



Project Intent

for a 'New Home' facility

General

A showcase facility that can be a learning tool and an inspirational example for our membership, the public and the building profession

**demonstrate leadership in state-of-the-art environmental and energy efficient design by using the most advanced, innovative and cost-effective products available*

**protect and enhance indoor air quality to ensure the health, comfort and productivity of the occupants*

coordinate plans with neighbors (McHenry County Soil & Water Conservation District, McHenry County Conservation District)

Placement

consider the views the office and other parts of the building will have

consider where snow will be stored -it should not be pushed to a sensitive area (downhill is easiest)

Energy

Maximum environmental and financial benefits via 1) energy efficiency, 2) renewable energy sources, and 3) sale of excess energy

**energy efficient*

**separate, programmable thermostat controls in different building areas*

**make maximum use of passive solar energy*

**solar electricity - get grant for large installation if not, possibly just have solar demo*

**connect to grid, sell excess electricity to ComEd*

radiant heat where appropriate

target a specific amount of energy savings, possibly 30-60% over comparable bldg

have ability to shutter solar light

possibly locate recycling center (which needs highest ceilings) at south side of building for passive day lighting to reduce electricity needs and to improve quality of light/space

Materials

Use of innovative, natural, renewable, low-toxic and/or recycled materials in place of conventional materials, to reduce toxic emissions from unsustainable manufacturing processes, and to demonstrate these materials' viability under actual conditions

**use non-toxic materials, paints, glues, etc., with low VOC's*

use reclaimed or recycled materials when possible such as old tires

use re-manufactured materials such as rubber flooring

use sustainably-harvested natural &/or organic materials such as cork, cob, bamboo, straw, etc.
use salvaged lumber for interior doors, trim
reuse doors etc. for shelving, benches
preference for wood from certified well-managed domestic forests
possibly a “green roof” i.e., plant life on the roof, possibly part green, part solar

Structure

Demonstration of cutting-edge, cost-effective energy-efficient design and equipment throughout the building

**handicapped-accessibility to all spaces, exterior and interior*

**flexibility for future expansion or conversion of activities, etc.*

**hide recycling trucks from road and from neighbors (Soil & Water)*

nice looking

fit in with surroundings, possibly via earth berming

accessible to all

systems that are simple to use, low maintenance

possibly entire building on one level

possibly two-story high ceilings on recycle center space, with remaining part of building on higher ground having entrance at second-story level

if two stories of office/public use space, possibly have recycle center office against shared wall with loft over office that is accessible from second floor

if two stories of office/public use space, possibly an elevator for handicapped & for hauling of storage btwn floors, elevator having front and rear doors, so can exit into meeting room space or to loft over recycle center office

if two stories of office/public use space, possibly an indoor wheelchair ramp wrapping around library or an atrium, with space under ramp being used somehow

ventilation for second floor, possibly via fan system or solar-powered roof fan

possibly have Pac-Man shape building, round part facing front, missing pie piece directly in back, so trucks park at recycle center docks in back but neighbors and passers-by can't see them

possibly a single public entrance to non-recycle center spaces, entering into a round atrium with interior entrances to other spaces, with moveable reception area and with wheelchair ramp wrapping around rotunda

Miscellaneous

**minimal site disturbance during construction*

**use the best techniques in erosion control*

**document site preparation and construction for use as educational tool*

**exterior should make a statement but not too funky*

**lots of electrical outlets*

attractive for resale

visible from road

use natural &/or organic materials for furniture such as buckthorn

lots of plants

a rest stop for bicyclists; maybe have refreshments on site like in library coffee shop

consider how building will affect the experience of natural areas

Grounds

“Curb appeal” for environmentally-sound landscaping and water management practices

