
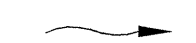


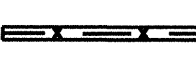
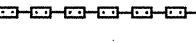

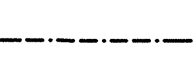
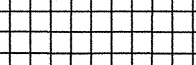




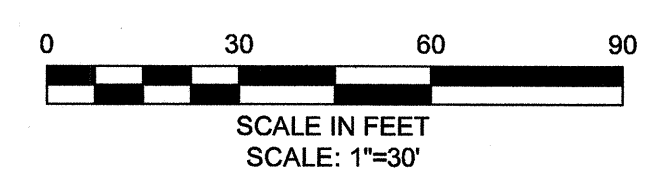


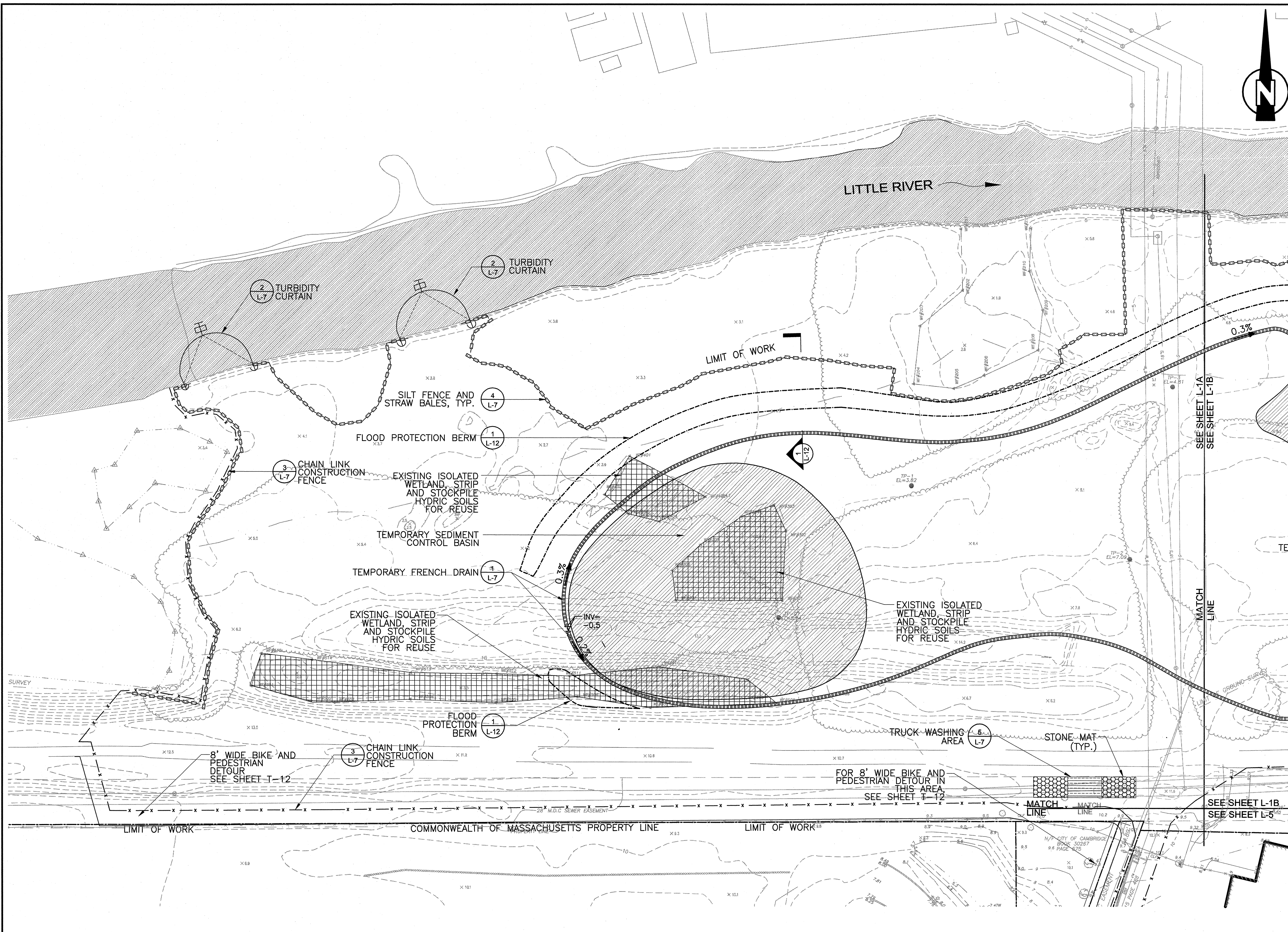
LEGEND

-  PROPERTY LINE
-  DIRECTION OF FLOW (LITTLE RIVER)
-  LIMIT OF WORK
-  CHAIN LINK CONSTRUCTION FENCE
-  CHAIN LINK FENCE ON CONCRETE BARRIER
-  STRAW BALES AND SILT FENCE
-  TEMPORARY FRENCH DRAIN
-  FLOOD PROTECTION BERM (FUTURE PHASE)
-  STRIP EXISTING HYDRIC SOIL
-  TEMPORARY SEDIMENT CONTROL BASIN
-  TURBIDITY CURTAIN
-  OPEN WATER
-  SUMP WITH PUMP

- NOTE:**
1. FOR GENERAL SEDIMENTATION AND EROSION CONTROL NOTES, AND SEQUENCING, SEE LG-1.
 2. TRUCK WASH SOURCE SHALL BE FROM THE PROPOSED YARD HYDRANT VIA THE EXISTING 6-INCH WATER LINE ON SITE OR AN APPROVED TEMPORARY SOURCE AND CONDUIT IF PROPOSED BY THE CONTRACTOR.
 3. INSTALL MIN. 6" THICK GRAVEL CONSTRUCTION PAD EACH SIDE OF TRUCK WASHING AREA. ACTUAL LENGTH TO BE DETERMINED IN FIELD BY THE OWNER'S REPRESENTATIVE ENGINEER. STONE TO BE COARSE AGGREGATE SIZE NO. 1 AASHTO M43 ON TOP OF GEOTEXTILE.



