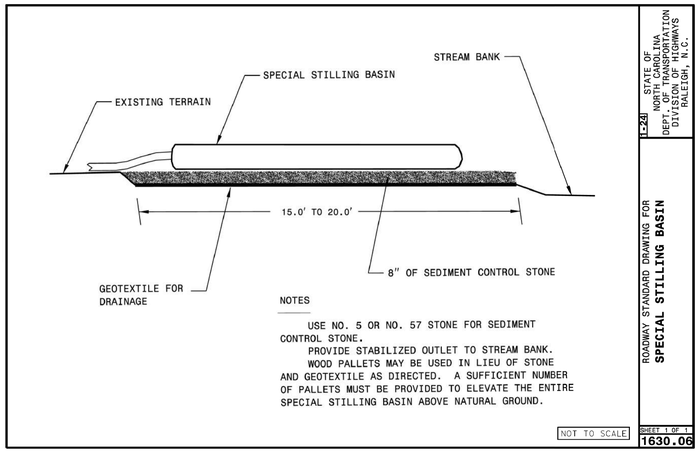
GREENWAY TRASH AND RECYCLING CANS	STANDARD DETAIL NUMBER: HS014
TOWN OF HOLLY SPRINGS	DATE / REVISIONS



NOTES:
1. NO ORANGE SILT FENCE PERMITTED.
2. TREE PROTECTION FENCE MUST BE ORANGE UV RESISTANT HIGH-TENSILE STRENGTH POLY BARRICADE FABRIC.
3. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
4. LETTERS TO BE 2" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
5. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
6. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
7. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
8. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
9. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
10. ADDITIONAL SIGNS MAY BE REQUIRED BY TOWN OF HOLLY SPRINGS INSPECTIONS DEPARTMENT BASED ON ACTUAL FIELD CONDITIONS.

DRAWING NOT TO SCALE

STANDARD TREE PROTECTION DETAIL	STANDARD DETAIL NUMBER: HS403
TOWN OF HOLLY SPRINGS	DATE / REVISIONS



NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
PROVIDE STABILIZED OUTLET TO STREAM BANK.
WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE SPECIAL STILLING BASIN ABOVE NATURAL GROUND.

NOT TO SCALE

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR
SPECIAL STILLING BASIN

SHEET 1 OF 1
1630.06

TABLE 4.1
SEEDING EROSION CONTROL SCHEDULE
(MAXIMUM SLOPE 3:1)

DATE**	TYPE	PLANTING RATE
AUGUST 15 – NOVEMBER 1	TALL FESCUE OR HARD FESCUE	300 LBS/ACRE
NOVEMBER 1 – MARCH 1	TALL FESCUE AND ABRUZZI RYE OR ANNUAL RYE	300 LBS/ACRE
MARCH 1 – APRIL 15	TALL FESCUE OR HARD FESCUE	300 LBS/ACRE
MARCH 1 – JULY 15	HULLED COMMON BERMUDA GRASS OR HYBRID BERMUDA GRASS OR CENTIPEDE GRASS OR ZOYSIA GRASS OR ST. AUGUSTINE GRASS	200 LBS/ACRE
APRIL 15 – JUNE 30	WEEPING LOVE GRASS OR BAHIA GRASS	25 LBS/ACRE
JULY 15 – AUGUST 15	TALL FESCUE, AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRID*	35 LBS/ACRE

*Temporary – Reseed according to optimum season for desired vegetation. Do not allow temporary cover to grow over 12 inches in height before mowing to keep fescue from being shaded out.
**Seeding dates will vary depending on weather conditions (e.g. temperature, rainfall, etc.)

Note on maintenance: refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

RIPARIAN AREAS TO BE RESEEDED WITH NATIVE GRASS MIX/ VEGETATION

SEEDING EROSION CONTROL SCHEDULE – TABLE 4.1	STANDARD DETAIL NUMBER: HS429
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE / REVISIONS 3/2016

TABLE 4.2
SEEDING EROSION CONTROL SCHEDULE
SLOPES (3:1 AND 2:1 – NOT MOWED)

DATE	TYPE	PLANTING RATE
MARCH 1 – JUNE 1	SERICEA LESPEDEZA (SCARIFIED), AND	50 LBS/ACRE
MARCH 1 – APRIL 15	ADD TALL FESCUE, OR	120 LBS/ACRE
MARCH 1 – JUNE 30	ADD WEEPING LOVEGRASS, OR	10 LBS/ACRE
MARCH 1 – JUNE 30	ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUNE 1 – SEPTEMBER 1	TALL FESCUE, AND ADD BROWNTOP MILLET,* OR ADD SORGHUM-SUDAN HYBRIDS*	120 LBS/ACRE 25 LBS/ACRE 30 LBS/ACRE
SEPTEMBER 1 – MARCH 1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED), AND ADD TALL FESCUE, AND ADD ABRUZZI RYE AND ANNUAL RYE	70 LBS/ACRE 120 LBS/ACRE 25 LBS/ACRE

*For temporary seeding purposes.

Note on maintenance: refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

RIPARIAN AREAS TO BE RESEEDED WITH NATIVE SEED MIX.

DRAWING NOT TO SCALE

SEEDING EROSION CONTROL SCHEDULE – TABLE 4.2	STANDARD DETAIL NUMBER: HS430
TOWN OF HOLLY SPRINGS ENGINEERING DEPARTMENT	DATE / REVISIONS 3/2016

DATE:

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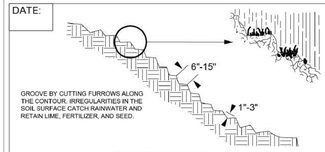
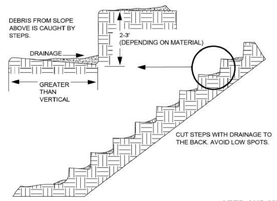


GROOVING SLOPES



STAIR STEPPING CUT SLOPES

CUT SLOPE ROUGHENING FOR AREAS NOT TO BE MOWED:
1. Stair-step grade or groove cut slopes with a gradient steeper than 3:1.
2. Use stair-step grading on any erodible material soft enough to be ripped with a bulldozer. Slopes consisting of soft rock with some subsoil are particularly suited to stair-stepping.
3. Make the vertical cut distance less than the horizontal distance, and slightly slope the horizontal position of the "step" in toward the vertical wall.
4. Do not make individual vertical cuts more than 2 feet in soft materials or more than 3 feet in rocky materials.
5. Grooving uses machinery to create a series of ridges and depressions that run across the slope (on the contour).
6. Groove using any appropriate implement that can be safely operated on the slope. Such as disks, tillers, spring harrows, or the teeth on a front-end loader bucket. Do not make such grooves less than 3 inches deep nor more than 15 inches apart.

FILL SLOPE ROUGHENING FOR AREAS NOT TO BE MOWED:
1. Place fill slopes with a gradient steeper than 3:1 in lifts not to exceed 9 inches, and make sure each lift is properly compacted. Ensure that the face of the slope consists of loose, uncompacted fill 4 to 6 inches deep. Use grooving, as described above, to roughen the face of the slopes, if necessary.
2. Do not blade or scrape the final slope face.

CUTS, FILLS, AND GRADED AREAS THAT WILL BE MOWED:
1. Make mowed slopes **no steeper than 3:1**
2. Roughen these areas to shallow grooves by normal tilling, disking, harrowing, or use of a cultipacker-seeder. Make the final pass of any such tillage implement on the contour.
3. Make grooves, formed by such implements, close together (less than 10 inches) and not less than 1 inch deep.
4. Excessive roughness is undesirable where mowing is planned.

ROUGHENING WITH TRACKED MACHINERY:
1. Limit roughening with tracked machinery to sandy soils to avoid undue compaction of the soil surface. Tracking is generally not as effective as the other roughening methods described.
2. Operate tracked machinery up and down the slope to leave horizontal depressions in the soil. Do not back-blade during the final grading operation.

SEED AND MULCH ROUGHENED AREAS IMMEDIATELY TO OBTAIN OPTIMUM SEED GERMINATION AND GROWTH.

	SURFACE ROUGHENING	Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

DATE:

PAGE:

TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

Seeding Mixture

Species	Rate (lb/acre)
Rye (grain)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

Seeding Dates
Mountains—Above 2500 feet: Feb. 15 - May 15
Below 2500 feet: Feb. 1- May 1
Piedmont—Jan. 1 - May 1
Coastal Plain—Dec. 1 - Apr. 15

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

Seeding Mixture

Species	Rate (lb/acre)
German millet	40

In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.

Seeding Dates
Mountains — May 15 - Aug. 15
Piedmont — May 1 - Aug. 15
Coastal Plain — Apr. 15 - Aug. 15

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

Seeding Mixture

Species	Rate (lb/acre)
Rye (grain)	120

Seeding Dates
Mountains — Aug. 15 - Dec. 15
Coastal Plain and Piedmont — Aug. 15 - Dec. 31

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.

SEED BED PREPARATION:

LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1-1½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.

FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700 - 1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage. Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

	TEMPORARY SEEDING	Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

DATE:

PAGE:

NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE

Species	Rate
Centipede	5 lbs/acre
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Coastal or Eastern Piedmont for Centipede- Sept. 1 - May 1
Coastal and Piedmont for Indian Woodoats and Virginia Wild Rye- Feb 15 - April 1
Mountains for Indian Woodoats and Virginia Wild Rye- March 1 - May 15

Maintenance:
Significant maintenance may be required to obtain desired cover.

NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE

Species	Rate
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre*

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Mountains - July 15- Aug 15
Piedmont - Aug 15 - Oct 15

Maintenance:
Indian Woodoats and Virginia Wild Rye are both sun and shade tolerant.

NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE

Species	Rate
Hard Fescue	15 lbs/acre
Switchgrass	2.5-3.5 lbs/acre*
Indian Grass	5-7 lbs/acre*
Big Bluestem	5-7 lbs/acre*
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre*

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Mountains - Hard Fescue- Aug 1 - June 1
Mountains- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 15
Piedmont and Coastal- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 1
Coastal- Indian Woodoats and Virginia Wild Rye- Sept 1 - Nov 1

Maintenance:
Hard Fescue is not recommended for slopes > 5%. Prefers shade.

SEED BED PREPARATION:

LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1½ tons/acre on coarse0textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.
FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.
SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. the finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. all ridges and depressions shall be removed and filled to provide the approved surface drainage . Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

NOTES:
1. Permanent seeding, sodding or other means of stabilization are required when all construction work is completed according to the NPDES timeframes table.
2. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted.
3. Use a seeding mix that will produce fast(growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must cover at leaser 80% of the soil surface.
4. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.

	PERMANENT SEEDING	Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

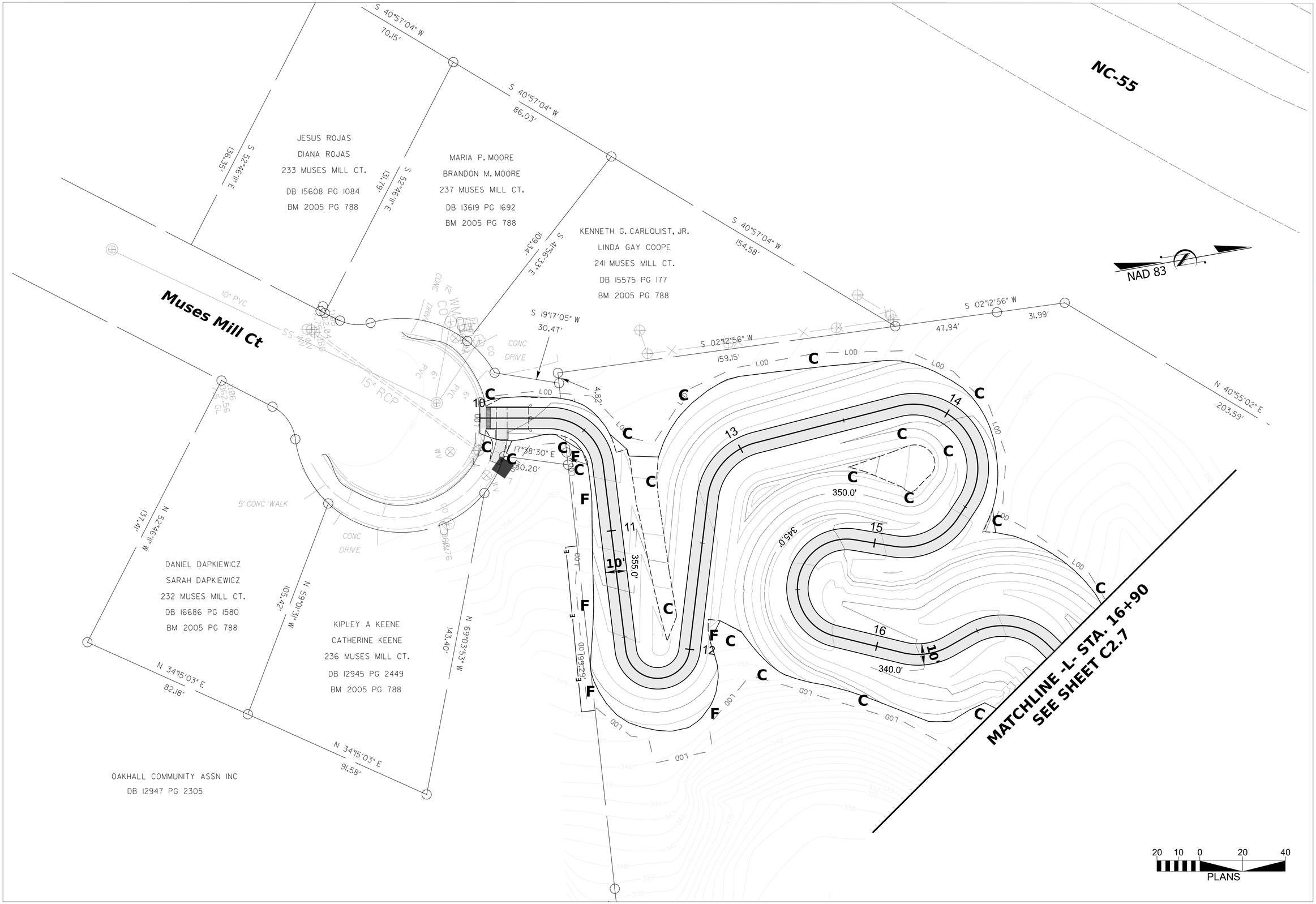
Project No: 1725-200012.00
Date: 10/23/2025
Revisions:
-
-

Sheet Title:

Standard Details

Sheet No:

C2.5



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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:
-
-

Sheet Title:

Grading Plans

Sheet No:

C2.6

THE TOWN OF HOLLY SPRINGS
101 SPORTSMANSHIP WAY
DB 15368 PG 1624
BM 2015 PG 837

NAD 83

MATCHLINE -L- STA. 16+90
SEE SHEET C2.6

END PROJECT
END 10' ASPHALT TRAIL
TIE FLUSH TO EXIST GREENWAY
-L- STA. 20+13.00

CONTRACTOR TO REPAIR ANY DAMAGED PARTS OF THE EXISTING TING STADIUM GREENWAY AFTER TIE-IN FROM PROPOSED PATH IS COMPLETED

17
18
19
20
335.0'
330.0'
LOD
C
F

20 10 0 20 40
PLANS

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Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/8/2025
Revisions:
-
-

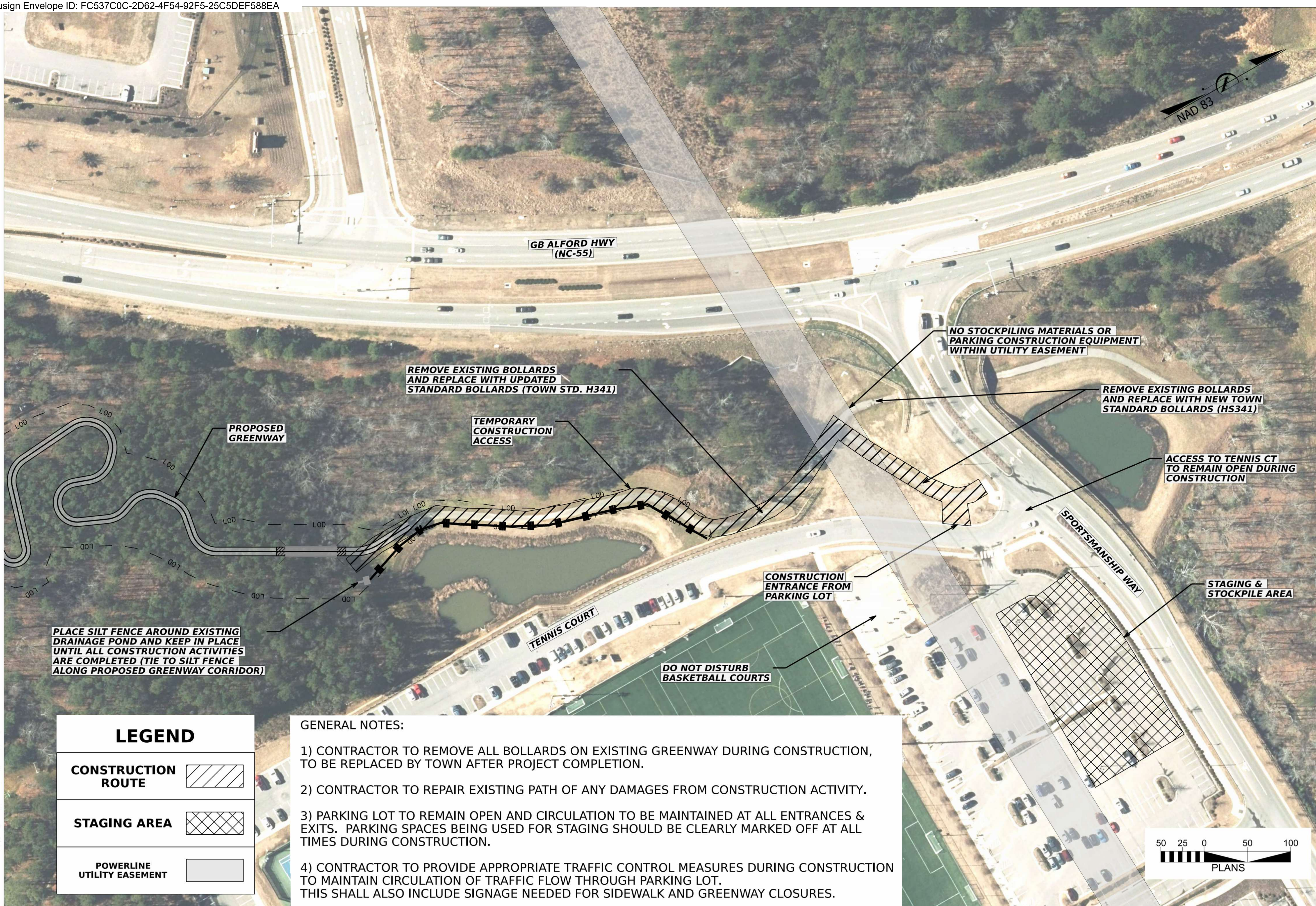
HOLLY SPRINGS North Carolina

Sheet Title:

Grading Plans

Sheet No:

C2.7



LEGEND

CONSTRUCTION ROUTE	(diagonal hatch)
STAGING AREA	(cross hatch)
POWERLINE UTILITY EASEMENT	(grey fill)

GENERAL NOTES:

1) CONTRACTOR TO REMOVE ALL BOLLARDS ON EXISTING GREENWAY DURING CONSTRUCTION, TO BE REPLACED BY TOWN AFTER PROJECT COMPLETION.

2) CONTRACTOR TO REPAIR EXISTING PATH OF ANY DAMAGES FROM CONSTRUCTION ACTIVITY.

3) PARKING LOT TO REMAIN OPEN AND CIRCULATION TO BE MAINTAINED AT ALL ENTRANCES & EXITS. PARKING SPACES BEING USED FOR STAGING SHOULD BE CLEARLY MARKED OFF AT ALL TIMES DURING CONSTRUCTION.

4) CONTRACTOR TO PROVIDE APPROPRIATE TRAFFIC CONTROL MEASURES DURING CONSTRUCTION TO MAINTAIN CIRCULATION OF TRAFFIC FLOW THROUGH PARKING LOT.
THIS SHALL ALSO INCLUDE SIGNAGE NEEDED FOR SIDEWALK AND GREENWAY CLOSURES.

