



LIBERTYVILLE TOWNSHIP

Open Space

Site Management Plans

Completed Year End 2019

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Atkinson Road

Updated: February, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Trail, Oak Hickory Woodland, Mitigation Bank	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees
		Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff
		Conduct a vegetative survey.	2020	Contractor, Open Space Staff
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month	TWP Open Space Staff
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Annually	TWP Open Space Staff
		Provide and maintain trail amenities including but not limited to: the trail, bollards, benches, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, etc.	Ongoing	
		Conduct visual trail inspections, especially after storm events. Mark unsafe trail conditions using flagging, cones, barricades, etc. immediately upon discovery.	Weekly	
		Evaluate need for trail resurfacing.	2025	Supervisor, TWP Open Space Staff
		Complete significant trail repairs including additional culverts and trail raising.	2019	TWP Open Space Staff
Restore		Patch and sealcoat asphalt trail every two years or as needed.	2021	Contractor
		As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the INPC guidelines.	Annually	TWP Open Space Staff
		Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Trail, Oak Hickory Woodland, Mitigation Bank (continued)	Restore (continued)	Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	2020	TWP Open Space Staff
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing	
	Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff
		Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
	Communication	Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
		Continue communications with the INPC for possible Nature Preserve dedication.	Ongoing	Supervisor, TWP Open Space Staff, Openlands, INPC
	Recreation	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, etc.	Ongoing	Supervisor, TWP Open Space Staff
A. Oak Hickory Woodland, Trail	Document	Photo document regeneration of native vegetation.	Spring & Fall	TWP Open Space Staff
	Maintain	Cut and herbicide re-sprouts as needed.	Ongoing	
B. Mitigation Bank, Trail		Implement burn plan.	2020	
	Maintain	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	TWP Open Space Staff
		Keep drainages and culverts free flowing and free of obstructions.	As needed	

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Butterfield Road (Canterbury)

Updated: February, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Prairie, Wetland Mitigation Bank, Wooded Riparian Corridor, Trail, Mowed Park Lots, Stream Channel	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees
		Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month	
		Complete baseline tree inventory for unit "A".	2021	
		Maintain agreement # 2761799 between Canterbury Homeowners Association and Township regarding tree planting and maintenance requirements for management unit "A".	Ongoing	
		Conduct a vegetative survey.	2019	Contractor, Open Space Staff
		Monitor donated memorial plaques, benches and volunteer habitat projects (snake hibernaculum, hawk nest platform, bird houses and informational signage).	Ongoing	TWP Open Space Staff
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and repair if needed.	Annually	TWP Open Space Staff
		Provide and maintain trail amenities including but not limited to: the trail, bollards, Knox boxes, benches, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, memorial plaques, etc.	Ongoing	
Spray turf edges for broadleaf weeds and evaluate future need.	2019			
Sealcoat asphalt trailheads every two years or as needed.	2021			
Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly			

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel (continued)	Restore	As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the INPC guidelines.	Annually	TWP Open Space Staff	
		Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing		
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing		
			Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.	2019	TWP Open Space Staff, Contractor
	Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff	
	Communication	Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after). Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	TWP Open Space Staff	
		Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff	
	Recreation	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, birdwatching, cross country skiing, etc.	Ongoing	Supervisor, TWP Open Space Staff	
		Install Hoover memorial bench, tree, concrete pad, and plaque.	2019	TWP Open Space Staff	
	A. North Prairie, Wetlands, Mowed park lots, Trail	Maintain	Maintain and mow grass, edge beds and sidewalk edges, trim trees, install mulch, control weeds, etc. in order to provide an aesthetically pleasing view for users and nearby residents. Conduct broadleaf herbicide treatments to all mowed out lots. Evaluate the need for trail resurfacing.	Seasonally as needed Annually Ongoing	TWP Open Space Staff Contractor, TWP Open Space Staff TWP Open Space Staff, Supervisor

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
A. North Prairie, Wetlands, Mowed park lots, Trail (continued)	Restore	Enhance and encourage short grass prairie.	Annually	TWP Open Space Staff
		Inter-seed in herbicided and burned areas with native short grass prairie species, plant trees and shrubs as funding becomes available.	Spring 2019	
	Maintain	Trim and prune planted trees. Remove dead ash trees as needed.	Annually	
B. Mitigation Bank, Prairie, Wetlands, Trail	Control water level	Seasonally adjust water level to aid in controlling invasive wetland vegetation. Stop logs are to be raised in the winter and lowered in the spring.	Seasonally as needed	TWP Open Space Staff
		Maintain and mow grass, trim trees, install mulch, control weeds, etc. in order to provide an aesthetically pleasing view for residents.	Seasonally as needed	TWP Open Space Staff
	Maintain	Continue initial clearing and herbiciding of invasive trees.	2019-20	
		Conduct follow up treatments to areas already cleared of invasives.	Ongoing	
		Discuss with Village of Libertyville future IGA for the maintenance of natural areas of Canterbury Park adjacent to Township property. Activities may include herbiciding and tree removals.	2019	Supervisor, TWP Open Space Staff, Village of Libertyville, Trustees
Restore	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership. Especially focus on control of phragmites and reed canary grass.	2019	TWP Open Space Staff	
	Evaluate need for large scale herbicide project to control wetland invasives such as phragmites and reed canary grass.	2020	Contractor, TWP Open Space Staff	
C. Riparian Corridor, Mitigation Bank, Stream Channel, Wetland	Monitor	Monitor and repair muskrat damage to trail berm. Evaluate need for additional tip-rap.	Ongoing	TWP Open Space Staff
		Monitor Mundelein trail connection drainage and water damage from offsite sources.	2019	Supervisor, TWP Open Space Staff, MPRD, ComEd, Carmel H.S.
	Restore	Keep drainage free flowing and free of obstructions. Continue to follow recommendations outlined in the Lake County Storm Water Management (LCSMC) plan. Seek grant opportunities for restoration.	2019	TWP Open Space Staff
Maintain	Remove log jams identified in 2018. Clear access points for debris removal and disposal.	Remove log jams identified in 2018. Clear access points for debris removal and disposal.	2019	TWP Open Space Staff
		Evaluate need for large scale herbicide project to control wetland invasives such as phragmites and reed canary grass.	2020	Contractor, TWP Open Space Staff
	Continue initial clearing and herbiciding of invasive trees.	2021	TWP Open Space Staff	
	Conduct follow up treatments to areas already cleared of invasives.	Ongoing		

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Casey North (Oak Openings Buffer, 2017 Almond Marsh Buffer, 2018 Section 319 Grant)

