CRITERION 2:

"the facility is so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected"
415 ILCS 5/39.2(a)(ii)

- Receipt, solidification and transfer of hydro excavation wastes;
- Operation of a courtesy drop off for electronic wastes; and
- Receipt and transfer of source-separated recyclables (referred to as "SSR" or more generally as "recyclables").

Loads of MSW from collection vehicles will be consolidated into larger loads for transport to an area landfill for disposal. Loads of hydro excavation wastes will be solidified and then transported to an area landfill for disposal. Electronic waste from West Chicago citizens will be consolidated and transported to recovery facility. Loads of recyclables from collection vehicles will be consolidated into larger loads for transport to a material recovery facility (MRF), such as LRS's MRF in Forest View, for re-use as a commodity. The proposed operations at the West DuPage RTS will allow for more efficient processing and/or transportation of these materials to a MRF or disposal facility (landfill). In addition, the expanded operations at the facility will allow for more improved recycling of the C&D.

West DuPage RTS is a unique facility due its desirable location, relatively large size, and diversity of operations, and will be a premier waste management and recycling facility in the State of Illinois.

Subject to Illinois Environmental Protection Agency (IEPA) permitting, West DuPage RTS is anticipated to accept up to 2,300 tons per day of MSW, hydro excavation wastes, C&D and SSR, of which up to 1,000 tons per day may be MSW.

leak or have trash clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations.

As discussed in the operating plan, the West DuPage RTS meets all of the above criteria so will be compatible with safe airport operations.

LRS contracted Loomacres Wildlife Management (Loomacres) to conduct a wildlife hazard evaluation at the Site. A site visit was conducted from June 17 to June 19, 2019. The wildlife hazard evaluation performed by Loomacres included observations of wildlife hazard attractants and surveying wildlife at multiple locations. Recommendation to minimize wildlife hazard attractants and mitigate the presence of wildlife is also provided. The Loomacres report is provided in Appendix 2-G1. The Site will perform various measures as recommended in the Loomacres report to minimize wildlife hazard attractants and mitigate the presence of birds and other wildlife on the West DuPage RTS. We believe the implementation of these measures will reduce the presence of birds and other wildlife compared to existing conditions.

As noted above, the Advisory Circular indicates that waste handling facilities should not be located within an RPZ. FAA Advisory Circular 150/5300-13A, Section 310 indicates the following regarding the RPZ:

- The RPZ's function is to enhance the protection of people and property on the ground through the airport ownership over RPZs.
- The RPZ is trapezoidal in shape and is centered about the extended runway centerline.
- The RPZ has two components with varying widths (central portion and controlled activity), and the approach RPZ may be different from the departure RPZ.
- The RPZ generally extends 1,000 feet from the end of the runway.

The runways at the DuPage Airport runways are either not orientated in the direction of the West DuPage RTS or are over 1,000 feet from West DuPage RTS operational areas. Thus, we believe the West DuPage RTS is not located within an RPZ.

The height of all buildings and structures at the West DuPage RTS are subject to a clear zone avigation easement (Avigation Easement). The Avigation Easement is provided in Appendix 2-G2 and indicates that a specified clear zone area be and remain free and clear of any structure, tree or other object which is or would constitute an obstruction or hazard to the flight of aircraft landing or taking off from the DuPage Airport. The clear zone area varies in elevation across the Site ranging from approximately elevation 785 feet mean sea level at the western property limit (closest to the DuPage Airport) to approximately elevation 825 feet mean sea level at the eastern property

Lights are installed at the site entrance, in parking areas and on the transfer station building to provide adequate lighting. A security camera system will also be installed at strategic locations around the Site. The Site currently has approximately fifty security cameras located inside and outside of buildings, which have twenty-four-hour local and remote viewing access.

Per the Host Agreement, any area used for the outdoor storage of any material or equipment will be fenced and visually screened from viewing from off the Site by means of said fence and appropriate landscaping as approved by the city.

2.4.13 VEHICLE FUELING PROCEDURES

Vehicles will be fueled using mobile equipment. Fuel tanks are also located on-site.