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Ting Park-Oak Hall Greenway Connector
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Holly Springs North Carolina

Sheet Title:
Construction Access

Sheet No:
C2.8

2°12'56" W
31.99'
N 40°55'02" E
203.59'
N 26°32'00" E
557.13'
THE TOWN OF HOLLY SPRINGS
101 SPORTSMANSHIP WAY
DB 15368 PG 1624
BM 2015 PG 837
NAD 83
LOD
WING WALL
TEMPORARY HEADWALL
OUTLET ELEV. = 317.00'
-L- STA. 18+90.35
16.14' LT
PROPOSED FIBERGLASS BRIDGE
SEE SHEET C5.1
EXISTING TING STADIUM GREENWAY
TEMPORARY INLET
ELEV. = 330.00'
ACCESS ONTO
PROJECT SITE
TEMPORARY 18"
(46 LF) HDPE PIPE
SLOPE = 8.7%
TEMPORARY OUTLET
ELEV. = 326.00'
TWO TEMPORARY 36"
(2 X 60 LF) HDPE PIPES
SLOPE = 3.33%
TEMPORARY HEADWALL
INLET ELEV. = 319.00'
-L- STA. 19+07.33
41.48' RT
12'
4'
NOTE:
SHADED AREA IS THE ANTICIPATED TEMPORARY PATH NEEDED.
CONTRACTOR SHALL FOLLOW TOWN STANDARD HS418 ON
SHEET C2.3 TO PLACE TEMPORARY PIPES, AGGREGATE BASE,
AND TIE BACK DOWN ON BOTH SIDES OF THE STREAM.
20 10 0 20 40
PLANS
NOTE: CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AT ALL TIMES
CONTRACTOR TO IMPLEMENT PROPER EROSION CONTROL MEASURES WHILE ACCESSING THE SITE
SEE TEMPORARY CROSSING DETAIL SHOWN ON SHEET C2.3

Y:\North Carolina\TTXX-205\TT25-200912.00__Ting_Oakhall_Greenway\Eng_Docs\Base\Ting Oakhall_Temp_Crossing_Sheet.dgn

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:
-
-

HOLLY SPRINGS North Carolina

Sheet Title:

Temporary Crossing

Sheet No:

C2.9

Plan Sheet Layout

-L-

CUR DATA -L-
PI = 10+54.96
Δc = 83°03'05.9" (RT)
D = 229°10'59.2"
Lc = 36.24
Tc = 22.14
R = 25

CUR DATA -L-
PI = 12+80.35
Δc = 166°13'38.4" (LT)
D = 21°58'18.7"
Lc = 43.52
Tc = 124.20
R = 15

CUR DATA -L-
PI = 12+92.06
Δc = 68°45'30.7" (RT)
D = 190°59'09.4"
Lc = 36.00
Tc = 20.53
R = 30

CUR DATA -L-
PI = 14+53.74
Δc = 137°44'35.3" (RT)
D = 190°59'09.4"
Lc = 72.12
Tc = 77.63
R = 30

CUR DATA -L-
PI = 14+75.87
Δc = 66°08'21.0" (RT)
D = 190°59'09.4"
Lc = 34.63
Tc = 19.53
R = 30

CUR DATA -L-
PI = 16+24.33
Δc = 43°21'06.1" (LT)
D = 190°59'09.4"
Lc = 22.70
Tc = 11.92
R = 30

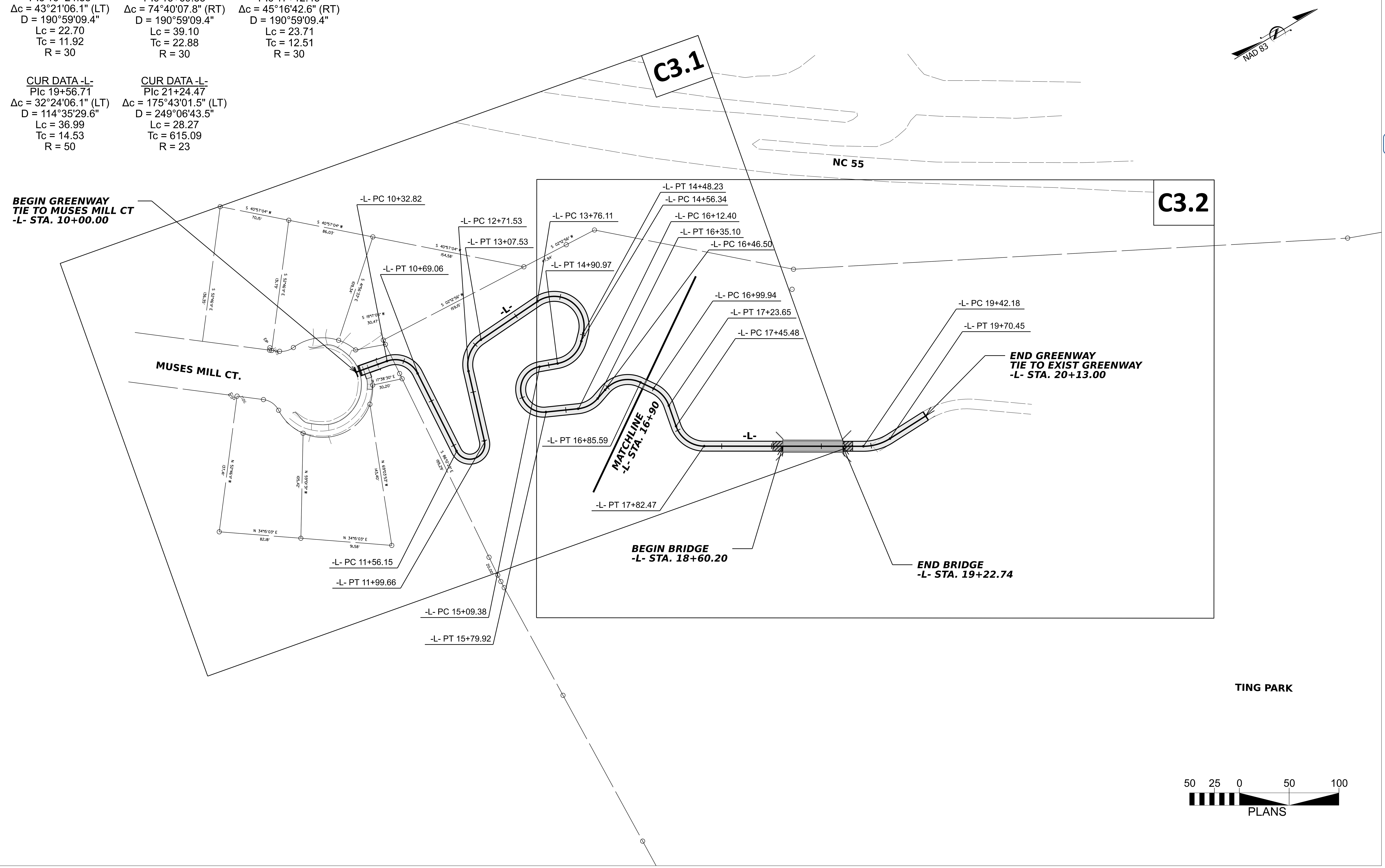
CUR DATA -L-
PI = 16+69.38
Δc = 74°40'07.8" (RT)
D = 190°59'09.4"
Lc = 39.10
Tc = 22.88
R = 30

CUR DATA -L-
PI = 17+12.45
Δc = 45°16'42.6" (RT)
D = 190°59'09.4"
Lc = 23.71
Tc = 12.51
R = 30

CUR DATA -L-
PI = 17+66.74
Δc = 70°38'22.7" (LT)
D = 190°59'09.4"
Lc = 23.71
Tc = 21.26
R = 30

CUR DATA -L-
PI = 19+56.71
Δc = 32°24'06.1" (LT)
D = 114°35'29.6"
Lc = 36.99
Tc = 14.53
R = 50

CUR DATA -L-
PI = 21+24.47
Δc = 175°43'01.5" (LT)
D = 249°06'43.5"
Lc = 28.27
Tc = 615.09
R = 23



50 25 0 50 100
PLANS

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12/19/2025

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Ting Park-Oak Hall Greenway Connector

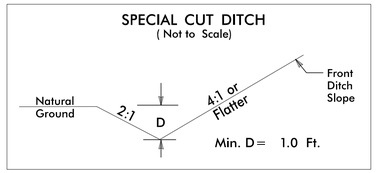
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

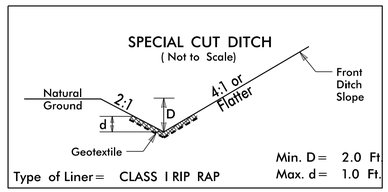
HOLLY SPRINGS North Carolina

Sheet Title:
Plan Sheet Layout

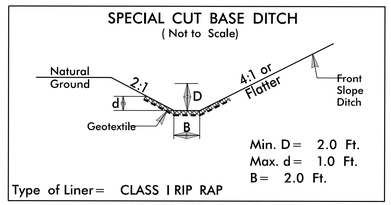
Sheet No:
C3.0



FROM STA. 10+65 TO STA. 11+55 –L– LT.
FROM STA. 12+15 TO STA. 14+50 –L– RT.



FROM STA. 14+50 TO STA. 16+33 –L– RT



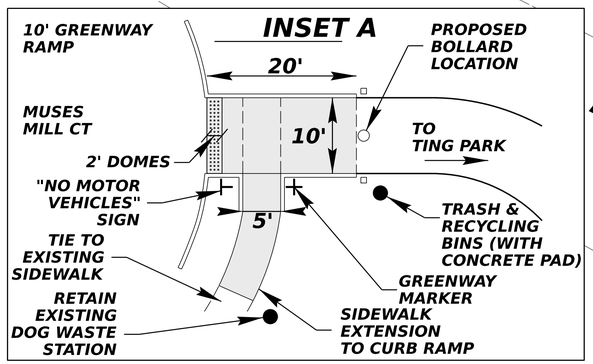
FROM STA. 15+20 TO STA. 18+15 –L– LT.
FROM STA. 16+33 TO STA. 18+15 –L– RT.

SIGN DETAIL

NO MOTOR VEHICLES

R5–3, 24'' X 24''
12' STANDARD BLACK POWDER COATED ALUMINUM U–POST, AND BLACK POWDER COATED BACKING

NOTE: SEE MUTCD FOR SPECIFICATIONS



JESUS ROJAS
DIANA ROJAS
233 MUSES MILL CT.
DB 15608 PG 1084
BM 2005 PG 788

MARIA P. MOORE
BRANDON M. MOORE
237 MUSES MILL CT.
DB 13619 PG 1692
BM 2005 PG 788

KENNETH G. CARLQUIST, JR.
LINDA GAY COOPE
241 MUSES MILL CT.
DB 15575 PG 177
BM 2005 PG 788

DANIEL DAPKIEWICZ
SARAH DAPKIEWICZ
232 MUSES MILL CT.
DB 16686 PG 1580
BM 2005 PG 788

KIPLEY A KEENE
CATHERINE KEENE
236 MUSES MILL CT.
DB 12945 PG 2449
BM 2005 PG 788

OAKHALL COMMUNITY ASSN INC
DB 12947 PG 2305

PROPOSED BOLLARD LOCATION TO BE FURNISHED AFTER PROJECT COMPLETED BY TOWN

BEGIN GREENWAY TIE TO MUSES MILL CT -L- STA. 10+00.00

SEE INSET A

MATCHLINE -L- STA. 16+90 SEE SHEET C3.2

FOR -L- PROFILE SEE SHEETS C3.3 THRU C3.4

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:
-
-

Sheet Title:

Horizontal Alignment

Sheet No:

C3.1


STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Natural Ground
2:1
2:1
D
d
Geotextile
B
Min. D = 1 Ft.
Max. d = 1 Ft.
B = 2 Ft.
*When B is < 6.0'
Type of Liner = CLASS I Rip-Rap
FROM STA. 18+15 TO STA. 18+33 -L- RT
SPECIAL CUT DITCH
(Not to Scale)
Natural Ground
2:1
D
4:1 or Flatter
Front Ditch Slope
Min. D = 1.0 Ft.
FROM STA. 18+15 TO STA. 18+55 -L- LT.
SPECIAL CUT BASE DITCH
(Not to Scale)
Natural Ground
2:1
D
d
Geotextile
B
4:1 or Flatter
Front Slope Ditch
Min. D = 2.0 Ft.
Max. d = 1.0 Ft.
B = 2.0 Ft.
Type of Liner = CLASS I RIP RAP
FROM STA. 15+20 TO STA. 18+15 -L- LT.
FROM STA. 16+33 TO STA. 18+15 -L- RT.
THE TOWN OF HOLLY SPRINGS
101 SPORTSMANSHIP WAY
DB 15368 PG 1624
BM 2015 PG 837
30' TOWN OF HOLLY SPRINGS RIPARIAN BUFFER
NAD 83
-L- PC 16+99.94
-L- PT 17+23.65
-L- PC 17+45.48
STANDARD BASE DITCH
MATCHLINE -L- STA. 16+90
SEE SHEET C3.1
STANDARD YARD INLET - HS802
-L- STA. 18+15
OFF. 15.6' LT
TOP = 328.8'
INV. = 326.8'
18" RCP-III
END ASPHALT TRAIL
BEGIN APPROACH SLAB
-L- STA. 18+50.20
END APPROACH SLAB
END SAFETY RAILING
BEGIN BRIDGE
-L- STA. 18+60.20
END SAFETY RAILING
-L- STA. 19+62.74
-L- PC 19+42.18
-L- PT 19+70.45
END GREENWAY
TIE TO EXIST GREENWAY
-L- STA. 20+13.00
EXISTING TING STADIUM GREENWAY
N55°09'08.0"E
S79°34'09.4"E
BEGIN SAFETY RAILING
-L- STA. 17+97.47
STANDARD V DITCH
-L-
N29°47'27.9"E
+31.47
+92.08
10'
N02°36'38.3"W
BEGIN SAFETY RAILING
-L- STA. 17+62.20
STANDARD BASE DITCH
-L- PT 17+82.47
CLASS I RIP RAP
EST. 4 TONS
EST. 11 SY
GEOTEXTILE
STANDARD BASE TAIL DITCH
STANDARD ENDWALL
INV. = 326.3'
END SAFETY RAILING
-L- STA. 19+62.74
END APPROACH SLAB
BEGIN ASPHALT TRAIL
-L- STA. 19+32.74
END BRIDGE
BEGIN SAFETY RAILING
BEGIN APPROACH SLAB
-L- STA. 19+22.74
30' TOWN OF HOLLY SPRINGS RIPARIAN BUFFER
TRIBUTARY OF
LITTLE BRANCH
WETLAND BOUNDARY
WLB
20 10 0 20 40
PLANS
FOR -L- PROFILE SEE SHEET C3.4
FOR STRUCTURE PLANS, SEE SHEET C5.0 THRU C5.1

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Eric Spalding 12/19/2025

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

Sheet Title:

Horizontal Alignment

Sheet No:

C3.2

EROSION CONTROL NOTES

1. ALL "STD." NUMBERS REFER TO NCDEQ DETAILS AND SPECIFICATIONS.
2. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY/STATE EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
4. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
5. PHASE I EROSION CONTROL TO BE IN PLACE DURING BRIDGE CONSTRUCTION AND TEMPORARY STREAM CROSSING

   ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
6. PROVIDE EROSION CONTROL IN STOCKPILE AND STAGING AREA WHEN ESTABLISHING EROSION CONTROL AS INDICATED IN THE CONSTRUCTION SEQUENCE. PROVIDE BARRIER AT THE BASE OF THE FENCE AROUND THE PERIMETER OF THE STOCKPILE AREA AS SHOWN ON SHEET C4.5A. ENSURE NO MIGRATION OF SEDIMENT-LADEN RUNOFF OUTSIDE OF THE DESIGNATED STOCKPILE AND STAGING AREA. PROVIDE INLET PROTECTION FOR EACH INLET IN THE STOCKPILE AREA AND BARRIERS OR FENCING AS NECESSARY TO PROTECT EXISTING LANDSCAPE AREAS. PROVIDE ADDITIONAL PROTECTIONS SUCH AS TARPING, STABILIZATION, AND BARRIERS ON SEDIMENT-PRODUCING STOCKPILES AS NECESSARY. ENSURE NO SEDIMENT TRACKING ONTO EXISTING ROADWAYS BETWEEN STAGING AREA AND PROJECT SITE. UPON COMPLETION, SWEEP OR CLEAN ALL SEDIMENT REMAINING ON PAVED AREAS OF STOCKPILE BEFORE REMOVING BOUNDARY PROTECTIONS.
7. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF NCDEQ.
8. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.
9. A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING EXCEEDING ONE ACRE THAT WAS NOT PREVIOUSLY APPROVED.
10. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.
11. TOTAL DENUDED AREA: 2.43 AC
12. SOIL TYPES: HrB - HOLLIS FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES
    HrD2 - HOLLIS FINE SANDY LOAM, 15 TO 45 PERCENT SLOPES
13. NAME OF RECEIVING WATER COURSE: LITTLE BRANCH, CLASSIFICATION OF RECEIVING WATER COURSE: C

MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGN.
2. SEDIMENT WILL BE REMOVED FROM THE TEMPORARY SEDIMENT TRAPS WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
3. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FEET DEEP AT THE FENCE.
4. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. THE ENGINEER MAY DIRECT THAT ADDITIONAL SILT FENCING OR EROSION CONTROL MATTING BE INSTALLED AT ANY TIME PRIOR TO FINAL ACCEPTANCE.
5. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS INCLUDED IN THESE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED ONCE THE ENTIRE SITE IS STABILIZED.
7. CONTACT PERSON RESPONSIBLE FOR EROSION CONTROL MAINTENANCE: MARK TUTOR
   - 7.1. PHONE: 919-215-2249
   - 7.2. EMAIL: mark.tutor@hollyspringsnc.gov

NPDES Stormwater Discharge Permit for Construction Activities (NCGO1)

NCDENR/Division of Energy, Mineral and Land Resources

STABILIZATION TIMEFRAMES

(Effective Aug. 3, 2011)

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.

EROSION CONTROL SEQUENCE:

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ).

1a. EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES (INCLUDING TIMBERING AND DEMOLITION) OCCUR. THE COC CAN BE OBTAINED BY FILLING OUT THE ELECTRONIC NOTICE OF INTENT (E-NOI) FORM AT HTTPS://WWW.DEQ.NC.GOV/NCG01 [DEQ.NC.GOV]. PLEASE NOTE, THE E-NOI FORM MAY ONLY BE FILLED OUT ONCE THE PLANS HAVE BEEN APPROVED. A COPY OF THE E&SC PERMIT, THE COC, AND A HARD COPY OF THE PLAN MUST BE KEPT ON SITE, PREFERABLY IN A PERMITS BOX, AND ACCESSIBLE DURING INSPECTION.

2. SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH EROSION CONTROL INSPECTOR OF NCDEQ TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION OF NORTH CAROLINA RULES GOVERNING SEDIMENTATION CONTROL. DEMLR CONTACT NUMBER (919)791-4200.

3. THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES AND COMPETE THE FOLLOWING COMBINED SELF-INSPECTION FORM FOUND ON THE DEMLR WEBSITE: HTTPS://DEQ.NC.GOV/ABOUT/DIVISIONS/ENERGY-MINERAL-LAND-RESOURCES/EROSION-SEDIMENT- CONTROL/FORMS[DEQ.NC.GOV]. TWELVE MONTHS OF COMPLETE INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS RECOMMENDED A COPY BE KEPT IN A PERMITS BOX.

3a. SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF EQUAL TO OR GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING.

3b. PER NPDES REQUIREMENTS, A RAIN GAUGE, SELF- INSPECTIONS RECORDS, PERMIT, CERTIFICATE OF COVERAGE, AND E&SC PLAN ARE REQUIRED TO BE MAINTAINED ON SITE AND ACCESSIBLE DURING INSPECTION. IT IS RECOMMENDED THAT THESE ITEMS BE PLACED IN A PERMITS BOX AT THE BEGINNING OR ENTRANCE OF PROJECT.

4. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH NCDEQ EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.

4a. REFER TO SHEET C1.1 FOR CONSTRUCTION PAHASING INCLUDING THE INSTALLATION OF TEMPORARY STREAM CROSSING, STREAM CROSSING PROTECTIONS, INSTALLATION OF PERMANENT STREAM CROSSING AND REMOVAL AND STABILIZATION OF TEMPORARY CROSSING IN CONJUNCTION WITH THE CONSTRUCTION OF THE REST OF THE GREENWAY.

5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

6. INSTALL ALL PERIMETER EC DEVICES AS NEEDED FOR CONTRACTOR ACCESS AS SHOWN ON SHEET C2.7. ENSURE EXISTING RETENTION BASIN IS PROTECTED FROM SEDIMENTATION.

6a. INSTALL SILT FENCE, INLET PROTECTION, SEDIMENT TRAPS, DIVERSION DITCHES, TREE PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.

6b. CALL FOR ON SITE INSPECTION BY NCDEQ INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.

7. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.

8. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.

9. COORDINATE WITH NCDEQ EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.

10. PERIMETER MEASURES MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE.

11. WHEN THE PROJECT IS COMPLETE AND PERMANENT STABILIZATION IS ACHIEVED, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE E&SC PLAN.

GROUND STABILIZATION REQUIREMENTS

PURSUANT TO NCDWQ GENERAL STORMWATER PERMIT NCG-010000 FOR CONSTRUCTION ACTIVITIES-

A. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE (PER THE CONSTRUCTION STORMWATER GENERAL PERMIT NCG010000:

A.A. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

A.B. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

A.C. CONDITIONS - IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:

A.D. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.

A.E. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY REQUIREMENT APPLIES.

A.F. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT.

A.G. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7 DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.

A.H. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.

A.I. FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION-DEFINED "HIGH QUALITY WATER ZONE" (15A NCAC 04A. 0105), STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.

A.J. PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&SC PLAN OR ADDED BY THE PERMITTING AUTHORITY.

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	LOD
STANDARD TEMPORARY SILT FENCE (HS401)	
SILT FENCE OUTLET (HS404)	
CHECK DAM (HS413)	
STANDARD YARD INLET PROTECTION (HS422)	
PIPE INLET PROTECTION (HS423)	
CONSTRUCTION ENTRANCE (HS432)	
TREE PROTECTION FENCE	—x—x—x—
PUMP AROUND	
IMPERVIOUS DIKE	
SPECIAL STILLING BASIN	

811 Know what's below. Call before you dig.

FOR -L- PROFILE SEE SHEETS C3.3 THRU C3.4
FOR STRUCTURE PLANS, SEE SHEET C5.0 THRU C5.1

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Ting Park-Oak Hall Greenway Connector
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Holly Springs North Carolina

Sheet Title: Erosion Control NOTES

Sheet No: C4.0

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

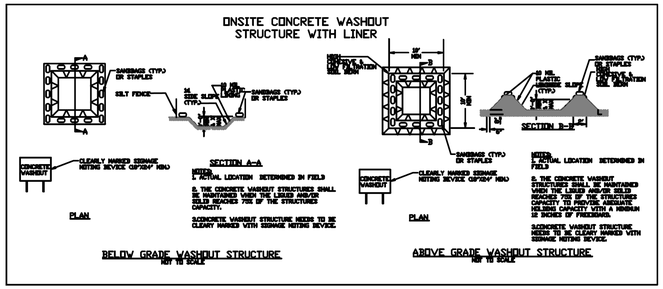
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

NORTH CAROLINA Environmental Quality



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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Ting Park-Oak Hall Greenway Connector
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Sheet Title:
Erosion Control NOTES

Sheet No:
C4.1

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NORTH CAROLINA *Environmental Quality*

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

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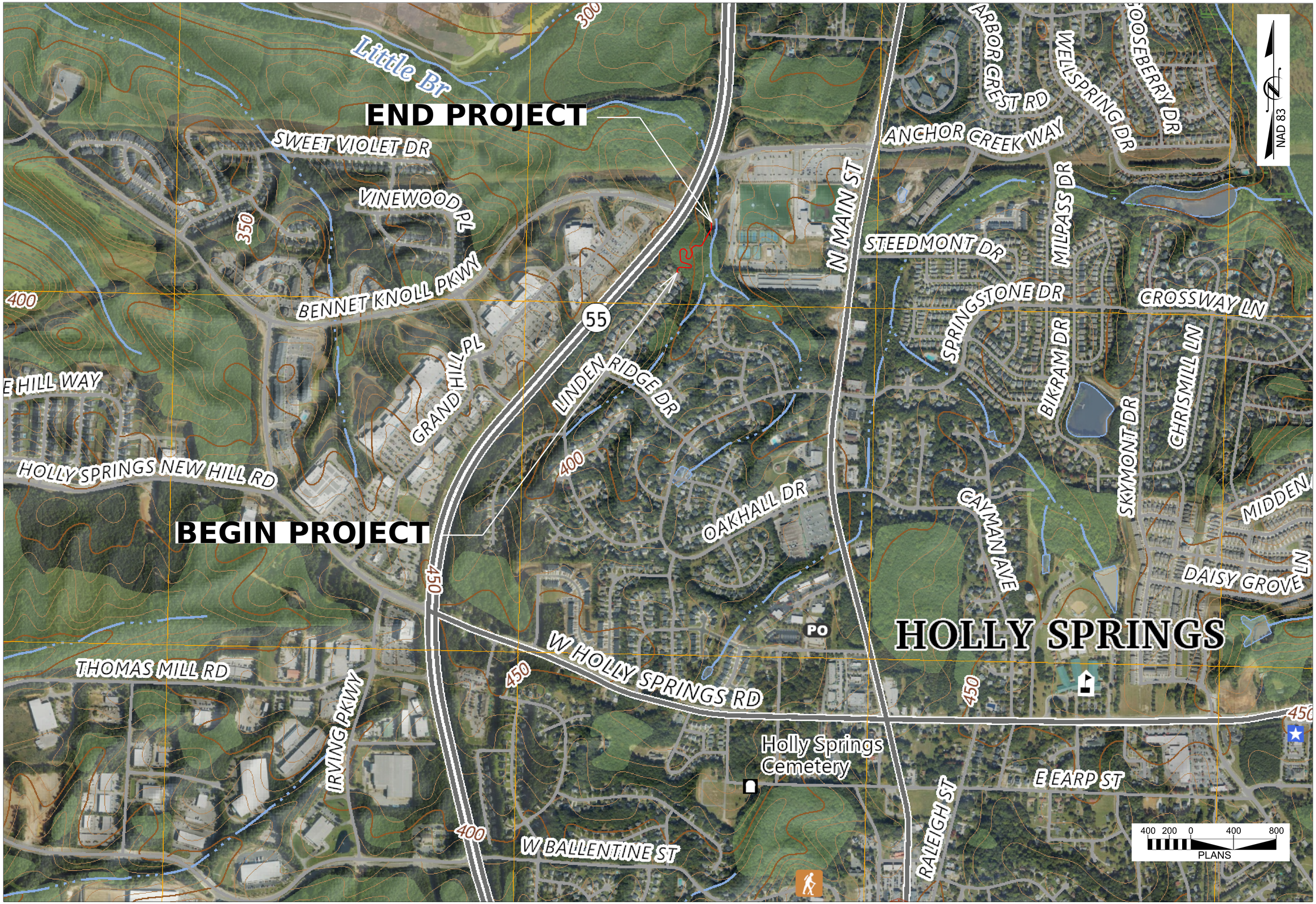
Ting Park-Oak Hall Greenway Connector
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Sheet Title:
Erosion Control NOTES

