VILLAGE OF MCFARLAND **Parks and Recreation Committee** *NOTICE OF PUBLIC MEETING*

Tuesday, January 3, 2023 **6:30 PM** **McFarland Municipal Center**
Community Room

AGENDA

You are invited to this meeting through a Zoom webinar. The public may attend in-person or remotely through the webinar or telephone options listed below.
PLEASE CLICK THE LINK BELOW TO JOIN THE ZOOM WEBINAR:
https://us02web.zoom.us/j/85646335462
Or by Telephone: +1 (312) 626-6799
Webinar ID: 856 4633 5462
Press *9 to raise/lower hand. Press *6 to mute/unmute.

1. CALL TO ORDER, ROLL CALL.

2. PUBLIC APPEARANCES.
   a. This is an opportunity for members of the public to address the Parks and Recreation Committee for items that are not on the agenda. Please remember this is a hybrid meeting conducted in person and through the Zoom online meeting platform. Meeting attendees wishing to address the Committee about items not on the agenda may do so at this time. Zoom attendees should type their name and address in the Question and Answer feature within the Zoom online meeting platform at this time. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. When you are called upon to speak, state your name, address, and provide your comments to the Committee for their consideration. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.

      Members of the public may also speak during their selected agenda item as they designate on the public comment form or in the Question and Answer feature on Zoom.

3. APPROVAL OF MINUTES.
   a. Motion to approve the minutes of the December 6, 2022 meeting.

4. BUSINESS.
   a. Discussion and action to make a recommendation to the Village Board regarding design approval for the reconstruction of the skate park within William McFarland Park and authorize the project for bid.

   b. Discussion and action regarding the addition of shade structures to the Bocce Courts at William McFarland Park.

   c. Discussion and action to make a recommendation to the Village Board regarding irrigation work at Community Park.

   d. Discussion regarding Chapter 2 Parks and Recreation Facility Policy Section 2.04

   e. Discussion regarding scheduling and tournaments for the pickleball courts and the disc golf course.

5. SCHEDULE NEXT MEETING DATE.

a. Tuesday, February 7, 2023 at 6:30 p.m.

6. ADJOURNMENT.

Any person who has a qualifying disability as defined by the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible location or format should contact the McFarland Municipal Center at (608)838-3153, 5915 Milwaukee Street, McFarland, Wisconsin, or village.clerk@mcfarland.wi.us by 2:00 p.m. at least 5 business days prior to the meeting so that any necessary arrangements can be made to accommodate each request. If the meeting or request is less than 5 business days from the meeting, requests for accommodations may still be made and reasonable efforts will be made to accommodate each request.

VILLAGE OF MCFARLAND

Parks and Recreation Committee Minutes

Tuesday, December 6, 2022 - 6:30 PM

1. CALL TO ORDER, ROLL CALL.

Trustee Nelson called the regular meeting of the Parks and Recreation Committee to order at 6:30 PM in the Community Room of the Municipal Center. This meeting was also held via Zoom webinar.

Members present: Carrie Nelson, Sarah Kuba, Tanya Lancaster, Jim Lacy

Members not present: TJ Jerke, Justin Rupert, Luke Fessler

Staff Present: Village Administrator Matt Schuenke, Parks Superintendent Sayer Larson, Streets & Utilities Superintendent Lee Igl, Assistant to the Public Works Director Aimee Irwin

2. PUBLIC APPEARANCES.

a. *This is an opportunity for members of the public to address the Parks and Recreation Committee. Please remember this is a virtual meeting conducted through the Zoom online meeting platform. Zoom meeting attendees wishing to address the Committee may do so using the Question and Answer feature within the Zoom online meeting platform. You may state your name, address, and provide your comments to the Committee for their consideration. Members of the public who are present in person and wish to address the Committee should fill out a public comment form and turn into the meeting chairperson. Members of the public may speak during public appearances or during their selected agenda item as they designate on the public comment form. Please adhere to the 3-minute time limit. Additionally, you may send your public comments to public.works@mcfarland.wi.us to be included as part of the meeting.*

None.

3. APPROVAL OF MINUTES.

a. *Discussion and action regarding the minutes from the November 1, 2022 Parks and Recreation Committee meeting.*

Motion by Trustee Nelson, seconded by Lacy, to approve the minutes from the November 1, 2022 Parks and Recreation Committee meeting with one edit provided by Sarah Kuba. Motion carries 4 - 0 - 0.

4. BUSINESS.

a. *Discussion and action regarding a request to add McFarland Youth Baseball Organization to Appendix A of the Chapter 2 Parks and Recreation Facility Policy.*

Larson provided an introduction regarding a request from McFarland Youth Baseball Organization to be added to Appendix A. Arick Ecker of the McFarland Youth Baseball Organization (MYBO) Board was present to provide an introduction to the newly created MYBO. This organization will organize baseball for 3rd through 8th grade as was previously handled by the McFarland School District and MRAP.

- Lacy asked what fields would be utilized by the MYBO. Ecker responded that fields would be utilized at Brandt Park, Lewis Park, William McFarland Park, and school district fields.

Motion by Trustee Nelson, seconded by Lancaster, to approve a request to add McFarland Youth Baseball Organization to Appendix A of the Chapter 2 Parks and Recreation Facility Policy. Motion carries 4 - 0 - 0.

b. *Discussion regarding irrigation work at Community Park.*

Larson provided an overview of possible irrigation work at Community Park. Previously approved for the project involved water wheels to water the fields. Schuenke said that a change order would be brought to committee during the January meeting for the additional irrigation work.

- Trustee Nelson asked if additional irrigation work is being added because additional funding is available. Larson responded that irrigation was desired but initially exceeded the initial funding for the project.
- Lancaster asked if any delay would occur with adding the irrigation work. Larson stated no delay should occur as the timing is good with no seeding in the ground and final grading has not been completed. Schuenke added that irrigation may assist with growing once the seeding is added to the ground.

c. *Discussion and action to make a recommendation to the Village Board regarding the Lewis Park lake access plan*

Larson provided an overview of the Lewis Park lake access plan and the enclosed final recommendations for the plan from Parkitecture. The plan was previously reviewed by the committee during their November meeting along with being reviewed by the Sustainability & Natural Resources committee.

- Trustee Nelson asked if the future path shown within the plan would be constructed in the future or with construction of the boardwalk. Larson responded that the path would be included during construction of the boardwalk.
- Lacy asked if this project was included within the budget. Schuenke stated the project would be reviewed in 2023 as the 10-year Parks Plan is reviewed and the project funds can be added if desired.
- Kuba asked if the observation platform would have a roof. Larson stated there would not be a covering on the boardwalk but a pavilion with a roof could be included. Schuenke added that the plan is what is being approved; design would need to occur at a later date and decisions about what is to be included will occur in the future.
- Lancaster asked when this project was projected to occur in the 10-year Parks Plan. Schuenke stated it was included in 2023 but due to additional funding required, the design could occur in late 2023 with possible construction in 2024.
- Lancaster asked what the timeline would be for construction. Larson and Schuenke responded that construction would be estimated at 8 weeks.

Motion by Trustee Nelson, seconded by Lacy, to recommend approval to the Village Board regarding the Lewis Park lake access plan as presented by Parkitecture. Motion carries 4 - 0 - 0.

d. *Discussion regarding Chapter 2 Parks and Recreation Facility Policy Section 2.04*

Motion by Trustee Nelson, seconded by Lancaster, to table the discussion regarding Chapter 2 Parks and Recreation Facility Policy Section 2.04 to the January Parks and Recreation Committee meeting. Motion carries 4 - 0 - 0.

5. SCHEDULE NEXT MEETING DATE.

a. *Tuesday, January 3, 2023 at 6:30 p.m.*

6. ADJOURNMENT.

Motion by Trustee Nelson, seconded by Lacy, to adjourn at 7:09 p.m.

Pursuant to law, written notice of this meeting was given to the public and posted on the public bulletin boards in accordance with Open Meetings Law.

Respectfully submitted,
Aimee Irwin
Assistant to the Public Works Director

VILLAGE OF
McFarland

SUMMARY SHEET

MEETING DATE: **Tuesday, January 3, 2023**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Sayer Larson, Parks Superintendent, Matt Schuenke, Village Administrator**

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board regarding design approval for the reconstruction of the skate park within William McFarland Park and authorize the project for bid.**

PREVIOUS ACTION:
The Parks & Recreation Committee recommended to the Village Board acceptance of the plan for the reconstruction of the Skate Park at William McFarland Park at their October 4, 2022 meeting.

The Village Board approved the plan for the reconstruction of the Skate Park at their October 11, 2022 meeting.

The Parks & Recreation Committee recommended to the Village Board the award of contract to Parkitecture for design and bidding services at their November 1, 2022 meeting.

The Village Board awarded contract to Parkitecture for design and bidding services at their November 10, 2022 meeting.

ISSUE SUMMARY:
Parkitecture will be present to review the enclosed design plans for the reconstruction of the skate park.

The project is proposed for construction in 2023 and has been accepted within the 2023-2027 Capital Improvement Plan as well as within the 2023 Budget.
The remaining schedule for the project is proposed as follows:

- January 3, 2023 - Parks & Recreation Committee: Recommendation to the Village Board to accept final design and authorize the project for bidding.
- January 10, 2023 - Village Board: Consider recommendation from the Committee on final design and authorize the project for bidding
- January 31, 2023 - Bid Opening at 10:00 a.m.
- February 7, 2023 - Parks & Recreation Committee: Recommendation to the Village Board on project award.
- February 14, 2023 - Village Board: Consider recommendation from the Committee on project award.

- Mid-March 2023 - Mobilization for construction
- June 1, 2023 - End Construction

This is a tentative schedule to provide perspective on next steps in the project should the design be approved and the project proceed through necessary approvals.

FINANCIAL/BUDGET IMPACT:
The 2023 Budget was approved to allocate $375,000 for the project. Current revenue and expense estimates are as follows:

Revenues - The following revenues are proposed to fund the projects costs as estimated from the study accepted in October of this year:

$280,000	Borrowed Money (2023)
$ 35,000	Borrowed Money (2022)
$100,000	Parks Fund
$ 50,000	Fundraising
$465,000	Total Project Revenue

The budget allocation essentially accounted for the hard costs but also needs to address the soft costs. In order to address this, the anticipated borrowing for 2023 is increased from $225,000 to $280,000 to make up the difference. Borrowed monies already incurred in 2022 covered costs for planning, design, and bidding services. Fundraising thus far has collected about half of the targeted amount but will continue throughout the year in 2023. If there is a shortfall, the variance will be made up through the Parks Fund.

Expenses - Please note the following breakdown of project expenses to implement the project as proposed in the study:

$360,000	Construction Contract
$ 15,000	Site Amenities
$ 5,000	Security Cameras
$ 14,480	Planning
$ 18,960	Design Engineering/Bidding
$ 10,000	Construction Administration
$ 42,344	Contingency
$ (784)	Rounding
$465,000	Total Project Expense

These costs are based on estimates from the study that was accepted in October. See the link below in this memo for that information and details on those costs. Final costs will be determined at the time of project award when bids have been opened which may require further reconciliation/adjustment to these expense and revenue assumptions.

VILLAGE PLAN REFERENCE:

McFarland Parks Master Plan
William McFarland Skatepark Plan

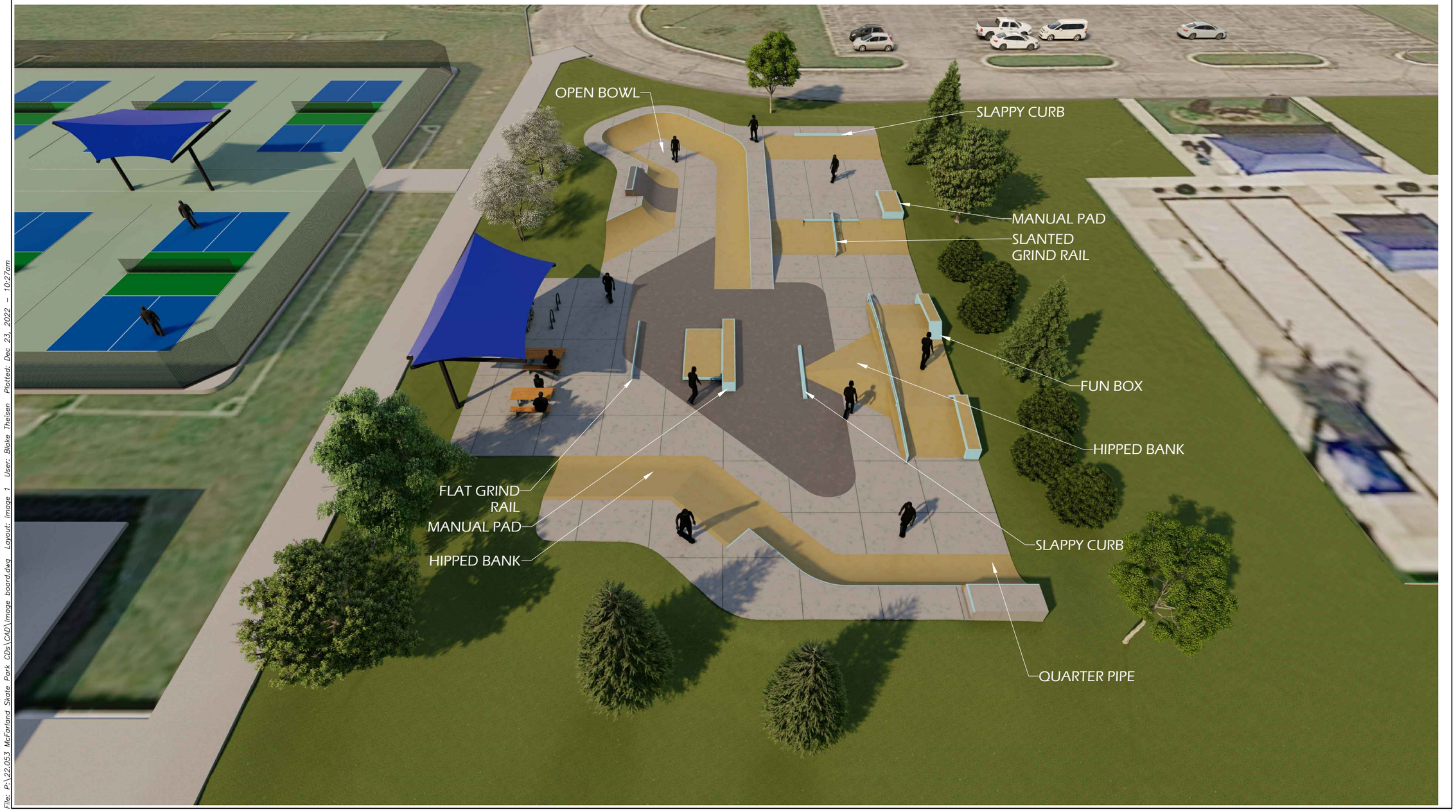
ORDINANCE REFERENCE:
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Recommended action:

> *Motion, second to recommend to the Village Board approval of the design as presented for the reconstruction of the skate park within William McFarland Park and further request authorization for Parkitecture to bid for the project.*

ATTACHMENTS:
1. WMCF Skate Park Renderings
2. WMCF Skate Plans DRAFT
3. WMCF Skate Specs DRAFT

VIEW LOOKING NORTH



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Madison,WI.53717
608.886.6808
Parkitecture

SPOHN RANCH
SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK
PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title:
RENDERING VIEW 1

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/22/2022

Sheet Number
EXHIBIT 1

File: P:\22.053 McFarland Skate Park CDs\CAD\Image board.dwg Layout: Image 1 User: Blake Theisen Plotted: Dec 23, 2022 – 10:27am

VIEW LOOKING WEST

EXHIBIT 2

Sheet Number

Project #: 22.053
Issued For: Review
Date: 12/22/2022

Revisions:

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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McFarland, WI 53558

Sheet Title:
RENDERING VIEW 2

SPOHN RANCH SKATEPARKS

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VIEW LOOKING SOUTH

EXHIBIT 3

Sheet Number

Project #: 22.053
Issued For: Review
Date: 12/22/2022

Revisions:

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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McFarland, WI 53558

Sheet Title:
RENDERING VIEW 3

SPOHN RANCH SKATEPARKS

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VIEW LOOKING SOUTHWEST

EXHIBIT 4

Sheet Number

Project #: 22.053
Issued For: Review
Date: 12/22/2022

Revisions:

Project Name:
WILLIAM MCFARLAND PARK
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McFarland, WI 53558

Sheet Title:
RENDERING VIEW 4

SPOHN RANCH SKATEPARKS

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VIEW ENLARGEMENT OF ENTRANCE

VIEW ENLARGEMENT LOOKING NORTH

VIEW ENLARGEMENT LOOKING WEST

OVERALL CONTEXTUAL PLAN

Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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McFarland, WI 53558

Sheet Title:
RENDERING VIEW 5

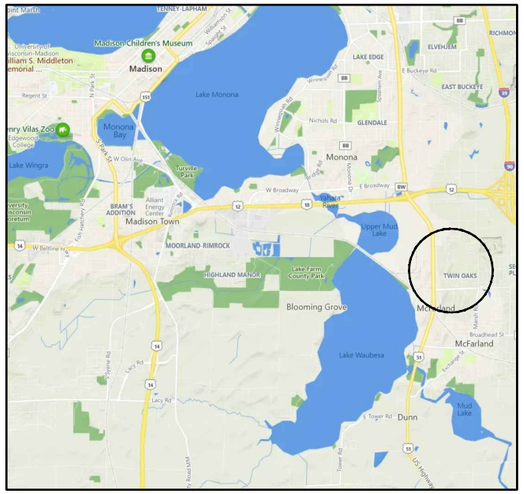
Revisions:

Project #: 22.053
Issued For: Review
Date: 12/22/2022

Sheet Number
EXHIBIT 5

File: P:\22.053 McFarland Skate Park CDs\CAD\Image board.dwg Layout: Image 5 User: Blake Theisen Plotted: Dec 23, 2022 – 10:26am

PROJECT LOCATION MAP



PROJECT ADDRESS:
4802 Marsh Road, McFarland, WI 53558

NTS

PROJECT OVERVIEW

SITE LOCATION PLAN

NTS

INDEX TO DRAWINGS

T100	TITLE SHEET
C100	EXISTING CONDITIONS
C101	DEMOLITION AND EROSION CONTROL PLAN
C200	OVERALL SITE PLAN
C201	SITE PLAN + RESTORATION PLAN
C300	SITE GRADING PLAN
C900	CONSTRUCTION DETAILS
C901	CONSTRUCTION DETAILS
C902	CONSTRUCTION DETAILS
C903	CONSTRUCTION DETAILS
C904	CONSTRUCTION DETAILS
SK1.0	3D PERSPECTIVE
SK2.0	SPECIFICATIONS
SK2.1	SPECIFICATIONS
SK3.0	INFORMATION PLAN
SK4.0	COLOR PLAN
SK5.0	LAYOUT PLAN
SK6.0	GRADING + DRAINAGE PLAN
SK7.0	STEEL PLAN
SK8.0	SECTIONS
SK8.1	SECTIONS
SK8.2	SECTIONS
SK9.0	CONSTRUCTION DETAILS
SK9.1	CONSTRUCTION DETAILS
SK9.2	CONSTRUCTION DETAILS
SK9.3	CONSTRUCTION DETAILS

ISSUED FOR VILLAGE REVIEW

CIVIL ENGINEER:
PARKITECTURE + PLANNING
901 DEMING WAY, SUITE 102
MADISON, WI 53717
608.438.4253

LANDSCAPE ARCHITECT:
PARKITECTURE + PLANNING
901 DEMING WAY, SUITE 102
MADISON, WI 53717
608.886.6808

VILLAGE OF McFarland

WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK

VILLAGE OF MCFARLAND
MCFARLAND, WISCONSIN

PROJECT NUMBER 22.053

DIGGERS HOTLINE
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www.DiggersHotline.com

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SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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McFarland, WI 53558

Sheet Title:
TITLE SHEET

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/15/2022

Sheet Number
T100

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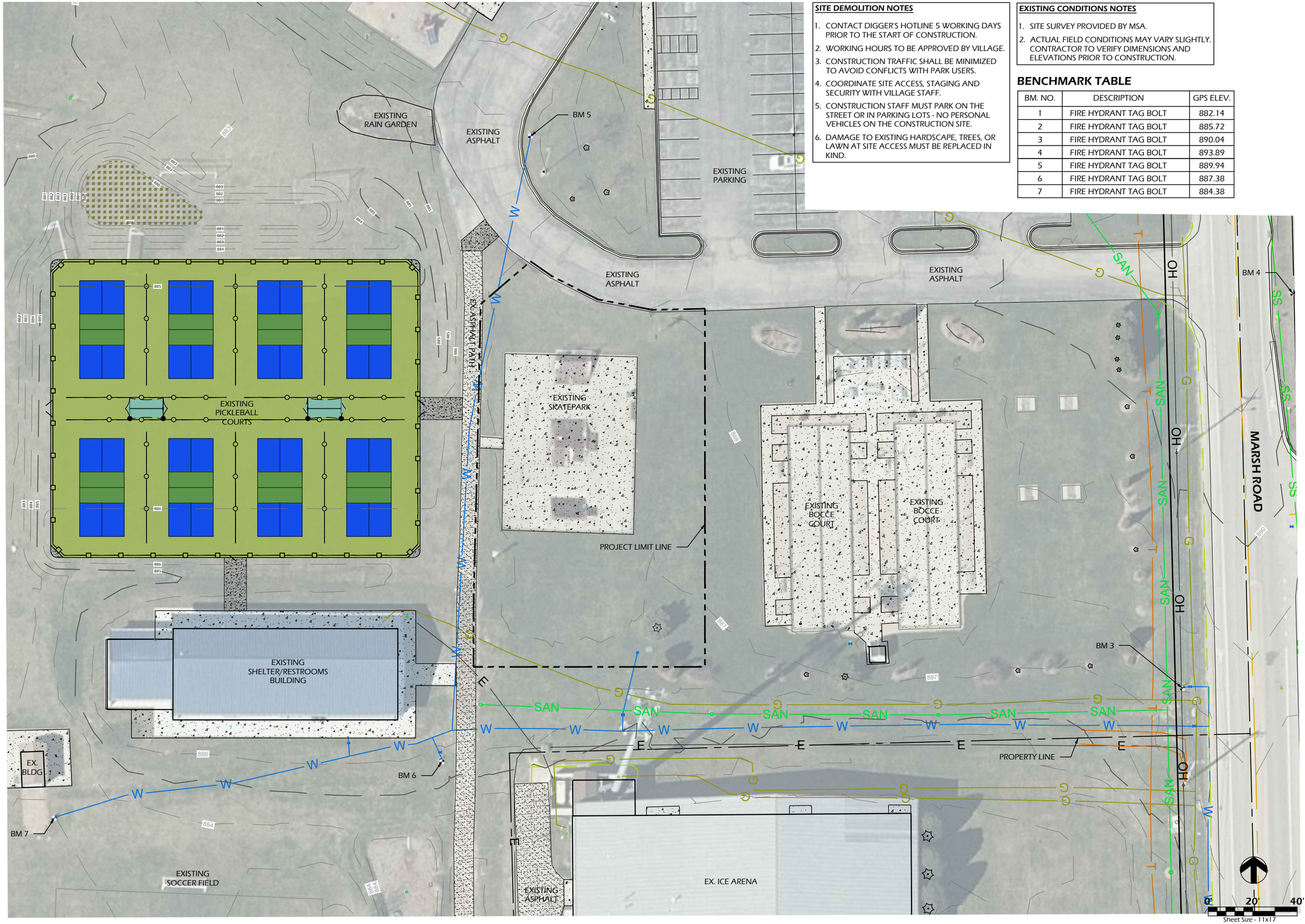

SITE DEMOLITION NOTES

1. CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
2. WORKING HOURS TO BE APPROVED BY VILLAGE.
3. CONSTRUCTION TRAFFIC SHALL BE MINIMIZED TO AVOID CONFLICTS WITH PARK USERS.
4. COORDINATE SITE ACCESS, STAGING AND SECURITY WITH VILLAGE STAFF.
5. CONSTRUCTION STAFF MUST PARK ON THE STREET OR IN PARKING LOTS - NO PERSONAL VEHICLES ON THE CONSTRUCTION SITE.
6. DAMAGE TO EXISTING HARDSCAPE, TREES, OR LAWN AT SITE ACCESS MUST BE REPLACED IN KIND.

EXISTING CONDITIONS NOTES

1. SITE SURVEY PROVIDED BY MSA.
2. ACTUAL FIELD CONDITIONS MAY VARY SLIGHTLY. CONTRACTOR TO VERIFY DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

BENCHMARK TABLE

BM. NO.	DESCRIPTION	GPS ELEV.
1	FIRE HYDRANT TAG BOLT	882.14
2	FIRE HYDRANT TAG BOLT	885.72
3	FIRE HYDRANT TAG BOLT	890.04
4	FIRE HYDRANT TAG BOLT	893.89
5	FIRE HYDRANT TAG BOLT	889.94
6	FIRE HYDRANT TAG BOLT	887.38
7	FIRE HYDRANT TAG BOLT	884.38

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SPOHN RANCH SKATEPARKS

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Sheet Title:
EXISTING CONDITIONS

Revisions:

Project #: 22.053
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Sheet Number
C100

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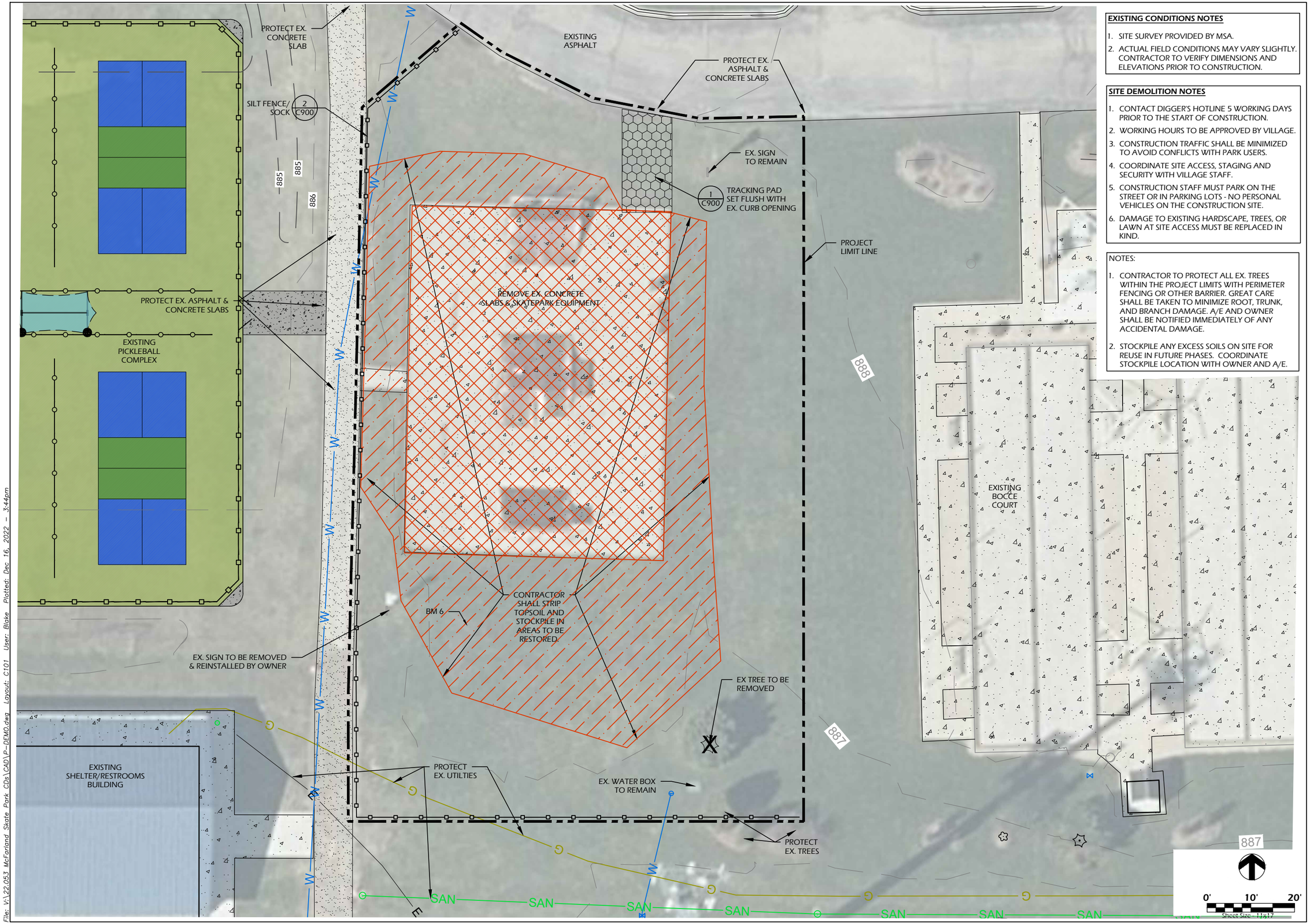

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SITE DEMOLITION NOTES

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5. CONSTRUCTION STAFF MUST PARK ON THE STREET OR IN PARKING LOTS - NO PERSONAL VEHICLES ON THE CONSTRUCTION SITE.
6. DAMAGE TO EXISTING HARDSCAPE, TREES, OR LAWN AT SITE ACCESS MUST BE REPLACED IN KIND.

