

SHEET SCHEDULE

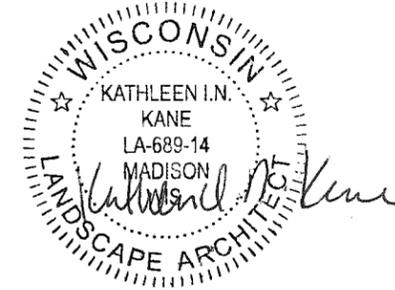
- 1.1 DUDGEON SCHOOL PARK - PROJECT LOCATION AND SITE ACCESS
- 1.2 DUDGEON SCHOOL PARK - DEMOLITION AND PROTECTION PLAN
- 1.3 DUDGEON SCHOOL PARK - SITE PLAN
- 1.4 DUDGEON SCHOOL PARK - GRADING AND EROSION CONTROL PLAN
- 1.5 DUDGEON SCHOOL PARK - DESIGN CALCULATIONS

- 2.1 INDIAN HILLS PARK - PROJECT LOCATION AND SITE ACCESS
- 2.2 INDIAN HILLS PARK - DEMOLITION AND PROTECTION PLAN
- 2.3 INDIAN HILLS PARK - SITE PLAN
- 2.4 INDIAN HILLS PARK - GRADING AND EROSION CONTROL PLAN
- 2.5 INDIAN HILLS PARK - DESIGN CALCULATIONS

- 3.1 ODANA HILLS PARK - PROJECT LOCATION AND SITE ACCESS
- 3.2 ODANA HILLS PARK - DEMOLITION AND PROTECTION PLAN
- 3.3 ODANA HILLS PARK - SITE PLAN
- 3.4 ODANA HILLS PARK - GRADING AND EROSION CONTROL PLAN
- 3.5 ODANA HILLS PARK - DESIGN CALCULATIONS

SHEET SCHEDULE, CONT.

- 4.1 TYPICAL PLAYGROUND SURFACING WITH UNDERDRAIN
- 4.2 ASPHALT EDGE AT PLAYGROUND
- 4.3 ORNAMENTAL FENCING



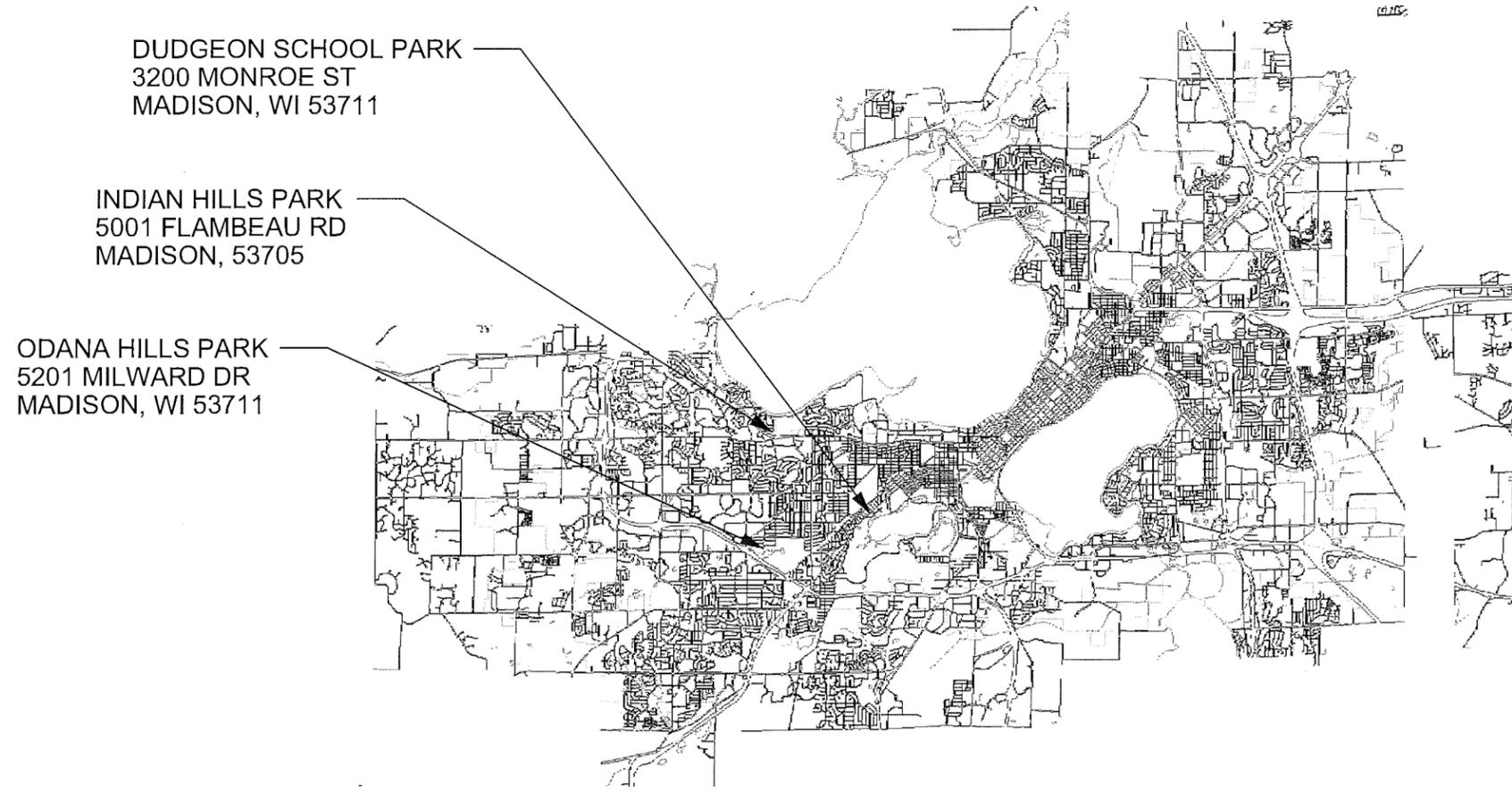
City of Madison
 Department of Public Works
PARKS DIVISION
 City-County Building, Suite 104
 210 Martin Luther King, Jr. Blvd.
 Madison, WI 53703

play
**MADISON
 PARKS**



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS-
 GROUP 1**

2018 PARKS PLAYGROUND REPLACEMENTS - GROUP 1
CONTRACT 8154
MUNIS NOS. 17372-51-130; 17376-51-130; 17377-51-130



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
Advised by: KK	03-01-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
 SHEET NUMBER:

CONSTRUCTION ACCESS FROM CORNER OF CROSS ST AND GILMORE ST
 PROTECT EXISTING SURFACES (LAWN, CURB, SIDEWALK, PAVEMENT, ETC.)
 AND UTILITIES. REPAIR OF SURFACES AND UTILITIES IS INCIDENTAL TO THIS CONTRACT.

CROSS ST

GILMORE ST

PROPOSED CONSTRUCTION FENCE, NO CONSTRUCTION OUTSIDE OF FENCE LIMITS

PROPOSED STAGING AREA WITHIN CONSTRUCTION FENCE LIMITS

CP #CP04
 MAGNAIL SDWK
 N=475692.5400
 E=807553.1000
 ELEV=912.0200

CP #CP03
 HYD TOP NUT
 N=475678.7900
 E=807556.4300
 ELEV=914.9100

#CP05
 IN CO SW OF 2 INLETS
 N=475645.9100
 E=807748.4500
 ELEV=909.4500

CP #CP06
 MAGNAIL ASPH NW
 N=475736.5500
 E=807866.0800
 ELEV=904.5100

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Graphical Scale

0 60 ft



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 - GROUP 1**

**DUDGEON SCHOOL PARK
 3200 MONROE STREET
 MADISON, WI 53711**

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

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

SHEET NUMBER:
1.1

LEGEND

-  REMOVE EX. PEA GRAVEL / RUBBER MIX
-  REMOVE EX. ASPHALT
-  PRO. CONSTRUCTION ENTRANCE
-  PRO. CONSTRUCTION FENCE
-  PRO. SILT SOCK
-  SAWCUT ASPHALT PER BID ITEM 20303
-  NRC NO ROOT CUT PER BID ITEM 10803
-  EX. CONTOUR (INDEX)
-  EX. CONTOUR (INTER.)
-  EX. APPROX. PARK BOUNDARY

NOTES

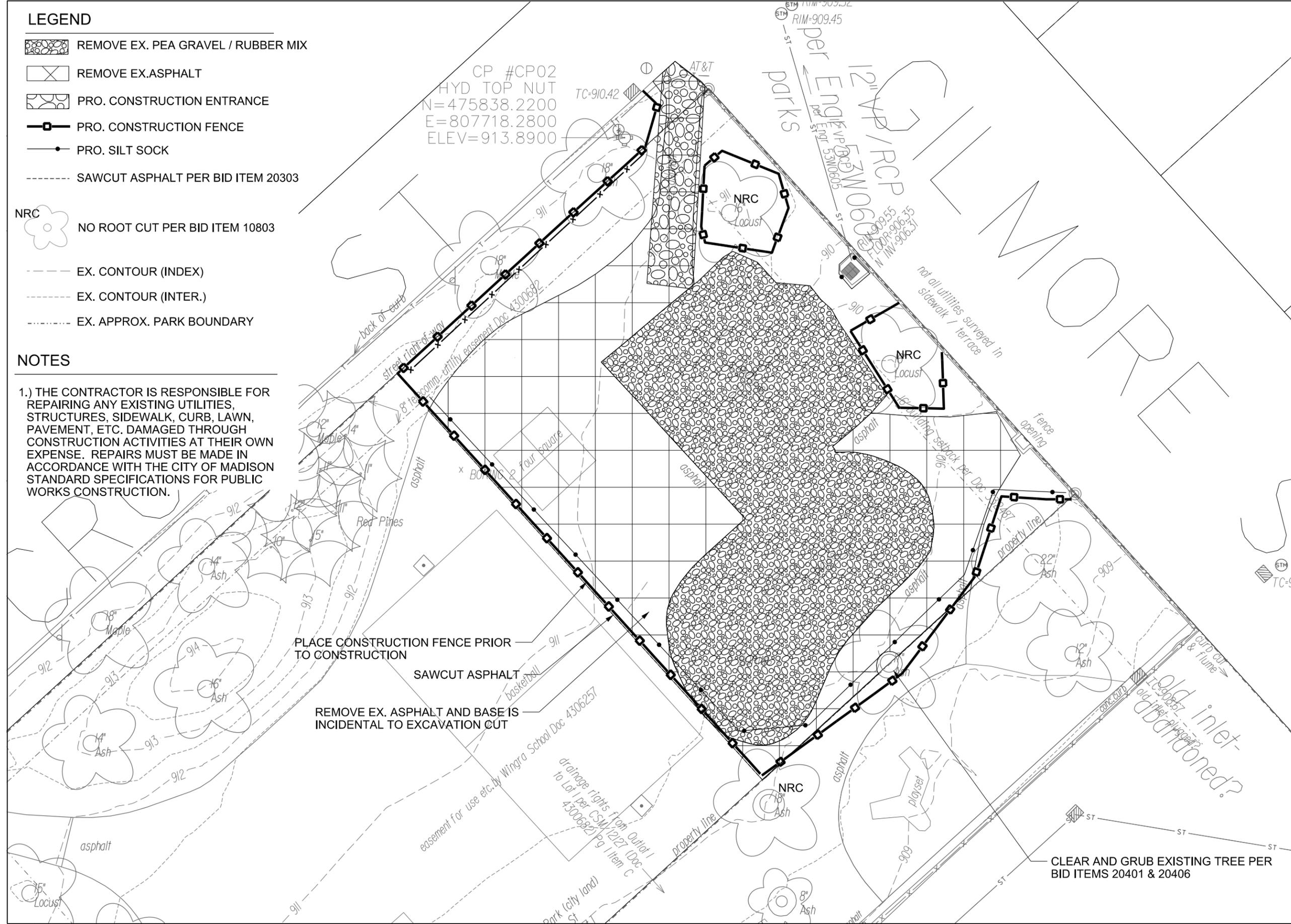
1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

