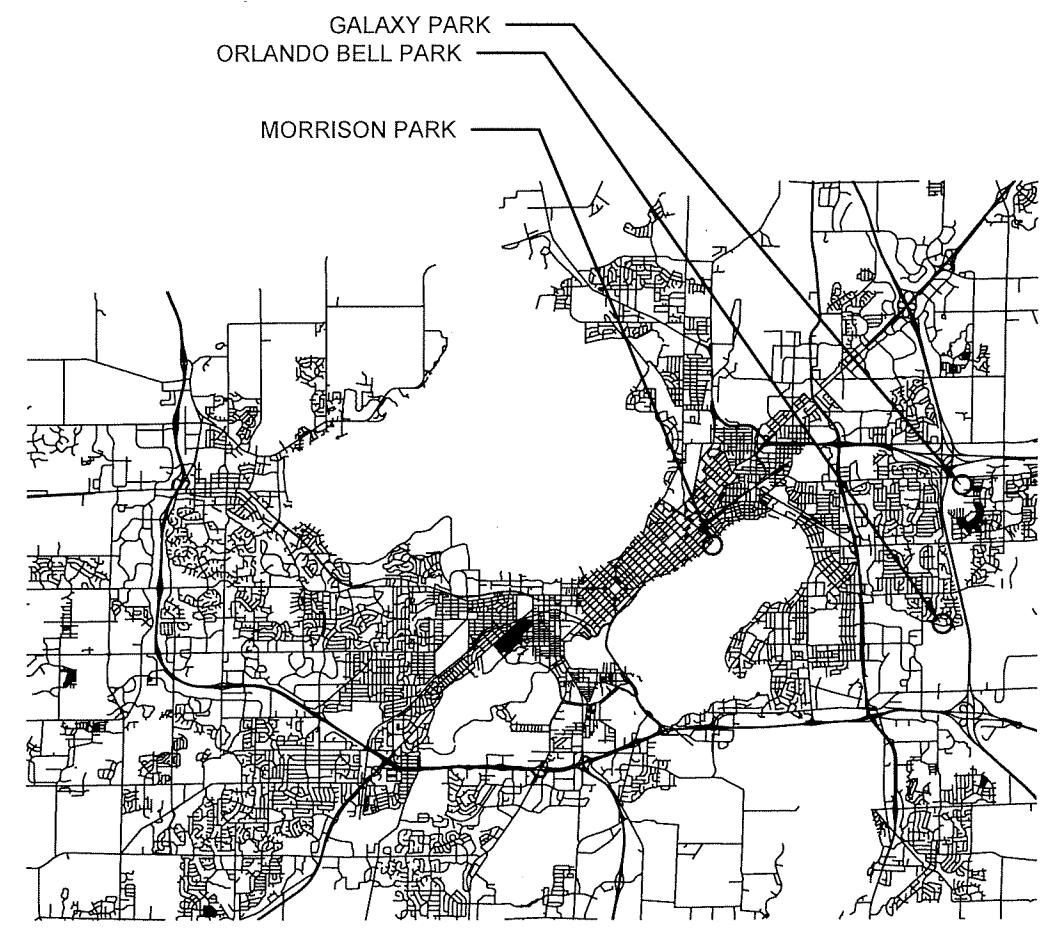


**LEGEND**

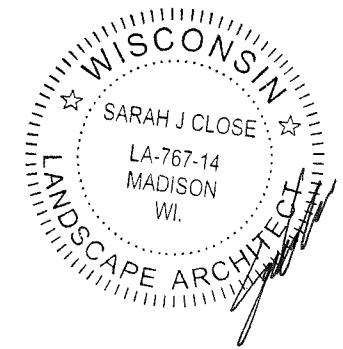
- ⊕ EX. ELECTRICAL HAND HOLE
- ⊞ EX. ELECTRICAL PEDESTAL
- ⊞ EX. TELEPHONE PEDESTAL
- ⊗ EX. TREE
- ⊕ EX. WATER HYDRANT
- ⊗ EX. WATER VALVE
- EX. PROPERTY LINE
- EX. EASEMENT
- x- EX. FENCE LINE
- ~ EX. TREE LINE
- - - EX. CONTOUR (INDEX)
- - - EX. CONTOUR (INTER)
- ..... EX. ABANDONED UTILITY
- E EX. ELECTRIC
- FO EX. FIBER OPTIC
- G EX. NATURAL GAS
- OH EX. OVERHEAD LINE
- SN EX. SANITARY SEWER
- ST EX. STORM SEWER
- TV EX. CABLE TV
- T EX. UNDERGROUND TELEPHONE
- W EX. WATER LINE
- ▨ EX. GRAVEL
- ▩ EX. CONCRETE
  
- ⊕### ## PRO. SPOT ELEVATION
- - - PRO. CONTOUR (INDEX)
- - - PRO. CONTOUR (INTER)
- x- PRO. FENCE
- - - PRO. GRADING LIMITS
- PRO. SILT SOCK
- PRO. CONSTRUCTION FENCE
- ST PRO. STORM SEWER
- ▩ PRO. ASPHALT
- ▨ PRO. WOOD MULCH
- ▨ PRO. PEA GRAVEL
- ▩ PRO. CONCRETE
- ▨ PRO. CONSTRUCTION ENTRANCE
- PRO. BOULDER RETAINING WALL
- ▨ REMOVE EX. ASPHALT
- ▨ REMOVE EX. TOPSOIL

# 2020 PLAYGROUND IMPROVEMENTS - GROUP 3

## MUNIS NOS. 12679-51-130 & 12680-51-130



DESIGNED BY:



**City of Madison**  
Department of Public Works  
**PARKS DIVISION**  
*City-County Building, Suite 104*  
*210 Martin Luther King, Jr. Blvd.*  
*Madison, WI 53703*



**SHEET SCHEDULE**

- 1 GALAXY PARK**
  - 1.1 Project Location and Site Access
  - 1.2 Existing Conditions
  - 1.3 Demolition and Site Plan
  - 1.4 Site Plan
  - 1.5 Grading and Erosion Control Plan
  - 1.6 Design Computations
  - 1.7 Design Computations
- 2 MORRISON PARK**
  - 2.1 Project Location and Site Access
  - 2.2 Existing Conditions
  - 2.3 Demolition and Site Plan
  - 2.4 Site Plan
  - 2.5 Grading and Erosion Control Plan
  - 2.6 Design Computations
  - 2.7 Design Computations
- 3 ORLANDO BELL PARK**
  - 3.1 Project Location and Site Access
  - 3.2 Existing Conditions
  - 3.3 Demolition and Site Plan
  - 3.4 Site Plan
  - 3.5 Grading and Erosion Control Plan
  - 3.6 Design Computations
  - 3.7 Design Computations
  - 3.8 Design Computations
- 4 DETAILS**
  - 4.1 Details- Playground and Pavement Edge

PROJECT:

*2020 PLAYGROUND IMPROVEMENTS - GROUP 3*

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED TO BID: SC	06/18/2020

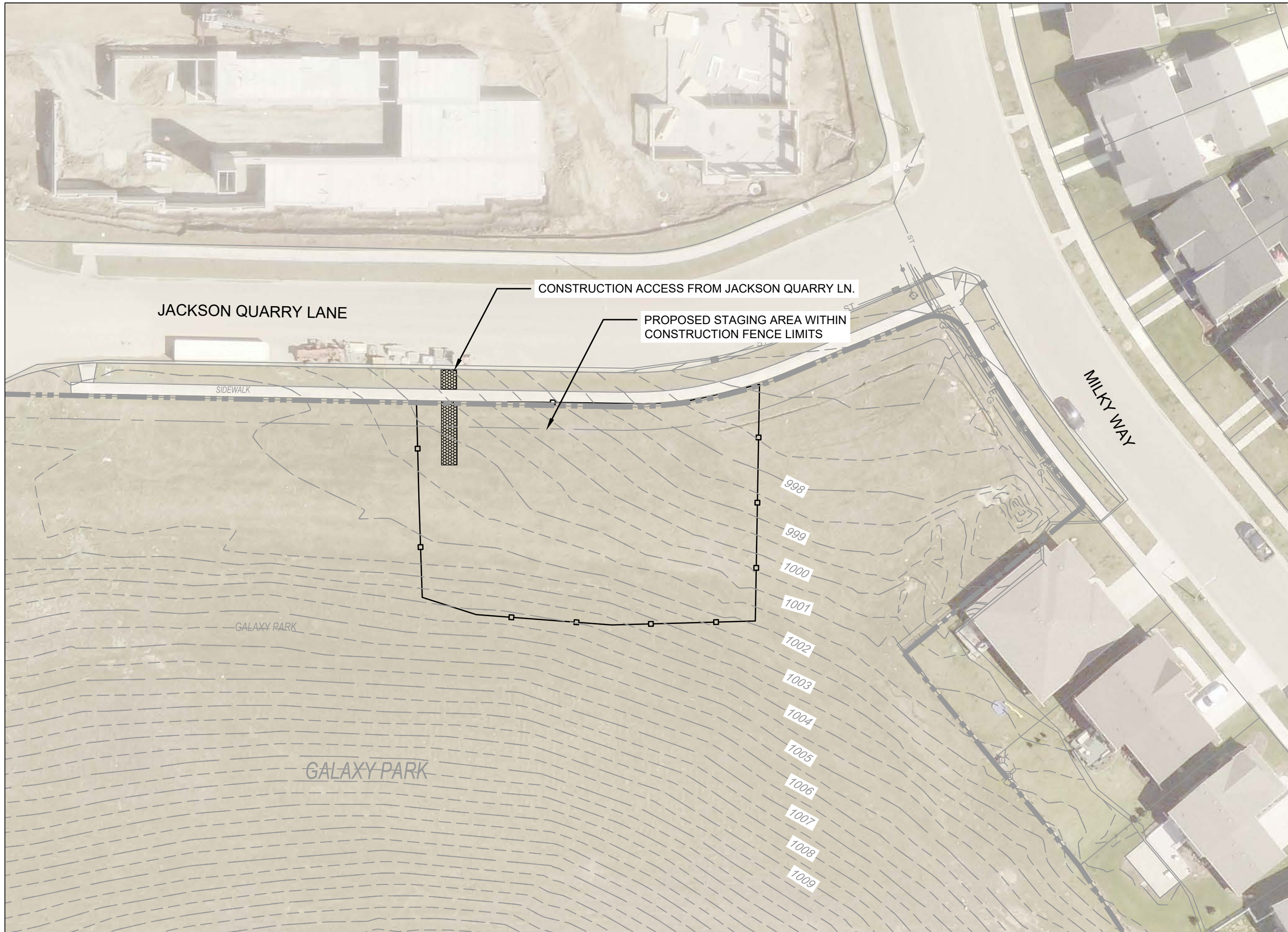
PUBLIC WORKS PROJECT #:

8904

SHEET TITLE:

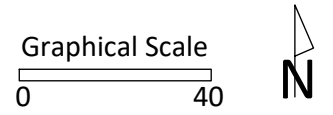
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SHEET NUMBER:



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**PARKS**



PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**GALAXY PARK  
 132 MILKY WAY  
 MADISON, WI 53718**