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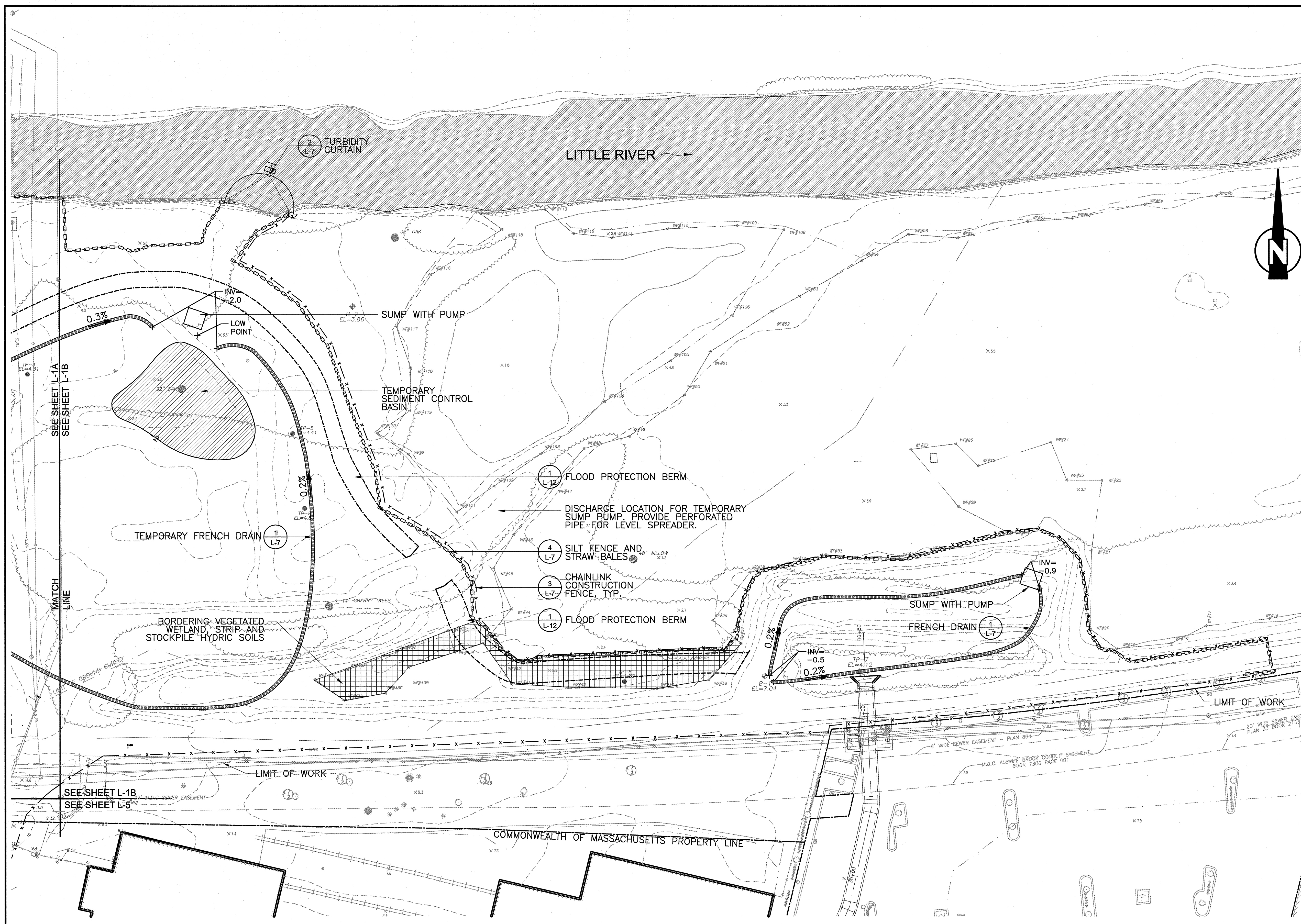
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REG. STATE OF MASSACHUSETTS
4-1-2010

Scale	1"=30'			
Date	SEPTEMBER 1, 2010			
Job No.	CAM			
Designed by	EJW			
Drawn by	MKO			
Checked by	RWG/KB	No.	Description	Date
Approved by	RWG		REVISIONS	

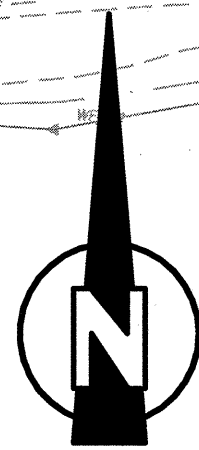
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CONTRACT NO. 12
STORMWATER TREATMENT AREA AND MITIGATION AREA
SEDIMENTATION AND EROSION CONTROL PLAN: WEST

Sheet No.
L-1A
File No.

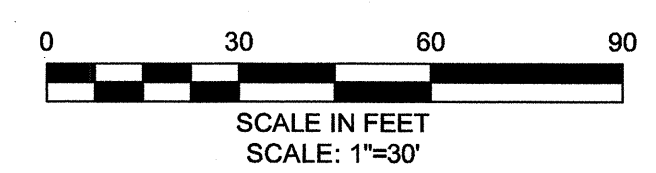


- ### LEGEND
- PROPERTY LINE
 - DIRECTION OF FLOW (LITTLE RIVER)
 - LIMIT OF WORK
 - CHAIN LINK CONSTRUCTION FENCE
 - CHAIN LINK FENCE ON CONCRETE BARRIER
 - STRAW BALES AND SILT FENCE
 - TEMPORARY FRENCH DRAIN
 - FLOOD PROTECTION BERM (FUTURE PHASE)
 - STRIP EXISTING HYDRIC SOIL
 - TEMPORARY SEDIMENT CONTROL BASIN
 - TURBIDITY CURTAIN
 - OPEN WATER
 - SUMP WITH PUMP