PLACE CONSTRUCTION FENCE PRIOR TO CONSTRUCTION

SAWCUT ASPHALT

REMOVE EX. ASPHALT AND BASE IS INCIDENTAL TO EXCAVATION CUT

CLEAR AND GRUB EXISTING TREE PER BID ITEMS 20401 & 20406



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PROJECT:
**2018 PARKS
PLAYGROUND
REPLACEMENTS
- GROUP 1**

**DUDGEON SCHOOL PARK
3200 MONROE ST
MADISON, WI 53711**

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**DEMOLITION AND
PROTECTION PLAN**

SHEET NUMBER:
1.2

LEGEND

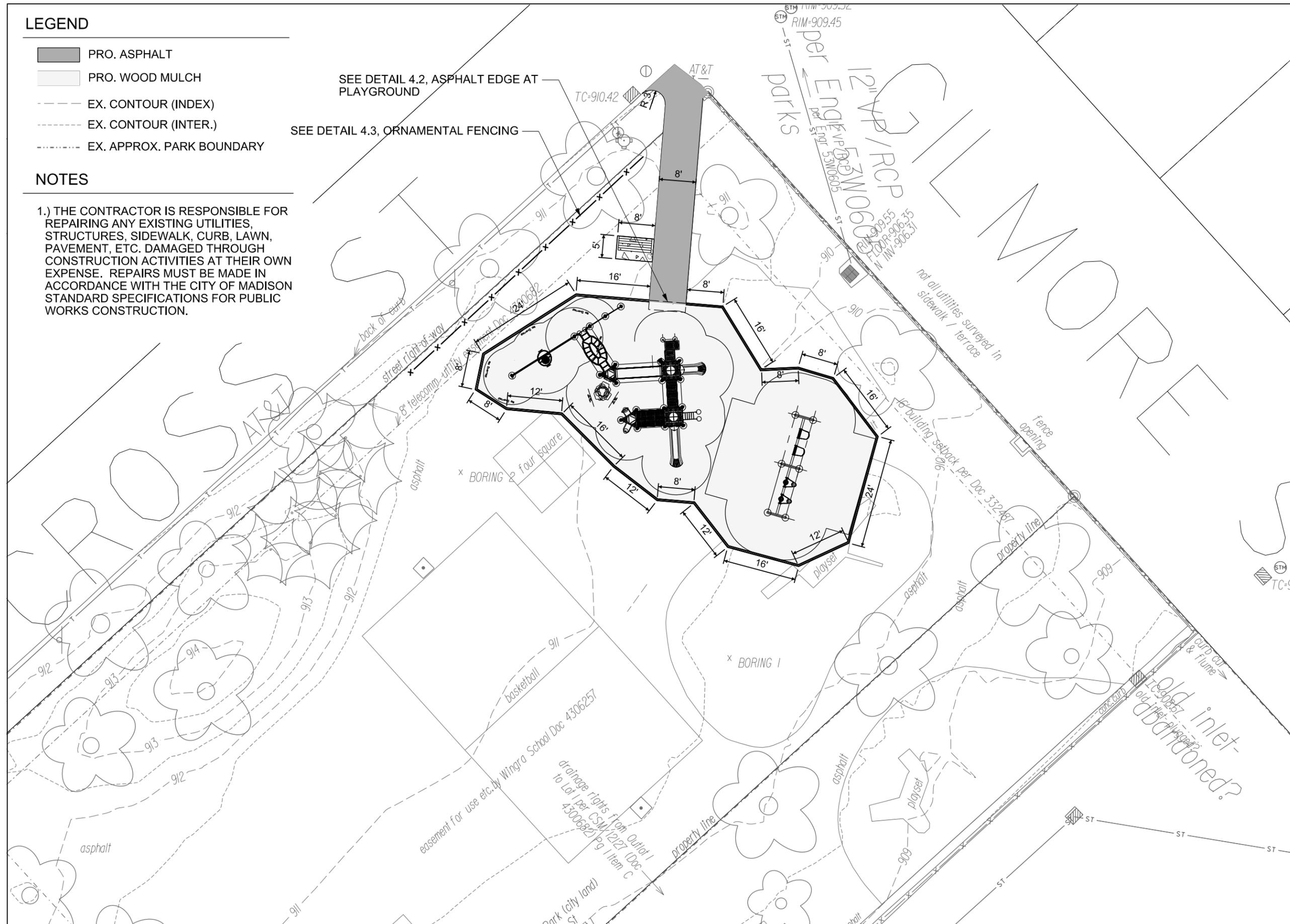
- PRO. ASPHALT
- PRO. WOOD MULCH
- EX. CONTOUR (INDEX)
- EX. CONTOUR (INTER.)
- EX. APPROX. PARK BOUNDARY

NOTES

1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

SEE DETAIL 4.2, ASPHALT EDGE AT PLAYGROUND

SEE DETAIL 4.3, ORNAMENTAL FENCING



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Graphical Scale

0 20 ft



PROJECT:
2018 PARKS
PLAYGROUND
REPLACEMENTS
- GROUP 1

DUDGEON SCHOOL PARK
3200 MONROE ST
MADISON, WI 53711

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
1.3

LEGEND

- XXX.XX PRO. SPOT EL.
- PRO. ASPHALT
- PRO. WOOD MULCH
- ▨ PRO. EROSION MATTING
- PRO. CONSTRUCTION ENTRANCE
- PRO. GRADING EXTENTS
- ST- PRO. DRAINTILE UNDERDRAIN
- DIT- PRO. SWALE
- PRO. CONSTRUCTION FENCE
- PRO. SILT SOCK
- PRO. CONTOUR (INDEX)
- PRO. CONTOUR (INTER.)
- EX. CONTOUR (INDEX)
- EX. CONTOUR (INTER.)
- EX. APPROX. PARK BOUNDARY

NOTES

- 1.) PLACE 4 OZ. PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE PLAYGROUND SUBGRADE PER DETAIL 7.1.
- 2.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED IN PLANS.

RESTORE ALL DISTURBANCE AREAS AT COMPLETION OF CONSTRUCTION WITH TOPSOIL, SEED AND MAT PER BID ITEMS 20221, 20701 & 21061

CP #CP02
HYD TOP NUT
N=475838.2200
E=807718.2800
ELEV=913.8900

EDGE OF PLAYGROUND BORDER TIMBERS: 911.67
ELEVATION OF FINISHED PLAYGROUND SURFACE: 911.50
PLAYGROUND SUBGRADE ELEVATION: 910.50
ASPHALT AT PLAYGROUND ELEVATION: 911.50

STORM SEWER TAP W/ KOR N SEAL
BOOT PER BID ITEM 50792

INLET PROTECTION, TYPE A -
COMPLETE

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0 20 ft N

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**2018 PARKS
PLAYGROUND
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- GROUP 1**

**DUDGEON SCHOOL PARK
3200 MONROE ST
MADISON, WI 53711**

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

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

SHEET NUMBER:
1.4

Dudgeon School Park Playground		
Drain Tile Invert (Flowline) Elevations		
Point	Invert (ft)	Distance from top of timbers 911.67 (INCHES)
A	909.91	21.12
B	909.47	26.40
C	909.16	30.12
D	909.08	31.08
E	909.91	21.12
F	909.91	21.12
G	909.91	21.12
H	908.55	37.44

Drain Tile Lengths & Slopes				
from intersection to intersection				
From	To	Length (ft)	Slope (%)	Pipe type
A	B	15.88	-2.77	Underdrain
B	C	11.27	-2.75	Underdrain
C	D	3.12	-2.56	Underdrain
D	H	28.83	-1.84	Underdrain
E	B	29.44	-1.49	Underdrain
F	C	47.93	-1.56	Underdrain
G	D	31.62	-2.62	Underdrain

Dudgeon School Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract
Date Revised: 2-19-2018

Notes:
Positive volumes are cuts, negative volumes are fills.
Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Existing Dudgeon_Survey2016-08-21.dtm
Proposed Pro1.dtm