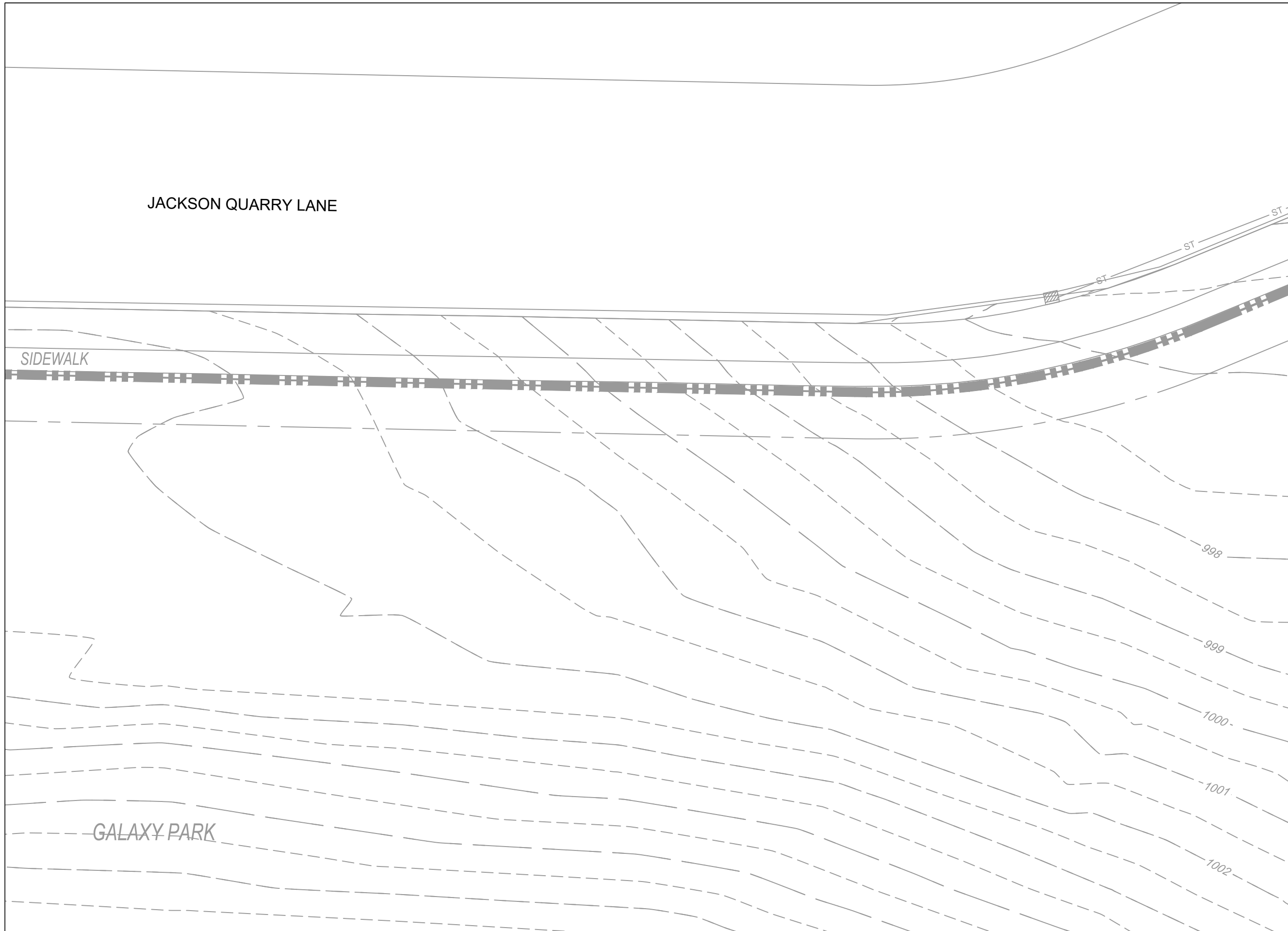
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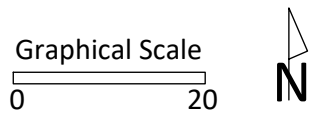
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**PROJECT LOCATION  
 AND SITE ACCESS**

SHEET NUMBER:  
**1.1**



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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**GALAXY PARK  
 132 MILKY WAY  
 MADISON, WI 53718**

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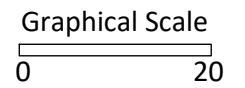
ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**EXISTING CONDITIONS**

SHEET NUMBER:  
**1.2**

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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**GALAXY PARK  
 132 MILKY WAY  
 MADISON, WI 53718**

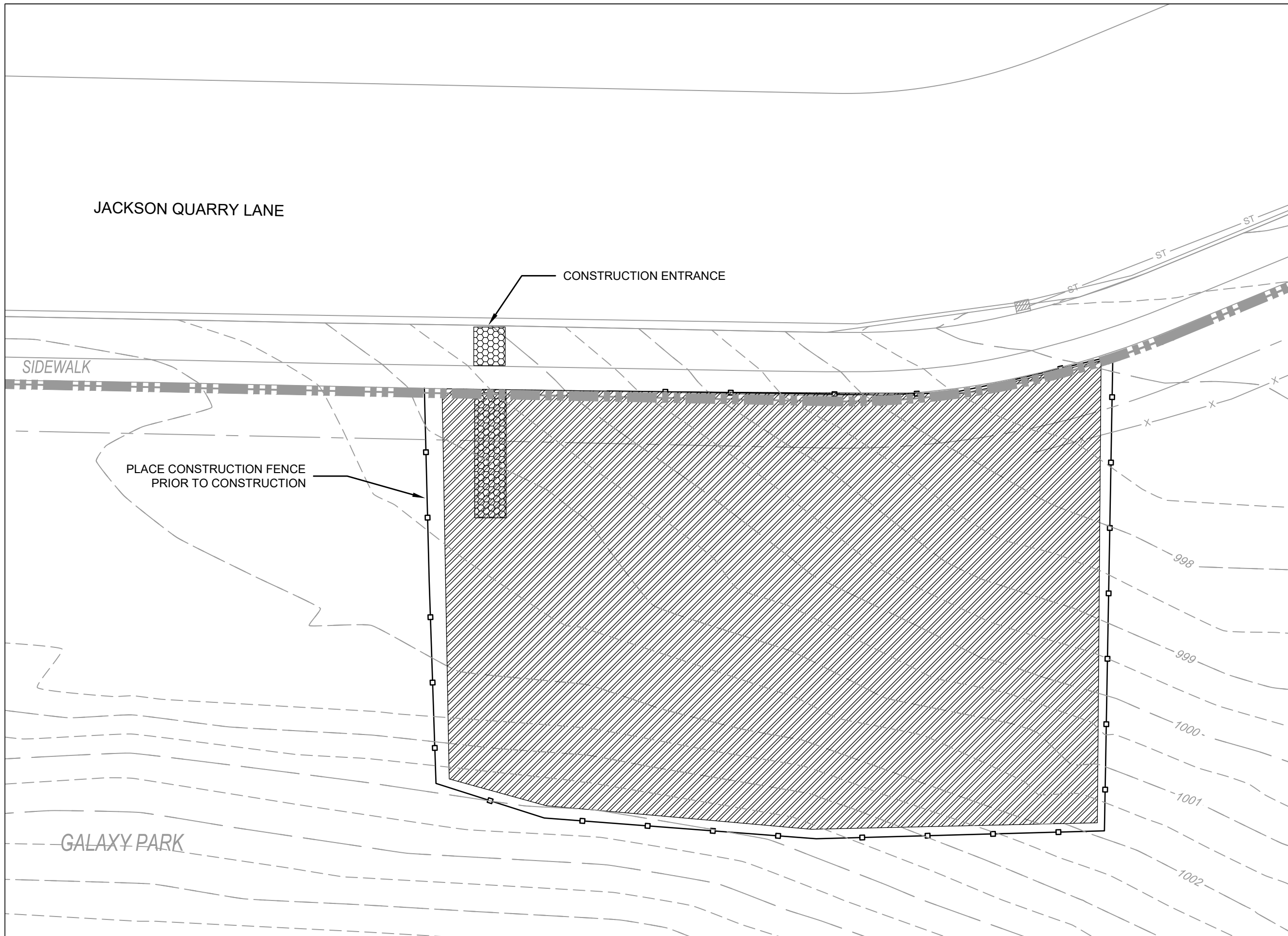
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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**DEMOLITION AND  
 PROTECTION PLAN**

SHEET NUMBER:  
**1.3**



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*play*  
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 PARKS**

Graphical Scale  
 0 20



PROJECT:

*2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3*

PROJECT ADDRESS:

*GALAXY PARK  
 132 MILKY WAY  
 MADISON, WI 53718*

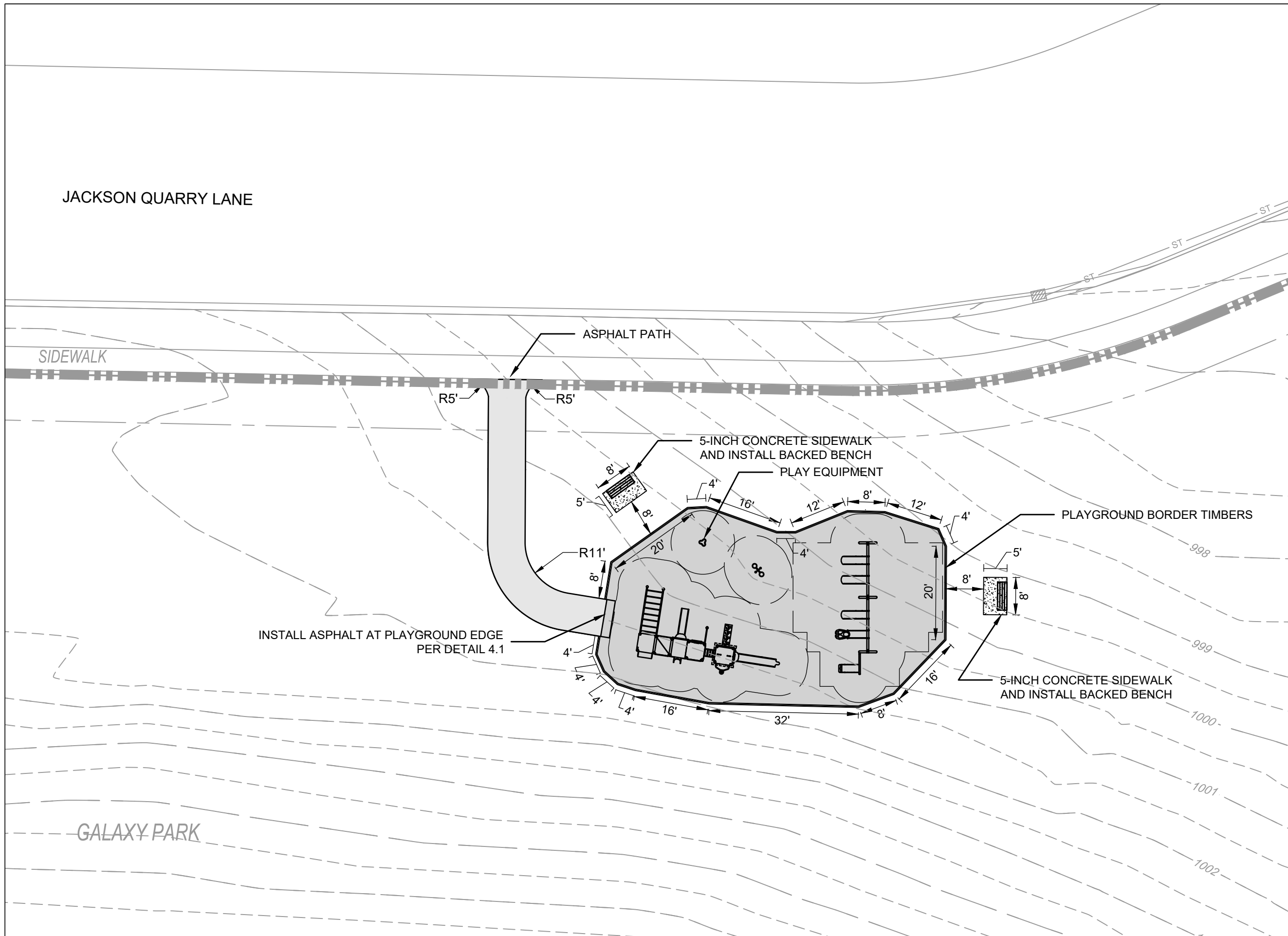
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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
*8904*

SHEET TITLE:  
*SITE PLAN*

SHEET NUMBER:  
**1.4**

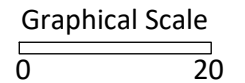


# NOTES

1.) ALL DISTURBED AREAS SHALL RECEIVE CLASS I, URBAN TYPE A EROSION CONTROL MATTING.