Demonstrations

**native landscape*

**composting*

land application of grey water or grey & black

no-mow grass

suburban yard natural landscape

gardens appropriate for town homes, conventional lot, large lot, commercial lot, industrial lot

gardens for wildlife such as butterflies, hummingbirds

self-sustaining garden

organic garden

edible prairie

herb garden

water harvesting, including reuse of grey water, wastewater

solar energy (via the building itself)

possible wind energy

demos should be coordinated with neighbors to prevent duplication

constructed wetland w/ proper buffers (usually 100 ft)

Critter

bird houses

bat houses

Signage

attractive, large sign at road entrance

matching signs on public side of building above doorways, designating each area (e.g., Library, Sale Shop, Recycling Center)

signs at each demo site, giving explanations

Roads

**shared entrance to site shared with neighbors (Soil & Water etc.)*

use permeable pavers

minimal road width

vegetated swales along roads without curb and gutter

Parking

**minimal paved parking space*

**filter strips around parking area*

depressional islands in parking area

potentially share parking with neighbors (Soil & Water etc.)

use permeable pavers

non-paved (grass) overflow parking for special events - fit 125 cars

ample bicycle parking

low-dust drives and parking

consider traffic flow in the design

Lighting

**lights should be minimal, yellow, pointing down not out (to make them critter-friendly)*

solar lamp

possibly night lighting - but minimal

possibly motion detectors - but ecologically sensitive

Miscellaneous

deal with roof runoff, possibly via capturing water for reuse or move water to swales

horizontal spreader for runoff

recharge of water to groundwater

possibly provide time table for outdoor development that requires just basics first, add demos over the years

provide summer shade

possibly a bicycle path

outdoor classroom

Recycling Center

A recycling facility that is convenient for the public to use, efficient for recycling workers to process and ship out materials, unoffensive to other building occupants and neighbors

Placement

**blocking sight of trucks from neighbors and the road, possibly via “beauty strip”, earth berms, soil barriers possibly via having dock area semi-underground*

**parking enough to accommodate at least 10 spaces at drop off area, and room for cars to turn around and back up to drop off doorway*

**reduce noise heard in office by placing recycling far away from office area of building, with sale shop & processing center between them*

easy access, possibly via a frontage road

possibly facing south

Structure

**Minimum 4500 ft2 for processing area*

**Minimum 600 ft2 for drop off area*

**ceilings at least 16 feet high, possibly w/ a slope to 12 feet*

**large access-way, possibly via double doors, to re-use processing center*

**minimum six or seven docks via dock peninsula*

**a room for drop off area separate from both 1) rest of recycling area and 2) re-use processing area Not required to be as well insulated*

**recycling office up front i.e. easy access to drop off area*

good ventilation

day lighting possibly via skylights

possibly moveable & soundproof walls between recycling and sale shop or re-use processing center

raised docks (for easy loading)

possibly have walls/doors from outside to drop off area that slide open so 4-5 cars can back up to the opening

secured drop-off area to prevent after-hours dumping

recycling center office against inside wall

possibly a loft over the office

bathroom (see restrooms category below)

convenient location for washroom

possibly a shower

locker room

reduce noise of machines possibly via insulation

Activities to Accommodate

**two exterior doors to drop off area*

make special flow for people selling cans - drop off area & payment area that is accessible yet doesn't interrupt flow of other drop off activities

larger office paper area than we currently have - areas for sorting and for storing

larger copper and brass area than we currently have

fixing, recycling computers
breaking down metals into recyclable components
improve recycling education signs

Space: What Should Fit

**grounds outside should include 1) dock w/ room for 6 or 7 trailers; 2) parking for one box truck and one van*

storage on the trailers, ready for shipment as soon as a trailer is full
prominent recycling office
Drop off area for: Sales to Defenders: aluminum cans copper & brass Pay Defenders to Take: batteries
) plastic #1 plastic #2 newspaper (three carts approx 6ft long each) office paper telephone books
paperboard cardboard Styrofoam packing peanuts computers & computer accessories
room to take in a lot of stuff
space for dumpster
space for truck and van
space for possible additional scale for weighing
tool storage
composter storage