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac-tored volume (cu ft)	Unfac-tored volume (cu yd)	Expan-sion Factor (%)	Factored (Uncom-pacted) Volume (cu yd)
1.1	Asphalt to Asphalt	Asphalt Excavate	Remove estimated 3in asphalt	n/a	n/a	394	0.25	99	3.6	0%	3.6
1.2	Asphalt to Asphalt	Gravel (Clean) Excavate	Remove estimated 4in clean gravel base	n/a	n/a	394	0.33	131	4.9	0%	4.9
1.3	Asphalt to Asphalt	Gravel (Dirty) Excavate	Remove estimated 2in mixed gravel/subsoil	n/a	n/a	394	0.17	66	2.4	0%	2.4
1.4	Asphalt to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-9in	Pro-12in	394	varies	73	2.7	0%	2.7
1.5	Asphalt to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-9in	Pro-12in	394	varies	-26	-1.0	0%	-1.0
1.6	Asphalt to Asphalt	Gravel (for Pavement) Place	Place 9in gravel base out to 6in from pavement edge	n/a	n/a	394	-0.75	-296	-10.9	0%	-10.9
1.7	Asphalt to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	336	-0.25	-84	-3.1	0%	-3.1
1.8	Asphalt to Asphalt	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	58	-0.25	-15	-0.5	0%	-0.5
2.1	Asphalt to Concrete	Asphalt Excavate	Remove estimated 3in asphalt	n/a	n/a	36	0.25	9	0.3	0%	0.3
2.2	Asphalt to Concrete	Gravel (Clean) Excavate	Remove estimated 4in clean gravel base	n/a	n/a	36	0.33	12	0.4	0%	0.4
2.3	Asphalt to Concrete	Gravel (Dirty) Excavate	Remove estimated 2in mixed gravel/subsoil	n/a	n/a	36	0.17	6	0.2	0%	0.2
2.4	Asphalt to Concrete	Gravel (for Pavement) Place	Place 6in gravel base out to 6in from pavement edge	n/a	n/a	36	-0.50	-18	-0.7	0%	-0.7
2.5	Asphalt to Concrete	Concrete Place	Place 5in concrete	n/a	n/a	36	-0.42	-15	-0.6	0%	-0.6
2.6	Asphalt to Concrete	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	36	-0.42	-15	-0.6	0%	-0.6
3.1	Asphalt to Grass	Asphalt Excavate	Remove estimated 3in asphalt	n/a	n/a	2658	0.25	664	24.6	0%	24.6
3.2	Asphalt to Grass	Gravel (Clean) Excavate	Remove estimated 4in clean gravel base	n/a	n/a	2658	0.33	886	32.8	0%	32.8
3.3	Asphalt to Grass	Gravel (Dirty) Excavate	Remove estimated 2in mixed gravel/subsoil	n/a	n/a	2658	0.17	443	16.4	0%	16.4
3.4	Asphalt to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-9in	Pro-6in	2658	varies	0	0.0	0%	0.0
3.5	Asphalt to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-9in	Pro-6in	2658	varies	-1492	-55.3	0%	-55.3
3.6	Asphalt to Grass	Topsoil Place	Place 6in topsoil	n/a	n/a	2658	-0.50	-1329	-49.2	0%	-49.2
4.1	Asphalt to Play Surface	Asphalt Excavate	Remove estimated 3in asphalt	n/a	n/a	41	0.25	10	0.4	0%	0.4
4.2	Asphalt to Play Surface	Gravel (Clean) Excavate	Remove estimated 4in clean gravel base	n/a	n/a	41	0.33	14	0.5	0%	0.5
4.3	Asphalt to Play Surface	Gravel (Dirty) Excavate	Remove estimated 2in mixed gravel/subsoil	n/a	n/a	41	0.17	7	0.3	0%	0.3
4.4	Asphalt to Play Surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-9in	Pro-12in	41	varies	0	0.0	0%	0.0
4.5	Asphalt to Play Surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-9in	Pro-12in	41	varies	-35	-1.3	0%	-1.3
4.6	Asphalt to Play Surface	Play Surface Place	Place 12in rubber mulch play surface	n/a	n/a	41	-1.00	-41	-1.5	0%	-1.5
5.1	Asphalt to Timbers	Asphalt Excavate	Remove estimated 3in asphalt	n/a	n/a	41	0.25	10	0.4	0%	0.4
5.2	Asphalt to Timbers	Gravel (Clean) Excavate	Remove estimated 4in clean gravel base	n/a	n/a	41	0.33	14	0.5	0%	0.5
5.3	Asphalt to Timbers	Gravel (Dirty) Excavate	Remove estimated 2in mixed gravel/subsoil	n/a	n/a	41	0.17	7	0.3	0%	0.3
5.4	Asphalt to Timbers	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-9in	Pro-12in	41	varies	0	0.0	0%	0.0
5.5	Asphalt to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-9in	Pro-12in	41	varies	-16	-0.6	0%	-0.6
5.6	Asphalt to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	41	-1.00	-41	-1.5	0%	-1.5
6.1	Grass to Asphalt	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	39	0.50	20	0.7	0%	0.7
6.2	Grass to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	39	varies	21	0.8	0%	0.8
6.3	Grass to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	39	varies	0	0.0	0%	0.0
6.4	Grass to Asphalt	Gravel (for Pavement) Place	Place 9in gravel base out to 6in from pavement edge	n/a	n/a	39	-0.75	-30	-1.1	0%	-1.1
6.5	Grass to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	22	-0.25	-5	-0.2	0%	-0.2
6.6	Grass to Asphalt	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	17	-0.25	-4	-0.2	0%	-0.2
7.1	Grass to Concrete	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	18	0.50	9	0.3	0%	0.3
7.2	Grass to Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-11in	18	varies	3	0.1	0%	0.1
7.3	Grass to Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-11in	18	varies	0	0.0	0%	0.0
7.4	Grass to Concrete	Gravel (for Pavement) Place	Place 6in gravel base out to 6in from pavement edge	n/a	n/a	18	-0.50	-9	-0.3	0%	-0.3
7.5	Grass to Concrete	Concrete Place	Place 5in concrete	n/a	n/a	10	-0.42	-4	-0.1	0%	-0.1
7.6	Grass to Concrete	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	8	-0.42	-3	-0.1	0%	-0.1
8.1	Grass to Grass	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	638	0.50	319	11.8	0%	11.8
8.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	638	varies	1	0.0	0%	0.0
8.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	638	varies	-79	-2.9	0%	-2.9
8.4	Grass to Grass	Topsoil Place	Place 6in topsoil	n/a	n/a	638	-0.50	-319	-11.8	0%	-11.8

9.1	Grass to Play Surface	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	1019	0.50	510	18.9	0%	18.9
9.2	Grass to Play Surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	1019	varies	102	3.8	0%	3.8
9.3	Grass to Play Surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	1019	varies	-84	-3.1	0%	-3.1
9.4	Grass to Play Surface	Play Surface Place	Place 12in wood mulch play surface	n/a	n/a	1019	-1.00	-1019	-37.8	0%	-37.8
10.1	Play Surface to Asphalt	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	5	1.42	8	0.3	0%	0.3
10.2	Play Surface to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	5	varies	0	0.0	0%	0.0
10.3	Play Surface to Asphalt	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	5	varies	-9	-0.3	0%	-0.3
10.4	Play Surface to Asphalt	Gravel (for Pavement) Place	Place 9in gravel base out to 6in from pavement edge	n/a	n/a	5	-0.75	-4	-0.1	0%	-0.1
10.5	Play Surface to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	5	-0.25	-1	0.0	0%	0.0
10.6	Play Surface to Asphalt	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	5	-0.25	-1	0.0	0%	0.0
11.1	Play Surface to Grass	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	2347	1.42	3325	123.1	0%	123.1
11.2	Play Surface to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	2347	varies	0	0.0	0%	0.0
11.3	Play Surface to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	2347	varies	-3668	-136.5	0%	-136.5
11.4	Play Surface to Grass	Topsoil Place	Place 6in topsoil	n/a	n/a	2347	-0.50	-1174	-43.5	0%	-43.5
12.1	Play Surface to Play Surface	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	1752	1.42	2482	91.9	0%	91.9
12.2	Play Surface to Play Surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	1752	varies	0	0.0	0%	0.0
12.3	Play Surface to Play Surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	1752	varies	-2523	-93.5	0%	-93.5
12.4	Play Surface to Play Surface	Play Surface Place	Place 12in wood mulch play surface	n/a	n/a	1752	-1.00	-1752	-64.9	0%	-64.9
13.1	Play Surface to Timbers	Play Surface Excavate	Remove existing play surface, estimated depth 17in	n/a	n/a	34	1.42	48	1.8	0%	1.8
13.2	Play Surface to Timbers	Subsoil Place	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	34	varies	0	0.0	0%	0.0
13.3	Play Surface to Timbers	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	34	varies	-57	-2.1	0%	-2.1
13.4	Play Surface to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	34	-1.00	-34	-1.2	0%	-1.2

Dudgeon School Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract 8154
Date Revised: 2/19/2018

Derived from more detailed spreadsheet available from Parks Div

Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material needed)

Row Labels	Sum of Unfac-tored volume (cu yd)
Asphalt Place	-3.4
Border Timbers Place (placeholder volume)	-2.8
Gravel (for Pavement) Place	-13.2
Play Surface Excavate	217.1
Play Surface Place	-104.2
Subsoil Excavate	5.3
Subsoil Place	-294.4
Topsoil Excavate	31.8
Topsoil Place	-105.9
Asphalt Excavate	29.4
Gravel (Clean) Excavate	39.1
Gravel (Dirty) Excavate	19.6
Concrete Place	-0.7
Grand Total	-182.3

Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut		39 CY	= Subsoil Excavate + Topsoil Excavate+Asphalt Excavate
20104 Excavation Cut - Pea Gravel / Rubber Mix		217 CY	= Play Surface Excavate
20202 Fill Borrow		289 CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil		634 SY	= (Topsoil Place)/-.167
40102 Crushed Aggregate Base Course Gradation No. 2		26 tons	= (Gravel for Pavement Place) * -2
40201 3" Depth HMA Pavement Type E-0.3 & 3		9.0 tons	= Asphalt Place * -2.16 ton/cubic yard
90003 Playground Surfacing - Wood Mulch		115 CY	= Play Surface Place * -1.10

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MADISON PARKS

PROJECT:
2018 PARKS PLAYGROUND REPLACEMENTS - GROUP 1

**DUDGEON SCHOOL PARK
3200 MONROE ST
MADISON, WI 53711**

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
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
DESIGN COMPUTATIONS

SHEET NUMBER:
1.5

FLAMBEAU RD

NOTE:
1. SITE IS HEAVILY WOODED, THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO ENSURE EXISTING TREES ARE PROTECTED. TREE PROTECTION (NO ROOT CUT BID ITEMS) HAVE BEEN ADDED TO THIS CONTRACT. THE CONTRACTOR SHALL NOT DRIVE OUTSIDE OF CONSTRUCTION FENCE LIMITS.

City of Madison
Department of Public Works
PARKS DIVISION

City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703

play
**MADISON
PARKS**

Graphical Scale
0 40 ft

PROJECT:
**2018 PARKS
PLAYGROUND
REPLACEMENTS-
GROUP 1**

**INDIAN HILLS PARK
5001 FLAMBEAU RD
MADISON, WI 53705**

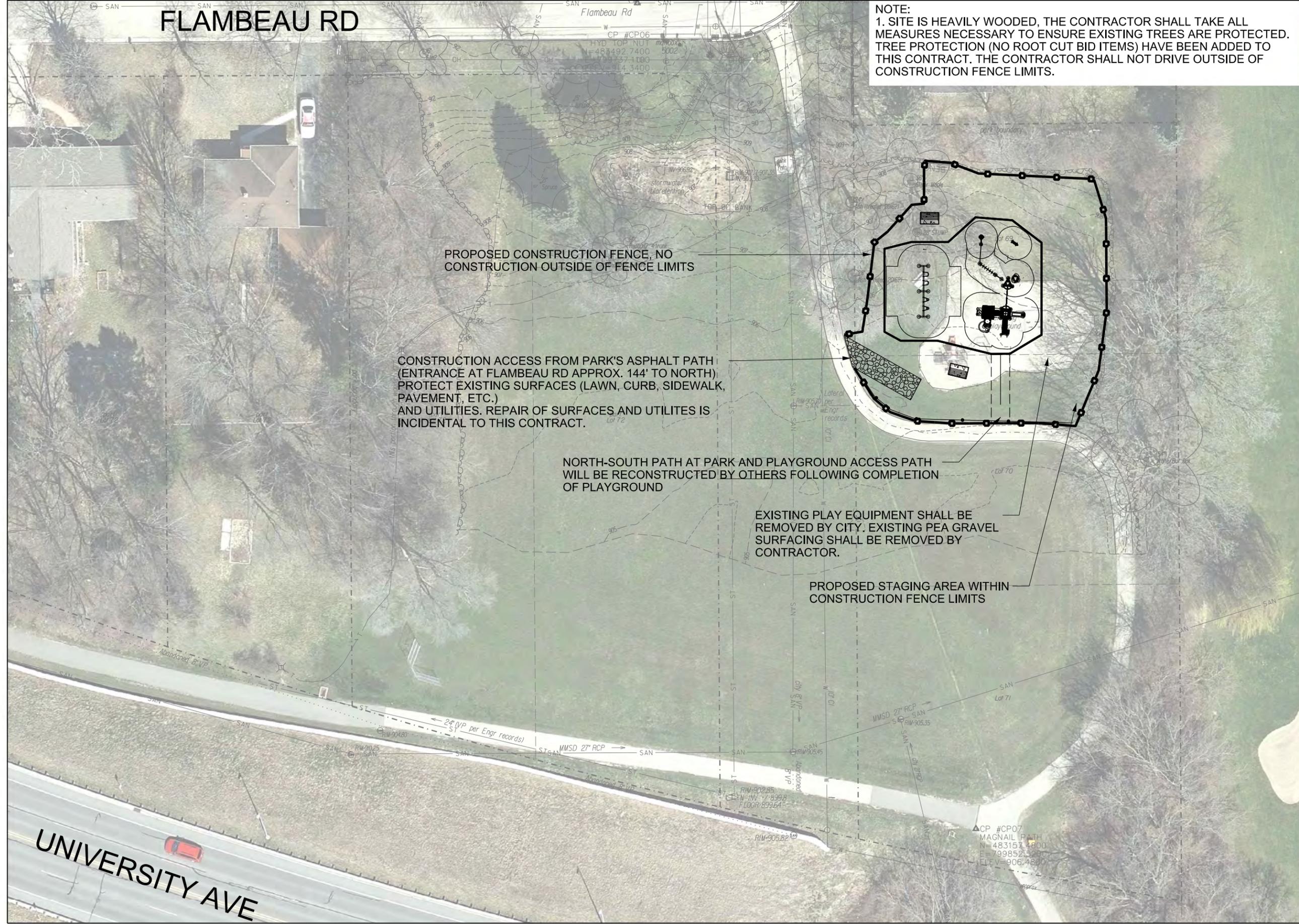
Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