Sheet No:
C4.2



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PRELIMINARY
NOT FOR CONSTRUCTION

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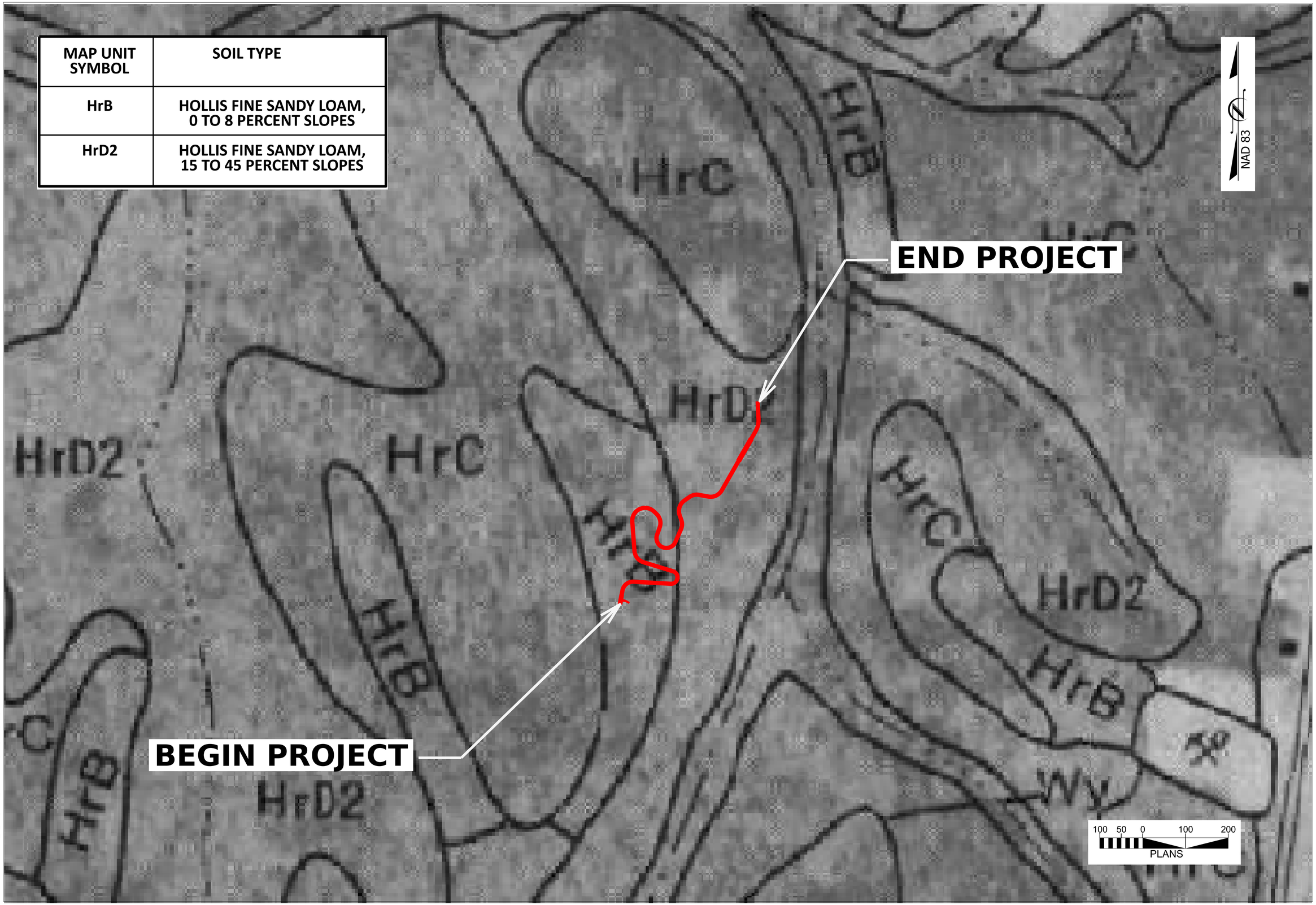
Ting Park-Oak Hall Greenway Connector
Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:
-
-

Sheet Title:
Erosion Control
QUAD MAP

Sheet No:
C4.3

MAP UNIT SYMBOL	SOIL TYPE
HrB	HOLLIS FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES
HrD2	HOLLIS FINE SANDY LOAM, 15 TO 45 PERCENT SLOPES



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Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Sheet Title:
Erosion Control
SOILS MAP

Sheet No:
C4.4

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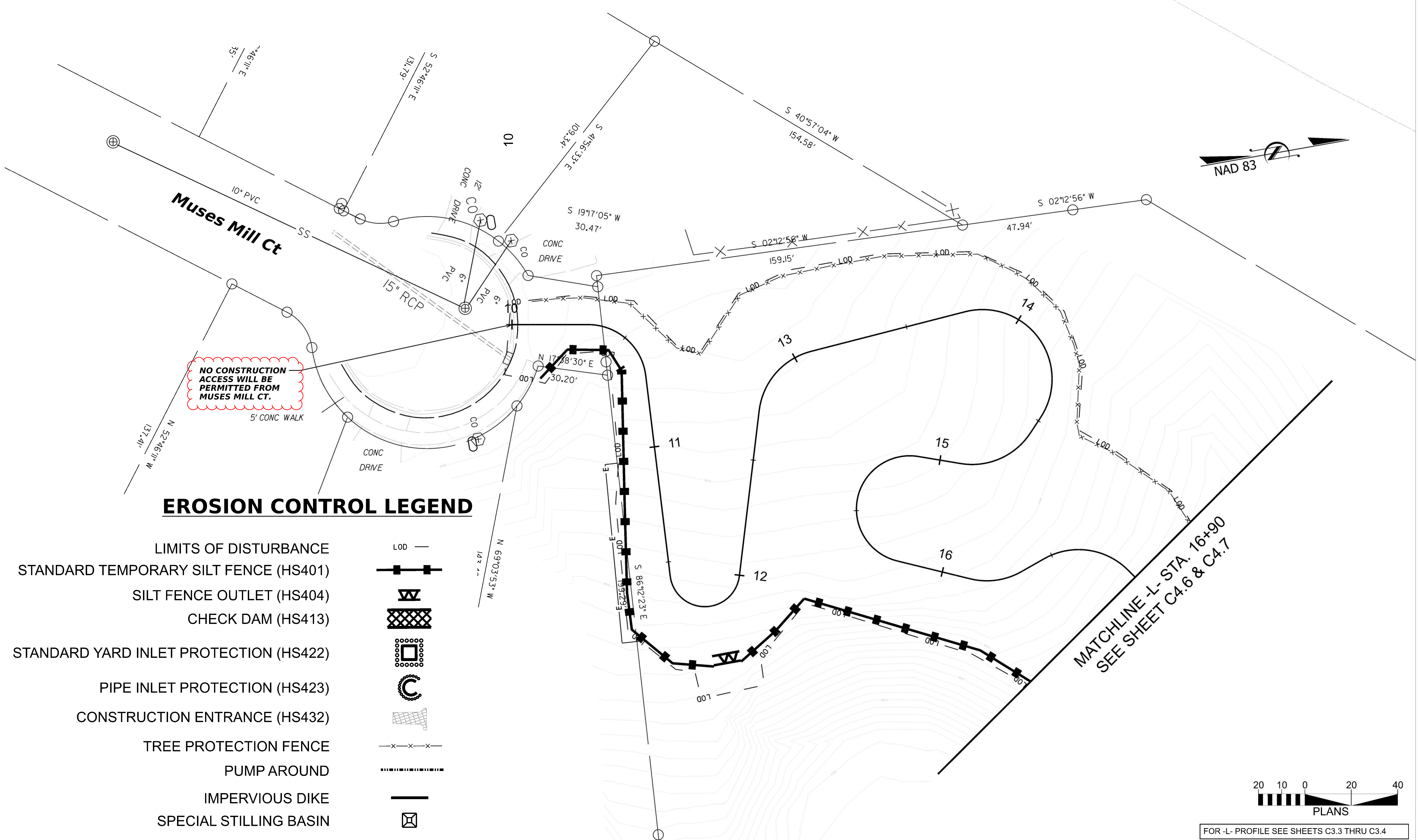
ALL PROPOSED DITCHES TO BE LINED WITH STRAW UNTIL STABILIZED AFTER CONSTRUCTION. SEE GROUND STABILIZATION REQUIREMENTS LISTED ON C4.0.



EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	LOD
STANDARD TEMPORARY SILT FENCE (HS401)	
SILT FENCE OUTLET (HS404)	
CHECK DAM (HS413)	
STANDARD YARD INLET PROTECTION (HS422)	
PIPE INLET PROTECTION (HS423)	
CONSTRUCTION ENTRANCE (HS432)	
TREE PROTECTION FENCE	
PUMP AROUND	
IMPERVIOUS DIKE	
SPECIAL STILLING BASIN	

20 10 0 20 40
PLANS

FOR -L- PROFILE SEE SHEETS C3.3 THRU C3.4

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Ting Park-Oak Hall Greenway Connector

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Holly Springs, North Carolina

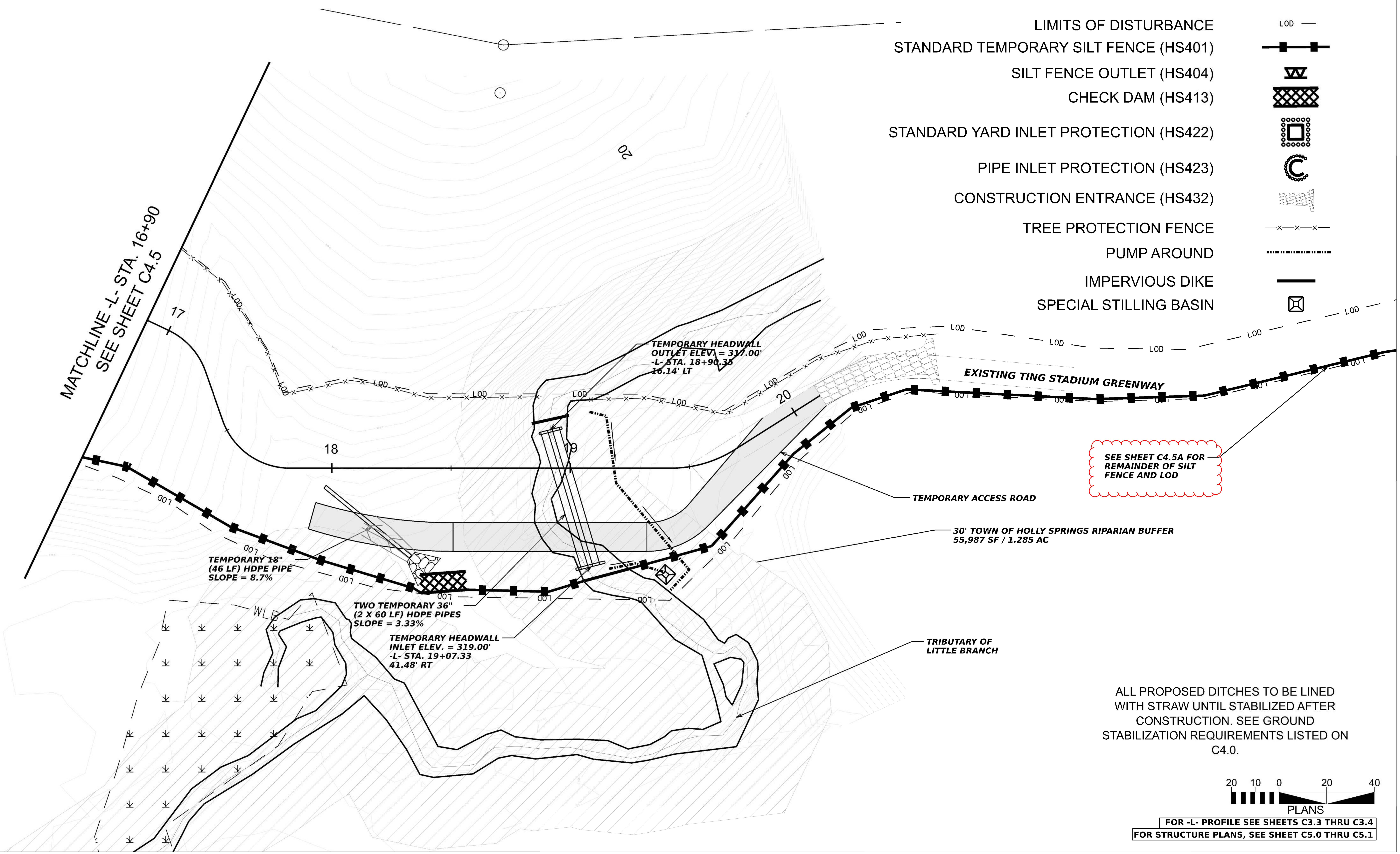
Project No: 1725-200012.00
Date: 10/23/2025
Revisions:

Sheet Title:
Erosion Control
PHASE I

Sheet No:
C4.5

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	LOD
STANDARD TEMPORARY SILT FENCE (HS401)	
SILT FENCE OUTLET (HS404)	
CHECK DAM (HS413)	
STANDARD YARD INLET PROTECTION (HS422)	
PIPE INLET PROTECTION (HS423)	
CONSTRUCTION ENTRANCE (HS432)	
TREE PROTECTION FENCE	
PUMP AROUND	
IMPERVIOUS DIKE	
SPECIAL STILLING BASIN	



ALL PROPOSED DITCHES TO BE LINED WITH STRAW UNTIL STABILIZED AFTER CONSTRUCTION. SEE GROUND STABILIZATION REQUIREMENTS LISTED ON C4.0.

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FOR STRUCTURE PLANS, SEE SHEET C5.0 THRU C5.1

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Ting Park-Oak Hall Greenway Connector

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Revisions:

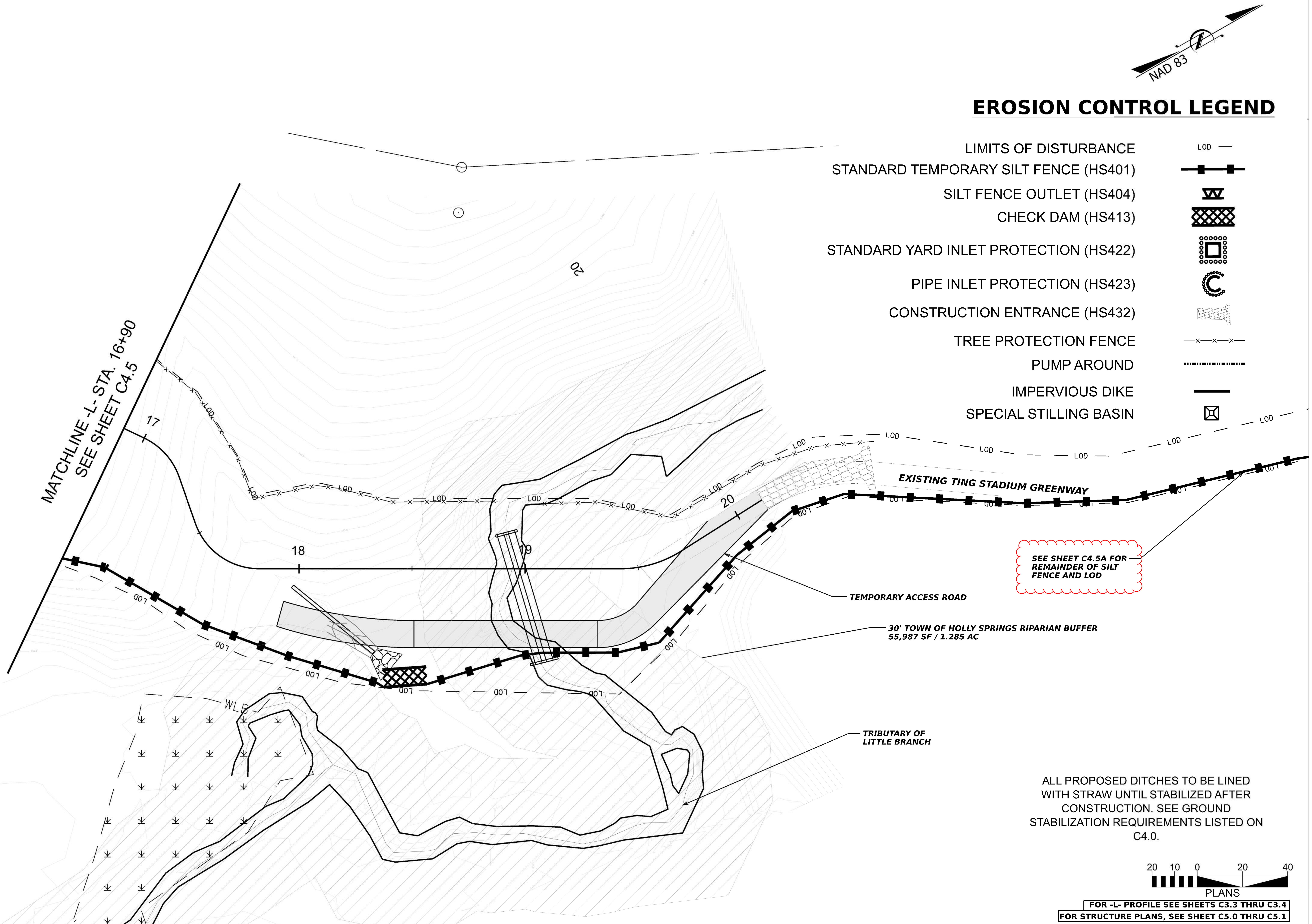
Sheet Title:

Erosion Control

PHASE IA

Sheet No:

C4.6



EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	LOD
STANDARD TEMPORARY SILT FENCE (HS401)	
SILT FENCE OUTLET (HS404)	
CHECK DAM (HS413)	
STANDARD YARD INLET PROTECTION (HS422)	
PIPE INLET PROTECTION (HS423)	
CONSTRUCTION ENTRANCE (HS432)	
TREE PROTECTION FENCE	
PUMP AROUND	
IMPERVIOUS DIKE	
SPECIAL STILLING BASIN	

ALL PROPOSED DITCHES TO BE LINED WITH STRAW UNTIL STABILIZED AFTER CONSTRUCTION. SEE GROUND STABILIZATION REQUIREMENTS LISTED ON C4.0.

20 10 0 20 40
PLANS

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FOR STRUCTURE PLANS, SEE SHEET C5.0 THRU C5.1

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Project No: 1725-200012.00
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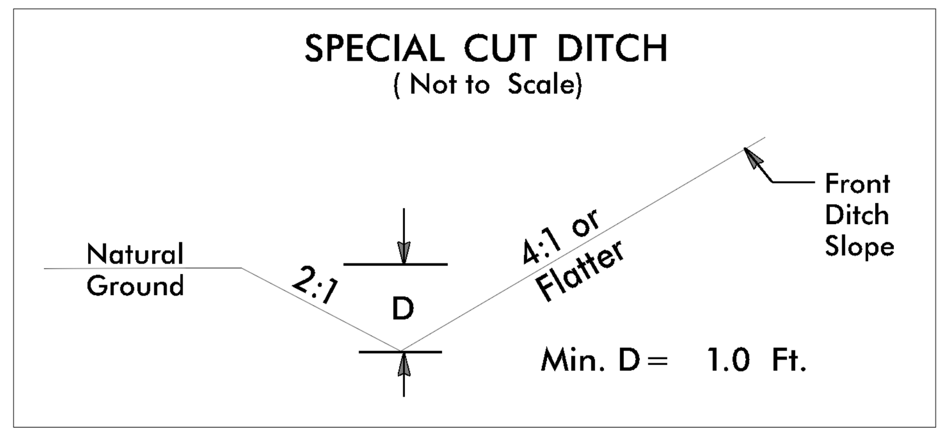
Sheet Title:
Erosion Control
PHASE IB

Sheet No:
C4.7



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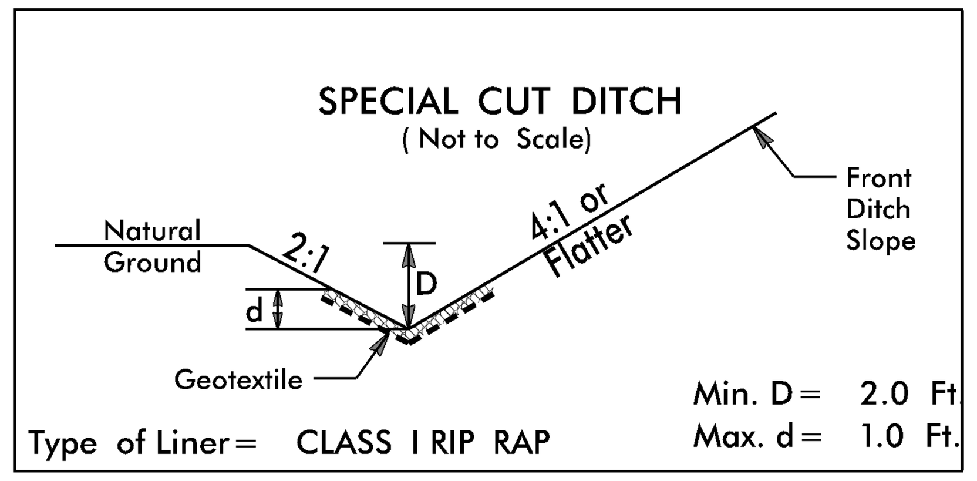
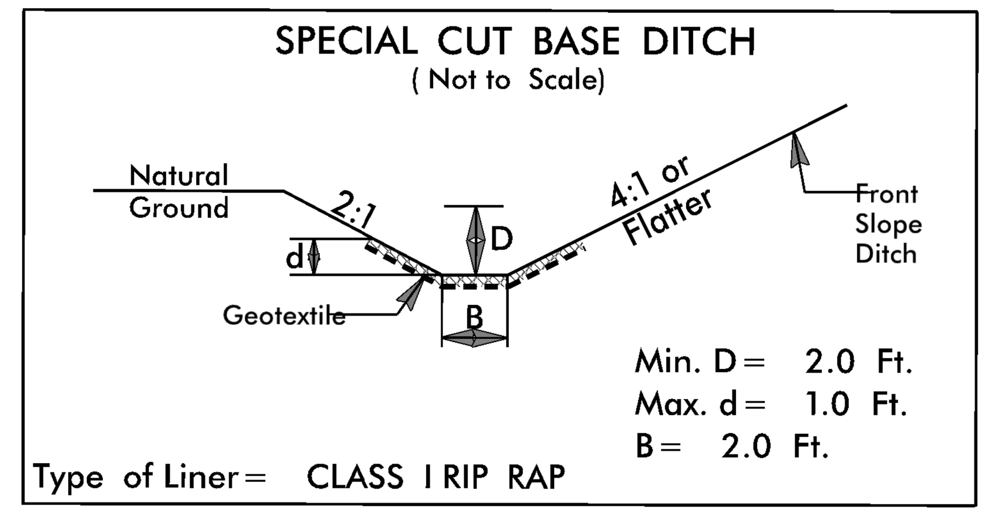
FROM STA. 12+15 TO STA. 14+50 -L- RT.