Miscellaneous

bell that customer can ring for help
keep aluminum away from entrance
keep noisiest machines farthest from rest of building areas

Re-Use Processing Center

Space to prepare items for sale that were donated to either sale shop or recycling center, including repairing, washing, pricing and storing items

Placement

next to recycling center

Structure

**ceilings at least 10 ft high*

**flooring that can take a beating*

**entrance for drop off of items, separate from recycling center or sale shop*

**connecting doors/doorways between recycling center & workshop, between workshop and sale shop*

**all doors large enough for big furniture*

**laundry sink*

possibly 900 to 1200 ft²

moveable wall between recycling center & workshop

moveable walls creating spaces for: 1) accepting resale item donations 2) storage until items are repaired/cleaned 3) cleaning/repair workspace 4) pricing 5) storage of rejects waiting to go to Good Will

possibly an outside spigot for washing large or nasty items

Space: What

place to store bicycles, doors, small resale items, etc. for cleaning/repair before sale

place to clean/repair bicycles, doors, small resale items, etc.

place to price all items

laundry sink (grey water okay)

work bench

pricing table

shelving for storing merchandise

space should be at least double what WNW has currently

Miscellaneous

**good lighting at night (not just natural light)*

Sale Shop

A single location for all items for sale, whether new or used, big or small

Placement

- *near office so volunteers can cover both areas*
- *easy access for customers*

Structure

- *sale shop + resale processing center should total at least 2000 ft²*
- *ceilings at least 10 ft high*
- *separate entrance from outside or foyer (so don't have to enter through office or recycling drop off)*
- *all sale items in one large space, including new & resale, big & little, etc.*
- *separate climate control*
- *adequate heat - 50-90°*
- *prevent recycle center dust from getting in, possibly via walls between sale shop and recycle center that go to ceiling*

possibly warehouse style (everything in one big room), but nicer
ceilings that are easy to hang things from, such as signs, artwork
good lighting

additional entrance from the office area

no steps to gain access

possibly have sub-rental cubicles within the store for independent sellers, like an antique mall

possibly three areas: one for new things, one for small used, one for big used

separated into vignettes, possibly via movable walls, for different store depts, i.e. kitchen, garden, etc.

display windows

sufficient wall space

large window between store and office so office personnel can see into store

Space: What Should Fit

Store Departments

- teaching materials
- business opportunities
- adult manufacturing
- “kid-safe” area for learning and manufacturing
- kitchen
- garden
- possibly used clothing

Miscellaneous

eventually a full time person to run sale shop

bell that rings automatically when someone enters - from outside or from an adjoining room

As items are received for sale/resale, barcode them and record item description in a book or computer, so they're immediately ready for sale

If there is a foyer public enters to access other spaces in building, have “teaser” sale items, free items, brochures in the foyer

conspicuous area on the way out the door to pay for items, with Pay Here sign

Library

An inviting, comfortable and easy-to-use library to house the area's largest environmental collection, open to the public

Placement

at front of building

Structure

**accessibility by volunteers in office and the public*

**lots of electrical outlets, including in floor where patron tables will be*

**telephone line at reference desk*

note that current space is 17ft x 17ft for books. It should be bigger half again as much at the very least.

good lighting

keep books from direct sunlight

possibly a shared entrance with entrance to office so public goes through library to access office

separate from meeting space

possibly have library double as meeting space

definite separation between public library space and private office space

open office space area between library and private offices

computer line at patron Internet access computer

all new technology that is available

Space: What Should Fit

**books - more than our current 25 feet wide of shelving*

reference desk for librarian or for use as volunteer work space

telephone at reference desk

compactor shelving - fits twice as many shelves in space by allowing them to sit flush against one another, then be moved one at a time. C Electronic option: "White Isle Saver" shelving - moves shelves electronically. Designed&installed by Chicago Power