2.4.14 COMMUNICATIONS

All equipment operators at the facility will be equipped to communicate with the facility manager and other personnel via mobile phone at all times during operating hours. Emergency numbers will be clearly posted.

2.4.15 RECORDKEEPING

Accurate and up-to-date records documenting facility operations will be maintained at the Site. These records will include, but are not limited to, the following:

- Daily records of the amounts and description of the various types of materials received;
- Load inspection reports;
- Results of inspections (by IEPA, county, or local authorities);
- Copies of all submitted reports (to IEPA, county, or local authorities);
- Employee training records; and
- Employee personnel records.

The records will be maintained for a period of at least two years. The records of the amounts and description of the various types of materials received will include both waste receipts and scale weight on the disposal tickets and logs (electronic and/or hard copies), including, without limitation, those showing the amount in tons of all material received.

2.4.16 SITE THROUGHPUT CAPACITY

West DuPage RTS is anticipated to receive and efficiently manage up to 2,300 tons per day of MSW, hydro excavation wastes, C&D and SSR, of which up to 1,000 tons per day would be MSW.

Upon start-up of operations, smaller volumes will be received. The typical amount of material accepted is anticipated to be approximately 1,500 tons per day with an approximate breakdown of 650 tons per day MSW, 100 tons per day hydro excavation wastes, 600 tons per day general construction and demolition debris and 150 tons per day SSR.

The site and operating features that determine the daily throughput capacity of a transfer station are the following:

- Incoming waste flow;
- The available capacity to queue incoming waste vehicles;
- The time needed for collection vehicles to empty their loads and exit the facility;
- The time needed to load a transfer trailer;
- The tipping floor size and stockpiling capacity; and
- The operating hours of the facility.

2.4.17 DAILY OPERATING CAPACITY AND THROUGHPUT CAPACITY DESIGN

The following summarizes our evaluation of Site features that are determinative of daily operating capacity and throughput capacity, relative to the anticipated acceptance volumes. The assumptions discussed below are typical estimates and may vary.

2.4.17.1 Incoming Waste Flow

This evaluation utilizes a summary of the anticipated collection and transportation times based on the following:

- The current route schedules MSW and SSR collection vehicles of West DuPage RTS, which times are not expected to substantially change with the operation of West DuPage RTS.
- The current incoming C&D collection vehicle times at the Site.
- The incoming hydro excavation waste acceptance times at LRS's facility in Forest View.

The information indicates the following:

- Minor amounts of MSW and SSR will be accepted prior to 10:00 a.m.;
- The peak hours of MSW and SSR acceptance will be between 10:00 a.m. and 12:00 p.m., and then again between 2:00 p.m. and 4:00 p.m.;
- Waste and SSR acceptance volumes will decrease after 4:00 p.m.;

tons per eight minutes, MSW and/or SSR may not need to be stored on the tipping floor (assuming waste is being loaded during that time). If the MSW and/or SSR is being unloaded onto the tipping floor at a rate of greater than 24 tons per eight minutes, MSW and/or SSR will need to be stored on the tipping floor. If a longer time is taken to load the transfer trailer, additional waste will need to be stored. It should be noted that transfer trailer loading can occur simultaneously with unloading occurring.

Based on the above, the facility has the capacity to load up to 7.5 transfer trailers per hour of MSW and/or SSR (or approximately 192 tons per hour of MSW and/or SSR).

2.4.17.4 C&D Transfer and Processing Rate

The C&D transfer and processing procedures vary by the type of material accepted. Source separated materials (e.g., shingles, broken concrete) are not processed through the screener and sorting line. These types of loads are much heavier than mixed C&D loads so typically comprise a significant percentage of the general C&D accepted on a weight basis.

Mixed loads of C&D are processed through the screener and sorting line to remove as much recyclable material as practical. Materials separated by the screener are transported via conveyor to the cover building. Materials separated by the sorting line are dropped into storage bunkers. Non-recyclable materials from the sorting line proceed through the sorting line and are deposited in a separate storage bunker for subsequent transfer through the MSW and SSR transfer building loading pit.