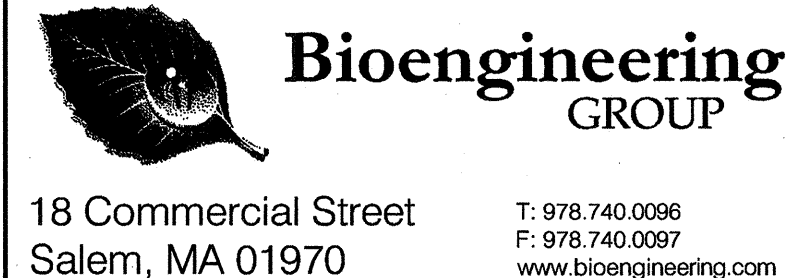


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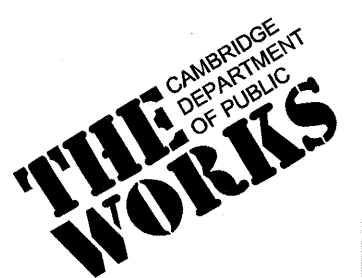
1. FOR GENERAL SEDIMENTATION AND EROSION CONTROL NOTES, AND SEQUENCING, SEE LG-1.
2. REMOVE SEDIMENT FROM TEMPORARY SEDIMENT CONTROL BASIN BEFORE PLACING WETLAND SOILS.



CONFORMED SET



Scale	1"=30'		
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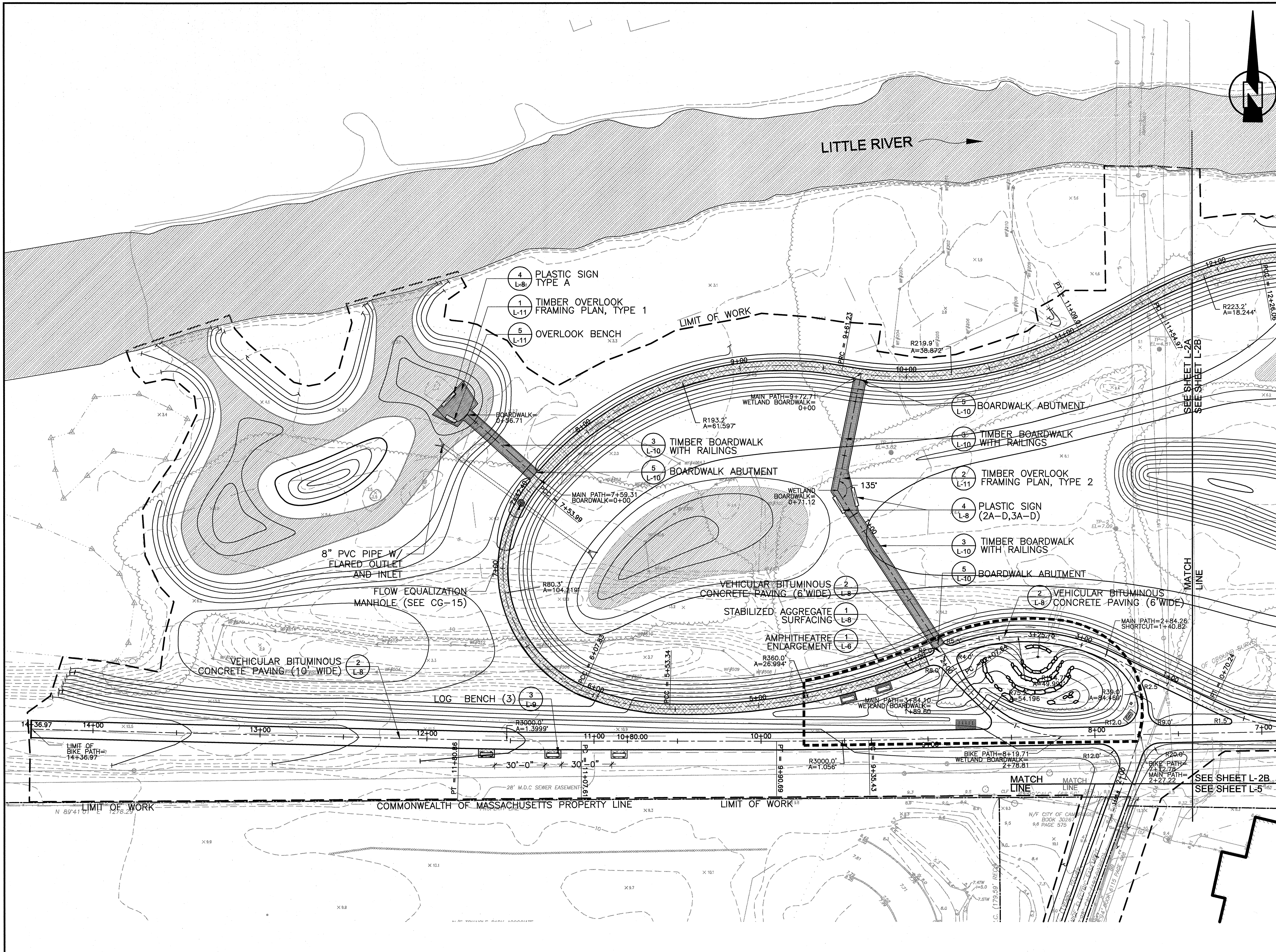
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CAMBRIDGEPARK DRIVE AREA DRAINAGE IMPROVEMENTS
CONTRACT NO. 12

STORMWATER TREATMENT AREA AND MITIGATION AREA
SEDIMENTATION AND EROSION CONTROL PLAN: EAST

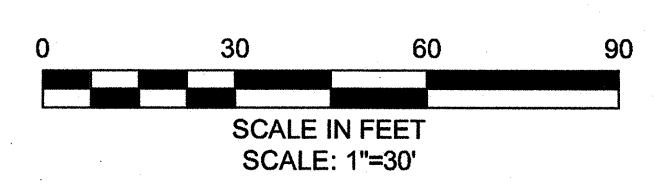
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File No.



