WATER & LIGHT COMPLEX
SITE ANALYSIS & USAGE PLAN
COLUMBIA, MISSOURI

COLUMBIA WATER & LIGHT

YAEGER ARCHITECTURE

CONFLUENCE

THHinc

February 10, 2013

INTRODUCTION & PROJECT SCOPE

The team of Yaeger Architecture, Confluence and THH was commissioned to prepare a site analysis and usage plan for the City of Columbia Water and Light Complex located at 1514 Business Loop 70 East in Columbia, Missouri. The purpose of the analysis and plan is to provide a planned phased approach to future site usage.

The specific scope of services included:

- An analysis of current facilities
- Current and future needs assessments
- Recommendation for renovation or reconfiguration
- Need for new construction of facilities on existing property
- Need for new construction of facilities on consultant identified property

TABLE OF CONTENTS

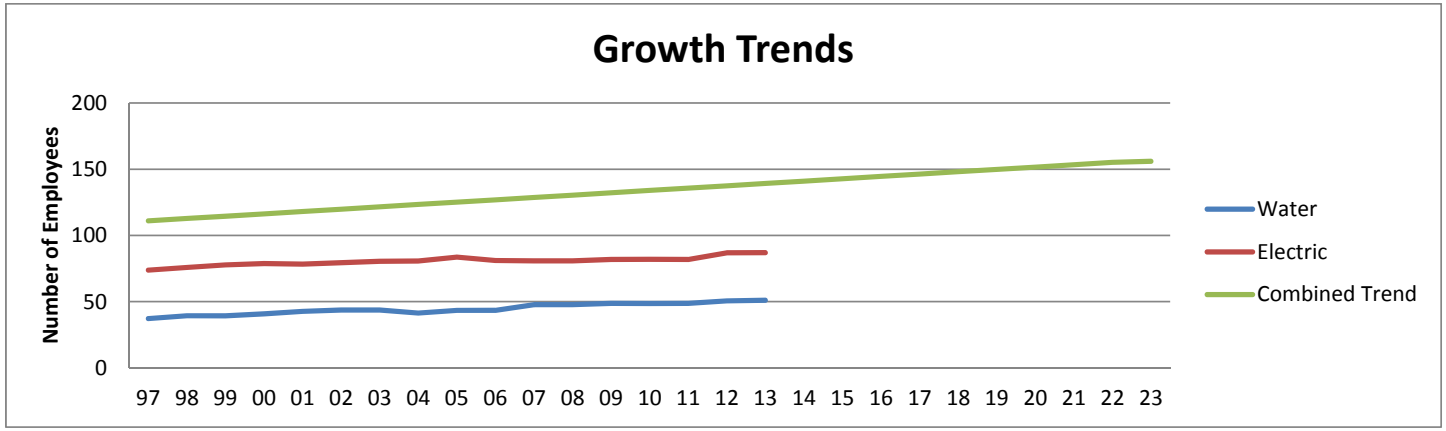
The result of this master planning effort is included in this document on following pages:

WATER & LIGHT DEPARTMENT BACKGROUND AND EVALUATION

The water and electric distribution complex has been located at its present site for over 50 years. The scope and mission of the two divisions have expanded significantly during that timeframe. In 1967 when the Heuchen building was constructed, the water and electric divisions served a population of approximately 58,500. Today they serve a population of nearly twice that number at 110,500. Census data indicates an average growth of the City of Columbia at approximately 2% per year.

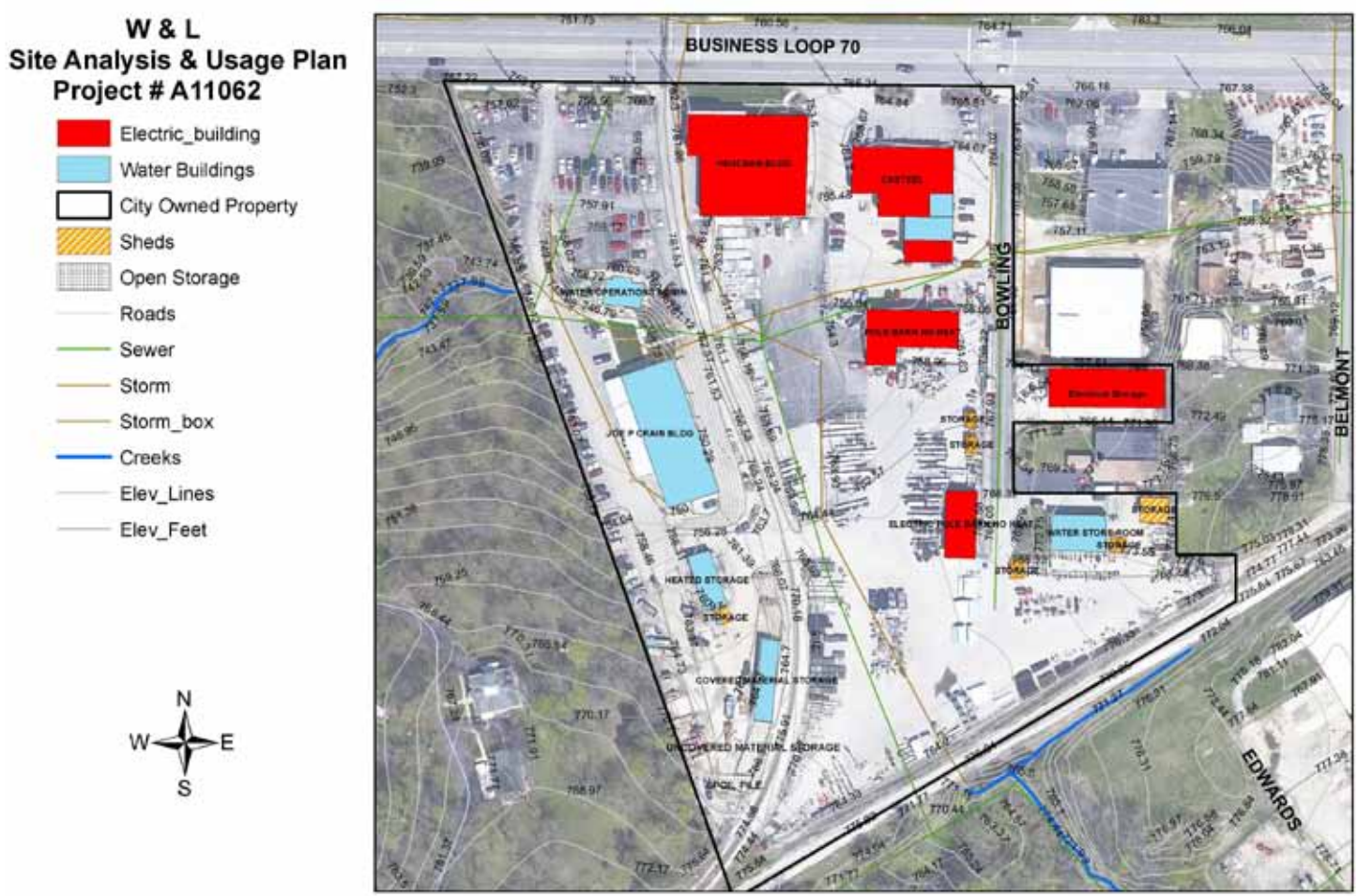
Comparatively the growth within the water and light divisions has been steady when averaged over the last 15 years just under 2% per year. The growth of the water and light divisions tracking closely to the growth of the population of the City, allowing us to project the future growth of the divisions for the next 10 years and beyond.