Based on historical operations, the Site can manage (separate, transport and/or distribute into storage bays for subsequent recycling) approximately 60 tons per hour. The load out of recyclable material is not required every day so is not a limiting factor in the throughput evaluation. The amount of non-recyclable material required to be loaded out via the MSW and SSR transfer building loading pit is 250 tons per day (25% of 1,000 tons per day of C&D). The load out of the non-recyclable material is included in the evaluation of the load out of the MSW.

The storage capacity of the C&D transfer/screening building is at least 260 tons (100 feet long by 35 feet wide by 10 feet high by 0.8 slope factor) so provides ample storage capacity to accommodate processing.

2.4.17.5 Tipping Floor Size and Stockpiling Capacity

The tipping floor for the MSW and SSR transfer building is approximately 17,100 square feet (90 feet by 190 feet). Waste and SSR will be unloaded in separate locations so waste and SSR cannot

occupy the entire tipping floor as adequate maneuvering space is needed for the loader and the disposal vehicles. The MSW waste is anticipated to be staged on the west portion of the tipping floor, which has an area of approximately 90 feet by 50 feet. Assuming a 10-foot average height and 0.8 slope loss factor, the waste storage capacity in this area is approximately 1,333 cubic yards (or approximately 335 tons assuming a waste density of 500 pounds per cubic yard).

The SSR is anticipated to be primarily staged in the southeast corner of the tipping floor, which has an area of approximately 50 feet by 20 feet. Assuming a 10-foot average SSR height and 0.8 slope loss factor, the SSR storage capacity in this area is approximately 300 cubic yards (or approximately 60 tons assuming a waste density of 400 pounds per cubic yard). A similarly sized staging area is available along the north perimeter if needed so the total storage capacity for SSR is approximately 600 cubic yards or 120 tons.

2.4.17.6 Operating Hours

West DuPage RTS anticipates operating hours of up to 4:00 a.m. to 12:00 a.m. on weekdays and 4:00 a.m. to 12:00 p.m. on Saturdays, which is similar to LRS's current site operating hours. These hours will allow operational flexibility to accommodate specific customer or market needs. However, the transfer station facility will not be open all of these hours if the customer needs and market do not warrant those hours.

2.4.17.7 Evaluation of Maximum Amount

Tables 2-1, 2-2 and **2-3**, located in the tables section of this Criterion, provide an evaluation of the needed tipping floor storage volume for 2,300 tons per day of MSW, hydro excavation wastes, C&D and SSR, of which 1,000 tons per day would be MSW. To evaluate a "worst case" scenario, 1,000 tons per day is assumed to be C&D, 300 tons per day is assumed to be SSR, 1,000 tons per day is assumed to be MSW, and zero tons per day is assumed to be hydro excavation waste. The acceptance rate for C&D, SSR and MSW is based on current and anticipated LRS delivery times and relative amounts and percentage of collection vehicles (packer versus roll offs).

As shown in Tables 2-2 and 2-3, the MSW and SSR transfer building is anticipated to receive up to twenty-two MSW waste collection vehicles and six SSR vehicle in one hour (which is less than 60% of the unloading capacity of the MSW and SSR transfer building). Assuming that the transfer trailers are loaded at an average of 6.5 per hour during the peak hours (which is 87% of the loading capacity for both MSW and SSR), the amount of MSW needed to be stored on the tipping floor is approximately 31% of its storage capacity (104 tons of required floor storage/335 tons of storage capacity) and the amount of SSR needed to be stored on the tipping floor is approximately 42% of its storage capacity (51 tons of required floor storage/120 tons of storage capacity).

