



The Charter Township of Oakland, Michigan
Parks and Recreation Commission
INVITATION FOR BIDS

PAINT CREEK TRAIL STREAM BANK STABILIZATION

ADDENDUM NO. 1

Notification of Change in RFP before Proposals Due

Date of Issue: December 22, 2014

RFP DEADLINE: Tuesday January 6, 2015 @ 2 p.m.

This addendum is issued prior to the opening of sealed proposals. The following items are changes, additions, eliminations, and/or clarifications and are to be considered by the bidders in making and submitting their proposal.

The project **Drawings** have been revised to show:

- The limit of the 50-foot Trail ROW at Site 1,
- A seed mix for site restoration at Sites 1 and 2 if brush is cleared for site access,
- A correction for the size of field stone to be installed at Site 2,
- Requirements for securing logs together in the Site 3 log cribwall, and
- The seed mix for use at Site 3.

A revised set of the drawings is posted with this addendum.

General Clarifications/Changes

- ASTI will apply for Oakland County SESC Permit. Contractor shall pick up and pay for permit.
- Seed mixes may be from any reputable native seed provider, but species must be Michigan-genotype.
- Bids shall include a line item for Contractor-provided as-needed traffic control for the Paint Creek Trail
- ROW at site 1 is 50 feet wide in total, not 50 feet from the center line of the trail as indicated previously. Please see change to Site 1 drawing. Figures showing the rights-of-way limits for access (for Site 1) at Clarkston Road, Site 1 (Stairway), Site 2 (Boardwalk), and Site 3 (north of Silver Bell Road) are attached to this Addendum.

Site 1

Paint Creek Trail Access: Contractor to remove and replace bollards south of Clarkston Road, at the Royal Oak Archers entrance, and north of Adams Road to provide access to trail. Contractor should enter at Adams intersection with loaded trucks and exit at Clarkston after emptying load. Between the Clarkston intersection and Site 1 the contractor must cross Paint Creek Trail bridge 38.4 which has an 11' 10" clear width and is capable of carrying a 42-ton single-unit truck, a 77-ton 2-unit truck or a 77-ton 3-unit truck and Paint Creek Trail bridge 38.2 which has an 11' 7" clear width and is capable of carrying a maximum live load of 4,700 lbs per axle.

Site 1 Access: To reach site from the Paint Creek Trail it may be necessary for Contractor to remove woody vegetation. Vegetation to be removed will be verified on-site with ASTI. Cut stumps and roots are

to remain to retain the slope. The revised drawings specify a restoration seed mix for the contractor to use in the case that they must disturb the site. Bids shall include provision and installation of ¼ -acre (total for Sites 1 and 2) Woodland seed mix as described in the drawings. If Contractor chooses to access the site by removing all or portions the wooden staircase, he/she would need to restore the staircase to its current condition or better.

Equipment/material storage: Area to be determined with Contractor – could be in Paint Creek Trail parking area south of Kern/Clarkston intersection immediately north of the restroom. Storage at Site 1 will be limited as the Paint Creek Trail right-of-way is narrow in this area and contractor will only have 20' in width beyond the trail surface.

Site 2

Paint Creek Trail Access: If necessary, Contractor to remove and replace bollards south of Gallagher Road and north of Silver Bell Roads to provide access to trail.

Site 2 Access: To reach site from the Paint Creek Trail it may be necessary for Contractor to remove woody vegetation. Vegetation to be removed will be verified on-site with ASTI. Cut stumps and roots are to remain to retain the slope. The revised drawings specify a restoration seed mix for the contractor to use in the case that they must disturb the site. Bids shall include provision and installation of ¼ -acre (total for Sites 1 and 2) Woodland seed mix as described in the drawings. If Contractor chooses to access the site by using all or portions of the timber staircase or boardwalk, he/she would need to restore these structures to their current condition or better.

Equipment/material storage: Area to be determined with Contractor – Paint Creek Trail right-of-way immediately north of Silver Bell Road on the east side of trail surface appears to be the closest location.

Site 3

Paint Creek Trail Access: If necessary, Contractor to remove and replace bollards south of Gallagher Road and north of Silver Bell Roads to provide access to trail.

Site 3 Access: To reach site from the Paint Creek Trail Contractor should ensure that equipment footprint does not extend beyond the trail surface if possible, or at a minimum, the top of the slope.

Equipment/material storage: Paint Creek Trail right-of-way immediately north of Silver Bell Road on the east side of trail surface.

Oakland Township Parks and Recreation is requesting proposals from experienced and qualified bidders to provide Paint Creek Trail stream bank stabilization services. Sealed proposals will be received by the Charter Township of Oakland Clerk's Department at 4393 Collins Road, Rochester, MI 48306 until 2:00 P.M., Tuesday, January 6, 2015, at which time the name of submitting proposers will be read.

OAKLAND TOWNSHIP RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS AND TO WAIVE ANY IRREGULARITIES.