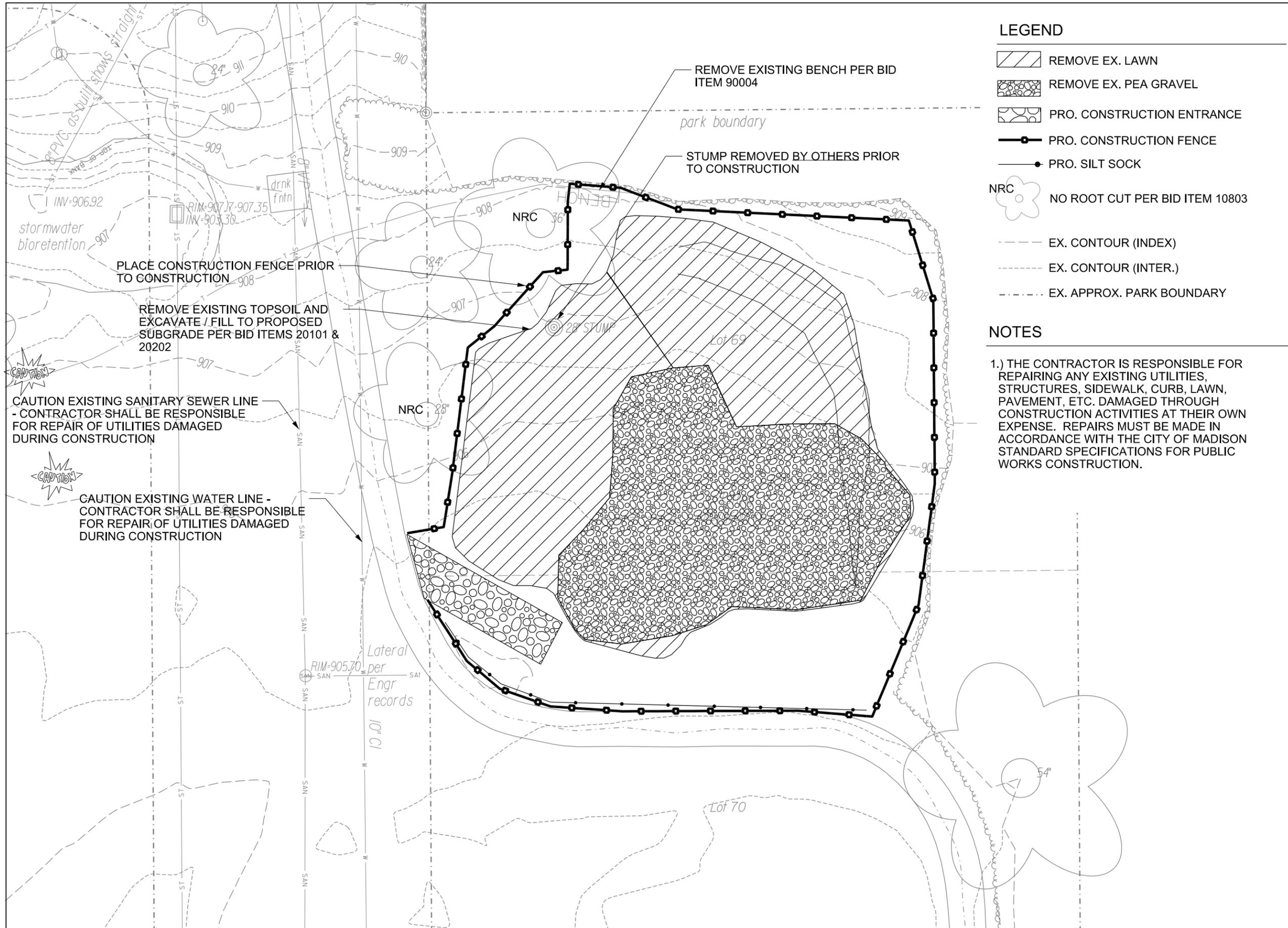
ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

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

SHEET NUMBER:
2.1





LEGEND

-  REMOVE EX. LAWN
-  REMOVE EX. PEA GRAVEL
-  PRO. CONSTRUCTION ENTRANCE
-  PRO. CONSTRUCTION FENCE
-  PRO. SILT SOCK
-  NRC NO ROOT CUT PER BID ITEM 10803
-  EX. CONTOUR (INDEX)
-  EX. CONTOUR (INTER.)
-  EX. APPROX. PARK BOUNDARY

NOTES

1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

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Department of Public Works
PARKS DIVISION

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Madison, WI 53703

play
**MADISON
PARKS**

Graphical Scale
0 20 ft



PROJECT:
**2018 PARKS
PLAYGROUND
REPLACEMENTS
- GROUP 1**

**INDIAN HILLS PARK
5001 FLAMBEAU RD
MADISON, WI 53705**

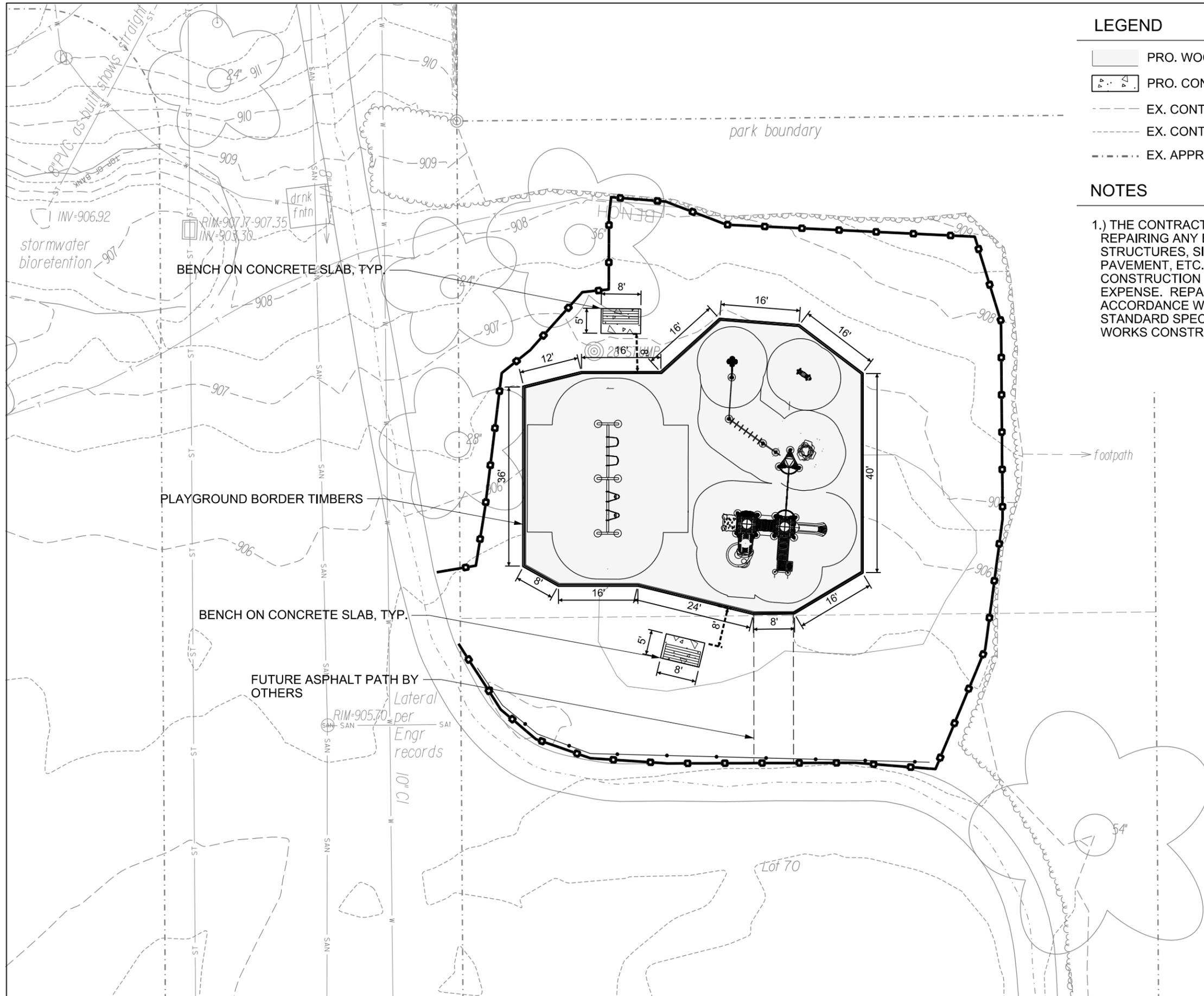
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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**DEMOLITION AND
PROTECTION PLAN**

SHEET NUMBER:
2.2



LEGEND

- PRO. WOOD MULCH
- PRO. CONCRETE
- EX. CONTOUR (INDEX)
- EX. CONTOUR (INTER.)
- - - - EX. APPROX. PARK BOUNDARY

NOTES

1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

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PARKS DIVISION

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play
MADISON
PARKS

Graphical Scale



PROJECT:

**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 - GROUP 1**

**INDIAN HILLS PARK
 5001 FLAMBEAU RD
 MADISON, WI 53705**

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:

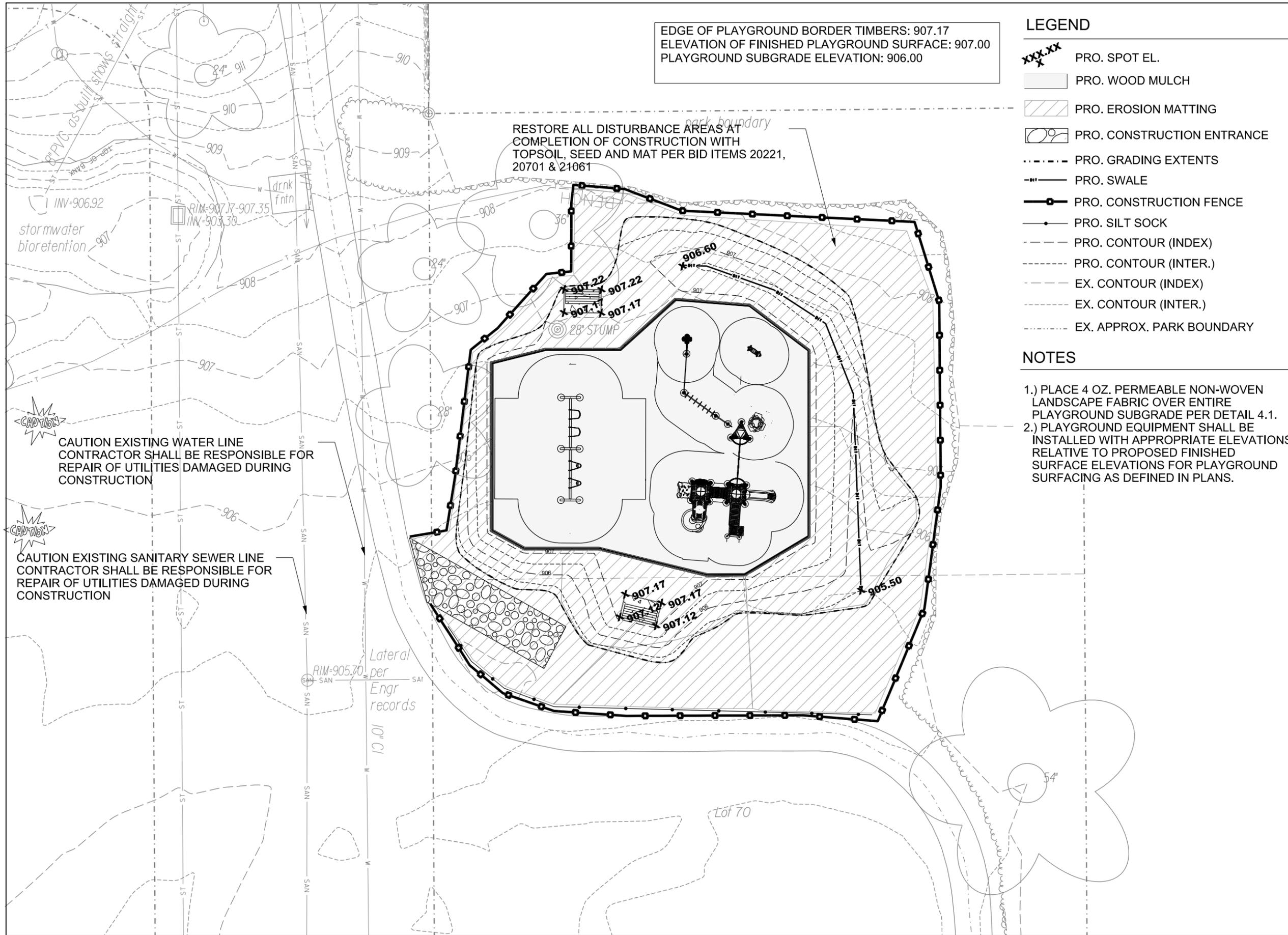
8154

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

2.3



EDGE OF PLAYGROUND BORDER TIMBERS: 907.17
 ELEVATION OF FINISHED PLAYGROUND SURFACE: 907.00
 PLAYGROUND SUBGRADE ELEVATION: 906.00

RESTORE ALL DISTURBANCE AREAS AT COMPLETION OF CONSTRUCTION WITH TOPSOIL, SEED AND MAT PER BID ITEMS 20221, 20701 & 21061

LEGEND

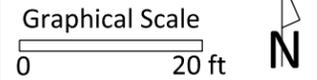
-  PRO. SPOT EL.
-  PRO. WOOD MULCH
-  PRO. EROSION MATTING
-  PRO. CONSTRUCTION ENTRANCE
-  PRO. GRADING EXTENTS
-  PRO. SWALE
-  PRO. CONSTRUCTION FENCE
-  PRO. SILT SOCK
-  PRO. CONTOUR (INDEX)
-  PRO. CONTOUR (INTER.)
-  EX. CONTOUR (INDEX)
-  EX. CONTOUR (INTER.)
-  EX. APPROX. PARK BOUNDARY

NOTES

- 1.) PLACE 4 OZ. PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE PLAYGROUND SUBGRADE PER DETAIL 4.1.
- 2.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED IN PLANS.

City of Madison
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PARKS DIVISION

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PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 - GROUP 1**

**INDIAN HILLS PARK
 5001 FLAMBEAU RD
 MADISON, WI 53705**

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ITEM	DATE
Drawn by: KK	02-27-2018

PUBLIC WORKS PROJECT #:
8154

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

SHEET NUMBER:
2.4



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 - GROUP 1**

**INDIAN HILLS PARK
 5001 FLAMBEAU RD
 MADISON, WI 53705**

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 _____
 Drawn by: KK 02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**DESIGN
 CALCULATIONS**

SHEET NUMBER:
2.5

Indian Hills Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract
 Date Revised: 2-27-2018

Notes:
 Positive volumes are cuts, negative volumes are fills.
 Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Existing Indian Hills_Survey2017-09-26.dtm
 Proposed Pro1.dtm
 Proposed

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 6in topsoil	n/a	n/a	1832	0.50	916	33.9	0%	33.9
			Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	1832	varies	0	0.0	0%	0.0
1.2	Grass to Grass	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	1832	varies	-434	-16.1	0%	-16.1
1.3	Grass to Grass	Subsoil Place	Place 6in topsoil	n/a	n/a	1832	-0.50	-916	-33.9	0%	-33.9
1.4	Grass to Grass	Topsoil Place	Strip 6in topsoil	n/a	n/a	54	0.50	27	1.0	0%	1.0
2.1	Grass to Concrete	Topsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	17	0.6	0%	0.6
2.2	Grass to Concrete	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	0	0.0	0%	0.0
2.3	Grass to Concrete	Subsoil Place	Place 6in gravel base out to 6in from pavement edge	n/a	n/a	54	-0.50	-27	-1.0	0%	-1.0
2.4	Grass to Concrete	Place (for Pavement)	Place 5in concrete	n/a	n/a	40	-0.42	-17	-0.6	0%	-0.6
2.5	Grass to Concrete	Concrete Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	14	-0.42	-6	-0.2	0%	-0.2
2.6	Grass to Concrete	Topsoil Place	Strip 6in topsoil	n/a	n/a	1732	0.50	866	32.1	0%	32.1
3.1	Grass to Play Surface	Topsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	1732	varies	142	5.2	0%	5.2
3.2	Grass to Play Surface	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	1732	varies	-663	-24.5	0%	-24.5
3.3	Grass to Play Surface	Subsoil Place	Place 12in wood mulch play surface	n/a	n/a	1732	-1.00	-1732	-64.2	0%	-64.2
3.4	Grass to Play Surface	Play Surface Place	Strip 6in topsoil	n/a	n/a	50	0.50	25	0.9	0%	0.9
4.1	Grass to Timbers	Topsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	50	varies	7	0.2	0%	0.2
4.2	Grass to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	50	varies	-19	-0.7	0%	-0.7
4.3	Grass to Timbers	Subsoil Excavate	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	50	-1.00	-50	-1.8	0%	-1.8
4.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Remove existing play surface, estimated depth 17in	n/a	n/a	54	1.42	77	2.8	0%	2.8
5.1	Play Surface to Concrete	Play Surface Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	0	0.0	0%	0.0
5.2	Play Surface to Concrete	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	-78	-2.9	0%	-2.9
5.3	Play Surface to Concrete	Subsoil Place	Place 6in gravel base out to 6in from pavement edge	n/a	n/a	54	-0.50	-27	-1.0	0%	-1.0
5.4	Play Surface to Concrete	Place (for Pavement)	Place 5in concrete	n/a	n/a	40	-0.42	-17	-0.6	0%	-0.6
5.5	Play Surface to Concrete	Concrete Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	14	-0.42	-6	-0.2	0%	-0.2
5.6	Play Surface to Concrete	Topsoil Place	Remove existing play surface, estimated depth 17in	n/a	n/a	1389	1.42	1967	72.9	0%	72.9
6.1	Play Surface to Grass	Play Surface Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-6in	1389	varies	0	0.0	0%	0.0
6.2	Play Surface to Grass	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-17in	Pro-6in	1389	varies	-2581	-95.6	0%	-95.6
6.3	Play Surface to Grass	Subsoil Place	Place 6in topsoil	n/a	n/a	1389	-0.50	-694	-25.7	0%	-25.7
6.4	Play Surface to Grass	Topsoil Place	Remove existing play surface, estimated depth 17in	n/a	n/a	1497	1.42	2121	78.5	0%	78.5
7.1	Play Surface to Play Surface	Play Surface Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	1497	varies	0	0.0	0%	0.0
7.2	Play Surface to Play Surface	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	1497	varies	-2406	-89.1	0%	-89.1
7.3	Play Surface to Play Surface	Subsoil Place	Place 12in rubber mulch play surface	n/a	n/a	1497	-1.00	-1497	-55.4	0%	-55.4
7.4	Play Surface to Play Surface	Play Surface Place	Remove existing play surface, estimated depth 17in	n/a	n/a	26	1.42	37	1.4	0%	1.4
8.1	Play Surface to Timbers	Play Surface Excavate	Cut subsoil to proposed subgrade	Ex-17in	Pro-12in	26	varies	0	0.0	0%	0.0
8.2	Play Surface to Timbers	Subsoil Place	Fill subsoil to proposed subgrade	Ex-17in	Pro-12in	26	varies	-52	-1.9	0%	-1.9
8.3	Play Surface to Timbers	Subsoil Excavate	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	20	-1.00	-20	-1.0	0%	-1.0
8.4	Play Surface to Timbers	Border Timbers Place (placeholder volume)									

Indian Hills Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract 8154
 Date Revised: 2/27/2018

Derived from more detailed spreadsheet available from Parks Div

Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material needed)

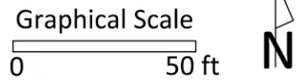
Row Labels	Sum of Unfactored volume (cu yd)
Border Timbers Place (placeholder volume)	-2.8
Gravel (for Pavement) Place	-2.0
Play Surface Excavate	155.6
Play Surface Place	-119.6
Subsoil Excavate	3.2
Subsoil Place	-228.0
Topsoil Excavate	67.9
Topsoil Place	-60.1
Concrete Place	-1.2
Grand Total	-186.9

Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut	71	CY	= Subsoil Excavate + Topsoil Excavate
20103 Excavation Cut - Pea Gravel	156	CY	= Play Surface Excavate
20202 Fill Borrow	225	CY	= Subsoil Excavate + Subsoil Place
20221 Topsoil	360	SY	= (Topsoil Place) - .167
40102 Crushed Aggregate Base Course Gradation No. 2	4	tons	= (Gravel for Pavement Place) * - 2 ton/cubic yard
90003 Playground Surfacing - Wood Mulch	132	CY	= Play Surface Place * -1.10



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

play
**MADISON
 PARKS**



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 GROUP 1**

**ODANA HILLS PARK
 5201 MILWARD DR
 MADISON, WI 53711**

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
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