NOTES:

1. CONTRACTOR TO PROTECT ALL EX. TREES WITHIN THE PROJECT LIMITS WITH PERIMETER FENCING OR OTHER BARRIER. GREAT CARE SHALL BE TAKEN TO MINIMIZE ROOT, TRUNK, AND BRANCH DAMAGE. A/E AND OWNER SHALL BE NOTIFIED IMMEDIATELY OF ANY ACCIDENTAL DAMAGE.
2. STOCKPILE ANY EXCESS SOILS ON SITE FOR REUSE IN FUTURE PHASES. COORDINATE STOCKPILE LOCATION WITH OWNER AND A/E.

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Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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Sheet Title:
SITE DEMOLITION + EROSION CONTROL PLAN

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/15/2022

Sheet Number
C101

File: V:\22.053 McFarland Skate Park CDs\CAD\P-DEMO.dwg Layout: C101 User: Blake Plotted: Dec 16, 2022 - 3:44pm

SITE LAYOUT NOTES

1. CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
2. ALL PROPOSED DIMENSIONS ARE REFERENCED PARALLEL OR PERPENDICULAR TO THE PROPOSED FEATURES SHOWN. WRITTEN DIMENSIONS SUPERSEDE ANY SCALED DIMENSIONS.
3. PROPOSED GRADE AND LEVEL SHALL BE PERIODICALLY REVIEWED IN THE FIELD BY THE OWNER OR A/E.
4. CONCRETE JOINTING IS SHOWN FOR DESIGN INTENT. FINAL SCORING PLANS SHALL BE SUBMITTED TO THE A/E FOR REVIEW AS A SHOP SUBMITTAL.
5. CONTRACTOR TO IMPORT SOIL AS NEEDED TO PREPARE TURF AREAS. CONTRACTOR TO FINE GRADE ALL AREAS TO FINISH GRADE.
6. ANY EXISTING STRUCTURES AND/OR UTILITIES NOT SHOWN ON THESE DOCUMENTS WHICH NEED TO BE REMOVED, RELOCATED, AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR AND INCLUDED IN THE BASE BID.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STAKING. DIGITAL PLAN FILES MAY BE AVAILABLE FROM THE A/E.

EXISTING RAIN GARDEN
EXISTING ASPHALT
BM 5
EXISTING PARKING
EXISTING ASPHALT
EXISTING ASPHALT
BM 4
EXISTING PICKLEBALL COURTS
EX. ASPHALT PATH
15.91'
18.34'
14.49'
68.24'
2.71'
24.27'
27.35'
44.03'
124.46'
EXISTING BOCCE COURT
EXISTING BOCCE COURT
MARSH ROAD
79.35'
16.00'
44.77'
56.50'
53.73'
BM 3
EXISTING SHELTER/RESTROOMS BUILDING
PROPERTY LINE
EX. BLDG
BM 6
BM 7
EXISTING SOCCER FIELD
EX. ICE ARENA
EXISTING ASPHALT
0'
20'
40'
Sheet Size: 11x17

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Parkitecture
SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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Sheet Title:
CONTEXTUAL SITE PLAN

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/15/2022

Sheet Number
C200

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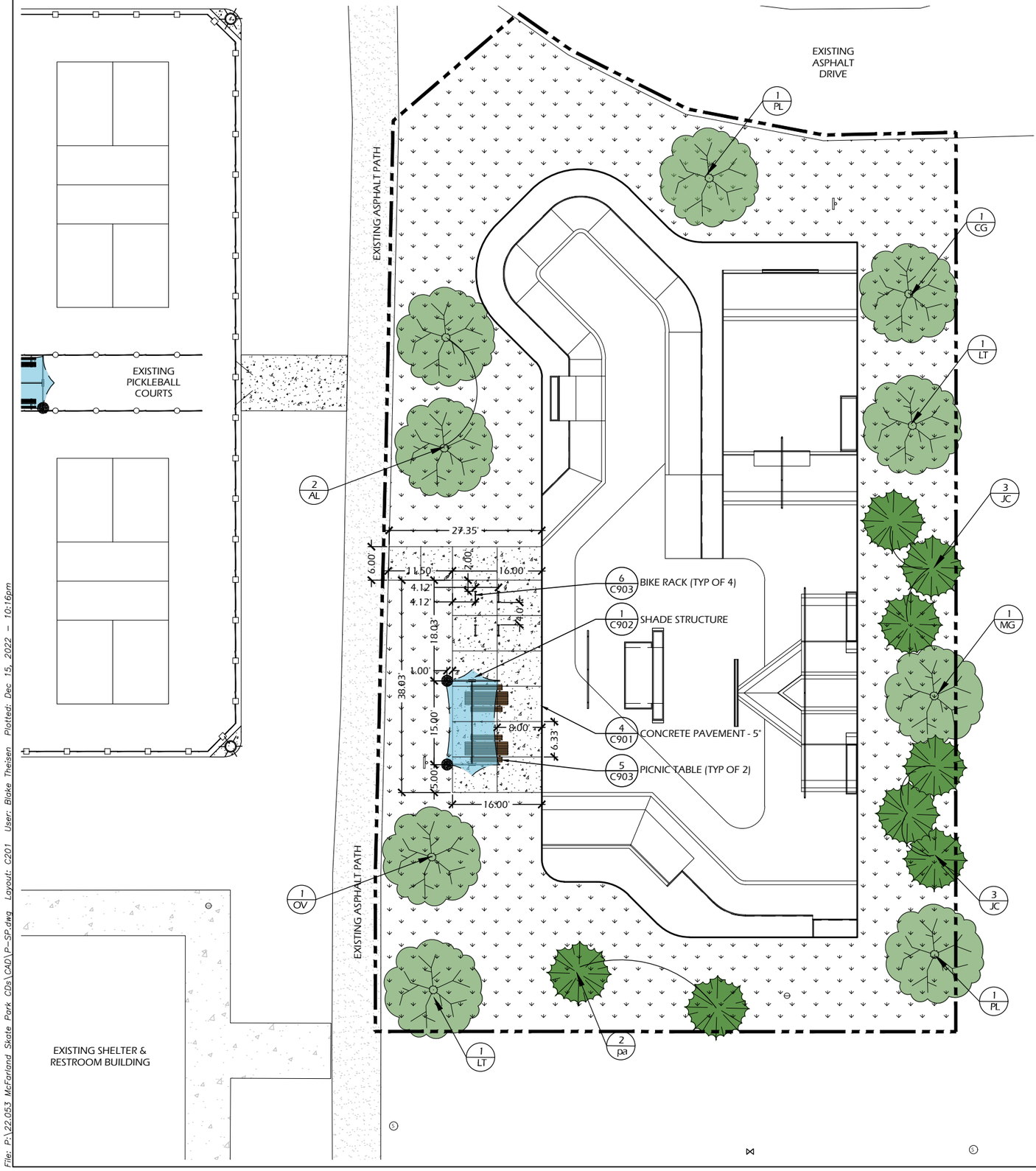

SITE LAYOUT NOTES

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7. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STAKING. DIGITAL PLAN FILES MAY BE AVAILABLE FROM THE A/E.

LANDSCAPE AND RESTORATION NOTES

1. CONTRACTOR SHALL MEET EXISTING GRADE AT GRADING LIMITS WITH A SMOOTH AND CONTINUOUS TRANSITION.
2. SEED/SOIL PLACEMENT SHALL EXTEND TO THE LIMITS OF CONSTRUCTION DISTURBANCE.
5. ALL GENERAL LANDSCAPE AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED WITH 4" MINIMUM TOPSOIL DEPTH AND SEEDED IN ACCORDANCE WITH THE SPECIFICATIONS. THIS SHALL INCLUDE ANY AREAS OUTSIDE OF THE PROJECT LIMITS THAT ARE DISTURBED BY CONTRACTOR ACTIVITY.

PLANT MATERIAL SCHEDULE

Symb	Botanical name	Common Name	Size (min)	Qty
TREES				
AL	Amelanchier laevis	Allegheny Serviceberry	Multi-stem	2
JC	Juniperus chinensis 'Iowa'	Iowa Juniper	5' Ht	6
LT	Liriodendron tulipifera	Tulip Poplar	8' Ht	2
MG	Metasequoia glypotostroboides	Dawn Redwood	8' Ht	1
OV	Ostrya virginiana	Hophornbeam	8' Ht	1
PA	Picea abies	Norway Spruce	5' Ht	1
PL	Platanus x acerifolia	London Plane Tree	2" Cal	2

RESTORATION MIXES

SEED MIXES

DESIGNATION	SEED MIX	RATE (LBS/1000 SF)	
GRASS RESTORATION	WISDOT MIX #40	3.0	

ANNUAL SEED MIX ADDITIVE (USE ONE TYPE)

DESIGNATION	SEED MIX	RATE (LBS/1000 SF)	USAGE DATES
ANNUAL SEEDING		2.0	GROWING SEASON
COOL WEATHER COVER CROP	OATS	2.0	AFTER SEPTEMBER 15
DORMANT COVER CROP	WINTER WHEAT	2.0	AFTER OCTOBER 15

ADDITIONAL ADDITIVES

DESIGNATION	TYPE	RATE (LBS/1000 SF)	USAGE DATES
MULCH	STRAW MULCH	PER MANUFACTURER	ALL SEASONS
FERTILIZER	PER SOIL TEST	2.0	ALL SEASONS
SOIL STABILIZER	POLYACRYLIMIDE	PER MANUFACTURER	AFTER NOVEMBER 15

0' 10' 20'
Sheet Size - 11x17

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Parkitecture
SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title:
SITE PLAN + RESTORATION PLAN

Revisions:

Project #: 22.053
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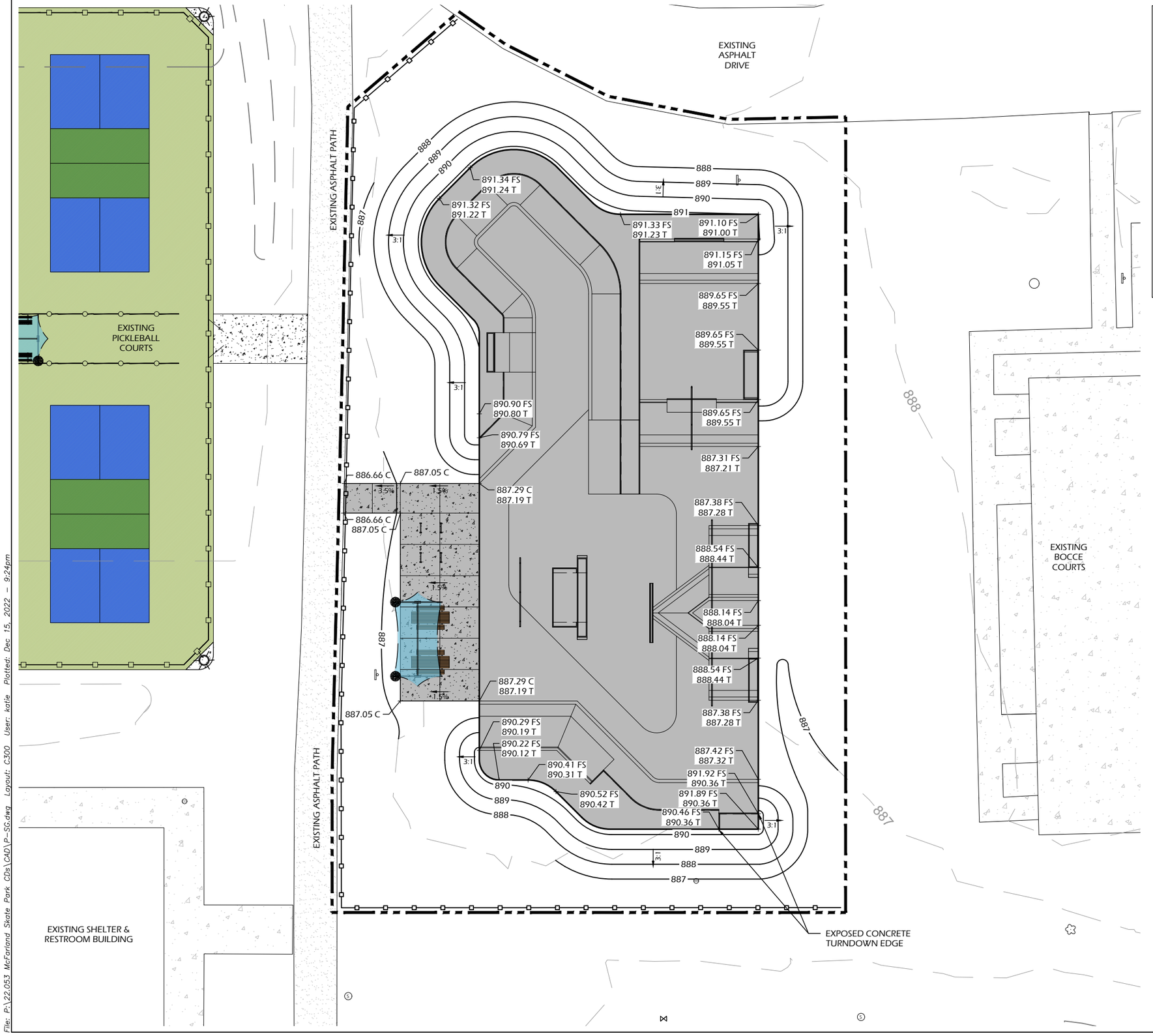
Date: 12/15/2022

Sheet Number
C201

File: P:\22.053 McFarland Skate Park CDs\CAD\P-SP.dwg Layout: C201 User: Blake Theisen Plotted: Dec 15, 2022 - 10:16pm



SITE GRADING NOTES

1. ALL BIDDERS SHOULD VISIT THE SITE PRIOR TO SUBMITTING A BID AND REVIEW THE EXISTING CONDITIONS OF THE SITE.
2. CONTACT DIGGER'S HOTLINE A MINIMUM OF 5 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
3. GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE OWNER OR A/E.
4. THE SITE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL ELEMENTS IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES AND THE LOCAL GOVERNING AUTHORITY'S REGULATIONS.
5. PLACE SILT FENCE OR INLET PROTECTION AT ALL PROPOSED AND EXISTING CATCH BASINS, MANHOLES, AND INLETS FOR THE DURATION OF CONSTRUCTION.
6. ALL EXISTING STRUCTURES AND/OR UTILITIES WHICH ARE NOT SHOWN ON THESE DOCUMENTS WHICH NEED TO BE REMOVED, RELOCATED, AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR AND INCLUDED IN THE BASE BID.
7. CONTOUR INTERVAL SHOWN REPRESENTS ONE VERTICAL FOOT AND SHALL BE CONSTRUED AS FINISH GRADE.
8. ALL HARDSCAPE SURFACES SHALL NOT EXCEED 2% RUNNING OR CROSS SLOPES UNLESS OTHERWISE INDICATED.
9. ALL TURF AREAS SHALL MAINTAIN A MINIMUM SLOPE OF 2% UNLESS OTHERWISE INDICATED.

LEGEND

- SILT FENCE/SOCK
- TRACKING PAD
- CONCRETE PAVEMENT - 5"
- TURF RESTORATION
- PROJECT LIMIT LINE

SPOT GRADE ABBREVIATIONS:

(XXX.XX)	= EXISTING GRADE
XXX.XX C	= PROPOSED CONCRETE
XXX.XX FS	= PROPOSED FINISH SURFACE
XXX.XX T	= PROPOSED TURF ELEVATION

0' 10' 20'
Sheet Size - 11x17

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Revisions:

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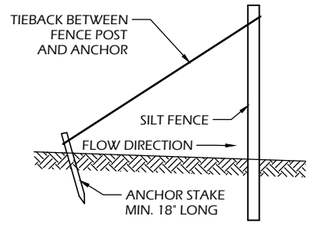
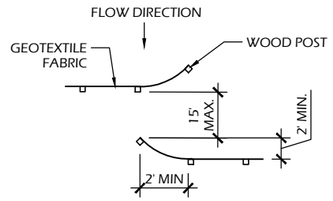
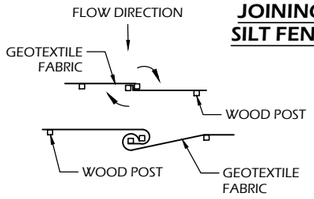


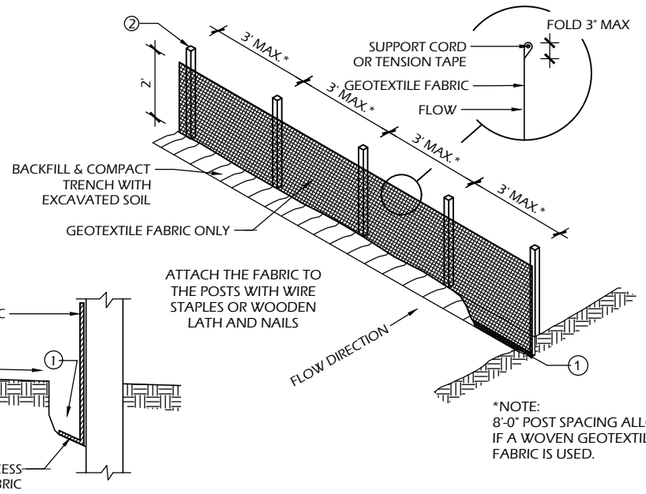
SILT FENCE TIE BACK (WHEN REQUIRED BY THE ENGINEER)



JOINING TWO LENGTHS OF SILT FENCE (HOOK METHOD)



JOINING TWO LENGTHS OF SILT FENCE (TWIST METHOD)



TRENCH DETAIL

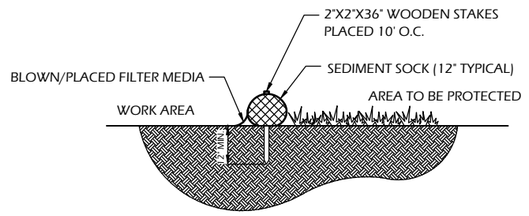
*NOTE:
8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

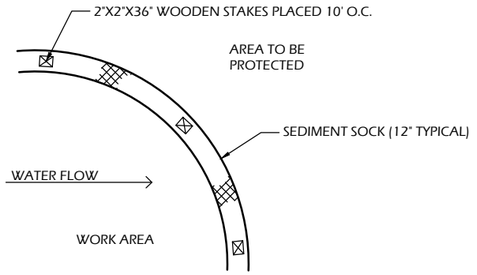
SILT FENCE GENERAL NOTES:

1. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
2. WOOD POSTS SHALL BE A MINIMUM SIZE OF 3' LENGTH OF OAK OR HICKORY
3. ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS
4. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
5. 8" OF FENCE FABRIC REQUIRED BELOW GRADE IN TRENCH PER DNR TECH STD. 1056
6. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WisDOT PRODUCT ACCEPTABILITY LIST (PAL) MAY BE SUBSTITUTED.
7. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
8. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2"X4".
9. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD AND TECHNICAL SPECIFICATIONS.
10. CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
11. MINIMUM 14 GAUGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C.C.
12. WIRE SUPPORT FENCE SHALL BE 14 GAUGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C.C. (TYPE B)
13. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED. (TYPE A)
14. STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS./LIN. FT. (WITHOUT ANCHOR) FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
15. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL, IF POSSIBLE, BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING TWO METHODS: A.) TWIST METHOD – OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B:) HOOK METHOD – HOOK THE END OF EACH SILT FENCE LENGTH.

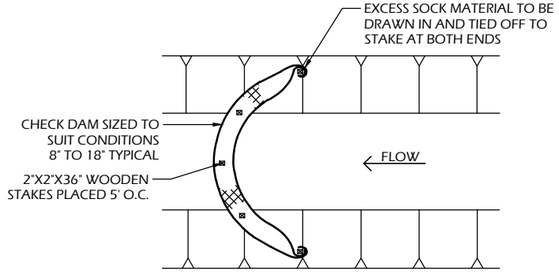
2 C900 **SILT FENCE OR SEDIMENT SOCK**
SCALE: NTS



SECTION



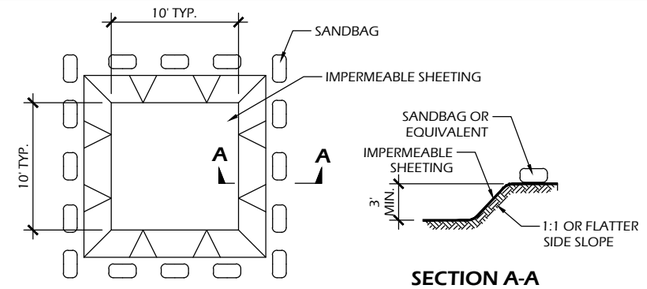
PLAN



SEDIMENT SOCK NOTES:

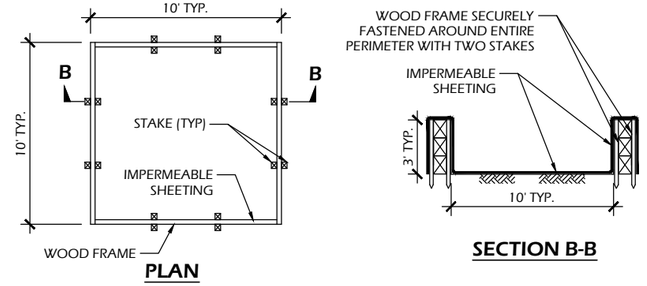
1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. SEDIMENT SHOULD BE REMOVED FROM BEHIND CHECK DAM ONCE THE ACCUMULATED HEIGHT HAS REACHED ½ THE HEIGHT OF THE CHECK DAM.
3. CHECK DAM CAN BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
4. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
5. COMPOST MATERIAL TO BE DISPERSED ON SITE. AS DETERMINED BY ENGINEER.

SEDIMENT SOCK



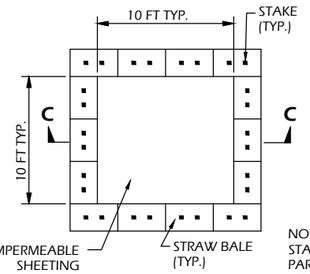
PLAN **SECTION A-A**

EXCAVATED WASHOUT STRUCTURE



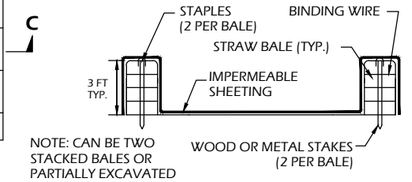
PLAN **SECTION B-B**

WASHOUT STRUCTURE WITH WOOD PLANKS



PLAN

STAPLE DETAIL



SECTION C-C

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

1. TEMPORARY CONCRETE WASHOUT STRUCTURE SHALL BE USED TO WASH DOWN CONCRETE TRUCK CHUTES AND OTHER EQUIPMENT AFTER USE TO PREVENT WASHDOWN WATER FROM POLLUTING THE SITE.
2. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
3. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
4. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
5. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
6. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

1 C900 **CONCRETE WASHOUT STRUCTURE (TEMP)**
SCALE: NTS

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Sheet Title:
CONSTRUCTION DETAILS

Revisions:

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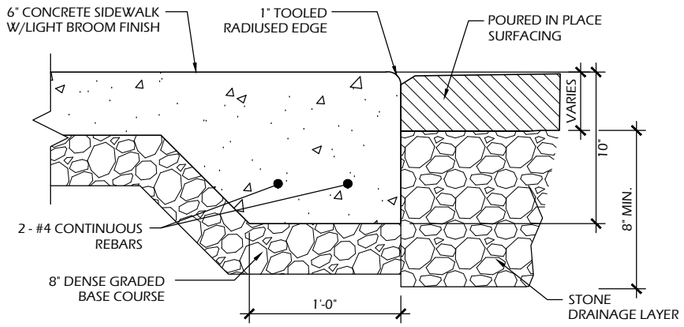
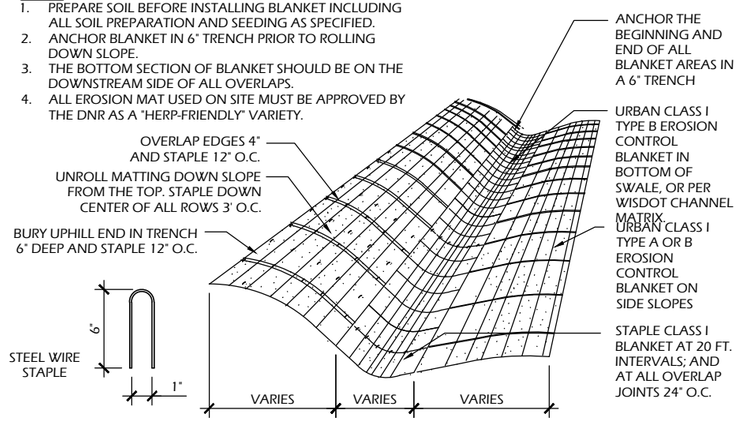


GENERAL NOTES:
1. PROVIDE 1/4" PER FOOT CROSS SLOPE ACROSS WALK
2. NO MESH REQUIRED
3. PROVIDE TOOLED JOINTS @ +/- 5'-0" O.C. U.N.O.

5 C901 THICKENED EDGE SIDEWALK

SCALE: NTS

NOTES
1. PREPARE SOIL BEFORE INSTALLING BLANKET INCLUDING ALL SOIL PREPARATION AND SEEDING AS SPECIFIED.
2. ANCHOR BLANKET IN 6" TRENCH PRIOR TO ROLLING DOWN SLOPE.
3. THE BOTTOM SECTION OF BLANKET SHOULD BE ON THE DOWNSTREAM SIDE OF ALL OVERLAPS.
4. ALL EROSION MAT USED ON SITE MUST BE APPROVED BY THE DNR AS A "HERP-FRIENDLY" VARIETY.



2 C901 EROSION MAT

SCALE: NTS

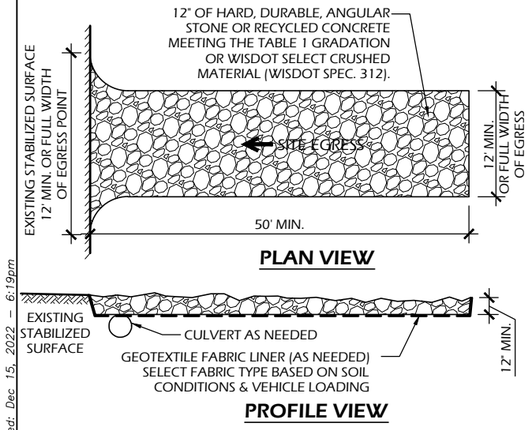
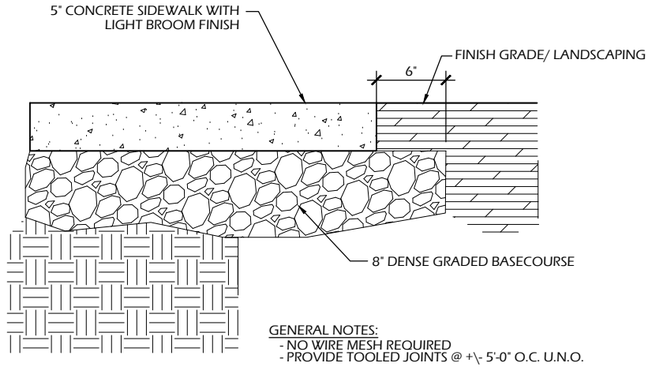


TABLE 1 AGGREGATE GRADATION	
SIEVE SIZE	PERCENT PASSING BY WEIGHT
3"	100
2 1/2"	90 - 100
1 1/2"	25 - 60
3/4"	0 - 20
3/8"	0 - 5

OPERATION & MAINTENANCE:
1. MONITOR TRACKING PADS FOR COMPACTION, SOIL DEPOSITS, AND MIXING OF UNDERLYING SOILS AND STONE LAYERS.
2. MAINTAIN A LOOSENED, ROUGH SURFACE BY SCRAPING, LOOSENING, OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
3. REPLACE GEOTEXTILE AND STONE IF LESS-INTENSIVE MAINTENANCE EFFORTS FAIL TO REESTABLISH EFFECTIVENESS.
4. ADD STONE AS NEEDED TO MAINTAIN THE MINIMUM PAD THICKNESS.
5. REPLACE DAMAGED OR CRUSHED CULVERTS UNDER TRACKING PAD.

7 C901 STONE TRACKING PAD

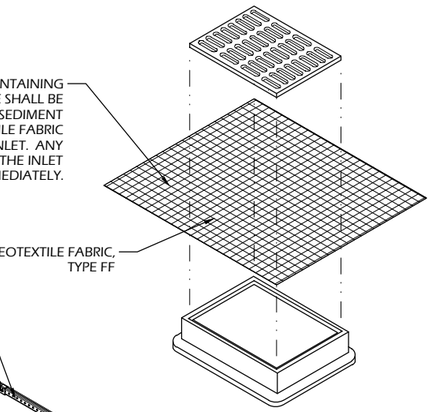
SCALE: NTS



GENERAL NOTES:
- NO WIRE MESH REQUIRED
- PROVIDE TOOLED JOINTS @ +\- 5'-0" O.C. U.N.O.