ATTACHMENT A

Revised Construction Drawings

Paint Creek Shoreline Restoration for Oakland Township Parks & Recreation Commission

General Notes

1. CONTRACTOR shall furnish all labor, materials, equipment, transportation, services and necessary incidental work required to complete work as shown on the Drawings and/or as specified herein.
2. All work shall comply with all applicable permits.
3. In general the work includes: Site construction, clearing and grubbing, erosion control, earthwork, upland seeding, and supply and installation of seed mixes and live dormant stakes.
4. Conduct site clearing operations to insure minimum interference with roads, streets, walks and other adjacent occupied or used facilities. Do not close or obstruct streets, walks, and other adjacent occupied or used facilities without permission from authorities having jurisdiction.
5. Limits of work are established on the Drawing and shall be verified with the Wetland Consultant or Site Manager prior to any construction activities. No vehicle activity shall occur outside the limit of construction area.
6. Contractor is responsible for procuring and complying with any additional permits that may be required by any governing agency for the completion of this project, including, but not limited to, soil erosion control permits and county drain permits.
7. Excess excavated soil material shall be placed at an upland location on-site determined by the Site Manager. Stockpiled excess material shall be graded and stabilized with seed to prevent erosion into existing wetland or watercourse. Contractor shall not remove and/or fill excess soil material without prior approval of Wetland Consultant or Site Manager and Contractor shall submit cost to transport excess soil materials to OWNER prior to removal.

Utilities

1. Locations of existing underground utilities are shown using the best information available, but with no guarantee that indicated locations are accurate or that utility lines other than those shown may or may not be present.
2. Contractor and those subcontractors affected by site conditions shall be fully responsible for any deductions or conclusions made on the basis of this information and that of any additional site inspections, if made.
3. "MISS DIG" shall be contacted by Contractor for location of underground utilities prior to start of work. It should be understood that MISS DIG will not locate private lines, only utility company lines and the Contractor will be responsible for verifying all locations.
4. Conflicts between utilities and proposed work shall be reported to Wetland Consultant or Site Manager prior to construction.

Layout

1. Contractor shall establish and maintain grades, benchmarks, and all other significant reference line of points. Layout of elevations and alignments shall be performed by a Licensed Surveyor. Wetland Consultant shall review the layout of all grades/contours prior to construction and after the establishment of sub-grades.
2. The Contractor shall designate a full-time Project Supervisor, who is authorized to act as his/her agent and to be responsible for all subcontractors. The Project Supervisor shall be designated by name prior to commencement of the work and shall be available for proper supervision of the project for the duration of the MDEQ permit and/or contract.

Sequence of Construction

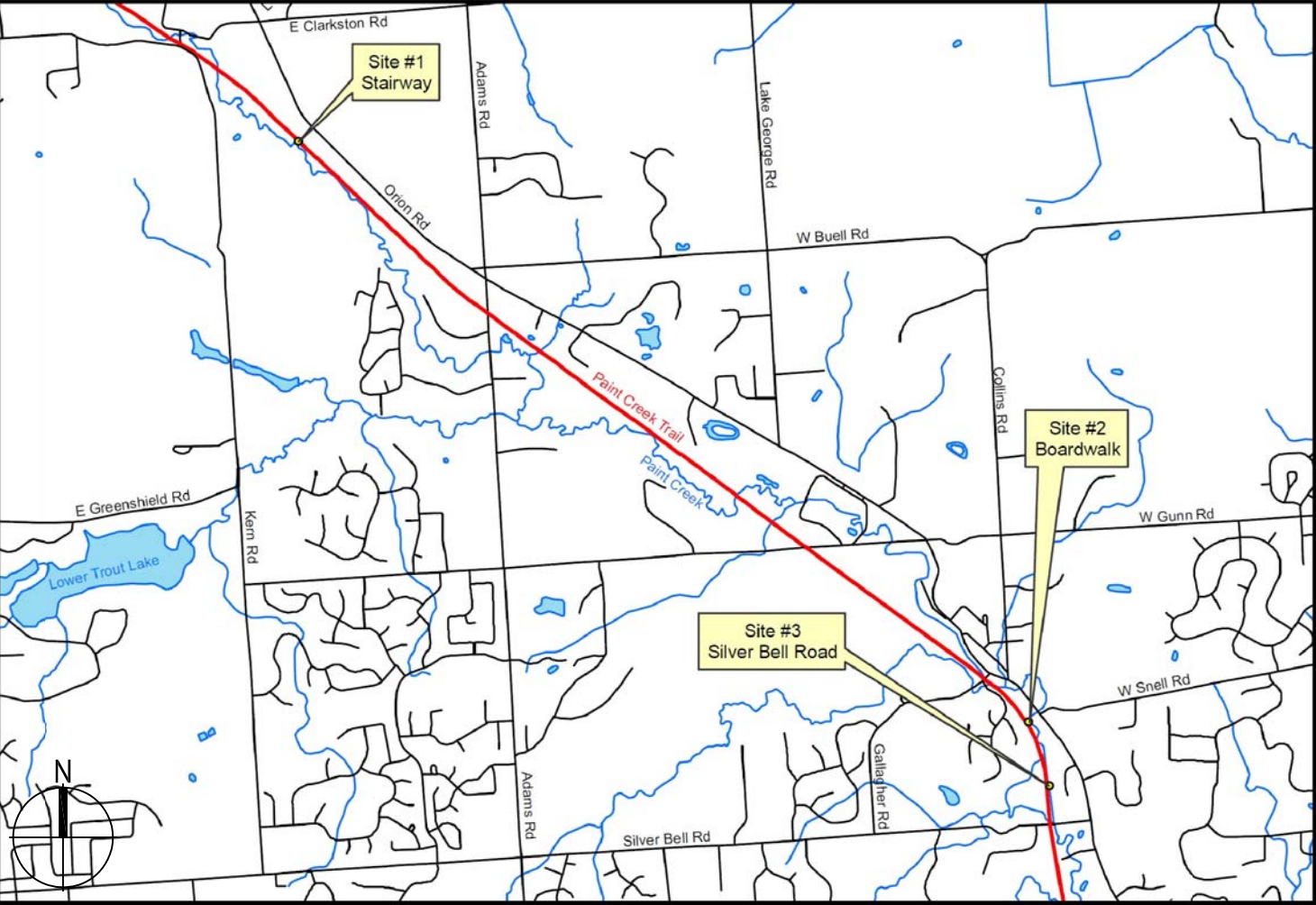
1. Hold a pre-construction meeting with all parties involved. Examine the site to ascertain the state and conditions under which the work is to be done and review conditions of all applicable permits.
2. Install erosion control measures and tree protection to the limits shown on the drawings.
3. Stream flow should be diverted around the work area according to a plan approved by the MDEQ and/or local authorities. Construction within the stream channel is limited to a maximum of 5 feet from the edge of water and should particularly minimize impacts to areas with gravel or cobble substrates.
4. Clear and grub woody vegetation within the limits of the streambank stabilization project areas as needed.
5. Survey and stake proposed layout for site construction. Wetland Consultant to review contour staking for excavations and fill areas.
6. Remove existing logs stockpiled against and under the undercut bank and strip and stockpile topsoil from proposed streambank stabilization project area.
7. Excavate and fill within limits of work to the required sub-grade elevations.
8. Survey and stake site for sub-grade elevations/contours. Wetland Consultant to review and approve the sub-grade elevations/contours prior to the placement of topsoil. Any adjustments to the project limits shall be decided at this time.
9. Place and spread stockpiled topsoil. Finished grades in streambank stabilization areas are subject to written approval from the Wetland Consultant.
10. Immediately following fine grading, the Wetland Consultant and Contractor shall meet on-site to jointly examine current site conditions under which the work is to be completed.
11. Stake limits of seeding and provide submittals to Wetland Consultant prior to seed placement. Wetland Consultant to approve seed mix and limits of seeding.
12. Immediately following seed staking, install trees, shrubs, and plugs, if any, according to specifications and plan details. Wetland Consultant may stake the location of all or some of the plant material.
13. Upon completion of tree, shrub, and plug planting, restore to finish grades any areas disturbed during the planting activities.
14. Immediately following planting, seed the streambank stabilization areas and any disturbed upland areas.
15. Provide straw mulch over seeded areas and apply erosion control blanket on slopes adjacent to existing Paint Creek and natural feature buffers. Crimp straw mulch into ground or apply tackifier to hold straw in place. Stake erosion control blankets into place.
16. If required by Owner or MDEQ, Contractor to provide as-built drawings to the Wetland Consultant and/or Owner.
17. Meet with Wetland Consultant to review the finished streambank stabilization, and obtain a copy of the as-built drawings.
18. Remove tree protection and soil erosion control measures if approved by Wetland Consultant and provide site clean-up.