In 2012, the total number of Water and Light equivalent full time employees (FTE) was 137.5. The projected trend increase is as follows:
2022 is 155.2 FTE's
2023 is 170.3 FTE's



Development at the Water and Light complex over the years has been somewhat reactionary or in other words it has responded to a need at a specific point in time. This strategy works until the amount of available space to expand is used up. This explains the conditions at the site today. The divisions suffer from inadequate storage areas, lack of employee parking, difficult site circulation and an inefficient layout.

The design team met with the Water and Light divisions as a group in an open forum to discuss the issues that they face operating at the existing site. The discussion that followed identified the pros and cons of the location/ operations. The column to the right identifies the highlights.



EVALUATION OF EXISTING SITE CONDITIONS

Positive aspects of existing site:

- Current site is centrally located and familiar.

Challenges of existing site:

- Only one way in.
- Hard to see/find.
- Not easily accessed/ navigated by public.
- Circulation is difficult with utility poles, may need to remain off site.
- Need to continue 24/7 operations during construction.
- Not enough queuing for trucks and trailers (stack up on street).

Design staff asked 'What is impact of future population growth on W+L staffing and operations?'

- Currently, W+L is approximately 10% understaffed.
- Anticipate need to staff up an additional 10% (once 'fully staffed') to meet future demands based on population growth.
- Water and Light is a small utility that is growing.

Separate uses (public image vs. operations)

- Facilities to be attractive to public (separate bill paying public from muddy work boots)

Roofs are preferred for all vehicles, materials and equipment.

EVALUATION OF EXISTING SITE CONDITIONS (CONTINUED)

The following services can be combined between Water and Light:

- Vehicle maintenance
- Store room
- Customer Service (complaints and inquiries)
- Meter readers work for electrical but read both water and electric meters.
- Anticipate additional combined/coordinated services in the future.
- Both services are covered by one bill (which includes other services as well).

Top 5 Goals (resulting from exercise and staff discussion)

- Common Division Offices/ Entry Point for Water and Light Distribution Services
- All vehicles, equipment and materials under one roof
- Increase efficiency
- Flexibility for expansion and change
- No disruption to operations

Expensive wire rolls are stored in the open.

Limited conditioned space is available for essential vehicles.

The site is bisected by a rail line spur that divides the property.

Significant grade changes across the site make circulation difficult.

SITE ANALYSIS

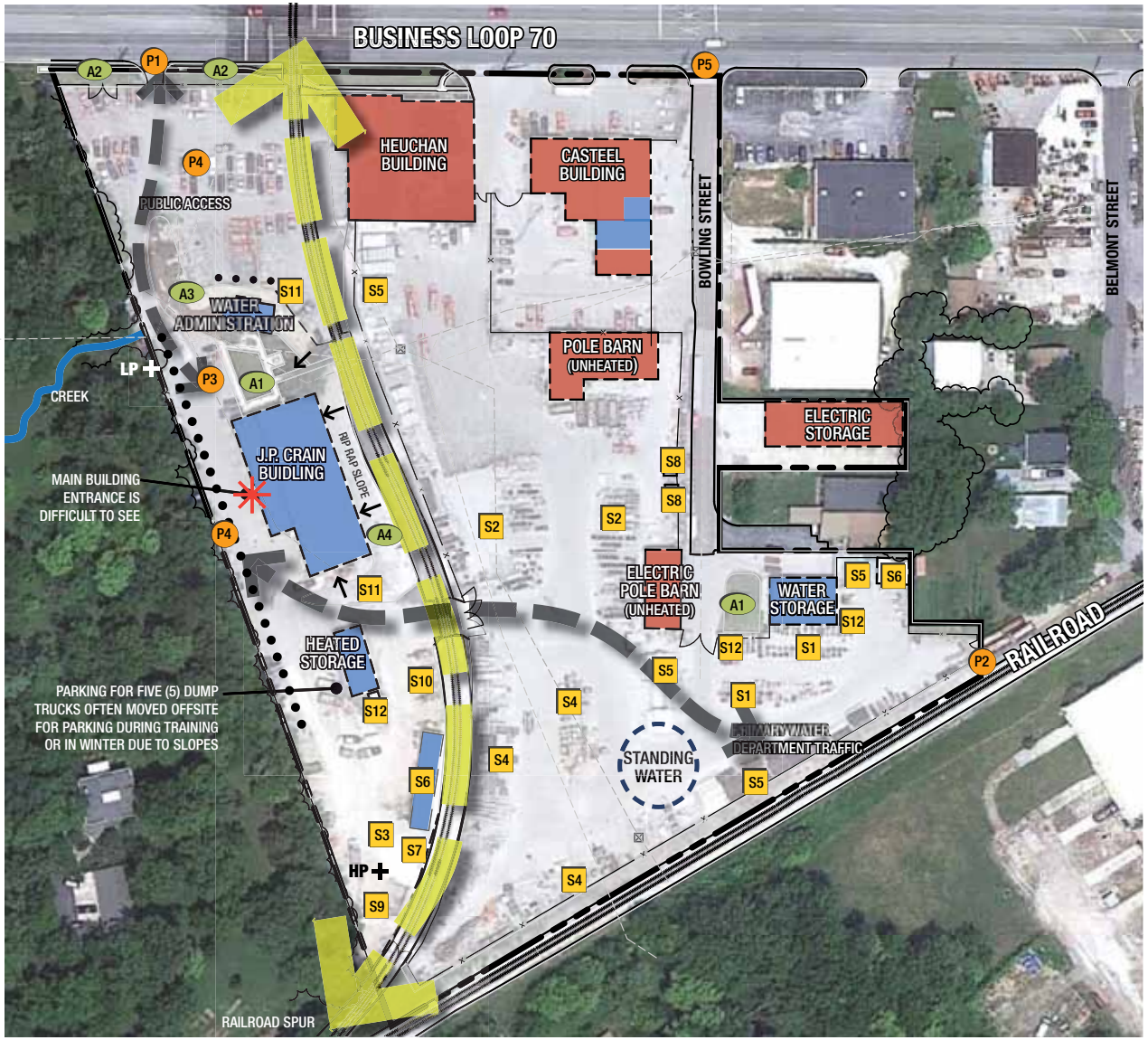
The existing site is comprised of 9.3 acres of land. It is located in a largely industrial area due South of the existing power plant.

