TART 3-MILE TRAIL EXTENSION & EAST BAY TOWNSHIP NON-MOTORIZED PLAN
Planning Summary Report

Client:	TART Trails, Inc.	Date:	July 19, 2021
Client's Agent:	Elizabeth Calcutt, Planner	Re:	TART 3-Mile Trail Extension – Planning Summary Report
From:	Kevin Krogulecki, PLA		
cc:	Julie Clark, Executive Director TART Trails, Inc.		

This report summarizes information on the planning process and proposed improvements for the TART 3-Mile Trail Extension & East Bay Township Non-Motorized Plan. The planning process included field investigations, trail routing, public input sessions, stakeholder meetings and development of a conceptual trail plan and opinions of cost for the project. Input from multiple stakeholders including East Bay Township, Grand Traverse Regional Land Conservancy, Grand Traverse Co. Road Commission, Grand Traverse Academy, TCAPS, Conservation Resource Alliance, and several others was sought and included throughout the planning process. Gosling-Czubak's involvement in the project began in summer 2020 and continued through the summer of 2021, with primary responsibilities being the project engineer for final trail routing location, basemaps assembly, trail treatment selection, development of project alternatives, project graphics and developing opinions of cost for multiple trail treatment types.

Project Overview Summary

1.0 TART 3-MILE TRAIL EXTENSION

1.1 Trail Location & Routing

- The trail extension is proposed to connect the existing asphalt 3-Mile Trail (south of Airport Rd. east side of 3-Mile Rd.) to Hammond Rd. east of the 3-Mile Rd. intersection.
- Total trail length of 1.95 miles consisting of 10'-14' Boardwalk and 10' asphalt trail.
- Includes routing though GTRLC, Alta Vista residential development (within west property line 25' buffer setback) and road right-of-way. Includes potential easement or land purchase of Sattler property portion for first leg of the trail along 3-Mile.
- Proposed trail is routed through uplands, lowlands, forested areas, and creek crossings. Trail location was determined by available project land boundaries, minimalization of wetland impacts, constructability, and cost implications. Final trail placement will be made to minimize tree and vegetation removal, as well as minimize other environmental impacts.

1.2 Trail Type and Construction

- Asphalt trail sections proposed at 10'wide and lie primarily on upland areas suitable for this type of construction. Includes fill and geotextile separator.
- Total asphalt trail length = 1.06 Miles +/-
- Boardwalk trail sections to be raised and supported by galvanized steel helical piles with a proposed load rating of H-10 (supports 20,000 lb. vehicle).
- Proposed boardwalk to be prefabricated galvanized steel frame, timber decking and code compliant railing (in locations where boardwalk edge exceeds 30" above adjacent ground)
- One boardwalk clear span bridge is proposed, other creek crossings will be made with standard boardwalk system.
- Total boardwalk trail length = .86 Miles +/-
- Vanderlip Rd. crossing includes ADA crosswalk landings and 6" concrete pavement across existing gravel road. Concrete crosswalk may be eliminated due to maintenance issues and at suggestion of the Road Commission. Vanderlip Rd. to be paved as part of Alta Vista development last phase, crossing would be asphalt striped at this time.
- Hammond Rd. crossing was investigated with options including at-grade refuge island, pedestrian bridge, and pedestrian tunnel. The at-grade crossing option is included in project opinions of cost. Pedestrian bridge and tunnel options with an estimated cost range of $3-6 M depend heavily on further investigations of site conditions. These options would likely require easement or property purchase north and south of Hammond Road due to their size and footprint for achieving accessible grades.
- Vanderlip Rd. and Hammond Rd. Crossings = .03 Miles +/-

1.3 Trail Amenities

- A parking trailhead is proposed at the north end of the trail extension with access from 3-Mile Rd. by way of paved commercial driveway entrance.
- Parking area is proposed gravel with 16 +/- regular car spaces, trailhead, signage and connector to main trail.
- TART standard trail signage is planned throughout the extension improvements.

1.4 Conceptual Trail Linkages

- A conceptual trail linkage is depicted on proposed plans that extends north, connecting the 3-Mile trail extension to Reffitt Preserve (GTRLC Property). This linkage would be a GTRLC project.
- A paved parking area is proposed on GTRLC property at the Mitchell Creek Meadow Nature Preserve as a separate GTRLC project. A connector trail from this parking lot to the 3-Mile extension is planned and would be a GTRLC project.

1.5 Opinion of Cost

- Opinions of cost were assembled for the entire trail project including 14', 14'/10' combination, and 10' boardwalk width options.
- Costs include contractor general conditions, engineering, permitting and assume prevailing wage rates.
- Costs are conceptual and based on best available information, similar past projects and general construction pricing. Estimates are subject to change throughout the project.

1.6 Future Phase Planning and Engineering

- Topographic survey of proposed routing will be completed (ground topo and UAV aerial survey were applicable)
- Geotechnical soil borings for boardwalk/helicals will be completed (deep borings for helicals and foundations, hand auger borings for upland trail)
- Wetland delineation for the project area will be completed.
- Permitting during the engineering phases is expected to include State of Michigan EGLE Joint Permit, County Soil Erosion Review, and potential project environmental review.