Live Cribwall

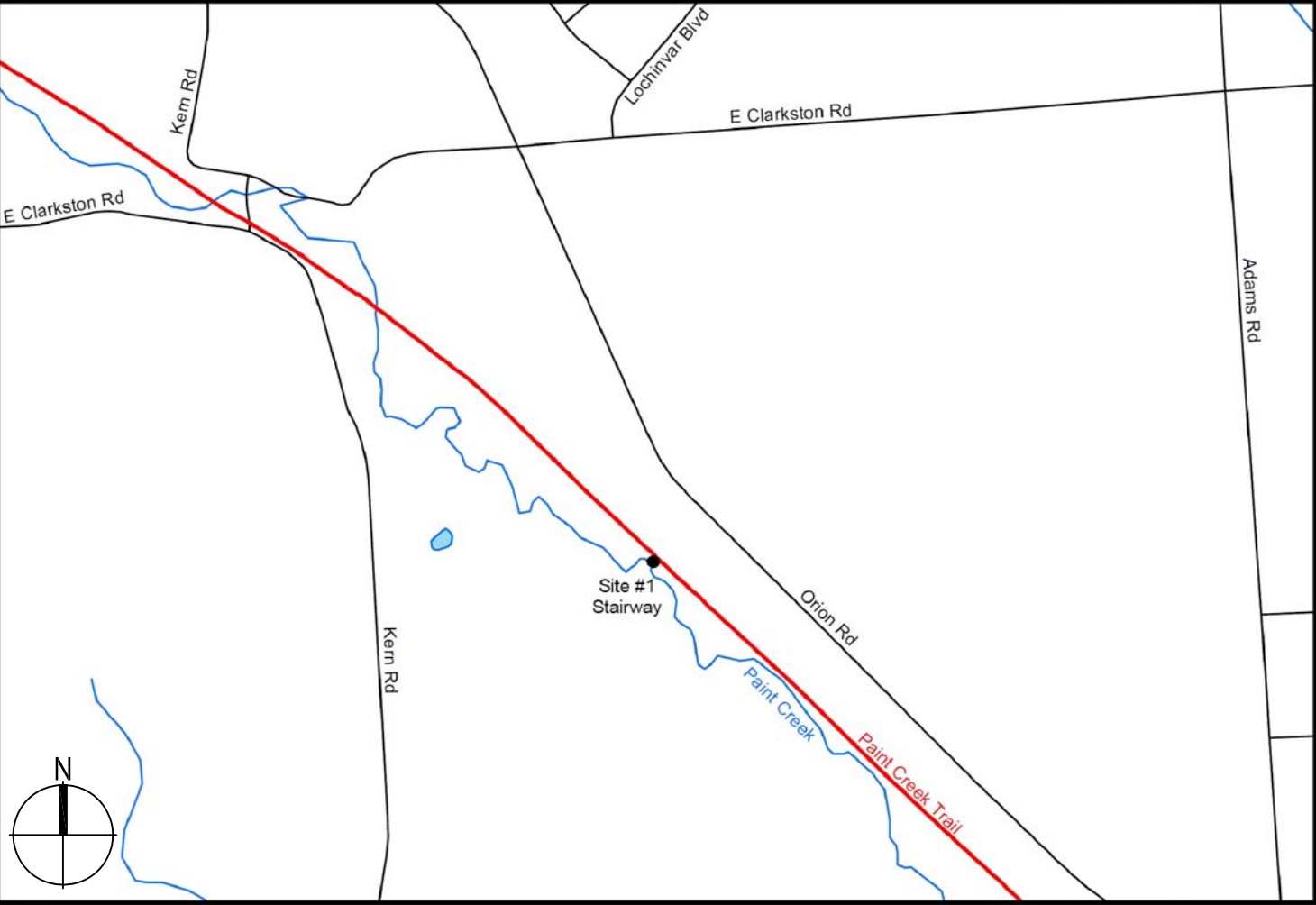
1. Excavate loose material at the toe of the embankment to a depth of 2 feet below the existing stream channel to establish a stable foundation. Incine the crib foundation and structure into the slope at a minimum angle (measured from the horizontal) ranging from 10H:1V to 6H:1V.