Files Plus Inc, 480 Wrightwood Av, Elmhurst IL 60126, (312) 279-1314. See McHenry Co. Gov't Ctr law library for example. C Manually-operated option: See Monsanto Center Library at Missouri Botanical Garden for example

card catalogue: 6.5ft x 2.5ft

1-2 computers to serve as card catalogue searchable from home on the Internet

magazines - more room than current

government reports

videos

tv/vcr/headset for viewing videos

computer for Internet access by patrons

patron tables & straight-backed chairs

patron comfy chairs

no chairs in front of books (need easy accessibility to books)

patron photocopier - with coin-op and card option or pay via honor system (but that's a drain on personnel time)

one whole wall devoted to community info bulletin board w/ flyers of upcoming events etc., not in library perhaps

rack to display brochures/leaflets either here or in foyer
at least 24 file drawers for pamphlets
at least 50 ft2 to display educational materials, such as non-toxic home stuffed otter in glass case
numerous maps

Miscellaneous

should look inviting to the public
bell that rings automatically when someone enters - from outside or from an adjoining room (in case staff/volunteers are elsewhere, and need to know of customer presence)
keep books low enough that no ladder is needed to reach any, but maybe have displays up high, so ladder needed to access those

Possible Foyer / Lobby

Possible room into which public might enter to reach all spaces except recycling

if a second story, possibly have wheelchair ramp wind around rotunda/foyer to 2d floor
possibly double as largest meeting space - to accommodate 200 people at annual meetings
have teaser items from store here
could serve as a commons area for people to gather, or a commons could be located in or near library/office areas
possibly put coffee shop here

Miscellaneous

use rotunda as place for students to gather and be counted before getting back on buses

Possible Greenhouse

Placement

on south side

Miscellaneous

possibly rent space in greenhouse to others
use for prairie plant production, such as for WPPC plant sales

Office

An ergonomically-efficient, harmonious place in which to run the day-to-day business of the organization and house its day-to-day documents, equipment and furnishings

Placement

possibly in back, less visible than public spaces like library, sale shop & recycle center drop off
easily accessible from all parts of building

Structure

**Two general areas of the office: a “private area” consisting of several private offices for staff and an open “public area” which is inviting and accessible to the public*

**four private offices for staff*

**open “public” work area for volunteers and staff (so staff has choice between being in their private offices or open area)*

**small conference room for 2-3 person staff conferences*

**separate climate control*

**comfortable in warm weather, possibly via air conditioning*

**lots of light*

comfortable

safe

separate entrance

Space: What Should Fit

two large tables for volunteer work space: 1) for answering phones 2) computer work space: computer, monitor, printer, scanner

fax machine

photocopier

collating table/counter at least 9' x 2' (large enough for 22 piles as wide as #10 envelope)

table or space for mail: scale, postage supplies, outgoing mail pile

table or space for in-bins, e.g., for mail to be processed for outgoing, for volunteer tasks, etc.

At least 40 mailboxes for board members, committees (18 board members, 4 staff, 4 volunteers, 13?)

file drawers for: board documents each committee (13) newsletters & info sources general office

supply cabinet

space or cabinet deep enough for two-ream-deep paper supply boxes

cabinet for computer manuals & disks

table for computer server, monitor & keyboard (for whenever computers get networked)

paper recycling center: white file stock magazines newspaper paperboard cardboard

display area for membership info

L-shaped wall units in each private office: short end for computer monitor, paper supplies & work

Image

combat re-use & recycling as only image

re-affirm and make our advocacy visible

work with other not-for-profit groups

Kitchen

A kitchen both to meet the daily needs of building workers and to allow up to four people to work simultaneously to serve larger events

Placement

***near meeting rooms and office area**
semi-hidden yet accessible
upstairs if there is two levels

Structure

room for four people to work in kitchen comfortably
big enough to expand it later -
pass-through window from kitchen to meeting space
possibly keep grey water separate from black water