FROM STA. 14+50 TO STA. 16+33 -L- RT



FROM STA. 15+20 TO STA. 18+15 -L- LT.
FROM STA. 16+33 TO STA. 18+15 -L- RT.

EROSION CONTROL LEGEND

LIMITS OF DISTURBANCE	LOD
STANDARD TEMPORARY SILT FENCE (HS401)	
SILT FENCE OUTLET (HS404)	
CHECK DAM (HS413)	
STANDARD YARD INLET PROTECTION (HS422)	
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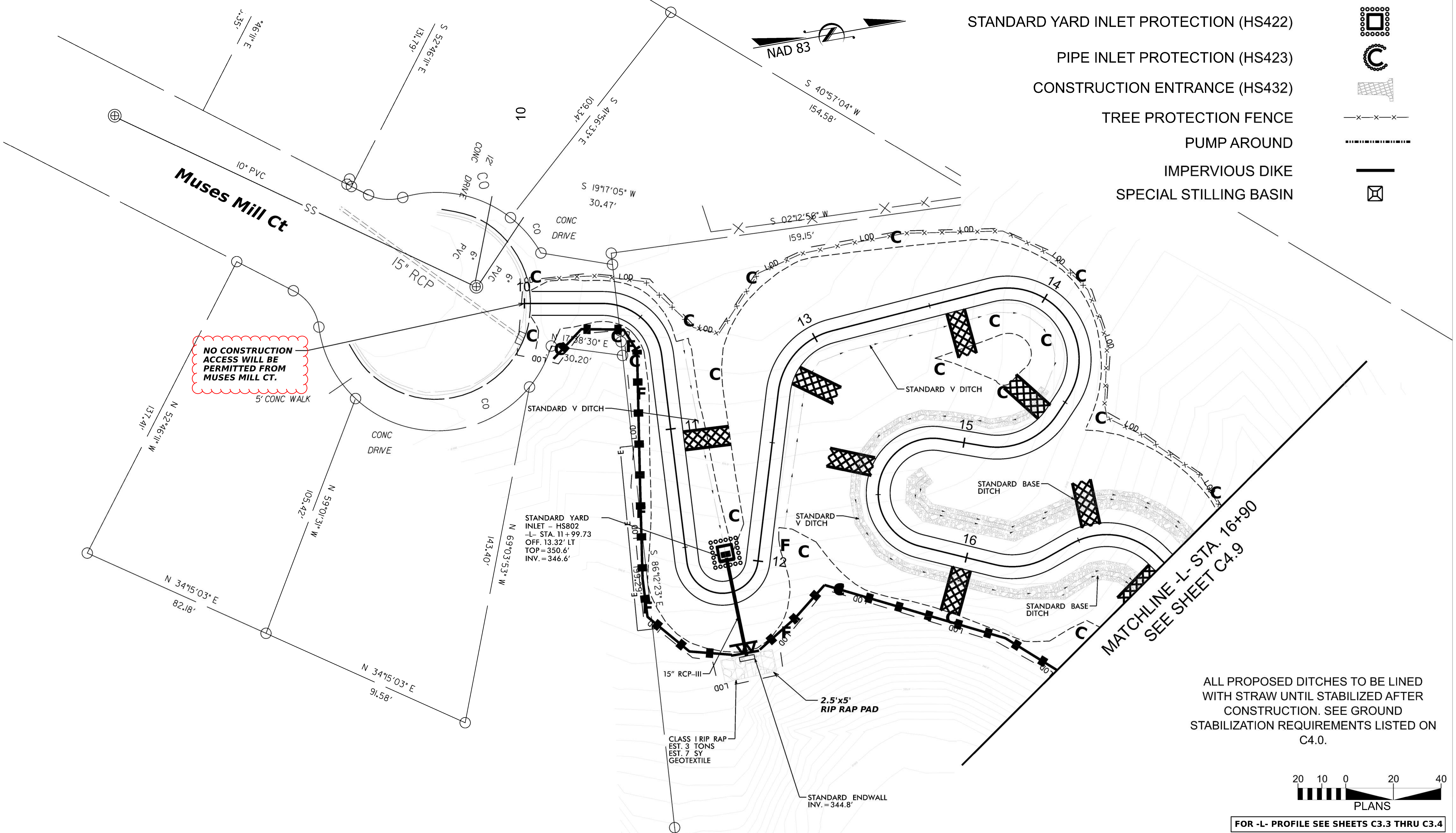

ALL PROPOSED DITCHES TO BE LINED WITH STRAW UNTIL STABILIZED AFTER CONSTRUCTION. SEE GROUND STABILIZATION REQUIREMENTS LISTED ON C4.0.

20 10 0 20 40
PLANS

FOR -L- PROFILE SEE SHEETS C3.3 THRU C3.4

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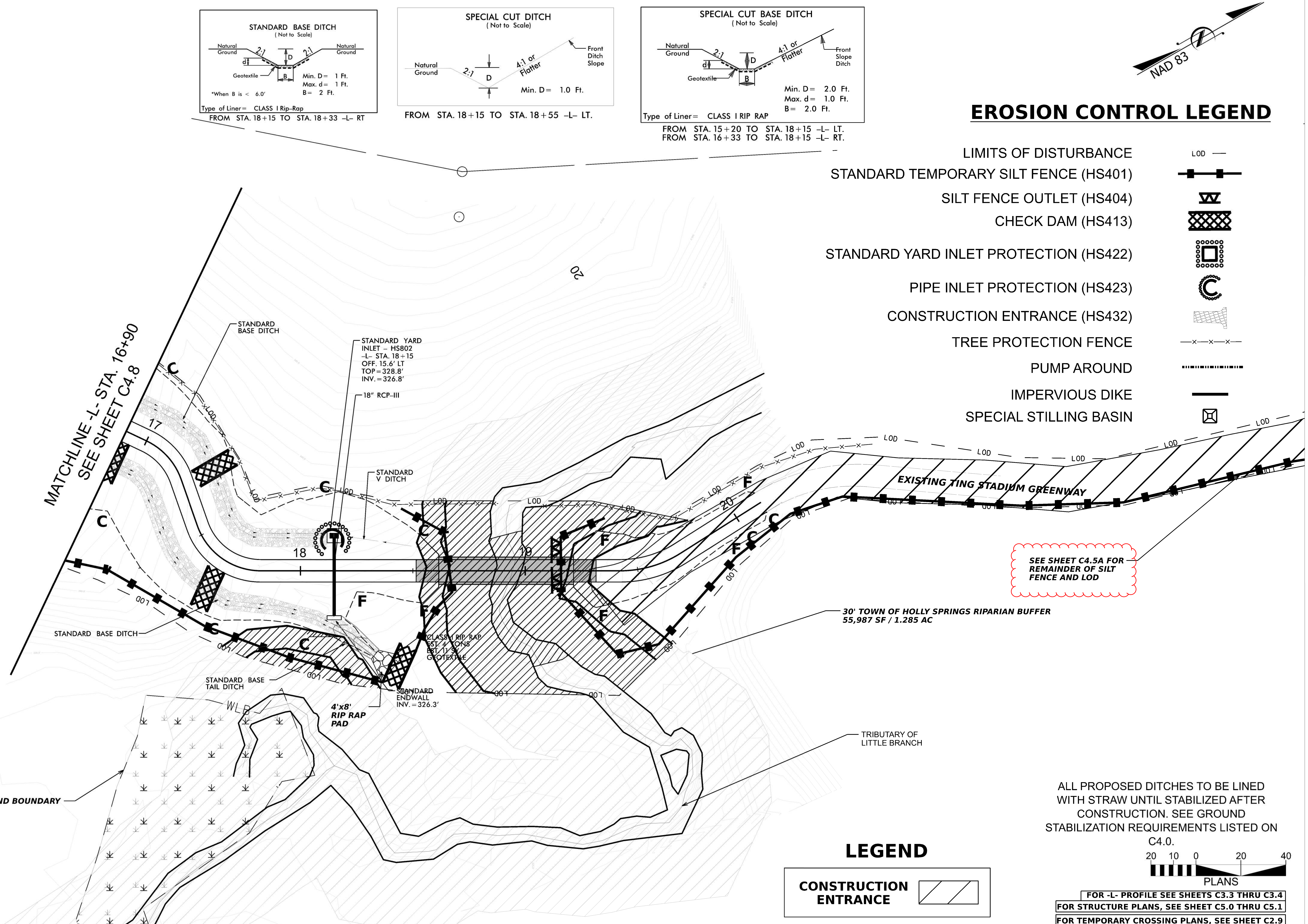
Date: 10/23/2025
Revisions:

Sheet Title:
Erosion Control
PHASE II

Sheet No:
C4.8



EROSION CONTROL LEGEND

- LIMITS OF DISTURBANCE — LOD
- STANDARD TEMPORARY SILT FENCE (HS401)
- SILT FENCE OUTLET (HS404)
- CHECK DAM (HS413)
- STANDARD YARD INLET PROTECTION (HS422)
- PIPE INLET PROTECTION (HS423)
- CONSTRUCTION ENTRANCE (HS432)
- TREE PROTECTION FENCE
- PUMP AROUND
- IMPERVIOUS DIKE
- SPECIAL STILLING BASIN

ALL PROPOSED DITCHES TO BE LINED WITH STRAW UNTIL STABILIZED AFTER CONSTRUCTION. SEE GROUND STABILIZATION REQUIREMENTS LISTED ON C4.0.

LEGEND

CONSTRUCTION ENTRANCE

20 10 0 20 40
PLANS

FOR -L- PROFILE SEE SHEETS C3.3 THRU C3.4
FOR STRUCTURE PLANS, SEE SHEET C5.0 THRU C5.1
FOR TEMPORARY CROSSING PLANS, SEE SHEET C2.9

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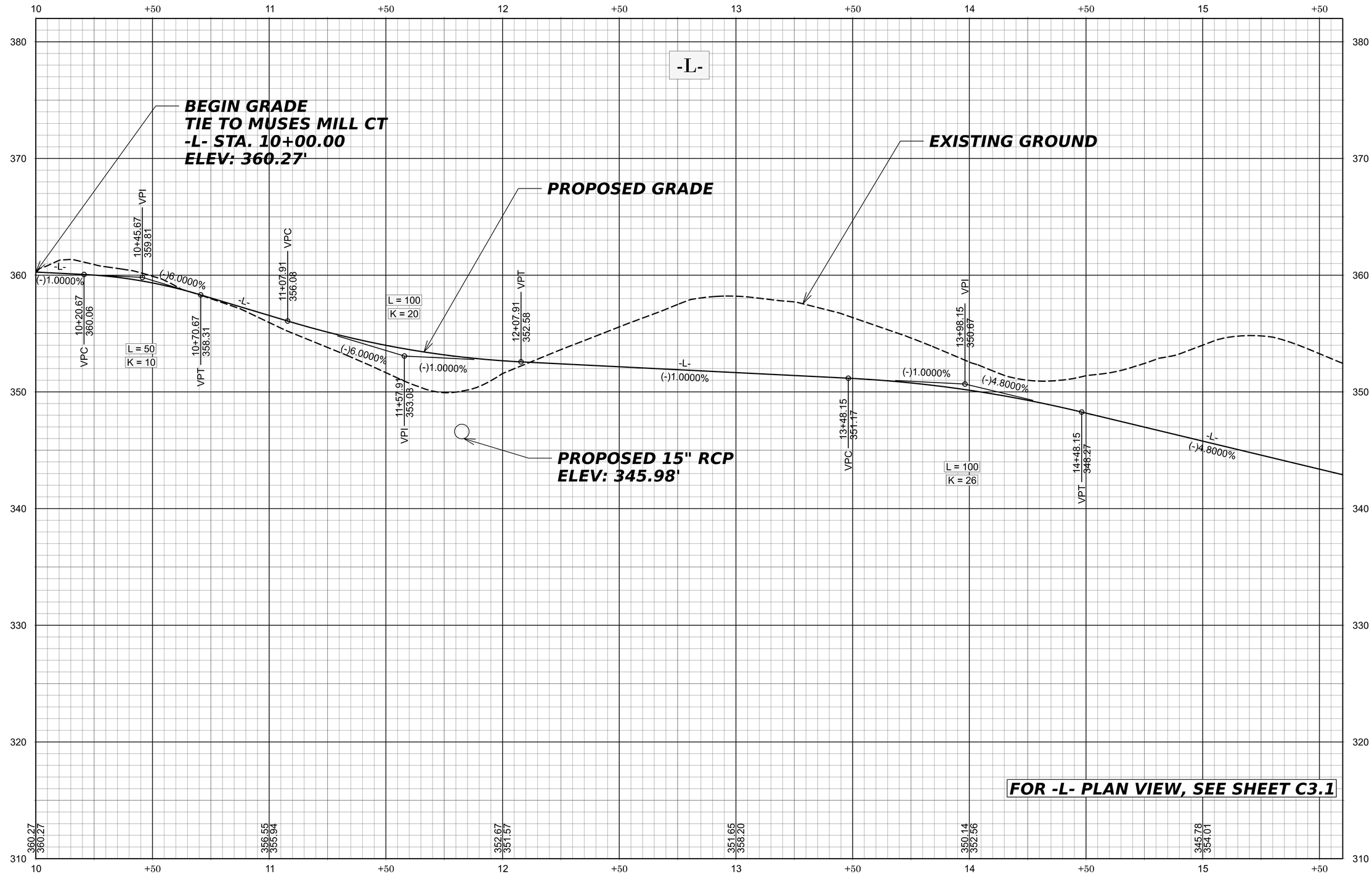
Erosion Control
PHASE II

Sheet No:
C4.9



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NORTH CAROLINA PROFESSIONAL SEAL 045955 ENGINEER ERIC D. SPALDING

DocuSigned by: Eric Spalding CTE7FA0BA3864D8... 12/19/2025

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Ting Park-Oak Hall Greenway Connector

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Sheet Title:

Vertical Alignment

Sheet No:

C3.3

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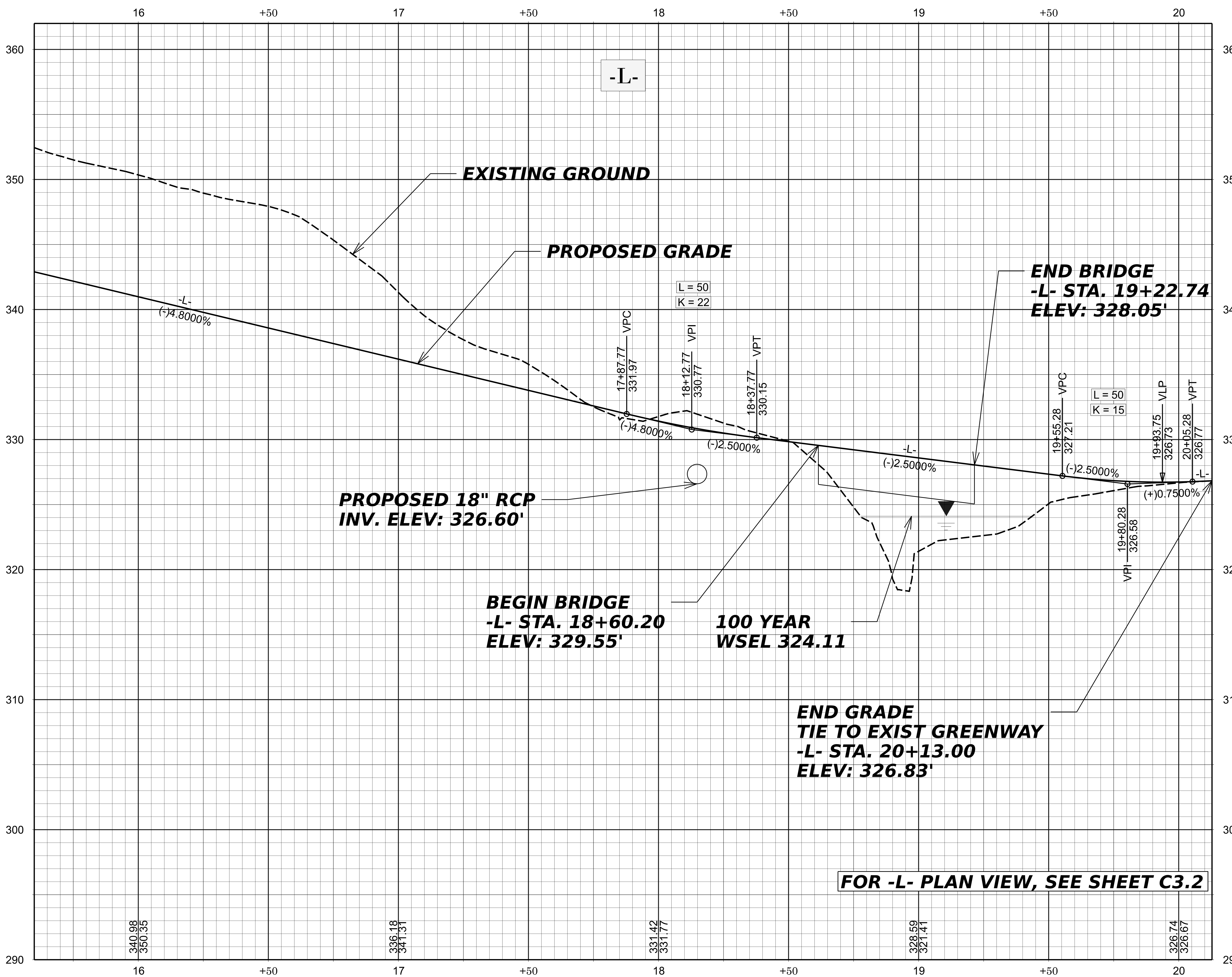

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NORTH CAROLINA PROFESSIONAL SEAL 045955 ENGINEER ERIC D. SPALDING

DocuSigned by: Eric Spalding
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12/19/2025

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

Sheet Title:

Vertical Alignment

Sheet No:

C3.4

GENERAL

1. THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
2. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE. ALL APPLICABLE SAFETY REGULATIONS TO BE FOLLOWED STRICTLY.
3. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING FOR THE STRUCTURE IN ALL DIRECTIONS.
4. THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, GRADE CONDITIONS (BOTH NEW AND EXISTING) AND SUBSURFACE INFORMATION, REPORTING ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH ANY PHASE OF THE WORK.
5. THE CONTRACTOR SHALL COMPARE STRUCTURAL SECTIONS WITH OTHER SECTIONS AND REPORT ANY DISCREPANCY TO THE ENGINEER PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
6. DO NOT SCALE DIMENSIONS FROM DRAWINGS. THE CONTRACTOR SHALL REQUEST, FROM THE ENGINEER, NECESSARY DIMENSIONS NOT SHOWN ON THE DRAWINGS.
7. IF ANY BIDDER IS IN DOUBT AS TO THE INTENT OF THE PLANS OR SPECIFICATIONS, THEY SHALL REQUEST AN INTERPRETATION FROM THE ENGINEER IN WRITING AT LEAST TEN (10) DAYS PRIOR TO THE SCHEDULED BID DATE.
8. WHERE A CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS OCCUR THE MORE STRINGENT REQUIREMENT SHALL APPLY.
9. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY REFERENCED ON THE DRAWINGS.

DESIGN CRITERIA

1. APPLICABLE CODES
   A. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION.
   B. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-08)
   C. AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2009.
2. DESIGN LIVE LOADS:
   PEDESTRIAN LIVE LOAD . . . . 90 PSF
   VEHICLE LIVE LOAD H5
3. THERE ARE NO PROVISIONS FOR FUTURE LOADS

FOUNDATIONS

1. WALLS RETAINING SOIL SHALL BE TEMPORARILY BRACED DURING BACKFILLING AND UNTIL ALL SUPPORTING SOIL AND SLABS ARE IN PLACE AND ARE AT DESIGN STRENGTH UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
2. ABUTMENT 1:
   PRIOR TO CONSTRUCTION, THE CONTRACTOR SHOULD VERIFY THE PARTIALLY WEATHERED ROCK ELEVATION AND A MINIMUM BEARING PRESSURE OF 4.0 KSF. EXCAVATE TO THE ELEVATION SHOWN IN THE PLAN. IF SOLID ROCK ELEVATIONS DEVIATE FURTHER THAN 6 INCHES THAN THE EXPECTED ELEVATION SHOWN ON THE PLANS, NOTIFY THE ENGINEER. NOTIFY THE ENGINEER WHEN FOUNDATION EXCAVATION IS COMPLETE. DO NOT PLACE CONCRETE FOR FOOTINGS UNTIL EXCAVATION DEPTH AND FOUNDATION MATERIAL ARE APPROVED. ENSURE FOOTING IS EMBEDDED AT LEAST 1 FOOT INTO PARTIALLY WEATHERED ROCK.

   IF SOILS ENCOUNTERED AT THE FOOTING BEARING LEVEL, THE SOILS ARE REQUIRED TO BE UNDERCUT DOWN TO PWR AND BACKFILLED WITH LEAN CONCRETE PRIOR TO CONSTRUCTION OF THE FOOTING. THE LEAN CONCRETE SHOULD HAVE A DESIGN COMPRESSIVE STRENGTH OF AT LEAST 2,000 PSI.