List of Drawings

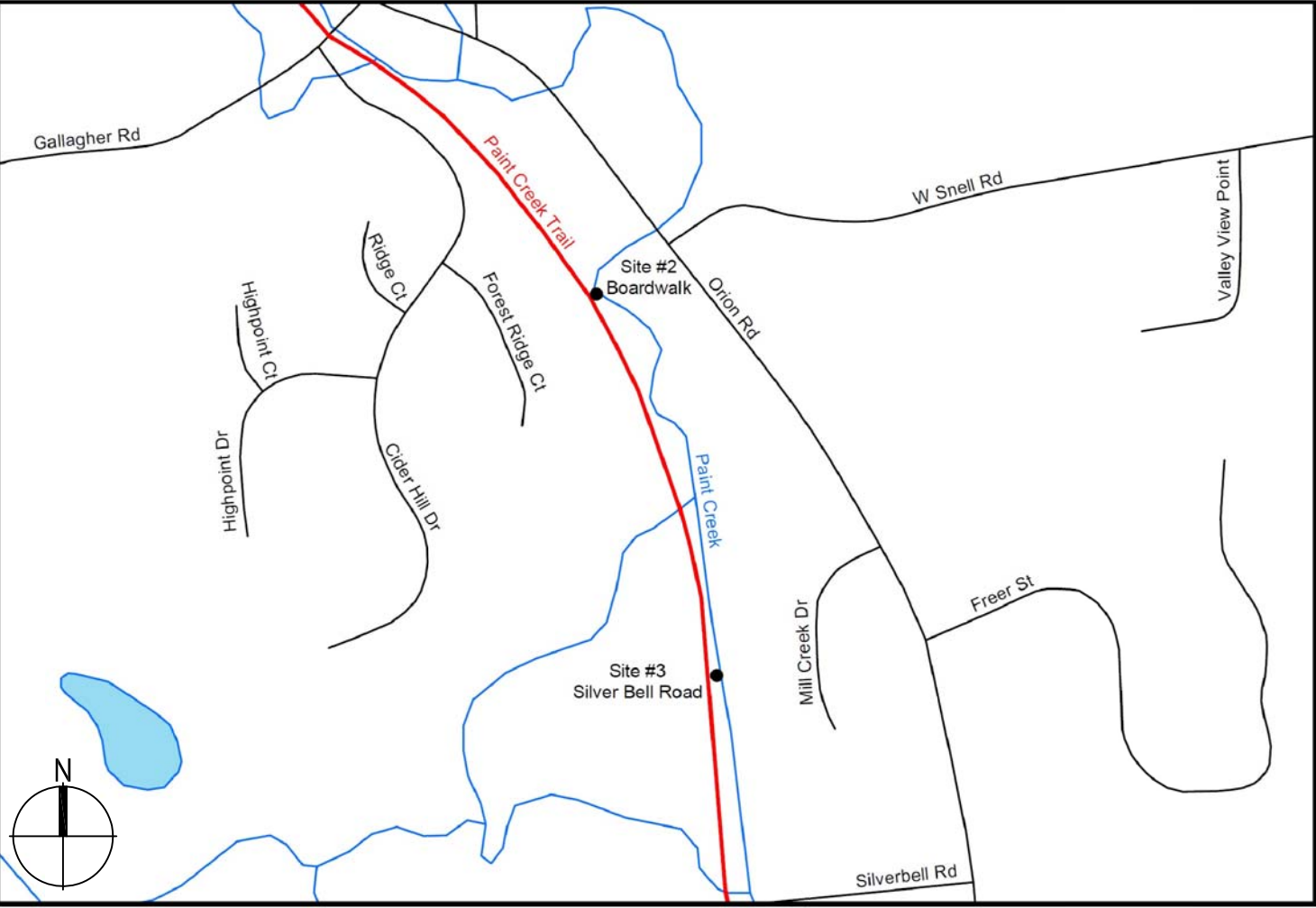
- 1 Title Sheet
- 2 Grading Plan for Stream Bank Stabilization Site 1 & 2
- 3 Grading Plan for Stream Bank Restoration Site 3
- 4 Seeding & Planting Plan
- 5 Details