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

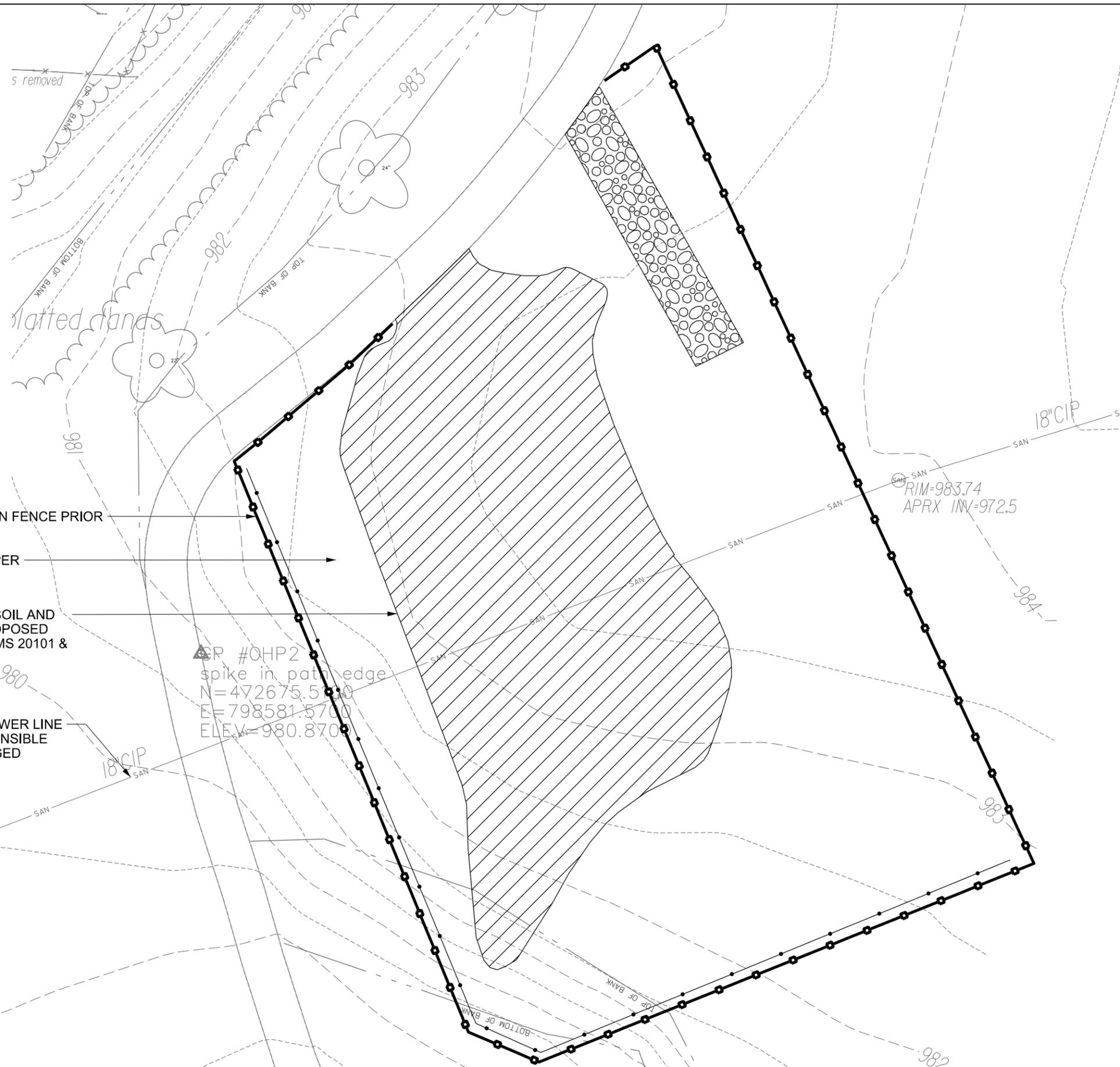
SHEET NUMBER:
3.1

LEGEND

-  REMOVE EX. LAWN
-  PRO. CONSTRUCTION ENTRANCE
-  PRO. CONSTRUCTION FENCE
-  PRO. SILT SOCK
-  EX. CONTOUR (INDEX)
-  EX. CONTOUR (INTER.)
-  EX. APPROX. PARK BOUNDARY

NOTES

1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.



PLACE CONSTRUCTION FENCE PRIOR TO CONSTRUCTION

CLEAR AND GRUB EXISTING TREE PER BID ITEMS 20401 & 20406

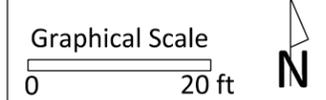
REMOVE EXISTING TOPSOIL AND EXCAVATE / FILL TO PROPOSED SUBGRADE PER BID ITEMS 20101 & 20202

CAUTION EXISTING SANITARY SEWER LINE - CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF UTILITIES DAMAGED DURING CONSTRUCTION

SPR #OHP2
spike in path edge
N=472675.5730
E=798581.5700
ELEV.=980.8700

City of Madison
Department of Public Works
PARKS DIVISION
City-County Building, Suite 104
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Madison, WI 53703

play
MADISON PARKS



PROJECT:
2018 PARKS PLAYGROUND REPLACEMENTS GROUP 1

ODANA HILLS PARK
5201 MILWARD DR
MADISON, WI 53711

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
DEMOLITION AND PROTECTION PLAN

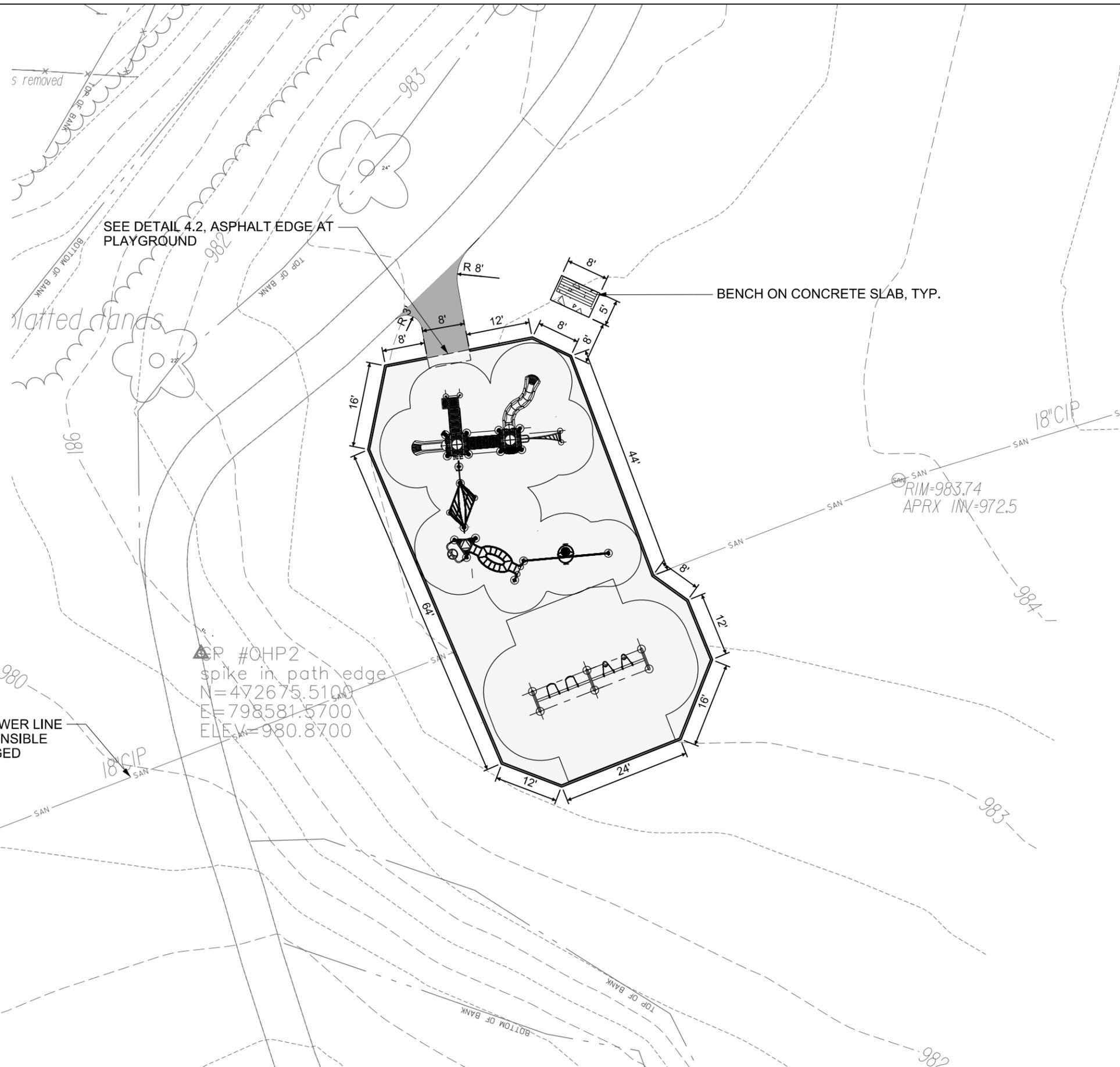
SHEET NUMBER:
3.2

LEGEND

- PRO. ASPHALT
- PRO. WOOD MULCH
- PRO. CONCRETE
- EX. CONTOUR (INDEX)
- EX. CONTOUR (INTER.)
- EX. APPROX. PARK BOUNDARY

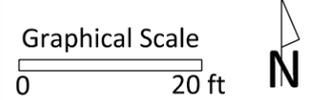
NOTES

1.) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES, STRUCTURES, SIDEWALK, CURB, LAWN, PAVEMENT, ETC. DAMAGED THROUGH CONSTRUCTION ACTIVITIES AT THEIR OWN EXPENSE. REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.



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play
MADISON
PARKS



PROJECT:
2018 PARKS
PLAYGROUND
REPLACEMENTS
GROUP 1

ODANA HILLS PARK
5201 MILWARD DR
MADISON, WI 53711

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
3.3

LEGEND

- PRO. SPOT EL.
- PRO. ASPHALT
- PRO. WOOD MULCH
- PRO. EROSION MATTING
- PRO. CONSTRUCTION ENTRANCE
- PRO. GRADING EXTENTS
- PRO. CONSTRUCTION FENCE
- PRO. SILT SOCK
- PRO. CONTOUR (INDEX)
- PRO. CONTOUR (INTER.)
- EX. CONTOUR (INDEX)
- EX. CONTOUR (INTER.)
- EX. APPROX. PARK BOUNDARY