   ABUTMENT 2:
   DUE TO THE PRESENCE OF SHALLOW PARTIALLY WEATHERED ROCK, ALL PILES ARE REQUIRED TO BE PRE-DRILLED. CONTRACTOR SHALL DRILL TO THE ELEVATION SHOWN IN THE PLANS. IF THE PILE TIP ELEVATION IS NOT RESTING ON PARTIALLY WEATHERED ROCK, NOTIFY THE ENGINEER BEFORE PROCEEDING WITH PILE INSTALLATION.

CONCRETE CONSTRUCTION JOINTS

1. CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION JOINTS IN MONOLITHIC CONCRETE POURS SO THAT THE QUALITY OF PLACEMENT AND FINISH MEETS THE REQUIREMENTS OF PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL.
2. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS. ALL VERTICAL CONSTRUCTION JOINTS IN SLABS AND BEAMS SHALL BE MADE WITH BULKHEADS. ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS SHALL BE AS SPECIFIED BY THE STRUCTURAL ENGINEER.

CONCRETE/REINFORCING STEEL

1. CONCRETE COMPRESSIVE STRENGTH IN 28 DAYS:
   SITE WALLS . . . . 3000 PSI, NORMAL WEIGHT
2. REINFORCING:
   TYPICAL ASTM A615, GRADE 60
3. GROUT UNDER BASE PLATES TO BE HIGH STRENGTH (5000 PSI), NON-SHRINK.
4. REFER TO THE DRAWINGS FOR REINFORCING LAP REQUIREMENTS. WHERE LAP SPLICES ARE NOT SHOWN, LAP PER ACI 318 OR CRSI STANDARDS.
5. CLEAR COVER FROM FACE OF CONCRETE, UNLESS NOTED OTHERWISE ON PLANS AND DETAILS:
   CAST IN PLACE CONCRETE (MEASURE TO OUTERMOST REINFORCING):
   WALLS, PEDESTALS . . . . 3"
   FOOTINGS, CAISSONS . . . . 3"
6. BAR SUPPORTS FOR CONCRETE EXPOSED TO VIEW SHALL HAVE PLASTIC COATED LEGS OR BE HOT DIP GALVANIZED AFTER FABRICATION.
7. REBAR SHALL NOT BE HEATED WITH A TORCH IN THE FIELD.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER FAR ENOUGH IN ADVANCE (48 HOURS) OF EACH CONCRETE POUR TO ALLOW AMPLE TIME TO CHECK THE LAYOUT OF THE STEEL BEFORE THE BEGINNING OF THE ACTUAL POUR, BUT NOT PRIOR TO 90% OF THE STEEL HAVING BEEN PLACED.

STEEL H-PILES

1. REFER AND CONFORM TO GEOTECHNICAL REPORT AND SPECIAL PROVISIONS FOR PRE-DRILLED PILES.
2. BID LENGTH FOR STEEL H-PILES TO BE 48 LINEAR FEET.
3. PAYMENT ADJUSTMENT TO BE PROVIDED PER UNIT LENGTH LONGER OR SHORTER AS INDICATED ON BID FORM.
4. STEEL PILES SHALL BE ROLLED SHAPES OF THE WEIGHT AND SHAPE SHOWN ON THE PLANS AND SHALL MEET THE REQUIREMENTS OF ASTM A572 OR A992, GRADE 50 (H-PILES) BY THE ACID-BESSEMER PROCESS. ENSURE THAT STEEL PILES, WHEN PLACED IN THE LEADS, WILL NOT EXCEED THE CAMBER AND SWEEP PERMITTED BY THE ALLOWABLE MILL TOLERANCE. THE ENGINEER WILL REJECT PILES THAT ARE BENT OR OTHERWISE DAMAGED.
5. PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT END BENT 2. EXCAVATE HOLES TO ELEVATION 310.5 FEET. IF PARTIALLY WEATHERED ROCK IS NOT ENCOUNTERED AT ELEVATION 310.5 FEET, NOTIFY THE ENGINEER.
6. CONCRETE OR GROUT IS REQUIRED TO FILL HOLES FOR PILE EXCAVATION AT END BENT 2. SEE SPECIFICATIONS FOR TYPE OF CONCRETE OR GROUT TO BE USED.
7. PILE EXCAVATIONS WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.

STRUCTURAL STEEL

1. ANCHOR BOLTS AND THREADED RODS SHALL CONFORM TO ASTM F1554, GRADE 36.
2. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE. USE E70 SERIES ELECTRODES FOR ALL STRUCTURAL STEEL WELDS.

EPOXY AND EPOXY GROUT

1. ANCHOR BOLTS, REINFORCING STEEL, THREADED RODS, AND OTHER EMBEDDED STEEL ITEMS SHALL BE SET INTO HARDENED CONCRETE WITH EPOXY OR EPOXY GROUT ONLY WHERE APPROVED BY THE ENGINEER.
2. MANUFACTURER'S DATA FOR ALL EPOXY AND EPOXY GROUT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. ACCEPTABLE EPOXY PRODUCTS ARE:
   HILTI HY150, HILTI HIT RE500, MASTER BUILDERS CONCRESIVE STANDARD PASTE, SIMPSON STRONG-TIE ET OR APPROVED EQUAL.
   IN USING THE ABOVE PRODUCTS, FOLLOW STRICTLY THE MANUFACTURER'S SPECIFICATIONS AND DIRECTIONS FOR MIXING AND APPLICATION. HEED ALL LABEL WARNINGS. INSTALL IN ACCORDANCE WITH APPLICABLE SAFETY LAWS.
3. ALL EPOXY AND EPOXY GROUT SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AND TENSILE STRENGTH OF 2,300 PSI.
4. ALL HOLES SHALL BE DRILLED WITH A DIAMETER NO LARGER THAN 1/8" GREATER THAN THE DIAMETER OF THE STEEL MEMBER BEING INSTALLED.
5. ALL HOLES SHALL BE CLEANED WITH COMPRESSED AIR AND SHALL BE DRY PRIOR TO INSTALLATION OF EPOXY. HOLES SHALL BE FREE OF ALL DELETERIOUS MATERIAL SUCH AS LAITANCE, DUST, DIRT AND OIL.
6. CONTRACTOR PERFORMING EPOXY WORK SHALL BE AN APPROVED CONTRACTOR BY THE MANUFACTURER FURNISHING THE EPOXY MATERIALS, AND SHALL HAVE NO LESS THAN FIVE YEARS EXPERIENCE IN THE VARIOUS TYPES OF EPOXY RELATED WORK REQUIRED IN THIS PROJECT. A NOTARIZED CERTIFICATION FROM THE MANUFACTURER ATTESTING TO THE TRAINING SHALL BE SUBMITTED TO THE ENGINEER ALONG WITH THE PROPOSAL TO DO THE WORK.

PREFABRICATED BRIDGES

1. APPLICABLE CODES:
   AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION.
   AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2009.
2. CONTRACTOR SHALL PROVIDE A BRIDGE WITH THE FOLLOWING NOMINAL DIMENSIONS: NOTE ALL LENGTH DIMENSIONS BELOW ARE FROM CONTROL REFERENCE POINTS VIA ABUTMENTS/PIERS.
   NOMINAL BRIDGE LENGTH = 60'-0"
   NOMINAL CLEAR WIDTH = 10'-0"
3. CONTRACTOR AND BRIDGE MANUFACTURER TO CONFIRM THE BRIDGE DIMENSIONS WILL FIT IN THE ABUTMENT DIMENSIONS SHOWN ON THE PLANS. CONTACT ENGINEER FOR ABUTMENT DESIGN MODIFICATIONS.
4. SHOP DRAWINGS OF BRIDGE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. FRP STRUCTURAL SHAPES TO BE STANDARD GRADE POLYESTER 1-400 RESIN. STANDARD STRUCTURAL SHAPES ARE MANUFACTURED USING A SURFACE VEIL AS U.V. INHIBITOR TO PROTECT AGAINST U.V. DEGRADATION.
6. FOR ADDITIONAL DETAILS ON PREFABRICATED BRIDGE, SEE SPECIAL PROVISIONS.

REPRODUCTION

1. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

SPECIAL INSPECTION

THE FOLLOWING SHALL BE INSPECTED IN ACCORDANCE WITH IBC SECTION 1704 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO MATERIAL SAMPLING AND TESTING SECTION BELOW. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS TO THE STRUCTURAL ENGINEER, ARCHITECT, CONTRACTOR, OWNER AND BUILDING DEPARTMENT (IF REQUIRED). ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN IF LEFT UNCORRECTED TO THE STRUCTURAL ENGINEER, ARCHITECT AND BUILDING DEPARTMENT (IF REQUIRED)

MATERIAL INSPECTION

MATERIALS SHALL BE SAMPLED AND TESTED BY A CERTIFIED INSPECTOR FROM AN ESTABLISHED TESTING AGENCY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, GENERAL NOTES, OR PREVAILING BUILDING CODE, WHICHEVER IS MORE STRINGENT. ALL MATERIAL SAMPLING AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM REQUIREMENTS. FOR ADDITIONAL INFORMATION ON MATERIAL SAMPLING AND TESTING, REFER TO PROJECT SPECIFICATIONS AND GENERAL NOTES. THE TESTING AGENCY SHALL SEND COPIES OF ALL TESTING REPORTS DIRECTLY TO THE STRUCTURAL ENGINEER, ARCHITECT, CONTRACTOR, OWNER, AND BUILDING DEPARTMENT (IF REQUIRED). ANY MATERIALS WHICH FAIL TO MEET THE PROJECT SPECIFICATIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

ITEMS		CONTINUOUS OR PERIODIC
REINFORCED CONCRETE	INSPECTION OF REINFORCING STEEL AND PLACEMENT	P
	INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	C
	VERIFYING USE OF REQUIRED DESIGN MIX	P
	AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	C
	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	C
	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	P
	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBERS BEING FORMED	P

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Seals:

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

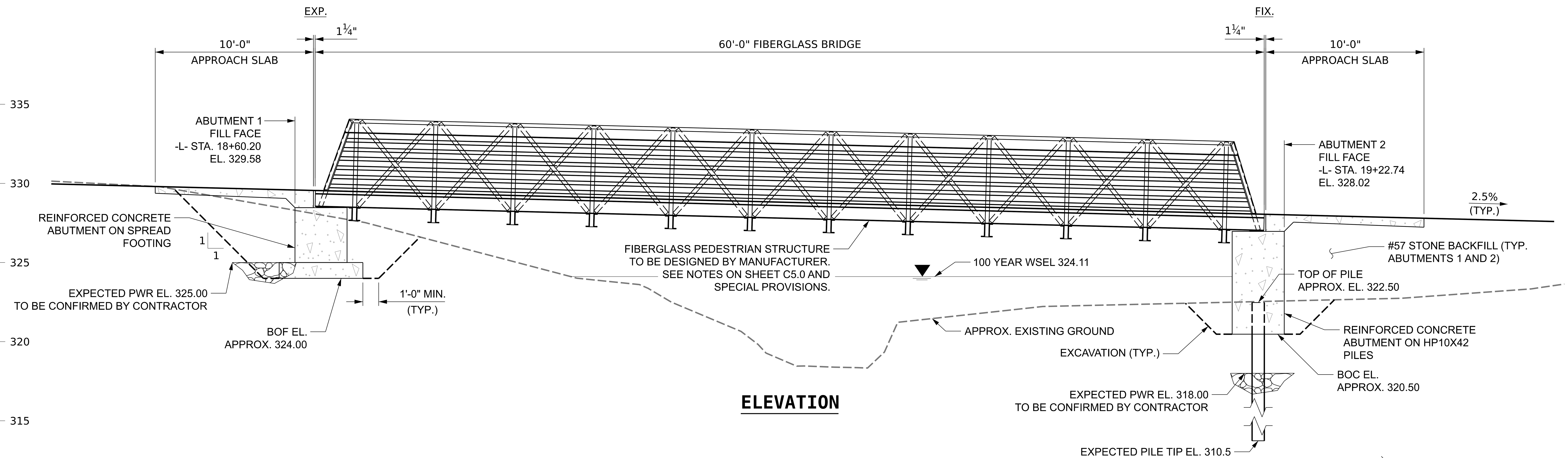
Sheet Title:

General Notes

Sheet No:

C5.0

Y:\North Carolina\17XX-20S\1725-200012.00__Ting_Oakhall_Greenw\Eng_Docs\Structures\DGN\Ting Oakhall_STR_PLAN & ELEV.dgn



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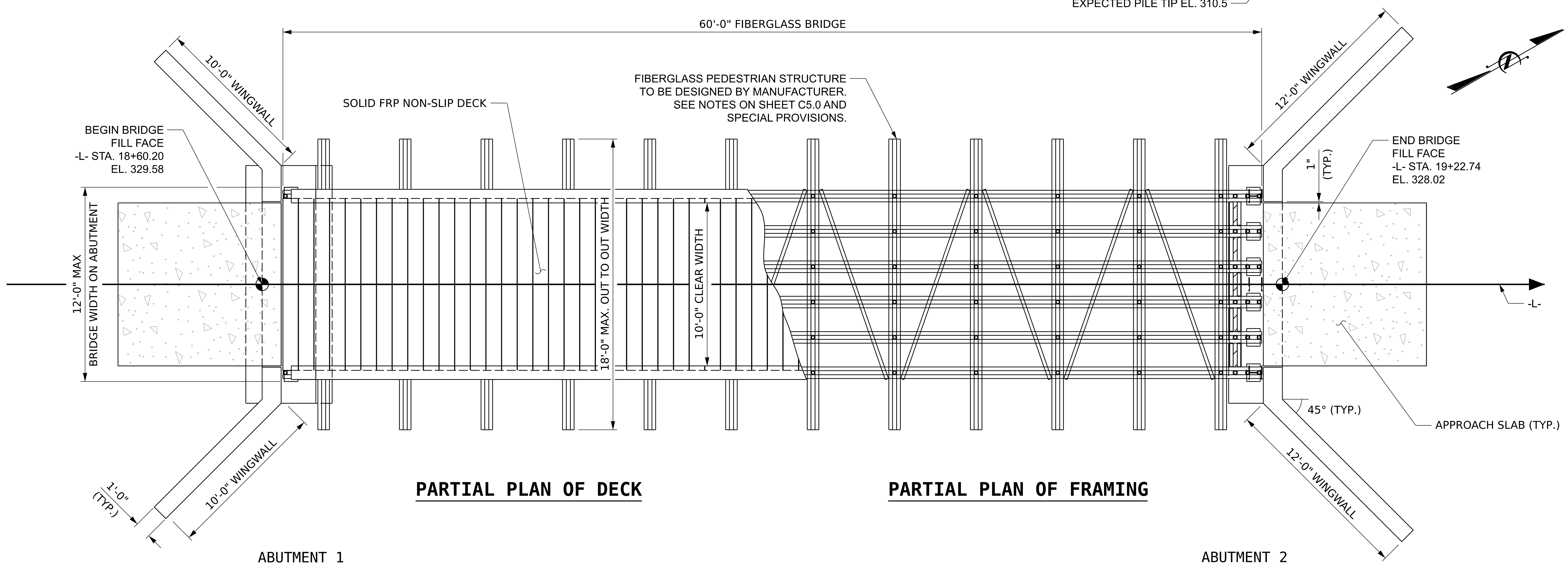

PARTIAL PLAN OF DECK **PARTIAL PLAN OF FRAMING**

ABUTMENT 1 ABUTMENT 2

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Seals:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 050773 TRAVIS B. STUMP

Signed by:

12/19/2025

Corp. NC License: F-1320

Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:

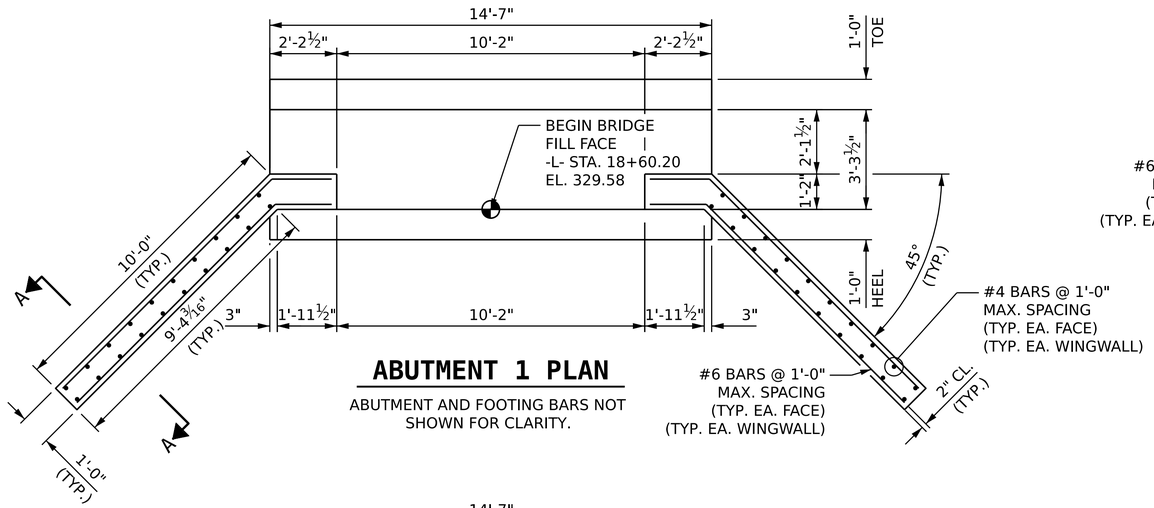
HOLLY SPRINGS North Carolina

Sheet Title:

Plan & Elevation

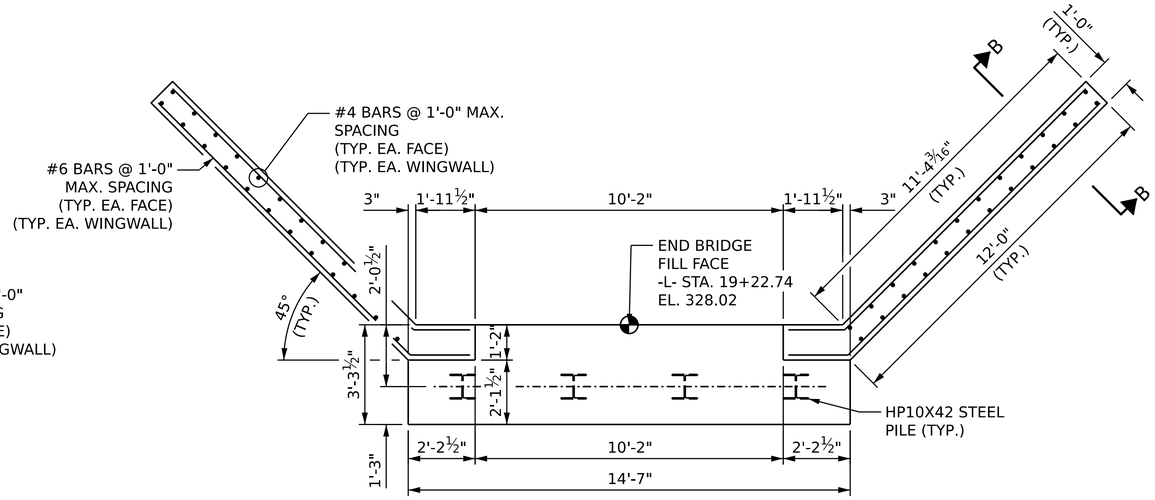
Sheet No:

C5.1



ABUTMENT 1 PLAN

ABUTMENT AND FOOTING BARS NOT SHOWN FOR CLARITY.



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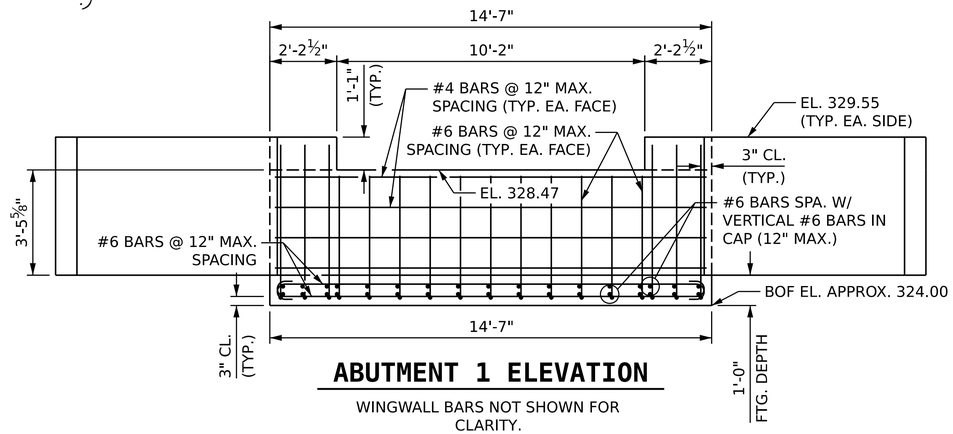

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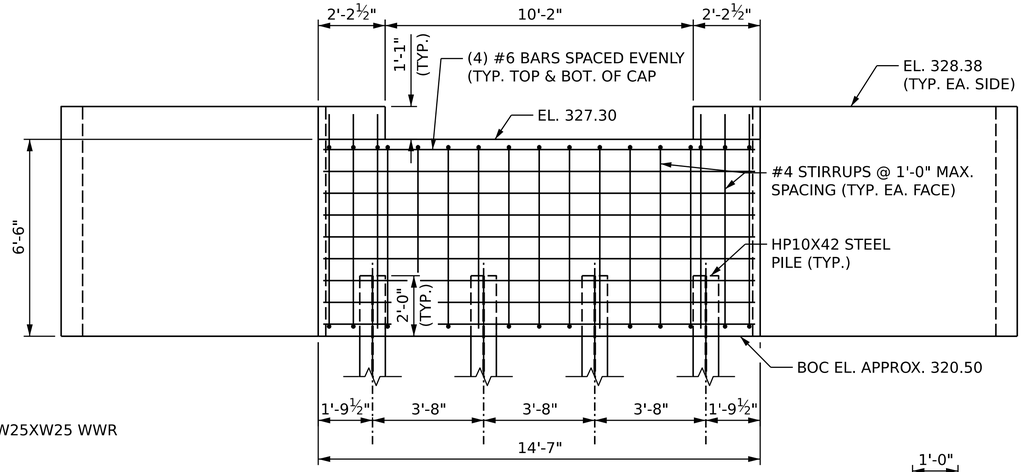

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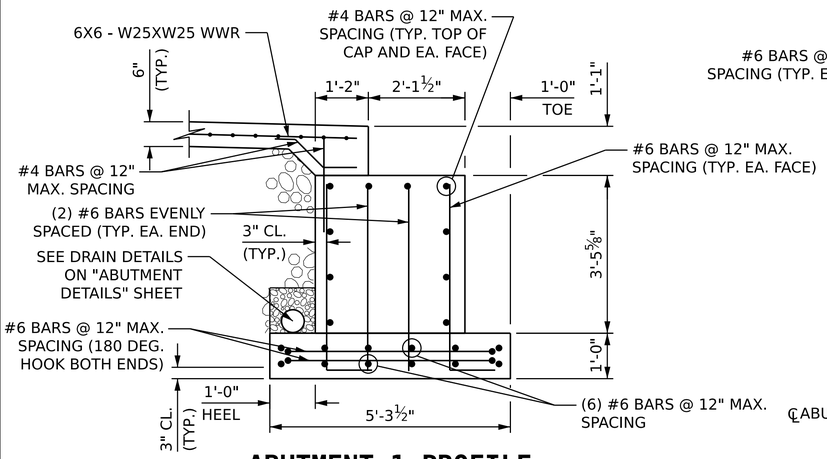
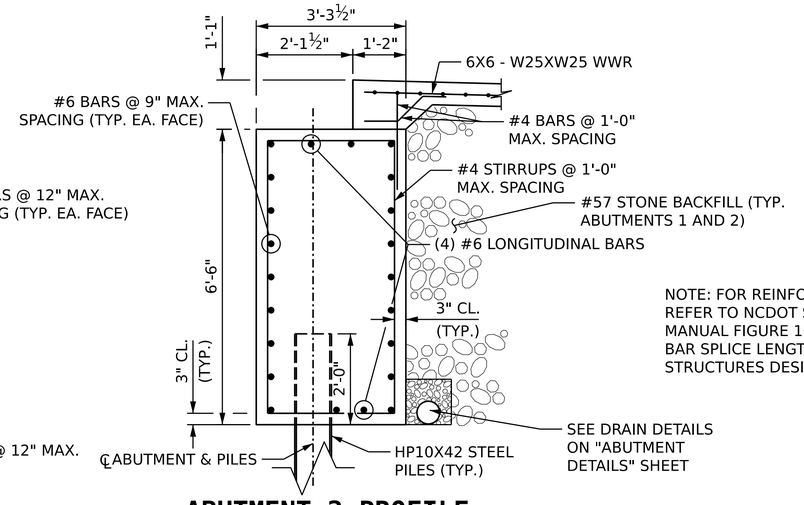
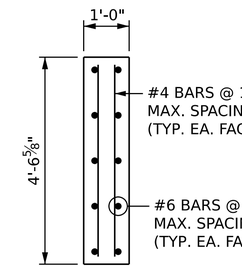


ABUTMENT 1 PROFILE

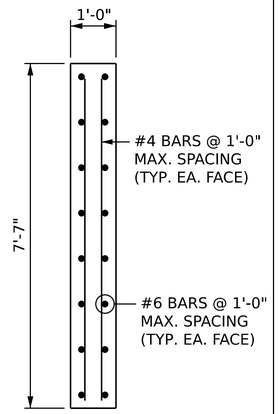


ABUTMENT 2 PROFILE

NOTE: FOR REINFORCING BAR BEND DETAILS, REFER TO NCDOT STRUCTURES DESIGN MANUAL FIGURE 10-11. FOR REINFORCING BAR SPLICE LENGTHS, REFER TO NCDOT STRUCTURES DESIGN MANUAL FIGURE 10-7.