LOCATION MAP

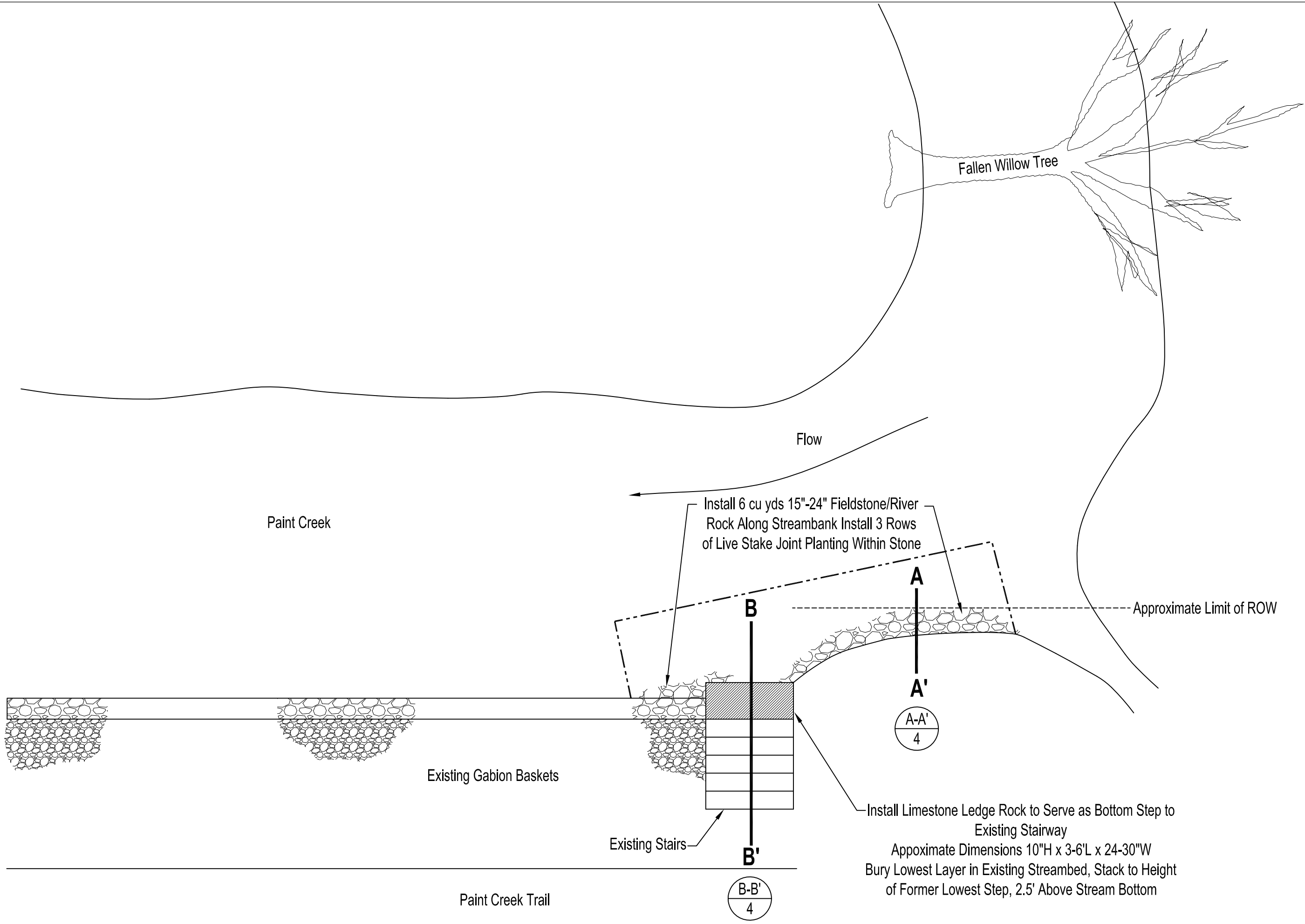


LOCATION MAP



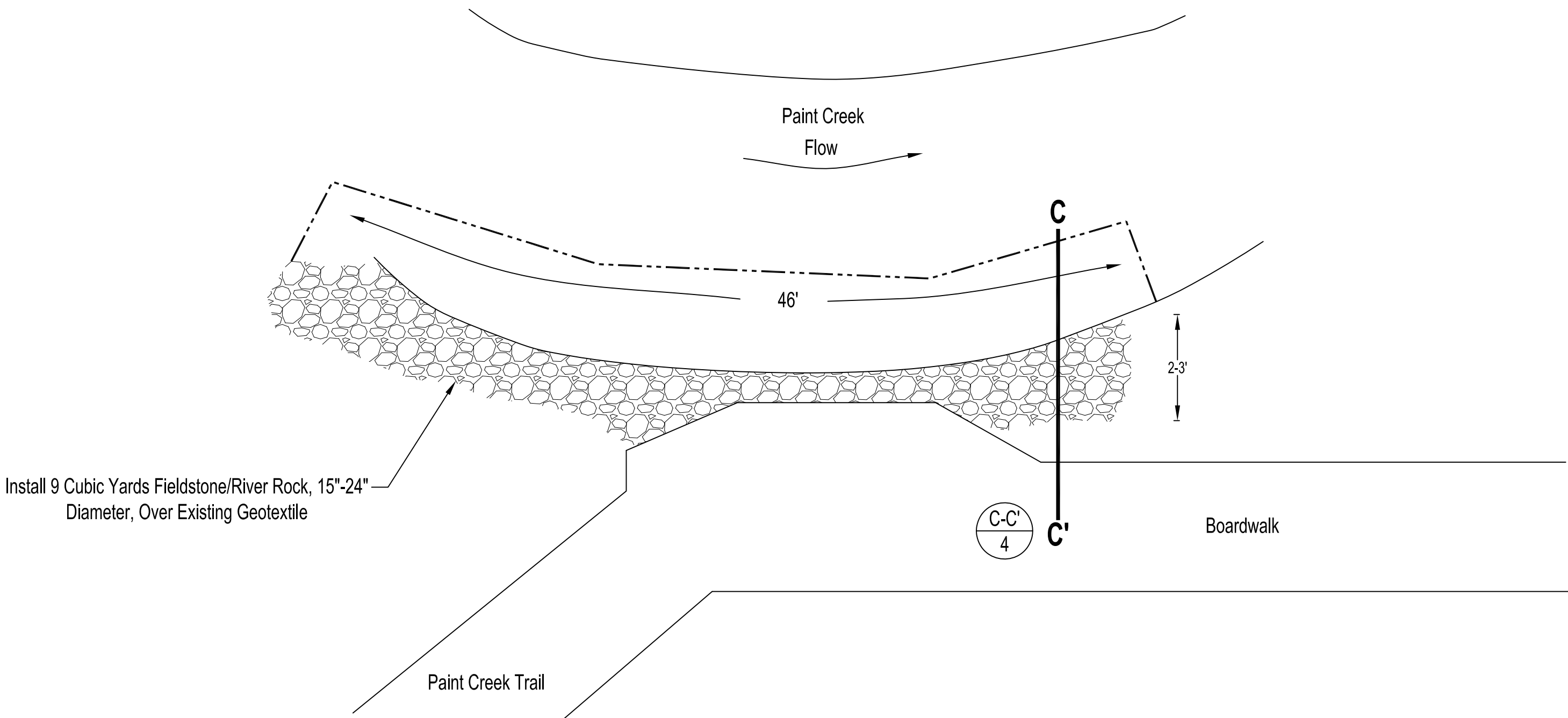
LOCATION MAP

ASTI Environmental				Charter Township of Oakland Oakland County, MI			
Paint Creek Shoreline Restoration Title Sheet				1			
ASTI File 8916 Revisions:	DATE:	12/22/14					
	SHEET:	1 of 4					
	GIS/CADD:	JMD					
	CLIENT:	Oakland Township Parks & Recreation					
	PM:	PR					
	CHECKED PR						
	PROJECT:	8916					



Site 1

Not to Scale



Site 2

Not to Scale

Sequence of Construction (continued from Sheet 1)

- Portions of the crib framework placed below the Ordinary High Water Mark (OHWM) shall be constructed from untreated, unmilled cedar, Douglas fir, or tamarack (larch) logs 10 to 15 inches in diameter. Portions of the crib framework placed above the OHWM shall be constructed of logs previously cut and stockpiled at the project site, as possible.
- Position the first course of logs or timbers at the front and back of the excavated foundation approximately 3 to 6 feet apart and parallel to the slope contour. Situate successive courses of logs or timbers at right angles on top of the previous course, in the manner of a log cabin, so that they overhang the front and back of the previous course by 3 to 6 inches.
- Live crib walls can also be constructed in a stair-step fashion with each successive course of timbers set back 6 to 9 inches from the previously installed course.
- Each course shall be secured to the preceding course with spikes or rebar.
- Backfill in and around timber crib with stone from bottom of excavation to an elevation equal to or greater than the OHWM. Course above the OHWM, to an elevation of 818.46 (datum), shall be filled with compacted fill soil.
- Each transverse log course contains live cuttings followed by a layer of tamped backfill.
- Live branch cuttings should be placed on top of each face course having (stretcher) logs or timbers running parallel to the contour and above the OHWM.
- The growing tips of the branches should be oriented toward the front face such that a maximum of 20 percent of their lengths project from the framework.
- Each layer of branches should be followed with a layer of compacted soil to ensure an adequate soil-branch interface to stimulate growth.
- Each face course (front and rear) and the area behind the structure shall be backfilled and hand tamped.