4 C901 CONCRETE PAVEMENT - 5"

SCALE: NTS

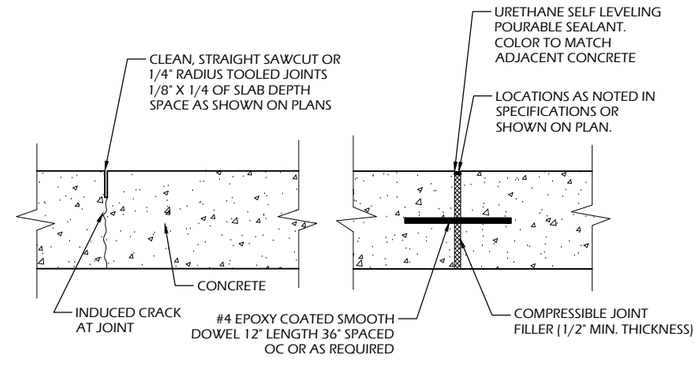


RIGID FRAME INLET PROTECTION

INLET PROTECTION NOTES:
1. INSTALL PER WDNR STORM WATER CONSTRUCTION TECHNICAL STANDARD 1060.
2. RIGID FRAME INLET PROTECTION SHALL BE USED ON ALL STRUCTURES, TYPE B MAY BE USED IN ATYPICAL STRUCTURES SUCH AS STAND PIPES OR INLETS TOO SHALLOW TO ACCEPT RIGID FRAME UNITS.
3. ROUTINELY INSPECT FOR INTEGRITY AND NEEDED MAINTENANCE.
4. EMPTY SEDIMENT WHEN THE BAG IS HALF FULL OR SEDIMENT IS WITHIN 6 INCHES OF THE OVERFLOW HOLES, OR AS DIRECTED BY THE OWNER OR A/E.
5. IMMEDIATELY REMOVE ANY SEDIMENT FALLING INTO THE INLET DURING MAINTENANCE ACTIVITIES.
6. INLET PROTECTION SHALL BE REMOVED AFTER THE SITE HAS ACHIEVED 80% STABILIZATION OR AT THE END OF THE PROJECT.

1 C901 INLET PROTECTION - RIGID FRAME & TYPE B

SCALE: NTS



GENERAL NOTES:
- SAWCUT ALL JOINTS FOR PLAZA AREA
- OVERCUTS SHALL NOT BE ACCEPTED
- PROVIDE JOINTS PER JOINTING PLAN
- DOWEL BETWEEN ALL SEPARATE POURS
- ALL JOINTS SHALL BE STRAIGHT AND CONTINUOUS

6 C901 CONCRETE JOINTS

SCALE: NTS

3 C901 NOT USED

SCALE: NTS

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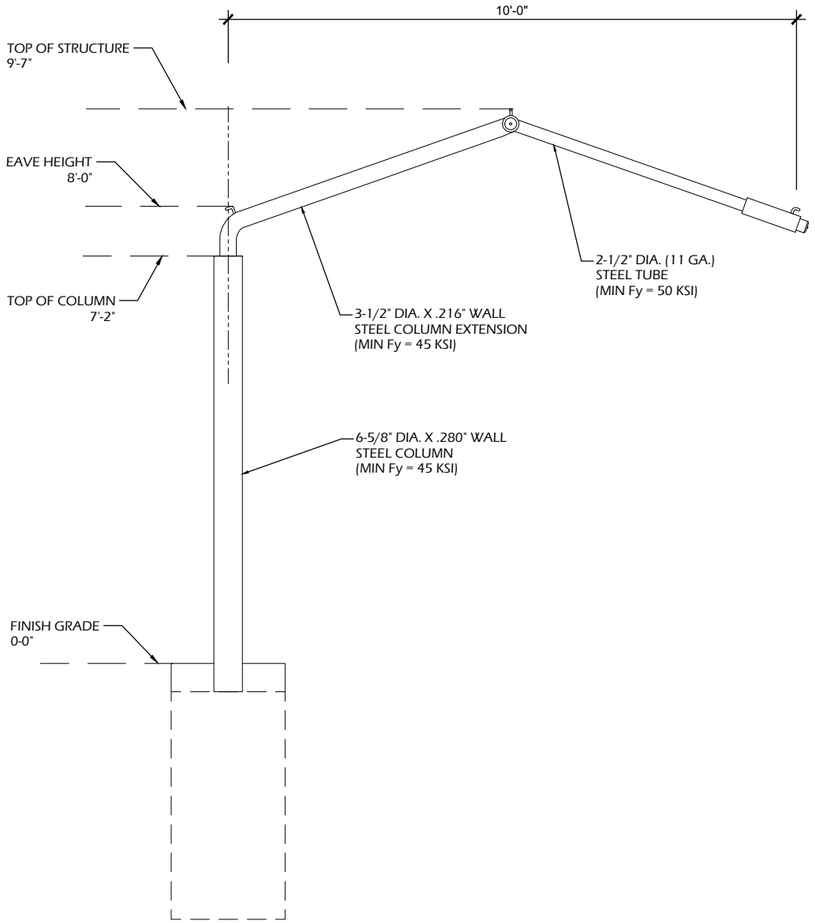
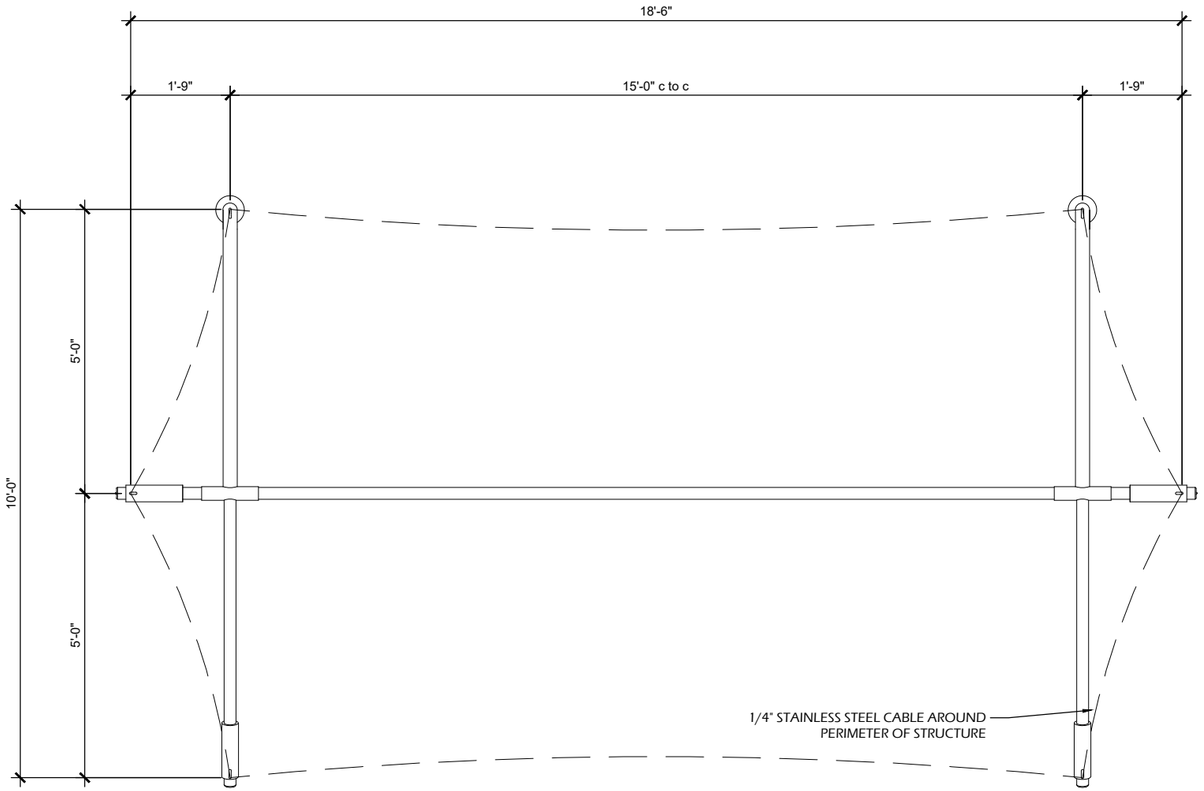
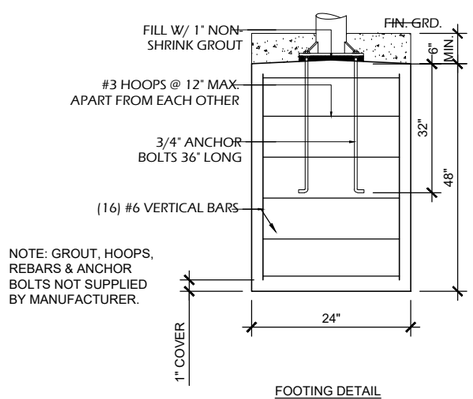


ELEVATION VIEW



PLAN VIEW

NOTE: FOOTING DIMENSIONS SHOWN SHALL BE USED FOR BID ESTIMATING ONLY. CONTRACTOR SHALL SUBMIT ENGINEER SEALED DRAWINGS AND CALCULATIONS FOR SHADE STRUCTURES AND FOOTINGS. FINAL FOOTING DIMENSIONS WILL VARY.



FOOTING DETAIL

NOTES:
1. 'SHADE SYSTEMS' MODEL SW101508 OR EQUAL.
2. ALL FASTENERS SHALL BE STAINLESS STEEL.
3. ASSEMBLE AND PLACE PER MANUFACTURER RECOMMENDATIONS.
4. IF MANUFACTURER RECOMMENDATIONS DIFFER FROM THIS DETAIL, MANUFACTURER RECOMMENDATIONS SHALL PREVAIL.
5. CONTRACTOR SHALL SUBMIT ENGINEER SEALED DRAWINGS AND CALCULATIONS FOR SHADE STRUCTURES AND FOOTINGS.

1 / C902 **SHADE STRUCTURE**

SCALE: NTS

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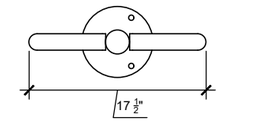
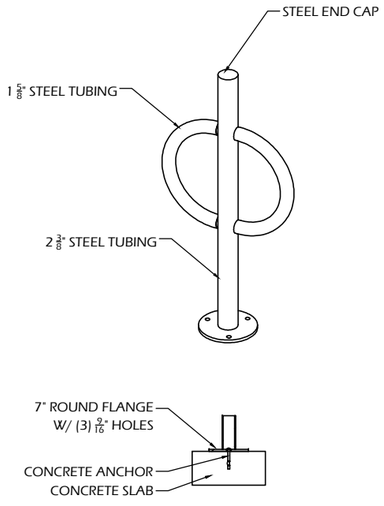
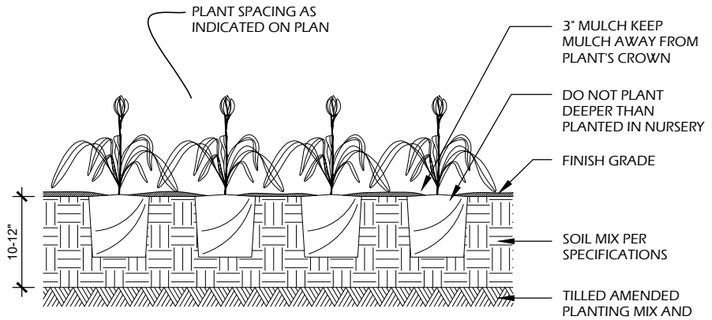




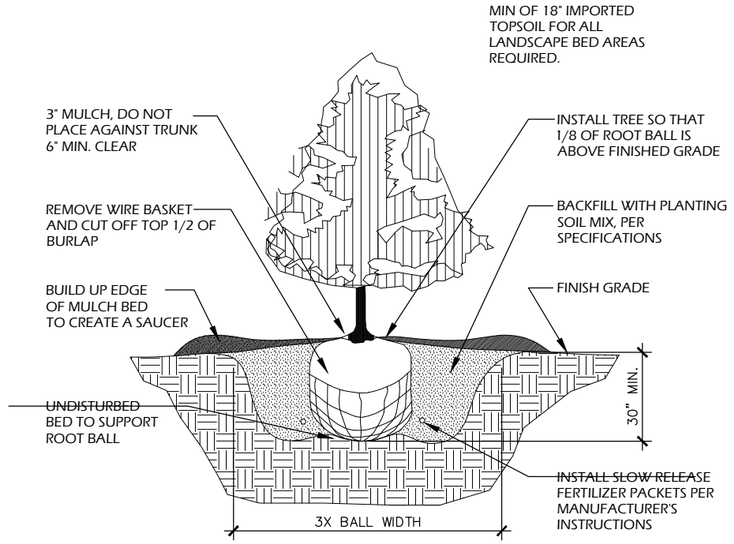
6 BIKE RACK
C903

SCALE: NTS



4 PLUG AND PERENNIAL PLANTING
C903

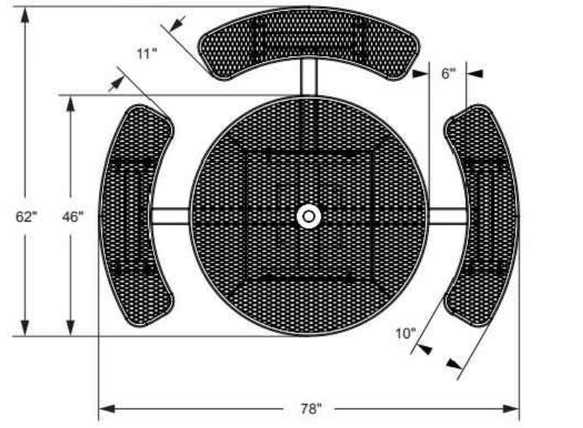
SCALE: NTS



GENERAL NOTE:
REMOVE EXCESS SOIL FROM TOP OF BALL IF NEEDED. BREAK DOWN SIDES OF HOLE WHEN BACKFILLING

2 B&B EVERGREEN PLANTING
C903

SCALE: NTS



5 PICNIC TABLE
C903

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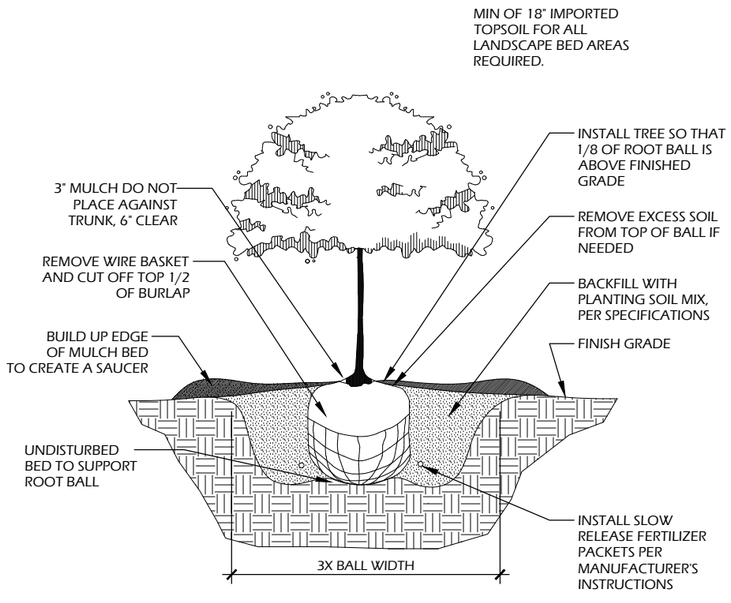
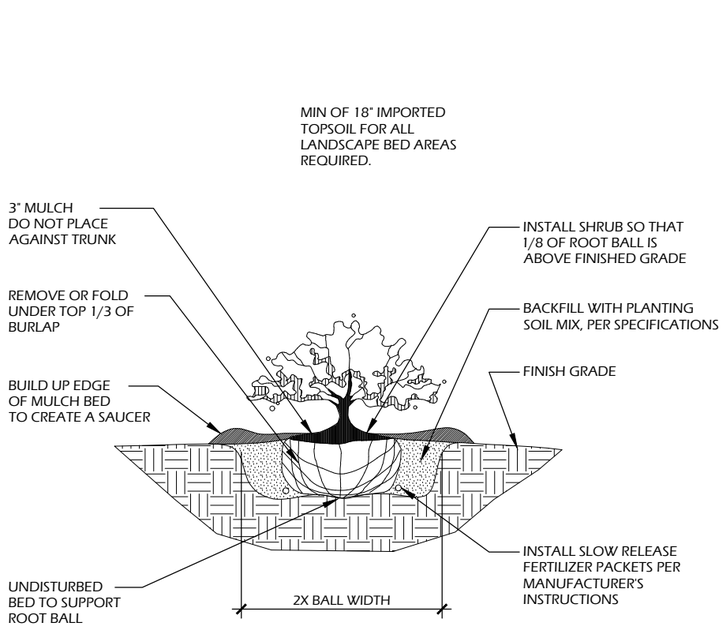


GENERAL NOTE:
1. WRAP TRUNK OF SHADE TREES IN PARKING LOT AREAS.
2. BREAK DOWN SIDES OF HOLE WHEN BACKFILLING.

3 B&B TREE PLANTING
C903

SCALE: NTS



1 B&B SHRUB PLANTING
C903

SCALE: NTS

Sheet Size - 11x17

PARKITECTURE + PLANNING
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SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

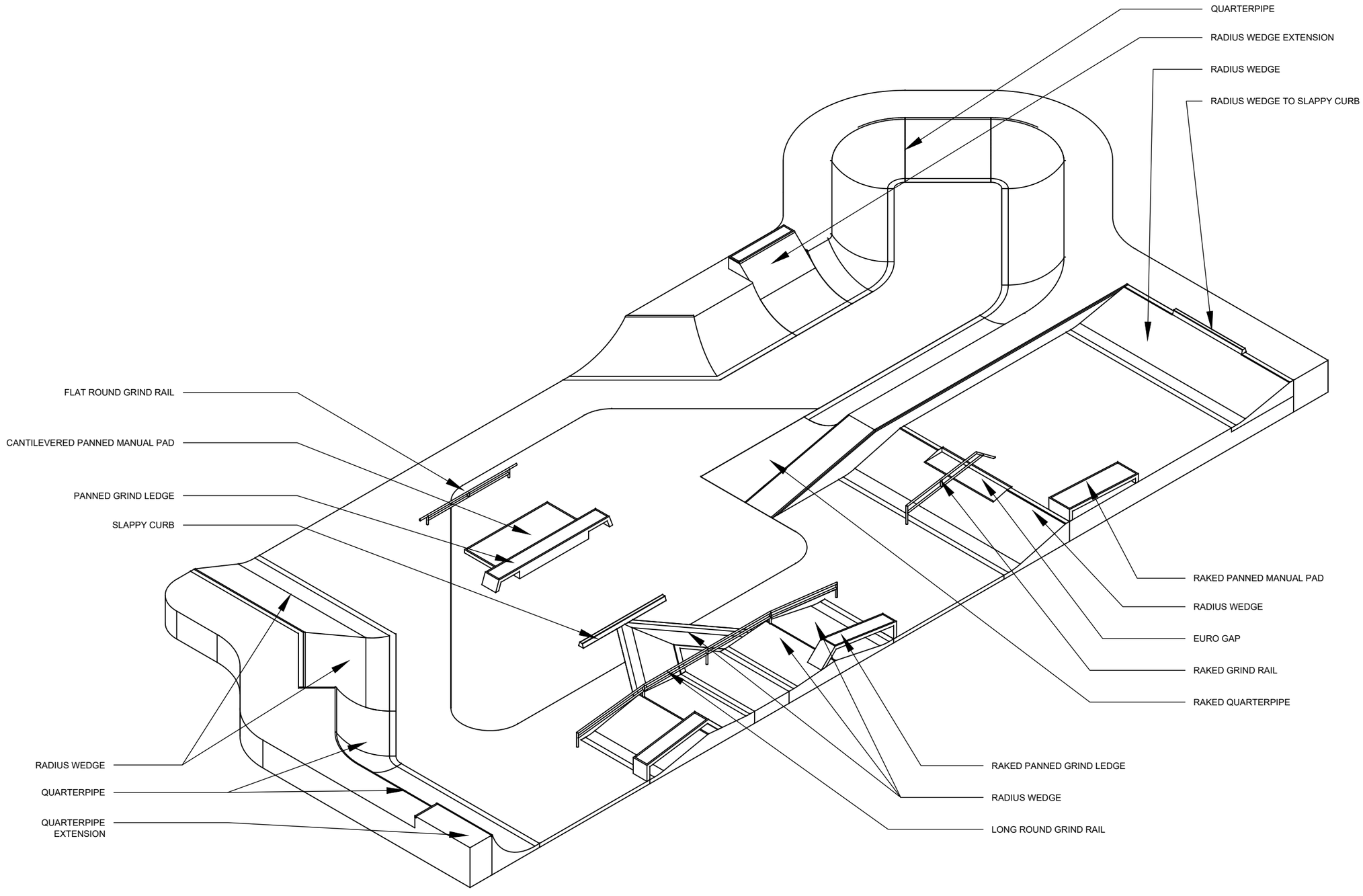
Sheet Title:
CONSTRUCTION DETAILS

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/15/2022

Sheet Number
C903

File: P:\22.053 McFarland Skate Park CDs\CAD\P-D.dwg Layout: C903 User: Blake Theisen Plotted: Dec 15, 2022 - 9:57pm



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SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
4802 Marsh Road
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Sheet Title:
3D PERSPECTIVE

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/16/2022

Sheet Number
SK1.0

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GENERAL NOTES

DESIGN CRITERIA

1. THESE GENERAL NOTES APPLY UNLESS NOTED OTHERWISE ON CONSTRUCTION DRAWINGS.
2. COMPLY WITH CURRENT LOCAL BUILDING CODE EXCEPT AS NOTED HEREIN.
3. TESTING SERVICES: OWNER TO BEAR ALL ASSOCIATED COSTS FOR TESTING SERVICES. COORDINATE THE FOLLOWING TESTING WITH THE OWNER SELECTED TESTING AGENCY (IF REQUIRED BY THE PROJECT SPECIFICATIONS):
   A. MATERIAL EVALUATIONS TESTS FOR CONCRETE MIX, AGGREGATE BASE, SUBGRADE, AND STRUCTURAL FILL.
   B. INSPECTION OF STRUCTURAL FILL PLACEMENT AND COMPACTION.
   C. INSPECTION OF FINAL SUBGRADE.
   D. BASE MATERIAL COMPACTION TEST FOR EVERY 2500 S.F. OF CONCRETE FLATWORK IN SKATEPARK AREA TO ENSURE 95% COMPACTION IN ACCORDANCE WITH CIVIL ENGINEERING SPECIFICATIONS AND TESTING AGENCY RECOMMENDATIONS.

SHOP DRAWINGS

1. THE SHOP DRAWING REVIEW IS INTENDED TO HELP THE SKATEPARK DESIGNER VERIFY THEIR DESIGN CONCEPT. THIS REVIEW IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH DESIGN DRAWINGS & SPECIFICATIONS, WHICH HAVE A PRIORITY OVER SHOP DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR CONFIRMED & CORRELATED DIMENSIONS, FABRICATION PROCESSES, MEANS, METHODS, TECHNIQUES, SAFETY, AND COORDINATION OF THE WORK WITH OTHER TRADES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK THE ACCURACY OF HIS OWN SHOP DRAWINGS AND THOSE OF HIS SUBCONTRACTORS, PRIOR TO SUBMITTAL.
2. THE SHOP DRAWINGS WILL BE RETURNED FOR RESUBMITTAL IF A CURSORY REVIEW SHOWS MAJOR ERRORS WHICH SHOULD HAVE BEEN FOUND BY THE CONTRACTOR'S CHECKING. ALL SHOP DRAWINGS SHALL INCLUDE PLAN LAYOUTS SHOWING LOCATIONS OF ITEMS DETAILED ON THE SHOP DRAWINGS. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLOUDED ON SHOP DRAWINGS. ANY OF THE CHANGES WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED REVIEWED AFTER SKATEPARK DESIGNER'S REVIEW UNLESS NOTED ACCORDINGLY.
3. ANY RESUBMITTAL OF A DETAIL SHEET WITH CHANGED INFORMATION SHALL BE ACCOMPANIED BY LOCATION PLAN IDENTIFYING THE MEMBERS INVOLVED, AND CLOUDING AROUND CHANGED INFORMATION.
4. ANY ENGINEERING SUBMITTED FOR REVIEW SHALL BE APPROPRIATELY SEALED. FULL RESPONSIBILITY OF SUCH ENGINEERING RESTS WITH THE PERSON SEALING THE DESIGN.

EARTHWORK

1. ESTABLISH AND MAINTAIN REQUIRED LINES AND GRADE ELEVATIONS.
2. REMOVE UPPER FOUR TO SIX INCHES OR MORE OF TOPSOILS CONTAINING SURFICIAL VEGETATION, GRASS, ROOTS, AND ORGANIC MATERIAL FROM WITHIN AND TO A POINT AT LEAST FIVE FEET BEYOND THE BUILDING LINES/SKATEPARK LIMITS. THESE SOILS ARE GENERALLY NOT CONSIDERED SUITABLE FOR RE-USE AS STRUCTURAL FILL AND SHOULD BE STOCKPILED IN DESIGNATED AREAS BEYOND THE CONSTRUCTION LIMITS, OR REMOVED FROM THE SITE. COORDINATE STOCKPILE LOCATION WITH OWNER. IF REMOVED FROM SITE, DISPOSE OF IN A LEGAL MANNER.
3. COMPACT THE EXPOSED SUBGRADE ACROSS THE SITE TO ESTABLISH A FIRM AND UNYIELDING SURFACE. UNDER SUPERVISION OF CITY PROVIDED GEOTECHNICAL ENGINEER, PROOF-ROLL EXPOSED SUBGRADES WITH CONSTRUCTION EQUIPMENT TO ASSIST IN THE EVALUATION OF THE SUBGRADES ACROSS THE SITE. IF UNSTABLE AREAS ARE DETECTED, AN INITIAL ATTEMPT SHOULD BE MADE TO AERATE (12 INCHES MIN.) AND DENSIFY THE SUBGRADE BY RECOMPACTION WHERE NATURAL MOISTURE CONTENTS ARE AT APPROPRIATE LEVELS. IF THIS PROCEEDURE IS INEFFECTIVE, THE DISTURBED SOILS SHOULD BE UNDERCUT AND REPLACED WITH CLEAN FILL AND/OR STABILIZING MATERIALS. COMPACT TO AT LEAST 90% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698 STANDARD PROCTOR METHOD. FILL AND CONSOLIDATE DEPRESSED AREAS. A FIRM, NON-YIELDING SUBGRADE SHOULD BE ESTABLISHED PRIOR TO PROCEEDING WITH FILL PLACEMENT.
4. SOIL COMPACTION SHALL BE ACHIEVED BY MEANS OF PNEUMATIC TIRE ROLLERS, HOE PACKS, RIDE-ON DRUM ROLLER OR OTHER MECHANICAL TAMPERS (PLATE, RAMMER, OR WALK BEHIND ROLLER).
5. PROVIDE STRUCTURAL FILL AS REQUIRED TO MEET PROPOSED SUBGRADE ELEVATIONS IN ACCORDANCE WITH GRADING PLAN.
6. BUILD UP SUBGRADE USING STOCKPILED MATERIAL AND/OR APPROVED MATERIAL WITH LOW PLASTICITY. THE FILL SHOULD BE PLACED IN LIFTS THIN ENOUGH TO ATTAIN THE SPECIFIED COMPACTION LEVEL THROUGHOUT THE ENTIRE LIFT THICKNESS. PRIOR TO COMPACTION, MOISTURE CONDITION AS NEEDED. COMPACT EACH LIFT TO AT LEAST 90 PERCENT OF ASTM D698.
7. THE EARTHWORK SHALL BE DONE UNDER SUPERVISION OF A SOILS ENGINEER RETAINED BY THE OWNER (IF REQUIRED BY THE PROJECT), WHO SHALL VERIFY ABOVE SPECIFICATIONS FOR THE SUPPORT OF SLAB ON GRADE AND FOR THE CONTROL OF SOIL SWELLING. FIELD DENSITY TESTS TO DETERMINE THE LEVEL OF COMPACTION BEING ACHIEVED IN THE FILL SHALL BE PERFORMED ON EACH LIFT AT THE BEGINNING OF FILL PLACEMENT AND AT A FREQUENCY MUTUALLY AGREED UPON BY THE PROJECT TEAM FOR THE REMAINDER OF THE PROJECT.
8. EXCAVATION AND COMPACTION OF FILL SHALL EXTEND TO MINIMUM 2' FEET BEYOND SKATE PARK FOOTPRINT.
10. PROCEED WITH SUB-BASE AS REQUIRED ONLY AFTER NONCONFORMING CONDITIONS HAVE BEEN CORRECTED AND SUBGRADE HAS BEEN INSPECTED. A FIRM, NON-YIELDING SUBGRADE SHOULD BE ESTABLISHED PRIOR TO BASE COURSE PLACEMENT.
11. PROVIDE THE SPECIFIED DEPTH OF COMPACTED AGGREGATE BASE MATERIAL IF REQUIRED. COMPACT AGGREGATE BASE TO 90% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698 STANDARD PROCTOR METHOD IF REQUIRED.
12. PROCEED WITH CONCRETE ONLY AFTER NONCONFORMING CONDITIONS HAVE BEEN CORRECTED, SUBGRADE HAS BEEN INSPECTED, AND FORMWORK AND FIELD MOCK-UPS HAVE BEEN REVIEWED.
13. A SOILS REPORT DOES NOT EXIST FOR THIS PROJECT. OWNER SHALL RETAIN A SOILS ENGINEER IF SO REQUIRED BY THE PROJECT, TO VERIFY EXCAVATIONS FOR ASSUMED ALLOWABLE SOIL BEARING, LOW SETTLEMENT AND SWELL POTENTIAL, AND TO MAKE ANY ADDITIONAL RECOMMENDATIONS.