Site Features

- Site is in a good location that is easily accessible
- Site largely fits the zoning of the surrounding area (industrial)
- Opportunities to expand the site area (by acquisition)
- Opportunities to improve circulation on site

Site Constraints

- Bisected by a rail line
- Many of the buildings are older
- Vertical drop across site
- Security is difficult due to rail line
- Vehicular circulation is difficult and tight
- No existing storm-water control



LEGEND:

- HP HIGH POINT
- LP LOW POINT
- INLET
- SEWER LINE
- MAIN BUILDING ENTRY
- ELECTRIC BUILDING
- WATER BUILDING
- SLOPE
- POWER RUNS FOR VEHICLES
- FENCELINE

KEYNOTES:
PARKING AND CIRCULATION

- P1 GATED-PUBLIC ENTRANCE (NO SIGNAGE)
- P2 GATE-FORMER ACCESS POINT
- P3 VISITOR PARKING
- P4 STAFF PARKING
- P5 SHIPPING & RECEIVING ENTRANCE

SITE USAGE

- S1 HYDRANT STORAGE
- S2 SPOOL STORAGE
- S3 SPOIL STORAGE
- S4 TRANSFORMER STORAGE
- S5 PIPE STORAGE
- S6 COVERED MATERIAL STORAGE (GRAVEL, TOPSOIL, ASPHALT)
- S7 UNCOVERED MATERIAL STORAGE (GRAVEL)
- S8 PCB STORAGE
- S9 RECYCLING
- S10 BACKHOES
- S11 DUMPSTER
- S12 SHED

SITE AMENITIES

- A1 TURF
- A2 DECORATIVE FENCE AND PEDESTRIAN LIGHTING
- A3 SIGNAGE
- A4 UTILITY POLES / PARKING LOT LIGHTS

ARCHITECTURAL PROGRAM - WATER DIVISION

Programming, Staffing and Equipment

The architectural program was developed using a baseline of the current facilities. All building functions were identified (office, storage, break room, etc.) and existing square footages were calculated. After interviewing the staff and discussing their operations, the baseline areas were evaluated and adjustments made to the program accounting. The following architectural program contains the detailed list of spaces discussed along with staff assignments and locations.

Item	Item No.	Description	Personell	Quantity	Area	2012 Current
1.1 General	1.1.1	Reception Area	Pam Mathews	1	63	63
	1.1.2	Waiting		0	0	0
		Circulation		35%		22
Net Area Subtotal						***85***
	1.2.1	Water Manager	Floyd Turner	1	143	143
	1.2.2	Distribution Superintendent	William Strawn	1	98	98
	1.2.3	Service Superintendent	Bob Drake	1	98	98
	1.2.4	Seasonal Temp		1	0	0
1.2 Private Office		Water Distribution Supervisor Office	Rick Turner, Tom Arnold, Greg Keimig, Homer Smith, Chad Martin, Tim Brandes, Scott Hern, James Phillipee, Shelby Perkins	7	73	511
		Engineering Aid IV / Technician	3 aids: Archie Hendren, Mike Ussery, Tom Taylor	1	73	73
						0
		Circulation		35%		119
Net Area Subtotal						***1,042***
1.3 Open Office	1.3.1	Meter Shop Technicians	4 techs: Kevin Crane, Joshua Hoyes, Kyle George, Dave Whitaker	1	240	240
		Meter Shop Offices	2 techs: Gregg Nichols, Kenny Hudson	1	220	220
		Circulation		35%		161
Net Area Subtotal						***621***

Item	Item No.	Description	Personell	Quantity	Area	2012 Current
	1.4.1	Mens		1	35	35
	1.4.2	Womens		1	35	35
	1.4.3	Copy room		1	95	95
	1.4.4	Small Conference		1	217	217
	1.4.5	Storage		1	15	15
	1.4.4	Conference Training Room		1	1,322	1,322
	1.4.5	Meter Shop		1	795	795
	1.4.6	Meter Storage		1	247	247
	1.4.7	Storage		1	102	102
	1.4.8	Men's		1	73	73
	1.4.9	Women's		1	73	73
	1.4.10	Men's		1	133	133
1.4 Support Spaces	1.4.11	Unisex Restroom		1	82	82
	1.4.12	Janitor		1	34	34
	1.4.13	Laundry		1	41	41
	1.4.14	Locker Room		1	353	353
	1.4.15	Map Room	2 workstations: Steve Gordon, Common workstation	1	108	108
	1.4.16	Lunch room		1	727	727
	1.4.17	Garage / Shop		1	2,440	2,440
		Circulation		35%	2,424	2,424
Net Area Subtotal						***9,351***
1.5 Truck Crews						
Net Area Subtotal						***0***
Total Net Square Footage						***11,099***
		Total Gross Square footage (includes 10% grossing factor)				***12,209***

ARCHITECTURAL PROGRAM - ELECTRIC DIVISION

Item	Item No.	Description	Personell	Current Location	Quantity	Area	2012 Current
2.1 General	2.1.1	Reception Area	Karla S.		1	80	80
	2.1.2	Waiting			1	60	60
	2.1.3	Vestibule			1	66	66
Net Area Subtotal							***206***