NOTES

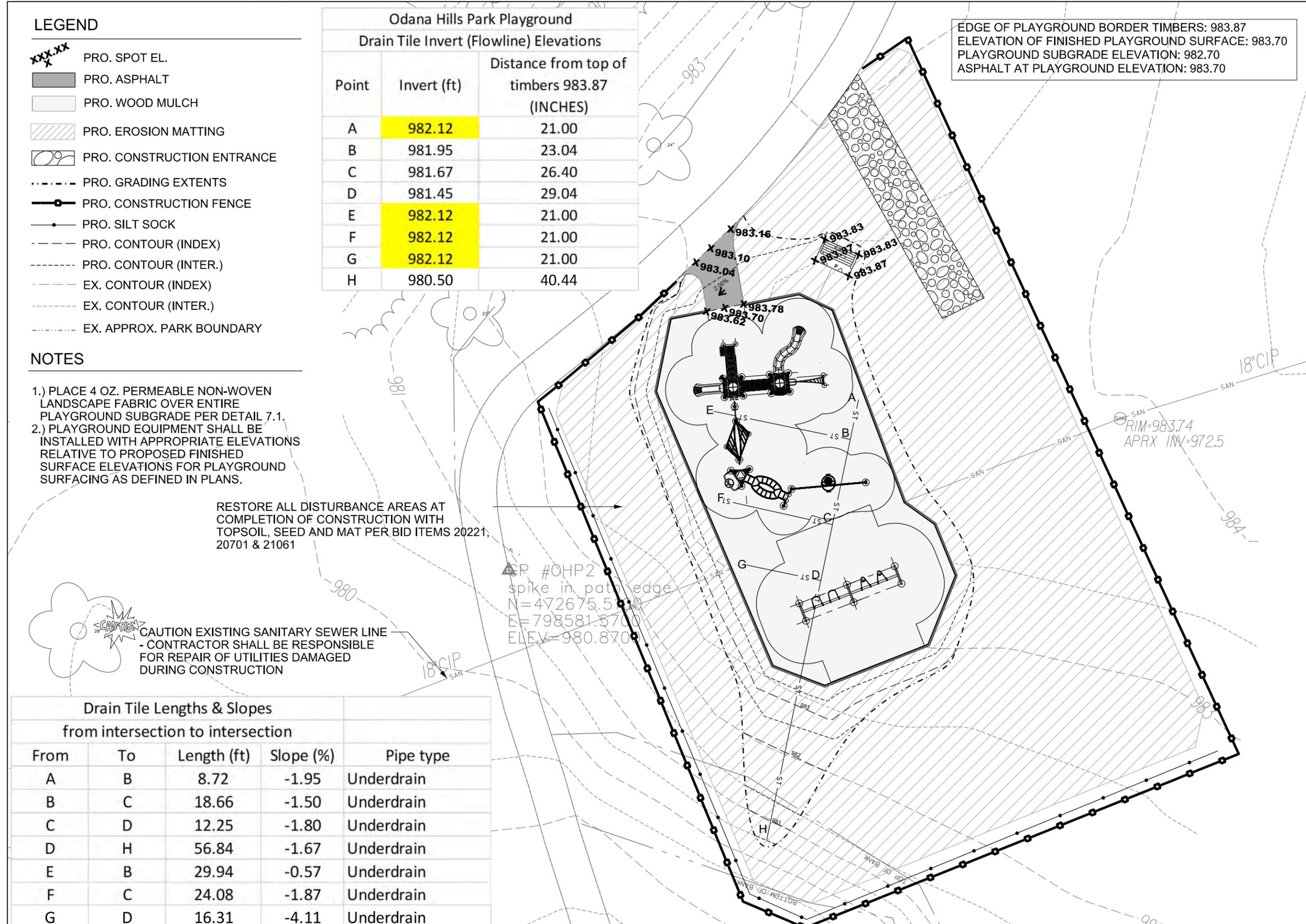
- 1.) PLACE 4 OZ. PERMEABLE NON-WOVEN LANDSCAPE FABRIC OVER ENTIRE PLAYGROUND SUBGRADE PER DETAIL 7.1.
- 2.) PLAYGROUND EQUIPMENT SHALL BE INSTALLED WITH APPROPRIATE ELEVATIONS RELATIVE TO PROPOSED FINISHED SURFACE ELEVATIONS FOR PLAYGROUND SURFACING AS DEFINED IN PLANS.

RESTORE ALL DISTURBANCE AREAS AT COMPLETION OF CONSTRUCTION WITH TOPSOIL, SEED AND MAT PER BID ITEMS 20221, 20701 & 21061

CAUTION EXISTING SANITARY SEWER LINE - CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF UTILITIES DAMAGED DURING CONSTRUCTION

Odana Hills Park Playground		
Drain Tile Invert (Flowline) Elevations		
Point	Invert (ft)	Distance from top of timbers 983.87 (INCHES)
A	982.12	21.00
B	981.95	23.04
C	981.67	26.40
D	981.45	29.04
E	982.12	21.00
F	982.12	21.00
G	982.12	21.00
H	980.50	40.44

EDGE OF PLAYGROUND BORDER TIMBERS: 983.87
 ELEVATION OF FINISHED PLAYGROUND SURFACE: 983.70
 PLAYGROUND SUBGRADE ELEVATION: 982.70
 ASPHALT AT PLAYGROUND ELEVATION: 983.70



SPR #OHP2
 spike in path edge
 N=472675.5700
 E=798581.5700
 ELEV=980.8700

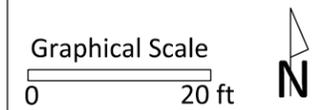
Drain Tile Lengths & Slopes

from intersection to intersection

From	To	Length (ft)	Slope (%)	Pipe type
A	B	8.72	-1.95	Underdrain
B	C	18.66	-1.50	Underdrain
C	D	12.25	-1.80	Underdrain
D	H	56.84	-1.67	Underdrain
E	B	29.94	-0.57	Underdrain
F	C	24.08	-1.87	Underdrain
G	D	16.31	-4.11	Underdrain

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play
MADISON
PARKS



PROJECT:
2018 PARKS
PLAYGROUND
REPLACEMENTS
GROUP 1

ODANA HILLS PARK
5201 MILWARD DR
MADISON, WI 53711

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ITEM	DATE
Drawn by: KK	02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
GRADING AND
EROSION CONTROL
PLAN

SHEET NUMBER:
3.4



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS
 GROUP 1**

**ODANA HILLS PARK
 5201 MILWARD DR
 MADISON, WI 53711**

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ITEM DATE
 Drawn by: KK 02-26-2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**DESIGN
 CALCULATIONS**

SHEET NUMBER:
3.5

Odana Hills Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract
 Date Revised: 2-1-2018

Notes:
 Positive volumes are cuts, negative volumes are fills.
 Not all parts of all surface models (Digital Terrain Models) are used for computations or intended for actual construction.

Existing OdanaHills_Survey2012-10-26_Engr53W1556.dtm
 Proposed Pro1_COMPS.dtm
 Proposed

Sort	Grp	Material	Item	From Surface Model	To Surface Model	area (sq ft)	depth (ft)	Unfac-tored volume (cu ft)	Unfac-tored volume (cu yd)	Expan-sion Factor (%)	Factored (Uncom-pacted) Volume (cu yd)	
		Grass to Asphalt	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	140	0.50	70	2.6	0%	2.6
		Grass to Asphalt	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	140	varies	37	1.4	0%	1.4
		Grass to Asphalt	Gravel (for Pavement) Place	Place 9in gravel base out to 6in from pavement edge	n/a	n/a	140	-0.75	-105	-3.9	0%	-3.9
		Grass to Asphalt	Asphalt Place	Place 3in asphalt	n/a	n/a	124	-0.25	-31	-1.1	0%	-1.1
		Grass to Asphalt	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	16	-0.25	-4	-0.1	0%	-0.1
	1.1	Grass to Concrete	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	54	0.50	27	1.0	0%	1.0
	1.2	Grass to Concrete	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	5	0.2	0%	0.2
	1.3	Grass to Concrete	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-11in	54	varies	0	0.0	0%	0.0
	1.4	Grass to Concrete	Gravel (for Pavement) Place	Place 6in gravel base out to 6in from pavement edge	n/a	n/a	54	-0.50	-27	-1.0	0%	-1.0
	1.5	Grass to Concrete	Concrete Place	Place 5in concrete	n/a	n/a	40	-0.42	-17	-0.6	0%	-0.6
	1.6	Grass to Concrete	Topsoil Place	Place 3in topsoil over 6in wide gravel edge	n/a	n/a	14	-0.42	-6	-0.2	0%	-0.2
	2.1	Grass to Grass	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	2010	0.50	1005	37.2	0%	37.2
	2.2	Grass to Grass	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-6in	2010	varies	2	0.1	0%	0.1
	2.3	Grass to Grass	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-6in	2010	varies	-621	-23.0	0%	-23.0
	2.4	Grass to Grass	Topsoil Place	Place 6in topsoil	n/a	n/a	2010	-0.50	-1005	-37.2	0%	-37.2
	3.1	Grass to Play Surface	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	3269	0.50	1635	60.5	0%	60.5
	3.2	Grass to Play Surface	Subsoil Excavate	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	3269	varies	691	25.6	0%	25.6
	3.3	Grass to Play Surface	Subsoil Place	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	3269	varies	-168	-6.2	0%	-6.2
	3.4	Grass to Play Surface	Play Surface Place	Place 12in wood mulch play surface	n/a	n/a	3269	-1.00	-3269	-121.1	0%	-121.1
	34.1	Grass to Timbers	Topsoil Excavate	Strip 6in topsoil	n/a	n/a	76	0.50	38	1.4	0%	1.4
	4.2	Grass to Timbers	Subsoil Place	Cut subsoil to proposed subgrade	Ex-6in	Pro-12in	76	varies	8	0.3	0%	0.3
	4.3	Grass to Timbers	Subsoil Excavate	Fill subsoil to proposed subgrade	Ex-6in	Pro-12in	76	varies	-19	-0.7	0%	-0.7
	4.4	Grass to Timbers	Border Timbers Place (placeholder volume)	Place playground border timbers (placeholder volume to balance volume comps)	n/a	n/a	76	-1.00	-76	-2.8	0%	-2.8

Odana Hills Park Playground - Earthwork Quantities

City of Madison, WI Public Works Contract 8154
 Date Revised: 2/1/2018

Derived from more detailed spreadsheet available from Parks Div

Computation Summary

Positive volumes are cuts (material available), negative volumes are fills (material needed)

Row Labels	Sum of Unfac-tored volume (cu yd)
Asphalt Place	-1.1
Border Timbers Place (placeholder volume)	-2.8
Gravel (for Pavement) Place	-4.9
Play Surface Place	-121.1
Subsoil Excavate	26.5
Subsoil Place	-28.9
Topsoil Excavate	102.8
Topsoil Place	-37.6
Concrete Place	-0.6
Grand Total	-67.8

Reorganized into bid table items

Bid Item	Quantity	Units	Relation to Table Above
20101 Excavation Cut	129	CY	= Subsoil Excavate + Topsoil Excavate
20201 Fill	2	CY	= Subsoil Excavate + Subsoil Place
40102 Crushed Aggregate Base Course Gradation No. 2	10	TONS	= (Gravel for Pavement Place) * -2 ton/cubic yard
40201 3" Depth HMA Pavement Type E-0.3 & 3	2	TONS	= Asphalt Place * -2.16 ton/cubic yard
20221 Topsoil	225	SY	= (Topsoil Place)/-.167
90003 Playground Surfacing - Wood Mulch	133	CY	= Play Surface Place * -1.10

City of Madison
 Department of Public Works
PARKS DIVISION

City-County Building, Suite 104
 210 Martin Luther King, Jr. Blvd.
 Madison, WI 53703