FORMS

1. FORM MATERIALS: PLYWOOD, METAL, METAL-FRAMED PLYWOOD, OR OTHER APPROVED PANEL-TYPE MATERIALS FREE FROM DEFECTS AND DISTORTION, AND TO PROVIDE FULL-DEPTH, CONTINUOUS, STRAIGHT, SMOOTH EXPOSED SURFACES.
2. USE FLEXIBLE OR CURVED FORMS AS REQUIRED TO PROVIDE VERTICAL AND HORIZONTAL RADII AS INDICATED IN THE DRAWINGS.
3. PROVIDE 2" NOMINAL THICKNESS, SURFACED PLANK WOOD FORMS FOR STRAIGHT SECTIONS. USE FLEXIBLE METAL, 1" LUMBER, OR PLYWOOD FORMS FOR RADIUS BENDS. DO NOT OVERLAP FORMS, CREATING AN OFFSET FINISHED EDGE.
4. FORM-RELEASE AGENT: COMMERCIALLY FORMULATED FORM-RELEASE AGENT THAT WILL NOT BOND WITH, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES AND WILL NOT IMPAIR SUBSEQUENT TREATMENTS OF CONCRETE SURFACES.
5. EDGE FORMS AND SCREED CONSTRUCTION
   A. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK.
   B. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.

REINFORCING

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60. FOR REINFORCING THAT IS TO BE WELDED, CONFORM TO ASTM A706 GRADE 60. USE ASTM A-108 GRADE 60 FOR ALL WELDED ANCHORS.
2. JOINT DOWEL BARS: PLAIN STEEL DOWELS, ASTM A 615/A 615M, GRADE 60. CUT BARS TRUE TO LENGTH WITH ENDS SQUARE AND FREE OF BURRS.
3. SLIP DOWEL SLEEVES ARE ACCEPTABLE, SUCH AS SPEED DOWELS BY GREENSTREAK, INC., OR APPROVED EQUAL.
4. BAR SUPPORTS: BOLSTERS, CHAIRS, SPACERS AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCEMENTS BARS, AND DOWELS IN PLACE. MANUFACTURE BAR SUPPORTS ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE" FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE OR FIBER-REINFORCED CONCRETE OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE.
5. ALL REINFORCING BARS TO BE DEFORMED. CLEAR CONCRETE COVERAGES TO ANY REINFORCING INCLUDING TIES ARE AS FOLLOWS:
   A. 2" FORMED CONCRETE EXPOSED TO EARTH OR WEATHER.
   B. 1" SLABS AND JOISTS NOT EXPOSED TO WEATHER.
   C. 1-1/2" ALL OTHER.
6. SMALLER CLEARANCES PERMISSIBLE FOR PRECAST OR PRESTRESSED.
7. TENSION LAP SPLICES IN CONCRETE: UNLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING:
   A. #3, 9"; #4, 12". 30X DIAMETER FOR TOP BARS
8. MINIMUM CLEAR COVER FOR SPLICED REINFORCING IS GREATER THAN ONE BAR DIAMETER, AND MINIMUM CLEAR SPACING IS GREATER THAN TWO BAR DIAMETERS. SPLICE BOTTOM BAR OVER SUPPORTS AND TOP BAR AT MIDSPAN ONLY. WHERE BARS ARE SHOWN SPLICED, THEY MAY RUN CONTINUOUS AT CONTRACTOR'S OPTION.

CONCRETE

1. PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED HEREIN:
   A. MINIMUM 28-DAY STRENGTH: 4000 PSI
   B. TYPE I/II CEMENT
   C. SMALL TO MEDIUM AGGREGATE (1" MAX.)
   D. WATER/CEMENT RATIO OF .45 OR LESS
   E. MIX DESIGNS CONTAINING FLY ASH: THE AMOUNT OF FLY ASH USED SHALL NOT EXCEED 20% BY WEIGHT OF THE COMBINED WEIGHT OF FLY ASH PLUS CEMENT.
   F. AIR ENTRAINMENT NOT TO EXCEED 3%.
2. DO NOT INSTALL CONCRETE WORK OVER SATURATED, MUDDY, OR FROZEN SUBGRADE.
3. PROTECT ADJACENT WORK AND PROVIDE TEMPORARY BARRICADES AS REQUIRED FOR PROTECTION OF PROJECT WORK AND PUBLIC SAFETY.
4. MECHANICALLY VIBRATE ALL CONCRETE FLATWORK WHEN PLACED, EXCEPT THAT SLABS ON GRADE AND SLABS ON DECK NEED TO BE VIBRATED ONLY AROUND EMBEDDED ITEMS.
5. CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED PER THE ACI CODE, WHEN REQUIRED BY THE PROJECT. FREQUENCY= 1 SET OF CYLINDERS PER 50 CY'S PLACED. OWNER TO BEAR ALL COSTS.
6. ALL REINFORCING, INCLUDING DOWELS AND ANCHOR BOLTS, SHALL BE SECURELY TIED IN LOCATION BEFORE PLACING CONCRETE OR GROUT. DOWELS WILL NOT BE ALLOWED TO BE "STABBED" IN.
7. IN AN EFFORT TO CONTROL SHRINKAGE AND QUALITY, FLATWORK/FLOORS SHOULD BE PLACED IN SECTIONS OF 25 CY'S OR LESS.
8. CONDUITS, PIPES, AND SLEEVES EMBEDDED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 6.3.

CONCRETE PLACEMENT

1. CONSOLIDATE CONCRETE BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT AND PROCEDURES TO CONSOLIDATE CONCRETE ACCORDING TO RECOMMENDATIONS IN ACI 309R.
   A. CONSOLIDATE CONCRETE ALONG FACE OF FORMS AND ADJACENT TO TRANSVERSE JOINTS WITH AN INTERNAL VIBRATOR. KEEP VIBRATOR AWAY FROM JOINT ASSEMBLIES, REINFORCEMENT, OR SIDE FORMS. USE ONLY SQUARE-FACED SHOVELS FOR HAND-SPREADING AND CONSOLIDATION. CONSOLIDATE WITH CARE TO PREVENT DISLOCATING REINFORCEMENT, DOWELS, AND JOINT DEVICES.
2. COLD WEATHER PLACEMENT: COMPLY WITH ACI 306.1 AND AS FOLLOWS. PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES.
   A. WHEN AIR TEMPERATURE HAS FALLEN TO OR IS EXPECTED TO FALL BELOW 40 DEG F, UNIFORMLY HEAT WATER AND AGGREGATES BEFORE MIXING TO OBTAIN A CONCRETE MIXTURE TEMPERATURE OF NOT LESS THAN 50 DEG F AT POINT OF PLACEMENT.
   B. DO NOT USE FROZEN MATERIALS OR MATERIALS CONTAINING ICE OR SNOW.
   C. DO NOT USE CALCIUM CHLORIDE, SALT, OR OTHER MATERIALS CONTAINING ANTIFREEZE AGENTS OR CHEMICAL ACCELERATORS, UNLESS OTHERWISE SPECIFIED AND APPROVED IN MIX DESIGNS.
3. HOT-WEATHER PLACEMENT: PLACE CONCRETE ACCORDING TO RECOMMENDATION IN ACI 305R AND AS FOLLOWS WHEN HOT-WEATHER CONDITIONS EXIST:
   A. COOL INGREDIENTS BEFORE MIXING TO MAINTAIN CONCRETE TEMPERATURE AT TIME OF PLACEMENT BELOW 100 DEG FAHRENHEIT. CHILLED MIXING WATER OR CHOPPED ICE MAY BE USED TO CONTROL TEMPERATURE, PROVIDED WATER EQUIVALENT OF ICE IS CALCULATED TO TOTAL AMOUNT OF MIXING WATER. USING LIQUID NITROGEN TO COOL CONCRETE IS CONTRACTORS OPTION.
   B. FOG-SPRAY FORMS, REINFORCEMENT STEEL, AND SUBGRADE JUST BEFORE PLACING CONCRETE. KEEP SUBGRADE MOISTURE UNIFORM WITHOUT STANDING WATER, SOFT SPOTS, OR DRY AREAS.
4. **FINISH: ALL EXPOSED CONCRETE SURFACES ARE TO BE HARD STEEL TROWEL FINISH UNLESS OTHERWISE NOTED. TROWEL UNTIL ALL VISIBLE PORES ARE CLOSED. CEASE TROWELING BEFORE SURFACE BECOMES GLOSSY. DO NOT BROOM FINISH AND DO NOT TROWEL BURN SURFACE.**
   a. ALL EDGE TOOLING SHOULD BE 1/8 INCH RADIUS UNLESS OTHERWISE SPECIFIED.
5. COLOR: ALL CONCRETE SURFACES ARE TO BE NATURAL GRAY COLOR UNLESS OTHERWISE NOTED. MINOR VARIATIONS IN APPEARANCE OF COLORED CONCRETE, WHICH ARE SIMILAR TO NATURAL VARIATIONS IN COLOR AND APPEARANCE OF UNCOLORED CONCRETE, ARE ACCEPTABLE. DO NOT BROOM FINISH AND DO NOT TROWEL BURN SURFACE.

CONCRETE PROTECTION AND CURING

1. GENERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND FOLLOW RECOMMENDATIONS IN ACI 305R FOR HOT-WEATHER PROTECTION DURING CURING. KEEP MOIST FOR NECESSARY AMOUNT OF TIME TO REACH CONCRETE STRENGTH AND INHIBIT MOISTURE LOSS AFTER PLACING.
2. EVAPORATION RETARDANT: WATERBORNE, MONOMOLECULAR FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE, SUCH AS EUCOBAR EVAPORATION RETARDANT BY THE EUCLID CHEMICAL COMPANY. APPLY EVAPORATION RETARDANT TO CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS BEFORE AND DURING FINISHING OPERATIONS. APPLY TO EXPOSED SURFACE OF CONCRETE ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS AS NECESSARY.
3. BEGIN CURING AFTER FINISHING CONCRETE, BUT NOT BEFORE FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE.
4. CURING METHODS: CURE CONCRETE BY CURING COMPOUND, MOISTURE CURING, MOISTURE-RETAINING-COVER CURING, OR A COMBINATION OF THESE AS FOLLOWS:
   A. CURING COMPOUND: MEET REQUIREMENTS OF MANUFACTURER'S CURRENT PRINTED APPLICATION INSTRUCTIONS AND COVERAGE RATE CHART. FOR HORIZONTAL APPLICATIONS, IMMEDIATELY APPLY AFTER ALL SURFACE WATER HAS DISAPPEARED AND THE CONCRETE SURFACE IS HARD ENOUGH TO WALK ON. FOR VERTICAL APPLICATIONS, APPLY IMMEDIATELY AFTER REMOVING THE CONCRETE FORMS. APPLY IN A UNIFORM AND CONTINUOUS MANNER. AVOID OVER-APPLICATION OR PUDDLING OF CURING COMPOUND. PROTECT SURFACE FROM WATER, ADJACENT SHOTCRETE WORK, AND DEBRIS.
   B. MOISTURE CURING: KEEP SURFACES CONTINUOUSLY MOIST FOR NOT LESS THAN SEVEN DAYS WITH THE FOLLOWING MATERIALS:
      - WATER.
      - CONTINUOUS WATER-FOG SPRAY.
      - ABSORPTIVE COVER, WATER SATURATED, AND KEPT CONTINUOUSLY WET. COVER CONCRETE SURFACES AND EDGES, OVERLAP SEAMS MIN. 6" BETWEEN ADJACENT ABSORPTIVE COVERS.
   C. MOISTURE-RETAINING-COVER CURING: COVER CONCRETE SURFACES WITH MOISTURE-RETAINING COVER FOR CURING CONCRETE, PLACED IN WIDEST PRACTICABLE WIDTH, WITH SIDES AND ENDS LAPPED AT LEAST 6 INCHES.

CURING MATERIALS

1. ABSORPTIVE COVER: AASHTO M 182, CLASS 2, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9OZ./SQ. YD. DRY.
2. MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET (BUR LENE).
3. WATER: POTABLE.
4. CURING COMPOUND: ASTM C-309, CLEAR, WATER-BASED, NO VOLATILE, NON-STAINING, MEMBRANE-FORMING, COMPATIBLE WITH SUBSEQUENT CONCRETE TREATMENTS. ACCEPTABLE PRODUCT: W.R. MEADOWS 1100-CLEAR, OR APPROVED EQUAL.

JOINT MATERIALS

1 EXPANSION AND ISOLATION JOINT FILLER STRIPS: EXPANSION JOINT MATERIALS SHALL BE FLEXIBLE POLYETHYLENE CLOSED CELL FOAM OR SIMILAR AND SUPPLIED BY CONCRETE CONTRACTOR. DECK-O-FOAM OR EQUIVALENT.

2 EXPANSION JOINT SEALANT: SIKAFLEX - 1A NS TG POLYURETHANE ELASTOMERIC SEALANT, OR APPROVED EQUAL. COLOR OF CAULK SHOULD RESEMBLE NATURAL COLOR OF CONCRETE (ALUMINUM GRAY OR LIMESTONE).

3 SAW CUT JOINT SEALANT: SIKAFLEX-1C SL HIGH PERFORMANCE, SELF-LEVELING, 1-PART POLYURETHANE SEALANT, OR APPROVED EQUAL. COLOR OF CAULK SHOULD RESEMBLE NATURAL COLOR OF CONCRETE (ALUMINUM GRAY OR LIMESTONE)

JOINTS

1. GENERAL: CONSTRUCT CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED.
2. EXPANSION JOINTS: FORM EXPANSION JOINTS OF SPECIFIED JOINT-FILLER STRIPS WHERE INDICATED
   A. LOCATE EXPANSION JOINTS AS INDICATED ON DRAWINGS.
   B. EXTEND JOINT FILLERS FULL WIDTH AND DEPTH OF JOINT.
3. INSTALL DOWEL BARS AND SUPPORT ASSEMBLIES AT JOINTS WHERE INDICATED. LUBRICATE OR ASPHALT-COAT ONE-HALF DOWEL LENGTH TO PREVENT CONCRETE BONDING TO ONE SIDE OF JOINT.
4. CONTROL JOINTS: FORM WEAKENED-PLANE JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTROL JOINTS FOR A DEPTH AS INDICATED IN THE DRAWINGS (GENERALLY 1/3 OF THE PAVEMENT THICKNESS), AS FOLLOWS:
   A. SAWED JOINTS: FORM CONTROL JOINTS WITH POWER SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND-RIMMED BLADES. CUT 1/8 INCH WIDE JOINTS INTO CONCRETE WHEN CUTTING ACTION WILL NOT TEAR, ABRADE, OR OTHERWISE DAMAGE SURFACE AN BEFORE DEVELOPING RANDOM CONTRACTION CRACKS. EARLY SAW CUTS ARE APPROXIMATELY 1 INCH DEEP, REGARDLESS OF PAVEMENT THICKNESS. REFER TO CONTROL JOINT GUIDE DRAWING OF PLAN SET IF APPLICABLE.
   B. IF SKATEPARK PROJECT DESIGN UTILIZES POURED STEPS, CONTROL JOINTS MUST BE CUT 3 - 4 FEET FROM THE EDGE OF THE TOP STEP.
5. POST CURE DETAIL WORK (AS NEEDED): GRIND SMOOTH ANY INCONSISTENCIES IN THE FINISH OR HIGH SPOTS BETWEEN POURS.

Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

Project Name: WILLIAM MCFARLAND PARK
PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title: SPECIFICATIONS

Revisions:

Project #: 22.053
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METALS

1. FURNISH MATERIALS AND PERFORM LABOR REQUIRED TO EXECUTE THIS WORK AS INDICATED ON THE DRAWINGS, AS SPECIFIED, AND AS NECESSARY TO COMPLETE THE CONTRACT, INCLUDING, BUT NOT LIMITED TO BOWL STEEL COPING, LEDGE STEEL EDGING, HANDRAILS, AND GRIND RAILS.

2. USING SKILLED WORKERS, FORM AND FABRICATE ITEMS OF WORK AS INDICATED AND AS REQUIRED TO MEET INSTALLATION CONDITIONS. MAKE PROVISIONS TO CONNECT WITH OR RECEIVE THE WORK OF OTHER TRADES.

3. USE MATERIALS OF SIZE AND THICKNESS SHOWN OR, IF NOT SHOWN, OF REQUIRED SIZE AND THICKNESS TO PRODUCE STRENGTH AND DURABILITY IN THE FINISHED PRODUCT.

4. UNLESS OTHERWISE INDICATED, WELD OR BOLT CONNECTIONS BETWEEN MEMBERS. WHERE POSSIBLE, CONCEAL CONNECTIONS ON THE FINISHED WORK. FIT OR MITER EXPOSED JOINTS TO HAIRLINE TOLERANCE OR USE WELDED JOINTS. ON FINISHED SURFACES, GRIND ALL WELDS SMOOTH AND FLUSH WITH BASE METAL.

5. WELD CONNECTIONS WHICH ARE NOT TO BE LEFT AS EXPOSED JOINTS, BUT CANNOT BE SHOP WELDED BECAUSE OF SHIPPING SIZE LIMITATIONS.

6. CAP ALL EXPOSED TUBE OR PIPE ENDS. USE SIZE AND THICKNESS OF MATERIAL SHOWN. PROPERLY FIT AND WELD CAP AT JOINT, GRIND WELD SMOOTH AND FLUSH WITH BASE METAL.

7. BEND PIPE OR TUBING WITHOUT COLLAPSING OR DEFORMING THE WALLS, SO AS TO PRODUCE A SMOOTH UNIFORM CURVED SECTION AND MAINTAIN UNIFORM SECTIONAL SHAPE.

8. WHERE ITEMS ARE TO BE IMBEDDED IN CONCRETE OR MASONRY, PROVIDE WELDED-ON ANCHORS OR LUGS AS INDICATED OR REQUIRED.

9. PROVIDE TEMPORARY BRACING OR ANCHORS IN FORMWORK FOR ITEMS WHICH ARE TO BE BUILT INTO CONCRETE OR SIMILAR CONSTRUCTION.

10. FASTENING TO IN-PLACE CONSTRUCTION: PROVIDE ANCHORING DEVICES AND FASTENERS WHERE NECESSARY FOR SECURING MISCELLANEOUS METAL FABRICATIONS TO IN-PLACE CONSTRUCTION INCLUDING THREADED FASTENERS FOR CONCRETE INSERTS, OR OTHER CONNECTORS AS REQUIRED.

11. GALVANIZING REPAIR--USE A HIGH ZINC DUST CONTENT PAINT FOR RE-GALVANIZING WELDS IN GALVANIZED STEEL. HOT GALVANIZED SOLDER IS ALSO ACCEPTABLE. USE RUST-OLEUM COLD GALVANIZING COMPOUND SPRAY, OR SIMILAR.

12. ALL WELDING SHALL CONFORM TO REQUIREMENTS OF AWS STANDARDS. ALL WELDING SHALL BE SHIELDED METAL ARC WELDING. WELDS IN FINISH WORK SHALL BE FILLED OUT FLUSH, GROUND AND DISTRESSED.

13. ASTM A-36 FOR C, MC, ANGLES, AND PLATES.

14. ASTM A-53 GRADE B OR A-500 GRADE B OR A-501 GRADE B FOR STEEL PIPES.

15. ASTM A-123 STANDARD SPECIFICATION FOR ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS

16. ASTM A-780 STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS.

SUPPLEMENTARY NOTES

1. THESE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE IMPROVEMENTS, WORKERS, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, MEANS AND METHODS, BRACING, SHORING, FORMS, SCAFFOLDING, GUYING OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD ELEMENTS IN PLACE DURING CONSTRUCTION. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

2. OPTIONS AND SUBSTITUTIONS (APPROVED BY OWNER/SKATEPARK DESIGNER/ARCHITECT) ARE FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING ALL CHANGES AND ADDITIONAL COSTS NECESSARY AND SHALL COORDINATE ALL DETAILS WITH SKATEPARK DESIGNER THROUGH PRIME CONTRACTOR.

3. ANY ENGINEERING DESIGN PROVIDED BY CONTRACTOR OR OTHERS AND SUBMITTED FOR REVIEW SHALL BE WET SIGNED AND STAMPED BY AN INSURED REGISTERED STRUCTURAL OR CIVIL ENGINEER LICENSED IN THE STATE OF WHICH THE PROJECT IS LOCATED, IF REQUIRED BY CITY OR COUNTY.

4. UNLESS NOTED OTHERWISE, DETAILS ON CONSTRUCTION DRAWINGS ARE TYPICAL AS INDICATED BY CUTS, REFERENCES, OR TITLES. ALL DETAILS SHOWN SHALL BE IMPORTED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS, WHETHER SPECIFICALLY INDICATED OR NOT. TYPICAL DETAILS MAY OR MAY NOT BE REFERENCED ON THE DOCUMENTS, BUT SHALL APPLY AT ALL LOCATIONS, UNLESS NOTED OTHERWISE. WHERE NO DETAIL CUTS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK SHOWN ELSEWHERE ON THE PROJECT. FOR BIDDING PURPOSES, WHERE ANY SHOWN MEMBER OR STRUCTURAL ELEMENT IS NOT SIZED ON THE DOCUMENTS, THE LARGEST SIMILAR MEMBER USED IN THE PROJECT SHALL BE UTILIZED.

5. ALL DIMENSIONS AND ELEVATIONS SHOWN ON CONSTRUCTION DRAWINGS SHALL BE VERIFIED WITH ARCHITECTURAL DRAWINGS (IF REQUIRED BY THE PROJECT). RESOLVE ALL DISCREPANCIES WITH SKATEPARK DESIGNER AND PRIME CONTRACTOR PRIOR TO START OF CONSTRUCTION. DO NOT SCALE DRAWINGS.

6. CONTRACTOR SHALL ESTABLISH AND VERIFY IN FIELD ALL EXISTING CONDITIONS AFFECTING NEW CONSTRUCTION. CONTACT SKATEPARK DESIGNER AND PRIME CONTRACTOR IMMEDIATELY IF EXISTING CONDITIONS ARE NOT AS DEPICTED IN DRAWINGS.

7. ***SKATE FEATURE DESIGN AND LAYOUT ARE THE RESPONSIBILITY OF THE SKATEPARK DESIGNER.**

PAVEMENT TOLERANCES

4. CONTRACTOR MUST ACHIEVE POSITIVE DRAINAGE FOR ALL SURFACES WITHIN THE SKATEPARK AREA WHENEVER POSSIBLE.

REPAIRS AND PROTECTION

1. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE, OR DOES NOT MEET REQUIREMENTS IN THIS SECTION. THE CONTRACTOR SHALL FIX ALL CRACKS AND DISPLACEMENTS LARGER THAN 3/16" UP TO THE PROJECT COMPLETION.

2. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 14 DAYS AFTER PLACEMENT. WHEN CONSTRUCTION TRAFFIC IS PERMITTED, MAINTAIN PAVEMENT AS CLEAN AS POSSIBLE BY REMOVING SURFACE STAINS AND SPILLAGE OF MATERIALS AS THEY OCCUR.

3. MAINTAIN CONCRETE PAVEMENT OF FREE STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL.

SHOTCRETE SPECIFICATIONS

PART 1- GENERAL

1.1 SUMMARY

A. SPECIALTY CONSTRUCTION:

A.A. DESCRIPTION: SHOTCRETE APPLICATION, CUTTING, SCULPTING AND FINISH WORK HAS BEEN DEEMED AS SPECIALTY CONSTRUCTION WORK WITHIN THE CONSTRUCTION DOCUMENTS. ALL WORK RELATED TO THE SPECIALTY CONSTRUCTION SHALL BE COORDINATED BY THE PROJECT ENGINEER, AND THE PRE-QUALIFIED SPECIALTY CONTRACTOR, PRIOR TO THE START OF CONSTRUCTION.

1.2 QUALITY ASSURANCE

A. STANDARDS: COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE FOLLOWING CODES AND STANDARDS, EXCEPT AS HEREIN MODIFIED:

A.A. AMERICAN CONCRETE INSTITUTE (ACI): 506, CHAPTER 13, WET METHOD. CHAPTER 5, SHOTCRETE CREW

A.B. ASTM: "AMERICAN SOCIETY FOR TESTING MATERIALS"

1.3 REFERENCE STANDARDS

A. ACI 305- RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING.

B. ACI 306- RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING.

C. ASTM C33- CONCRETE AGGREGATES

D. ASTM C94- READY-MIXED CONCRETE

E. ASTM C143- TEST FOR SLUMP OF PORTLAND CEMENT CONCRETE

F. ASTM C150- PORTLAND CEMENT

G. ASTM C260- AIR-ENTRAINING ADMIXTURES FOR CONCRETE

H. ASTM C494- CHEMICAL ADMIXTURES FOR CONCRETE

I. ASTM C618- FLY ASH AND RAW OR CALCINED NATURAL POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE.

1.4 JOB CONDITIONS

A. COORDINATION:

A.A. COORDINATE SCHEDULES OF CONCRETE WORK TO ALLOW ADEQUATE TIME FOR INSTALLATION OF OTHER RELATED WORK.

A.B. VERIFY THAT ANCHOR BOLTS AND OTHER EMBEDDED STEEL ITEMS TO BE CAST INTO CONCRETE ARE PROPERLY PLACED.

A.C. COORDINATE EARTHWORK AND SOILS REPORT RECOMMENDATIONS WITH PLACEMENT REQUIREMENTS.

A.D. COORDINATE WITH FORM-WORK AND FINISHES SECTIONS TO PROVIDE FINISH FLOORLEVELNESS AND FLATNESS AS SPECIFIED HEREIN. SLOPE TO DRAINS AT GRADES AND PERCENT SLOPE SHOWN IN THE CONSTRUCTION DRAWINGS.

PART 2- SHOTCRETE WORK

2.1 SHOTCRETE MIX DESIGN

A. PROVIDE MIX DESIGNS THAT WILL MEET THE MINIMUM REQUIREMENTS LISTED HEREIN:

A.A. MINIMUM 28-DAY STRENGTH: 4000 PSI

A.B. TYPE I/II CEMENT

A.C. SMALL AGGREGATE (1/2" MAX.)

A.D. WATER/CEMENT RATIO OF .45 OR LESS

A.E. AIR ENTRAINMENT NOT TO EXCEED 3%

B. MIX DESIGNS FOR SHOTCRETE CONTAINING FLY ASH: THE AMOUNT OF FLY ASH USED SHALL NOT EXCEED 20% BY WEIGHT OF THE COMBINED WEIGHT OF FLY ASH PLUS CEMENT.

2.2 CONCRETE APPLICATION EQUIPMENT

A. FOR WET MIX SHOTCRETE:

A.A. MIXING EQUIPMENT: CAPABLE OF THOROUGHLY MIXING AGGREGATE, CEMENT AND WATER IN SUFFICIENT QUANTITY TO MAINTAIN CONTINUOUS PLACEMENT.

A.B. AIR SUPPLY: CLEAN AIR ADEQUATE FOR MAINTAINING SUFFICIENT NOZZLE VELOCITY FOR PARTS OF WORK, AND FOR SIMULTANEOUS OPERATION OF BLOW PIPE FOR CLEANING AWAY REBOUND.

A.C. DELIVERY EQUIPMENT: CAPABLE OF DISCHARGING AGGREGATE-CEMENT-WATER MIXTURE ACCURATELY, UNIFORMLY, AND CONTINUOUSLY THROUGH DELIVERY HOSE.

PART 3- EXECUTION

3.1 INSPECTION

A. EXAMINATION: EXAMINE CONCRETE FORMWORK AND VERIFY THAT IT IS TRUE TO LINE AND DIMENSION, ADEQUATELY BRACED AGAINST VIBRATION, AND CONSTRUCTED TO PERMIT ESCAPE OF AIR AND REBOUND BUT TO PREVENT LEAKAGE DURING SHOTCRETING. CORRECT DEFICIENCIES.

B. NOTIFICATION: NOTIFY OTHER TRADES INVOLVED IN AMPLE TIME TO PERMIT THE PROPER INSTALLATION OF THEIR WORK. COOPERATE IN SETTING SUCH WORK.

C. EXISTING SURFACES: EXAMINE EXISTING CONCRETE SURFACES FOR UNSOUND MATERIAL. CORRECT DEFICIENCIES.

3.2 PREPARATION FOR INSTALLATION OF CONCRETE

A. FORMS: USE A FORM-COATING MATERIAL ON REMOVABLE FORMS TO PREVENT ABSORPTION OF MOISTURE AND TO PREVENT BOND WITH SHOTCRETE.

3.3 CONCRETE BATCHING AND MIXING

A. PROPORTIONS: MIX PROPORTIONS SHALL BE CONTROLLED BY WEIGHT BATCHING.

B. SCHEDULING: CONCRETE SHALL NOT EXCEED A TEMPERATURE OF 100 DEGREES FAHRENHEIT AT TIME OF PLACEMENT UNLESS PRE-APPROVED BY THE PROJECT ENGINEER.

3.4 CONCRETE PLACEMENT

A. PLACEMENT: USE SUITABLE DELIVERY EQUIPMENT AND PROCEDURES THAT WILL RESULT IN SHOTCRETE IN PLACE MEETING THE REQUIREMENTS OF THIS SPECIFICATION. DETERMINE OPERATING PROCEDURES FOR PLACEMENT IN, EXTENDED DISTANCES, AND AROUND ANY OBSTRUCTIONS WHERE PLACEMENT VELOCITIES AND MIX CONSISTENCY MUST BE ADJUSTED.

B. PLACEMENT TECHNIQUES:

B.A. CONTROL THICKNESS. METHOD OF SUPPORT, AIR PRESSURE, AND/OR WATER CONTENT OF SHOTCRETE TO PRECLUDE SAGGING OR SLOUGHING OFF. DISCONTINUE SHOTCRETING OR PROVIDE SUITABLE MEANS TO SCREEN THE NOZZLE STREAM IF WIND OR AIR CURRENTS CAUSE SEPARATION OF THE NOZZLE STREAM DURING PLACEMENT.