- ### LEGEND
- PROPERTY LINE
 - DIRECTION OF FLOW (LITTLE RIVER)
 - LIMIT OF WORK
 - EXISTING CONTOUR
 - PROPOSED CONTOURS (SEE GRADING PLANS)
 - CENTER LINE
 - OPEN WATER
 - STABILIZED AGGREGATE SURFACING
 - BITUMINOUS CONCRETE PATH
 - TIMBER BOARDWALK WITH BUMPERS
 - TIMBER BOARDWALK WITH RAILINGS
 - TIMBER OVERLOOK, TYPE 1
 - TIMBER OVERLOOK, TYPE 2
 - OVERLOOK BENCH
 - PLASTIC SIGN
 - LOG BENCH
 - BIKE RACK
 - ENLARGEMENT AREA
 - MANHOLE
 - PC POINT OF CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - PRC POINT OF REVERSE CURVATURE
 - PT POINT OF TANGENCY
 - R RADIUS
 - A ANGLE

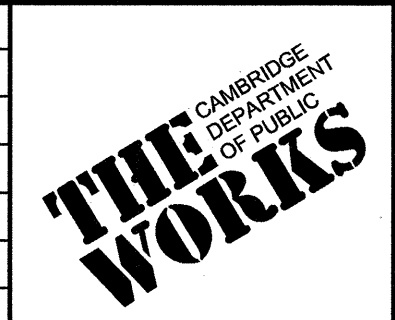
NOTE:
 1. FOR GENERAL LAYOUT AND MATERIALS NOTES, SEE LG-1



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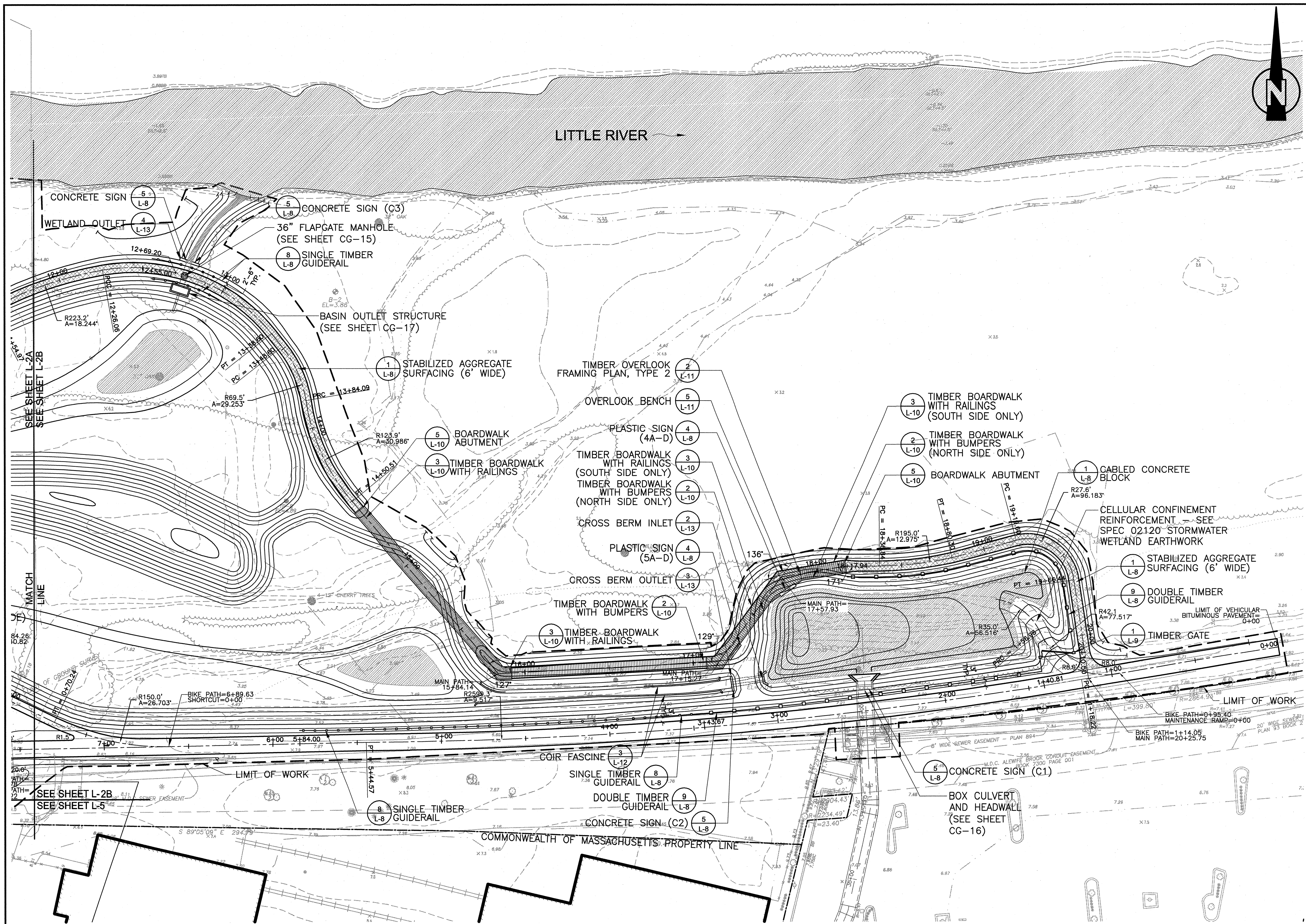


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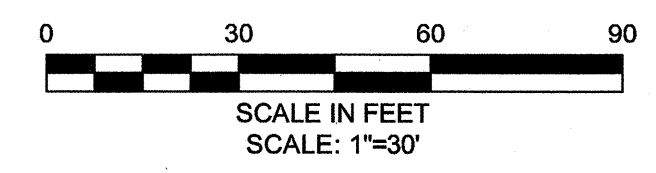
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 CONTRACT NO. 12
 STORMWATER TREATMENT AREA AND MITIGATION AREA
 LAYOUT AND MATERIALS PLAN: WEST

Sheet No. **L-2A**
 File No.