Updated: February, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Preserve: Restored Agriculture Field, Successional Woodland Restoration area, Oak Woodland, Wet mesic Floodplain Forest, Wooded Riparian Corridor, Trail, Parking Lot, Agriculture Field	Monitor	Conduct a vegetative survey.	2019	Contractor
		Conduct regular site visits. Inspect boundaries and encroachments. Update the encroachment inventory. Document conditions.	Every Other Month	TWP Open Space Staff
		Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly	
		Evaluate burn plans and implement prescribed burns in accordance with burn plans.	Annually	TWP Staff, Volunteers
		Continue to monitor and prevent creek bank erosion by installing erosion control measures.	Ongoing	TWP Open Space Staff
		Begin preliminary planning and permitting for trail resurfacing.	2019-20	TWP Open Space Staff, Supervisor, Engineer
		Provide and maintain limited, appropriate visitor amenities such as: trail, Knox boxes, bollards, parking lot, portable toilet, picnic table, garbage cans, kiosk, benches, dog waste receptacles, equestrian dismount blocks, memorial plaques, etc.	Ongoing	TWP Open Space Staff
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Annually	
		Maintain INPC signage along boundaries. Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Annually	
		Install "no snowmobile" signage seasonally to discourage snowmobile usage.	Annually in Fall	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Preserve (continued)	Restore	Install seed, trees, shrubs, and plugs that meet INPC specs as funds become available and when appropriate.	As needed	TWP Open Space Staff, Volunteers	
		Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Annually		
		Explore opportunities to implement the board approved Casey Road Land Use Plan. Continue phased restoration approach.	Ongoing	TWP Open Space Staff, Supervisor, Openlands, Trustees	
		Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.	Ongoing	TWP Open Space Staff, Volunteers	
		Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Annually	TWP Open Space Staff	
		Complete and submit INPC annual reports (Oak Openings Buffer, Almond Marsh Buffer).	Annually Feb. 15	TWP Open Space Staff, Supervisor	
		Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing		
		Obtain information including but not limited to: volunteer workday results, vegetation monitoring, bluebird monitoring, annual easement monitoring, etc.	Annually	TWP Open Space Staff, Supervisor, Volunteer Coordinator	
		Communication	Continue communications with Village of Grayslake, INPC, ICFPD, and Openlands.	Ongoing	TWP Open Space Staff, Supervisor, Openlands
		Recreation	Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
A. Restored Agriculture Field (Oak Openings Buffer)	Restore	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, birdwatching, cross country skiing, horseback riding, etc.	Ongoing	Supervisor, TWP Open Space Staff	
		Control invasives: reed canary grass, Canada thistle, and clover.	Annually	TWP Open Space Staff, Volunteers	
		Prescribe burn in accordance with burn plan.	2020		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
A. Restored Agriculture Field (Oak Openings Buffer)	Restore (continued)	Continue restoration of hedgerow #3 including tree removal and rock pile removal.	2021	TWP Open Space Staff
	Maintain	Conduct follow up treatments to areas already cleared of invasives in hedgerow.	Ongoing	
B. Riparian Corridor (Oak Openings Buffer)	Maintain	Continue initial clearing of the creek corridor removing invasive species.	2019-21	TWP Open Space Staff, Volunteers
		Conduct follow up treatments to areas already cleared of invasives.	Ongoing	
		Control invasives: buckthorn, yellow flag iris, phragmites, honey suckle, barberry, and reed canary grass.	Annually	
		Prescribe burn in accordance with burn plan.	Fall 2020	
		Keep drainage free flowing and free of obstructions. Continue to follow recommendations outlined in the Lake County Storm Water Management plan. Seek grant opportunities for restoration.	Annually	TWP Open Space Staff, Volunteers
		Monitor erosion of creek banks and take appropriate action when needed.	Ongoing	TWP Open Space Staff
C. Restored Agriculture Field (Oak Openings Buffer)	Restore	Control invasives: reed canary grass, sweet clover, woody invasives, and broome.	Annually	TWP Open Space Staff, Volunteers
		Prescribe burn in accordance with burn plan.	2020	TWP Staff, Volunteers
		Monitor trail erosion near underpass and complete trail improvements to alleviate erosion and water issues if needed.	2019	TWP Open Space Staff
D. Mesic Oak Woodland (Oak Openings Buffer)	Restore	Continue initial clearing removing buckthorn, honeysuckle and Japanese barberry.	2019-21	TWP Open Space Staff, Volunteers
		Prescribe burn in accordance with burn plan.	2019-20	TWP Open Space Staff, Volunteers
		Prescribe burn in accordance with burn plan.	2019	TWP Open Space Staff, Volunteers
E. Mesic Oak Woodland (Oak Openings Buffer)	Restore	Conduct follow up treatments to areas already cleared of invasives.	Ongoing	TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
E. Mesic Oak Woodland (Oak Openings Buffer) (continued)	Maintain	Mow grass foot path as needed on Township property.	Monthly	TWP Open Space Staff
F. Savanna (Oak Openings Buffer)	Restore	Control invasives: reed canary grass, brome, Canada thistle, garlic mustard, buckthorn and damas rocket. Prescribe burn in accordance with burn plan.	Annually 2019	TWP Open Space Staff, Volunteers
G. Retired Agriculture Field, Walnut Grove (Almond Marsh Buffer)	Restore	Control invasives: Canada thistle, reed canary grass, multiflora rose and brome. Prescribe burn in accordance with burn plan. Conduct follow up treatments to areas already cleared of invasives. Remove rock pile.	Annually 2020 Ongoing 2019	TWP Open Space Staff TWP Staff, Volunteers TWP Open Space Staff
H. Ketting Wetland (Almond Marsh Buffer)	Restore	Control invasives: reed canary grass, phragmites, and Canada thistle.	Ongoing	TWP Staff, Volunteers
	Maintain	Prescribe burn in accordance with burn plan.	2020	TWP Staff, Volunteers
		Remove final tree island.	2019-21	TWP Open Space Staff
		Seasonally adjust water level to aid in controlling invasive wetland vegetation. Stop logs are to be raised in the winter and lowered in the spring.	Seasonally	
I. Agriculture Field	Monitor	As farm license expires (12-31-2020), continue to review license and explore restoration opportunities outlined in the Board approved Casey Road Land Use Plan.	Summer 2020	Supervisor, Trustees, TWP Open Space Staff
	Restore	Seek grant opportunities to remediate priority erosion issues, as per the Bull Creek/Bull Brook Watershed Plan, Casey Road Land Use Plan, Liberty Prairie Master Plan. Assess wetland mitigation bank feasibility and identify appropriate next steps.	Ongoing	Supervisor, Openlands, TWP Open Space Staff
J. Baxter Grove (Oak Openings Buffer)	Monitor	Review and evaluate farm license (expires 11-30-2020).	Spring 2020	Supervisor, Trustee, TWP Open Space Staff
	Maintain	Install and Maintain INPC boundary signage.	2019	TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
K. Restored Agricultural Field (Almond Marsh Buffer)	Monitor	Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2018-19	TWP Open Space Staff	
		Photo document restoration progress using Casey Road Restoration (CRR) Phase 1 Photo Point Log in growing season.	2018-21	TWP Open Space Staff, Volunteers	
		Monitor for invasive outbreaks. Take action as necessary.	2018-21	TWP Open Space Staff, Volunteers	
		Conduct seed establishment monitoring following CRR Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers	
		Monitor the progress of the Donnelley oak tree planting and maintain as needed.	Annually	TWP Open Space Staff	
		Maintain boundary signage: Carsonite survey markers, Open Space signage and INPC signage.	Ongoing	TWP Open Space Staff	
		Mow as needed.	2018-20		
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Volunteers	
		Interseed as needed.	2021	TWP Open Space Staff	
L. Restored Agricultural Field (Almond Marsh Buffer)	Monitor	Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2018-19	TWP Open Space Staff	
		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2018-21	TWP Open Space Staff, Volunteers	
		Monitor for invasive outbreaks. Take action as necessary.	2018-21	TWP Open Space Staff, Volunteers	
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers	
		Maintain boundary signage: Carsonite survey markers, Open Space signage and INPC signage.	Ongoing	TWP Open Space Staff	
		Mow as needed.	2018-20	TWP Open Space Staff	
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Volunteers	
		Interseed as needed.	2021	TWP Open Space Staff	
L. Restored Agricultural Field (Almond Marsh Buffer)	Restore	Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Volunteers	
		Interseed as needed.	2021	TWP Open Space Staff	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
M. Agriculture Field	Monitor	As farm license expires (12-31-2020), continue to review license and explore restoration opportunities outlined in the Board approved Casey Road Land Use Plan.	Summer 2020	Supervisor, Trustees, TWP Open Space Staff
	Restore	Seek grant opportunities to remediate priority erosion issues, as per the Bull Creek/Bull Brook Watershed Plan, Casey Road Land Use Plan, Liberty Prairie Master Plan.	Ongoing	Supervisor, Openlands, TWP Open Space Staff
		Assess wetland mitigation bank feasibility and identify appropriate next steps.	Ongoing	Supervisor, Openlands, TWP Open Space Staff, Engineer
N. Agriculture Field	Monitor	As farm license expires (12-31-2020), continue to review license and explore restoration opportunities outlined in the Board approved Casey Road Land Use Plan.	Summer 2020	Supervisor, Trustees, TWP Open Space Staff
	Restore	Seek grant opportunities to remediate priority erosion issues, as per the Bull Creek/Bull Brook Watershed Plan, Casey Road Land Use Plan, Liberty Prairie Master Plan.	Ongoing	Supervisor, Openlands, TWP Open Space Staff
		Assess wetland mitigation bank feasibility and identify appropriate next steps.	Ongoing	Supervisor, Openlands, TWP Open Space Staff, Engineer
		Review inholding ingress and egress easement (driveway).	As needed	Supervisor, TWP Open Space Staff
		Monitor BMP installation.	2019	TWP Open Space Staff, Engineer
		Monitor for invasive outbreaks. Take action as necessary.	2019-21	TWP Open Space Staff, Volunteers
O. Agriculture Field (2018 Section 319 Grant)	Monitor	Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2019-21	TWP Open Space Staff
		Monitor inholding access drive and culverts until vegetation becomes established. Take action as necessary.	2019-21	TWP Open Space Staff
	Maintain	Install and maintain boundary signage, INPC signage, permit boards, etc.	Ongoing	TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
O. Agriculture Field (2018 Section 319 Grant)	Restore	Sow native seed as outlined by engineering plans.	Spring 2019	TWP Open Space Staff
		Pickup fieldstones.	2019-20	TWP Open Space Staff
		Plant plugs in waterways.	Spring 2019	TWP Open Space Staff, Openlands, Volunteers
		Complete maintenance and documentation activities as described in the Section 319 O&M plan in the Spring and Fall. Submit to LCSMC.	2020-30	TWP Open Space Staff
		Mow as needed.	2019-21	TWP Open Space Staff
		Install fieldstone at day lighted drain tile along inholding driveway.	2019	TWP Open Space Staff
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Volunteers
		Interseed as needed.	2021	TWP Open Space Staff
		Follow grant documentation and quarterly reporting requirements.	2019	Supervisor, Openlands, TWP Open Space Staff
		Document	Complete maintenance and documentation activities as described in the Section 319 O&M plan in the Spring and Fall. Submit to LCSMC.	2020-2030
Communicate		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff, Volunteers
		Continue communication with LCSMC, LCFPD, neighbors, Highway Commissioner, engineer, contractor, farmer, Openlands, etc.	Ongoing	Supervisor, Openlands, TWP Open Space Staff