JACKSON QUARRY LANE

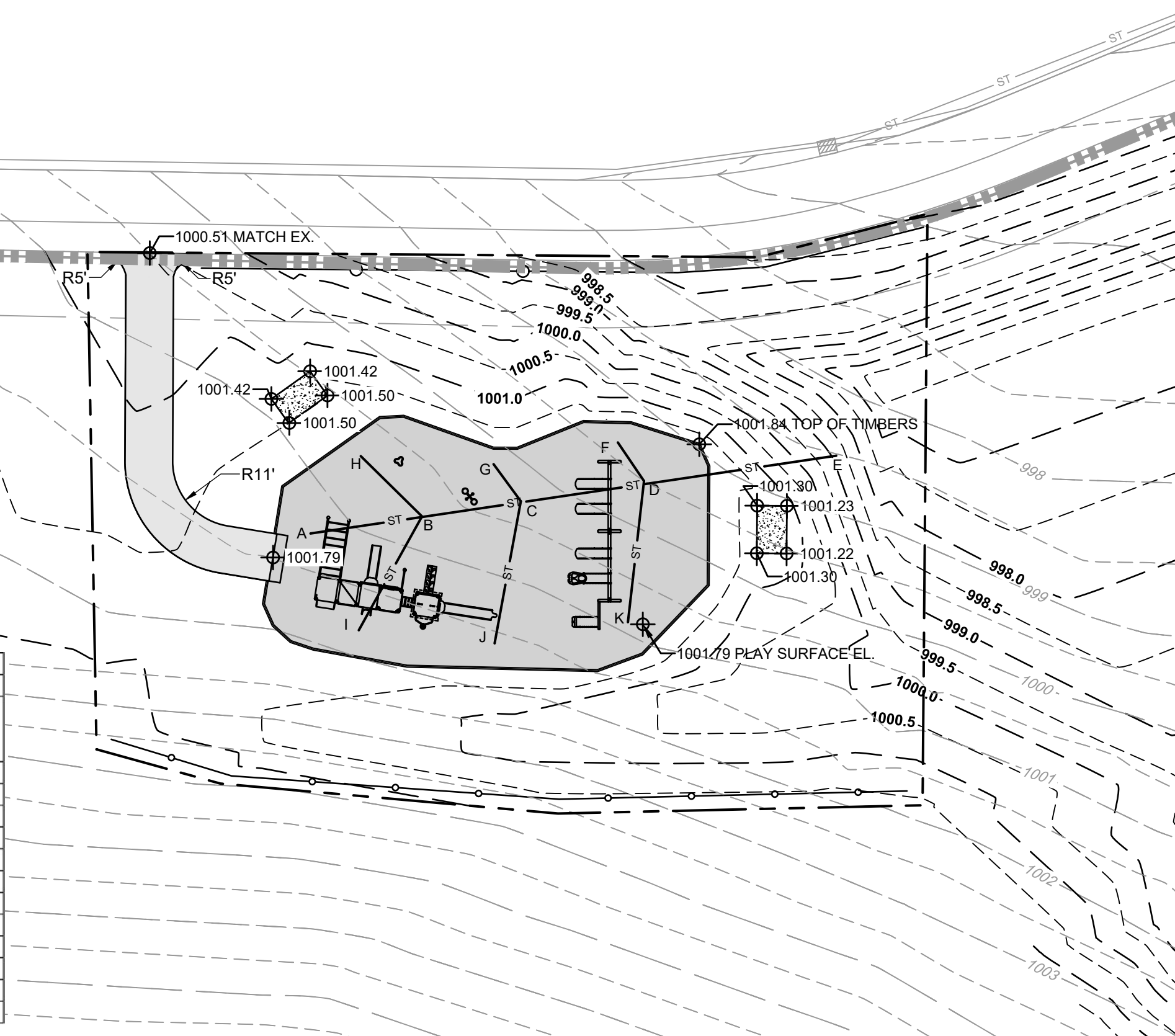
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SIDEWALK

Galaxy Park Drain Tile Invert (Flowline) Elevations		
Point	Invert (ft)	Distance from top of timbers 1001.84 (INCHES)
A	999.92	-23.04
B	999.80	-24.48
C	999.70	-26.88
D	999.58	-27.12
E	999.35	-29.88
F	999.92	-23.04
G	999.92	-23.04
H	999.92	-23.04
I	999.92	-23.04
J	999.92	-23.04
K	999.92	-23.04

Drain Tile Lengths & Slopes from intersection to intersection				
From	To	Length (ft)	Slope (%)	Pipe type
A	B	18.94	-0.63%	UNDERDRAIN
B	C	16.79	-0.60%	UNDERDRAIN
C	D	20.95	-0.57%	UNDERDRAIN
D	E	32.69	-0.70%	UNDERDRAIN
B	I	21.87	-0.55%	UNDERDRAIN
B	H	14.43	-0.83%	UNDERDRAIN
C	G	7.73	-2.85%	UNDERDRAIN
C	J	24.26	-0.91%	UNDERDRAIN
D	K	23.58	-1.44%	UNDERDRAIN
D	F	8.04	-4.23%	UNDERDRAIN
	Total	189.28		



PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS- GROUP 3**

PROJECT ADDRESS:  
**GALAXY PARK  
 132 MILKY WAY  
 MADISON, WI 53718**

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ITEM: ADVERTISED TO BID      DATE: 06/18/2020

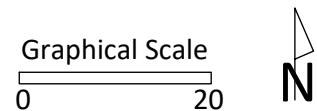
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**GRADING AND EROSION CONTROL PLAN**

SHEET NUMBER:  
**1.5**

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
1.1	Grass to Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	9321.39	0.50	4660.70	172.6	0%	172.6
1.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	9321.39	varies	4285.47	158.7	0%	158.7
1.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	9321.39	varies	-3563.77	-132.0	0%	-132.0
1.4	Grass to Grass	Topsoil Place	Place 6" topsoil	n/a	n/a	9321.39	-0.50	-4660.70	-172.6	0%	-172.6
2.1	Grass to play surface	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	2605.12	0.50	1302.56	48.2	0%	48.2
2.2	Grass to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-14 inch	2605.12	varies	337.30	12.5	0%	12.5
2.3	Grass to play surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-14 inch	2605.12	varies	-1307.22	-48.4	0%	-48.4
2.4	Grass to play surface	Play Surface Place (Rubber Mulch)	Place 14" of rubber mulch	n/a	n/a	2605.12	-1.17	-3039.31	-112.6	0%	-112.6
3.1	Grass to Asphalt	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	513.70	0.50	256.85	9.5	0%	9.5
3.2	Grass to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	513.70	varies	308.75	11.4	0%	11.4
3.3	Grass to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	513.70	varies	0.00	0.0	0%	0.0
3.4	Grass to Asphalt	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	513.70	-0.75	-385.28	-14.3	0%	-14.3
3.5	Grass to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	513.70	-0.25	-128.43	-4.8	0%	-4.8
4.1	Grass to Timbers	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	99.03	0.50	49.52	1.8	0%	1.8
4.2	Grass to Timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	99.03	varies	17.09	0.6	0%	0.6
4.3	Grass to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	99.03	varies	-78.45	-2.9	0%	-2.9
4.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	na	99.03	-1.00	-99.03	-3.7	0%	-3.7
5.1	Grass to 5-inch Concrete	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	80.00	0.50	40.00	1.5	0%	1.5
5.2	Grass to 5-inch Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-8inch	80.00	varies	0.00	0.0	0%	0.0
5.3	Grass to 5-inch Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-8inch	80.00	varies	-92.52	-3.4	0%	-3.4
5.4	Grass to 5-inch Concrete	Concrete Place	Place 5" of concrete	n/a	n/a	80.00	-0.41	-32.80	-1.2	0%	-1.2
5.5	Grass to 5-inch Concrete	Gravel Place (Concrete)	Place 3" of gravel	n/a	n/a	80.00	-0.25	-20.00	-0.7	0%	-0.7
6	Adjust	Play Surface Place (Rubber Mulch)	Increase play surface by 1/2 of asphalt ramp gravel base volume = 1/2 x (2.25 ft x 9 ft x 7 in)	n/a	n/a	31	-0.29	-9	-0.3	0%	-0.3

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PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS-GROUP 3**

PROJECT ADDRESS:  
**GALAXY PARK  
132 MILKY WAY  
MADISON, WI 53718**

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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**DESIGN COMPUTATIONS**

SHEET NUMBER:  
**1.6**

**Computation Summary**

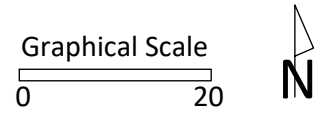
Positive volumes are cuts (material available), negative volumes

Row Labels	Sum of Factored (Uncom-pacted) Volume (cu yd)
Asphalt Place	-4.76
Border Timbers Place (placeholder volume)	-3.67
Concrete Place	-1.21
Gravel Place (Concrete)	-0.74
Gravel Place (pavement)	-14.27
Play Surface Place (Rubber Mulch)	-112.90
Subsoil Excavate	183.28
Subsoil Place	-186.74
Topsoil Excavate	233.69
Topsoil Place	-172.62
<b>Grand Total</b>	<b>-79.94</b>

**Reorganized into bid table items**

Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut	417	CY	= Subsoil Excavate + Topsoil Excavate + Pavement Excavate + Concrete Excavate
20202 Fill - Borrow	3	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	1034	SY	= (Topsoil Place)/- .167
40102 Crushed Aggregate Base Course Gradation No. 2	28	tons	= ((Gravel Place) pavement) * -2 ton/cubic yard
40202 HMA Pavement 4 LT 58-28 S	10.3	tons	= Asphalt Place * -2.16 ton/cubic yard
90005 Playground Surfacing - Rubber Mulch	135.5	CY	= Play Surface Place (Rubber Mulch * -1.2)

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PROJECT:  
*2020 PLAYGROUND IMPROVEMENTS- GROUP 3*

PROJECT ADDRESS:  
*GALAXY PARK  
132 MILKY WAY  
MADISON, WI 53718*

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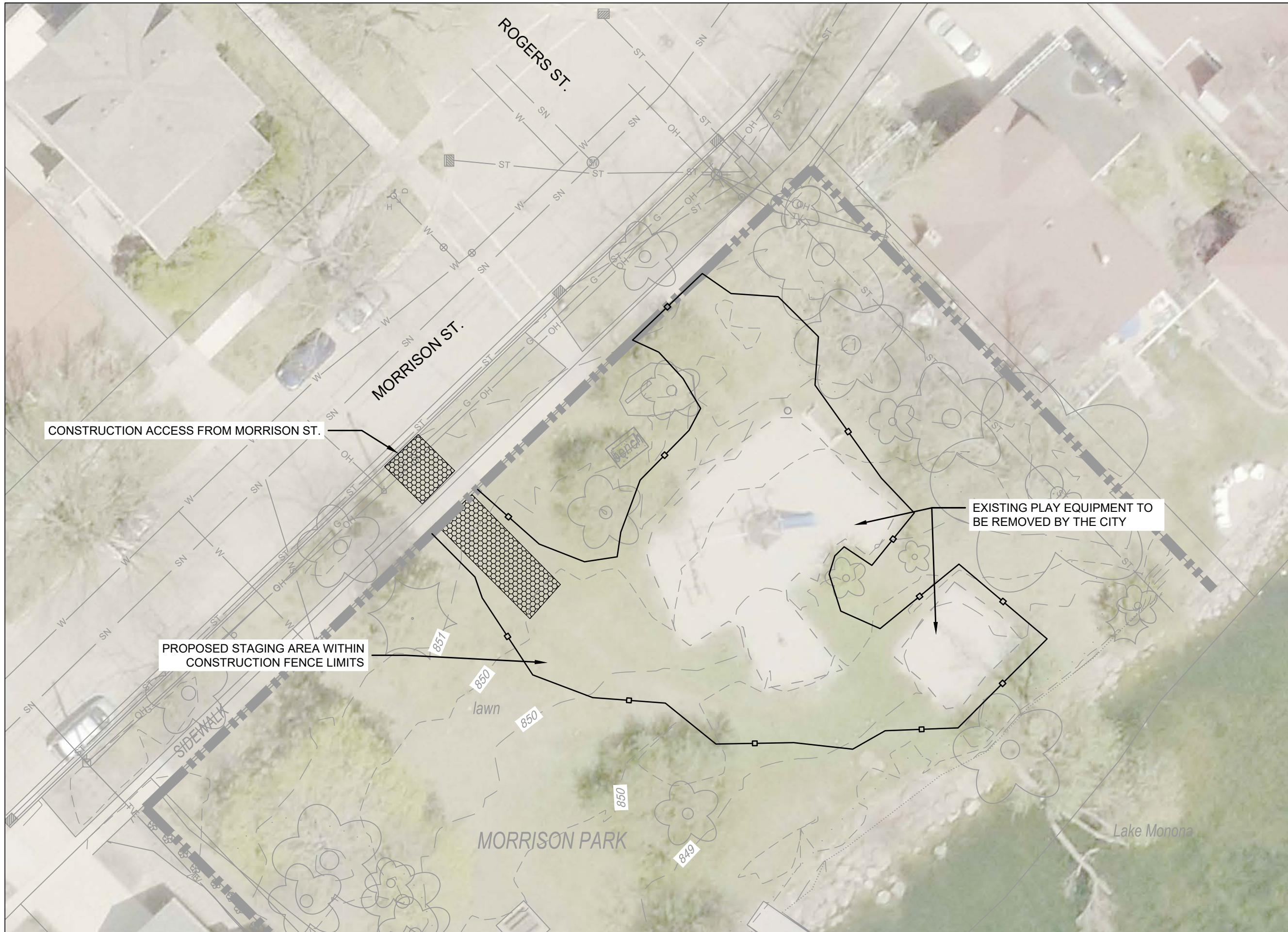
ITEM DATE  
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PUBLIC WORKS PROJECT #:  
*8904*