- ### LEGEND
- PROPERTY LINE
 - DIRECTION OF FLOW (LITTLE RIVER)
 - LIMIT OF WORK
 - EXISTING CONTOUR
 - PROPOSED CONTOURS (SEE GRADING PLANS)
 - CENTER LINE
 - OPEN WATER
 - STABILIZED AGGREGATE SURFACING
 - BITUMINOUS CONCRETE PATH
 - TIMBER BOARDWALK WITH BUMPERS
 - TIMBER BOARDWALK WITH RAILINGS
 - TIMBER BOARDWALK (RAILING AND BUMPER)
 - SINGLE TIMBER GUIDERAIL
 - DOUBLE TIMBER GUIDERAIL
 - TIMBER GATE
 - TIMBER OVERLOOK, TYPE 2
 - ENLARGEMENT AREA
 - OVERLOOK BENCH
 - PLASTIC SIGN
 - MANHOLE
 - PC POINT OF CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - PRC POINT OF REVERSE CURVATURE
 - PT POINT OF TANGENCY
 - R RADIUS
 - A ANGLE

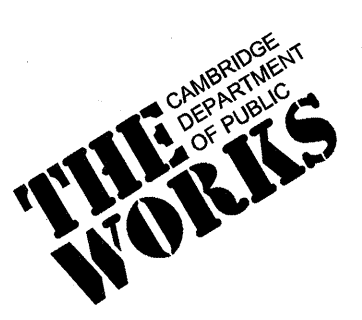
NOTE:
1. FOR GENERAL LAYOUT AND MATERIALS NOTES, SEE LG-1



CONFORMED SET

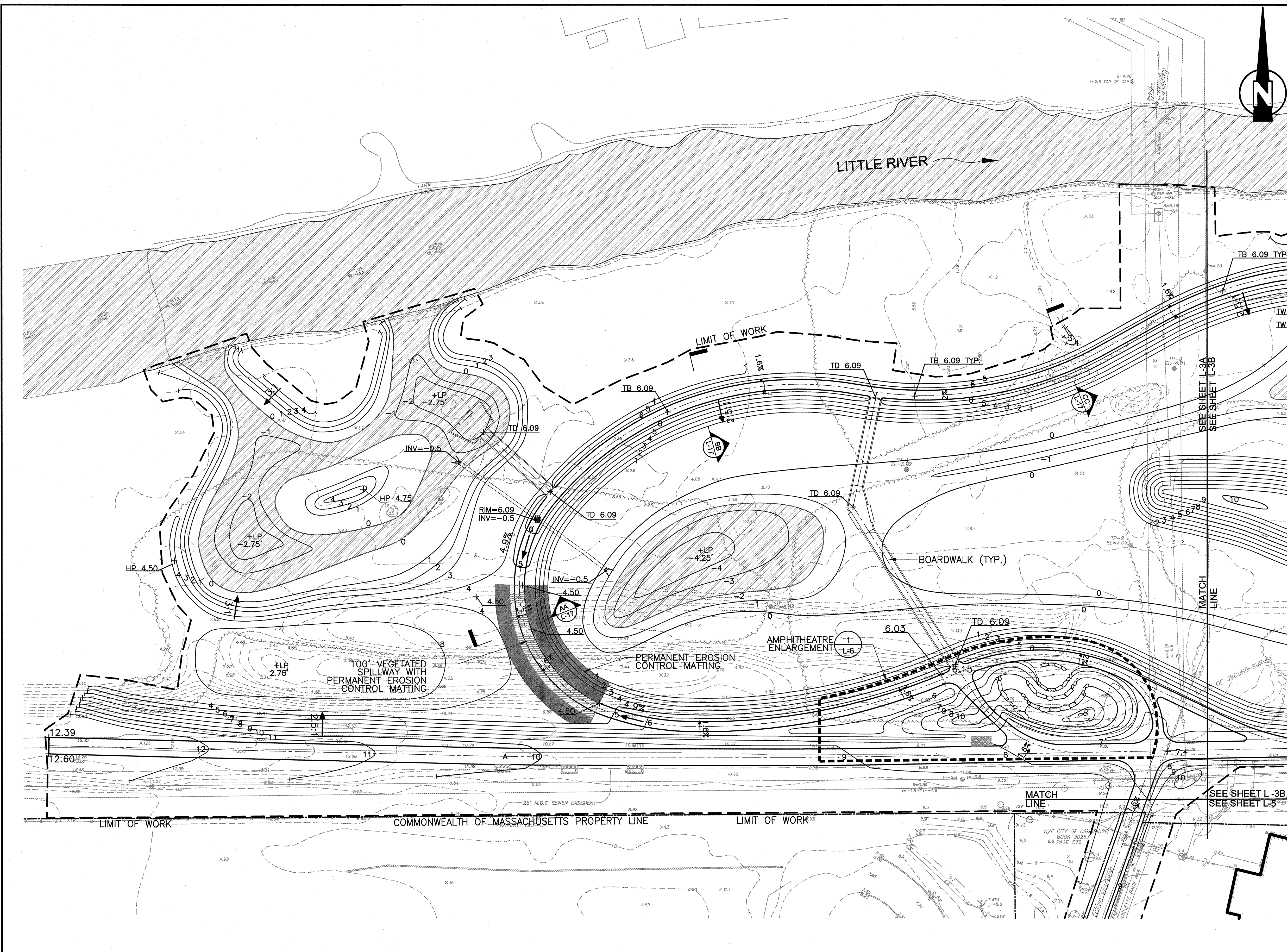


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CONTRACT NO. 12
STORMWATER TREATMENT AREA AND MITIGATION AREA
LAYOUT AND MATERIALS PLAN: EAST

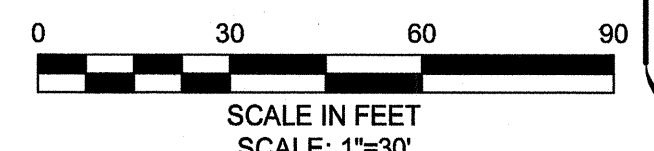
Sheet No.
L-2B
File No.