B.B. HOLD NOZZLE AS PERPENDICULAR TO SURFACE AS WORK WILL PERMIT, TO SECURE MAXIMUM COMPACTION WITH MINIMUM REBOUND.

B.C. IN SHOTCRETING WALLS, BEGIN APPLICATION AT BOTTOM. ENSURE WORK DOES NOT SAG.

B.D. LAYERING:

B.D.A. BUILD UP LAYERS BY MAKING SEVERAL PASSES OF NOZZLE OVER WORK AREA.

B.D.B. MAKE SURE SURFACE IS ADEQUATELY ROUGH TO WHICH, AFTER HARDENING, ADDITIONAL LAYERS OF SHOTCRETE ARE TO BE BONDED.

B.D.C. DAMPEN SURFACE (ACHIEVE SATURATED SURFACE DRY (SSD) CONDITION) JUST PRIOR TO APPLICATION OF SUCCEEDING LAYERS.

B.D.D. ALLOW EACH LAYER OF SHOTCRETE TO TAKE INITIAL SET BEFORE APPLYING SUCCEEDING LAYERS.

B.D.E. USE RADIAL TEMPLATES TO INSURE EXACT RADII FROM FLAT BOTTOM OF BOWL/PIPE TO FACE OF COPING. TEMPLATE SHALL BE FABRICATED FROM STEEL OR 3/4" MINIMUM PLYWOOD. CHECK EVERY HORIZONTAL FOOT WHEN APPLYING SHOTCRETE FOR CONFORMANCE OF INTENDED WALL RADII. BRACE TEMPLATE AND PLACE LEVELS AT ARC TO TANGENT CONNECTIONS TO INSURE NO KINKS WILL BE FORMED. KINKS AT THE BOTTOM OF BOWLS WILL NOT BE ACCEPTABLE. SLUMPING OF THE SHOTCRETE CAUSING COPING SETBACK WILL NOT BE ACCEPTABLE.

B.D.F. REMOVE ANY REBOUND OR ACCUMULATED LOOSE AGGREGATE FROM SURFACES TO BE COVERED PRIOR TO PLACING THE INITIAL OR ANY SUCCEEDING LAYERS OF SHOTCRETE. REBOUND SHALL NOT BE USED AS AGGREGATE.

B.E. PLACEMENT AROUND REINFORCEMENT:

B.E.A. HOLD THE NOZZLE AT SUCH DISTANCE AND ANGLE TO PLACE MATERIALS BEHIND REINFORCEMENT BEFORE ANY MATERIAL IS ALLOWED TO ACCUMULATE ON ITS FACE.

B.F. ACCESS: ALLOW EASY ACCESS TO SHOTCRETE SURFACES FOR SCREEDING AND FINISHING, PERMITTING UNINTERRUPTED APPLICATION.

3.14 REMOVAL OF SURFACE DEFECTS IN CONCRETE

A. GENERAL: REMOVE AND REPLACE SHOTCRETE WHICH LACKS UNIFORMITY, EXHIBITS SEGREGATION, HONEYCOMBING, OR LAMINATION, OR WHICH CONTAINS ANY DRY PATCHES, SLUGS, VOIDS OR POCKETS. REMOVE DEFECTIVE AREAS.

3.15 SHOTCRETE FINISH

A. FINISH: ALL EXPOSED SHOTCRETE SURFACES ARE TO BE HARD STEEL TROWEL FINISH UNLESS OTHERWISE NOTED. TROWEL UNTIL ALL VISIBLE POURS ARE CLOSED. CEASE TROWEL BEFORE GLASS FORMS ON SURFACE. DO NOT BROOM FINISH AND DO NOT BURN SURFACE.

B. GRINDING THE SURFACES WILL NOT BE AN ACCEPTABLE MEANS OF ACHIEVING THE INTENDED RADII/ANGLE.

C. COLOR: ALL SHOTCRETE SURFACES ARE TO BE NATURAL GRAY COLOR UNLESS OTHERWISE NOTED. MINOR VARIATIONS IN APPEARANCE OF COLORED CONCRETE, WHICH ARE SIMILAR TO NATURAL VARIATIONS IN COLOR AND APPEARANCE OF UNCOLORED CONCRETE, ARE ACCEPTABLE. DO NOT BROOM FINISH AND DO NOT TROWEL BURN SURFACE.

D. DURING THE CURING PERIOD, CONCRETE SHALL BE MAINTAINED AT A TEMPERATURE ABOVE 40 DEGREES FAHRENHEIT AND IN MOIST CONDITION. FOR INITIAL CURING, CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR 24 HOURS AFTER PLACEMENT IS COMPLETE. FINAL CURING SHALL CONTINUE FOR SEVEN DAYS AFTER PLACEMENT. COVER CONCRETE WITH POLYETHYLENE PLASTIC TO MAINTAIN TEMPERATURE IF NECESSARY. LAP SEAMS IN THE PLASTIC 6" AND WEIGH DOWN.

E. THE CONTRACTOR SHALL FIX ALL CRACKS AND DISPLACEMENTS LARGER THAN 3/16" UP TO THE PROJECT COMPLETION.

3.16 CONCRETE PROTECTION AND CURING

1. NERAL: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND FOLLOW RECOMMENDATIONS IN ACI 305R FORHOT-WEATHER PROTECTION DURING CURING. KEEP MOIST FOR NECESSARY AMOUNT OF TIME TO REACH CONCRETE STRENGTH AND INHIBIT MOISTURE LOSS AFTER PLACING.

2. EVAPORATION RETARDANT: WATERBORNE, MONOMOLECULAR FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE, SUCH AS EUCOBAR EVAPORATION RETARDANT BY THE EUCLID CHEMICAL COMPANY. APPLY EVAPORATION RETARDANT TO CONCRETE SURFACES IF HOT, DRY, OR WINDY CONDITIONS CAUSE MOISTURE LOSS BEFORE AND DURINGFINISHING OPERATIONS. APPLY TO EXPOSED SURFACE OF CONCRETE ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS AS NECESSARY.

3. BEGIN CURING AFTER FINISHING CONCRETE, BUT NOT BEFORE FREE WATER HAS DISAPPEARED FROM CONCRETE SURFACE.

4. CURING METHODS: CURE CONCRETE BY CURING COMPOUND, MOISTURE CURING, MOISTURE-RETAINING-COVER CURING, OR A COMBINATION OF THESE AS FOLLOWS:

A. CURING COMPOUND: MEET REQUIREMENTS OF MANUFACTURER'S CURRENT PRINTED APPLICATION INSTRUCTIONS AND COVERAGE RATE CHART. FOR HORIZONTAL APPLICATIONS, IMMEDIATELY APPLY AFTER ALL SURFACE WATER HAS DISAPPEARED AND THE CONCRETE SURFACE IS HARD ENOUGH TO WALK ON. FOR VERTICAL APPLICATIONS, APPLY IMMEDIATELY AFTER REMOVING THE CONCRETE FORMS. APPLY IN A UNIFORM AND CONTINUOUS MANNER. AVOID OVER-APPLICATION OR PUDDLING OF CURING COMPOUND. PROTECT SURFACE FROM WATER, ADJACENT SHOTCRETE WORK, AND DEBRIS.

B. MOISTURE CURING: KEEP SURFACES CONTINUOUSLY MOIST FOR NOT LESS THAN SEVEN DAYS WITH THE FOLLOWING MATERIALS:

B.A. WATER.

B.B. CONTINUOUS WATER-FOG SPRAY.

B.C. ABSORPTIVE COVER, WATER SATURATED, AND KEPT CONTINUOUSLY WET. COVER CONCRETE SURFACES AND EDGES, OVERLAP SEAMS MIN. 6" BETWEEN ADJACENT ABSORPTIVE COVERS.

C. MOISTURE-RETAINING-COVER CURING:

C.A. COVER CONCRETE SURFACES WITH MOISTURE-RETAINING COVER FOR CURING CONCRETE, PLACED IN WIDEST PRACTICABLE WIDTH, WITH SIDES AND ENDS LAPPED AT LEAST 6 INCHES.

3.17 CURING MATERIALS

1. ABSORPTIVE COVER:
   AASHTO M 182, CLASS 2, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9OZ./SQ. YD. DRY.
2. MOISTURE-RETAINING COVER:
   ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET (BUR LENE).
3. WATER: POTABLE.
4. CURING COMPOUND: ASTM C-309, CLEAR, WATER-BASED, NO VOLATILE, NON-STAINING, MEMBRANE-FORMING, COMPATIBLE WITH SUBSEQUENT CONCRETE TREATMENTS. ACCEPTABLE PRODUCT: W.R. MEADOWS 1100-CLEAR, OR APPROVED EQUAL.

3.18 CONCRETE JOINTS

A. CLEANING: THE ENTIRE JOINT SHALL BE THOROUGHLY CLEANED AND WETTED PRIOR TO THE APPLICATION OF ADDITIONAL SHOTCRETE.

B. REINFORCEMENT: MAKE JOINTS PERPENDICULAR TO THE MAIN REINFORCEMENT. CONTINUE REINFORCEMENT ACROSS JOINTS.

3.19 CRACKING

A. SAW CUT CONTROL JOINTS AND CONSTRUCTION JOINTS MAY BE SHOWN IN THE CONSTRUCTION DRAWINGS FOR DIAGRAMMATIC PURPOSES ONLY. THE CONTRACTOR MAY, WITH APPROVAL OF THE SKATEPARK DESIGNER, RECOMMEND AND DETAIL ADDITIONAL JOINTS TO HELP PREVENT CRACKING.

B. THE CONTRACTOR SHALL FIX ALL CRACKS AND DISPLACEMENTS LARGER THAN 3/16" UP TO PROJECT COMPLETION.

Sheet Size - 11x17

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Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
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Sheet Title:
SPECIFICATIONS

Revisions:

Project #: 22.053
Issued For: Review
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SK2.1

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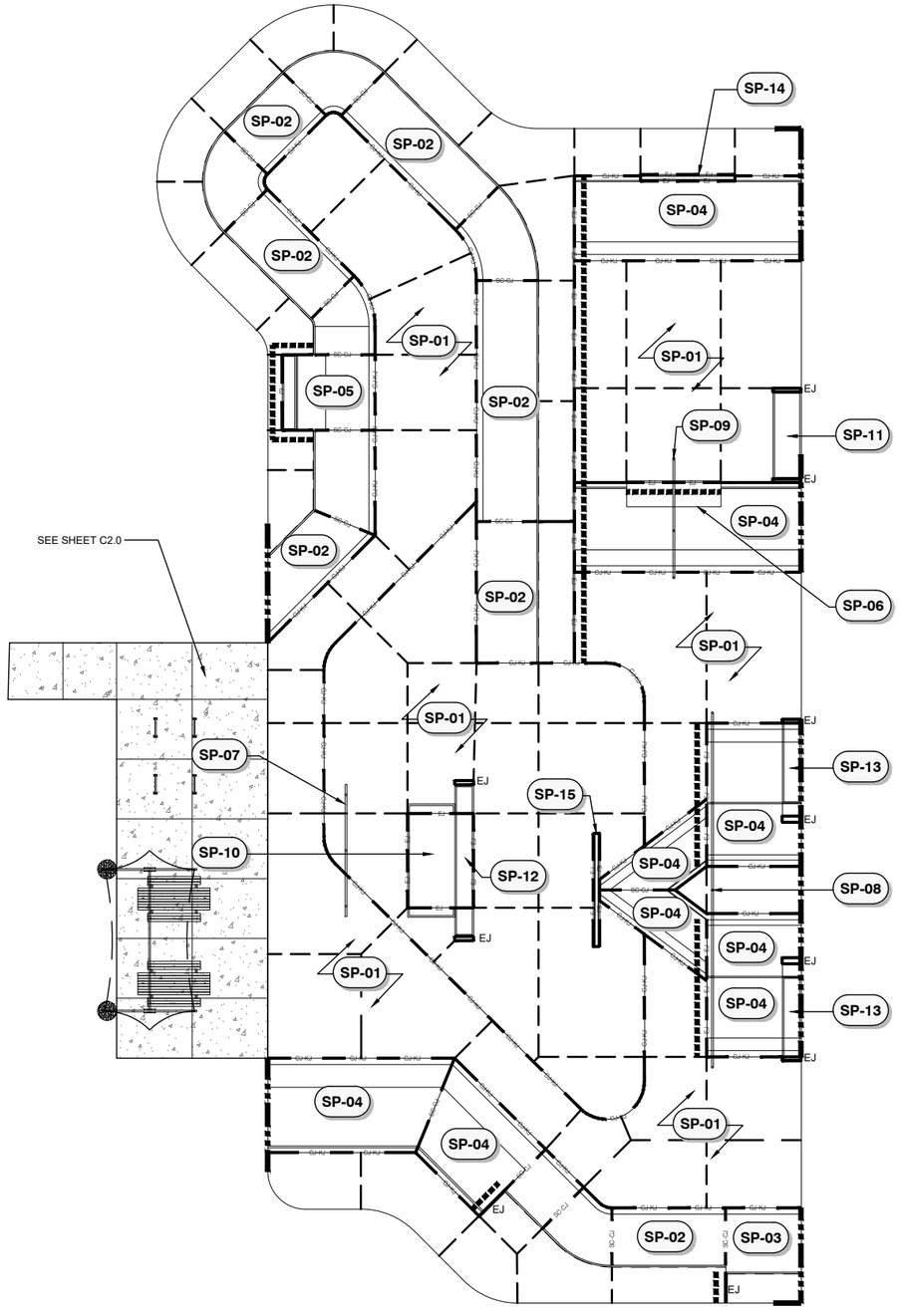

JOINTING SCHEDULE

SYMBOL	DESCRIPTION	QTY	DETAIL
H-01	EXPANSION JOINT	238 LF	5/SK9.0
H-02	COLD JOINT / KEY JOINT	513 LF	7/SK9.0
H-03	SAWCUT	537 LF	6/SK9.0
H-04	SC / CJ	114 LF	
H-05	TURNDOWN EDGE AT FINISH SURFACE	117 LF	2/SK9.0
H-06	TURNDOWN EDGE AT FINISH GRADE	103 LF	3/SK9.0

INFORMATION SCHEDULE

SYMBOL	DESCRIPTION	DETAIL	SECTION
SP-01	4" THICK CONCRETE FLATWORK		
SP-02	QUARTERPIPE	1/SK9.1	B,S
SP-03	QUARTERPIPE EXTENSION	4/SK9.1	C, R
SP-04	RADIUS WEDGE	2/SK9.1	A, H, J, M, N, T
SP-05	RADIUS WEDGE EXTENSION	3/SK9.1	L
SP-06	EURO GAP	5/SK9.1	P
SP-07	ROUND FLAT GRIND RAIL	1/SK9.2	D
SP-08	LONG ROUND GRIND RAIL	5/SK9.2	I
SP-09	RAKED GRIND RAIL	2/SK9.2	O
SP-10	CANTILEVERED PANNED MANUAL PAD	4/SK9.2	E
SP-11	RAKED PANNED MANUAL LEDGE	3/SK9.2	Q
SP-12	PANNED GRIND LEDGE	1/SK9.3	F
SP-13	RAKED PANNED GRIND LEDGE	2/SK9.3	K
SP-14	RADIUS WEDGE TO SLAPPY CURB	8/SK9.1	U
SP-15	SLAPPY CURB	7/SK9.1	G1, G2

NOTES:

1. SEE SHEET SK4.0 FOR COLOR PLAN.

2. THE SLAB CONFIGURATION, NOTES, LOCATION OF EXPANSION JOINTS, COLD JOINTS, SAW CUTS, DETAIL REFERENCES, AND APPLICABLE DETAILS HAVE BEEN INCLUDED FOR CLARITY. JOINTS AND DETAILS SHOWN ARE FOR THE SKATEPARK ONLY. REFER TO THE SITE PLANS AND DETAILS FOR SCOPES BEYOND THE SKATEPARK.

3. SUGGESTED ORDER OF CONSTRUCTION FOR CONCRETE ELEMENTS WITHIN THE SKATEPARK FOOTPRINT:
   A. SUBGRADE PREP - GRADE, MOISTURE CONDITION, AND COMPACT SKATEPARK FOOTPRINT TO +/- .1' OF SPECIFIED SUBGRADE ELEVATIONS.
   B. FINE GRADING
   C. LEDGES AND MANUAL PADS
   D. BANKS AND TRANSITIONS
   E. GRIND RAIL FOOTING INSTALLATION
   F. FLOOR SLAB/FLATWORK

4. ALL EXPOSED CONCRETE AND SHOTCRETE SURFACES TO BE NATURAL GRAY IN COLOR WITH HARD STEEL TROWEL FINISH UNLESS OTHERWISE SPECIFIED.

5. NO OVERCUTS SHALL BE ACCEPTED.

**JOINT PLAN HAS BEEN DEVELOPED TO PROVIDE GUIDANCE TO THE CONTRACTOR FOR THE USE OF SAW CUTS, COLD & EXPANSION JOINTS. ACTUAL FIELD VARIANCES WILL TAKE PRECEDENCE OVER THIS GUIDE. CONTRACTOR SHALL CUT SLAB AS NEEDED TO MINIMIZE CRACKING.

ALIGN SAW CUTS WITH EXPANSION AND COLD JOINTS AND START FROM CORNERS WHERE POSSIBLE TO PREVENT EXCESS CRACKING. SAW CUTS SHALL BE NO MORE THAN 10' X 12' AND/OR NOT TO EXCEED 120 SQUARE FEET AND A 2:1 MAX. RATIO BETWEEN SAW CUTS AND COLD OR EXPANSION JOINTS.

ALL SAW CUTS TO BE FILLED WITH SELF-LEVELING POLYURETHANE SEALANT AND TOOLED FLAT. MASK ALL SAW CUT/CONSTRUCTION JOINT EDGES TO PROTECT SURROUNDING CONCRETE FROM EXCESS SEALANT. EXPANSION JOINTS TO BE FILLED WITH POLYURETHANE BASED NON- SAGGING ELASTOMERIC SEALANT AND TOOLED FLAT. COLOR OF CAULK SHOULD RESEMBLE COLOR OF CONCRETE (ALUMINUM GRAY OR SIMILAR)

NO OVERCUTS SHALL BE ACCEPTED.

** PROVIDE ⅛" TOOLED EDGES TO JOINTS - SEE TYPICAL DETAILS & CONSTRUCTION SPECIFICATIONS FOR JOINT INFORMATION & INSTALLATION

NORTH

0 8' 16' 32'

Scale: 1/16" = 1'-0"

Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

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INFORMATION PLAN

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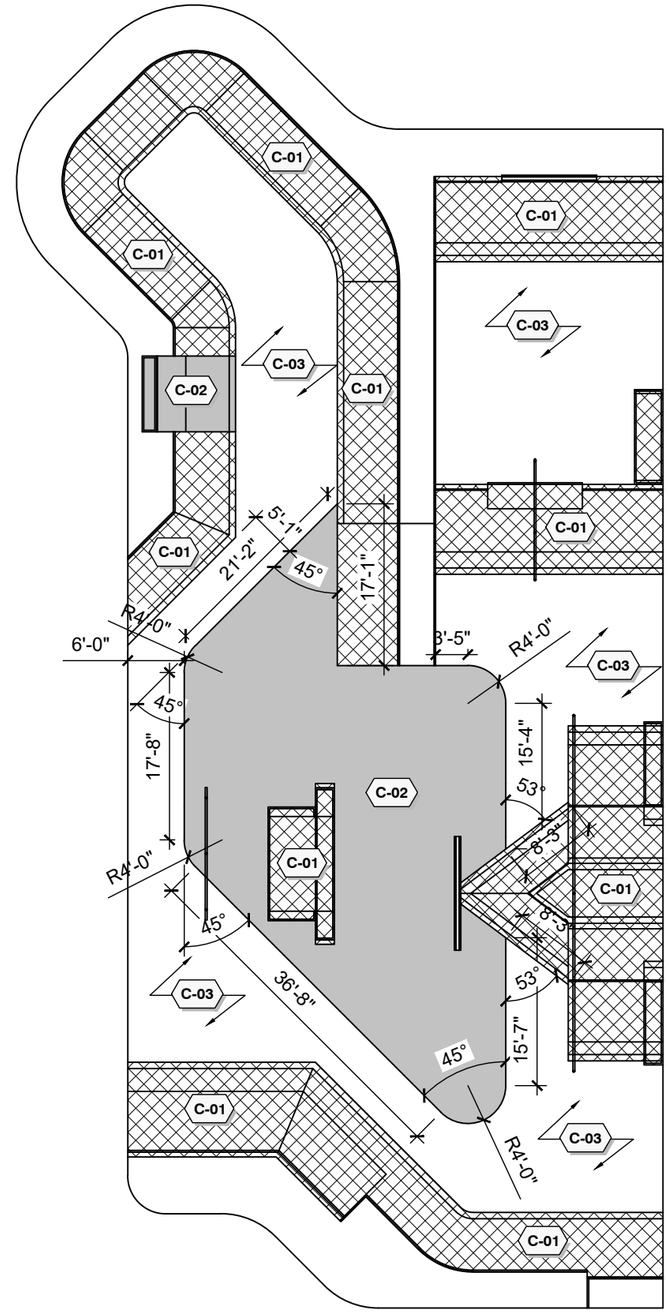

COLOR SCHEDULE

SYMBOL	DESCRIPTION	QTY
C-01	COLORED CAST-IN-PLACE CONCRETE TO BE `PALOMINO` BY EA PIGMENTS OR APPROVED EQUAL	2,357 SF
C-02	COLORED CAST-IN-PLACE CONCRETE TO BE `LET`S ROLL CHARCOAL` BY EA PIGMENTS OR APPROVED EQUAL	1,328 SF
C-03	CAST-IN-PLACE CONCRETE TO BE NATURAL GRAY	

COLOR NOTES:

1. CONCRETE COLOR AVAILABLE FROM EA PIGMENTS 1-888-222-7501, OR APPROVED EQUAL.
2. FINISH: ALL EXPOSED CONCRETE SURFACES ARE TO BE HARD STEEL TROWEL FINISH UNLESS OTHERWISE NOTED. TROWEL UNTIL ALL VISIBLE PORES ARE CLOSED. CEASE TROWELING BEFORE SURFACE BECOMES GLOSSY. DO NOT BROOM FINISH AND DO NOT TROWEL BURN SURFACE.
3. REFER TO STEEL PLAN ON SHEET SK7.0 FOR STEEL FINISH.

NORTH

0 8' 16' 32'

Scale: 1/16" = 1'-0"
Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title:
COLOR PLAN

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/16/2022

Sheet Number
SK4.0

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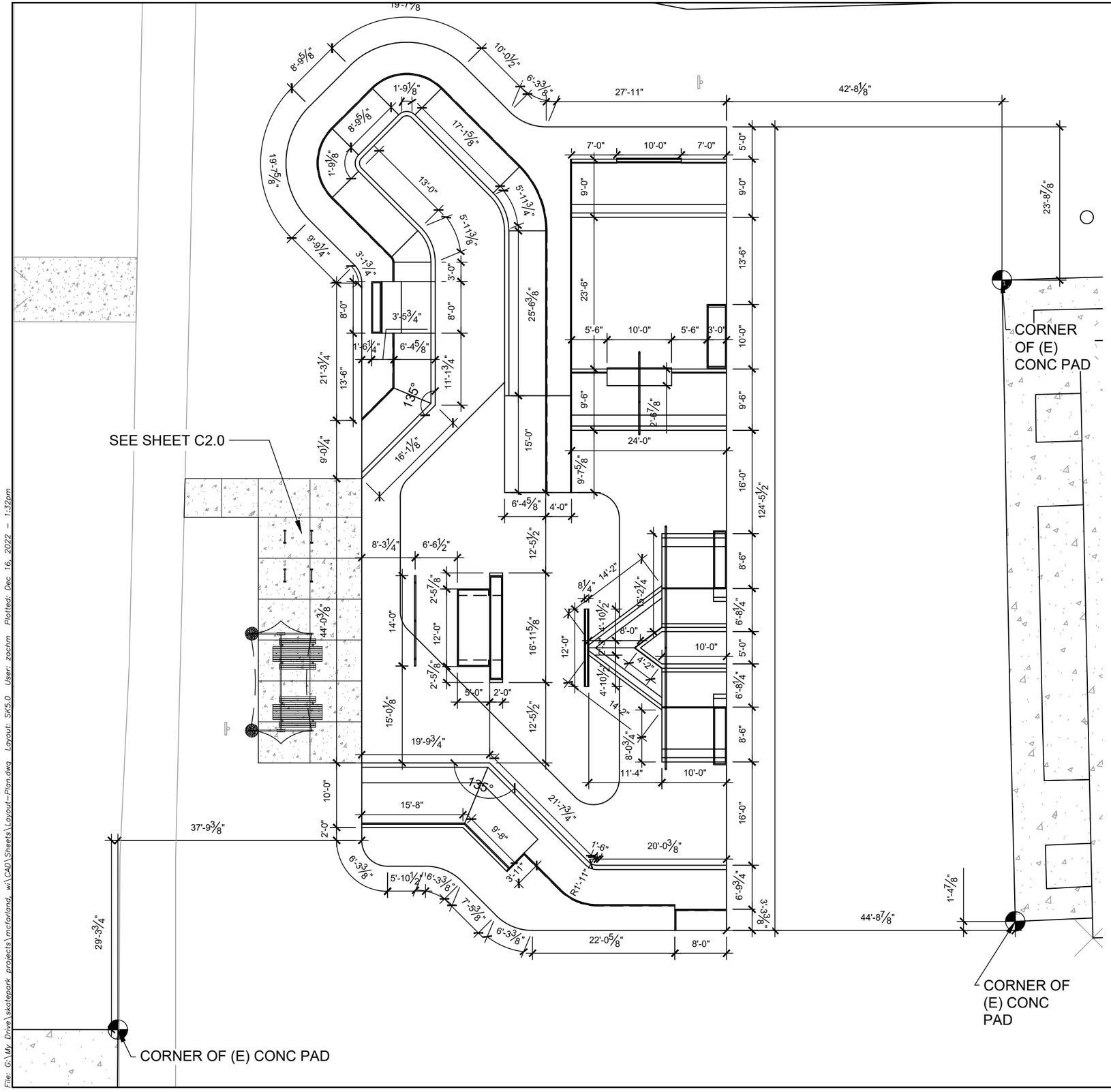

CONSTRUCTION NOTES:

1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO ALL APPLICABLE GOVERNING CODES AND ORDINANCES.
2. ALL FORMS AND ALIGNMENTS OF PAVING, LAYOUT, AND SPECIAL PAVING AREAS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO POURING (GIVE A MINIMUM OF 24 HOURS NOTICE)
3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL PUBLIC IMPROVEMENTS, INCLUDING UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL REPAIR AND/OR REPLACE IN-KIND ALL PUBLIC IMPROVEMENTS DAMAGED, BROKEN, OR REMOVED DURING CONSTRUCTION
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS (UNLESS OTHERWISE NOTED).
5. ALL REBAR CROSSINGS TO BE TIED.
6. ALL CONSTRUCTION TO BE PLUMB AND TRUE, UNLESS OTHERWISE NOTED OR INDICATED.
7. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE A/E, OWNER/BUILDER OR OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS AND FOR SAFETY CONDITIONS AT THE WORK SITE.
9. ALL BRACING, TEMPORARY SUPPORTS, SHORING, ETC.. ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. OBSERVATION VISITS TO THE JOB SITE BY THE A/E OR OWNER, DO NOT INCLUDE INSPECTION OF CONSTRUCTION PROCEDURES. THE VISIT SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
11. CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE CONSTRUCTED SIMILAR TO THE DETAILS FOR THE RESPECTIVE MATERIALS.
12. THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED CONSTRUCTION PRODUCT. THESE DOCUMENTS, ALTHOUGH PREPARED WITH CARE AND DILIGENCE, MAY CONTAIN ERRORS, OMISSIONS, CONTRADICTIONS, ETC. THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS THOROUGHLY AND SHALL NOTIFY THE A/E IMMEDIATELY UPON ANY SUCH DISCOVERY OR DISCREPANCY. GOVERNING CODES SHALL THEN APPLY.
13. ALL SCALE DIMENSIONS ARE APPROXIMATE. WRITTEN DIMENSIONS AND DETAILS TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL CHECK AND VERIFY ALL SITE DIMENSIONS PRIOR TO PROCEEDING WITH WORK AND CLARIFY WITH A/E, OWNER IF NECESSARY.
14. DESIGN, MATERIAL, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED OR INDICATED ON DRAWINGS MAY BE CONSIDERED FOR USE. APPROVAL FOR SUBSTITUTIONS SHALL BE OBTAINED FROM THE A/E.
15. SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE CLARIFICATION OF DESIGN CONCEPT DETAILS & SUBSTITUTIONS.
16. DURING WORK AND THROUGH ITS COMPLETION, THE CONTRACTOR SHALL KEEP THE SITE CLEAN TO THE SATISFACTION OF THE OWNER.
17. FINAL MATERIAL, FINISHES AND COLOR SHALL BE APPROVED BY OWNER AND A/E PRIOR TO INSTALLATION.
18. CLEAN-UP SHALL TAKE PLACE ON A DAILY BASIS.
19. REFER TO SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION.