2.2 Private Office	2.2.1	Electric Distribution Manager	Tony C.	106	1	164	164
	2.2.2	Electric Services Super.	Gary M.	109	1	140	140
	2.2.3	Substation Repair Super.	Fred E.	112	1	135	135
	2.2.4	Line Super.	Bruce P.	107	1	143	143
	2.2.5	Line Super.	Andy C.	108	1	136	136
	2.2.6	Stores Super.	Aaron R.	113	1	240	240
	2.2.7	Stores Clerk	Peggy L.	114	1	109	109
	2.2.8	Utility locator Super.	Allen W.	110	1	135	135
	2.2.9	Electric meter repair Super.	Terry S.	125	1	115	115
	2.2.10	Electronic data specialist	Richard M.	116	1	100	100
	2.2.11	Open office	Roger M.	111	1	135	135
	2.2.12	Meter Readers	Morgan L. Eric J. Spencer L.	103	1	172	172
	2.2.13	Dispatcher		105	1	486	486
	2.2.14	Substation Tech Super.	Joshua B. Matt W. Jarrett M.	125	1	115	115
	2.2.15	Supervisors room	Charles S. Steve C. T. Wilson Larry F. R. Nowlin Don F. Gary N. Rick M. M. Acton Mike S. Carl T. Kevin T.	121	1	160	160
Net Area Subtotal							***2,485***

Item	Item No.	Description	Personell	Current Location	Quantity	Area	2012 Current
2.3 Open Office	2.3.1	Communications Tech	Scott L. J. Lee J. Wardenburg	127	1	360	360
	2.3.2	Meter Repair Shop	Barry S. Russ C. Tony P.	127	1	668	668
	2.3.3	Meter Storage		126	1	269	269
Net Area Subtotal							***1,297***
2.4 Support Spaces	2.4.1	Mens Restroom / Locker room		129	1	989	989
	2.4.2	Womens		124	1	125	125
	2.4.3	Copy room		123	1	25	25
	2.4.4	Small Conference			1	218	218
	2.4.5	Break Room / Assembly room		130	1	876	876
	2.4.6	Storage		122 / 118	1	81	81
	2.4.7	Vertical circulation (stairs, elev.)			1		
	2.4.8	Phone		117	1	159	159
Net Area Subtotal							***2,473***
2.5 Truck Crews							
	2.5.1	Garage		128 / 131	1	4,726	4,726
Net Area Subtotal							***4,726***
2.6 Warehouse							
	2.6.1	Warehouse storage		27	1	7,054	7,054
	2.6.2	Warehouse storage - crawl space		132	1	989	989
Net Area Subtotal							***8,043***
Total Net Square Footage							***19,230***
		Circulation				***10%***	***1,923***
		Grossing Factor				***5%***	***1,058***
		Total Gross Square footage					***22,211***

EQUIPMENT NEEDS ELECTRIC DIVISION

Item	Item No.	Description	Location	Quantity	Uncovered Stall	Covered Stall	Covered & Heated
3.1 Trucks	1	Full size cargo van	Casteel Bldg.	2	Y		
	2	Small Van	Casteel Bldg.	1	Y		
	3	Service truck - 2 ton	Casteel Bldg.	1	Y		
	4	Full size pickup truck	Casteel Bldg.	7	Y		
	5	Double Bucket truck	Brown Barn	2		Y	
	6	Small Bucket truck	Brown Barn	2		Y	
	7	Full size pickup truck	Store Room Yard	2	Y		
	8	1 ton flat bed truck	Store Room Yard	1	Y		
	9	Line Truck	Heuchan Bldg.	6			Y
	10	Small Bucket Truck	Heuchan Bldg.	2			Y
	11	Crew cab pickup	Heuchan parking lot	6	Y		
	12	Small pickup	Heuchan parking lot	6	Y		
	13	Small Van	Heuchan parking lot	1	Y		
	14	Tahoe / SUV	Heuchan parking lot	3	Y		
	15	1 ton truck	Heuchan parking lot	1	Y		
	16	Extended Cab pickup	Heuchan parking lot	1	Y		
	17	Small Crew cab pickup	Heuchan parking lot	1	Y		
	18	Extended Cab pickup	Heuchan parking lot	4	Y		
	19	5 ton truck	Heuchan parking lot	4			Y
	20	Extended Cab pickup	Casteel Bldg.	1	Y		
	21	Crew cab pickup	Casteel Bldg.	1	Y		
	22	Small SUV	Casteel Bldg.	1	Y		
3.2 Equipment	1	Enclosed Trailer 14'	Brown Barn	1		Y	
	2	Under dawg puller	Brown Barn	3		Y	
	3	Fork Lift	Store Room Yard	3		Y	
	4	Vaccum Trailer	Heuchan Bldg.	1			Y
	5	Pole Yard trailer (various sizes, max 18')	Pole Yard	19	Y		
	6	2400 Volt transformer	Pole Yard	1	Y		
	7	Bob Cat	Pole Yard	1		Y	
	8	Track Vermeer Trencher	Pole Yard	1		Y	
	9	Rubber Track Trencher	Pole Yard	2		Y	
	10	Uni Loader	Pole Yard	1		Y	
	11	Dozer	Pole Yard	1		Y	
	12	Backhoe	Pole Yard Shed	4		Y	
	13	Digger Truck	Pole Yard Shed	1		Y	
	14	Big Bucket Truck - 80'	Pole Yard Shed	1		Y	
	15	Wire Truck 5 ton tandem	Pole Yard Shed	1		Y	
	16	Tandem Dump Truck	Pole Yard Shed	1		Y	
	17	Wire Puller	Pole Yard Shed	1		Y	
	18	Small backhoe	Casteel basement	1			Y
	19	Air Compressor trailer	Casteel basement	3			Y
	20	Hot Stick Trailer	Casteel basement	1		Y	
Net Area Subtotal				***104***	***60***	***27***	***17***

EQUIPMENT NEEDS
WATER DIVISION

Item	Item No.	Description	Location	Quantity	Uncovered Stall	Covered Stall	Covered & Heated
3.3 Trucks		Full size pickup		7	Y		
		Large Pickup		15		Y	
		Boom Truck		1		Y	
		Dump Truck		7		Y	
		Jeep		1	Y		
		Freightliner		1	Y		
3.4 Equipment		Backhoe		9		Y	
		Track hoe		2		Y	
		Tractor		2		Y	
		Bobcat		1		Y	
		dozer		1		Y	
		Trailer		18		Y	
		Unitloader		1		Y	
		Hyundai Ralex		1		Y	
		Compressor		4			Y
		Ditch witch		1		Y	
		Trench Roller		1		Y	
Net Area Subtotal				***73***	***9***	***60***	***4***

ADMINISTRATIVE RECOMMENDATIONS

Based upon the evaluation of the site and the programming data collected, the following recommendations are offered:

1. Construct a 2,500 SF EPA storage building for the storage and containment of transformers.

2. Consolidate all warehouse/ storage operations to a centralized location with adequate vehicle access for deliveries and distribution. New building to be 41,250 square feet.