SECTION A-A



SECTION B-B

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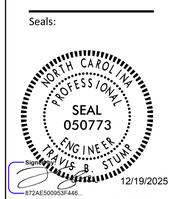

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

Project No: 1725-200012.00
Date: 9/4/2025
Revisions:
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Sheet Title:

Abutments 1 and 2

Sheet No:

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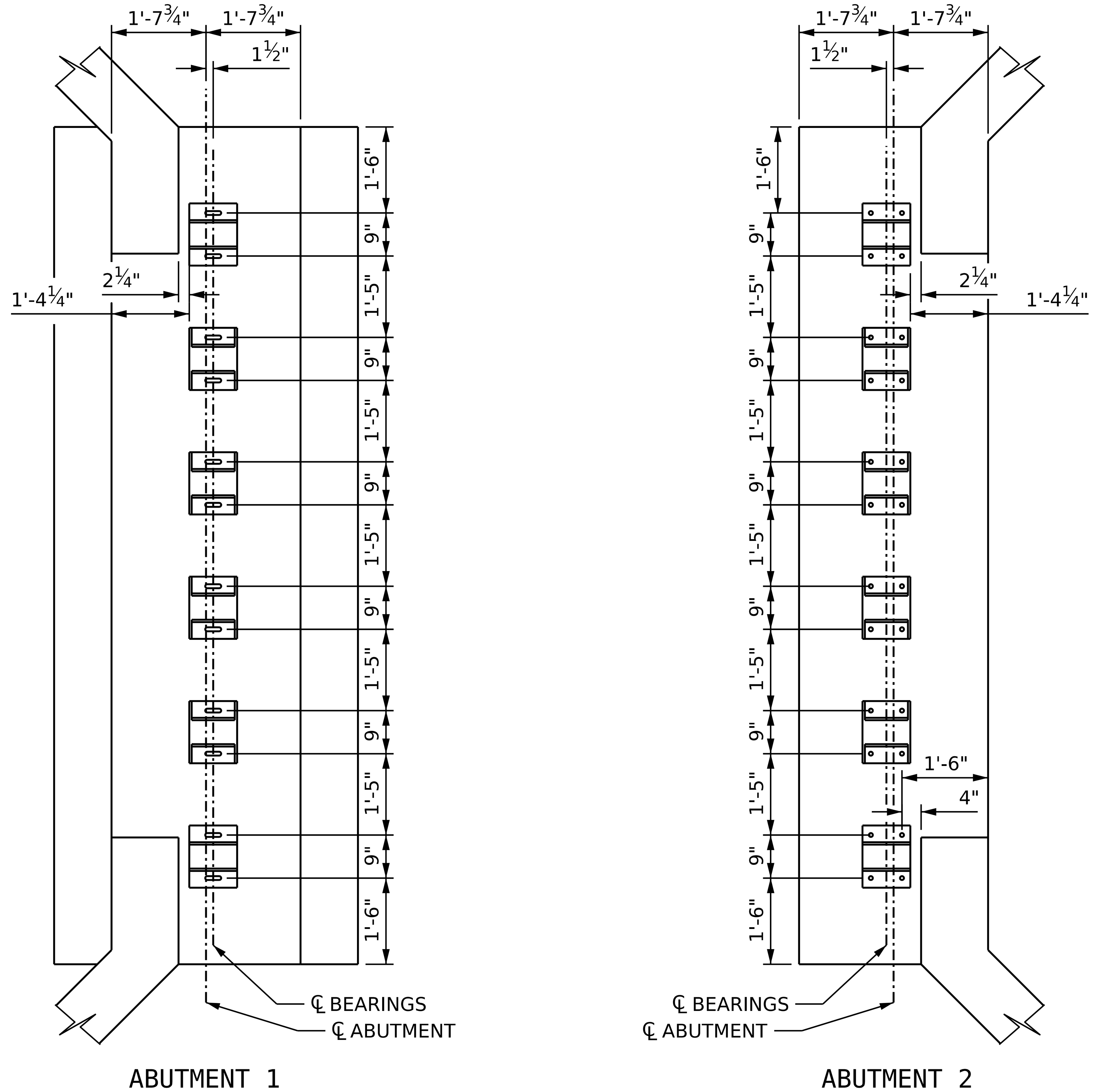
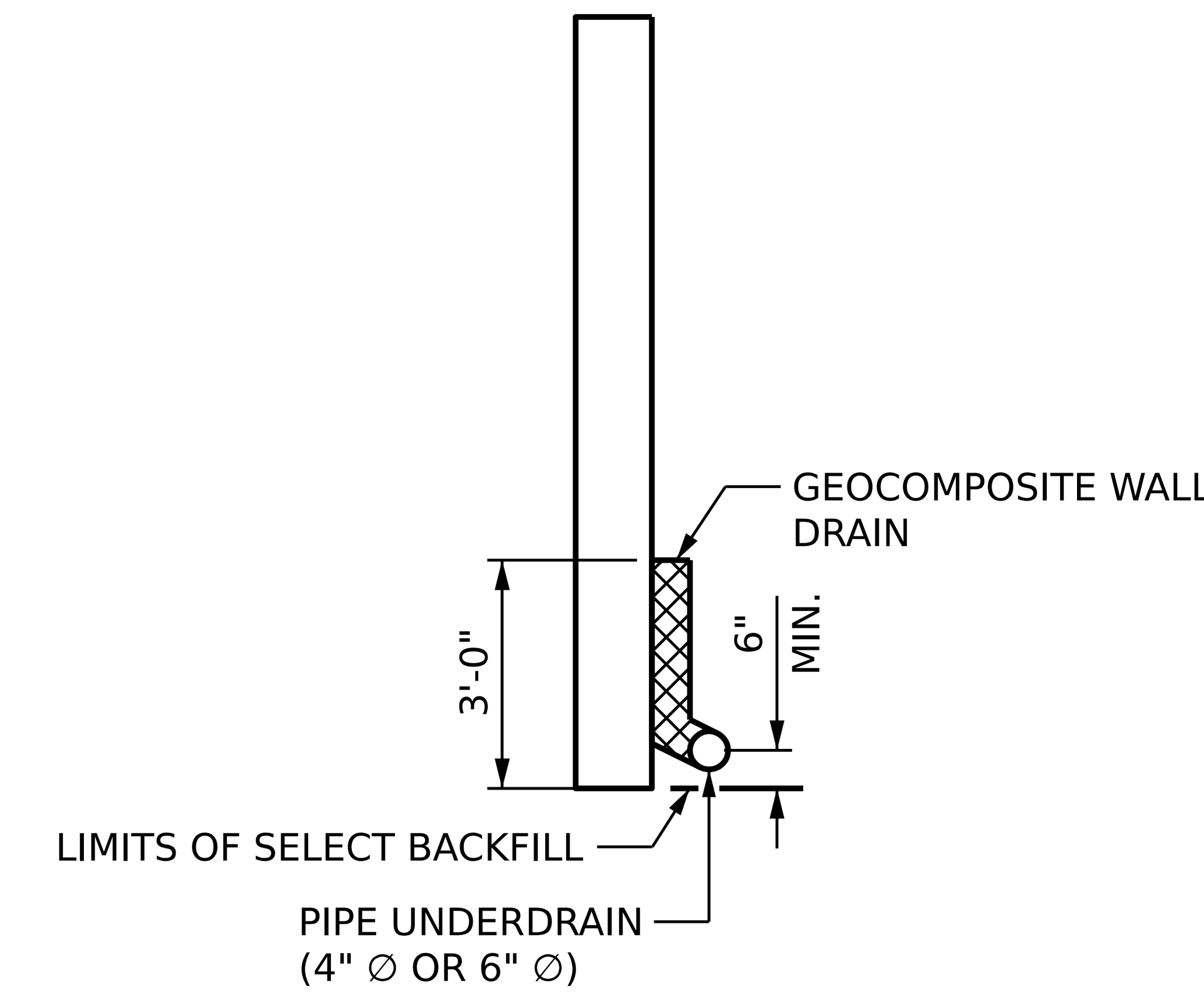
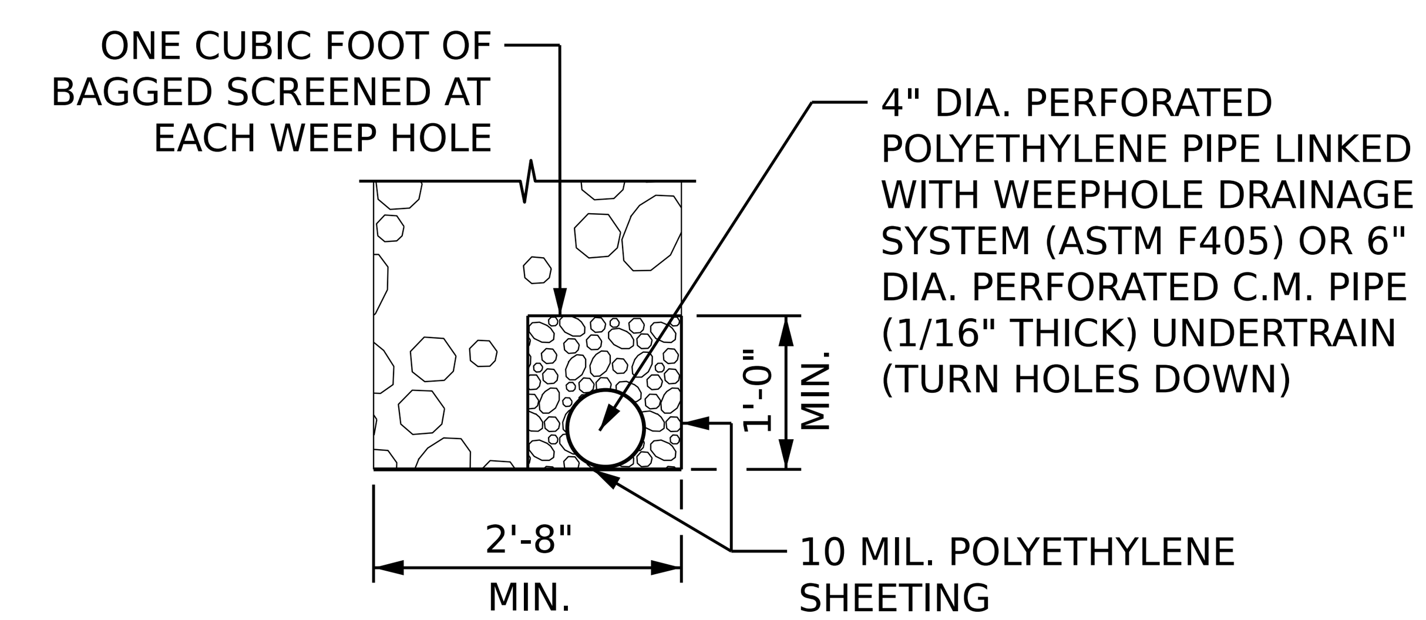


PLAN OF BEARINGS

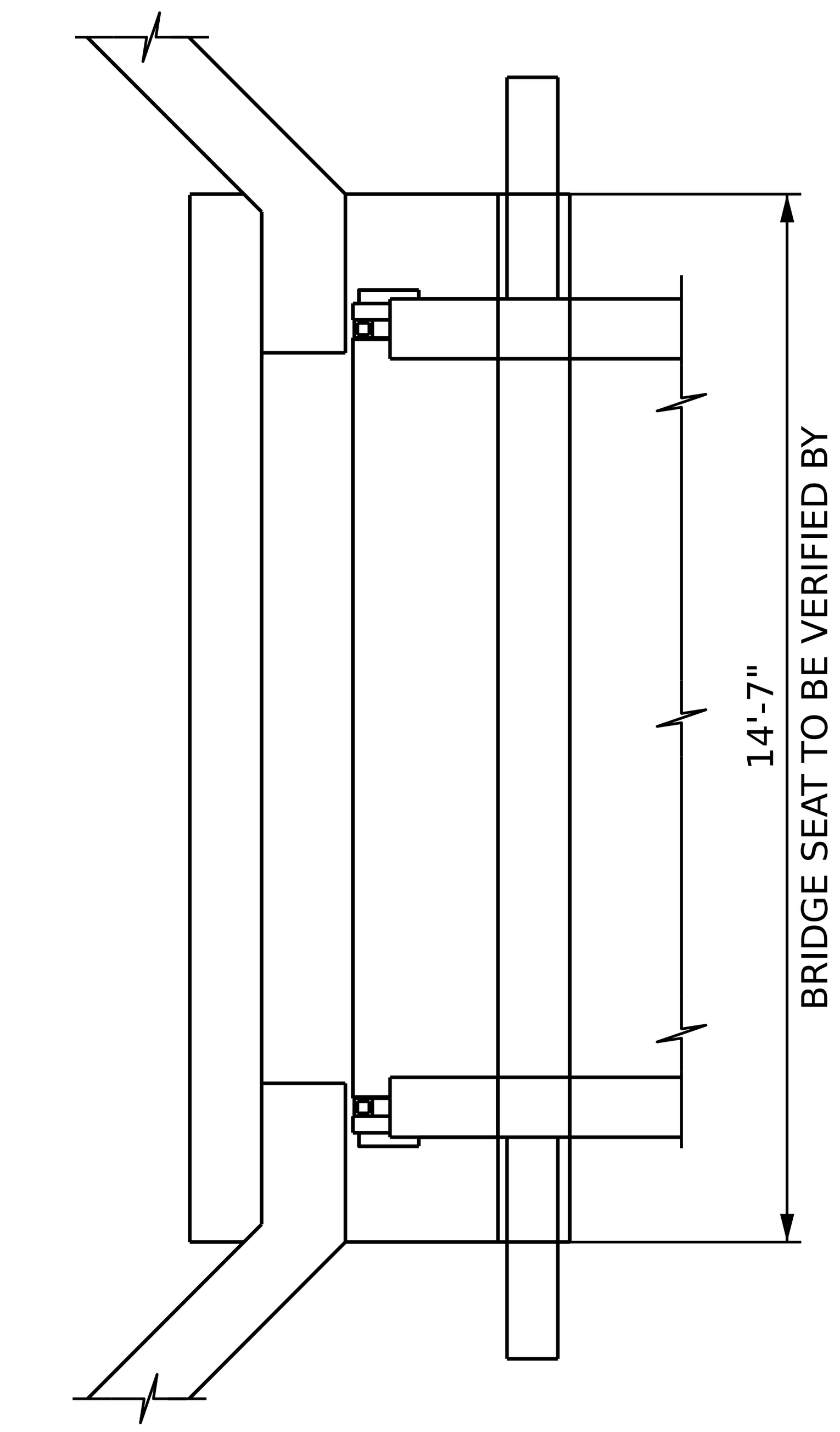
VARIATIONS OF BEARINGS PROVIDED BY THE MANUFACTURER SHALL BE SUBMITTED TO THE ENGINEER WITH SHOP DRAWINGS PRIOR TO FABRICATION OF PROCUREMENT.



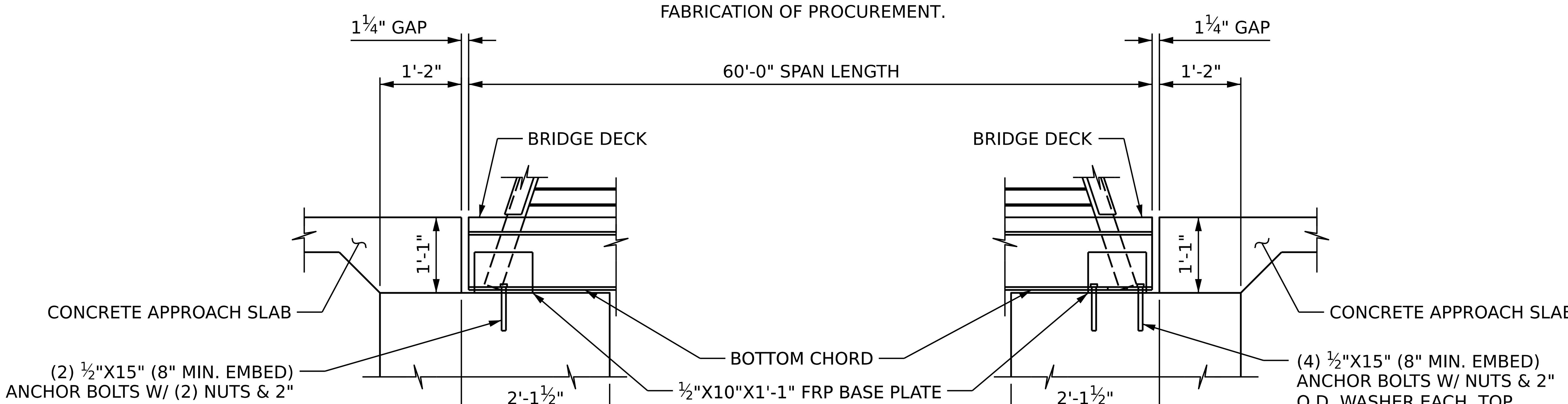
WINGWALL DRAINAGE DETAIL



DRAIN DETAIL

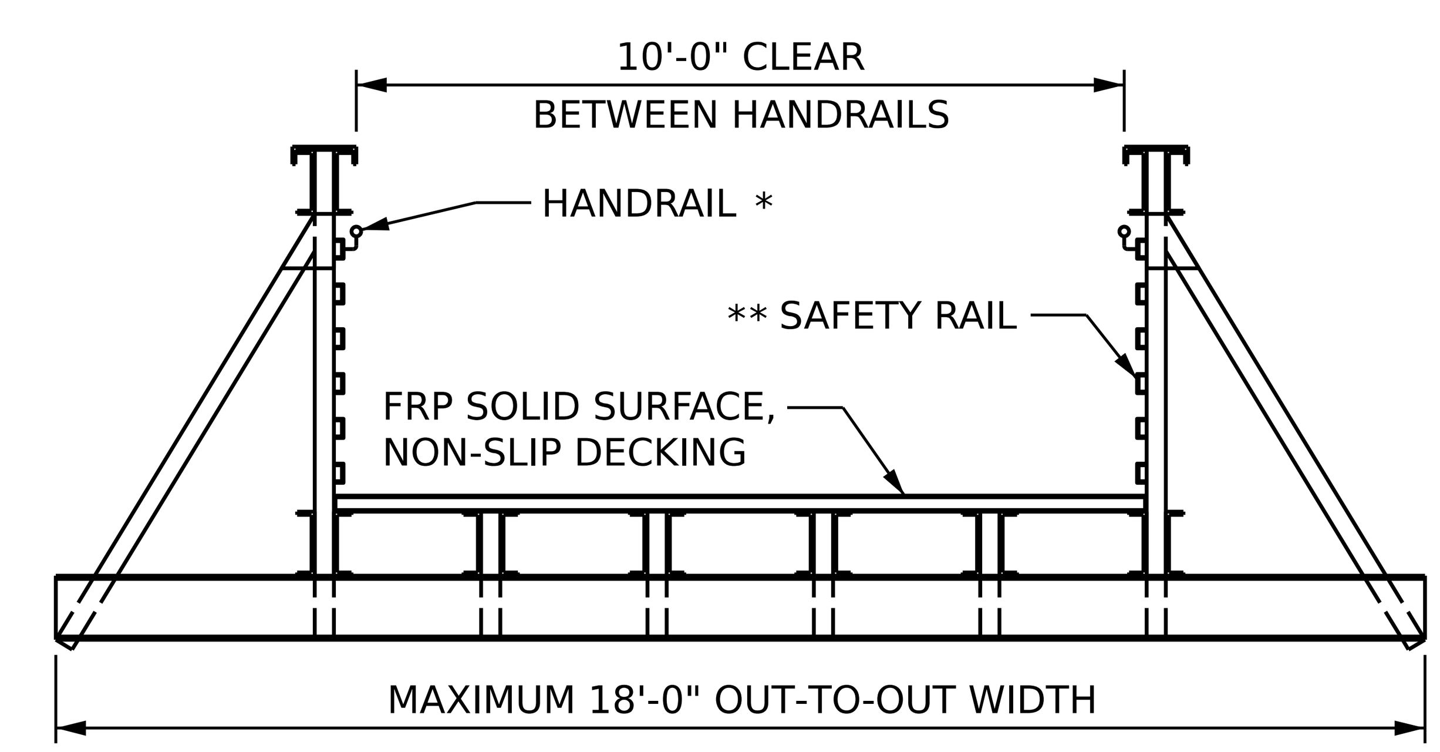


TYPICAL BEAM SEAT PLAN VIEW



BEARING ASSEMBLY SIDE VIEW

VARIATIONS OF BEARING DETAILS PROVIDED BY THE MANUFACTURER SHALL BE SUBMITTED TO THE ENGINEER WITH SHOP DRAWINGS PRIOR TO FABRICATION OF PROCUREMENT.