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McFarland, WI 53558

Sheet Title:
LAYOUT PLAN

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SK5.0

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GRADING NOTES

1. ALL GRADING SHALL BE IN ACCORDANCE WITH THE LOCAL GRADING CODE AND ANY SPECIAL REQUIREMENTS OF THE GRADING PERMIT.
2. CONTRACTOR TO VERIFY GRADES AND NOTIFY OWNER'S CONSTRUCTION ADMINISTRATOR PRIOR TO START OF GRADING WORK.
3. SLOPES SHALL BE NO STEEPER THAN 3' HORIZONTAL TO 1' VERTICAL (3:1) AND SHALL HAVE NOT LESS THAN 90% COMPACTION OUT TO THEIR FINISH SURFACES.
4. ALL PAVED AREAS SHALL SLOPE AS SHOWN ON PLANS WITH A 2% MAXIMUM FALL. PLANTED AREAS SHALL HAVE A MINIMUM 2% FALL.
5. FINISH GRADE SHALL HAVE A UNIFORM SURFACE, FREE OF LUMPS, BUMPS AND DEPRESSIONS AND ANY OBJECTS THAT MAY PREVENT A POSITIVE FLOW TO DRAIN.
6. ALL PROPOSED PAVING SURFACES SHALL MEET EXISTING PAVING SURFACES WITH SMOOTH AND CONTINUOUS TRANSITIONS AND FLUSH ALONG ENTIRE EDGE.
7. CONCRETE WALKS TO HAVE A MAXIMUM CROSS SLOPE OF 2% AND SHALL MEET ALL CITY AND COUNTY REQUIREMENTS.
8. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, EXISTING DRAINAGE STRUCTURES, PARKING LOT IMPROVEMENTS, AND FINISH FLOOR ELEVATIONS. NOTIFY THE OWNER'S CONSTRUCTION ADMINISTRATOR IMMEDIATELY UPON NOTING ANY DISCREPANCIES.
9. FINISH GRADE AT TURF AREAS SHALL BE ONE INCH BELOW FINISH SURFACE OF SIDEWALKS, CURBS OR PAVED AREAS. PLANTING AREA FINISH GRADE SHALL BE 2" BELOW SAME UNLESS OTHERWISE SPECIFIED.
10. ALL CONSTRUCTION AREAS SHALL BE FREE OF ROCK, DEBRIS, ETC. ALL EXISTING WEEDS SHALL BE REMOVED.

GRADING LEGEND:

EXISTING CONTOURS

PROPOSED CONTOURS

GB GB — PROPOSED GRADE BREAK

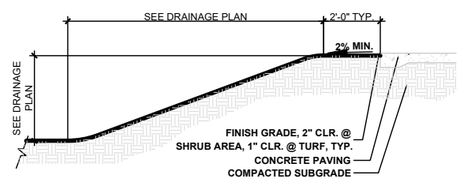
XXX.XX FS — PROPOSED ELEVATIONS

PROPOSED FLOW DIRECTION

BS	BOTTOM OF STEP
FG	FINISH GRADE
FS	FINISH SURFACE
HP	HIGH POINT
INV	INVERT ELEVATION (MAY CHANGE IN FIELD)
PA	PLANTING AREA
TD	TOP OF DRAIN
TL	TOP OF LEDGE
TP	TOP OF PAD
TR	TOP OF RAIL
TS	TOP OF STEP

(XXX.X) EXISTING ELEVATION (VERIFY IN FIELD)

**SLOPE AREAS TO BE BLENDED IN FIELD



NOTES

1. **TYPICAL SLOPE DETAIL FOR INFORMATIONAL PURPOSES ONLY. ALL SLOPE GRADING AND DRAINAGE SHALL CONFORM TO APPROVED GRADING PLAN.**

TYPICAL SLOPE FACTORS

1:1 (1' / 1') 2:1 (1' / 2') 3:1 (1' / 3') 4:1 (1' / 4') 5:1 (1' / 5')

1 TYPICAL SLOPE DETAIL

3/4" = 1'-0" P-PIP-MCF-26

NORTH

0 8' 16' 32'

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Sheet Size - 11x17

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4802 Marsh Road
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Sheet Title: **GRADING + DRAINAGE PLAN**

Revisions:

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Sheet Number **SK6.0**

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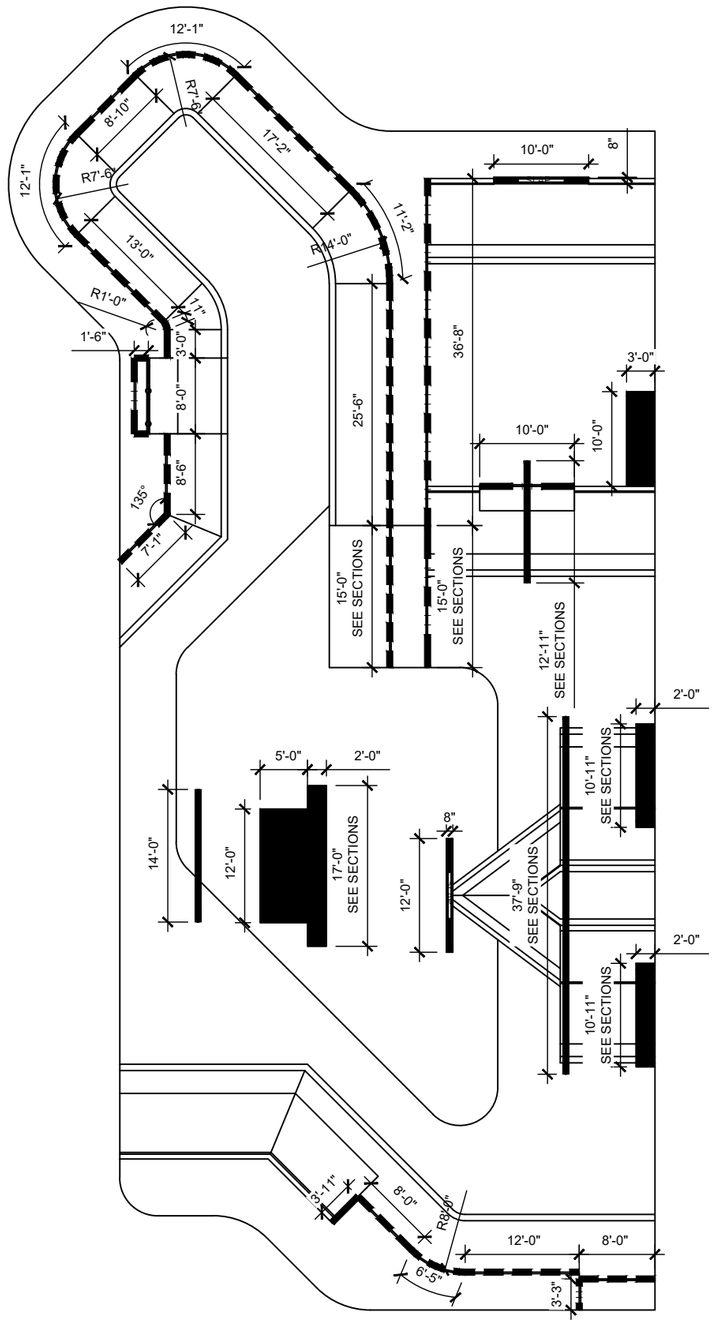


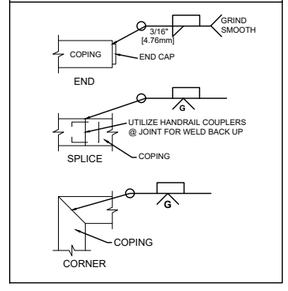
STEEL SCHEDULE

SYMBOL	STEEL DESCRIPTION	QTY	DETAIL	FINISH
S-01	2-3/8" O.D. SCH. 40 STEEL COPING	168 LF	10/SK9.0	HOT DIPPED GALVANIZED
S-02	1.5" X 2" X 3/16" THK. STEEL EDGING	80 LF	8/SK9.0	HOT DIPPED GALVANIZED
S-03	2" STEEL STRAP	8 LF	9/SK9.0	HOT DIPPED GALVANIZED
S-04	SLAPPY CURB SLAP	22 LF		POWDER COAT RAL #5012
S-05	GRIND RAIL	65 LF		POWDER COAT RAL #5012
S-06	STEEL PAN	61 LF		POWDER COAT RAL #5012

NOTES :

1. STEEL FINISH TO BE HOT DIPPED GALVANIZED OR POWDER COATED RAL #5012 (LIGHT BLUE) AS INDICATED IN LEGEND FINISH.
2. FINISH MUST OCCUR AFTER ALL WELDING IS COMPLETE.
3. CAP ALL EXPOSED TUBE OR PIPE ENDS AND ROUND ALL SHARP EDGES.
4. ALL WELDS TO BE ALL AROUND.
5. GRIND ALL WELDS SMOOTH BEFORE FINISHING.
6. FABRICATE STEEL GRIND EDGES IN LONG SECTIONS THAT WILL WORK FOR SHIPPING AND REDUCE THE NUMBER OF WELDS IN THE FIELD.
7. CLEAN METAL EDGES AFTER PLACEMENT OF CONCRETE.
8. POWDER COATING REPAIR - USE AN APPROPRIATELY COLOR MATCHED POWDER COAT TOUCH-UP SPRAY PAINT ON WELDED OR DAMAGED POWDER COATED SURFACES.
9. HOT DIPPED GALVANIZE REPAIR - FIELD WELDS SHALL BE GROUND SMOOTH AND TREATED WITH COLD GALVANIZING SPRAY.
10. SEE SHEET SK2.0 FOR SKATEPARK STEEL SPECIFICATIONS.

COPING / RAIL JOINT WELDS



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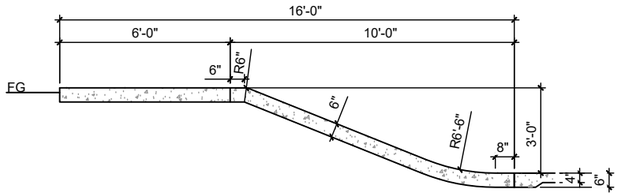

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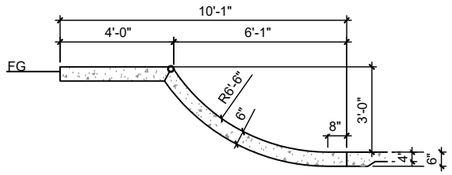

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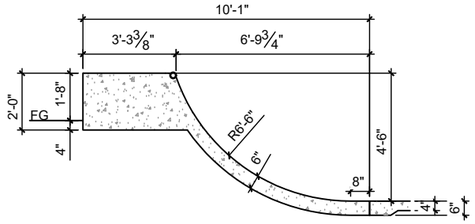

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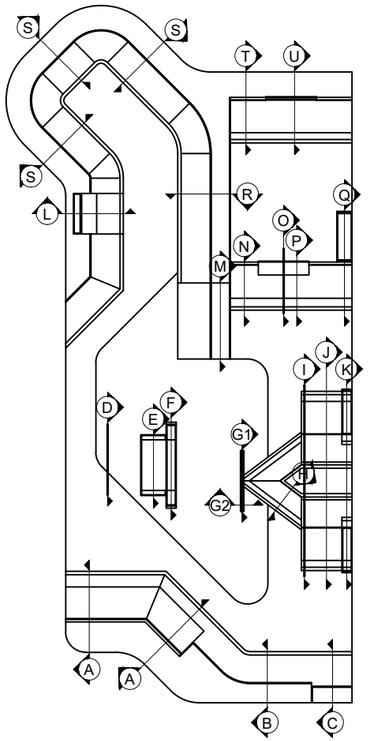

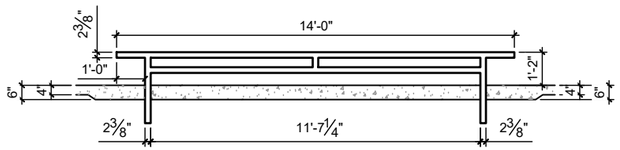

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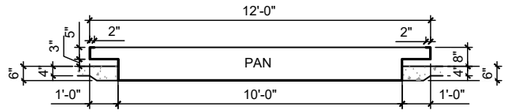

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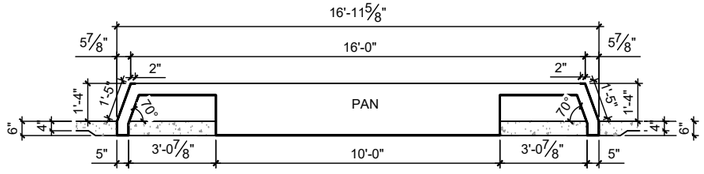

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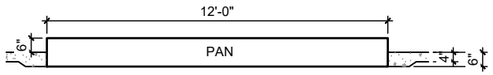

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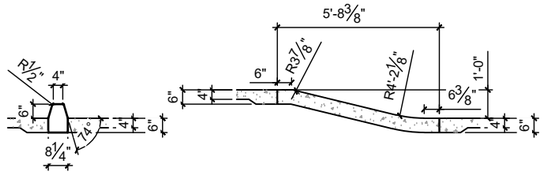

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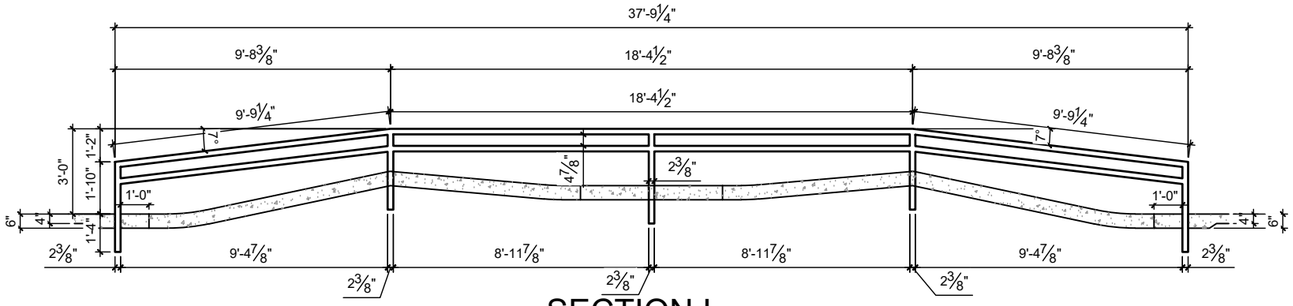

SECTION I

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Scale: 3/16" = 1'-0"

Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

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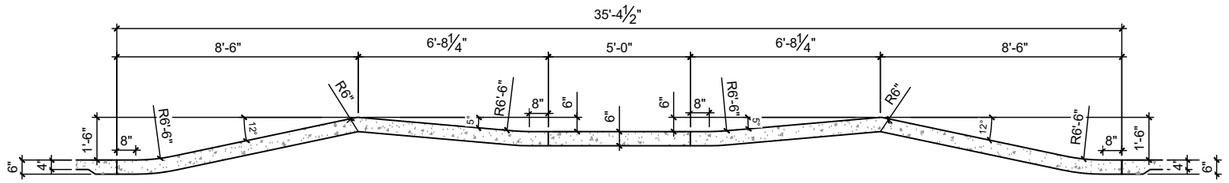

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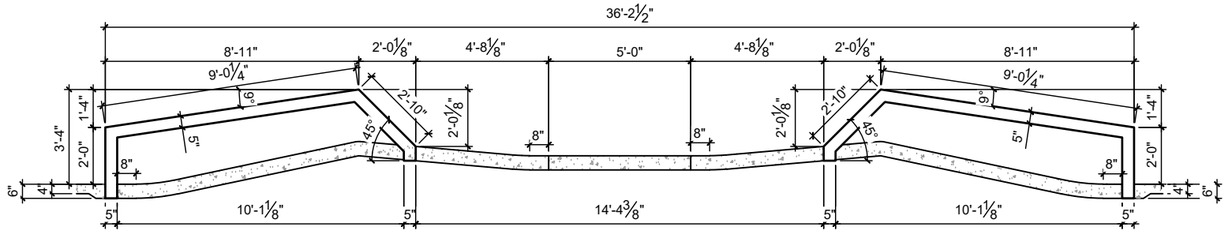

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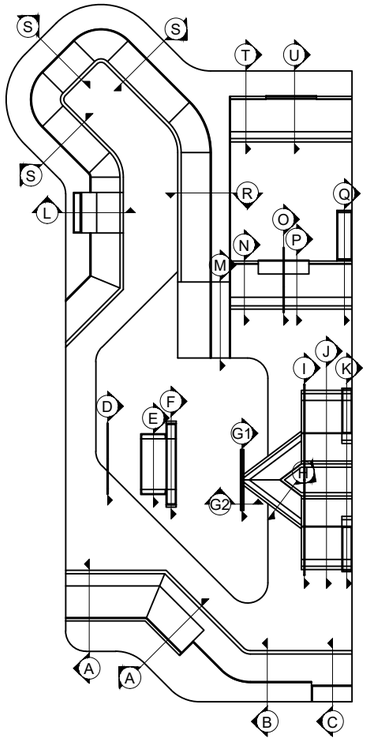

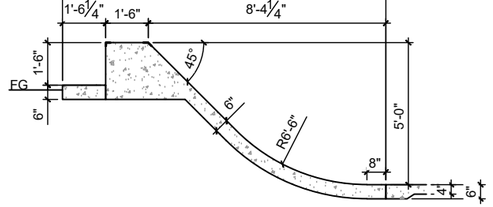

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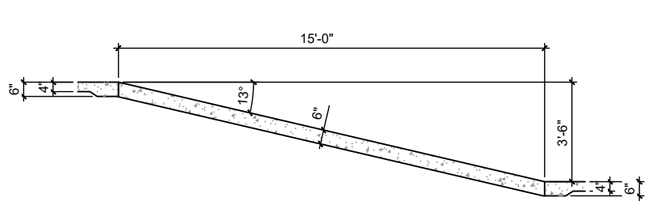

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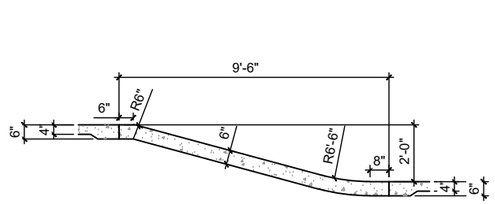

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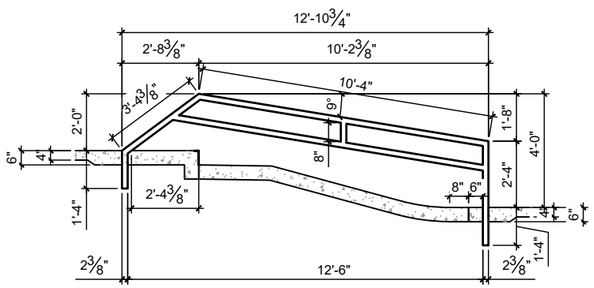

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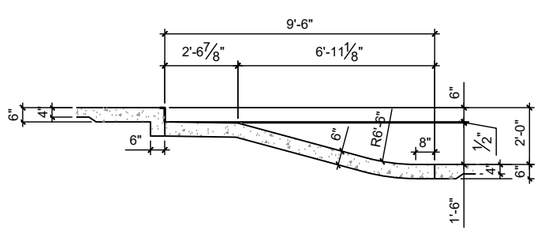

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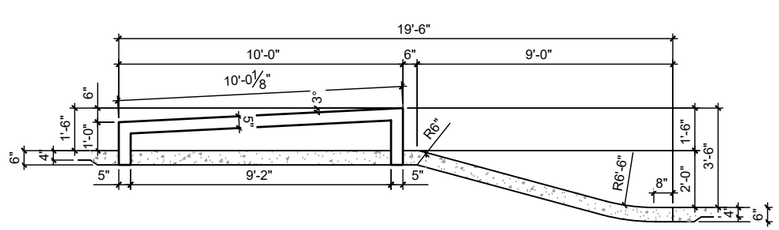

SECTION Q

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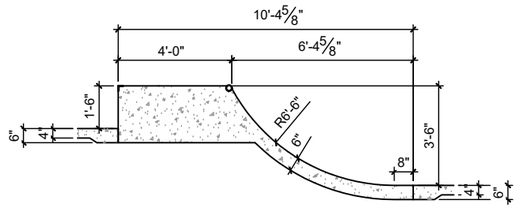

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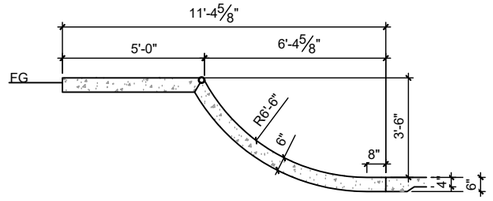

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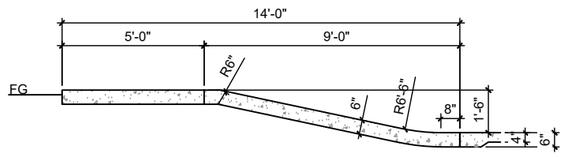

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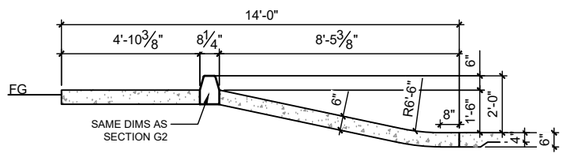

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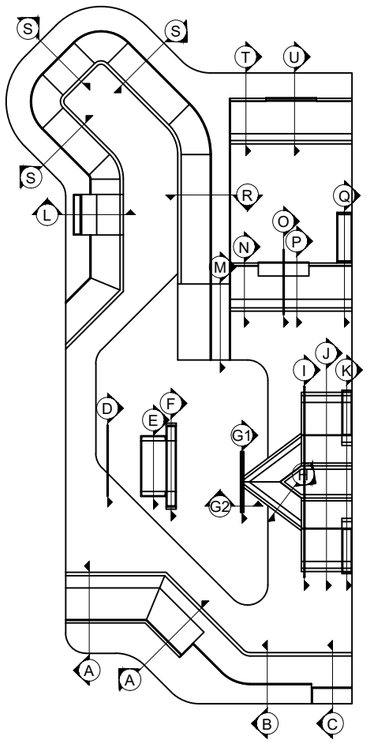

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SK8.2

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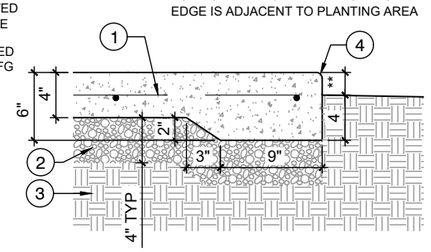
1. *4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. BASE COURSE, 4" DEEP MIN.
3. COMPACTED SUBGRADE
4. 1/2" TOOLED EDGE AT FG ONLY

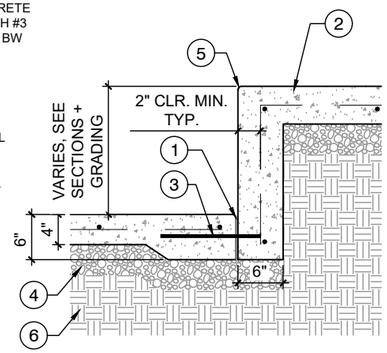
*SKATEPARK SURFACE TO HAVE STEEL HARD-TROWEL FINISH. CEASE TROWELING BEFORE SURFACE BECOMES GLOSSY. DO NOT TROWEL BURN SURFACE.

**DIMENSION SHALL BE 1" BELOW FINISH SURFACE IF SLAB EDGE IS ADJACENT TO TURF OR 2" BELOW FINISH SURFACE IF SLAB EDGE IS ADJACENT TO PLANTING AREA



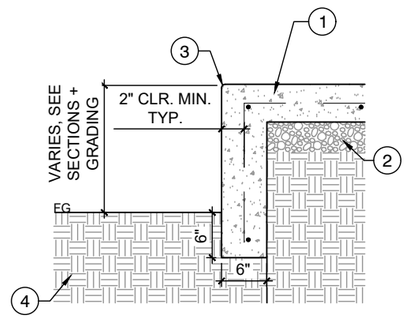
1 SLAB EDGE

1. EXPANSION JOINT
2. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR 16" O.C. BW
3. SLIP DOWEL
4. BASE COURSE
5. 1/2" TOOLED EDGE OR STEEL EDGING. SEE STEEL PLAN FOR LOCATION.
6. COMPACTED SUBGRADE



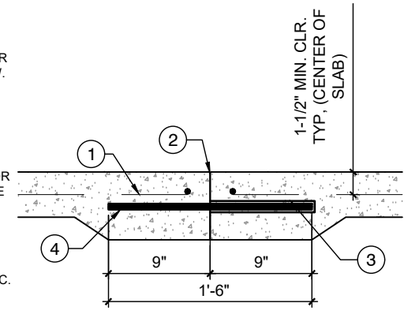
2 TURNDOWN EDGE AT FINISH SURFACE

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR 16" O.C. BW
2. BASE COURSE
3. 1/2" TOOLED EDGE OR STEEL EDGING. SEE STEEL PLAN FOR LOCATION.
4. COMPACTED SUBGRADE



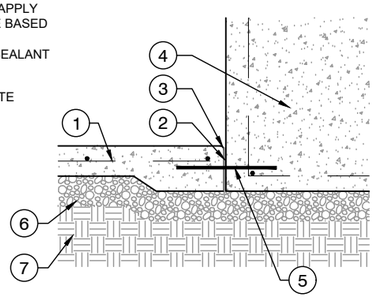
3 TURNDOWN EDGE AT FINISH GRADE

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. B.W.
2. COLD OR EXPANSION JOINT
3. SLEEVE FOR SLIP DOWEL OR WRAP/GREASE ONE END
4. 1/2" SMOOTH DOWEL OR REBAR DROP. SPACE 2'-6" O.C. ALONG JOINT



4 SLIP DOWEL

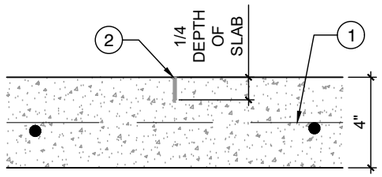
1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. PRE-COMPRESSED EXPANSION MATERIAL 1/2" DECK-O-FOAM OR SIMILAR
3. EXPANSION JOINT. 1/8" TOOLED EDGE. APPLY POLYURETHANE BASED NON-SAGGING ELASTOMERIC SEALANT AND TOOL FLAT
4. CONCRETE SKATE ELEMENT
5. SLIP DOWEL
6. BASE COURSE
7. COMPACTED SUBGRADE



5 EXPANSION JOINT

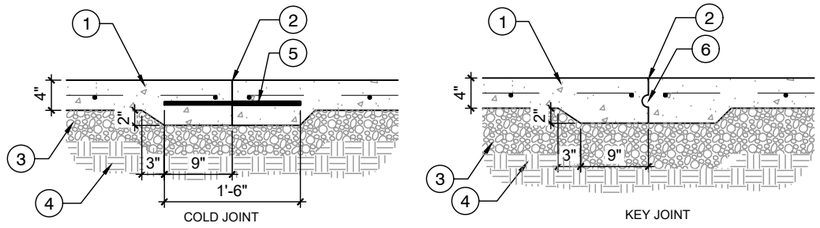
1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. 1/8" SAW CUT - FILL JOINT WITH SELF LEVELING SEALANT AND TOOL FLAT. PROTECT SURROUNDING SURFACE FROM EXCESS SEALANT.

NOTE:
NO OVERCUTS SHALL BE ACCEPTED.



6 SAWCUT JOINT

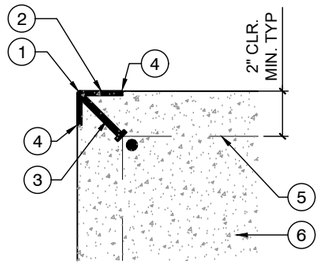
1. 4000 PSI CONCRETE FLAT WORK WITH #3 REBAR @ 16" O.C. BW
2. 1/8" TOOLED EDGE BOTH SIDES
3. BASE COURSE
4. COMPACTED SUBGRADE
5. SLIP DOWEL
6. KEY JOINT 1-5/8" O.D.



7 COLD JOINT / KEY JOINT

1. 1/8" MIN. ROUTED EDGE GROUND SMOOTH
2. 1.5" x 2" x 3/16" THICK STEEL EDGING -SEE STEEL PLAN FOR LOCATION
3. COPING ANCHOR, 3/8" X 4" MIN. NELSON STUD OR SIMILAR @ 18" O.C.
4. 1/8" TOOLED EDGE BOTH SIDES
5. TYPICAL STEEL REINFORCEMENT
6. SKATE ELEMENT

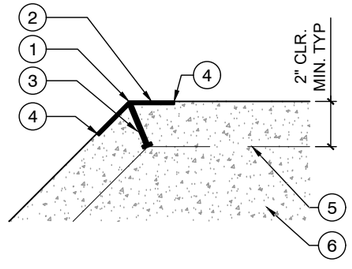
SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



8 STEEL EDGING

1. 1/8" MIN. ROUTED EDGE GROUND SMOOTH
2. 2" x 2" x .120" THICK STEEL STRAP EDGING -SEE STEEL PLAN FOR LOCATION
3. COPING ANCHOR, 3/8" X 4" MIN. NELSON STUD OR SIMILAR @ 18" O.C.
4. 1/8" TOOLED EDGE BOTH SIDES
5. TYPICAL STEEL REINFORCEMENT
6. SKATE ELEMENT

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES

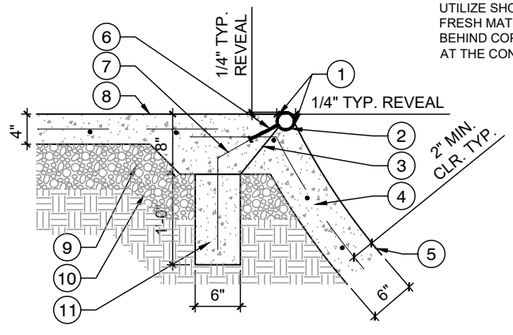


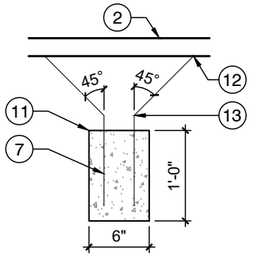
9 STEEL STRAP

1. 1/8" TOOLED EDGE BOTH SIDES OF COPING
2. STEEL COPING - SEE STEEL PLAN FOR LOCATION
3. CONSTRUCTION JOINT HAND SHAPED PRIOR TO CONCRETE CURING
4. TYPICAL STEEL REINFORCEMENT
5. BOWL TRANSITION
6. COPING ANCHOR, 3/8" X 4" MIN. NELSON STUD OR SIMILAR@ 18" O.C.
7. (2) #3 REBAR TIES TO SUPPORT COPING PRIOR TO CONCRETE PLACEMENT
8. 4000 PSI CONCRETE FLATWORK
9. BASE COURSE
10. COMPACTED SUB-GRADE
11. CONCRETE CYLINDER FOOTING. 8' O.C. ALONG BACK OF COPING & WHERE NEEDED ALONG SMALLER RADII
12. SPOT WELD TO COPING
13. TURN REBAR OUT 45 DEG

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES

CONSTRUCTION NOTE: WHEN BUILDING SLAB/DECK BEHIND COPING CONSTRUCTION JOINT, FIRST SATURATE SURFACE DRY (SSD) PREVIOUSLY PLACED CONCRETE MATERIAL AND THEN UTILIZE SHOTCRETE PLACEMENT METHOD FOR THE INITIAL FRESH MATERIAL TO THE EXISTING MATERIAL OF DECK/SLAB BEHIND COPING FOR PROPER PLACEMENT AND CONSOLIDATION AT THE CONSTRUCTION JOINT.