3. The current administrative space available is 19,355 gross square feet. The programming identifies a current need of 22,211 gross square feet (nine percent below need). Recommend consolidating all administrative, staff, and training to one location anticipating future growth. New consolidated facility will be 24,000 square feet.

4. Construct vehicle storage buildings to adequately cover and store vehicles and equipment. These buildings can be phased and built over time. Space for 97 items are needed at this time, expansion over 20 year term estimated at 125.

5. Consolidate vehicle maintenance with public works maintenance.

6. Provide outdoor recycle area accessible to warehouse that is secure and concealed from view.

7. Provide sufficient employee and visitor parking.

8. Provide storm water detention on site.

Key Components of Plan:

- Allows the plan to be implemented in multiple plases
- Re-activates an existing easement to Belmont Street, improving circulation
- Provides direction for future property acquisition
- Consolidates all material storage
- Establishes clean separation between personal vehicles and division vehicles
- Allows for control of storm water runoff
- Consolidates all material storage

MASTER PLAN, FULLY IMPLEMENTED

The diagram on this page shows the end product after the site is fully constructed.

KEYNOTES:

- A EMPLOYEE PARKING (155 STALLS)
- B VISITOR PARKING (30 STALLS)
- C COVERED EQUIPMENT PARKING (99 STALLS)
- D FUTURE COVERED EQUIPMENT PARKING (70 STALLS)
- E OPEN EQUIPMENT PARKING (69 STALLS)
- F ADMINISTRATION, OPERATIONS AND TRAINING BUILDING (24,000 SF ON 2 LEVELS)
- G WAREHOUSE WITH CONDITIONED STORAGE ROOM/CONTROLS OFFICE AND 20 ENCLOSED PARKING STALLS (27,000 sf)
- H COVERED MATERIAL STORAGE
- I RECYCLING
- J EPA STORAGE/SUBSTATION EQUIP. STORAGE BUILDING (2,400 SF)
- K TRANSFORMER STORAGE
- L SALVAGE YARD
- M STORMWATER DETENTION BASIN
- N DUMPSTER

LEGEND:

- EX. BUILDING TO REMAIN
- EX. BUILDING TO BE REMOVED
- PROPOSED BUILDING
- TURF
- ASPHALT PAVING
- SITE CIRCULATION

ANALYSIS & USAGE PLAN, PHASE ONE

Phase One Key Components:

- High priority was given to the installation of a new EPA storage facility. The first phase implements this immediate need.

PHASE 1 KEYNOTES:

(A) EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)

LEGEND:

EXISTING BUILDING TO REMAIN

ANALYSIS & USAGE PLAN, PHASE TWO

Phase Two Key Components:

- New storage warehouse for both water and electric materials and essential vehicle parking
- 16 bay covered vehicle storage barn - three sides with open front
- Establishes on-site storage (uncovered) for transformers and recycling
- Re-grades and provides a new crossing at rail spur

PHASE 2 KEYNOTES:

- A EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)

  REMOVE POLE BARNS AND PCB STORAGE SHEDS
- B CONDITIONED STORAGE ROOM/ WAREHOUSE CONTROLS OFFICE
  - 27,000 SF
  - 20 ENCLOSED PARKING STALLS
- C TRANSFORMER STORAGE (UNCOVERED)
- D COVERED EQUIPMENT PARKING (16 BAYS)
- E RECYCLING (2,500 SF)
- F DUMPSTER
- G TEMP. OPEN EQUIPMENT PARKING (37 STALLS)
- H NEW AT-GRADE CROSSING

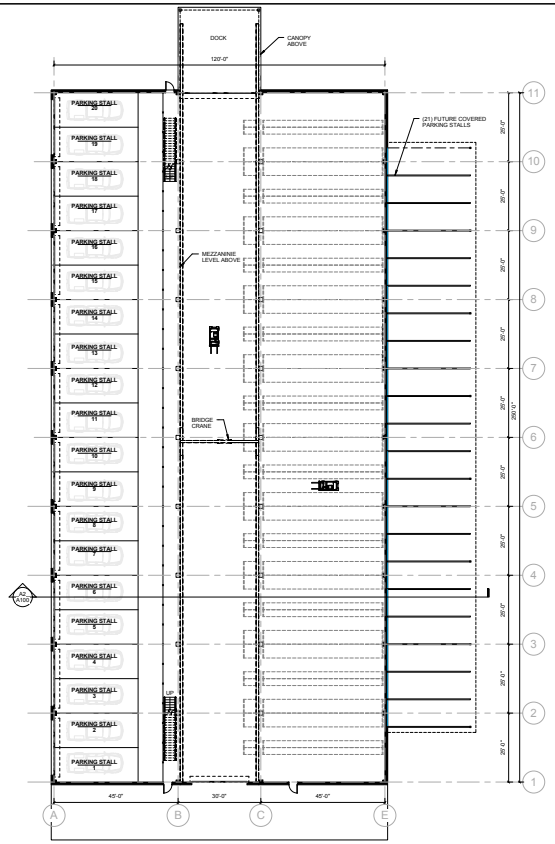
LEGEND:

- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED

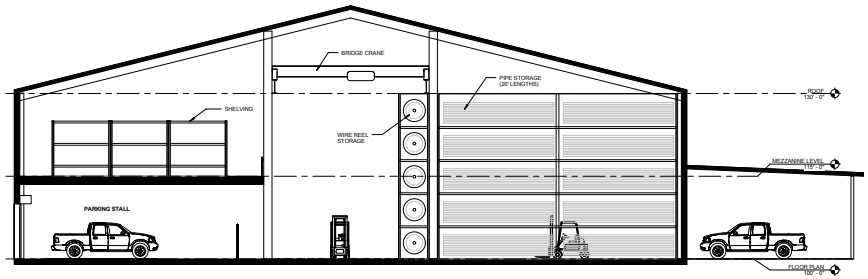
STORAGE BUILDING CONCEPT DESIGN

Storage Building Components:

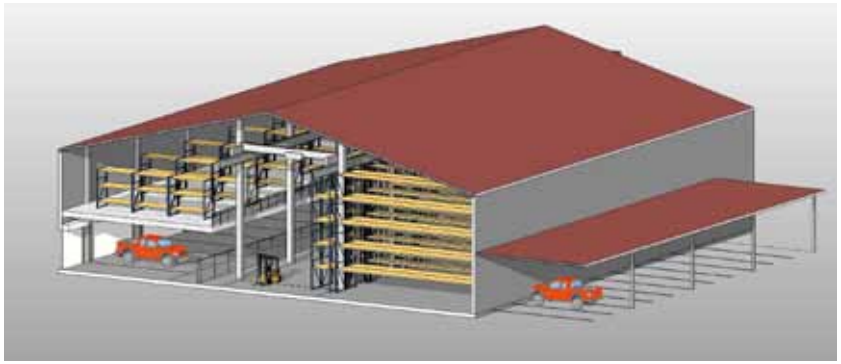
- Allows for "high bay" vertical storage - can store more material in smaller footprint
- Bridge crane allows for safe heavy lifting of materials
- Wire rolls can be stored in racks vertically
- Line trucks and essential vehicles can be parked in heated environment
- Convenient loading of materials onto line trucks
- Efficient, one location for all incoming and outgoing materials



A1 CONCEPTUAL FLOOR PLAN
SCALE: 1/16" = 1'-0"



A2 TRANSVERSE SECTION
SCALE: 1/8" = 1'-0"



A3 3D SECTION
SCALE:

COLUMBIA WATER & LIGHT COMPLEX

2012-11-12

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OVERLAND PARK, KS 913-742-8000

PRPOSED STORAGE BUILDING

A100

Phase Three Key Components:

- Build out additional covered vehicle storage

ANALYSIS & USAGE PLAN, PHASE THREE

PHASE 3 KEYNOTES:

- **A** EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)
- **B** CONDITIONED STORAGE ROOM/ WAREHOUSE CONTROLS OFFICE
  - 27,000 SF
  - 20 ENCLOSED PARKING STALLS
- **C** TRANSFORMER STORAGE
- **D** COVERED EQUIPMENT PARKING (16 BAYS)
- **E** RECYCLING (2,500 SF)
- **F** DUMPSTER
- **G** TEMP. OPEN EQUIPMENT PARKING (37 STALLS)
- **H** NEW AT-GRADE CROSSING

REMOVE ELECTRIC STORAGE AND WATER STORAGE

- **D** COVERED EQUIPMENT PARKING (42 STALLS)

LEGEND:

- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED

ANALYSIS & USAGE PLAN, PHASE FOUR

Phase Four Key Components:

- Construct a new admin building and consolidate water and electric to one location
- Existing admin can stay operational during new construction
- Build out new employee and visitor parking
- Administration building has large setback from business loop 70, allowing for greenscape, parking, and better presence

PHASE 4 KEYNOTES:

- A EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)
- B CONDITIONED STORAGE ROOM/ WAREHOUSE CONTROLS OFFICE
  - 27,000 SF
  - 20 ENCLOSED PARKING STALLS
- C TRANSFORMER STORAGE
- D COVERED EQUIPMENT PARKING (58 BAYS)
- E RECYCLING (2,500 SF)
- F DUMPSTER
- G TEMP. OPEN EQUIPMENT PARKING (37 STALLS)
- H NEW AT-GRADE CROSSING

REMOVE CASTEEL BUILDING, HEUCHAN BUILDING AND TEMP. OPEN EQUIPMENT PARKING

- F DUMPSTER
- I ADMINISTRATION, OPERATIONS AND TRAINING BUILDING (2 STORIES, APPROX. 24,000 SF)
- J EMPLOYEE PARKING (155 STALLS)
- K VISITOR PARKING (30 STALLS)
- L OPEN EQUIPMENT PARKING (46 STALLS)

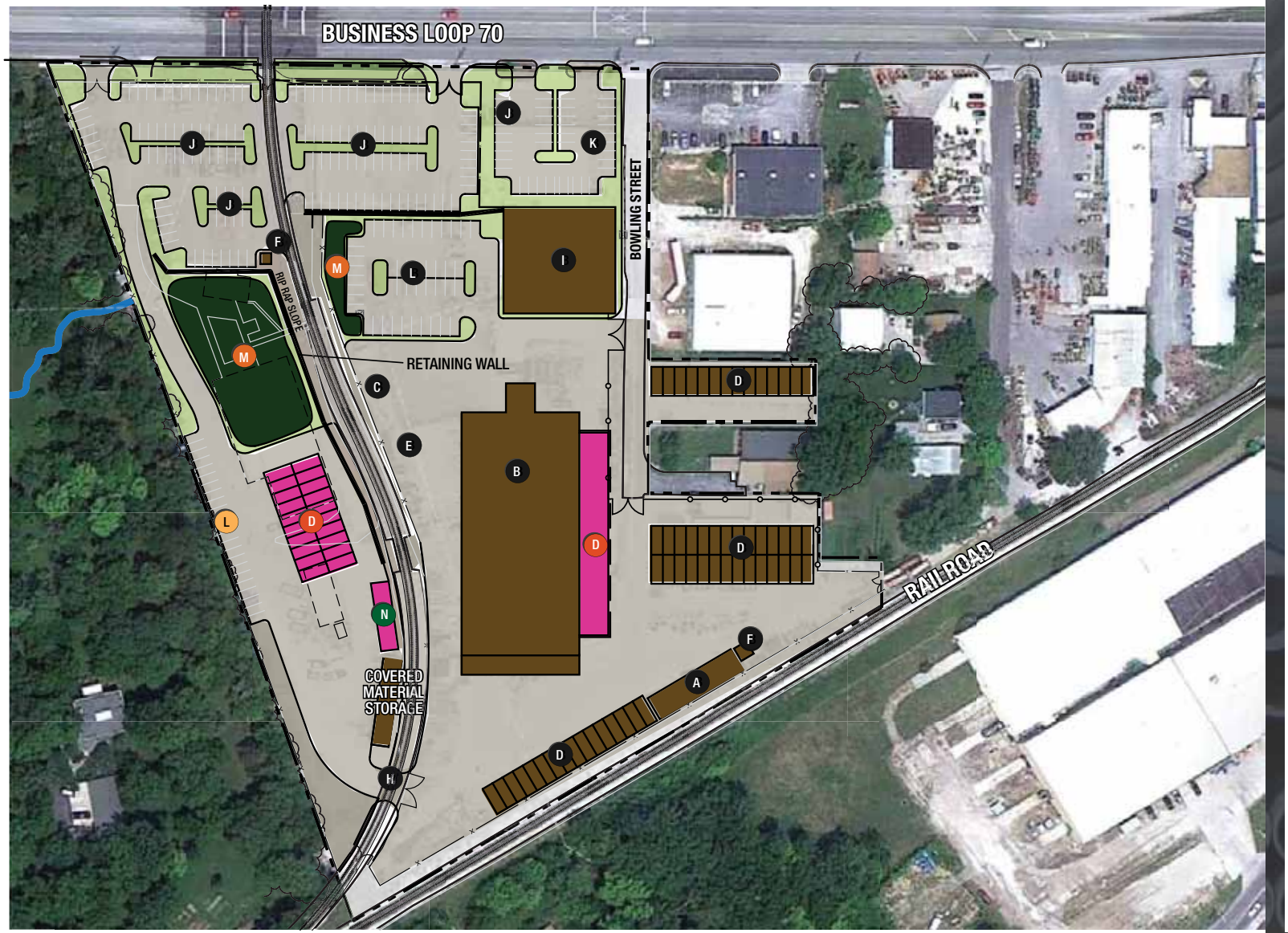
LEGEND:

- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED

Phase Five Key Components:

- Builds out entire existing site by adding vehicle bins
- Constructs storm water management areas

ANALYSIS & USAGE PLAN, PHASE FIVE



PHASE 5 KEYNOTES:

- A — EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)
- B — CONDITIONED STORAGE ROOM/ WAREHOUSE CONTROLS OFFICE
  - 27,000 SF
  - 20 ENCLOSED PARKING STALLS
- C — TRANSFORMER STORAGE
- D — COVERED EQUIPMENT PARKING (58 BAYS)
- E — RECYCLING (2,500 SF)
- F — DUMPSTER
- H — NEW AT-GRADE CROSSING
- I — ADMINISTRATION, OPERATIONS AND TRAINING BUILDING (2 STORIES, APPROX. 24,000 SF)
- J — EMPLOYEE PARKING (155 STALLS)
- K — VISITOR PARKING (30 STALLS)
- L — OPEN EQUIPMENT PARKING (46 STALLS)

REMOVE WATER ADMINISTRATION, J.P. CRAIN BUILDING AND HEATED STORAGE

- D — COVERED EQUIPMENT PARKING (41 STALLS)
- L — OPEN EQUIPMENT PARKING (23 STALLS)
- M — STORMWATER DETENTION (17,700 SF)
- N — COVERED MATERIAL STORAGE

LEGEND:

- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED

ANALYSIS & USAGE PLAN, PHASE SIX

Phase Six Key Components:

- Acquires adjacent properties
- New vehicle storage building
- Constructs perimeter security fence

FUTURE PHASE KEYNOTES:

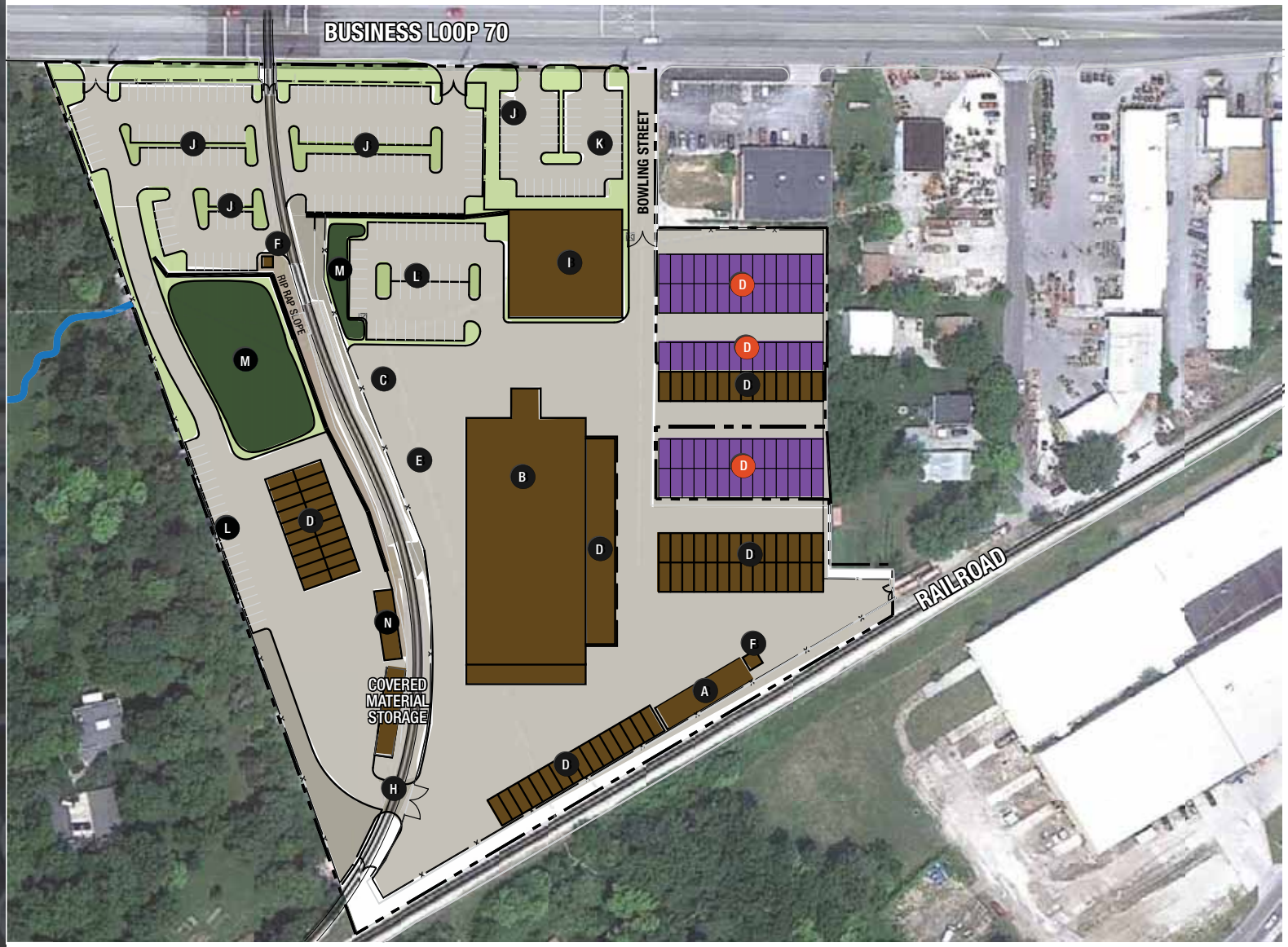
- **A** EPA/SUBSTATION EQUIP. STORAGE BUILDING (2,500 SF)
- **B** CONDITIONED STORAGE ROOM/ WAREHOUSE CONTROLS OFFICE
  - 27,000 SF
  - 20 ENCLOSED PARKING STALLS
- **C** TRANSFORMER STORAGE
- **D** COVERED EQUIPMENT PARKING (99 BAYS)
- **E** RECYCLING (2,500 SF)
- **F** DUMPSTER
- **H** NEW AT-GRADE CROSSING
- **I** ADMINISTRATION, OPERATIONS AND TRAINING BUILDING (2 STORIES, APPROX. 24,000 SF)
- **J** EMPLOYEE PARKING (155 STALLS)
- **K** VISITOR PARKING (30 STALLS)
- **L** OPEN EQUIPMENT PARKING (69 STALLS)
- **M** STORMWATER DETENTION (17,700 SF)
- **N** COVERED MATERIAL STORAGE