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Casey South (Liberty Prairie Nature Preserve and Buffer, Donnelley Prairies and Oaks Buffer)

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Graminoid Fen, Restored Prairie, Restored Agriculture Fields, Sedge Meadow, Riparian Corridor, Woodland, Hillside Seep, Sedge Meadow, Trail Monitored Species: Slender Bog Arrow Grass, Fringed Gentian, Grass of Parnassus, Bluebirds, butterflies, frogs.	Monitor	Obtain species monitoring results. Slender Bog Arrow Grass, Fringed Gentian, Grass of Parnassus, Bluebirds, butterflies, frogs.	Annually	TWP Open Space Staff, Volunteers
		Evaluate burn plan and implement prescribed burn in accordance with burn plan.	Annually	
		Check and document boundaries and encroachments. Update encroachment inventory as needed. Develop an encroachment policy.	Every Other Month	TWP Open Space Staff, Supervisor, Trustees
		Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly	TWP Open Space Staff
		Tree and shrub screen allowed along property edges to control off-road vehicle access.	Ongoing	
		Conduct a vegetative survey.	2019	Contractor
		Sealcoat boardwalks every two years or as needed.	2021	TWP Open Space Staff
		Provide and maintain limited, appropriate visitor amenities such as: trail, bollards, garbage cans, benches, dog waste receptacles, etc.	Ongoing	
		Maintain INPC signage along boundaries. Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Annually	
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Annually	
Phase 1 & 2 Birdscaping plantings - mulching, pruning, watering, weeding. As needed, fix or remove fencing and leave posts. Update tree inventory as needed.	Annually	TWP Open Space Staff		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel (continued)	Restore	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	TWP Open Space Staff, Volunteers	
		As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the INPC guidelines.	Annually		
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing		
		Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.	2020		
		Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	TWP Open Space Staff, Supervisor
		Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after). Complete and submit INPC annual report.	Annually Annually Feb. 15	TWP Open Space Staff TWP Open Space Staff, Supervisor	
Communication		Obtain information including but not limited to: volunteer workday results, vegetation monitoring, bluebird monitoring, annual easement monitoring, etc.	Monthly	TWP Open Space Staff, Volunteers, Contractor	
		Obtain information regarding shallow and deep well monitoring when possible.	Ongoing		
		Continue communications with INPC and LCFPD.	Ongoing	Supervisor, TWP Staff, INPC, LCFPD	
Recreation		Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff	
		Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, birdwatching, cross country skiing, horseback riding, etc.	Ongoing	Supervisor, TWP Open Space Staff	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
A: Graminoid Fen	Restore	Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Open Space Staff, Volunteers
		Control invasives: reed canary grass, cattails, purple loosestrife, oriental bittersweet and multiflora rose.	Ongoing	TWP Open Space Staff, Volunteers
		Conduct follow up treatments to areas already cleared of invasives. Spot mow areas of woody outbreaks as needed.	Ongoing	
B: Prairie Wet prairie, Wet mesic prairie, Mesic Prairie	Monitor	Conduct a vegetative survey of plants of concern, obtain and track results.	Annually	TWP Open Space Staff, Volunteers
		Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Open Space Staff, Volunteers
		Control invasives: reed canary grass, purple loosestrife, Canada thistle, grey dogwood, buckthorn, and phragmites. Collect and interseed in accordance with INPC seed collecting protocol.	Annually	TWP Open Space Staff, Volunteers
C: Restored Prairie	Restore	Conduct large scale herbicide project to control wetland invasives such as phragmites, cattails and reed canary grass.	As needed	Contractor, TWP Open Space Staff
		Conduct follow up treatments to areas already cleared of invasives. Spot mow areas of woody outbreaks as needed.	Ongoing	TWP Open Space Staff
		Monitor plants of concern and document.	Annually	Volunteers
D: Sedge Meadow	Restore	Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Staff, Volunteers
		Control invasives: reed canary grass, purple loosestrife, Canada thistle, grey dogwood, buckthorn, and oriental bittersweet. Spot mow areas of woody outbreaks as needed.	Annually	TWP Open Space Staff, Volunteers
		Conduct large scale herbicide project to control wetland invasives such as phragmites, cattails and reed canary grass.	As needed	TWP Open Space Staff
E: Riparian Corridor	Restore	Conduct prescribe burn in accordance with the burn plan.	Spring 2019	TWP Staff, Volunteers
		Control invasives: reed canary grass, cattails, and phragmites.	As needed	TWP Staff, Volunteers
		Conduct follow up treatments. Continue to girdle cottonwoods. Interseed cleared areas with seed collected on site. Continue clearing of invasives working east towards property line.	As needed	Contractor, TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
F. Restored Agriculture Field	Restore	Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Staff, Volunteers
		Conduct large scale herbicide project to control wetland invasives such as phragmites, cattails and reed canary grass.	As needed	Contractor, TWP Open Space Staff
		Control invasives: Canada thistle and reed canary grass.	Annually	TWP Open Space Staff
G. Retired Agriculture Field	Restore	Interseed in fall after burns with collected seed on site.		TWP Open Space Staff, Volunteers
		Control reed canary grass, buckthorn, teasel, clover, brome, and damnes rocket.	Annually	TWP Open Space Staff
		Interseed in fall after burns with collected seed on site.		TWP Open Space Staff, Volunteers
		Complete full restoration: herbicide application, burn, native seed.	2020	TWP Open Space Staff
		Conduct prescribe burn in accordance with the burn plan.	2020	TWP Open Space Staff, Volunteers
H. Woodland, Remnant Prairie, Restored Prairie	Restore	Continue clearing of invasives working east towards property line.	2019-20	TWP Open Space Staff
		Conduct prescribe burn in accordance with the burn plan.	2020	TWP Staff, Volunteers
		Control invasives: buckthorn, oriental bittersweet, reed canary grass, and Canada thistle.	Annually	TWP Open Space Staff
		Interseed with collected seed from site.		TWP Open Space Staff, Volunteers
		Continue clearing of invasives working east towards property line.	2019	TWP Open Space Staff, Volunteers