10 STEEL COPING

PARKITECTURE + PLANNING
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SPOHN RANCH SKATEPARKS

Project Name: WILLIAM MCFARLAND PARK PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title: CONSTRUCTION DETAILS

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/16/2022

Sheet Number
SK9.0

Sheet Size - 11x17

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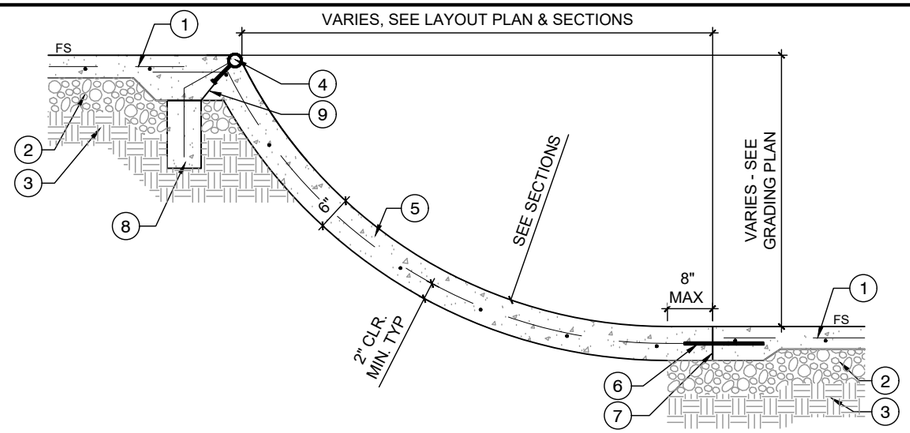
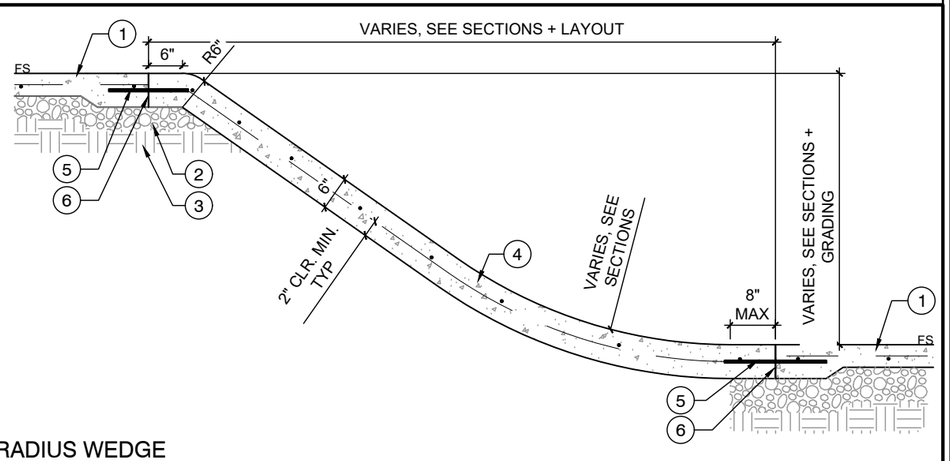
1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. BASE COURSE
3. COMPACTED SUBGRADE
4. STEEL COPING
5. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C. BW
6. SLIP DOWEL
7. COLD JOINT
8. CONCRETE CYLINDER FOOTING
9. CONSTRUCTION JOINT



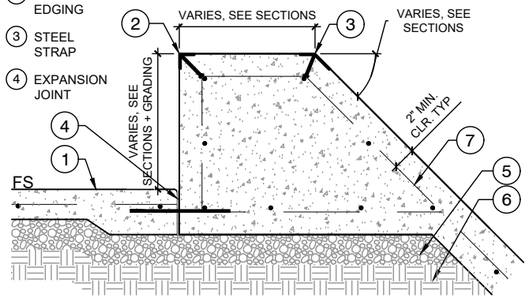
1 TYPICAL QUARTERPIPE

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. BASE COURSE
3. COMPACTED SUBGRADE
4. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C. BW
5. SLIP DOWEL
6. COLD JOINT / KEY JOINT



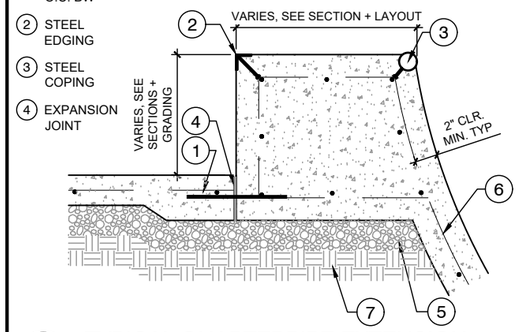
2 TYPICAL RADIUS WEDGE

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. STEEL EDGING
3. STEEL STRAP
4. EXPANSION JOINT
5. BASE COURSE
6. COMPACTED SUBGRADE
7. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C.



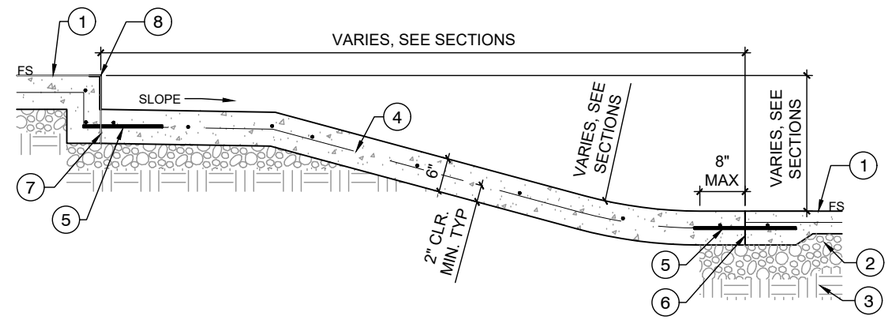
3 TYPICAL RADIUS WEDGE EXTENSION

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. STEEL EDGING
3. STEEL COPING
4. EXPANSION JOINT
5. BASE COURSE
6. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C.
7. COMPACTED SUBGRADE



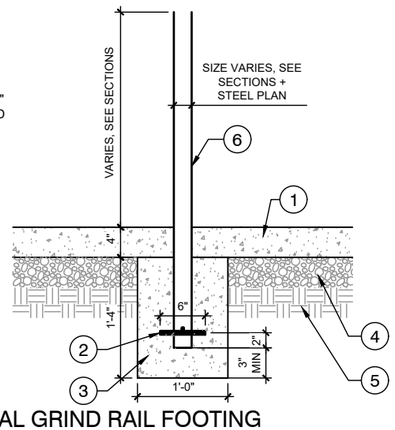
4 TYPICAL QUARTERPIPE EXTENSION

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. BASE COURSE
3. COMPACTED SUBGRADE
4. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C. BW
5. SLIP DOWEL
6. COLD JOINT / KEY JOINT
7. EXPANSION JOINT
8. STEEL RISER



5 TYPICAL EURO GAP

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. (2) #3 REBAR 6" LONG. DRILLED THROUGH + CROSSED ABOVE TO STABILIZE
3. CONCRETE FOOTING
4. BASE COURSE
5. COMPACTED SUBGRADE
6. GRIND RAIL

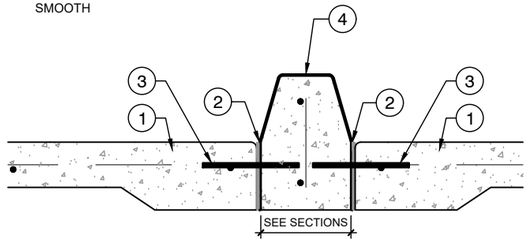


6 TYPICAL GRIND RAIL FOOTING

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. EXPANSION JOINT
3. SLIP DOWEL
4. STEEL SLAPPY CURB. 1/8" / 11 GA STEEL WALL WITH 1/8" MIN. ROUTED EDGE GROUND SMOOTH

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES

SLAPPY CURB TO BE FILLED WITH CONCRETE PRIOR TO SETTING.

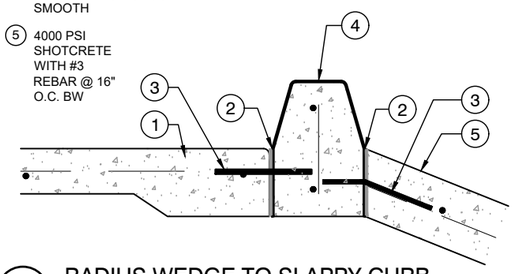


7 SLAPPY CURB

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. EXPANSION JOINT
3. SLIP DOWEL
4. STEEL SLAPPY CURB. 1/8" / 11 GA STEEL WALL WITH 1/8" MIN. ROUTED EDGE GROUND SMOOTH
5. 4000 PSI SHOTCRETE WITH #3 REBAR @ 16" O.C. BW

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES

SLAPPY CURB TO BE FILLED WITH CONCRETE PRIOR TO SETTING.



8 RADIUS WEDGE TO SLAPPY CURB

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SPOHN RANCH SKATEPARKS

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Sheet Size - 11x17

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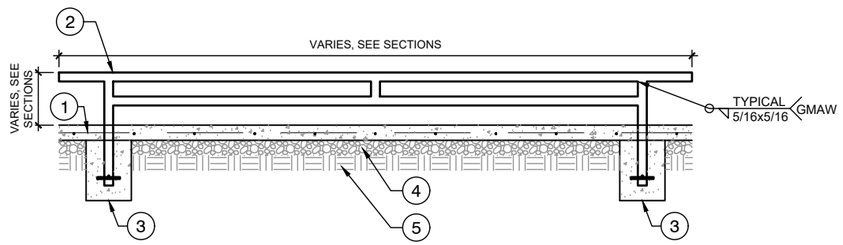
1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. GRIND RAIL, SEE SECTIONS
3. TYPICAL GRIND RAIL FOOTING
4. BASE COURSE
5. COMPACTED SUBGRADE

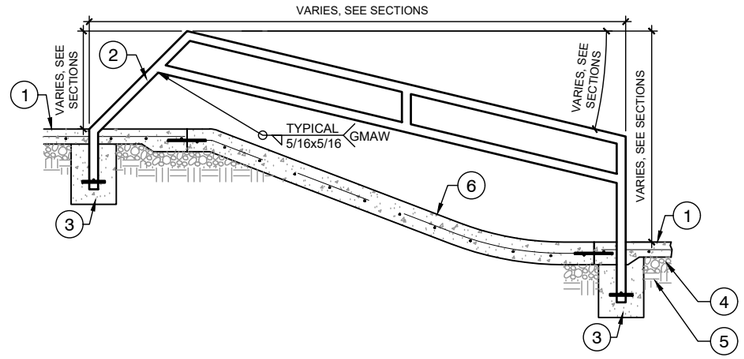
SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



1 TYPICAL ROUND FLAT GRIND RAIL

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. GRIND RAIL, SEE SECTIONS
3. TYPICAL GRIND RAIL FOOTING
4. BASE COURSE
5. COMPACTED SUBGRADE
6. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C. BW

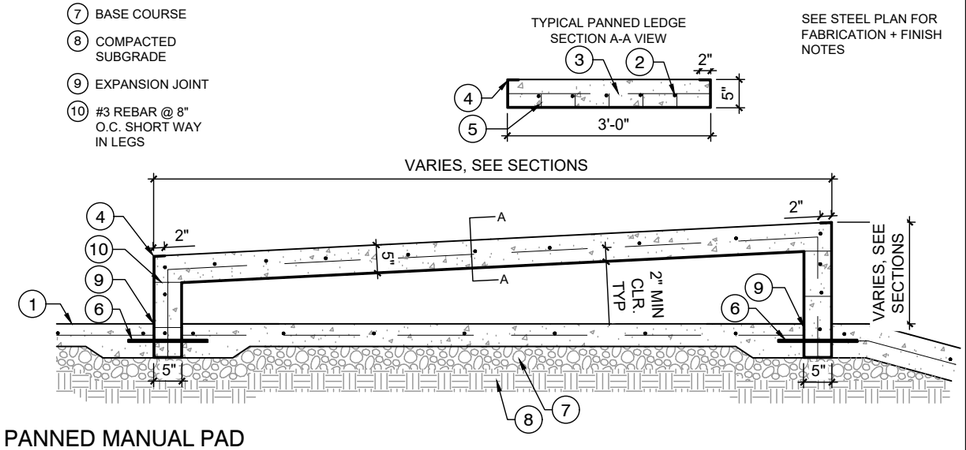
SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



2 TYPICAL RAKED GRIND RAIL

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. #3 REBAR LONG BAR @ 6" O.C.
3. #3 REBAR SHORT BAR @ 12" O.C.
4. 11GA .120" THICK STEEL WALL WITH 1/8" MIN. ROUTED EDGE GROUND SMOOTH
5. PROVIDE VERT. BAR SUPPORTS WELDED TO STEEL PAN @ 18" O.C. ALONG LONG BARS
6. SLIP DOWEL @ 16" O.C.
7. BASE COURSE
8. COMPACTED SUBGRADE
9. EXPANSION JOINT
10. #3 REBAR @ 8" O.C. SHORT WAY IN LEGS

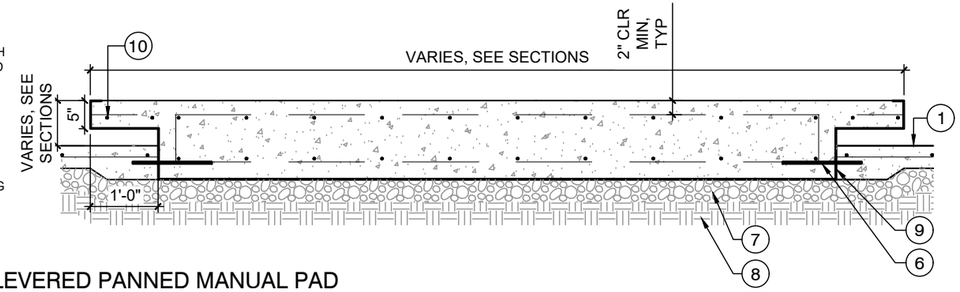
SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



3 RAKED PANNED MANUAL PAD

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. #3 REBAR LONG BAR @ 6" O.C.
3. #3 REBAR SHORT BAR @ 12" O.C.
4. 11GA .120" THICK STEEL WALL WITH 1/8" MIN. ROUTED EDGE GROUND SMOOTH
5. PROVIDE VERT. BAR SUPPORTS WELDED TO STEEL PAN @ 18" O.C. ALONG LONG BARS
6. SLIP DOWEL @ 16" O.C.
7. BASE COURSE
8. COMPACTED SUBGRADE
9. EXPANSION JOINT
10. #3 REBAR @ 8" O.C. SHORT WAY IN CANTILEVER

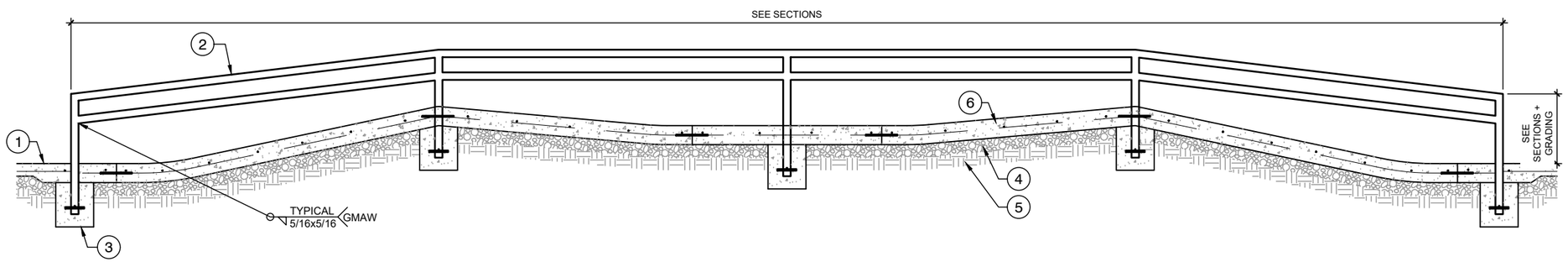
SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



4 CANTILEVERED PANNED MANUAL PAD

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. GRIND RAIL, SEE SECTIONS
3. TYPICAL GRIND RAIL FOOTING
4. BASE COURSE
5. COMPACTED SUBGRADE
6. 4000 PSI SHOTCRETE WITH #3 REBAR @ 12" O.C. BW

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



5 LONG ROUND GRIND RAIL

Sheet Size - 11x17

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SPOHN RANCH SKATEPARKS

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2. #3 REBAR LONG BAR @ 6" O.C.
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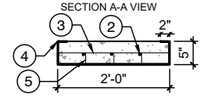
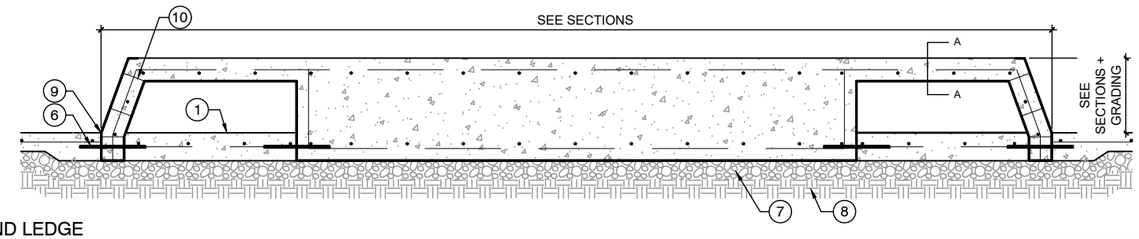
7. BASE COURSE
8. COMPACTED SUBGRADE
9. EXPANSION JOINT
10. #3 REBAR @ 8" O.C. SHORT WAY IN LEGS

TYPICAL PANNED LEDGE SECTION A-A VIEW



SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



1 PANNED GRIND LEDGE

1. 4000 PSI CONCRETE FLATWORK WITH #3 REBAR @ 16" O.C. BW
2. #3 REBAR LONG BAR @ 6" O.C.
3. #3 REBAR SHORT BAR @ 12" O.C.
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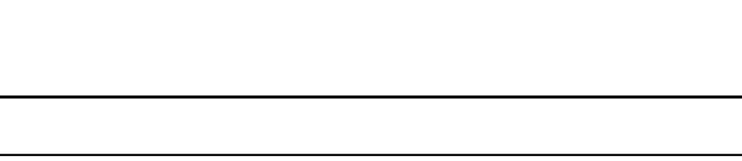
7. BASE COURSE
8. COMPACTED SUBGRADE
9. EXPANSION JOINT
10. #3 REBAR @ 8" O.C. SHORT WAY IN LEGS

TYPICAL PANNED LEDGE SECTION A-A VIEW

SEE STEEL PLAN FOR FABRICATION + FINISH NOTES



2 RAKED PANNED GRIND LEDGE

PARKITECTURE + PLANNING
901 Deming Way, Suite 102
Madison,WI.53717
608.886.6808
Parkitecture

SPOHN RANCH SKATEPARKS

Project Name:
WILLIAM MCFARLAND PARK
PHASE 1B: SKATEPARK
4802 Marsh Road
McFarland, WI 53558

Sheet Title:
CONSTRUCTION DETAILS

Revisions:

Project #: 22.053
Issued For: Review
Date: 12/16/2022

Sheet Number
SK9.3

Sheet Size - 11x17

File: G:\My Drive\skatepark projects\mcfarland, wi\CAD\Sheets\Construction-Details.dwg Layout: SK9.3 User: zachm Plotted: Dec. 16, 2022 - 1:32pm

Specification Manual

January 11, 2023

DRAFT

William McFarland Park Phase 1B

4802 Marsh Road
McFarland, WI 53558

Project # 22.053

Bid Due Date: January 31, 2022

Plans Prepared By:

Parkitecture + Planning
901 Deming Way
Madison, WI 53717
608.886.6808

Parkitecture

SPOHN RANCH SKATEPARKS

VILLAGE OF McFarland

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Village of McFarland, WI

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ADVERTISEMENT TO BID

January 11, 2023

The Village of McFarland is soliciting Bids for the proposed pickleball court complex and related improvements at William McFarland Park. Bids will be received until **2:00 PM, January 31, 2023** online via **QUEST CDN** only. Bids will be virtually opened and read aloud. All planholders will be provided with login information prior to bid opening via addendum.

PROJECT SCOPE:
The project scope includes but not limited to: demolition, earthwork, concrete skatepark construction, landscaping, and site restoration.

BID SUBMITTAL:
Bids shall be submitted online via **QUEST CDN** only. The OWNER reserves the right to waive any informalities and to reject any or all Bids. The letting of the work described herein is subject to the provisions of Sections 61.54, 66.0901 and 66.0903, Wisconsin Statutes. All prime contractors shall complete the required pre-qualification forms prior to bid submittal.

BID DOCUMENT AVAILABILITY:
Bidding Documents will be available from **QUEST CDN** online bid room (#8102952). Plan download fees are $30. Bid documents will be available for review only by appointment at the Village offices (5915 Milwaukee Street, McFarland WI, 53558), or at the Parkitecture + Planning office (901 Deming Way, Ste 102, Madison, WI, 53717).

PRE-BID CONFERENCE:
There will not be a pre-bid conference for this project. Contractor questions may be directed to Parkitecture + Planning, 608-664.3910.

BID BOND:
A satisfactory Bid Bond in the amount of 5% of the total bid payable to the OWNER, shall be submitted with the Bid via **QUEST CDN**.

SCHEDULE:
Selection of final bid is at the sole discretion of the OWNER and shall reserve the right to waive irregularities should it be needed. All Bids shall remain valid for 60 days after bid opening.

Publication Dates: January 20 and January 27, 2023

SECTION 1
INSTRUCTIONS TO BIDDERS

These Instructions to Bidders establish requirements for Bidding and Award of Contract.

- To demonstrate Bidder's qualifications to perform the Work, within five days of OWNER's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments and other such data as may be called for below. Bidder must be prepared to submit evidence of Bidder's qualifications to do business in the State of Wisconsin prior to award of the Contract.

- Bidder has made themselves familiar with those reports of explorations and tests of subsurface conditions at or contiguous to the Site that A/E (ARCHITECT/ENGINEER) has used in preparing the Bidding Documents.

- On request, OWNER will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid.

- Bidder shall comply with instructions and requirements identified in the Bid.

- The submission of a Bid will constitute an incontrovertible representation by Bidder to perform and furnish the work required by the Bidding Documents and apply the specific means, methods, techniques, sequences, or procedures of construction (if any) that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given A/E written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolution thereof by A/E is acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the work.

- If a pre-Bid conference is to be held, it will be held at the time and place stated in the Advertisement to Bid.

- All questions about the meaning or intent of the Bidding Documents are to be submitted to A/E in writing. Interpretations or clarifications considered necessary by A/E in response to such questions will be issued by Addenda. All Addenda so issued shall become part of the Contract Documents. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Addenda may also be issued to clarify, correct, or change the Bidding Documents as deemed advisable by OWNER or A/E. Receipt of all Addenda must be acknowledged in space provided in the Bid.

- A Certified Check, Back Cashier's Check or satisfactory Bid Bond in the amount stated in the Advertisement for Bids payable to the OWNER, shall accompany each Bid as a guarantee, that if the Bid is accepted, the Bidder will execute and file the Contract, Performance/Payment Bonds and Certification of Insurance, as required by the Contract Documents, within 15-days after the Notice of Award of Contract by the OWNER.

- The numbers of days within which, or the dates by which, the Work is to be (a) Substantially Completed and (b) completed and ready for final payment are set forth in the Agreement (or incorporated therein by reference to the attached Bid Form).

- The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to A/E, application for such acceptance will not be considered by A/E until after the Effective Date of the Agreement.

- The Bid form is included with the Bidding Documents. <u>The Bid must not be separated from the attached volume</u>.

- Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid Form. All blanks on the Bid Form must be completed in ink and the Bid signed or via digital format on QUEST CDN..

- Bids will be received for all divisions of the specifications and all other provisions of the Bidding Documents. Bids will not be considered or opened if they are received after the time set for opening Bids. Bids will be opened at the time and place indicated in the Advertisement to Bid and read aloud publicly.

SECTION 1A

BIDDER'S PROOF OF RESPONSIBILITY

-Confidential to the Extent Permitted by Laws and Regulations-

The Bidder's Proof of Responsibility must be filed with the Owner five days prior to the bid deadline. The Bidder must submit this statement, full and complete, sworn to before an officer authorized to administer oaths.

The purpose of this document is to enable the Owner to decide if the bidder has the financial ability, the equipment and the experience to perform the contract in a manner consistent with protection of the Owner's and the general welfare. It is not intended to discourage beginning contractors nor to make it difficult for qualified contractors to bid.

The Owner reserves the right to require additional information before awarding the contract in order to determine a prospective contractor's qualifications for the project. If the Owner determines that the answers to the questionnaire and the financial statement are insufficient or demonstrate that the bidder is not qualified the Owner may reject the bid.

Statement of Bidder's Qualifications

1. Name of Bidder _____
2. Bidder's address _____

   _____
3. Contact person _____
4. Telephone number _____
5. When organized _____
6. When incorporated _____
   (if Sole Proprietorship or Partnership, so indicate)
7. Years in business under present name _____
8. Licenses (type and license number) _____
9. Certifications (check those that apply):
   a. Disadvantaged Business Enterprise _____
   b. Minority Business Enterprise _____
   c. Woman-Owned Business Enterprise _____
   d. Small Business Enterprise _____
10. Contracts on hand
    (Attach a list of present uncompleted contracts, a schedule of their completion dates, % completed as of this date, and gross amount of each contract.)
11. General character of work typically performed by your firm _____

    _____
12. Has your firm or a firm for which a corporate officer of your firm was working ever defaulted on a contract or failed to complete any work awarded it? Yes _____ No _____

    (If yes, attach a statement setting forth when this occurred, where and why.)
13. Are there any judgments, claims, disputes or litigation pending or outstanding against your

firm? Yes No _____ _____

(If yes, attach a statement setting forth when this occurred, where and why.)

14. Attach a list of major contracts completed by your firm within the last five years, including the kind of work and the amount of the contract.

15. Attach a statement of experience in the construction of work similar in nature to the project for which your firm intends to submit a bid and references that may be contacted to verify the timeliness and quality of your work.

16. Attach a list of major equipment now owned or leased full-time by your firm.

17. Attach a list of principal employees of your firm, including the officers, and a short resume of the background and experience of these principal employees.

18. Attach a list of credit references, showing credit available. Banks or other financial institutions are preferred references.

19. Financial statement:
Condition at the close of business on _____, 20 . ___

Assets:

a. Cash _____

b. Accounts receivable _____

c. Work in progress _____

d. Real estate equity _____

e. Materials in stock _____

f. Book value of equipment _____

g. Book value of furniture and fixtures _____

h. Other assets _____

Liabilities:

a. Accounts, notes and interest payable _____

b. Other liabilities _____

Net Worth:

_____

(A standard financial statement may be submitted, if desired.)

20. Attach a completed Village of McFarland Affidavit of Qualifications.

Date at _____ this _____ day of 20 ___

Name of Organization _____

By _____

Title _____

State of _____, County of _____, _____

hereby certifies that the answers to all the foregoing questions and the other information provided are true and correct.

_____

(signature)

Subscribed and sworn to before me this _____ day of _____

_____, 20___ . ___

_____ Notary Public

City/Village _____ County _____

My commission expires on _____

(Attachments consist of _____ sheets.)

SECTION 1B

VILLAGE OF MCFARLAND
AFFIDAVIT OF QUALIFICATIONS

_____ ("Affiant"), a duly authorized representative of _____, a potential contractor or subcontractor (hereinafter the "Contractor"), on a project for the Village of McFarland, swears on behalf of said Contractor, under oath and penalty of perjury, as follows:

1. Contractor's permanent place of business is located at:

   _____

2. The Contractor, if a business entity, is authorized or registered to transact business in the state by the Department of Financial Institutions in compliance with Wis. Stat. chs. 178, 179, 180, 181, or 183.