BRIDGE SECTION

PEDESTRIAN BRIDGE MATERIALS, DESIGN, DETAILS, AND DECK SIZES TO BE DETERMINED BY PEDESTRIAN BRIDGE MANUFACTURER.

* HANDRAIL MUST MEET NATIONAL AND NORTH CAROLINA ADA REGULATIONS.

** 4 INCH MAXIMUM CLEAR SPACING BETWEEN ALL RAILS.

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12/19/2025

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Ting Park-Oak Hall Greenway Connector

Ting Park
Holly Springs, North Carolina

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Revisions:	

HOLLY SPRINGS North Carolina

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Abutment Details

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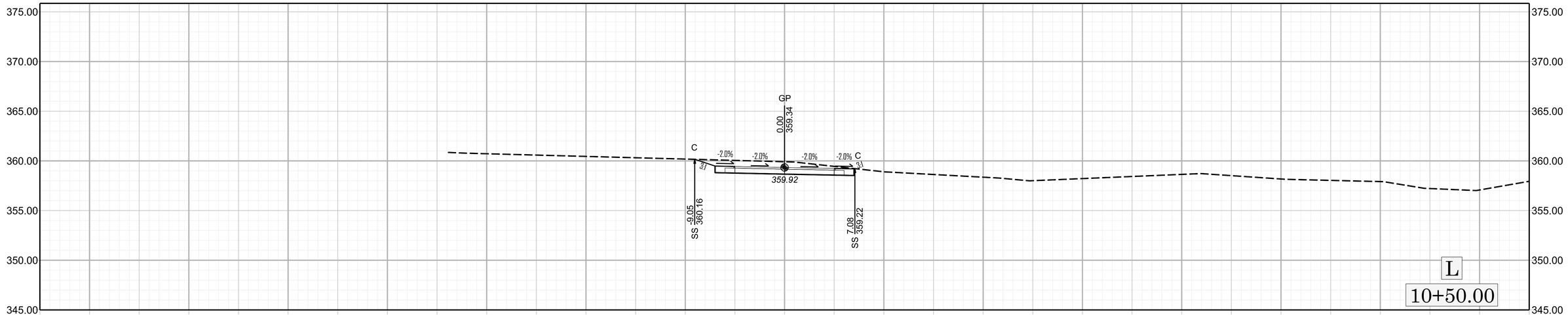

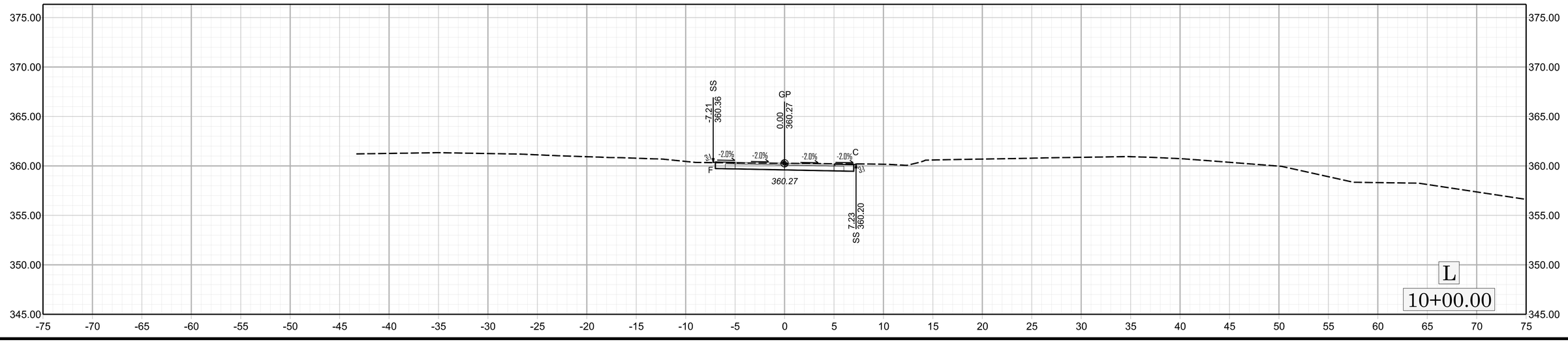

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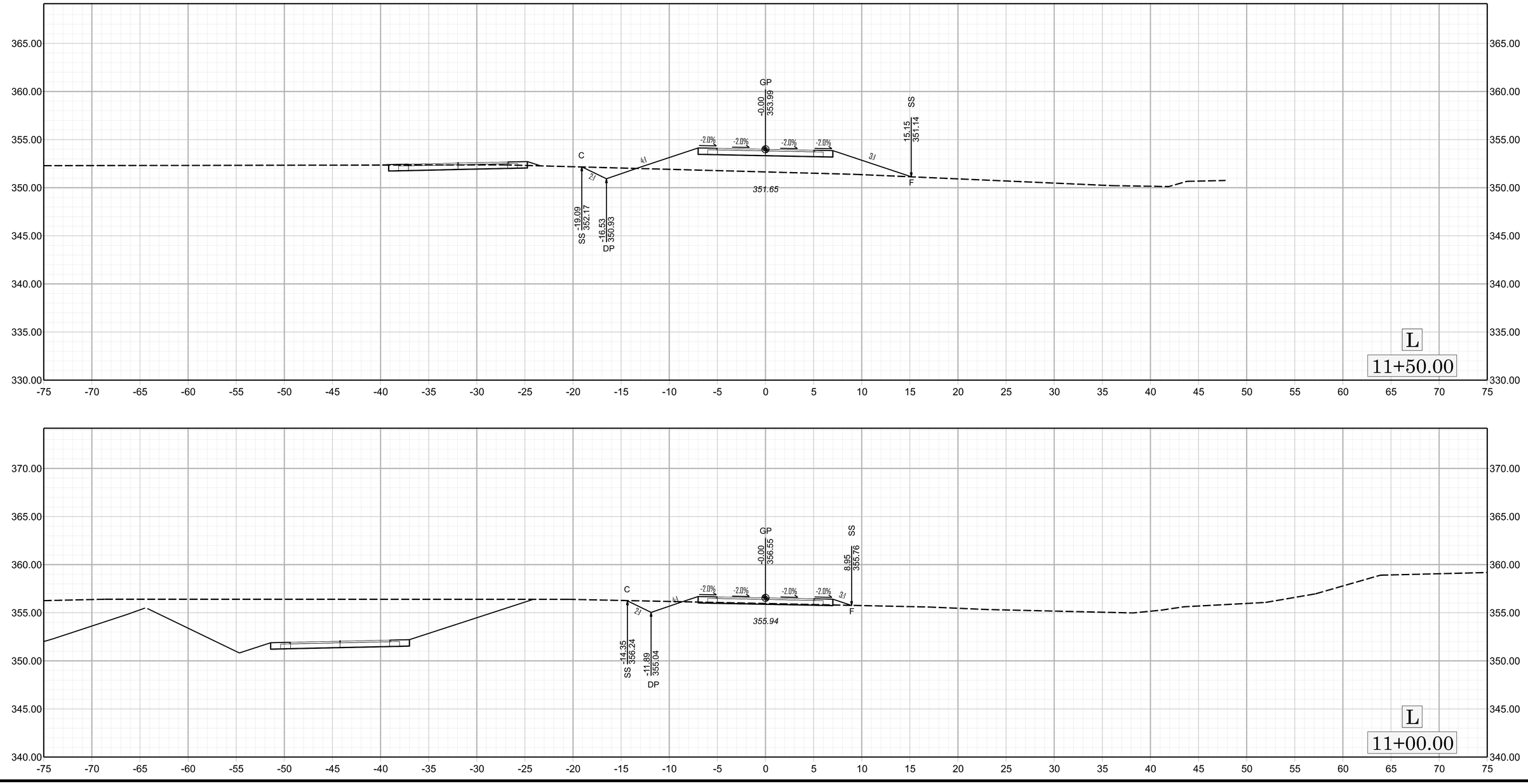

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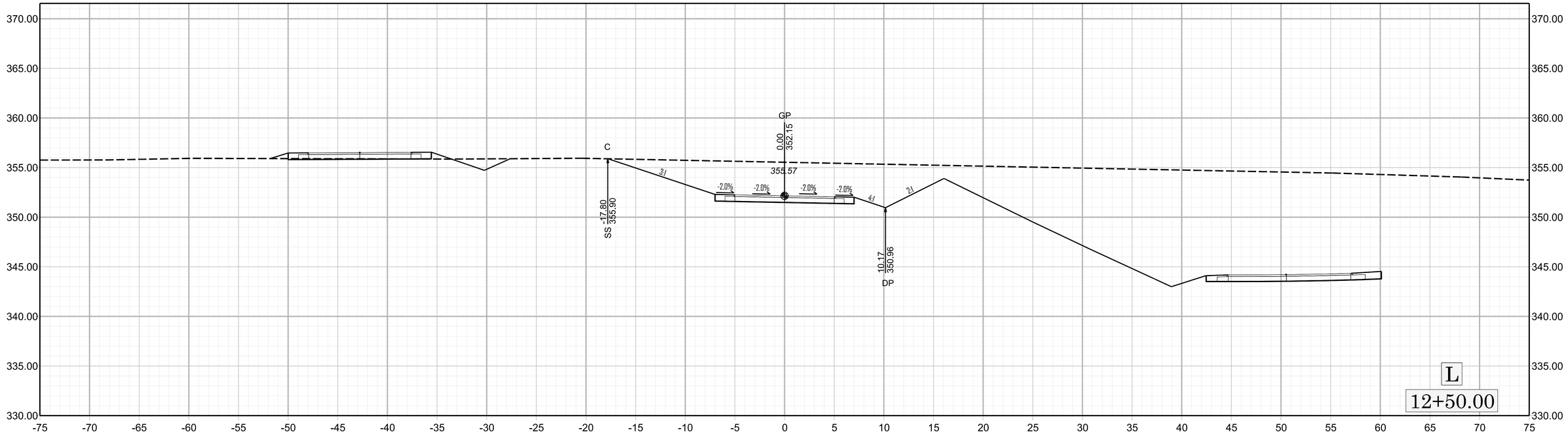

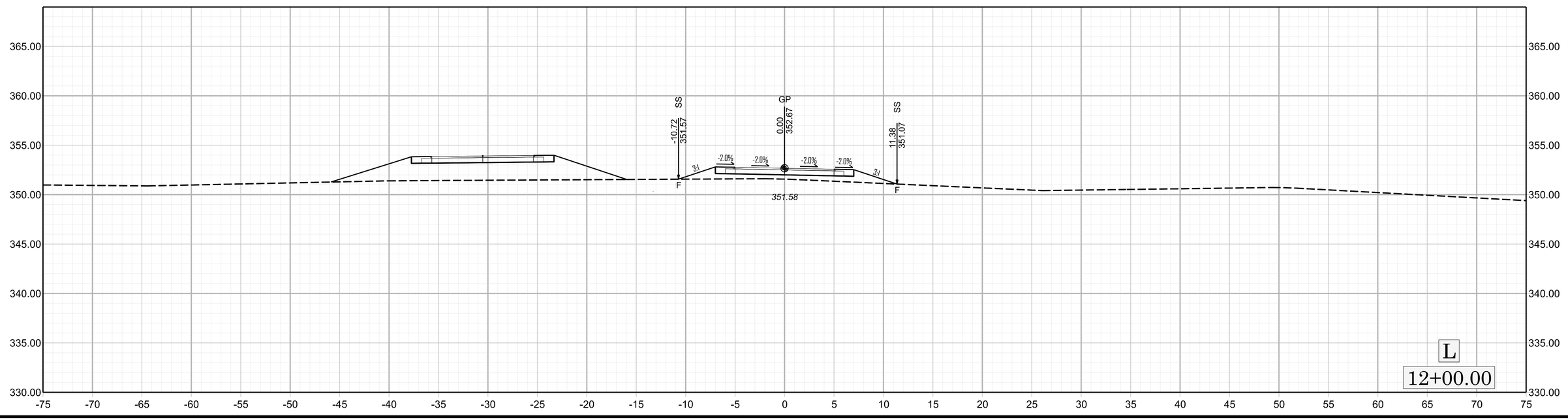

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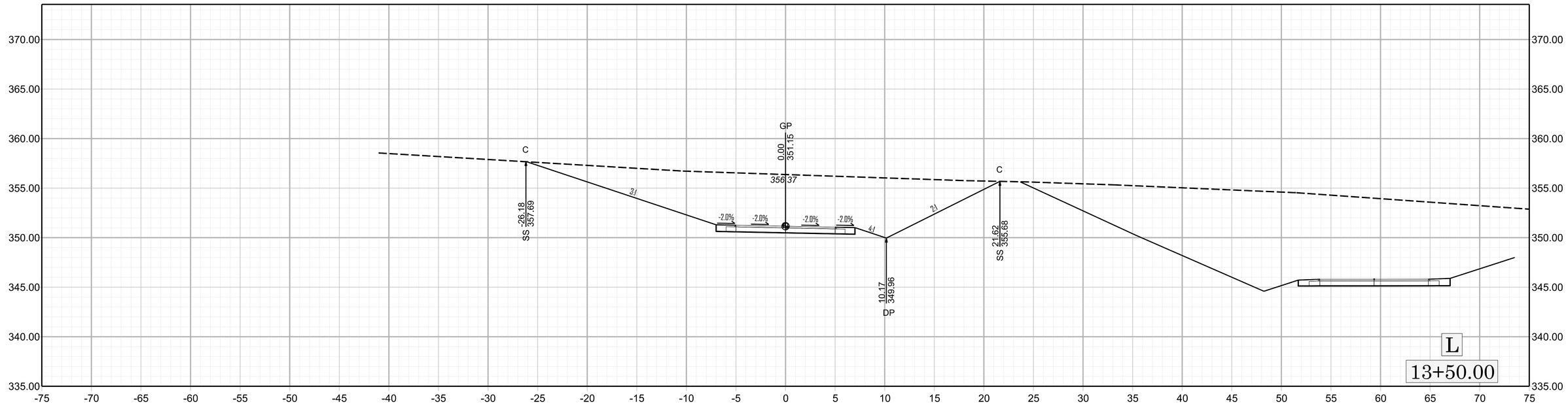

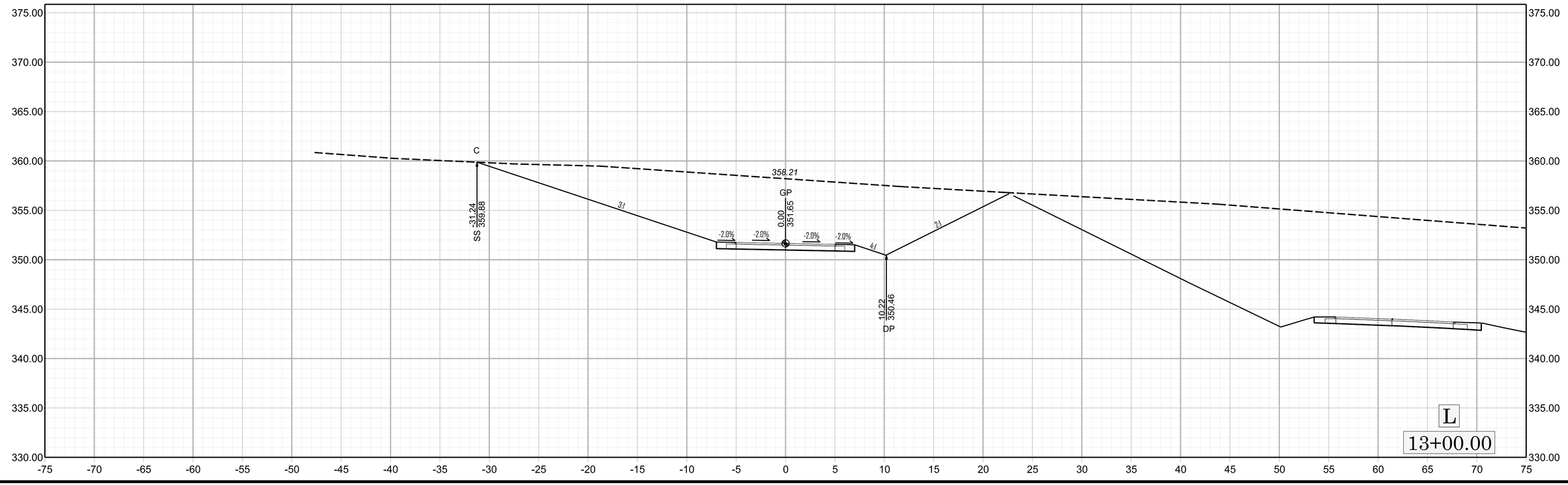

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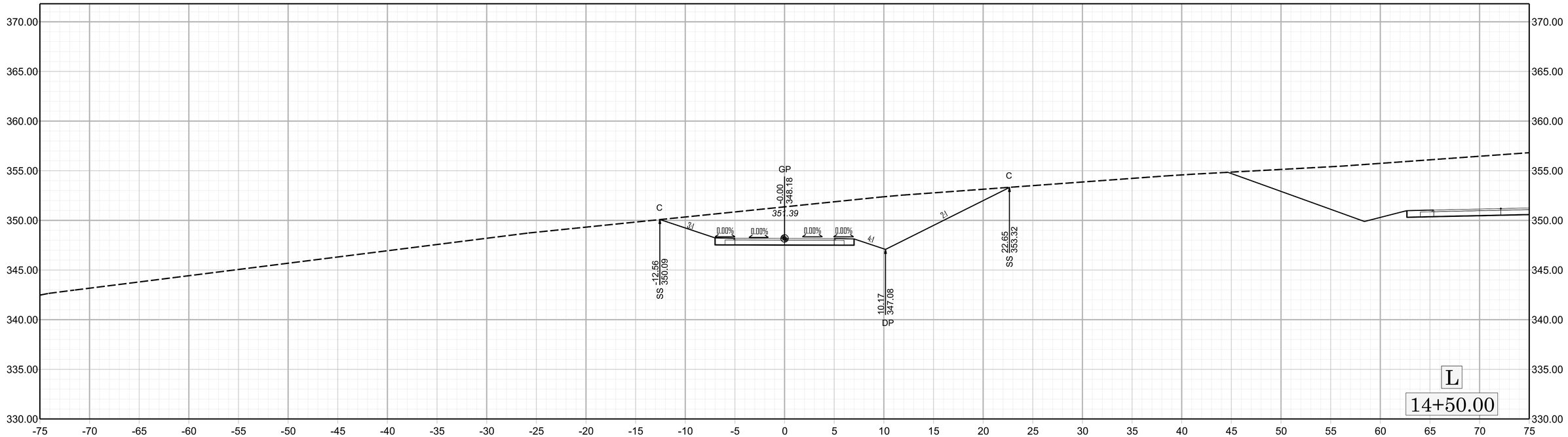

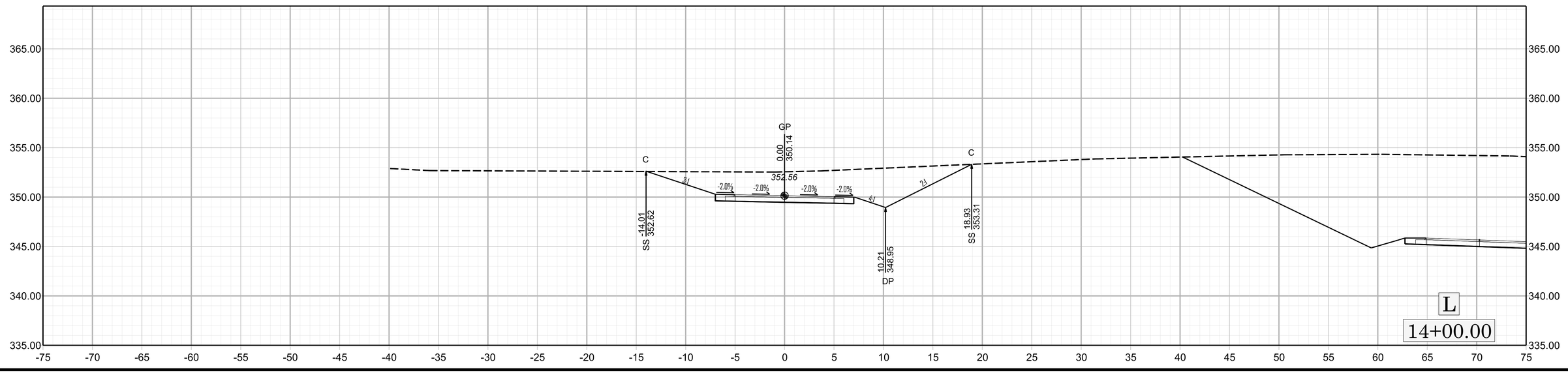

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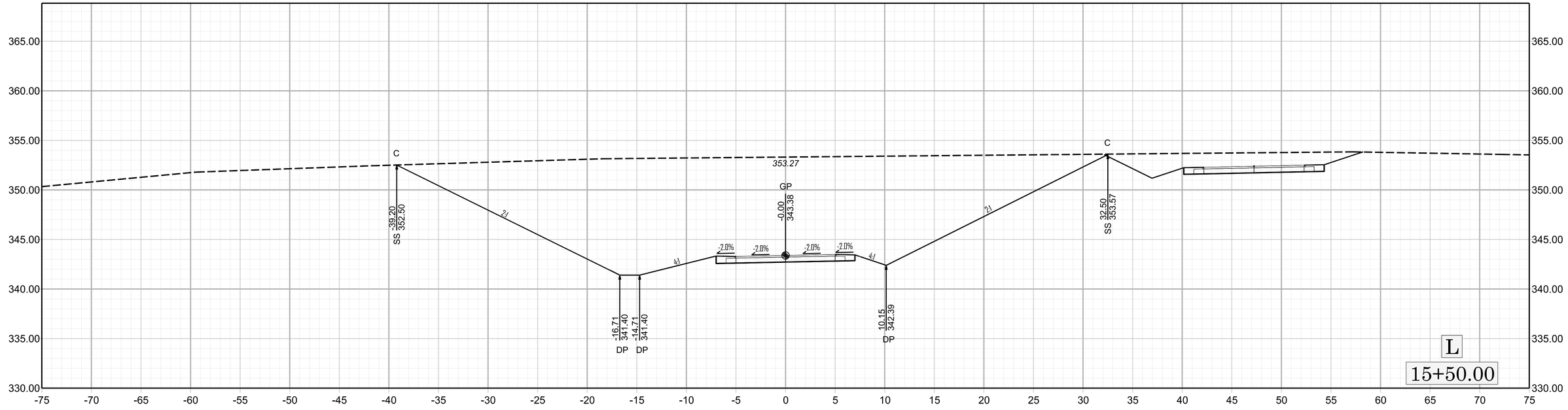