I. Hillside Seep	Restore	Conduct follow up treatments to areas already cleared of invasives.	Ongoing	
		Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Staff, Volunteers
		Control invasives: purple loosestrife, cattails, willow.	Annually	TWP Open Space Staff
J. Sedge Meadow	Monitor	Monitor and control invasive outbreaks.	As Needed	TWP Open Space Staff
K. Restored Agriculture Field	Restore	Continue to control invasives.	Annually	TWP Open Space Staff
		Conduct prescribed burn in accordance with the burn plan.	Spring 2019	TWP Staff, Volunteers
		Begin clearing of invasives along northern property line hedgerow.	2025	TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
L. Bottomland Successional Woods (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Monitor and repair WMB Head Cut Project	2019-20	Supervisor, TWP Open Space Staff	
	Restore	Seek grant opportunities to remove woody species and restore creek corridor. Continue restoration as outlined in the SMC plan, Casey Road Land Use Plan, Liberty Prairie Master Plan, 2011 Hay and Assoc. Proposal.	Ongoing 2025	Supervisor, LCSCM Supervisor, TWP Open Space Staff	
M. Impoundment (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Conduct follow up treatments to areas already cleared of invasives (2017 Riparian Corridor Clearing).	2019	TWP Open Space Staff	
		Monitor the need for a dam inspection. Monitor overall integrity of the water level control structure.	Ongoing	Supervisor, TWP Open Space Staff	
		Conduct prescribed burn in accordance with the burn plan.	2020	TWP Staff, Volunteers	
		Continue initial clearing of trees and brush.	2021-22	TWP Open Space Staff	
		Perform follow up treatments to areas previously cleared of invasives.	Ongoing		
	Control invasives: reed canary grass.	Ongoing			
	Signage	Install and maintain signage	2021-22	TWP Open Space Staff	
N. Restored Agriculture Fields, Access Drive, Stockpile Area (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff, Volunteers	
		Monitor for invasive outbreaks. Take action as necessary.	2019-21	TWP Open Space Staff, Volunteers	
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers	
		Obtain volunteer species (frog, bird, butterfly) monitoring results. Post results to website.	Annually	TWP Open Space Staff, Supervisor	
		Mow as needed.	2019-20	TWP Open Space Staff	
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Contractor	
		Perform follow up treatments to areas previously cleared of invasives.	Ongoing	TWP Open Space Staff	
		Interseed as needed.	2021		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
O. Retired Pasture	Monitor	Locate and review ingress/egress easement.	Annually	TWP Open Space Staff, Supervisor
		Obtain information related to the deep well monitoring station if necessary.	Ongoing	TWP Open Space Staff
		Continue to control invasives.	Annually	TWP Open Space Staff
		Conduct follow up treatments to areas already cleared of woody invasives.	Ongoing	
		Conduct prescribed burn in accordance with the burn plan.	2020	TWP Staff, Volunteers
		Install seed, trees, shrubs, and plugs that meet INPC specs as funds become available and when appropriate.	As needed	TWP Open Space Staff
		Herbicide site, burn, seed, plant and maintain.	2019	TWP Open Space Staff, Supervisor
P. Restored Agricultural Field (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2019	TWP Open Space Staff
		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff, Volunteers
		Monitor for invasive outbreaks.	2019-21	TWP Open Space Staff, Volunteers
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers
		Obtain volunteer species (frog, bird, butterfly) monitoring results. Post results to website.	Annually	TWP Open Space Staff, Supervisor
		Mow as needed.	2019-20	TWP Open Space Staff
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Contractor
		Interseed as needed.	2021	TWP Open Space Staff
		Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2019	TWP Open Space Staff
		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff, Volunteers
Q. Restored Agricultural Field & Cleared Hedgerow (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Monitor for invasive outbreaks.	2019-21	TWP Open Space Staff, Volunteers
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel		
Q. Restored Agricultural Field & Cleared Hedgerow (2017 Donnelley Prairie and Oaks Buffer) (continued)	Document	Obtain volunteer species (frog, bird, butterfly) monitoring results. Post results to website.	Annually	TWP Open Space Staff, Supervisor		
		Mow as needed.	2019-20	TWP Open Space Staff		
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Contractor		
		Interseed as needed.	2021	TWP Open Space Staff		
		Herbicide resprouts within hedgerow scar.	2019			
		Monitor steep slopes and erosion prone areas until vegetation becomes established. Take action as necessary.	2019	TWP Open Space Staff		
		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff, Volunteers		
		Monitor for invasive outbreaks.	2019-21	TWP Open Space Staff, Volunteers		
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers		
		Obtain volunteer species (frog, bird, butterfly) monitoring results. Post results to website.	Annually	TWP Open Space Staff, Supervisor		
R. Restored Agricultural Field & Cleared Hedgerow (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Mow as needed.	2019-20	TWP Open Space Staff		
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Contractor		
		Interseed as needed.	2021	TWP Open Space Staff		
		Herbicide resprouts within hedgerow scar.	2019			
		Monitor erosion prone areas until vegetation becomes established. Take action as necessary.	2019			
		Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff		
		Monitor for invasive outbreaks.	2019-21	TWP Open Space Staff, Volunteers		
		Conduct seed establishment monitoring following C.R.R. Phase 1 protocol.	2021	TWP Open Space Staff, Volunteers		
		S. Restored Agricultural Field (2017 Donnelley Prairie and Oaks Buffer)	Monitor	Photo document restoration progress using C.R.R. Phase 1 Photo Point Log in growing season.	2019-21	TWP Open Space Staff
				Monitor for invasive outbreaks.	2019-21	TWP Open Space Staff, Volunteers

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
S. Restored Agricultural Field (2017 Donnelley Prairie and Oaks Buffer) (continued)	Document	Obtain volunteer species (frog, bird, butterfly) monitoring results. Post results to website.	Annually	TWP Open Space Staff, Supervisor
		Mow as needed.	2019-20	
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans.	2020-21	TWP Open Space Staff, Contractor
		Interseed as needed.	2021	TWP Open Space Staff
		Begin clearing of TWP portion of East hedgerow, TWP portion of tree island and South property line.	2025	