2.0 EAST BAY TOWNSHIP NON-MOTORIZED PLAN

2.1 Non-Motorized Route Options

- Planned routes are intended to guide East Bay Township along with other route-adjacent projects in providing future non-motorized transportation options.

- Conceptual non-motorized pedestrian routes include 6'+ concrete sidewalk and 8'+ asphalt trail. Concrete sidewalk could be substituted with asphalt trail as desired. Boardwalk trail may also be required if necessary depending on grades and avoiding environmental impacts in some areas.
- Routes investigated as part of this panning effort follow east-west along Hammond Rd. and north-south along 3-Mile Rd.
- Routes reflect recent developed Safe Routes to School proposed linkages that connect school campuses, residential neighborhood and area amenities surrounding the 3-Mile Rd. and Hammond Rd. intersection.
- Routes may or may not lie withing the road right-of-way and may require easements across private parcels. Planned improvement within the right-of-way should be coordinated with the Road Commission or incorporated into future road construction projects.
- All routes should be separated from roadway or road back of curb by a vegetated maintenance strip of appropriate size, ideally 10' wide minimum.

2.2 3-Mile Rd. (North/South)

- Underground utilities exist on both the east and west side of the road within the road right-of-way. Overhead utilities and a 20' utility easement exist on the west side of the road.
- Wetlands are observed on both the east and west side of the road in certain areas throughout the route.
- 6' + wide sidewalk is proposed on the west side of the road to provide a non-motorized route for existing and future residential development, private parcels and commercial businesses. With the 3-Mile trail extension providing a non-motorized route on the east side of 3-Mile (interior parcels), a need will exist to provide the same non-motorized opportunities on the west side of the road allowing travel from north to south. This sidewalk is proposed to extend south of the Hammond Rd. intersection on the same side of the road.

2.3 Hammond Rd. (East/West)

- Underground utilities exist on both the north and south side of the road within the road right-of-way. Overhead utilities existing on the north side of the road for a short distance along this route.

- Wetlands are observed on both the north and south side of the road in certain areas throughout the route.
- A ravine down to a creek crossing under Hammond Rd. causes steep grades and will require boardwalk, bridges or expanded route footprint into adjacent parcels to achieve accessible grades. This exists on both the north and south sides of the road.
- 8'+ asphalt trail is proposed on the north side of the road and extends east to 4 Mile Rd. and west through and beyond the 3-Mile Rd. intersection. This would connect to the 3-Mile trail extension and would keep the heavier trail uses on the north side of Hammond Rd., decreasing the need for pedestrian crossing of Hammond Rd.
- 6'+ concrete sidewalk is proposed on the south side of Hammond Rd., though this could be substituted with a larger asphalt trail if desired. This route would extend east to 4 Mile Rd. and west through and beyond the 3-Mile Rd. intersection.
- A 6'+ concrete sidewalk spur is proposed south of Hammond Rd. down Carlisle Rd. connecting residential neighborhoods allowing residents access to the school campuses and the Plaza East shopping center.

2.4 Pedestrian Roadway Crossings

- An at grade road crossing south of the 3-Mile Rd./Hammond Rd. intersection is proposed as part of the Safe Routes to School plan. This crossing should be used as a model for other crossings within this corridor and any crossing improvements within the right-of-way should be coordinated with the Road Commission or incorporated into future road construction projects. All crossings should be both safe and inviting.
- Two pedestrian crossings are proposed on 3-Mile Rd.; one at the north end gravel parking trailhead, and one at the Mitchell Creek Meadows Nature Preserve driveway entrance. These crossings would allow for safe movement of pedestrians from the west side to the east side of the road at the two proposed 3-Mile Trail access locations.
- Crossings should be at-grade with refuge islands and have proper advance warning and crossing signage. More crossings may be feasible as development expands along 3-Mile Rd.

- Pedestrian roadway crossings should be included on all sides of the 3-Mile Rd./Hammond Rd. intersection, connecting to the proposed routes in all directions. Proper signage and traffic signal timing adjustments should be made as necessary to provide a safe crossing experience.
- A Hammond Rd. crossing at the south end of the TART 3-Mile Trail extension is proposed as previously discussed. This crossing would aid in pedestrian access to and from the TCAPS and TBA properties, and associated TART 3- Mile Trail and Safe Routes to School connections. It was made aware that this area is currently used as an informal crossing by school students and athletes who utilize both schools' facilities and grounds.

Conclusion

This report summarizes the process and results of planning efforts made by several groups and stakeholders. Additional information on the public input session and input results are available from TART Trails and East Bay Township. The process represented a team approach with the goal of providing non-motorized trail and routing opportunities to benefit the public and business throughout East Bay Township. If there are any questions regarding this report or its content, please do not hesitate to contact me.

Sincerely,

Kevin Krogulecki, PLA
Project Manager

Attachments

- TART 3-Mile Trail Extension Layout Map
- TART 3-Mile Trail Extension Conceptual Cost Estimates
- TART 3-Mile Trail Extension Example Trail Type Section Graphics
- Alta Vista Site Plan with West Buffer Setback Shown