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS-
 GROUP 1**

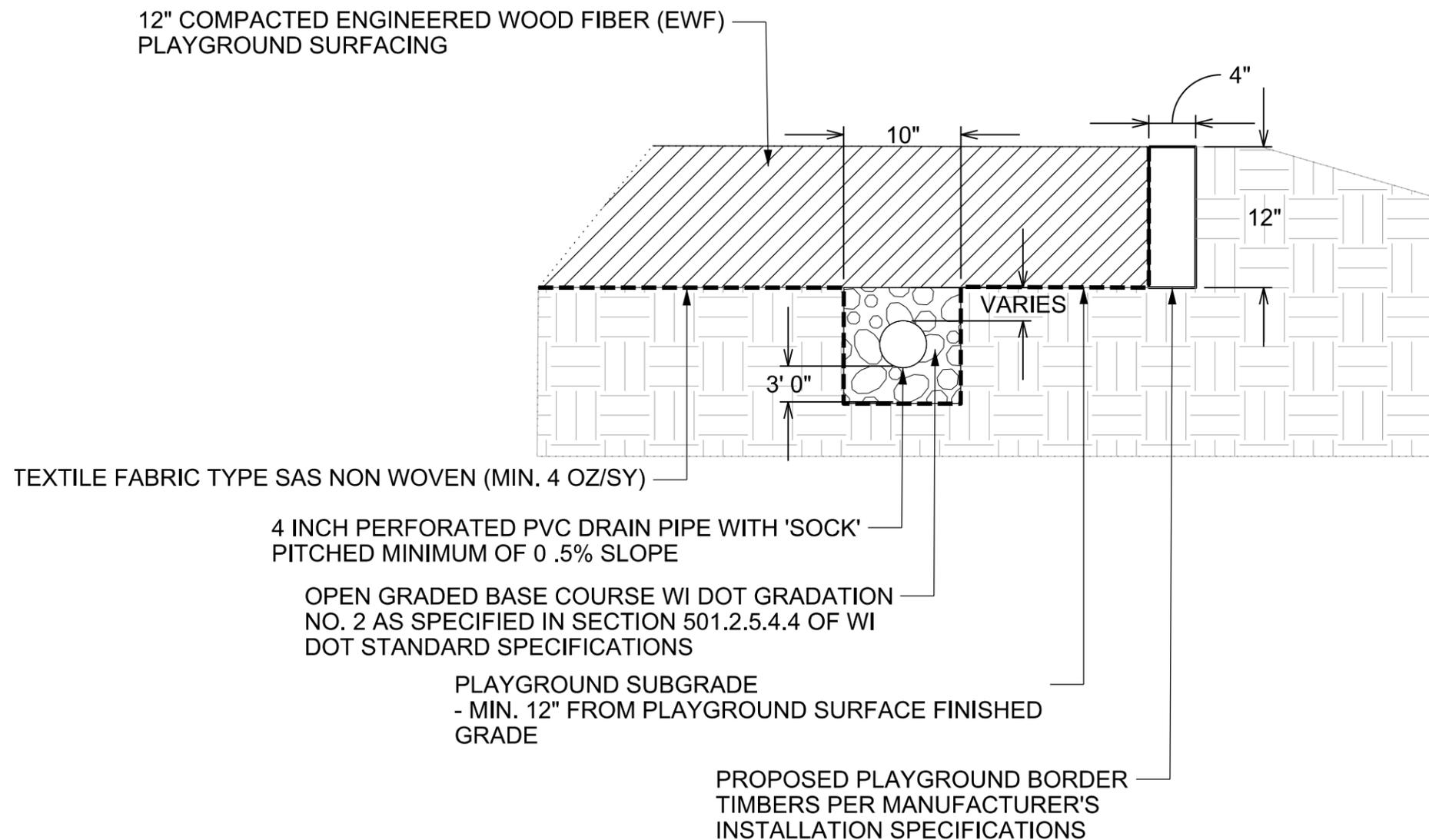
Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: KK	02/26/2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**TYPICAL PLAYGROUND
 SURFACING WITH
 UNDERDRAIN**

SHEET NUMBER:
4.1



PROJECT:
**2018 PARKS
 PLAYGROUND
 REPLACEMENTS-
 GROUP 1**

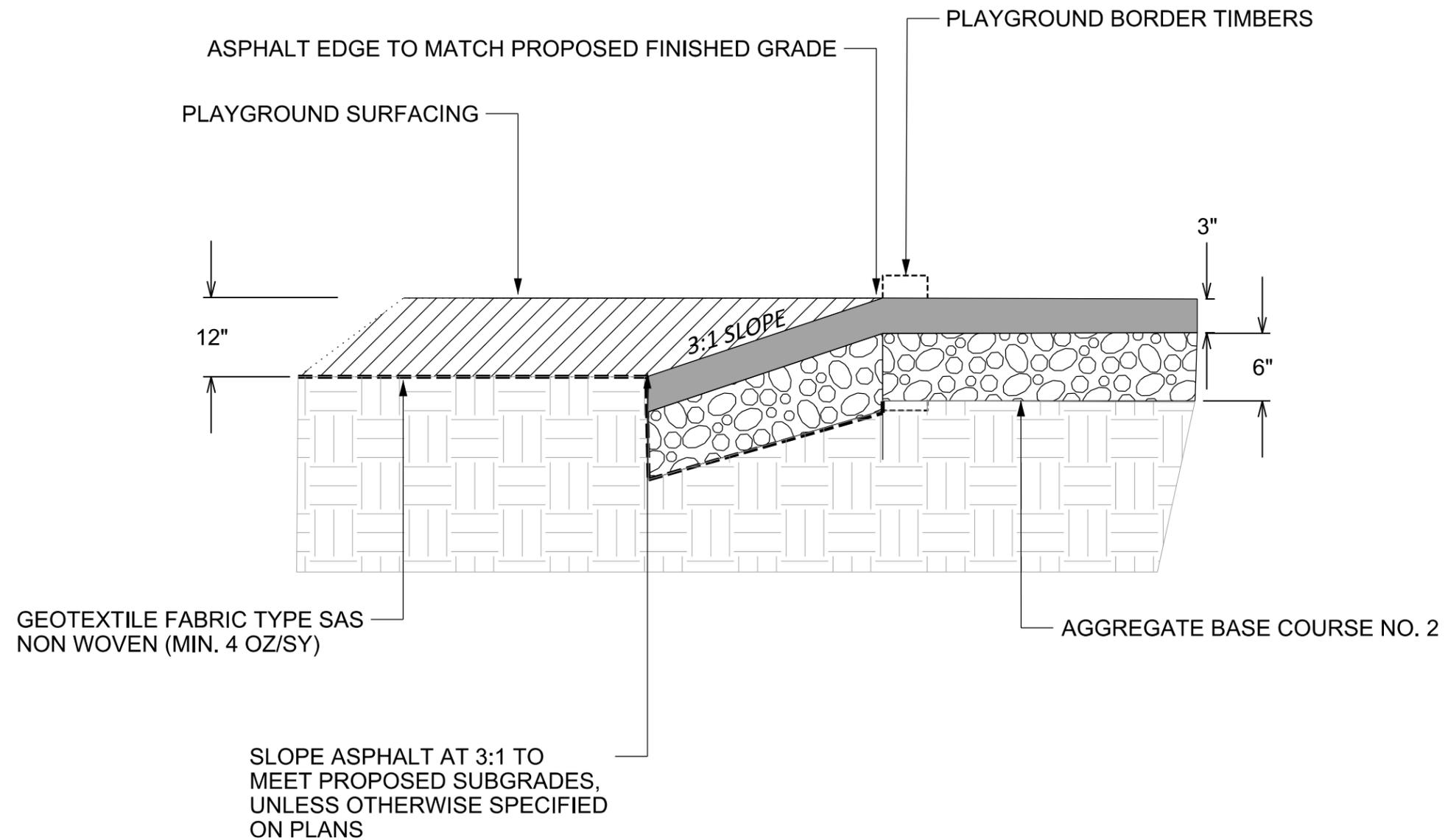
Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM	DATE
Drawn by: KK	02/26/2018

PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**ASPHALT EDGE
 AT PLAYGROUND**

SHEET NUMBER:
4.2



City of Madison
Department of Public Works
PARKS DIVISION

City-County Building, Suite 104
210 Martin Luther King, Jr. Blvd.
Madison, WI 53703



PROJECT:
**2018 PARKS
PLAYGROUND
REPLACEMENTS-
GROUP 1**

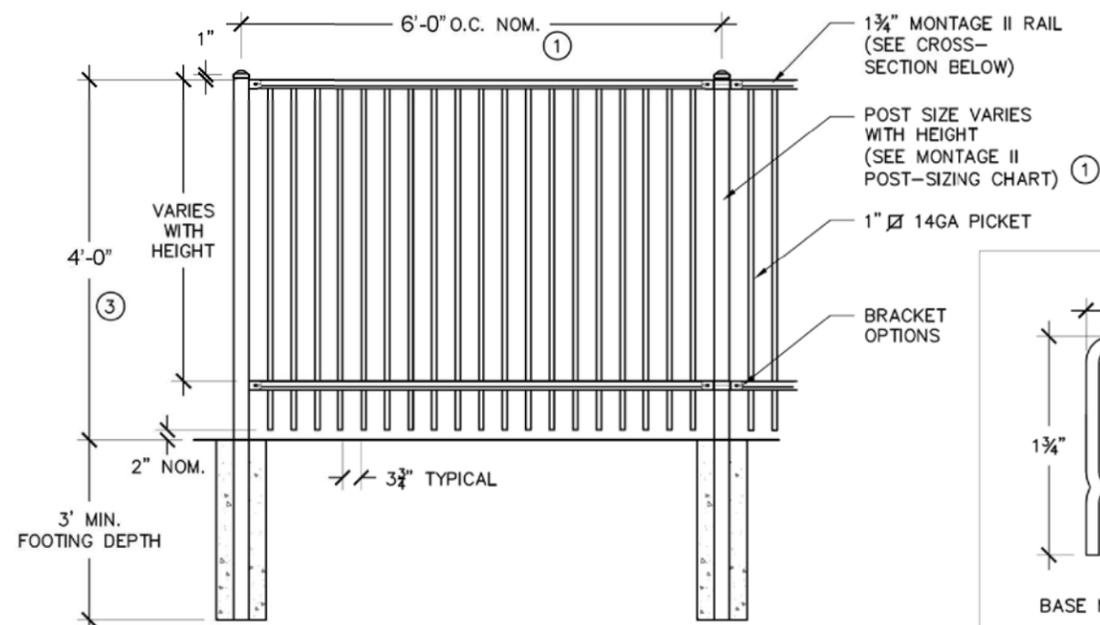
Although every effort has been made in preparing these plans and checking them for accuracy, the contractor and subcontractors must check all details and dimensions of their trade and be responsible for the same.

ITEM _____ DATE _____
Drawn by: KK 02/26/2018

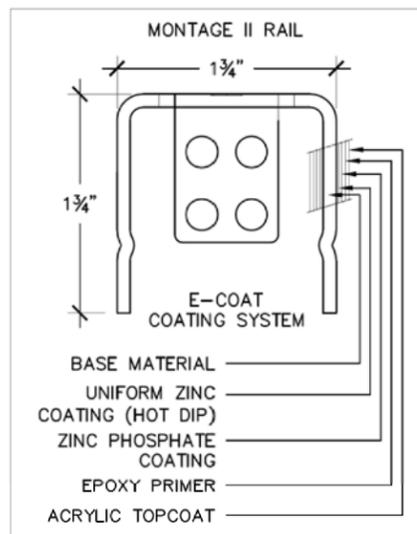
PUBLIC WORKS PROJECT #:
8154

SHEET TITLE:
**ORNAMENTAL
FENCING**

SHEET NUMBER:
4.3



- NOTES:
- 1.) POST SIZE DEPENDS ON FENCE HEIGHT AND WIND LOADS. SEE MONTAGE II SPECIFICATIONS FOR POST SIZING CHART AND DIMENSIONS.
 - 2.) AVAILABLE IN FLUSH BOTTOM.
 - 3.) VALUES SHOWN ARE NOMINAL AND NOT TO BE USED FOR INSTALLATION PURPOSES. SEE PRODUCT SPECIFICATION FOR INSTALLATION REQUIREMENTS.



RAKING DIRECTIONAL ARROW WELDED PANEL CAN BE RAKED 30" OVER 8' WITH ARROW POINTING DOWN GRADE.

RAKING DIRECTIONAL ARROW WELDED PANEL CAN BE RAKED 30" OVER 8' WITH ARROW POINTING DOWN GRADE.