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Kildare

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Bottomland Woods, Wooded Riparian Corridor, Easement	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees	
		Make sure rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff	
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month		
		Maintain	Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Ongoing	
			Keep drainage free flowing and free of obstructions.	Annually	TWP Open Space Staff, Village of Libertyville
			Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff
		Document	Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
			Provide information and outreach to neighboring homeowners, homeowner associations, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
		Communication			
Recreation	Explore passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, etc.	Ongoing	Supervisor, TWP Open Space Staff		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
A. Woodland	Monitor	Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Every Other Month	TWP Open Space Staff
		Monitor erosion at HOA culvert outflow and take appropriate action when needed.	Ongoing	
		Install tip-rap at HOA culvert outflow as needed.	As needed	
B. Wooded Riparian Corridor	Monitor	Keep drainage free flowing and free of obstructions. Continue to follow recommendations outlined in the Lake County Storm Water Management plan.	Annually	TWP Open Space Staff
		Seek grant opportunities for restoration. Seek opportunities for volunteer workdays.	Ongoing	
C. Ingress/ Egress Easement	Monitor	Review and monitor ingress/egress easement.	As needed	Supervisor, TWP Open Space Staff
		Locate and review agreement for maintenance of mowed area.	Ongoing	

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Lindholm Park

Updated: April, 2019

Map Symbol: Management Unit (List all communities) under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Playground, Athletic Fields, Trail, Woodland, Cool Season Meadow	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees	
		Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff	
		Conduct regular site inspections and document current conditions in the inspection log.	Monthly		
		Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly		
		Provide and maintain amenities including but not limited to: the trail, bollards, Knox boxes, benches, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, athletic fields, porta potties, memorial plaques, picnic tables, etc.	Ongoing	TWP Open Space Staff	
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and repair if needed.	Monthly		
		Maintain and mow grass, edge beds and sidewalk edges, trim trees, mulch, pull weeds, etc. in order to provide an aesthetically pleasing view for users and nearby residents.	Seasonally as needed		
		Evaluate the need to herbicide and/or fertilize turf grass.			
		Seal coat sidewalks every two years or as needed.	2021	Contractor	
Restore			As funds become available plant native seed, trees and shrubs.	Ongoing	TWP Open Space Staff
			Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	TWP Open Space Staff, Volunteers

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel (continued)	Restore cont.	Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	As needed	TWP Open Space Staff, Volunteers	
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing		
		Explore and provide opportunities for volunteers.	Ongoing	TWP Open Space Staff	
	Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent management plans when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	Supervisor, TWP Open Space Staff	
	Communication	Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff	
	Recreation	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, etc.	Ongoing	Supervisor, TWP Open Space Staff	
	Site Survey	Survey property boundaries as needed.	Ongoing	Contractor, TWP Open Space Staff	
	A: Athletic Fields Infield, Outfield	Maintain (Infield)	Evaluate the need for surface conditioners.	2019	TWP Open Space Staff
			Drag field weekly as weather permits.	Seasonally	
			Hire contractor for major retrofits including adding of clay and conditioner every two years or as needed.	2020	Contractor, TWP Open Space Staff
Maintain (Outfield)		Herbicide common herbaceous turf weeds including: clover, dandelion, creeping charlie, and chickweed.	Annually	TWP Open Space Staff, Contractor	
	Inspect outfield every week during ball season for holes, divots and depressions. Repair or flag immediately and log repairs on inspection form.	Seasonally	TWP Open Space Staff		
	Communication	Install and update document box with permits.	Seasonally	TWP Open Space Staff	
		Install seasonal field and temporary closure signage.	Seasonally/As Needed	TWP Open Space Staff	
B: Playground	Inspect	Complete inspection, fill out inspection form and repair deficiencies immediately.	April & October	TWP Open Space Staff	
	Maintain	Add playground approved woodchips to recommended levels.	As needed		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
B. Playground (continued)	Maintain (continued)	Prepare to remove the remaining ash trees and replace with native plant material.	As needed	TWP Open Space Staff
		Continue to maintain native planting bed.	Ongoing	
		Update playground equipment. Evaluate need for replacement or repairs.	2022-25	Supervisor, TWP Open Space Staff
C. Parking Lot	Maintain	Seal coat parking lot every two years.	2021	Supervisor, TWP Open Space Staff
D. Oak Woodland	Restore	Cut and herbicide invasives including: buckhorn, Canada thistle and reed canary grass.	Ongoing	TWP Open Space Staff
		Prescribe burn in accordance with burn plan.	2020	
		Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	
E. Cool Season Meadow	Maintain	As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the INPC guidelines.	Ongoing	
		Prescribe burn in accordance with burn plan.	2021	TWP Open Space Staff
		Herbicide invasives: Canada thistle, teasel and buckhorn.	Ongoing	
	Monitor	Continue to monitor storm water runoff and potential erosion into Willow woods.	Ongoing	Supervisor, TWP Open Space Staff, LCFPPD, LCSMC, Contractor

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Milwaukee Avenue

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Restored Short Grass Prairie, Agriculture Field, Wooded Riparian Corridor, Woodland, Retired Pasture, Leased Paddock	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees
		Make sure rules and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month	TWP Open Space Staff
		As farm licenses expire continue to evaluate license and restoration opportunities.	Ongoing	Supervisor, Trustees, Advisory Committee, TWP Staff
		Monitor and discuss long term maintenance needs and key personnel regarding Milwaukee Road sidewalk.	As needed	Supervisor, TWP Open Space Staff
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	TWP Open Space Staff
		Line trim, herbicide weeds and pick up litter along Milwaukee Rd. sidewalk (Casey Rd. to Janas Ct.) and access gate.	Seasonally	TWP Open Space Staff, Buildings and Grounds Manager
		Create new unit for corner of Casey Rd. and Rt. 21. Mow annually and spray as needed new unit and grass waterway in Unit B.	Ongoing	TWP Open Space Staff
		Restore	Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	Ongoing
	Seek and apply for restoration grants and for volunteer opportunities.	Annually	Supervisor, Openlands, TWP Open Space Staff	
	As funds become available plant native seed, trees and/or shrubs using recommended species and quantities outlined in the INPC guidelines.	Ongoing	TWP Open Space Staff	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel (continued)	Restore (continued)	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	TWP Open Space Staff, Volunteers
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing	TWP Open Space Staff
		Coordinate effort to restore in conjunction with LCFPD and Openlands.	Ongoing	TWP Open Space Staff, LCFPD, Openlands
		Document	Ongoing	Supervisor, TWP Open Space Staff
		Communication	Ongoing	TWP Open Space Staff
		Recreation	Ongoing	Supervisor, TWP Open Space Staff
		Site survey and Signage	Ongoing	Supervisor, Contractor
		Monitor	As needed	TWP Open Space Staff
		Restore	2019	TWP Open Space Staff, LCFPD, Contractor
		Review farm license	Ongoing	TWP Open Space Staff, Volunteers
A. Restored Short Grass Prairie	Monitor	Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	2019	TWP Open Space Staff, Volunteers
		Control invasive species: white sweet clover, reed canarygrass, canada thistle, woodies	Ongoing	TWP Open Space Staff
B. Agriculture Field	Review farm license	As farm license expires (12/31/2020), continue to evaluate license and restoration opportunities as per the Casey Road Land Use Plan.	Summer 2019	Supervisor, Trustees, Advisory Committee, TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
C. Wooded Riparian Corridor	Seek grant opportunities	Seek and apply for restoration grants to restore native riparian community.	Ongoing	Supervisor, Openlands, TWP Open Space Staff
	Monitor	Monitor creek flow and obstructions under Milwaukee Road underpass box culvert.	Ongoing	TWP Open Space Staff
D. Woodland	Monitor	Explore restoration and volunteer opportunities.	Ongoing	TWP Open Space Staff
E. Retired Pasture	Seek grant opportunities	Seek and apply for restoration grants to restore native riparian community.	Ongoing	Supervisor, Openlands, TWP Open Space Staff
	Restore	Mow and herbicide to reduce invasive plant populations as needed.	As needed	TWP Open Space Staff
F. Leased Paddock	Review farm license	Review and evaluate farm license as license expires (5-31-2022).	Spring 2022	Supervisor, Trustees, TWP Open Space Staff
G. Agriculture Field	Review farm license	Review and evaluate farm license as license expires (5-31-2022).	Spring 2022	Supervisor, Trustees, TWP Open Space Staff
	Monitor	Monitor driveway drainage especially after large rain events. Remove obstructions to allow free flow of water through box culverts and manhole grates if possible. Apply deicers as necessary.	Ongoing	TWP Open Space Staff
	Communication	Continue communications with engineer regarding solutions.	Ongoing	Supervisor, TWP Open Space Staff, Contractor