LEGEND

- PROPERTY LINE
- DIRECTION OF FLOW (LITTLE RIVER)
- - - - - LIMIT OF WORK
- ▨ OPEN WATER
- 10 5' CONTOUR PROPOSED
- 8 PROPOSED CONTOUR
- EXISTING CONTOUR
- +4.5 SPOT ELEVATION
- +HP 3.4 HIGH POINT
- +LP 1.8 LOW POINT
- + TD TOP OF BOARDWALK DECK
- + TW TOP OF WALL
- + TB TOP OF BERM
- + INV INVERT
- 2.5% SLOPE
- 2% CROWNED
- UNDERGROUND PIPE
- △ FLARED PIPE END
- MANHOLE
- ▨ VEGETATED SPILLWAY
- ▨ PERMANENT EROSION CONTROL MATTING (SEE NOTE 8)
- ENLARGEMENT AREA

- NOTES:**
1. ALL GRADES ARE SHOWN TO FINAL ELEVATIONS. SUBGRADE ELEVATIONS SHALL BE ESTABLISHED AS INDICATED IN THE SPECIFICATIONS TO ACCOMMODATE WETLAND AND TOP SOIL PLACEMENT AND GRADING.
 2. ALL FINAL GRADES SHALL BE ESTABLISHED WITH 1" OF WETLAND SOIL OR 1" OF UPLAND SOIL, AS APPROPRIATE.
 3. WETLAND SOIL SHALL BE PLACED AT ELEVATION -2 TO 1. UPLAND SOIL SHALL BE PLACED AT ELEVATIONS ABOVE 1, WHERE THERE IS PLANTING.
 4. TEMPORARY EROSION CONTROL MATTING SHALL BE PLACED IN HIGH MARSH AREAS AND ON ALL SLOPES GREATER THAN 3:1. SEE SPEC 01568 - EROSION & SEDIMENT CONTROL, FOR MATTING DESCRIPTION.
 5. SEE SPECIFICATION 01568, EROSION & SEDIMENT CONTROL, FOR DESCRIPTION OF PERMANENT E.C. MATTING. PROVIDE SECURING OF MATTING TERMINATION POINTS PER MANUFACTURER'S RECOMMENDATIONS.
 6. WIRE MESH FOR RODENT CONTROL SHALL BE LAID PRIOR TO THE PLACEMENT OF PLANTING SOIL. SEE DETAIL 1/L-13.
 7. FOR GENERAL GRADING NOTES, SEE LG-1.
 8. SEE PLANTING PLAN, L-4A, FOR SEED MIX BENEATH PERMANENT EROSION CONTROL MATTING.

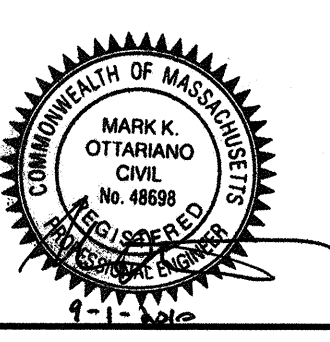


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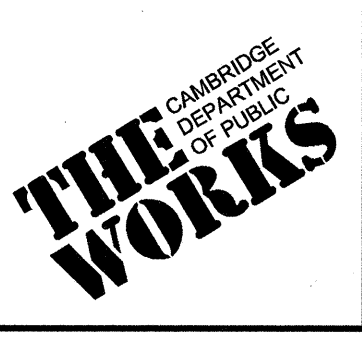
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CONTRACT NO. 12
STORMWATER TREATMENT AREA AND MITIGATION AREA
GRADING PLAN: WEST

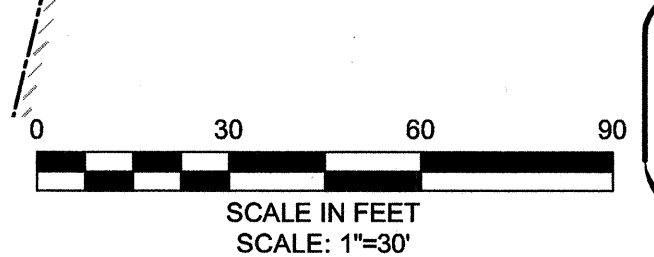
Sheet No. **L-3A**
File No.