Table 2-3
West DuPage Recycling and Transfer Station
Projected Material Processing and Traffic Volume
1,000 Tons Per Day MSW

Time	LRS Collection Vehicle Distribution		Municipal Solid Waste Delivered									Outgoing MSW			Municipal Solid Waste Transferred				Required Tip Floor Storage	
	Hour Incoming		Hour Incoming				Total Hourly Incoming			Cumulative Incoming		from C&D	from SSR	MSW	Hourly Transferred			Hourly Truck Volumes		
(Hour Beginning)	Packer (trucks)	Roll-off (trucks)	Packer (trucks)	Packer (tons)	Roll-off (trucks)	Roll-off (tons)	Trucks	Tons	yd^3	Tons	yd^3	Tons	Tons	Tons	Trucks	Tons	yd^3	(trucks)	Tons	yd^3
12:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0.0%	2.0%	0	0	3	12	3	12	62	12	62	5	0	12	0	0	0	3	17	70
6:00 AM	0.0%	4.0%	0	0	6	25	6	25	125	37	187	25	0	37	2	48	240	8	14	58
7:00 AM	2.0%	4.0%	3	25	6	25	9	50	250	87	437	45	1	87	2	48	240	11	37	150
8:00 AM	5.0%	4.0%	8	62	6	25	14	87	437	175	874	65	2	175	5	120	600	19	26	104
9:00 AM	5.0%	4.0%	8	62	6	25	14	87	437	262	1310	85	3	262	5	120	600	19	14	58
10:00 AM	10.0%	4.0%	16	125	6	25	22	150	749	412	2059	110	6	412	5	120	600	27	71	286
11:00 AM	10.0%	4.0%	16	125	6	25	22	150	749	562	2808	135	8	562	6	144	720	28	104	417
12:00 PM	3.0%	4.0%	5	37	6	25	11	62	312	624	3120	155	9	624	5	120	600	16	68	270
1:00 PM	3.0%	4.0%	5	37	6	25	11	62	312	686	3432	175	10	686	6	144	720	17	7	28
2:00 PM	10.0%	2.0%	16	125	3	12	19	137	686	824	4118	200	12	824	5	120	600	24	52	206
3:00 PM	10.0%	2.0%	16	125	3	12	19	137	686	961	4805	225	14	961	6	144	720	25	72	288
4:00 PM	2.0%	2.0%	3	25	3	12	6	37	187	998	4992	245	15	998	4	96	480	10	34	137
5:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	1.63	39.12	195.6	2	0	0
6:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
7:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
8:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
9:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
10:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
11:00 PM			0	0	0	0	0	0	0	998	4992	250	15	998	0	0	0	0	0	0
DAILY TOTALS	60%	40%	94	749	62	250	156	998	4992	998	4992	250	15	998	52.63	1263	6316	209	MAX 104	MAX 417

Assumptions:

156 Total Collection Vehicles per Day
1,000 Tons = Approximate Daily Throughput of Municipal Solid Waste (MSW)
8 tons = Average MSW Packer Truck Load
4 tons = Average MSW Roll-Off Truck Load
24 tons = Average MSW Transfer Trailer Load
1 ton MSW = 4 Cubic Yards on tipping floor (or 500 pounds/ cubic yard)

ATTACHMENT 7-1

STORMWATER POLLUTION PREVENTION PLAN

CITY OF
WEST CHICAGO

WHERE HISTORY & PROGRESS MEET

October 15, 2019

RE: Residential-zoned property located east of 1655 Powis Road, West Chicago, Illinois

To Whom It May Concern:

The Union Pacific Railroad line runs east of the subject property within Union Pacific Right of Way (ROW). While the ROW is zoned ER, Estate Residential, as an active rail line there can be no residential development within this corridor. Furthermore, there is insufficient room for a legally-sized series of Estate Residential lots including access to those lots. Finally, the ER zoning designation for the corridor is a remnant classification from the time it was annexed to the City of West Chicago.

As such, the City believes Section 22.14(a) 1,000 foot setback requirement is not applicable.

Please contact me if you have any questions.

Sincerely,

Tom Dabareiner AICP
Community Development Director/Zoning Administrator

475 Main Street
West Chicago, Illinois
60185

T (630) 293-2200
F (630) 293-3028
www.westchicago.org

Ruben Pineda
MAYOR

Nancy M. Smith
CITY CLERK

Michael L. Guttman
CITY ADMINISTRATOR

LOOMACRES
Wildlife Management

LAKESHORE RECYCLING SERVICES

WILDLIFE HAZARD SITE VISIT

June 2019

Prepared by:
Clayton Faidley, Airport Wildlife Biologist
Cody Bacuiska, Airport Wildlife Biologist