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Old School Road

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Woodland, Lowland Woods, Floodplain	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees	
		Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff	
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month		
		Conduct a vegetative survey in June.	2019	Contractor, TWP Open Space Staff	
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	TWP Open Space Staff	
		Remove debris from creek to allow water to remain free flowing. Continue to follow recommendations outlined in the Lake County Stormwater Management Plan.	Seasonally		
		Stabilize stream banks to prevent undercutting.	As needed		
		Restore	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Annually	TWP Open Space Staff, Volunteers
			Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.		
	Continue to explore future opportunities for volunteer workdays.	Ongoing	Supervisor, TWP Open Space Staff		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel (continued)	Restore (continued)	Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing	TWP Open Space Staff
		Continue initial clearing of invasive plants. Cut and herbicide.	Ongoing	TWP Open Space Staff, Volunteers
		Conduct follow-up control of invasives.	2019	
		Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing
A. Woodland	Restore	Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
		Provide information and outreach to neighboring homeowners, homeowner associations, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
		Continue communications with the INPC for possible Land and Water Reserve or other further protection.	Ongoing	Supervisor, TWP Open Space Staff, Openlands, INPC
A. Woodland	Restore	Continue to thin woodland to a lower stocking percentage by removing sugar maple, box elder, black cherry, trees with poor form or are in decline, and create group openings; all to allow for more light to penetrate floor. Remove invasive plants.	Ongoing	TWP Open Space Staff
		Prescribe burn in dormancy.	Fall 2019	
		Control invasives: Buckhorn, burning bush, phragmites.	Annually	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
B. Lowland Woods	Restore	Continue to thin woodland to a lower stocking percentage by removing sugar maple, box elder, black cherry, trees with poor form or are in decline, and create group openings; all to allow for more light to penetrate floor. Remove invasive plants.	Ongoing	TWP Open Space Staff
		Prescribe burn in dormancy.	Fall 2019	
		Control invasives: Buckthorn, burning bush, phragmites.	Annually	
C. Floodplain	Restore	Continue to thin woodland to a lower stocking percentage by removing sugar maple, box elder, black cherry, trees with poor form or are in decline, and create group openings; all to allow for more light to penetrate floor. Remove invasive plants.	Ongoing	TWP Open Space Staff
		Prescribe burn in dormancy.	Fall 2019	
		Control invasives: Buckthorn, burning bush, phragmites.	Annually	

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: River Road

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Easement, Paddocks, Agriculture Field, Woodland, Wetland, Trail, Retired Hay Field, Former Home site and Agricultural Field	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees
		Make sure rules and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff
		Review and monitor easement. Complete easement monitoring log sheet.	Annually	
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month	
		As farm license expires (5/31/2022), review and evaluate farm license details and options.	Winter Spring 2021	Supervisor, TWP Open Space Staff
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	TWP Open Space Staff
		Provide and maintain trail amenities including but not limited to: the trail, bollards, trailhead fencing, Knox boxes, benches, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, etc.	Ongoing	
		Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly	
		Evaluate and sealcoat asphalt trailheads every two years.	2021	
	Maintain wire gate farm access point.	Ongoing	TWP Open Space Staff	
	Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel (continued)	Document (continued)	Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
	Communication	Provide information and outreach to neighboring homeowners, homeowner associations, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
	Recreation	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, horseback riding, etc.	Ongoing	TWP Open Space Staff
A. Getz Easement	Site survey	Survey property boundary and install permanent marking posts.	2020	Supervisor, Surveyor, TWP Open Space Staff
	Monitor	Review and monitor Getz One easement. Complete easement monitoring log sheet.	Annually	TWP Open Space Staff
B. Agriculture Field, Paddocks	Review farm license	As farm license expires (5/31/2022), review and evaluate farm license details and options.	Spring 2021	Supervisor, TWP Open Space Staff
	Restore	Begin phragmites control in SE portion of unit along River Rd.	Ongoing	TWP Open Space Staff
	Maintain	Add unleased portion of hay field to farm license in 2019.	2019	TWP Open Space Staff
C. Woodland	Restore	Maintain River Rd. frontage along trail. Mow and pick up litter	Ongoing	TWP Open Space Staff
		Conduct follow up treatments to areas previously cleared of invasives.	Ongoing	TWP Open Space Staff
		Keep drainage free flowing and free of obstructions.	Ongoing	TWP Open Space Staff
		Evaluate the need for interseeding.	2021	TWP Open Space Staff, Volunteers
D. Wetland	Maintain	Prescribed burn in accordance with the burn plan.	2021	TWP Open Space Staff, Volunteers
		Maintain restoration signage.	Until 2020	TWP Open Space Staff
E. Paddocks	Restore	Explore possibilities of restoration.	Ongoing	Supervisor, TWP Open Space Staff
F. Retired Hay Field	Monitor easement	Review and monitor easement. Complete easement monitoring log sheet.	Annually	TWP Open Space Staff
		Restore in conjunction with Unit C. Herbicide entire unit and broadcast sow native seed. Mow as needed.	2019	TWP Open Space Staff
	Restore	Mow as needed to prevent weed growth and woody establishment.	Until 2021	TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
F. Retired Hay Field (continued)	Restore (continued)	Monitor for invasive outbreaks.	Ongoing	TWP Open Space Staff
		Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	
		Evaluate the need for interseeding.	2021	
		Prescribed burn in accordance with the burn plan.	2021	TWP Open Space Staff, Volunteers
G. Former Home site and Agriculture Field	Maintain	Maintain restoration signage.	Until 2020	TWP Open Space Staff
		Mow as needed to prevent weed growth and woody establishment.	Annually	TWP Open Space Staff
		Monitor the need for tree removals, etc.	Ongoing	TWP Open Space Staff
	Communication	Divide unit. Remove former home site from leased portion.	2019	Supervisor, TWP Open Space Staff