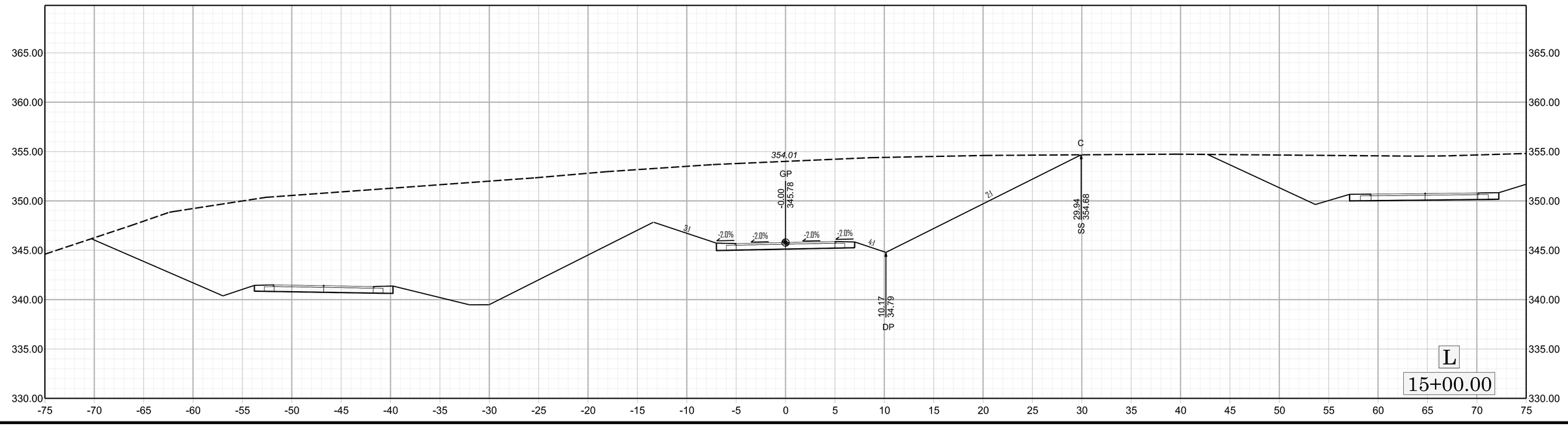

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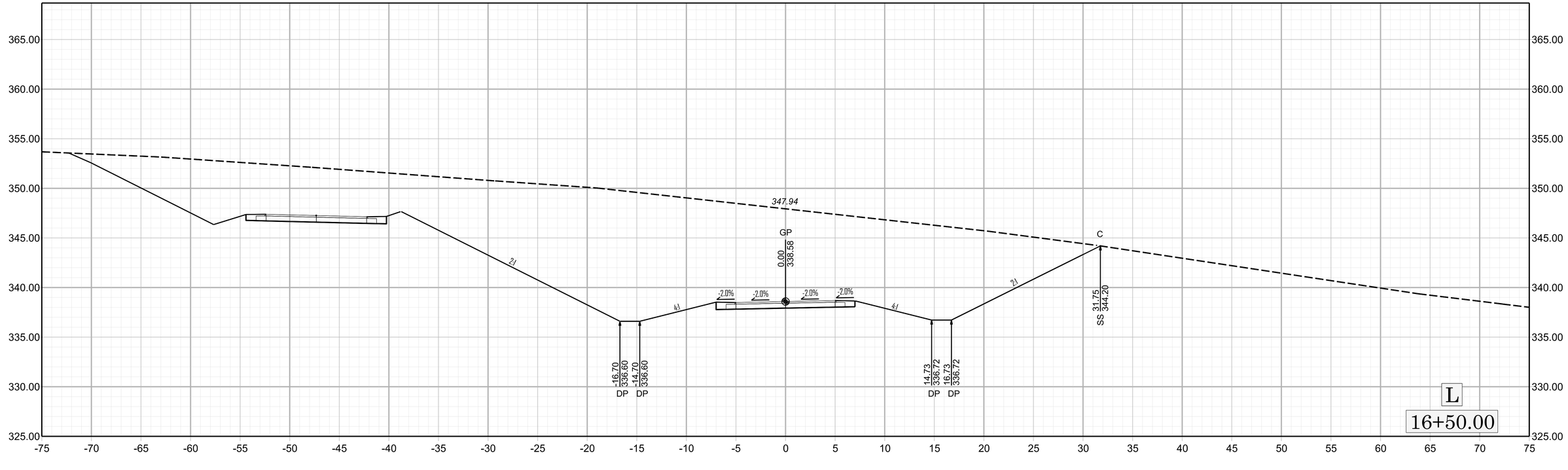

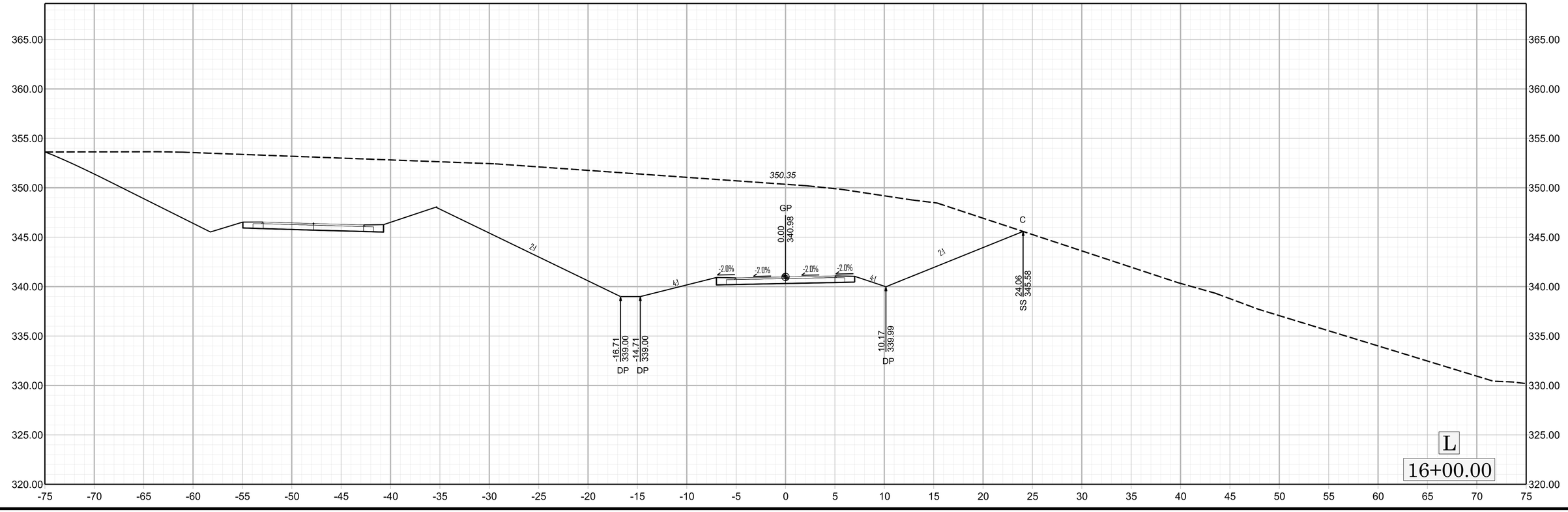

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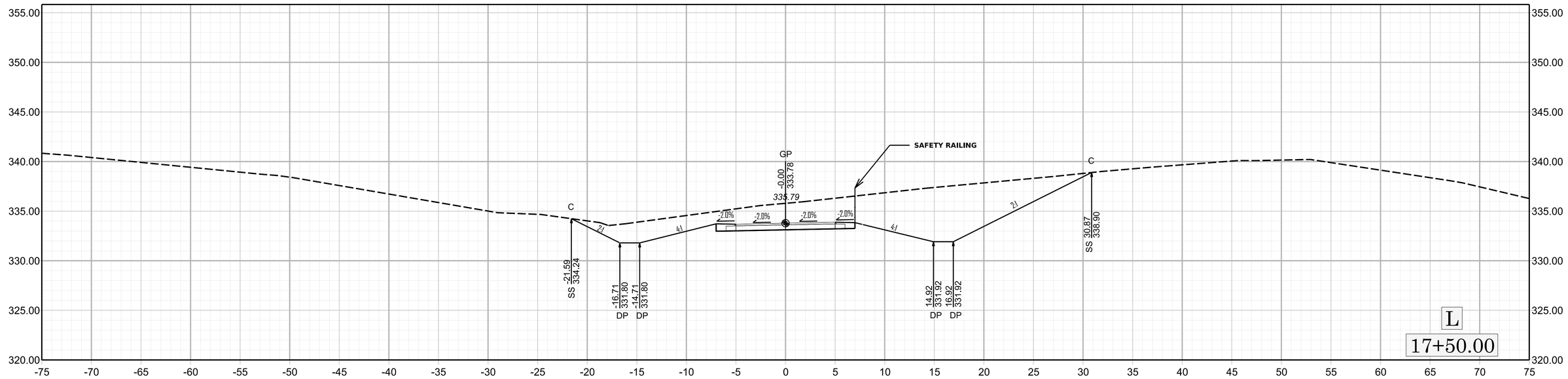

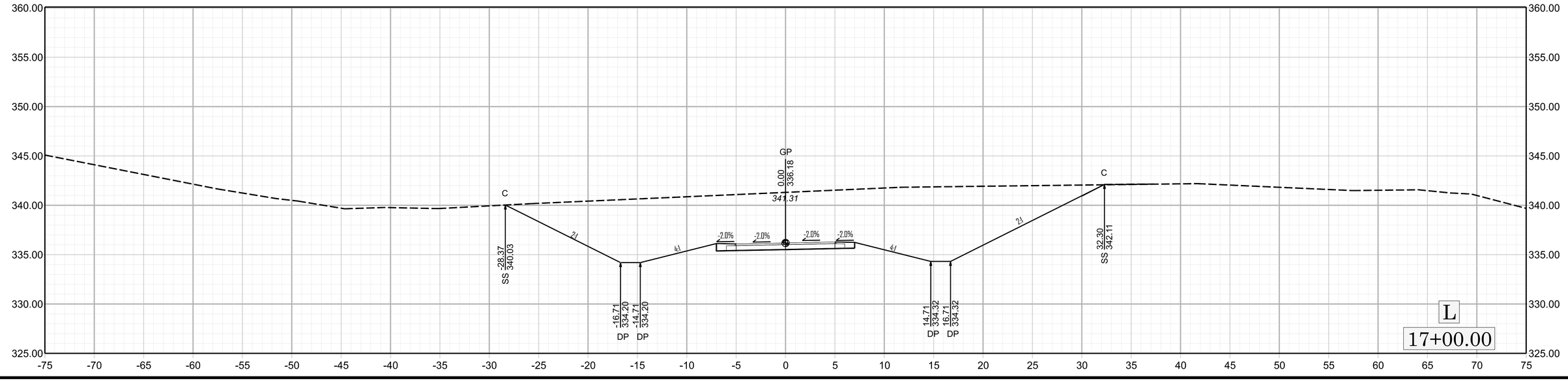

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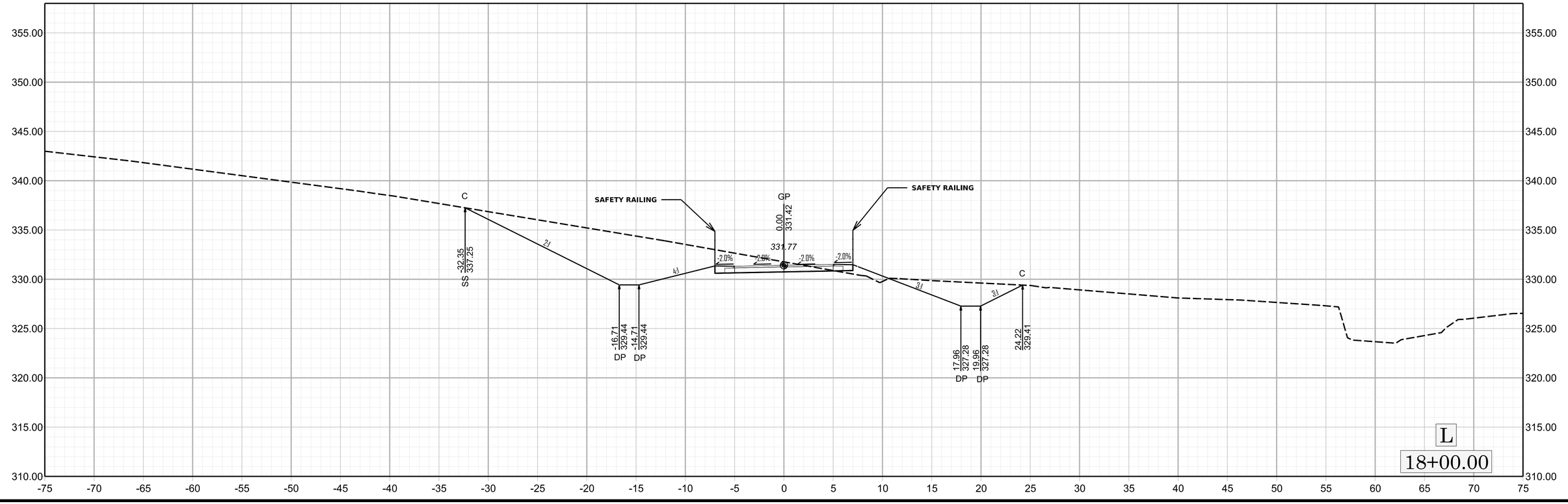

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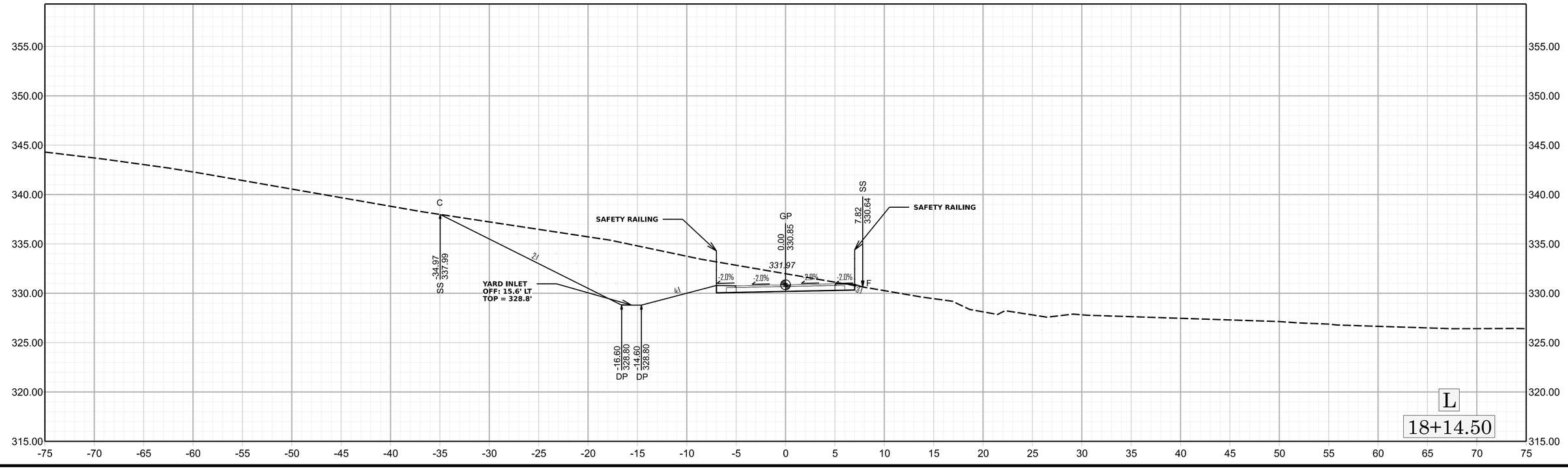

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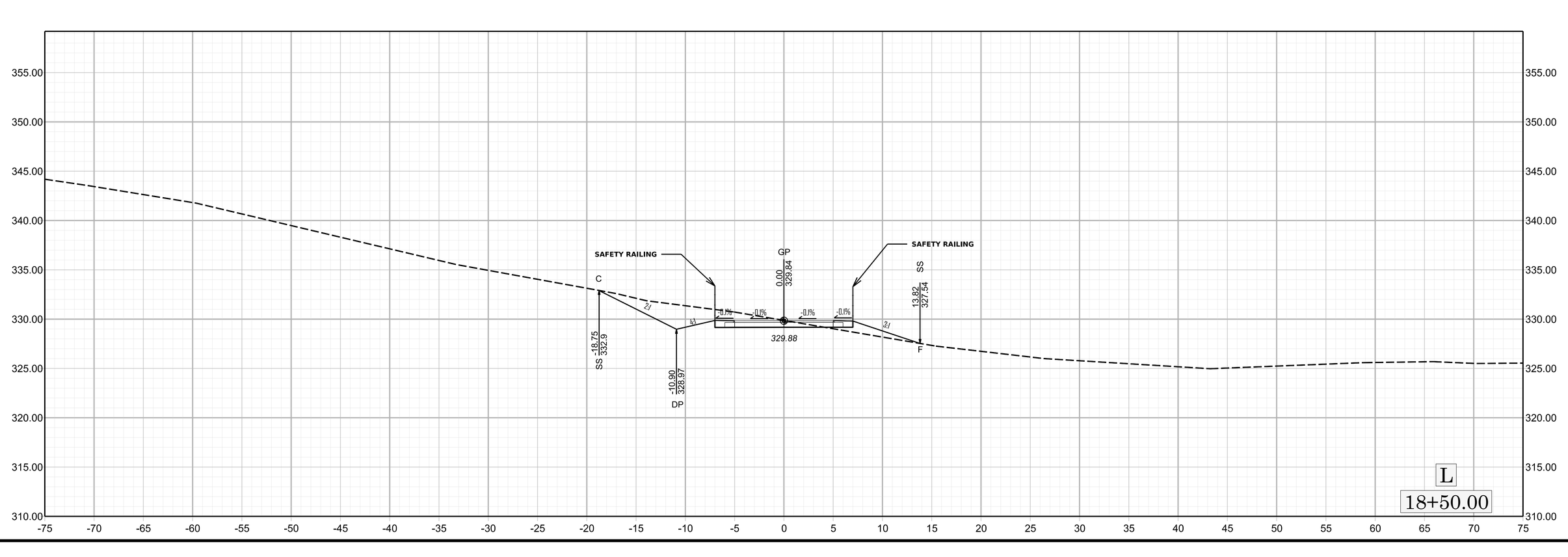

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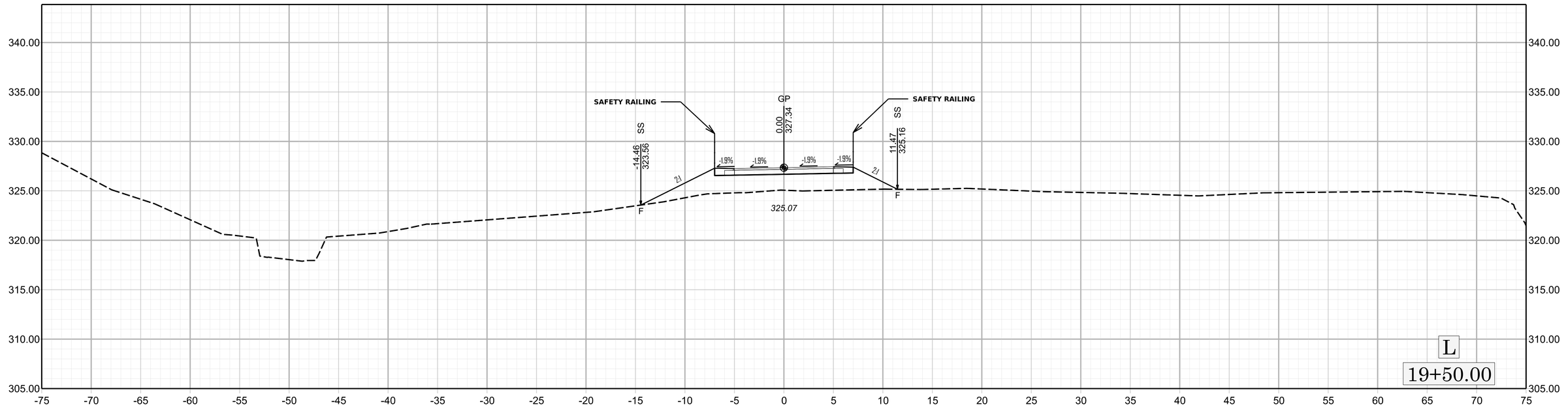

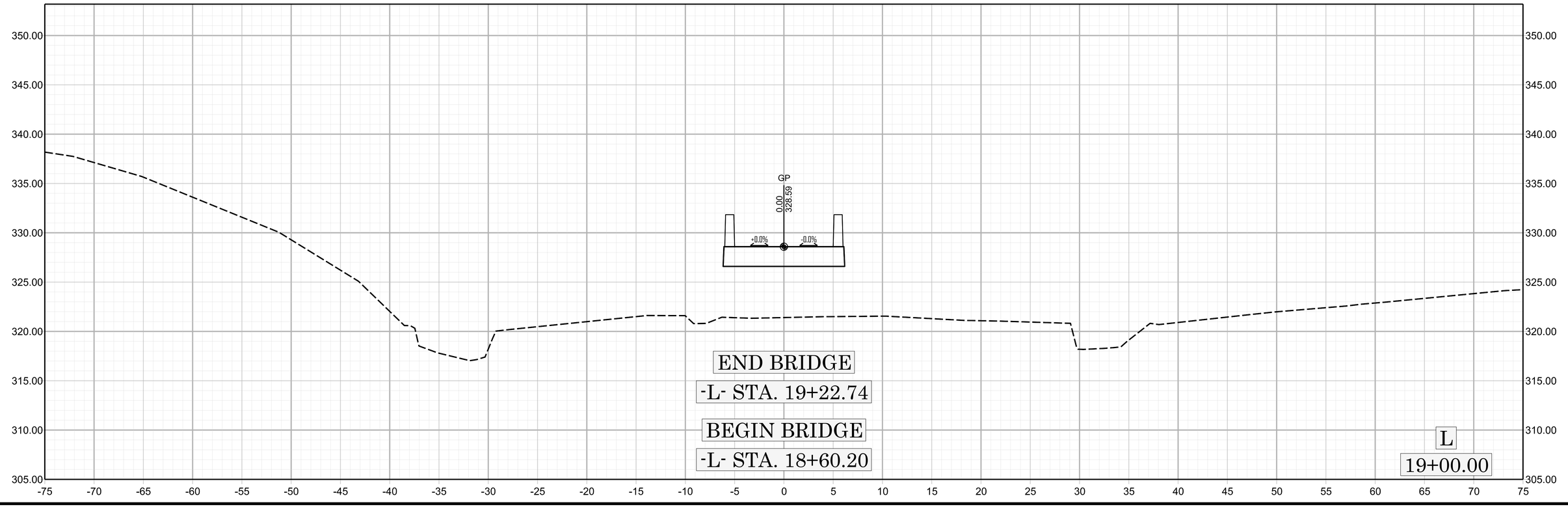

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