Bio-D Block Encapsulated Soil Lifts

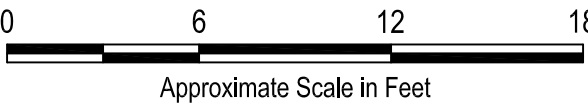
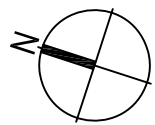
- Coir blocks and erosion control blankets (including netting) shall be 100% biodegradable coconut fiber. Coir blocks for the construction of soil lifts shall be 16 inches in height and 9 inches in thickness with attached coir erosion control blanket (BioD-Block™ 16-400 or equivalent).
- Before installing BioD-Block coir block system, place at least 2 inches of soil on the top course of the cribwall and level the surface well.
- Place a BioD-Block unit on level surface, keeping the female ends pointing downstream, and spread the bottom fabric. Anchor the bottom fabric to the ground well with suitable length metal staples or wooden pegs. Fill soil up to the height of the coir block and compact the filled soil well. Cover the compacted filled material with top fabric and anchor it well.
- Drive hardwood stakes, 2-3 feet apart, into the substrate along the front face of the Bio-D Blocks until the top of the stakes are approximately level with the top of the log. Stakes should be 3 to 4 feet in length, a minimum of 2 inches thick.
- Repeat the coir block installation procedure described above to make soil lift layers as needed. Shape slope above the top layer at a 3H:1V slope and plant and/or seed as specified.
- Join BioD-Block units by inserting male end of second BioD-Block to female end of first BioD-Block and drive stakes through overlapping fabrics of two BioD-Block units at their connection. Once again do not drive stakes all the way. Add BioD-Block units until desired length is achieved.
- Use minimum 1" x 1.5" x 15" pine wedges every 3 ft to anchor the bottom fabric to the ground before filling with soil and 2" x 2" x 24" pine wedges on the top fabric after filling with soil. Pine wedges may be substituted with 12" or longer metal staples if necessary. Anchor top course as shown on the drawings.

If tree/brush removal necessary for access to sites 1 and 2, site shall be rescored and reseeded with Woodland Seed Mix:

Woodland Seed Mix		
Seeding Rate 6.5 lbs/acre		
4 lbs grasses * 2.5 lbs forbs		
28.75 lbs temporary cover grasses		
Scientific Name	Common Name	Oz/Ac
Grasses & Sedges		
<i>Bromus purgens</i>	Hairy wood chess	2.00
<i>Carex cristatella</i>	Crested sedge	0.50
<i>Carex spengelii</i>	Long-beaked sedge	0.30
<i>Elymus villosus</i>	Silky wild rye	12.00
<i>Elymus virginicus</i>	Virginia wild rye	40.00
<i>Glyceri striata</i>	Fowl manna grass	1.00
<i>Histrix patula</i>	Bottlebrush grass	7.40
<i>Junus tenuis</i>	Path rush	0.80
		64.00
Temporary Cover		
<i>Lolium multiflorum</i>	Annual rye	100.00
<i>Avena sativa</i>	Common oat	360.00
		460.00
Forbs		
<i>Anemone canadensis</i>	Canada thimbleweed	1.00
<i>Aquilegia canadensis</i>	Wild columbine	0.40
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit	0.30
<i>Aster cordifolius</i>	Heart-leaved aster	0.30
<i>Aster shortii</i>	Short's aster	0.30
<i>Bidens frondosa</i>	Devil's beggarticks	3.00
<i>Campanula americana</i>	Tall bellflower	0.30
<i>Eupatorium purpureum</i>	Sweet Joe Pye weed	2.70
<i>Eupatorium rugosum</i>	White snake root	0.30
<i>Geranium maculatum</i>	Wild geranium	0.20
<i>Helianthus divaricatus</i>	Woodland sunflower	0.20
<i>Helianthus strumosus</i>	Pale-leaved sunflower	3.00
<i>Penstemon digitalis</i>	Foxglove beardtongue	6.00
<i>Polygonatum canaliculatum</i>	Great Solomon's seal	2.00
<i>Rudbeckia laciniata</i>	Golden glow	3.00
<i>Rudbeckia triloba</i>	Brown-eyed Susan	6.00
<i>Scrophularia marilandica</i>	Late figwort	0.50
<i>Smilacina racemosa</i>	False Solomon's seal	4.00
<i>Solidago caesia</i>	Blue-stemmed goldenrod	0.20
<i>Solidago rugosa</i>	Rough goldenrod	0.30
<i>Tradescantia ohiensis</i>	Common spiderwort	3.00
<i>Zizia aurea</i>	Golden Alexander	3.00
		40.00
Seed Mix:		
<i>Native Connections</i>		
17089 Hoshel Road		
Three Rivers, MI 49093		
(269) 580-4765		