LEGEND

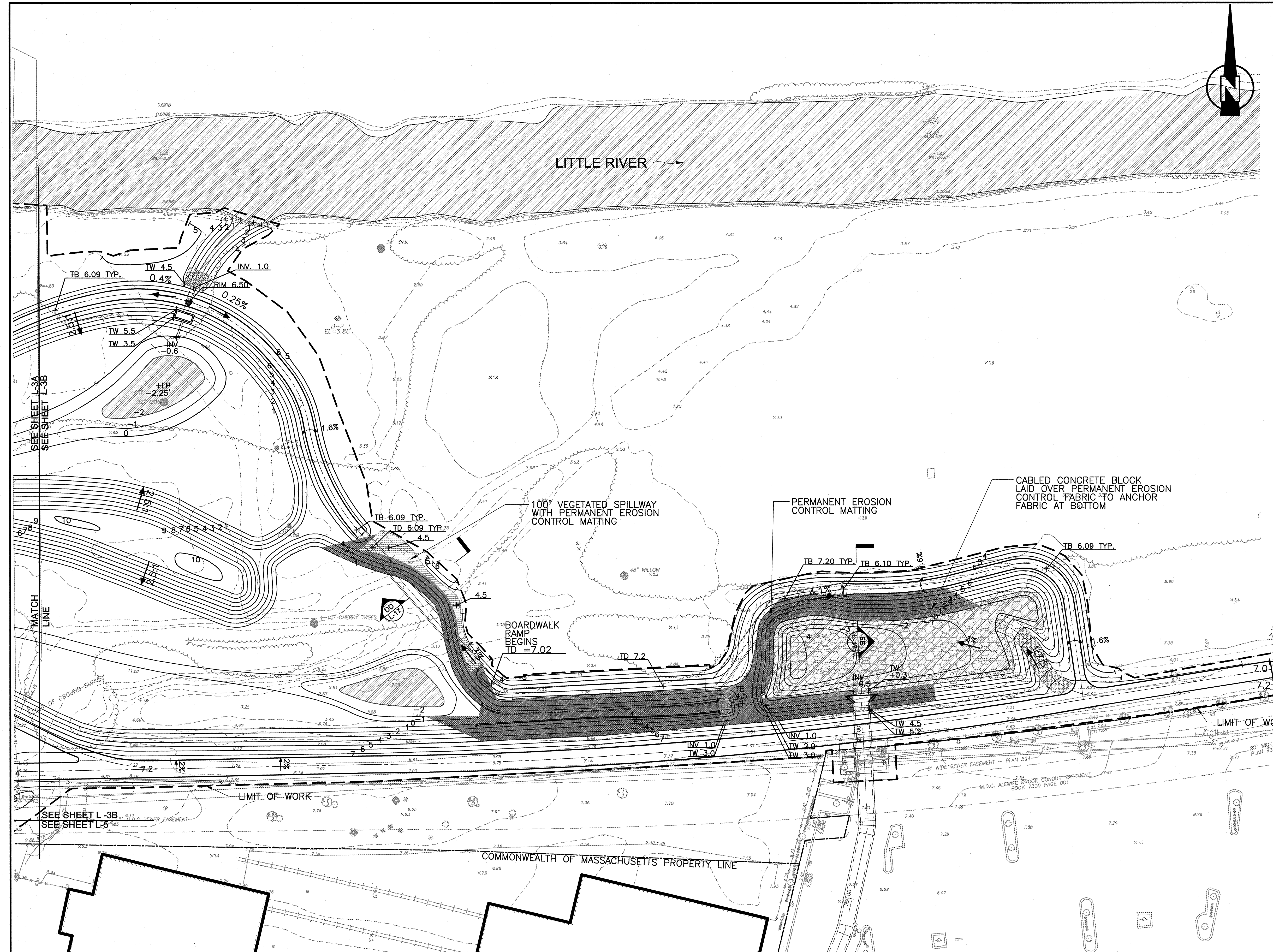
- PROPERTY LINE
- DIRECTION OF FLOW (LITTLE RIVER)
- - - LIMIT OF WORK
- ▨ OPEN WATER
- 5' CONTOUR PROPOSED
- PROPOSED CONTOUR
- EXISTING CONTOUR
- +4.5 SPOT ELEVATION
- +HP 3.4 HIGH POINT
- +LP 1.8 LOW POINT
- + TD TOP OF BOARDWALK DECK
- + TW TOP OF WALL
- + TB TOP OF BERM
- + INV INVERT
- 2.5% SLOPE
- 2% CROWNED
- ▨ CABLED CONCRETE BLOCK
- ▨ CELLULAR CONFINEMENT REINFORCEMENT
- ▨ STONE FOR PIPE ENDS
- COIR FASCINE
- PROPOSED PIPES
- ⊥ HEADWALL
- ⊥ HEADWALL WITH WINGWALLS
- MANHOLE
- ▭ BOX CULVERT AND HEADWALL
- ▭ COMPOUND OUTLET STRUCTURE
- ▨ VEGETATED SPILLWAY
- ▨ PERMANENT EROSION CONTROL MATTING (SEE NOTE 8)

NOTES:

1. ALL GRADES ARE SHOWN TO FINAL ELEVATIONS. SUBGRADE ELEVATIONS SHALL BE ESTABLISHED AS INDICATED IN THE SPECIFICATIONS TO ACCOMMODATE WETLAND AND TOP SOIL PLACEMENT AND GRADING.
2. ALL FINAL GRADES SHALL BE ESTABLISHED WITH 1' OF WETLAND SOIL OR 1' OF UPLAND SOIL, AS APPROPRIATE.
3. WETLAND SOIL SHALL BE PLACED AT ELEVATION -2 TO 1. UPLAND SOIL SHALL BE PLACED AT ELEVATIONS ABOVE ONE, WHERE THERE IS PLANTING.
4. TEMPORARY EROSION CONTROL MATTING SHALL BE PLACED ON SPILLWAYS, IN HIGH MARSH AREAS, AND ALL SLOPES GREATER THAN 3:1. SEE SPEC 01568 - EROSION & SEDIMENT CONTROL, FOR MATTING DESCRIPTION.
5. SEE SPECIFICATION 01568, EROSION & SEDIMENT CONTROL, FOR DESCRIPTION OF PERMANENT E.C. MATTING. PROVIDE SECURING OF MATTING TERMINATION POINTS PER MANUFACTURER'S RECOMMENDATIONS.
6. WIRE MESH FOR RODENT CONTROL SHALL BE LAID PRIOR TO THE PLACEMENT OF PLANTING SOIL. SEE DETAIL 1/L-13.
7. FOR GENERAL GRADING NOTES, SEE LG-1.
8. SEE PLANTING PLAN, L-4B, FOR SEED MIX BENEATH PERMANENT EROSION CONTROL MATTING.



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1-1-2010

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CONTRACT NO. 12
STORMWATER TREATMENT AREA AND MITIGATION AREA
GRADING PLAN: EAST

Sheet No. **L-3B**
File No.