SHEET TITLE:  
*DESIGN COMPUTATIONS*

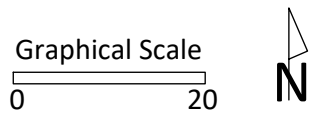
SHEET NUMBER:  
*1.7*





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**play**  
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**PARKS**



PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
 1451 MORRISON ST  
 MADISON, WI 53703**

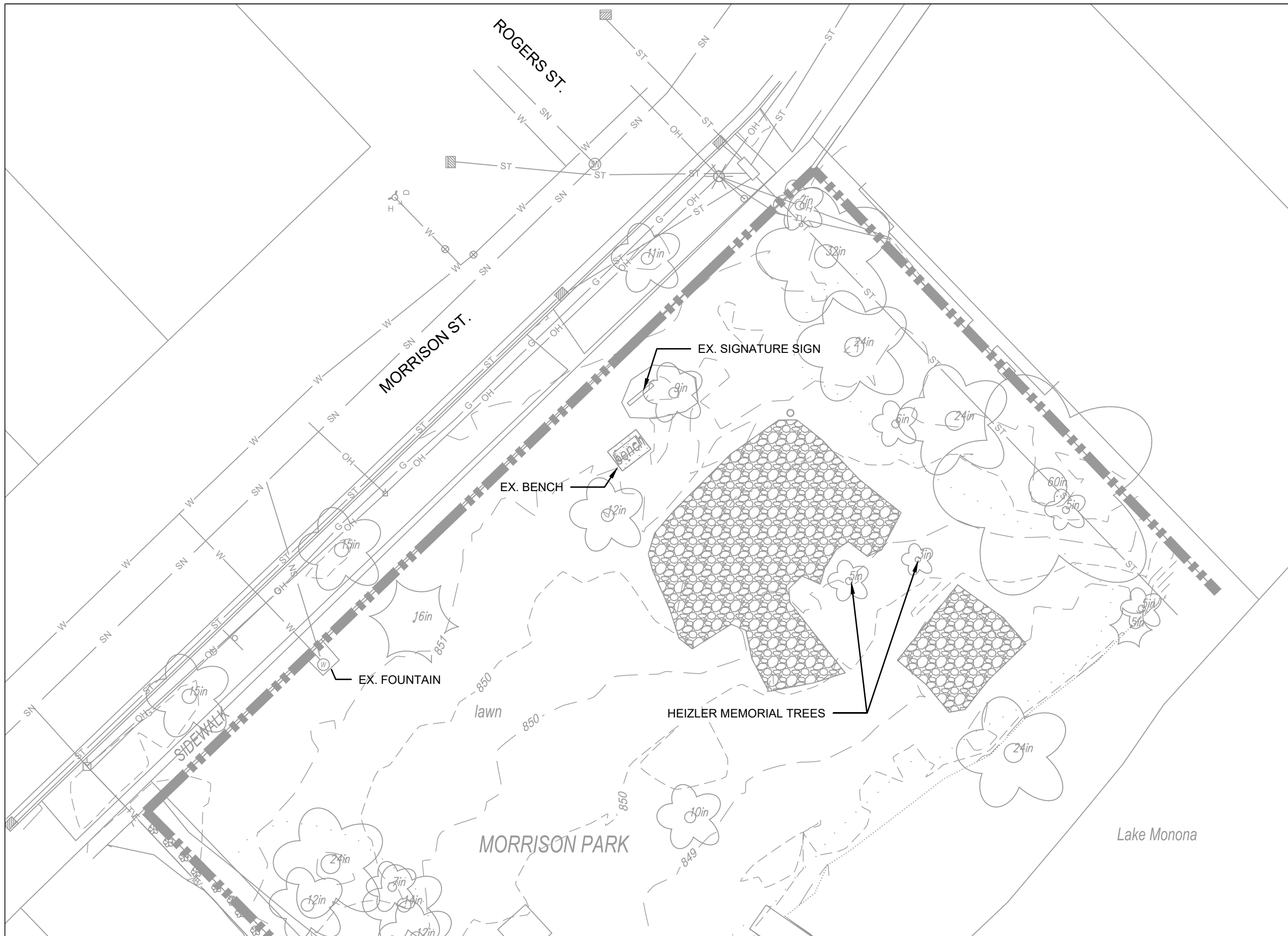
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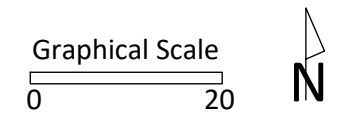
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**PROJECT LOCATION  
 AND SITE ACCESS**

SHEET NUMBER:  
**2.1**



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**PARKS DIVISION**  
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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
 1451 MORRISON ST  
 MADISON, WI 53703**

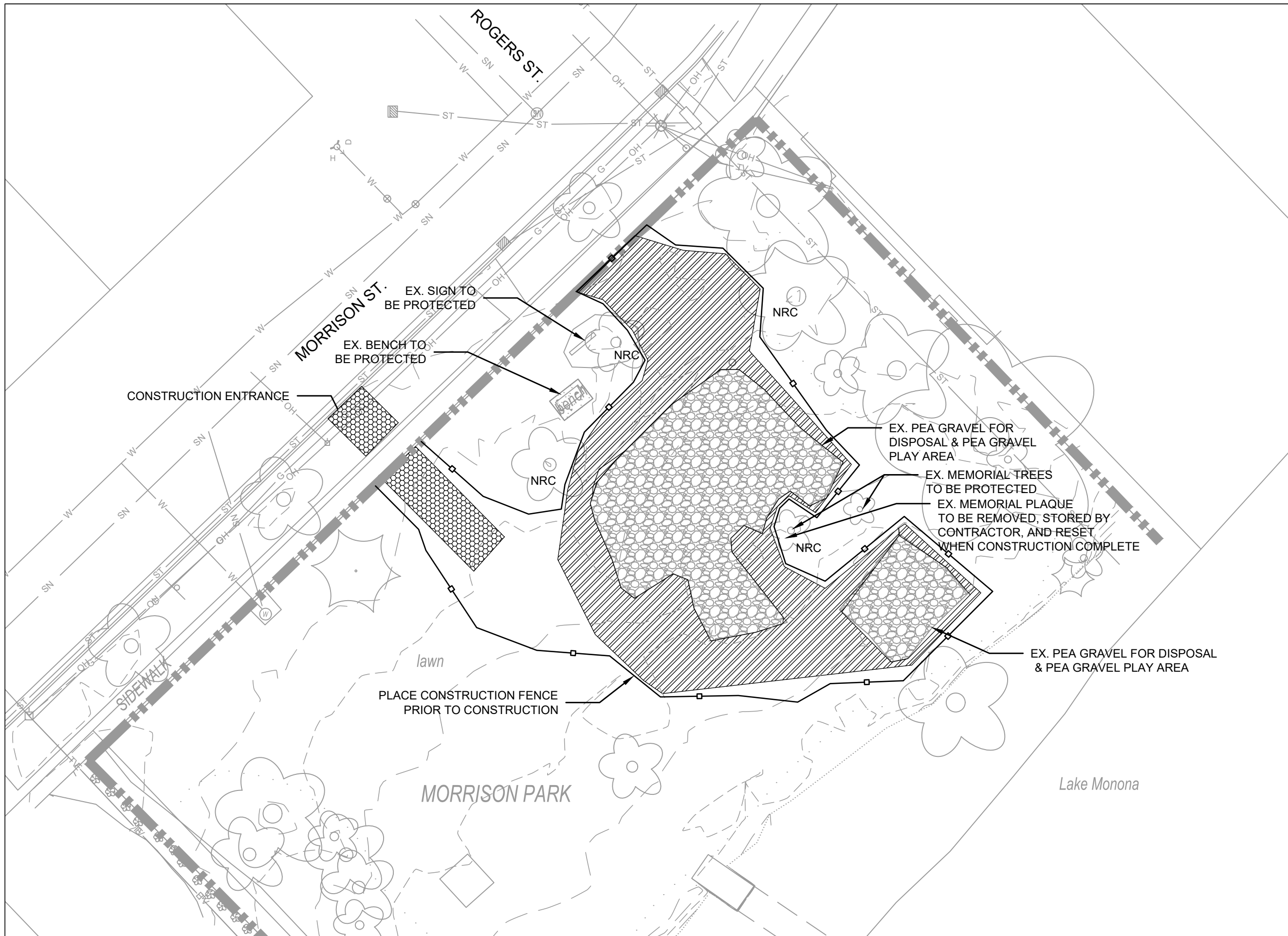
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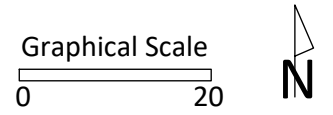
SHEET TITLE:  
**EXISTING CONDITIONS**

SHEET NUMBER:  
**2.2**



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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
 1451 MORRISON ST  
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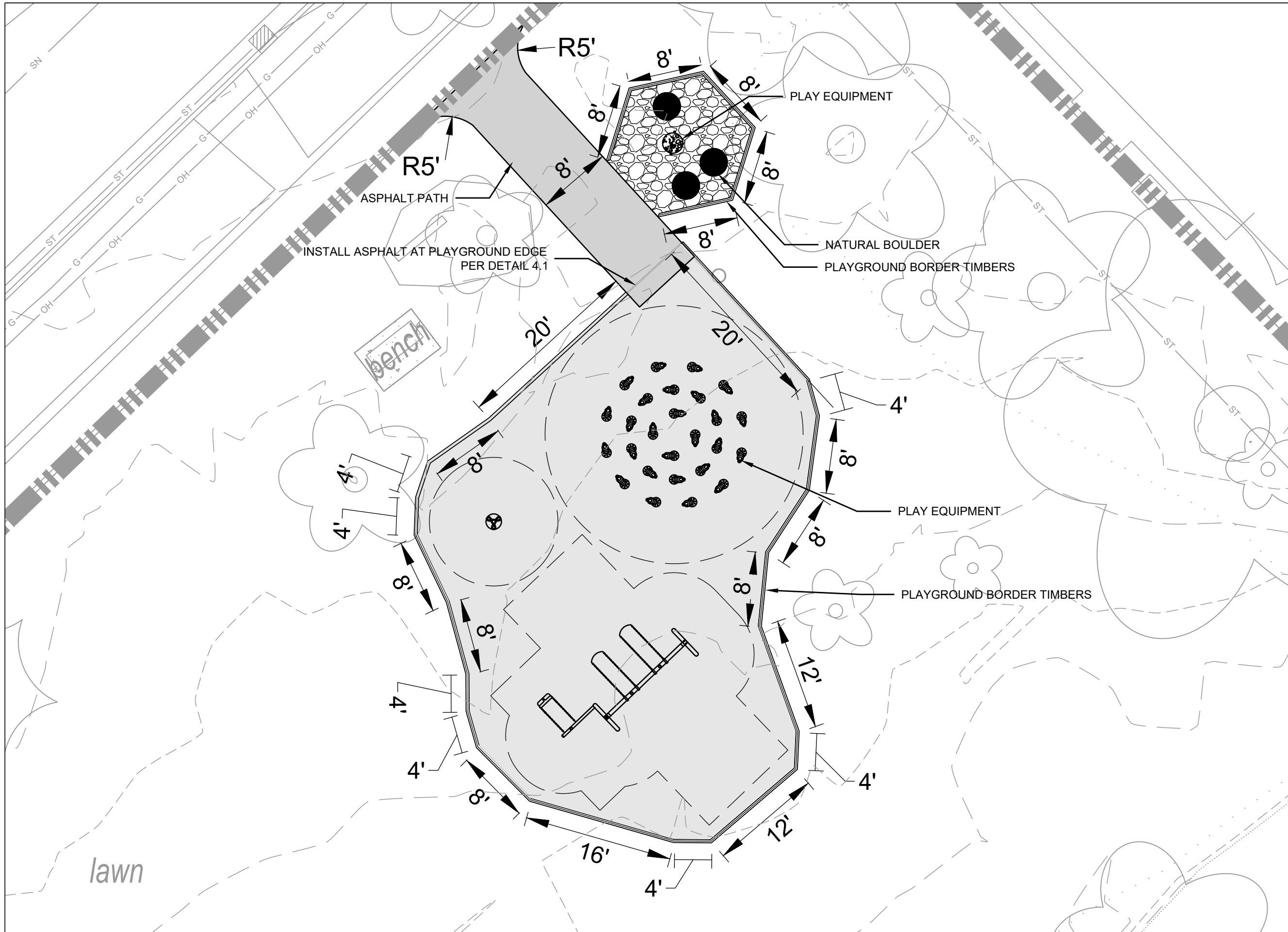
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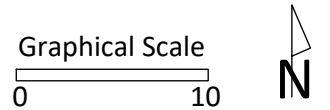
SHEET TITLE:  
**DEMOLITION AND  
 PROTECTION PLAN**

SHEET NUMBER:  
**2.3**



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**MADISON**  
**PARKS**



PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
 1451 MORRISON ST  
 MADISON, WI 53703**

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ITEM	DATE
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PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**SITE PLAN**

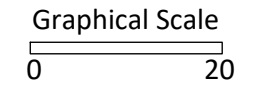
SHEET NUMBER:  
**2.4**

**NOTES**

1.) ALL DISTURBED AREAS SHALL RECEIVE CLASS I, URBAN TYPE A EROSION CONTROL MATTING.