ACQUIRE TWO (2) PARCELS FOR FUTURE EXPANSION

- **D** COVERED EQUIPMENT PARKING (70 STALLS)

LEGEND:

- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED



ANALYSIS & USAGE PLAN

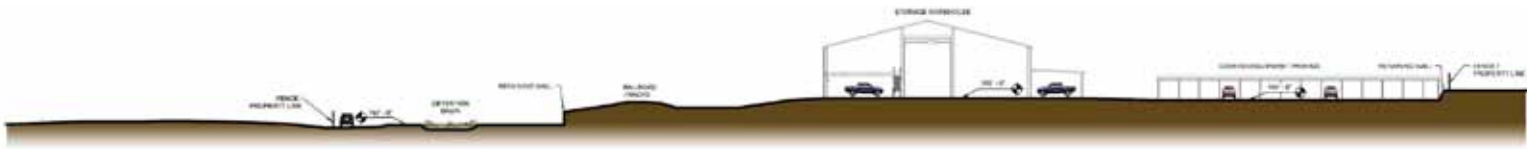
KEYNOTES:

- A EMPLOYEE PARKING (155 STALLS)
- B VISITOR PARKING (30 STALLS)
- C COVERED EQUIPMENT PARKING (99 STALLS)
- D FUTURE COVERED EQUIPMENT PARKING (70 STALLS)
- E OPEN EQUIPMENT PARKING (69 STALLS)
- F ADMINISTRATION, OPERATIONS AND TRAINING BUILDING (24,000 SF ON 2 LEVELS)
- G WAREHOUSE WITH CONDITIONED STORAGE ROOM/CONTROLS OFFICE AND 20 ENCLOSED PARKING STALLS (27,000 sf)
- H COVERED MATERIAL STORAGE
- I RECYCLING
- J EPA STORAGE/SUBSTATION EQUIP. STORAGE BUILDING (2,400 SF)
- K TRANSFORMER STORAGE
- L SALVAGE YARD
- M STORMWATER DETENTION BASIN
- N DUMPSTER

LEGEND:

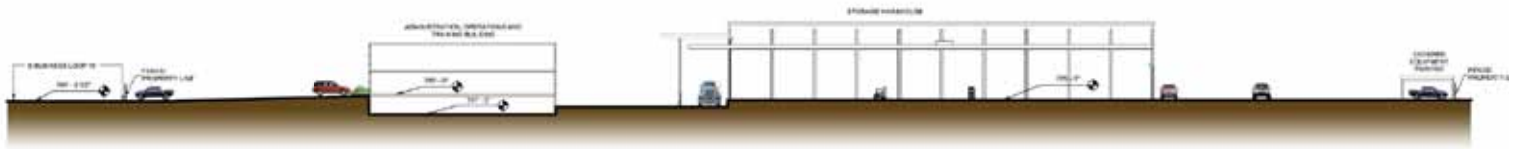
- EX. BUILDING TO REMAIN
- EX. BUILDING TO BE REMOVED
- PROPOSED BUILDING
- TURF
- ASPHALT PAVING
- SITE CIRCULATION

ANALYSIS & USAGE PLAN, SITE SECTIONS



A1 - EAST / WEST SECTION

ANALYSIS & USAGE PLAN, SITE SECTIONS



A2 - NORTH / SOUTH SECTION

COST ESTIMATE

The cost estimate identifies the major components of the plan and establishes a 2013 construction cost for each component.

The costs are broken down into the corresponding phases and are projected to occur over a 20 year period. Escalation is added for each subsequent year.

Item	Phase and Task	2013 Const. Cost		
		Water	**Electric**	**Total**
	Phase One			
1.1	EPA Storage Building		$ 188,179	
	Phase Two			
2.1	Warehouse Building	$ 1,756,313	$ 3,016,277	$ 4,772,590
2.2	Equipment Covered Parking	$ 132,145	$ 188,595	$ 320,740
2.3	Recycling	$ 29,385.49	$ 29,385.49	$ 58,771
2.4	At Grade Crossing	$ 8,330.40	$ 8,330.40	$ 16,661
	Phase Three			
3.1	Equipment Covered Parking	$ 348,589	$ 497,501	$ 846,090
	Phase Four			
4.1	Administration Building	$ 2,353,342	$ 4,041,609	$ 6,394,951
	Phase Five			
5.1	Covered Equipment Parking	$ 336,286	$ 479,942	$ 816,228
5.2	Open equipment Parking	$ 36,838	$ 52,575	$ 89,413
5.3	Storm Water Detention	$ 173,550	$ 173,550	$ 347,100
5.4	Covered Material Storage	$ 105,379.56	$ 123,926	$ 210,759
	Future			
	Covered Equipment Parking	$ 574,146	$ 819,413	$ 1,393,559
	TOTAL	**$ 5,854,305**	**$ 9,619,283**	**$ 15,266,862**

Year 1 2013	Year 2 2014	Year 3 2015	Year 4 2016	Year 5 2017	Year 10-14 2022	Year 15-19 2027	Year 20 2032
$ 188,179							
		$ 5,249,849					
		$ 352,814					
		$ 64,648					
		$ 18,327					
				$ 1,015,307			
					$ 8,952,932		
						$ 1,305,964	
						$ 143,061	
						$ 555,360	
						$ 337,215	
							$ 2,508,407
$ 188,179	**$ 0**	**$ 5,685,638**	**$ 0**	**$ 1,015,308**	**$ 8,952,932**	**$ 2,341,600**	**$ 2,508,408**