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Rt. 45

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Abandoned Nursery, Bott Prairie, Bott Easement	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees	
		Make sure rules and ownership signs are in place to ensure visitor safety.		TWP Open Space Staff	
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month		
		Maintain	Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	
		Restore	Seek opportunities for restoration through grant funding, offsite mitigation, Route 53 funding, etc.	Ongoing	Supervisor, TWP Open Space Staff, Openlands
		Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff
		Communication	Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
		Recreation	Provide information and outreach to neighboring homeowners, homeowner association's, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
		Site survey	Provide passive recreational opportunities when possible.	Ongoing	Supervisor, TWP Open Space Staff
		Survey property boundary and install permanent marking posts.	2019	Supervisor, Surveyor	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
A. Bott Prairie	Restore	Follow-up control of invasives such as buckthorn, thistle, teasel, reed canary grass, etc.	Annually	TWP Open Space Staff
		Re-introduce pre-settlement fire regime. Develop, implement and evaluate burn plans. When possible plan in conjunction with easement holder.	2019	TWP Open Space Staff, Easement Holder
		Collect and sow seed generated from on site.	Annually	TWP Open Space Staff
		Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing	
		Conduct a vegetative survey in May, June, or July.	2019	LCFPD, TWP Open Space Staff
B. Abandoned Nursery	Communication	Provide information and outreach to neighboring homeowners, homeowner associations, local horse stables, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Annually	TWP Open Space Staff, Supervisor
		Document	Every Other Month	TWP Open Space Staff
		Site survey	2019	Supervisor, TWP Open Space Staff, Contractor
		Restore	Survey property boundary and install permanent marking posts.	Ongoing
C. Bott Easement	Communication	Explore funding opportunities for site restoration.	Ongoing	Supervisor, TWP Open Space Staff
		Explore alternative land use options and restoration methods including grazing, agroforestry, etc.	Ongoing	Supervisor, TWP Open Space Staff
		Begin communication regarding restoration opportunities with ad hoc committee.	2019	Supervisor, TWP Open Space Staff
C. Bott Easement	Monitor	Stay in contact with easement holder regarding Township restoration activities.	Annually	TWP Open Space Staff, Supervisor, Easement Holder
		Review and monitor easement. Complete easement monitoring log sheet.	Annually	TWP Open Space Staff

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Rt. 137

Updated: April, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Agriculture Fields, Wetland, Wet Prairie Remnant, Woodlands, Abandoned Nursery, Trail	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees	
		Make sure rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff	
		Conduct regular site inspections and document current conditions in the inspection log.	Every Other Month		
		Monitor and maintain Birdscaping plantings.	2019-2020	TWP Open Space Staff, LC Audubon	
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	TWP Open Space Staff	
		Provide and maintain trail amenities including but not limited to: the trail, bollards, Knox boxes, benches, memorial plaques, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, kiosks, etc.	Ongoing		
		Evaluate and sealcoat asphalt trail sections every two years.	2021		
		Restore	Seek and apply for restoration grants targeting wetland and riparian areas (WMB, 319).	Ongoing	Supervisor, TWP Open Space Staff
			Whenever possible create habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing	TWP Open Space Staff, Volunteers
	As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the TNPC guidelines.	Ongoing			

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel (continued)	Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	Supervisor, TWP Open Space Staff
		Photograph parcel when possible during various seasons and during different phases of a given project (usually before and after).	Ongoing	TWP Open Space Staff
Communication	Recreation	Provide information and outreach to neighboring homeowners, homeowner associations, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	Supervisor, TWP Open Space Staff
		Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, horseback riding, etc.	Ongoing	Supervisor, TWP Open Space Staff
Site survey	Bull Creek Trail	Survey property boundary and install permanent marking posts.	2020	Supervisor, Surveyor, TWP Staff
		Install boardwalk trip trap.	As needed	TWP Open Space Staff
		Conduct follow up treatments to areas cleared of invasives.	Ongoing	
		Review and evaluate ComEd lease details. Expiration (7-31-2035).	Winter 2035	Supervisor, TWP Staff
A. Agriculture field	Review farm license	Review IGA with Village of Libertyville.	As needed	Supervisor, TWP Staff
		Continue restoration and maintenance activities within IGA area: trail maintenance, mowing, herbiciding, tree removals, etc.	Ongoing	TWP Open Space Staff
B. Wetland	Restore	Review and evaluate license details. Evaluate restoration opportunities as license expires (10-31-19).	Spring 2019	Supervisor, TWP Open Space Staff
		Evaluate opportunities to restore hay fields along ComEd R.O.W. to short grass prairie and remove hedgerow.	2025	Supervisor, TWP Open Space Staff
	Monitor	Keep drainage free flowing and free of obstructions.	As needed	TWP Open Space Staff
		Monitor erosion of creek banks and gullies and take appropriate action when needed.	Ongoing	Supervisor, TWP Staff
	Restore	Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.	2019	Contractor, TWP Open Space Staff
		Conduct a large scale herbicide project focusing on phragmites and reed canarygrass	2019	Contractor, TWP Open Space Staff

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
B. Wetland (continued)	Restore (continued)	Control wetland invasives such as phragmites, reed canary grass, purple loosestrife.	Ongoing	TWP Open Space Staff
		Sow native seed.	2021-22	
		Remove down logs, brush, etc.	2020-21	
C. Woodlands	Restore	Explore restoration opportunities such as clearing, seeding, burning.	2020-21	Supervisor, TWP Open Space Staff
D. Wet Prairie Remnant	Restore	Conduct follow up treatments to areas previously cleared of invasives.	Ongoing	TWP Open Space Staff
		Re-introduce pre-settlement fire regime. Implement and evaluate burn plan.	2019	Contractor, TWP Open Space Staff
E. Abandoned Nursery	Restore	Continue initial clearing and herbiciding of invasive trees adjacent to trail corridor.	2019-20	TWP Open Space Staff
		Conduct follow up treatments to areas previously cleared of invasives.	Ongoing	TWP Open Space Staff

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: St. Mary's Road

Updated: May, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: Oak woodland, Prairie, Dry basin, Trail, Maxey easement	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	TWP Open Space Staff
		Develop and approve an encroachment policy.	Ongoing	TWP Open Space Staff, Supervisor, Trustees
		Make sure all trail, rules, and ownership signs are in place to ensure visitor safety.	Ongoing	TWP Open Space Staff
		Conduct regular site inspections and document current conditions in the inspection log.	Monthly	
		Conduct a vegetative survey on units previously cleared.	2019	TWP Open Space Staff, LCFPPD, Contractor
		Ensure Carsonite marking posts, border signs, fencing and any other line markers are in place, in good condition, and replace/repair if needed.	Monthly	TWP Open Space Staff
		Provide and maintain trail amenities including but not limited to: the trail, bollards, Knox boxes, benches, trash cans, birdhouses, dog waste centers, culverts, mowed trail edges, etc.	Ongoing	
		Evaluate and sealcoat asphalt trailheads every two years.	2021	
		Maintain and mow grass, trim trees, mulch, pull weeds, herbicide trail edges, etc. in order to provide an aesthetically pleasing view for users and nearby residents.	Seasonally as needed	
		Conduct visual trail inspections, especially after storm events. Repair trail washouts and unsafe trail conditions or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly	
Complete engineering contract and engineering recommendations as outlined by Pearson Brown for portions of the drainage ditch in Unit A and C.	2019	Supervisor, TWP Open Space Staff, Engineer		