**City of Madison  
Department of Public Works  
PARKS DIVISION**

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PROJECT:  
**2020 PLAYGROUND  
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GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
1451 MORRISON ST  
MADISON, WI 53703**

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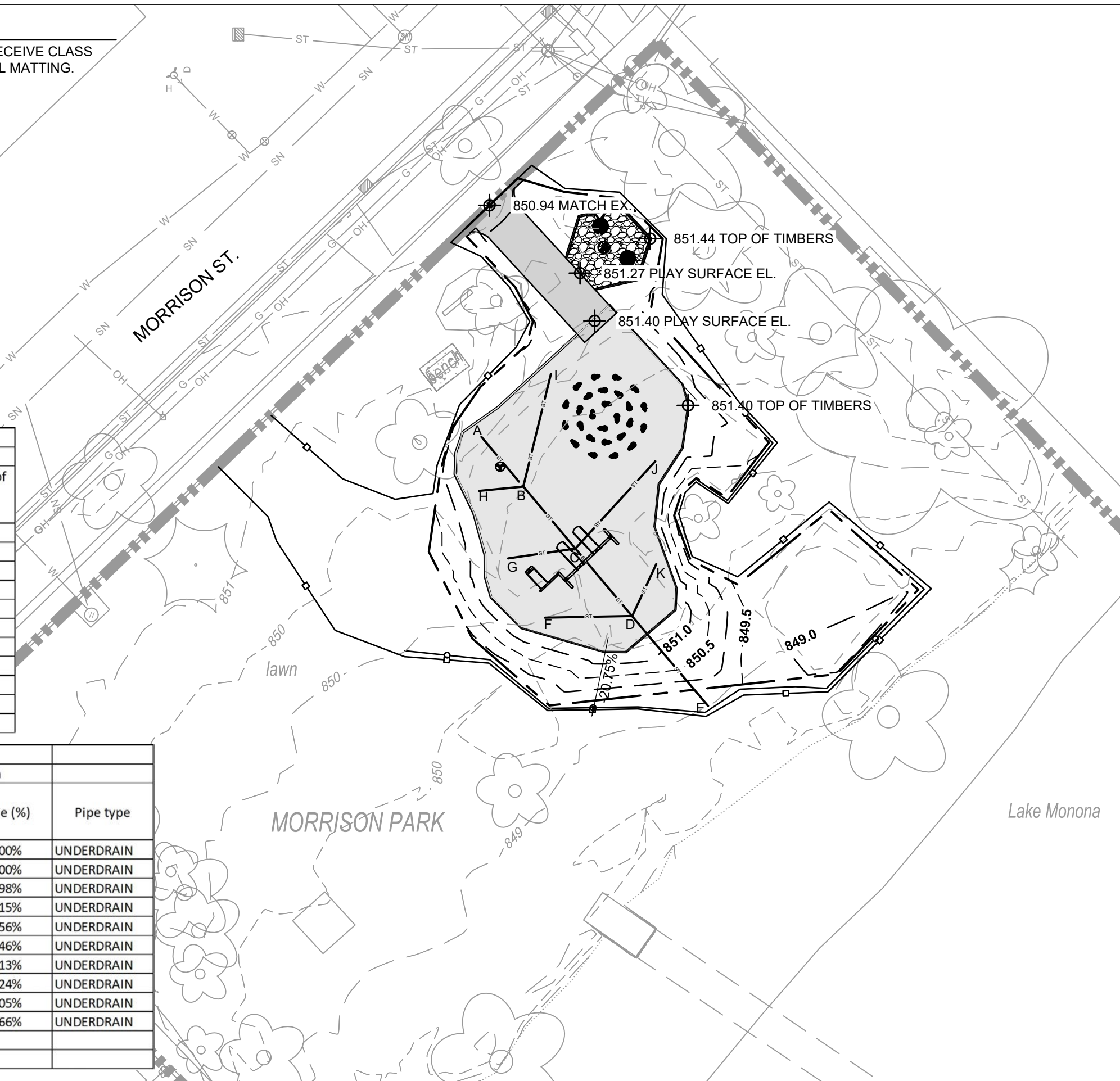
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**GRADING AND  
EROSION CONTROL  
PLAN**

SHEET NUMBER:  
**2.5**

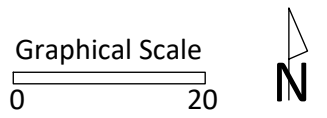
Morrison Park Drain Tile Invert (Flowline) Elevations		
Point	Invert (ft)	Distance from top of timbers 851.40 (INCHES)
A	849.73	-20.04
B	849.61	-21.48
C	849.46	-23.28
D	849.30	-25.20
E	849.05	-28.20
F	849.73	-20.04
G	849.73	-20.04
H	849.73	-20.04
I	849.73	-20.04
J	849.73	-20.04
K	849.73	-20.04

Drain Tile Lengths & Slopes from intersection to intersection				
From	To	Length (ft)	Slope (%)	Pipe type
A	B	12.03	-1.00%	UNDERDRAIN
B	C	15.06	-1.00%	UNDERDRAIN
C	D	16.29	-0.98%	UNDERDRAIN
D	E	21.8	-1.15%	UNDERDRAIN
B	I	21.49	-0.56%	UNDERDRAIN
B	H	8.23	-1.46%	UNDERDRAIN
C	G	12.7	-2.13%	UNDERDRAIN
C	J	21.86	-1.24%	UNDERDRAIN
D	K	10.62	-4.05%	UNDERDRAIN
D	F	16.18	-2.66%	UNDERDRAIN
	Total	156.26		



Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
1.1	Grass to Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	1666.97	0.50	833.49	30.9	0%	30.9
1.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	1666.97	varies	14.58	0.5	0%	0.5
1.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	1666.97	varies	-838.90	-31.1	0%	-31.1
1.4	Grass to Grass	Topsoil Place	Place 6" topsoil	n/a	n/a	1666.97	-0.50	-833.49	-30.9	0%	-30.9
2.1	Grass to play surface	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	377.87	0.50	188.94	7.0	0%	7.0
2.2	Grass to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-14 inch	377.87	varies	37.35	1.4	0%	1.4
2.3	Grass to play surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-14 inch	377.87	varies	-155.97	-5.8	0%	-5.8
2.4	Grass to play surface	Play Surface Place (Wood Mulch)	Place 14" of wood mulch	n/a	n/a	377.87	-1.17	-440.85	-16.3	0%	-16.3
3.1	Grass to play surface (pea gravel)	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	158.93	0.50	79.47	2.9	0%	2.9
3.2	Grass to play surface (pea gravel)	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-14 inch	158.93	varies	96.91	3.6	0%	3.6
3.3	Grass to play surface (pea gravel)	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-14 inch	158.93	varies	0.00	0.0	0%	0.0
3.2	Grass to play surface (pea gravel)	Pea gravel place	Place 14" of pea gravel	n/a	n/a	158.93	-1.17	-185.42	-6.9	0%	-6.9
4.1	Grass to Asphalt	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	231.13	0.50	115.57	4.3	0%	4.3
4.2	Grass to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	231.13	varies	98.50	3.6	0%	3.6
4.3	Grass to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	231.13	varies	0.00	0.0	0%	0.0
4.3	Grass to Asphalt	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	231.13	-0.75	-173.35	-6.4	0%	-6.4
4.5	Grass to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	231.13	-0.25	-57.78	-2.1	0%	-2.1
5.1	Grass to Timbers	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	72.80	0.50	36.40	1.3	0%	1.3
5.2	Grass to Timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	72.80	varies	8.39	0.3	0%	0.3
5.3	Grass to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	72.80	varies	-30.21	-1.1	0%	-1.1
5.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	na	72.80	-1.00	-72.80	-2.7	0%	-2.7
6.1	Play surface to Grass	Play Surface Excavate	Remove existing play surface, estimated depth 17 in	n/a	n/a	551.21	1.42	780.88	28.9	0%	28.9
6.2	Play surface to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	551.21	varies	0.00	0.0	0%	0.0
6.3	Play surface to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	551.21	varies	-728.27	-27.0	0%	-27.0
6.4	Play surface to Grass	Topsoil Place	Place 6" of topsoil	n/a	n/a	551.21	-0.50	-275.61	-10.2	0%	-10.2

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Department of Public Works  
**PARKS DIVISION**  
City-County Building, Suite 104  
210 Martin Luther King, Jr. Blvd.  
Madison, WI 53703



PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS- GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
1451 MORRISON ST  
MADISON, WI 53703**

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

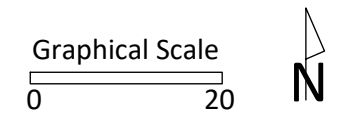
ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**DESIGN COMPUTATIONS**

SHEET NUMBER:  
**2.6**

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 Department of Public Works  
**PARKS DIVISION**  
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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**MORRISON PARK  
 1451 MORRISON ST  
 MADISON, WI 53703**

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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**DESIGN  
 COMPUTATIONS**