Arrangement

cold zone near wet zone near dry zone near hot zone
cold zone: fridge/freezer
wet zone: sink coffee maker dishwashing supplies food washing supplies utensils for wet e.g.,
colander, salad spinner
dry zone: dry food storage food prep area cutting boards
hot zone: oven/stove convection oven or something similar toaster oven pots & pans storage trivets,
oven mitts hand tools

Space: What Should Fit

island for food preparation
counter with 2-basin sink
stove & oven
1/2 size refrigerator
convection oven or something similar
toaster oven
coffee maker
storage for plates, cups, silverware - at least enough for 20 people, possibly enough for 200 people
storage for food
recycling center: glass, aluminum cans, tin cans
garbage with removable piece at top for food scraps
possibly a worm bin (bin might be kept in library instead)

Miscellaneous

For energy efficiency, keep refrigerator away from stove/oven, dishwasher, or sunny windows
Keep stove away from a wall on the side -

Meeting Space

Flexible space to accommodate at least three committee meetings simultaneously, 22-person board meetings, and 50-person public events

Placement

possibly a second floor to be added above non-recycle center areas (recycle center will be equivalent of 2 stories high by itself), could be added at a later date when \$ allows
possibly use the foyer/rotunda as the largest meeting space

Structure

***one wall without windows or doors - so it may be used as a screen**
***include a large conference room with 50-person capacity**
***moveable and fairly soundproof walls to allow adjusting of size of conference rooms, and ability to open walls into one big room**
possibly add or finish this space some time after the rest of the building, when money allows
natural light
private
space for several conference rooms so more than one meeting can take place at the same time
possibly allow rooms to open up into space holding 120-200 people - maybe combine library & office space with meeting space to get this big
big walk-in closet to hold tables, equipment
lots of electrical outlets, including in floor
possibility to network computer in meeting space to office computers
possibly have room for 65 person events (school children events usually involve 60 kids + staff)

Space: What Should Fit

folding tables and chairs - possibly enough to seat 200
board meeting table(s) to fit 24-30 people
tv/vcr
wall screen
overhead projector
Power Point projector
slide projector
easels
blackboard
possibly bathroom(s) (if it doubles as a community center)

Miscellaneous

possibly serve as a community center with a kid-safe area

Storage

A single, accessible, dry, well-organized and user-friendly storage area for all items not used on a daily basis

Placement

***Accessible by person with heavy load**

If there are two levels, this could be on second level

Structure

***A separate room**

Space: What Should Fit

***dry storage for archives: recycling records 7 years of financials a file cabinet for each committee (13) board meeting documents general office documents records re: past protests, etc. old membership records**

boxes of extra brochures

backup stock of books for sale

4-5 feet of space for various signs

large walk-in closet or room for special events supplies including:

- 1) Backyard Ecology supplies such as kits, eyedroppers, baskets, paperwork. (currently uses approx
- 2) Eco-Watch supplies such as 5-gallon buckets, etc.
- 3) Earth Day supplies such as recycled craft supply bins, poster boards, etc.
- 4) Tag Days supplies such as seed packets, etc.
- 5) committee displays PLUS a check-out system for removing anything from the room

possibly a mud room where cleaned items can dry before being put away

20 boxes reclaimed paper, file folders, envelopes, etc.

posters

lots of shelving

Restrooms

A minimum of two restrooms, one for recycling staff, and one for office staff

Placement

(check bldg code for # bathrooms required per number of workers)

shared wall between recycling toilet & other toilets

Structure

***alternative hot water heating, possibly via on-demand hot water heater**

handicapped accessibility

toilets (preference for composting or other alternative toilet) on inside wall (so less chance for pipes

filtered rain water for hand washing

possibly extra toilets for the public

Space: What Should Fit

toilet: possibly a composting toilet with fan possibly a variable flush toilet with forward area for #1 and remaining area for #2

sinks in same room with toilet

large toilet paper storage