LEGEND

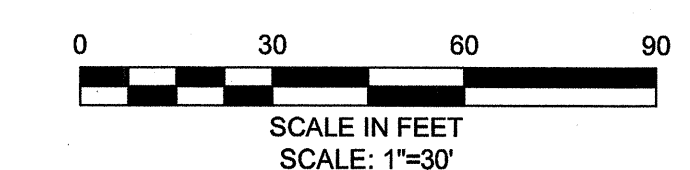
- PROPERTY LINE
- DIRECTION OF FLOW (LITTLE RIVER)
- - - LIMIT OF WORK
- - - EXISTING CONTOUR
- - - PROPOSED CONTOURS (SEE GRADING PLANS)

- RIPARIAN WOODLAND TYPE 1
- RIPARIAN WOODLAND TYPE 2
- SCRUB & SHRUB TYPE 1
- SCRUB AND SHRUB TYPE 2
- TALL TURF SEED MIX
- WET MEADOW SEED MIX
- BROADLEAF FLOODPLAIN

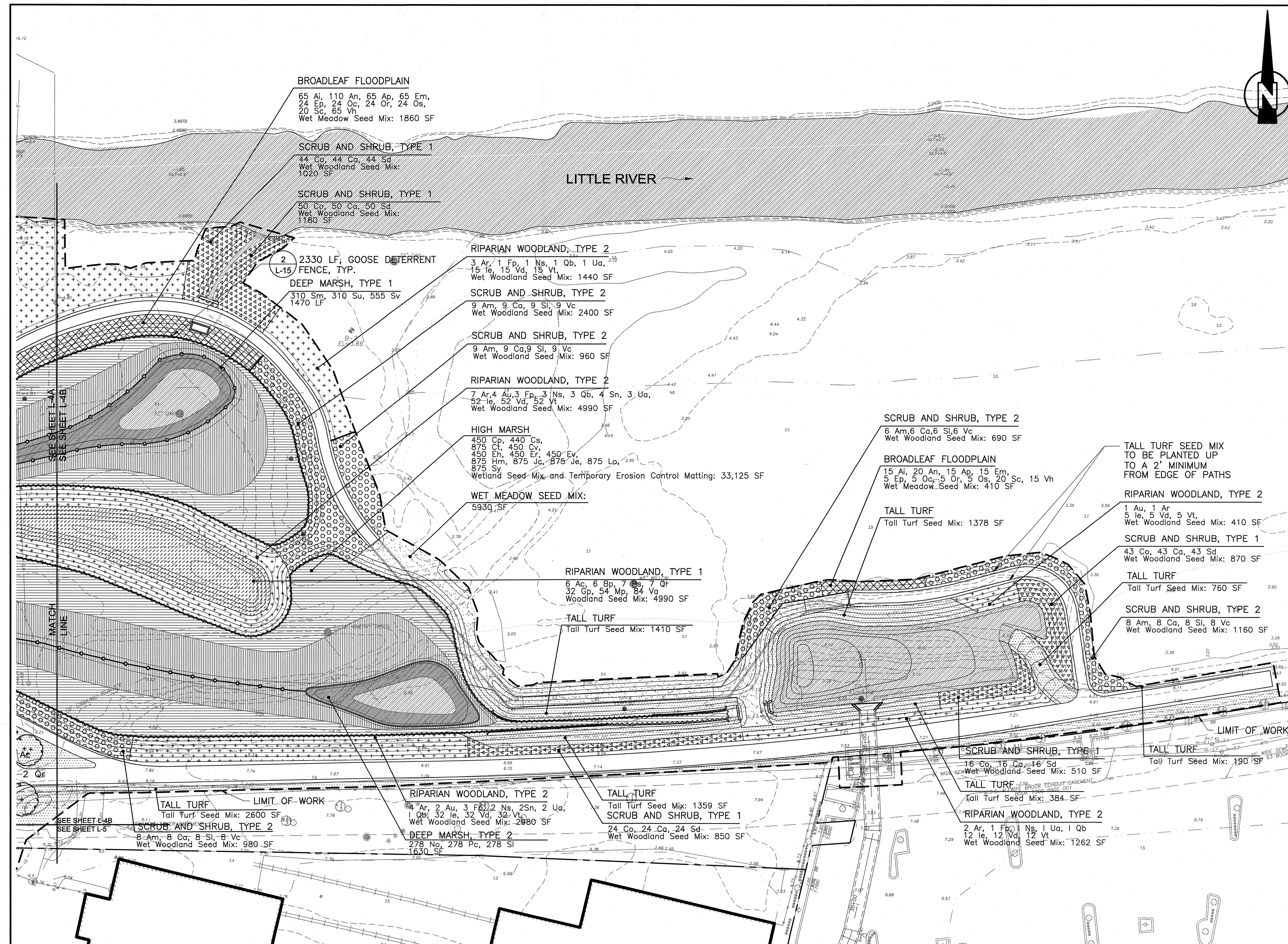
- HIGH MARSH
Stormwater Basin Elevations +1.0 to +0.5;
Compensatory Wetland Elevations +0.5 to 0.0
- EMERGENT MARSH
Elevations +0.5 to -0.5

- DEEP MARSH TYPE 1:
Elevation -0.5
- DEEP MARSH:
Elevations -0.5 to -2.0;
- OPEN WATER
- SPECIMEN TREE
- CLUMP TREE
- AMPHITHEATRE ENLARGEMENT

- NOTES:**
1. TALL TURF SEED MIX TO BE INSTALLED A MINIMUM OF 2' FROM EDGES OF PATH AND AS SHOWN IN THE DRAWINGS.
 2. FOR GENERAL PLANTING NOTES, SEE SHEET LG-1.
 3. FOR PLANTING SCHEDULE, SEE SHEET L-16.
 4. BEFORE PLANTING, CONTRACTOR SHALL TEST REPRESENTATIVE SOIL SAMPLES (4 MIN) TO DETERMINE THE LEVEL OF SODIUM AND OTHER MINERAL CHLORIDES IN THE SOIL AND PROVIDE RESULTS TO ENGINEER. HIGH LEVELS OF CHLORIDES MAY RESULT IN A DECISION TO SUBSTITUTE SPECIES IN MARSH PLANTINGS.



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9-1-2010

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CONTRACT NO. 12	
STORMWATER TREATMENT AREA AND MITIGATION AREA	
PLANTING PLAN: EAST	

Sheet No.	L-4B
File No.	