SHEET NUMBER:  
**2.7**

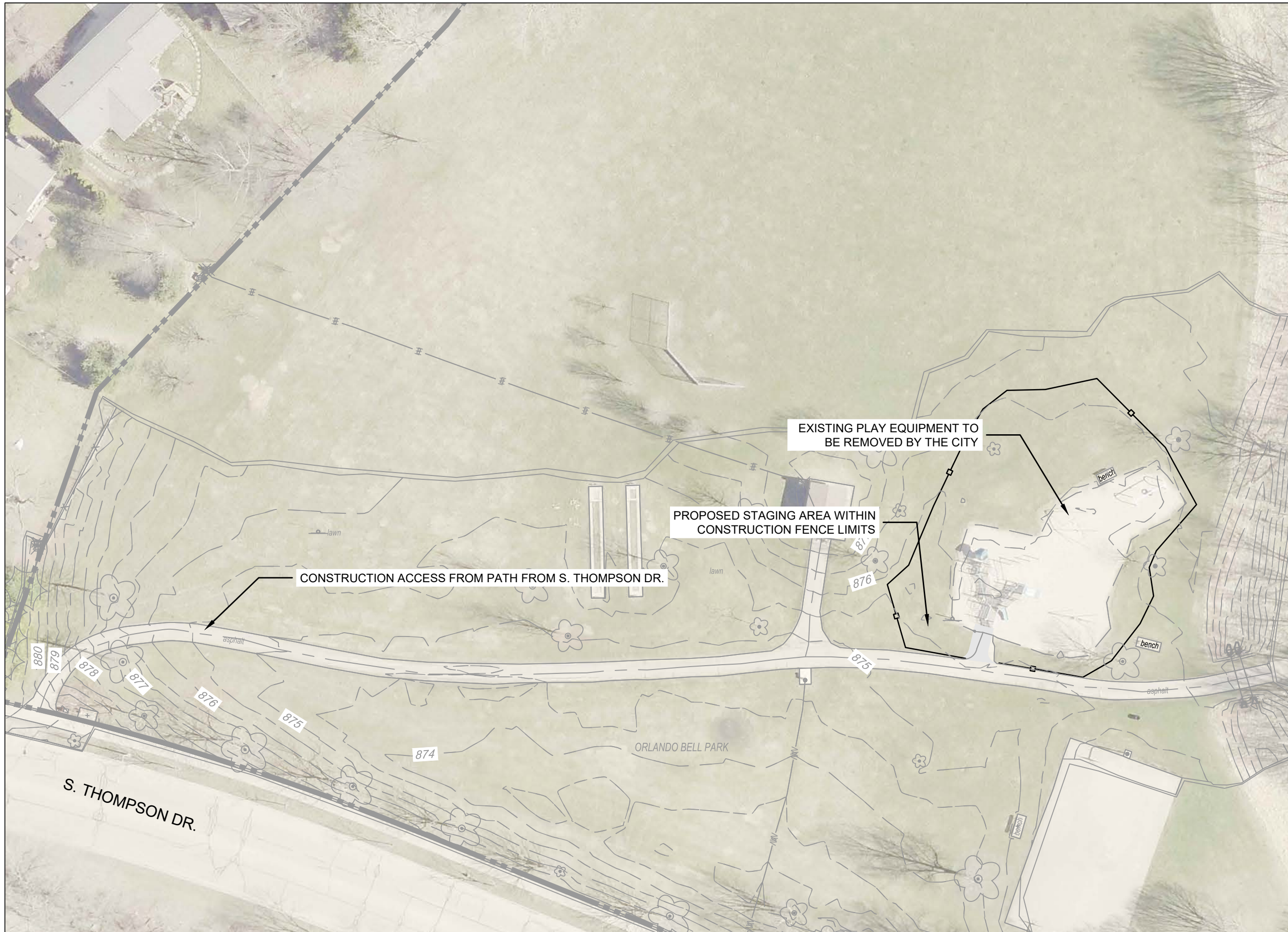
Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
7.1		Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	1434.09	1.42	2031.63	75.2	0%	75.2
7.2		Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-14in	1434.09	varies	0.00	0.0	0%	0.0
7.3		Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-14in	1434.09	varies	-1925.92	-71.3	0%	-71.3
7.4		Play Surface Place (Wood Mulch)	Place 14in wood mulch play surface	n/a	n/a	1434.09	-1.17	-1677.89	-62.1	0%	-62.1
8.1		Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	24.75	1.42	35.06	1.3	0%	1.3
8.2		Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	24.75	varies	0.00	0.0	0%	0.0
8.3		Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	24.75	varies	-40.58	-1.5	0%	-1.5
8.4		Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	24.75	-1.00	-24.75	-0.9	0%	-0.9
9	Adjust	Play Surface Place (Wood Mulch)	Increase play surface by 1/2 of asphalt ramp gravel base volume = 1/2 x (2.25 ft x 9 ft x 7 in)	n/a	n/a	31	-0.29	-9	-0.3	0%	-0.3

**Computation Summary**  
 Positive volumes are cuts (material available), negative volumes

Row Labels	Sum of Factored (Uncompacted) Volume (cu yd)
Asphalt Place	-2.14
Border Timbers Place (placeholder volume)	-3.61
Gravel Place (pavement)	-6.42
Pea gravel place	-6.87
Play Surface Excavate	105.47
Play Surface Place (Wood Mulch)	-78.47
Subsoil Excavate	9.47
Subsoil Place	-137.77
Topsoil Excavate	46.44
Topsoil Place	-41.08
<b>Grand Total</b>	<b>-114.99</b>

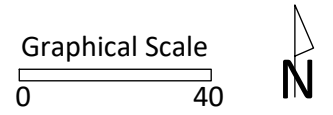
Reorganized into bid table items

Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut	56	CY	= Subsoil Excavate + Topsoil Excavate + Pavement Excavate
20103 Excavation Cut - Pea Gravel	105	CY	= Play Surface Excavate
20202 Fill - Borrow	128	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	246	SY	= (Topsoil Place)/-.167
40102 Crushed Aggregate Base Course Gradation No. 2	2	tons	= ((Gravel Place) pavement) * -2 ton/cubic yard
40202 HMA Pavement 4 LT 58-28 S	2.2	tons	= Asphalt Place * -2.16 ton/cubic yard
90003 Playground Surfacing - Wood Fiber Mulch	94.2	CY	= Play Surface Place (Wood Mulch) * -1.2)
90004 Playground Surfacing - Pea Gravel	7	CY	= Pea gravel place



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**PARKS**



PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
 2274 S THOMPSON  
 DR  
 MADISON, WI 53716**

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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

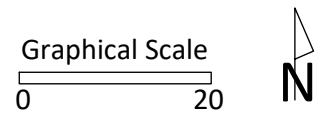
SHEET TITLE:  
**PROJECT LOCATION  
 AND SITE ACCESS**

SHEET NUMBER:  
**3.1**



City of Madison  
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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
 2274 S THOMPSON  
 DR  
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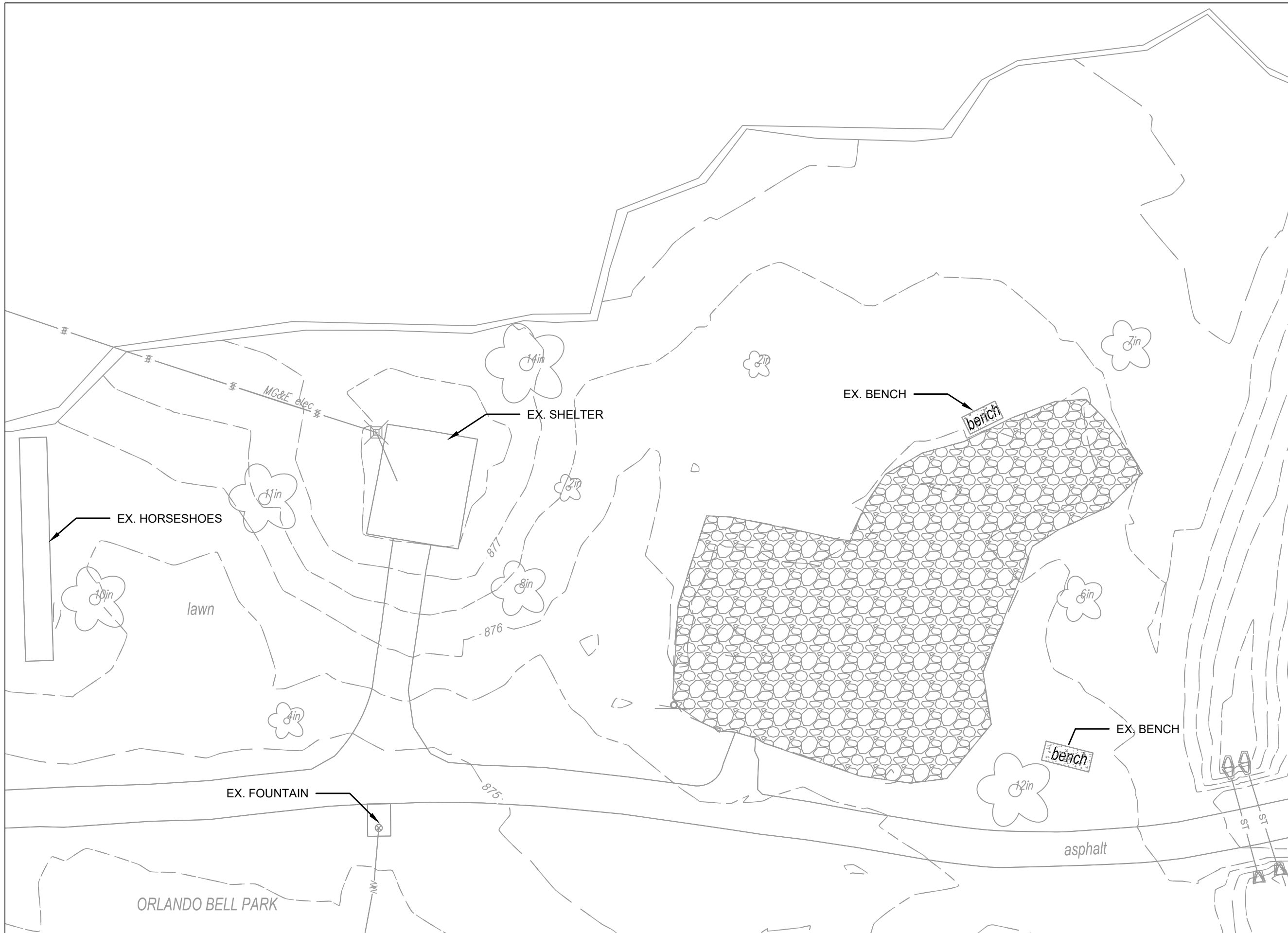
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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**EXISTING CONDITIONS**

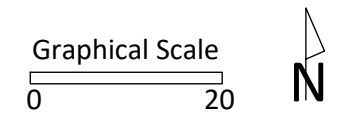
SHEET NUMBER:  
**3.2**





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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
 2274 S THOMPSON  
 DR  
 MADISON, WI 53716**

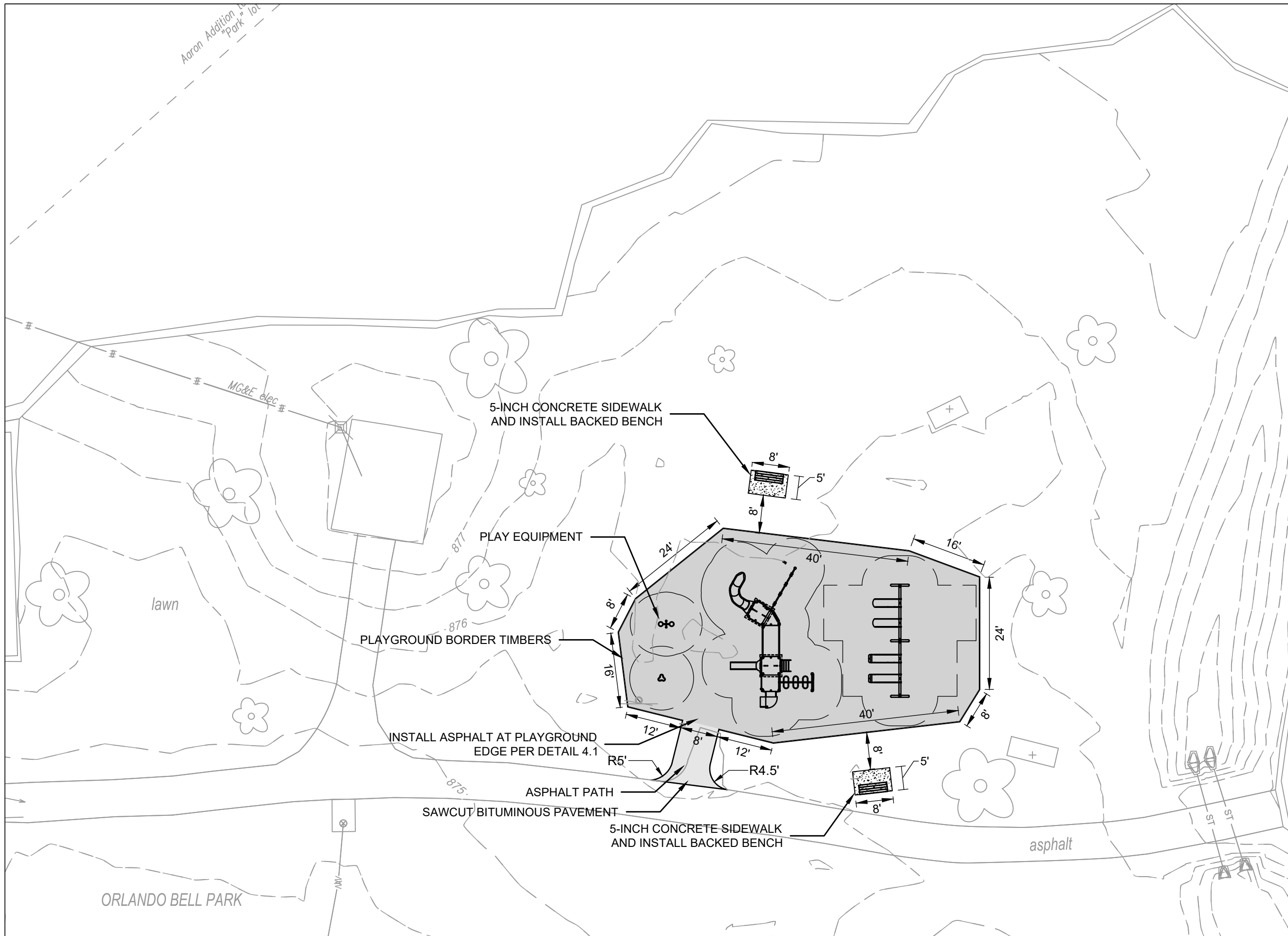
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ITEM	DATE
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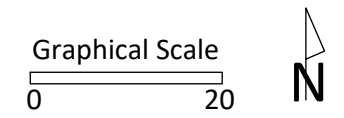
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**DEMOLITION AND  
 PROTECTION PLAN**