LEGEND

- Existing Contours
- Proposed Contours
- Turbidity Curtain



ASTI Environmental

Charter Township of Oakland
Oakland County, MI

Paint Creek Shoreline Restoration
Grading Plan - Sites 1 & 2

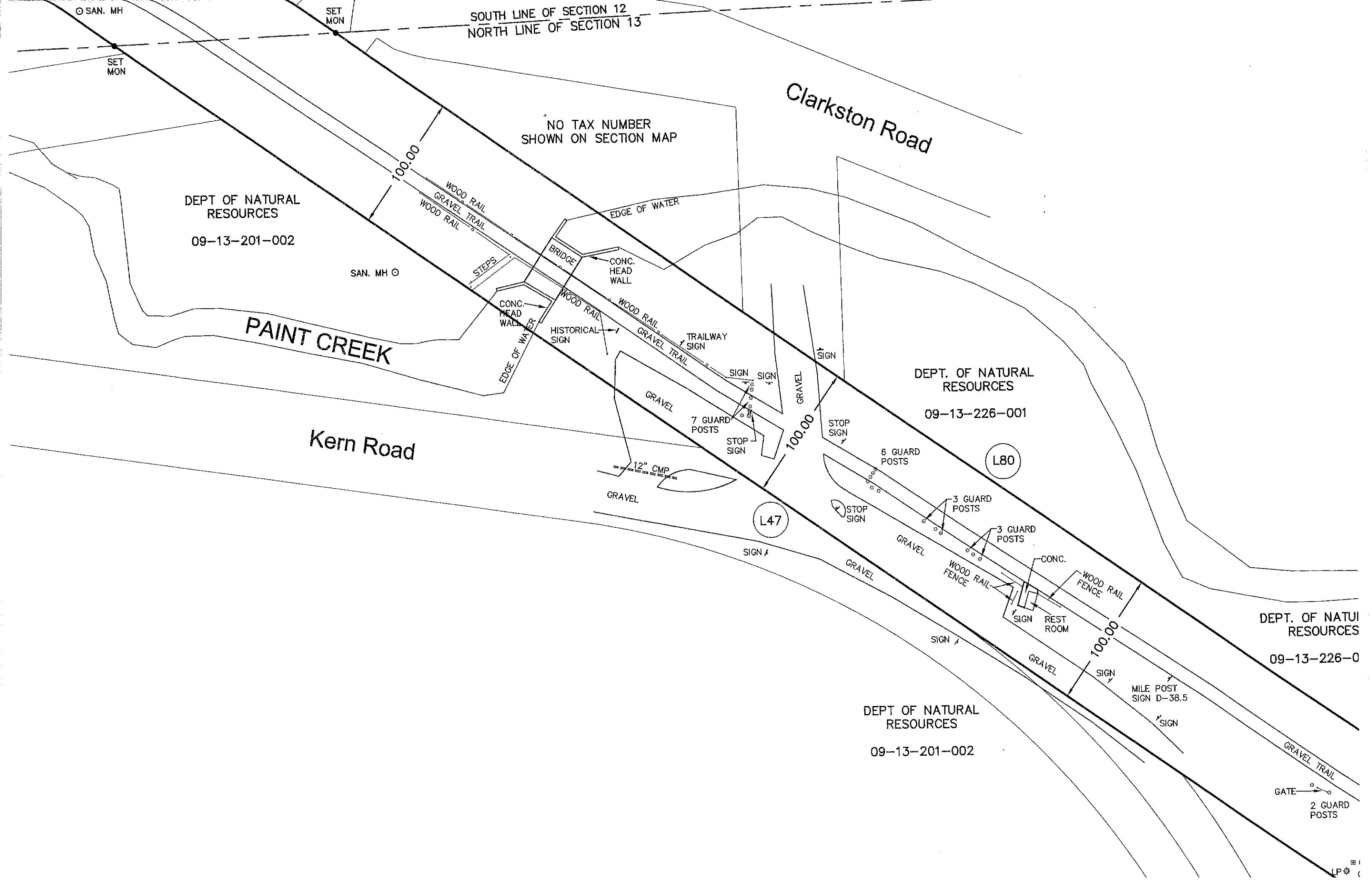
2

DATE: 12/22/14
SHEET: 2 of 5
GIS/CADD: JMD
CLIENT: Oakland Township Parks & Recreation
PM: PR
CHECKED: PR
PROJECT: 8916

ASTI File 8916

ATTACHMENT B

Limits of Paint Creek Trail Rights-of Way



CHARTER TOWNSHIP
OF OAKLAND

10-18-177-007

PATRICIA
MIECHIELS
76-007

ROGER D & EARLENE
STEELEY

10-18-177-004

L84

L42

GRAVEL TRAIL

PAINT CREEK

STEPS

RET. WALL

MILE POST
SIGN D-38

DALE & PATRICIA
MIECHIELS

10-18-376-007

COSTACHE & EMILIA
BARLADEANU

10-18-177-005

EDGE OF WATER

SET
MON

WOOD
FENCE
POSTS
FD. IRON
#30099
STOP
SIGN

DALE & PATRICIA
MIECHIELS

10-18-376-007

4-GUARD
POSTS

SET
MON

GRAVEL

FD.
IRON

STOP
SIGN

VIRGINIA BERAUD

10-18-376-008

WOOD
FENCE
POST

CHARTER TOWNSHIP
OF OAKLAND
10-28-476-004

CHARTER TOWNSHIP
OF OAKLAND
10-28-476-005

CHARTER TOWNSHIP
OF OAKLAND
10-28-476-004

10-28-503-013

GRAVEL TRAIL

160.00

L115

DECK
STAIRS

WOODEN
FOOT
BRIDGE
WOOD
DECK
STEPS

FD.
IRON

BILL E. & NANCY J. DUKE
10-28-477-010

MILL CREEK CONDO
OCCP NO 585

STONE
PATIO

FD.
IRON

HEATHER GEDZ
10-28-477-011

FD.
IRON

TIMOTHY & ANN MASKILL
10-28-477-014

10-28-477-015

Silverbell Road 66' Wd.

L14

SET
MON
FD.
IRON
GUARD
POSTS

MILE POST
SIGN D-34.3

SET
MON
PED.
SIGN
SET
MON

BOULDERS

12 GUARD
POSTS

GRAVEL

GRAVEL

CMP
SIGN

TRASH
RECEP
SIGN

L116

GUARDRAIL
CATE

PED.
SIGN

SET
MON

GUARDRAIL

SET
MON

PAINT C

EDGE OF WA

L117

SET
MON

BRIDGE

GUARDRAIL

SET
MON

SOUTH LINE OF SECTION 28
NORTH LINE OF SECTION 33

OVERHEAD LINES

SE. C
SECTI
T.4N.,
L.152'

NE. C
SECTI
T.4N.,
L.152'