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel			
A: Woodlot Oak-Hickory woods, Oak savanna	Entire Parcel (continued)	Maintain (continued)	Restore	Maintain turf along Nells Rd./St. Mary's trailhead from Open Space boundary up to Nells Rd. cul-de-sac staying within the Road District ROW.	Ongoing	TWP Open Space Staff	
				Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach.	Ongoing	TWP Open Space Staff	
				Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	Ongoing	TWP Open Space Staff, Volunteers	
				As funds become available plant native seed, trees and shrubs using recommended species and quantities outlined in the INPC guidelines.	Ongoing	TWP Open Space Staff	
				Whenever possible create and improve habitat for wildlife. This includes den trees, snags, brush piles, nurse logs, stumps, coarse woody debris, etc.	Ongoing		
				Document	Include current and long term management direction into Township site management plans, restoration documentation, and all other pertinent information.	Ongoing	TWP Open Space Staff, Supervisor
				Communication	Photograph parcel when possible during various seasons and during different phases of a given project (before and after). Provide information and outreach to neighboring homeowners, homeowner associations, and the public of management direction, upcoming projects, volunteer opportunities, and rules of Township Open Space.	Ongoing	TWP Open Space Staff, Supervisor
				Recreation	Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, horseback riding, etc.	Ongoing	TWP Open Space Staff, Supervisor
				Restore	Conduct follow up treatments to areas previously cleared of invasives. Control invasives using herbicide.	Annually	TWP Open Space Staff
				Maintenance	Prescribe burn in accordance with burn plan. Keep drainage ditches free flowing and free of obstructions. Continue to follow recommendations outlined in the Lake County Storm Water Management plan. Seek grant opportunities for restoration especially the WMB grant.	As needed	TWP Open Space Staff, Volunteers TWP Open Space Staff, Supervisor

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
B. Prairie Short grass prairie, Dry Basins	Interseed	Interseed with short grass prairie mix.	As needed	TWP Open Space Staff
	Restore	Prescribe burn in accordance with burn plan.	2019	TWP Staff, Volunteers
	Monitor	Conduct follow-up treatments to previously cleared area. Control invasives using herbicide. During/after rain events check dry basins to ensure they are fully functional.	Annually As needed	TWP Open Space Staff
C. Savanna, prairie	Restore	Continue clearing and removal of invasives in remainder of unit.	2020	TWP Open Space Staff
		Conduct follow up treatments to areas previously cleared of invasives.	Ongoing	
D. Maxey Easement	Monitor	Re-introduce pre-settlement fire regime. Develop, implement, and evaluate burn plan.	2019	TWP Open Space Staff, Volunteers
		Review and monitor easement. Complete easement monitoring log sheet.	Annually	TWP Open Space Staff

Site Management Plan

Prepared By: D. Cederberg and J. Happ

Site Name: Township Campus

Updated: May, 2019

Map Symbol: Management Unit (List all communities under unit name)	Management Objective	Management Activity	Schedule	Key Personnel	
Entire Parcel: Park, Footpath, Mowed lots, Parking lots, Office buildings, Picnic area, Sidewalks	Monitor	Check and document boundaries and encroachments. Update encroachment inventory as needed.	Ongoing	Buildings and Ground Manager, TWP Open Space Staff	
		Develop and approve an encroachment policy.	Ongoing		
		Make sure all signs are in place to ensure visitor safety and convenience.	Monthly		
		Monitor footpath surface and repair as needed.	Weekly		
		Maintain buildings as needed following maintenance guidelines.	Ongoing		Buildings and Grounds Manager
		Provide and maintain amenities including but not limited to: the footpath, sidewalks, benches, picnic tables, trash cans, dog waste centers, lighting, flagpole, brick paver sidewalk, etc.	Ongoing		
		Conduct visual inspections of buildings and grounds especially after storm events. Make necessary repairs or mark using flagging, cones, barricades, etc. immediately upon discovery.	Weekly		
		Mow grass, edge beds and sidewalk edges, pull and herbicide weeds, etc. in order to provide an aesthetically pleasing view and safe experience for users and nearby residents.	Weekly		
		Add mulch to planting beds, herbicide turf broadleaf weeds, aerate turf, spring and fall leaf clean up, as necessary.	Seasonally		
		Sealcoat parking lots every two years.	2021		
Keep sidewalks and parking lots free from snow, ice, and debris to ensure they are safe for users and aesthetically pleasing.	Daily	Buildings and Grounds Manager, Township Open Space Staff			

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
Entire Parcel: (continued)	Maintain (continued)	Control invasive species commonly found in Lake County, and as described by Northeast Illinois Invasive Plant Partnership when needed using an integrated pest management approach. Trim trees in dominance when possible. Promptly remove dead and dying trees to ensure visitor safety. When replacing trees use native selections.	Ongoing	Township Open Space Staff
	Document	Include current and long term management direction into Township site management plans, documentation, and all other pertinent information. Develop and update building maintenance log and guidelines. Log salt and herbicide use for MSA report. Photograph parcel when possible during various seasons and during different phases of a given project (before and after).	Ongoing	Buildings and Grounds Manager, Open Space Staff, Supervisor
	Communication	Provide information and outreach to neighboring homeowners and the public of management direction, upcoming projects, and rules of Township Campus.	Ongoing	Buildings and Grounds Manager, Supervisor
	Recreation	Ensure there is no overnight parking by installing signs. Provide passive and active recreational opportunities when possible and appropriate such as hiking, biking, bird watching, cross country skiing, picnicking, etc.	Ongoing	Buildings and Grounds Manager
A: Park, Mowed lot, Footpath, Picnic area, Sidewalks	Maintain Open Park Appearance	Remove dead and dying trees. Allow a lower stocking percentage allowing light to penetrate the ground for better turf establishment. Increase the size of the area for recreation. While keeping in mind an open park appearance, strategically plant more diverse and native species for replacement.	Seasonally - Winter	Buildings and Grounds Manager, Open Space Staff, Contractor
	Maintain Footpath	Add screenings and roll footpath to provide a safe means of travel. Herbicide footpath edges to prevent weeds from growing into path.	As needed	Buildings and Grounds Manager, Open Space Staff
	Maintain Visitor Amenities	Sand, paint and seal picnic tables and benches as needed.	Ongoing	
	Maintain Road Frontage Appearance	Maintain sign along Winchester road. Prune trees and shrubs to allow for clear view of signage and beautify nearby landscaping.	Ongoing Seasonally - Winter	

Map Symbol: Management Unit	Management Objective	Management Activity	Schedule	Key Personnel
B. Township offices and grounds, Sidewalks, Parking lot	Maintain Building	Maintain buildings as needed following maintenance guidelines.	Ongoing	Buildings and Grounds Manager, Open Space Staff
	Maintain Landscaping	Remove dead and dying trees. If needed strategically plant more diverse and native species for replacement. Add mulch to planting beds, pull and herbicide weeds, and water plants when necessary.	Ongoing	Buildings and Grounds Manager, Open Space Staff, Contractor
	Maintain Landscaping	Remove dead and dying trees. If needed strategically plant more diverse and native species for replacement. Add mulch to planting beds, pull and herbicide weeds, and water plants when necessary.	Ongoing	Buildings and Grounds Manager, Township Open Space Staff, Contractor
C. Parking lot and grounds, Sidewalks, Mowed lot	Maintain Lighting	Ensure parking lot lighting is functional for user safety.	Weekly	Buildings and Grounds Manager
	Maintain Landscaping	Remove dead and dying trees. If needed strategically plant more diverse and native species for replacement. Add mulch to planting beds, pull and herbicide weeds, and water plants when necessary.	Ongoing	Buildings and Grounds Manager, Township Open Space Staff, Contractor
D. Parks building and grounds, Parking lot, Mowed lot, Park, Sidewalks	Maintain Building	Maintain buildings as needed following maintenance guidelines.	Ongoing	Buildings and Grounds Manager
	Maintain Lighting	Ensure exterior building lighting is functional for user safety.	Weekly	Buildings and Grounds Manager
	Maintain Fencing	Inspect and repair fencing as necessary.	Annually	
	Maintain Drainage Ways	Keep all drainage ways clear of debris and guarantee positive flow.	Monthly	Buildings and Grounds Manager, Contractor
Sealcoat Parking Lot	Sealcoat in conjunction with other Township campus parking lots.	2021		