SHEET NUMBER:  
**3.3**



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PROJECT:  
**2020 PLAYGROUND  
 IMPROVEMENTS-  
 GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
 2274 S THOMPSON  
 DR  
 MADISON, WI 53716**

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ITEM	DATE
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PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**SITE PLAN**

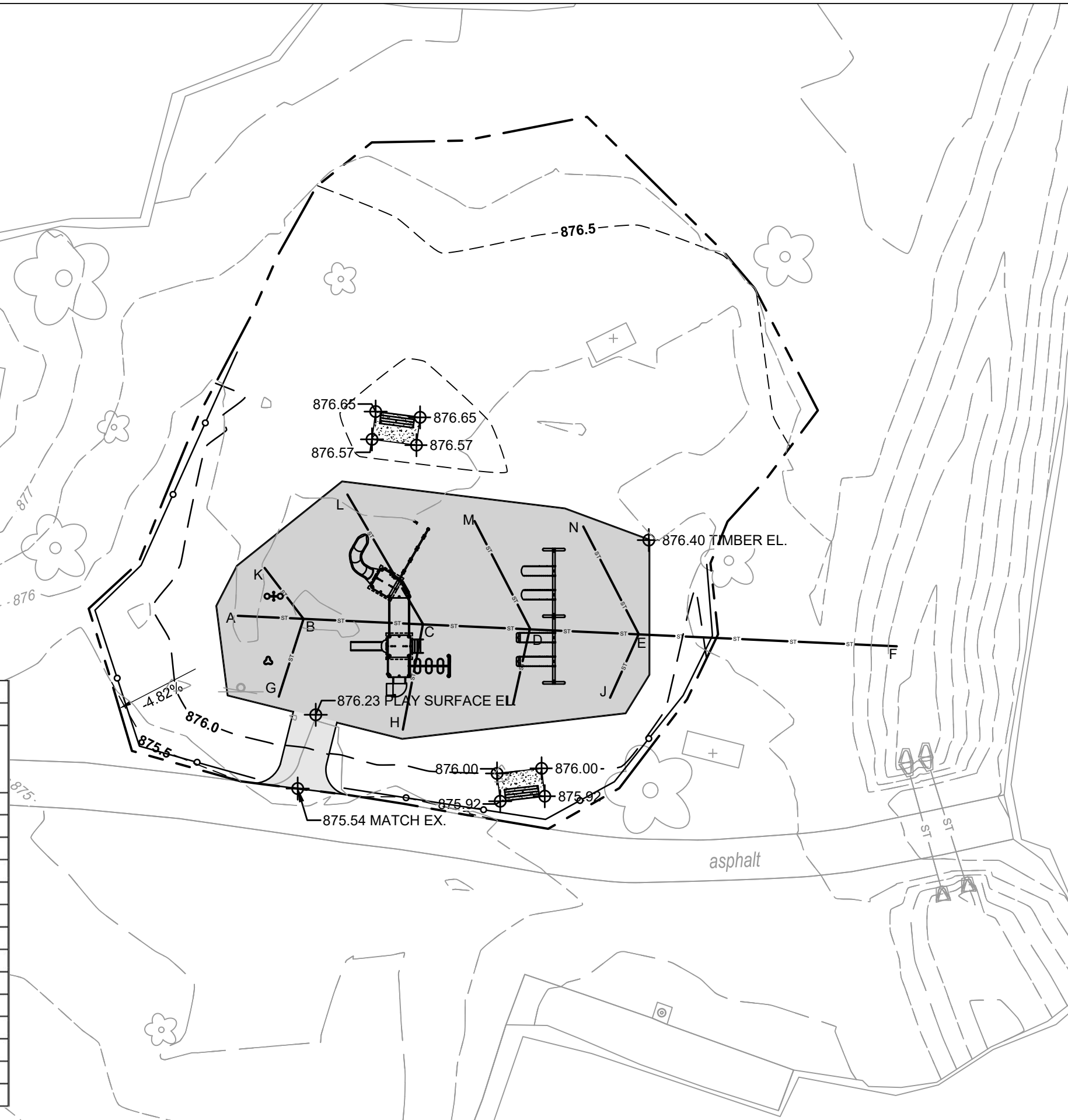
SHEET NUMBER:  
**3.4**

**NOTES**

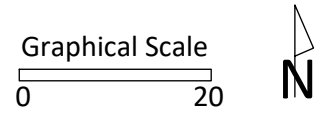
1.) ALL DISTURBED AREAS SHALL RECEIVE CLASS I, URBAN TYPE A EROSION CONTROL MATTING.

Orlando Bell Park		
Drain Tile Invert (Flowline) Elevations		
Point	Invert (ft)	Distance from top of timbers 876.4 (INCHES)
A	875.23	-14.04
B	875.18	-14.64
C	875.09	-15.72
D	875.01	-16.68
E	874.93	-17.64
F	874.75	-19.80
G	875.23	-14.04
H	875.23	-14.04
I	875.23	-14.04
J	875.23	-14.04
K	875.23	-14.04
L	875.23	-14.04
M	875.23	-14.04
N	875.23	-14.04

Drain Tile Lengths & Slopes				
from intersection to intersection				
From	To	Length (ft)	Slope (%)	Pipe type
A	B	11.7	-0.43%	UNDERDRAIN
B	C	21.48	-0.42%	UNDERDRAIN
C	D	19.18	-0.42%	UNDERDRAIN
D	E	19.43	-0.41%	UNDERDRAIN
E	F	46.14	-0.39%	UNDERDRAIN
B	G	14.58	-0.34%	UNDERDRAIN
B	K	11.2	-0.45%	UNDERDRAIN
C	H	19.13	-0.73%	UNDERDRAIN
C	L	26.5	-0.53%	UNDERDRAIN
D	I	14.18	-1.55%	UNDERDRAIN
D	M	21.67	-1.02%	UNDERDRAIN
E	N	21.77	-1.38%	UNDERDRAIN
E	J	12.36	-2.43%	UNDERDRAIN
	Total	259.32		



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**PARKS DIVISION**  
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PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS- GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
 2274 S THOMPSON DR  
 MADISON, WI 53716**

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ITEM	DATE
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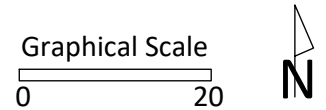
PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**GRADING AND EROSION CONTROL PLAN**

SHEET NUMBER:  
**3.5**

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
1.1	Grass to Grass	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	6163.99	0.50	3082.00	114.1	0%	114.1
1.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	6163.99	varies	15.81	0.6	0%	0.6
1.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	6163.99	varies	-1129.59	-41.8	0%	-41.8
1.4	Grass to Grass	Topsoil Place	Place 6" topsoil	n/a	n/a	6163.99	-0.50	-3082.00	-114.1	0%	-114.1
2.1	Grass to play surface	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	166.21	0.50	83.11	3.1	0%	3.1
2.2	Grass to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-14 inch	166.21	varies	48.32	1.8	0%	1.8
2.3	Grass to play surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-14 inch	166.21	varies	0.00	0.0	0%	0.0
2.4	Grass to play surface	Play Surface Place (Rubber Mulch)	Place 14" of rubber mulch	n/a	n/a	166.21	-1.17	-193.91	-7.2	0%	-7.2
3.1	Asphalt to Grass	Pavement Excavate	Strip 1' of Asphalt and Gravel	n/a	n/a	28.01	1.00	28.01	1.0	0%	1.0
3.2	Asphalt to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-12in	Pro-6in	28.01	varies	0.00	0.0	0%	0.0
3.3	Asphalt to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-12in	Pro-6in	28.01	varies	-20.52	-0.8	0%	-0.8
3.2	Asphalt to Grass	Topsoil Place	Place 6" topsoil	n/a	n/a	28.01	-0.50	-14.01	-0.5	0%	-0.5
4.1	Grass to Asphalt	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	36.48	0.50	18.24	0.7	0%	0.7
4.2	Grass to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	36.48	varies	8.79	0.3	0%	0.3
4.3	Grass to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	36.48	varies	-0.07	0.0	0%	0.0
4.3	Grass to Asphalt	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	36.48	-0.75	-27.36	-1.0	0%	-1.0
4.5	Grass to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	36.48	-0.25	-9.12	-0.3	0%	-0.3
5.1	Grass to Timbers	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	29.32	0.50	14.66	0.5	0%	0.5
5.2	Grass to Timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	29.32	varies	0.79	0.0	0%	0.0
5.3	Grass to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	29.32	varies	-1.59	-0.1	0%	-0.1
5.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	na	29.32	-1.00	-29.32	-1.1	0%	-1.1
6.1	Play surface to Grass	Play Surface Excavate	Remove existing play surface, estimated depth 17 in	n/a	n/a	1798.16	1.42	2547.39	94.3	0%	94.3
6.2	Play surface to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	1798.16	varies	0.00	0.0	0%	0.0
6.3	Play surface to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	1798.16	varies	-2359.37	-87.4	0%	-87.4
6.4	Play surface to Grass	Topsoil Place	Place 6" of topsoil	n/a	n/a	1798.16	-0.50	-899.08	-33.3	0%	-33.3

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Department of Public Works  
**PARKS DIVISION**  
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Madison, WI 53703



PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS- GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
2274 S THOMPSON DR  
MADISON, WI 53716**

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ITEM DATE  
ADVERTISED TO BID 06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**VOLUME COMPUTATIONS**

SHEET NUMBER:  
**3.6**

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
7.1	Play surface to play surface	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	2594.33	1.42	3675.30	136.1	0%	136.1
7.2	Play surface to play surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-14 inch	2594.33	varies	0.00	0.0	0%	0.0
7.3	Play surface to play surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-14 inch	2594.33	varies	-1706.20	-63.2	0%	-63.2
7.4	Play surface to play surface	Play Surface Place (Rubber Mulch)	Place 14in rubber mulch play surface	n/a	n/a	2594.33	-1.17	-3035.37	-112.4	0%	-112.4
8.1	Play surface to timbers	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	70.84	1.42	100.36	3.7	0%	3.7
8.2	Play surface to timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	70.84	varies	0.00	0.0	0%	0.0
8.3	Play surface to timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	70.84	varies	-65.11	-2.4	0%	-2.4
8.4	Play surface to timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	70.84	-1.00	-70.84	-2.6	0%	-2.6
9.1	Asphalt to Asphalt	Pavement Excavate	Strip 1' of Asphalt and Gravel	n/a	n/a	61.31	1.00	61.31	2.3	0%	2.3
9.2	Asphalt to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-12in	Pro-12in	61.31	varies	0.07	0.0	0%	0.0
9.3	Asphalt to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-12in	Pro-12in	61.31	varies	-16.28	-0.6	0%	-0.6
9.4	Asphalt to Asphalt	Gravel Place (pavement)	Place 9" of gravel	n/a	n/a	61.31	-0.75	-45.98	-1.7	0%	-1.7
9.5	Asphalt to Asphalt	Asphalt Place	Place 3" of asphalt	n/a	n/a	61.31	-0.25	-15.33	-0.6	0%	-0.6
10.1	5" Concrete to Grass	Concrete Excavate	Remove 5" of concrete and 3" of gravel	n/a	n/a	31.47	0.66	20.77	0.8	0%	0.8
10.2	5" Concrete to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex- 8in	Pro-6in	31.47	varies	0.00	0.0	0%	0.0
10.3	5" Concrete to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex- 8in	Pro-6in	31.47	varies	-9.99	-0.4	0%	-0.4
10.4	5" Concrete to Grass	Topsoil Place	Place 8" of concrete	n/a	n/a	31.47	-0.50	-15.74	-0.6	0%	-0.6
11.1	Play Surface to Asphalt	Play Surface Excavate	surface, estimated depth 17in	n/a	n/a	9.45	1.42	13.39	0.5	0%	0.5
11.2	Play Surface to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	9.45	varies	0.00	0.0	0%	0.0
11.3	Play Surface to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	9.45	varies	-9.23	-0.3	0%	-0.3
11.4	Play Surface to Asphalt	Asphalt Place	Place 3" of asphalt	n/a	n/a	9.45	-0.25	-2.36	-0.1	0%	-0.1
12.1	Grass to 5-inch Concrete	Topsoil Excavate	Strip 6" topsoil	n/a	n/a	67.17	0.50	33.59	1.2	0%	1.2
12.2	Grass to 5-inch Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-8inch	67.17	varies	1.36	0.1	0%	0.1
12.3	Grass to 5-inch Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-8inch	67.17	varies	-12.01	-0.4	0%	-0.4
12.4	Grass to 5-inch Concrete	Concrete Place	Place 5"of concrete	n/a	n/a	67.17	-0.41	-27.54	-1.0	0%	-1.0
12.5	Grass to 5-inch Concrete	Gravel Place (Concrete)	Place 3" of gravel	n/a	n/a	67.17	-0.25	-16.79	-0.6	0%	-0.6

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Madison, WI 53703

**play  
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PARKS**

Graphical Scale  
0 20



PROJECT:

**2020 PLAYGROUND  
IMPROVEMENTS-  
GROUP 3**

PROJECT ADDRESS:

**ORLANDO BELL PARK  
2274 S THOMPSON  
DR  
MADISON, WI 53716**

Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

SHEET TITLE:  
**VOLUME  
COMPUTATIONS**

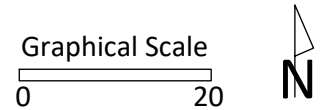
SHEET NUMBER:  
**3.7**

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfactored volume (cu ft)	Unfactored volume (cu yd)	Expansion Factor (%)	Factored (Uncompacted) Volume (cu yd)
13.1	Play Surface to 5-inch Concrete	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	12.79	1.42	18.12	0.7	0%	0.7
13.2	Play Surface to 5-inch Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-8inch	12.79	varies	0.07	0.0	0%	0.0
13.3	Play Surface to 5-inch Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-8inch	12.79	varies	-1.26	0.0	0%	0.0
12.4	Grass to 5-inch Concrete	Concrete Place	Place 5"of concrete	n/a	n/a	12.79	-0.41	-5.24	-0.2	0%	-0.2
13.4	Play Surface to 5-inch Concrete	Gravel Place (Concrete)	Place 3" of gravel	n/a	n/a	12.79	-0.25	-3.20	-0.1	0%	-0.1
14	Adjust	Play Surface Place (Rubber Mulch)	Increase play surface by 1/2 of asphalt ramp gravel base volume = 1/2 x (2.25 ft x 9 ft x 7 in)	n/a	n/a	31	-0.29	-9	-0.3	0%	-0.3

Computation Summary	
Positive volumes are cuts (material available), negative volumes	
	<b>Sum of Factored (Uncompacted) Volume (cu yd)</b>
<b>Row Labels</b>	
Asphalt Place	-0.99
Border Timbers Place (placeholder volume)	-3.71
Concrete Excavate	0.77
Concrete Place	-1.21
Gravel Place (Concrete)	-0.74
Gravel Place (pavement)	-2.72
Pavement Excavate	3.31
Play Surface Excavate	235.35
Play Surface Place (Rubber Mulch)	-119.94
Subsoil Excavate	2.79
Subsoil Place	-197.45
Topsoil Excavate	119.69
Topsoil Place	-148.55
<b>Grand Total</b>	<b>-113.41</b>

Reorganized into bid table items			
Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut	126	CY	= Subsoil Excavate + Topsoil Excavate + Pavement Excavate
20103 Excavation Cut - Pea Gravel	235	CY	= Play Surface Excavate
20202 Fill - Borrow	-195	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	890	SY	= (Topsoil Place)/-.167
40102 Crushed Aggregate Base Course Gradation No. 2	1	tons	= ((Gravel Place) pavement) * -2 ton/cubic yard
40202 HMA Pavement 4 LT 58-28 S	1.0	tons	= Asphalt Place * -2.16 ton/cubic yard
90005 Playground Surfacing - Rubber Mulch	143.9	CY	= Play Surface Place (Rubber Mulch * -1.2)

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PROJECT:  
**2020 PLAYGROUND IMPROVEMENTS- GROUP 3**

PROJECT ADDRESS:  
**ORLANDO BELL PARK  
2274 S THOMPSON DR  
MADISON, WI 53716**

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ITEM	DATE
ADVERTISED TO BID	06/18/2020

PUBLIC WORKS PROJECT #:  
**8904**

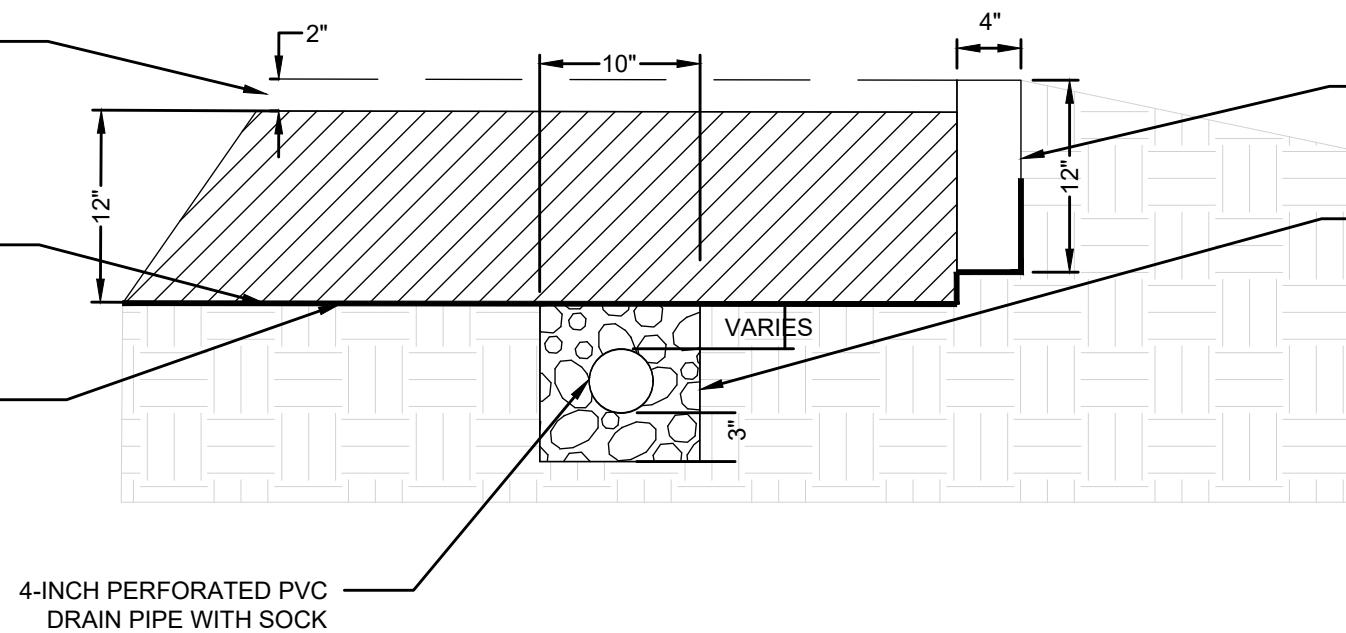
SHEET TITLE:  
**VOLUME COMPUTATIONS**

SHEET NUMBER:  
**3.8**

PLAYGROUND SURFACING INSTALLED AT PLAYGROUND TIMBER HEIGHT TO ACCOMMODATE COMPACTION. FINAL PLAYGROUND SURFACE SHOULD BE SET AT 2" BELOW TIMBER HEIGHT.

GEOTEXTILE FABRIC TYPE SAS NON WOVEN (MIN. 4 OZ/SY)

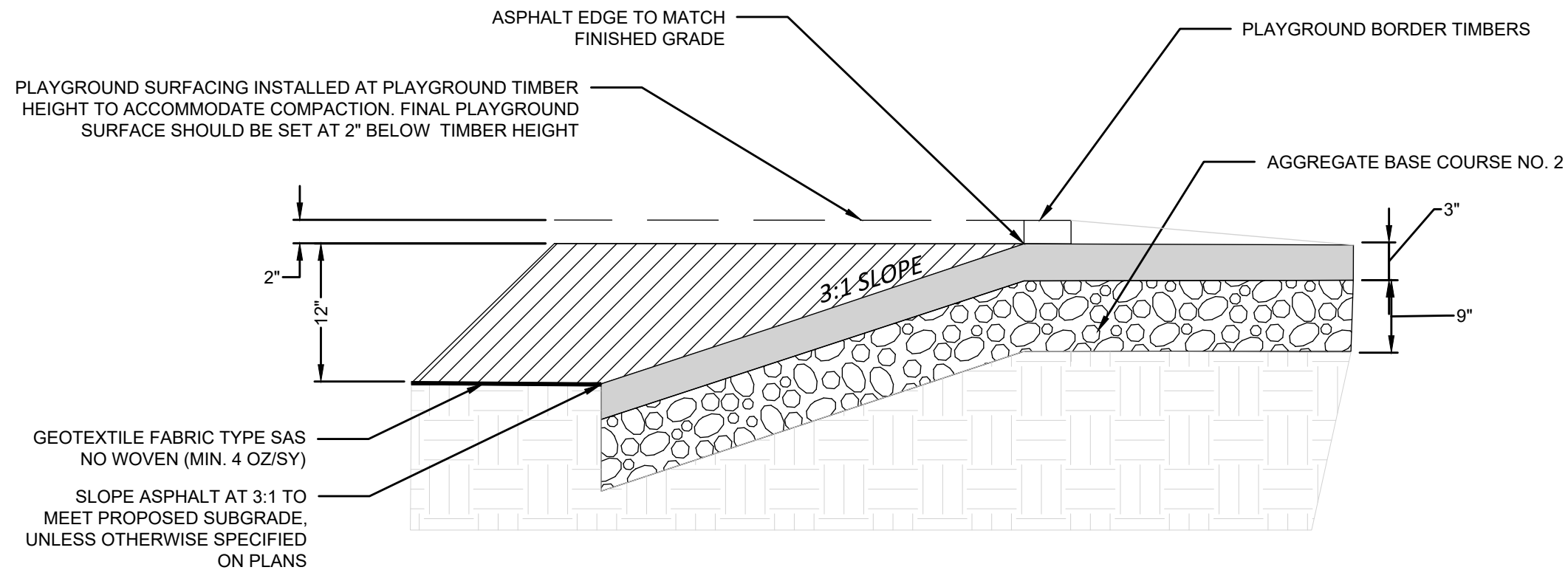
PLAYGROUND SUBGRADE - MIN. 12" FROM PLAYGROUND SURFACE FINISHED GRADE



PLAYGROUND BORDER TIMBER

OPEN GRADED BASE COURSE WI DOT GRADATION NO. 2 AS SPECIFIED IN SECTION 501.2.5.4.4 OF WISCONSIN DOT STANDARD SPECIFICATIONS

1  
4.1  
PLAYGROUND SURFACING WITH UNDERDRAIN  
NOT TO SCALE



GEOTEXTILE FABRIC TYPE SAS NO WOVEN (MIN. 4 OZ/SY)

SLOPE ASPHALT AT 3:1 TO MEET PROPOSED SUBGRADE, UNLESS OTHERWISE SPECIFIED ON PLANS

ASPHALT EDGE TO MATCH FINISHED GRADE

PLAYGROUND BORDER TIMBERS

AGGREGATE BASE COURSE NO. 2

2  
4.1  
ASPHALT AT PLAYGROUND EDGE  
NOT TO SCALE

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**play**  
**MADISON**  
**PARKS**

PROJECT:

*2020 PLAYGROUND IMPROVEMENTS - GROUP 3*

PROJECT ADDRESS:

*Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.*

ITEM	DATE
ADVERTISED TO BID	2020-05-08

PUBLIC WORKS PROJECT #:  
*8904*

SHEET TITLE:  
*DETAILS - PLAYGROUND & PAVEMENT EDGE*

SHEET NUMBER:

**4.1**