3. Neither the Contractor, nor agent, partner or officer of the Contractor, nor any employee who will perform any work on the project, is debarred, suspended, proposed for debarment or declared ineligible from contracting with any unit of federal, state or local government.

4. The Contractor is in compliance with provisions of Section 2000e of Chapter 21, Title 42 of the United States Code and Federal Executive Order No. 11246 as amended by Executive Order No. 11375 (known as the Equal Opportunity Employer provisions).

5. The Contractor has general liability, workers' compensation, unemployment, and automobile insurance at levels sufficient to protect the Village including those liability coverage limits specified in the contract documents.

6. The Contractor has complied with all provisions of Wisconsin prevailing wage law and federal Davis-Bacon related Acts, and all rules and regulations therein, for projects undertaken by the Contractor that are covered by these laws, for the past five (5) years.

7. The Contractor has _____ employees. The Contractor (does / does not) [STRIKE ONE] participant in an Apprenticeship program.

8. The Contractor has a written substance abuse prevention program meeting the requirements of Wis. Stat. § 103.503. As required by Wis. Stat. § 103.503, all employees are subject to drug and alcohol testing before commencing work on the public works project, except that testing of an employee before commencing work on a project is not required if the employee has been participating in a random testing program during the 90 days preceding the date on which the employee commences work on the public construction project.

9. Affiant represents and warrants that all employees who will perform work on the project are properly classified as employees or independent contractors under all applicable state and federal laws.

10. The Contractor (has / has not) [STRIKE ONE] been the subject of any investigation, order or judgment from any state or federal agency or court concerning an employment practice, including but not limited to, classification of employees, unemployment insurance, or discrimination. Copies of any investigation, order or judgment are attached. [STRIKE IF NOT APPLICABLE]

11. The Contractor's employees who will perform work on the project are:
    a. Covered under a current workers' compensation policy; and
    b. Properly classified under such policy.

12. The Contractor is in compliance with all applicable requirements of the federal Affordable Care Act.

13. The Contractor possesses all applicable professional and trade licenses required for performing the public works.

14. The Contractor has adequate financial resources to complete the public construction contract, as well as all other work the bidder is presently under contract to complete.

15. The Contractor is bondable for the terms of the proposed public construction contract.

16. The Contractor has satisfactorily completing the following five projects of similar size and complexity to the proposed public construction project within the last five years.

a. Project 1:

b. Project 2:

c. Project 3:

d. Project 4:

e. Project 5:

17. The Contractor has, and diligently maintains, a written safety program.

18. The Contractor has not been determined to have committed a Serious, Willful or Repeated violation (as defined by OSHA) of OSHA safety standards in the last 10 years.

19. The person signing below has the authority to sign on behalf of, and bind, the Contractor.

20. The Contractor understands that failing to submit the requited affidavit, or providing incorrect, false, or misleading information, shall automatically disqualify the Contractor from be awarded the public construction contract and/or performing work on the project.

Project: _____

Signature: _____

Date: _____

Name: _____

Title: _____

SECTION 2

BID FORM

The following bid proposal indicates an agreement on behalf of the Bidder to complete work required to fulfill the project scope as outlined in the plans and specifications for the unit prices specified herein for the following project:

William McFarland Park Phase 1B

Bid proposals shall remain valid for up to 60 days after date of the bid opening. Upon notice of award, bidder shall complete required Bond Forms and insurance documents. Three copies shall be provided to the A/E for review prior to execution by the OWNER.

The scope of work as outlined in the plans and specifications shall be substantially completed by Friday, June 2, 2023.

The signature(s) of the bidding entity on the following pages shall confirm that the Bidder has reviewed all pertinent documents and existing site conditions, fully reviewed the scope of the project, and understands the overall nature of the work.

Any questions regarding the above items shall have been sufficiently raised and resolved with the A/E and/or OWNER prior to bidding. Any clarifications and responses provided by the A/E and/or OWNER shall only be binding if issued in writing via addenda.

Signature below must be completed by an officer of the bidding entity who shall be authorized to bind said entity into contractual agreements.

_____
Name & Address of Bidder

_____
Contact Phone & Email

_____
Type of Entity (Corporation, LLC, etc)

conducting business in the State of _____;

_____
Signature

NOTARY
Signature_____
Sworn and subscribed to me on this
_____ day of 2023.
Name and Title_____
Expiration of Commission_____

SECTION 2

BID FORM

Addenda Acknowledged _____, _____, _____

Bidder to input unit prices below and include the total cost per item in the far right column. Bid Item descriptions are outlined in the Special Provisions Section of this Project Manual. The A/E shall review the computations for irregularities and notify bidder should errors be found.

ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1.	Mobilization	1	LS	$_____	$_____
2.	Erosion Control	1	LS	$_____	$_____
3.	Demolition/Earthwork	1	LS	$_____	$_____
4.	Dense Graded Basecourse	190	TON	$_____	$_____
5.	Concrete Pavement – 5"	773	SF	$_____	$_____
6.	Skatepark Construction	1	LS	$_____	$_____
7.	Shade Structures	1	EA	$_____	$_____
8.	Bicycle Parking	4	EA	$_____	$_____
9.	Picnic Tables	2	EA	$_____	$_____
10.	Trees	13	EA	$_____	$_____
11.	Restoration	1	LS	$_____	$_____

TOTAL BID (ITEMS 1 THROUGH 11)

_____ Dollars $_____

(Words) (Numbers)

DO NOT FILL OUT

SECTION 3

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER *(Name and Address)*:

SURETY *(Name and Address of Principal Place of Business)*:

OWNER *(Name and Address)*:

BID
Bid Due Date:
Description *(Project Name and Include Location)*:

BOND
Bond Number:
Date *(Not earlier than Bid due date)*:
Penal sum _____ $ _____
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER	SURETY
_____ (Seal)	_____ (Seal)
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or

3.2 All Bids are rejected by Owner, or

3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

SECTION 4

CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is dated as of the _____ day of _____ in the year _____ by and

between _____ (Owner)

and _____ (Contractor).

Owner and Contractor hereby agree as follows:

ARTICLE 1 - THE WORK

1.1 Work

A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

B. The Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

1. Project: William McFarland Park Phase 1B

2. Scope of Work: Project elements include demolition, earthwork, concrete pavement, concrete skatepark construction, landscaping, and restoration.

ARTICLE 2 - CONTRACT DOCUMENTS

2.1 Intent of Contract Documents

A. It is the intent of the Contract Documents to describe a functionally complete project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Owner and A/E. This Contract supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents (plans and specifications) are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.

B. During the performance of the Work and until final payment, Contractor and Owner shall submit all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work under the Contract Documents to the A/E. A/E will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.

C. A/E will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.

D. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media editions) prepared by A/E or its consultants.

2.2 Contract Documents Defined

A. The Contract Documents consist of the following documents:

1. This Contract (pages 1 to 8, inclusive).

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2. Performance bond (pages 1 to 3, inclusive), plus attachments.
3. Payment bond (pages 1 to 3, inclusive), plus attachments.
4. Special Provisions (pages SP-1 to SP-4, inclusive).
5. Drawings (not attached but incorporated by reference) consisting of 24 sheets as listed in the Drawing Sheet Index.
6. Addenda (numbers __ to __, inclusive).
7. Exhibits to this Contract (enumerated as follows):
   a. Contractor's Bid (pages __ to __, inclusive).
8. The following which may be delivered or issued on or after the Effective Date of the Contract:
   a. Work Change Directives.
   b. Change Orders.
   c. Field Orders.

ARTICLE 3 - A/E

3.1 A/E

A. The A/E for this Project is Parkitecture + Planning, 901 Deming Way, Suite 102, Madison, WI 53717.

B. The term ENGINEER is used in the standard language of the General Conditions to represent the A/E referred to hereunder.

ARTICLE 4 - CONTRACT TIMES

4.1 Contract Times

A. Construction shall commence on or about March 1, 2023.

B. The Work will be substantially completed on or before June 2, 2023.

4.2 Liquidated Damages

A. None.

4.3 Delays in Contractor's Progress

A. If Owner, A/E, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

B. Refer to Article 4 of the General Conditions for additional terms and requirements.

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ARTICLE 5 - CONTRACT PRICE

5.1 Payment

A. Owner shall pay Contractor in accordance with the Contract Documents at the unit price for each unit of Work as stated in Contractor's Bid Schedule, which is attached to this Contract as an exhibit.

1. The initial Contract Price based on the estimated quantities of work listed in the Bid Schedule is $_____.

2. The final Contract Price will be determined by multiplying each unit price times the actual quantity of that Work item completed. Actual quantities installed will be determined by the A/E.

ARTICLE 6 - BONDS AND INSURANCE

6.1 Bonds

A. Refer to Article 6 of the General Conditions for terms and requirements.

6.2 Insurance

A. Before starting Work, Contractor shall furnish evidence of insurance from companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a minimum AM Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:

1. Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:

a. Workers' Compensation:

State:	Statutory
Employer's Liability:	
Bodily Injury, each Accident	$ 100,000
Bodily Injury By Disease, each Employee	$ 100,000
Bodily Injury/Disease Aggregate	$ 500,000

b. Commercial General Liability:

General Aggregate	$ 1,000,000
Products - Completed Operations Aggregate	$ 2,000,000
Personal and Advertising Injury	$ 500,000
Each Occurrence (Bodily Injury and Property Damage)	$ 500,000

c. Automobile Liability:

Bodily Injury and Property Damage Combined Single Limit of	$ 1,000,000

d. Excess or Umbrella Liability:

Per Occurrence	$ 3,000,000
General Aggregate	$ 3,000,000

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B. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the insured and additional insured.

C. Automobile liability insurance provided by Contractor shall provide coverage against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.

D. Contractor's commercial general liability policy shall be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:

1. Products and completed operations coverage maintained for three years after final payment;

2. Blanket contractual liability coverage to the extent permitted by law;

3. Broad form property damage coverage; and

4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.

E. The Contractor's commercial general liability and automobile liability, and umbrella or excess liability policies shall include and list Owner and A/E and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis.

F. Umbrella or excess liability insurance shall be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. Subject to industry-standard exclusions, the coverage afforded shall be procured on a "follow the form" basis as to each of the underlying policies. Contractor may demonstrate to Owner that Contractor has met the combined limits of insurance (underlying policy plus applicable umbrella) specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policies and an umbrella or excess liability policy.

ARTICLE 7 - CONTRACTOR'S RESPONSIBILITIES

7.1 Supervision and Superintendence

A. Refer to Article 8 of the General Conditions for terms and requirements.

7.2 Other Work at the Site

A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

B. Refer to Article 8 of the General Conditions for additional terms and requirements.

7.3 Quality Management

A. Contractor is fully responsible for managing quality to ensure Work is completed in accordance with the Contract Documents.

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7.4 Licenses, Fees and Permits

A. Contractor shall obtain and pay for all construction permits and licenses unless otherwise provided in the Contract Documents.

7.5 Record Documents

A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to A/E upon completion of the Work.

7.6 Shop Drawings, Samples, and Other Submittals

A. Refer to Article 7 of the General Conditions for terms and requirements.

7.7 Warranties and Guarantees

A. Refer to Article 6 of the General Conditions for terms and requirements.

7.8 Correction Period

A. If within one year after the date of substantial completion, any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly and without cost to Owner, correct such defective Work.

7.9 Indemnification

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and A/E, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts they may be liable.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.1 Owner's Responsibilities

A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through A/E.

B. Owner shall make payments to Contractor as provided in this Contract.

C. Owner shall provide Site and easements required to construct the Project.

D. Refer to Article 9 of the General Conditions for additional terms and requirements.

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ARTICLE 9 - A/E'S STATUS DURING CONSTRUCTION

9.1 A/E's Status

A. A/E will be Owner's representative during construction. The duties and responsibilities and the limitations of authority of A/E as Owner's representative during construction are set forth in this Contract.

B. Neither A/E's authority or responsibility under this Article 9 or under any other provision of the Contract, nor any decision made by A/E in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by A/E, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by A/E to Contractor, any subcontractor, any supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

C. Refer to Article 10 of the General Conditions for additional terms and requirements.

ARTICLE 10 - CLAIMS AND DISPUTE RESOLUTION

10.1 Claims Process

A. Refer to Article 12 of the General Conditions for terms and requirements.

ARTICLE 11 - TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK

11.1 Refer to Article 14 of the General Conditions for terms and requirements.

ARTICLE 12 - PAYMENTS TO CONTRACTOR

12.1 Progress Payments

A. The Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form of application for payment acceptable to A/E. The unit price breakdown submitted with the bid will be used for unit price work. Break lump sum items into units that will allow for measurement of Work in progress.

12.2 Applications for Payments:

A. Contractor shall submit an application for payment in a form acceptable to the A/E, no more frequently than monthly, to A/E. Applications for payment will be prepared and signed by Contractor. Contractor shall provide supporting documentation required by the Contract Documents. Payment will be paid for Work completed as of the date of the application for payment.

12.3 Retainage

A. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract:

1. 95 percent of the Work completed (with the balance being retainage); and

2. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

3. At 50 percent completion, no additional amounts will be retained unless A/E certifies that the Work is not proceeding satisfactorily, but amounts previously retained will not be paid to Contractor. At 50 percent completion or any time thereafter when the progress of the Work is not satisfactory, additional amounts may be retained but in no event will total

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retainage be more than 10 percent of the Work completed and materials and equipment delivered, suitably stored, and accompanied by required documentation.

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 98 percent of the Contract Price (with the balance being retainage), less such amounts set off by Owner pursuant to Paragraph 14.4.C, and less A/E's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

12.4 Review of Applications

A. Refer to Article 15 of the General Conditions for terms and requirements.

12.5 Substantial Completion

A. All Contract work shall be substantially complete by 06/02/2023 .

B. The Contractor shall notify Owner and A/E in writing that the Work is substantially complete and request the A/E issue a certificate of substantial completion when Contractor considers the Work ready for its intended use. Contractor shall at the same time submit to Owner and A/E an initial draft of punch list items to be completed or corrected before final payment.

C. Refer to Article 15 of the General Conditions for additional terms and requirements.

12.6 Final Inspection

A. Refer to Article 15 of the General Conditions for terms and requirements.

12.7 Final Payment

A. Refer to Article 15 of the General Conditions for terms and requirements.

ARTICLE 13 - SUSPENSION OF WORK AND TERMINATION

13.1 Refer to Article 16 of the General Conditions for terms and requirements.

ARTICLE 14 - CONTRACTOR'S REPRESENTATIONS

14.1 Contractor Representations

A. Contractor makes the following representations when entering into this Contract:

1. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

4. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on:

a. The cost, progress, and performance of the Work;

b. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and

c. Contractor's safety precautions and programs.

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5. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
6. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
7. Contractor has given A/E written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by A/E is acceptable to Contractor.
8. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
9. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

IN WITNESS WHEREOF, Owner and Contractor have signed this Contract.

This Contract will be effective as of the date first written on Page 1 of the Contract (which is the Effective Date of the Contract).

OWNER:	CONTRACTOR:
By:	By:
Title:	Title:
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
	License No.: (where applicable)

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SECTION 5

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

CONTRACT

Effective Date of Agreement:
Amount:
Description *(Name and Location)*:

BOND

Bond Number:
Date (*Not earlier than Effective Date of Agreement*):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY
_____ (Seal)	_____ (Seal)
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2 Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1 Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2 Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and
2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and
3. Not having been paid within the above 30 days, have sent a written notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. Reserved.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related

subcontracts, purchase orders, and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. Definitions

15.1 Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract, or to perform and complete or otherwise comply with the other terms thereof.

FOR INFORMATION ONLY – (*Name, Address, and Telephone*) Surety Agency or Broker: Owner's Representative (*Engineer or other*):

SECTION 5

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

CONTRACT

Effective Date of Agreement:
Amount:
Description (*Name and Location*):

BOND

Bond Number:
Date (*Not earlier than Effective Date of Agreement*):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY
_____ (Seal)	_____ (Seal)
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

1. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 2.1.

2. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
   2.1 Owner has notified Contractor and Surety, at the addresses described in Paragraph 9 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor, and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
   2.2 Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 2.1; and
   2.3 Owner has agreed to pay the Balance of the Contract Price to:
      1. Surety in accordance with the terms of the Contract; or
      2. Another contractor selected pursuant to Paragraph 3.3 to perform the Contract.

3. When Owner has satisfied the conditions of Paragraph 2, Surety shall promptly, and at Surety's expense, take one of the following actions:

   3.1 Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
   3.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
   3.3 Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 5 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
   3.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
      1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
      2. Deny liability in whole or in part and notify Owner citing reasons therefor.

4. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 3.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

5. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 3.1, 3.2, or 3.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To the limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

5.1 The responsibilities of Contractor for correction of defective Work and completion of the Contract;
5.2 Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions of or failure to act of Surety under Paragraph 3; and
5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

6. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

7. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located, and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

9. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

10. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

11. Definitions.

11.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
11.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
11.3 Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
11.4 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or otherwise comply with the other terms thereof.

FOR INFORMATION ONLY – (*Name, Address and Telephone*) Surety Agency or Broker: Owner's Representative (*Engineer or other party*):

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

5. *Bidder*—An individual or entity that submits a Bid to Owner.

6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.

7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.

9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*

a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

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requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.

c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.

d. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.

13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.

14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.

15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.

16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.

17. *Cost of the Work*—See Paragraph 13.01 for definition.

18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.

19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.

21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

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recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.

23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.

24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.

    a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.

    b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.

    c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.

25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.

28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.

29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.

30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.

31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.

32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

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33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.

34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.

36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.

39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.

41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

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43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.

44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.

45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.

46. *Technical Data*

    a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.

    b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.

    c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.

47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

48. *Unit Price Work*—Work to be paid for on the basis of unit prices.

49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

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1.02 *Terminology*

A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms "as allowed," "as approved," "as ordered," "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

C. *Day*: The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*: The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

1. does not conform to the Contract Documents;

2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or

3. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).

E. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.

4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

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F. *Contract Price or Contract Times*: References to a change in "Contract Price or Contract Times" or "Contract Times or Contract Price" or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term "or both" is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).

B. *Evidence of Contractor's Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.

C. *Evidence of Owner's Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

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into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.

B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

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ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

G. Nothing in the Contract Documents creates:

1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or

2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

A. *Standards Specifications, Codes, Laws and Regulations*

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

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inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements*: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents*: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

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B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

A. Contractor and its Subcontractors and Suppliers shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

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established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.

B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.

B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.

C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;

2. Abnormal weather conditions;

3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and

4. Acts of war or terrorism.

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D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:

1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.

2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.

3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.

E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:

1. The circumstances that form the basis for the requested adjustment;

2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;

3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;

4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and

5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.

G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

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B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.

C. *Cleaning*: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

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and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading of Structures*: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;

2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and

3. Technical Data contained in such reports and drawings.

B. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

C. *Reliance by Contractor on Technical Data*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

D. *Limitations of Other Data and Documents*: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;

3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or

4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

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5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;

2. is of such a nature as to require a change in the Drawings or Specifications;

3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

D. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

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Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;

b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;

b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

c. Contractor failed to give the written notice required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.

4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:

1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;

2. complying with applicable state and local utility damage prevention Laws and Regulations;

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3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;

4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.

C. *Engineer's Review*: Engineer will:

1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;

2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;

3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and

4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

F. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

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or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;

b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and

c. Contractor gave the notice required in Paragraph 5.05.B.

2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.

3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;

2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

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of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.

H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

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conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.

B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.

C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

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Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.

E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.

F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.

H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.

B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.

C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.

D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

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Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.

F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.

G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

H. Contractor shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and

2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.

I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.

K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

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L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.

M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.

N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

A. *Required Insurance*: Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.

B. *General Provisions*: The policies of insurance required by this Paragraph 6.03 as supplemented must:

1. include at least the specific coverages required;

2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;

3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;

4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and

5. include all necessary endorsements to support the stated requirements.

C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:

1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;

2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;

3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

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4. not seek contribution from insurance maintained by the additional insured; and

5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.

B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.

C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.

D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.

E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

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Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.

1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.

C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.

D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

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6.06 *Receipt and Application of Property Insurance Proceeds*

A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.

B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

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B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.

C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

A. *Contractor's Request; Governing Criteria*: Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.

1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that the proposed item:

1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

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2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;

3) has a proven record of performance and availability of responsive service; and

4) is not objectionable to Owner.

b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.

B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.

E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.

1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

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3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:

    a. will certify that the proposed substitute item will:

        1) perform adequately the functions and achieve the results called for by the general design;

        2) be similar in substance to the item specified; and

        3) be suited to the same use as the item specified.

    b. will state:

        1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;

        2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

        3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

    c. will identify:

        1) all variations of the proposed substitute item from the item specified; and

        2) available engineering, sales, maintenance, repair, and replacement services.

    d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

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E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.

B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.

C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.

D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.

E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

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H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.

J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.

K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.

L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.

M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

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7.09 *Permits*

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.

C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

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7.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.

C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.

H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

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I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).

J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

1. Before submitting a Shop Drawing or Sample, Contractor shall:

a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

b. determine and verify:

1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;

2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;

c. confirm that the Submittal is complete with respect to all related data included in the Submittal.

2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

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3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

a. Contractor shall submit the number of copies required in the Specifications.

b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

a. Contractor shall submit the number of Samples required in the Specifications.

b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.

3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

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document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.

7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.

2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.

3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:

   a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.

   b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.

   c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

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d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.

2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03. 2.04, and 2.05.

F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.

B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:

1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and

2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.

C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:

1. Observations by Engineer;

2. Recommendation by Engineer or payment by Owner of any progress or final payment;

3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. Use or occupancy of the Work or any part thereof by Owner;

5. Any review and approval of a Shop Drawing or Sample submittal;

6. The issuance of a notice of acceptability by Engineer;

7. The end of the correction period established in Paragraph 15.08;

8. Any inspection, test, or approval by others; or

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9. Any correction of defective Work by Owner.

E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.

B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.

C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

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D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:

1. Checking for conformance with the requirements of this Paragraph 7.19;

2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and

3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.

F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.

G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.

D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

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E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. An itemization of the specific matters to be covered by such authority and responsibility; and

3. The extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

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B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.

1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.

2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.

C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

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9.05 *Lands and Easements; Reports, Tests, and Drawings*

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

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ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.

B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

A. Engineer has the authority to reject Work in accordance with Article 14.

B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.

C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.

D. Engineer's authority as to changes in the Work is set forth in Article 11.

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E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

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ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.

C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders covering:

1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;

2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;

3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and

4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

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B. If Owner has issued a Work Change Directive and:

1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.

2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.

B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.

B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.

C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.

B. An adjustment in the Contract Price will be determined as follows:

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1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);

2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or

3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).

C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:

1. A mutually acceptable fixed fee; or

2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;

b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;

c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;

d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;

e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and

f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

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11.08 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.

B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

A. *Purpose and Content*: Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal*: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.

2. *Supporting Data*: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.

    a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.

    b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

    The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review*: Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.

4. *Engineer's Full Review and Action on the Change Proposal*: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

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Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.

C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:

1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and

4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.

B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

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and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*

1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:

1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

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2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.

5. Other costs consisting of the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

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consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.

2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.

3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

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g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. The cost of purchasing, renting, or furnishing small tools and hand tools.

3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

6. Expenses incurred in preparing and advancing Claims.

7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:

a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.

b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:

1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.

2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.

2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

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Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 *Allowances*

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances*: Contractor agrees that:

1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.

C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

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thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:

a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.

2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.

3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

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D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:

1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;

3. by manufacturers of equipment furnished under the Contract Documents;

4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and

5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.

B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. *Notice of Defects*: Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

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losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

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or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

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establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

   a. the Work has progressed to the point indicated;

   b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and

   c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

   a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or

   b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

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4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

    a. to supervise, direct, or control the Work;

    b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;

    c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;

    d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or

    e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.

6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:

    a. the Work is defective, requiring correction or replacement;

    b. the Contract Price has been reduced by Change Orders;

    c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

    d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

    e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:

    a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

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b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

c. Contractor has failed to provide and maintain required bonds or insurance;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;

f. The Work is defective, requiring correction or replacement;

g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

h. The Contract Price has been reduced by Change Orders;

i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;

j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or

l. Other items entitle Owner to a set-off against the amount recommended.

2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

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submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

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significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.

2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.

2. The final Application for Payment must be accompanied (except as previously delivered) by:

   a. all documentation called for in the Contract Documents;

   b. consent of the surety, if any, to final payment;

   c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

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d. a list of all duly pending Change Proposals and Claims; and

e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Final Application and Recommendation of Payment*: If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Notice of Acceptability*: In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.

D. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

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appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. correct the defective repairs to the Site or such adjacent areas;
2. correct such defective Work;
3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.

B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.

C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.

D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

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F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);

2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;

3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or

4. Contractor's repeated disregard of the authority of Owner or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:

1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and

2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.

D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

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attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

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provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this article:

1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and

2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.

B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:

1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;

2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:

1. in person, by a commercial courier service or otherwise, to the recipient's place of business;

2. by registered or certified mail, postage prepaid, to the recipient's place of business; or

3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

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18.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

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SECTION 7

SPECIAL PROVISIONS

Project Information

This project is being funded by the Village of McFarland (Owner). All scope items and work listed below AND as required to complete the project shall be accounted for in the Contractors total bid price. Contractor shall minimize disturbance to the existing park as much as possible. Public access will be permitted during construction in areas other than the designated work zone.

Reference

The work included in this project scope shall be completed in accordance with the plans. The scope items shall be described in the following section and executed according to the referenced standards. The latest edition of the "State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction" shall serve as the referenced standard.

Item 1 – Mobilization

Scope: This work shall include the cost of moving in equipment and supplies to the site, the establishment of necessary stockpiles and trailer, perimeter fencing around the project area, and moving the same off site. This item also includes any construction staking or layout required by the contractor.

Reference: Section 619 of the standard specifications.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 2 – Erosion Control

Scope: This work consists of furnishing, installing, and maintaining tracking pad, inlet protection, and silt fence/sock at the locations designated on the Plans and where directed by the A/E, removing and disposing sediment deposits, and removing fence at the completion of the work.

Reference: Section 628 of the standard specifications, and all WDNR Construction Technical Standards including No. 1056, No. 1057, and No. 1071.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 3 – Demolition/Earthwork

Scope: This work consists of removing and disposing of miscellaneous items at the locations designated on the Plans and where directed by the A/E. Items include but are not limited to saw cutting, clearing and grubbing, tree protection, curb and gutter removal, pavement removal, abandoning and removing utilities, stockpiling of topsoil, excavating, rough grading, importing new fill, compacting, preparation of sub-grade, disposal of excess materials, temporary drainage and miscellaneous item removals.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 4 – Dense Graded Basecourse

Scope: This work describes furnishing and installing 3/4" dense graded basecourse under concrete pavement areas as shown in the details and plans. This will include a minimum of 4" top dressing of the existing skatepark footprint, full depth import for the expanded skatepark footprint and entry areas, and additional material needed for construction of raised features.

Reference: Section 305 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per ton. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 5 – Concrete Pavement – 5"

Scope: This work consists of furnishing and installing concrete pavement including forming, reinforcing, aggregate base, and concrete and finishing at locations designated on the Plans in accordance with the standard specifications.

Reference: Section 602 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per square foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 6– Skatepark Construction

Scope: This work describes furnishing and installing all elements related to the concrete skatepark area including but not limited to poured concrete, shotcrete, turndown walls, railings, steel reinforcing, steel coping, precast skate features, etc as shown in the details and plans. This item shall also include the required excavating, fine grading, importing new fill, compacting of stone and other required materials.

Reference: Technical specifications as included on the plan and details sheets.

Provide stamped Engineered Drawings.

Provide shop drawings and receive approval.

Demonstration of Experience: Potential suppliers and installers of precast concrete skate elements could include but are not limited to Spohn Ranch Skateparks, 6824 S Centinela Ave., Los Angeles CA 90230 (626)-330-5803 and American Ramp Company, 601 McKinley Ave. Joplin, MO 64801 (800) 949-2024. All vendors interested in supplying and installing these items MUST complete the "Bidder's Qualifications for Skateparks" forms found in Section 1B by the specified date.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 7 – Shade Structures

Scope: This work consists of furnishing and installing the shade structures as shown on the Plans. This item shall include pier footings.

Reference: Shade Structure: Shade Systems model 10158SW with pier mounted columns. Structure is 10' x 15' with 8' eave. Final colors should match the adjacent pickleball court structure and shall be verified by owner prior to fabrication.

Manufacturer Contact:

Commercial Recreation Specialists, 1807 Liberty Dr. Suite 101, Verona WI, 877-896-8442, ron@crs4rec.com or donna@crs4rec.com

- or pre-approved equivalent.

Provide stamped Engineered Drawings for structure and footings.

Provide shop drawings and receive approval.

FOOTINGS: The structures shall be set on prepared footings sized as shown, anchor bolts to be provided by manufacturer. The manufacturers engineer shall review and confirm design footings to the minimum values identified in IBC Table 1804.2 Allowable Foundation and Lateral Pressure. The contractor must use appropriate construction practices for the specific site conditions.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work. This shall also include stamped engineered drawings and calculations.

Item 8 – Bicycle Parking

Scope: This work consists of furnishing and installing the bike racks as shown on the Plans. Items shall be surface mounted.

Reference:
Bike Racks: Madrax model PAR-2 (Post and Ring). Frame color: Black.

Provide shop drawings and receive approval.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, accepting delivery, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 9 – Picnic Tables

Scope: This work consists of furnishing and installing the picnic tables as shown on the Plans. Items shall be surface mounted. One table shall be ADA accessible and contain 3 seats, one shall contain 4 seats.

Reference:
Bike Racks: Belson model TRDP464S-EA and TRDP463S-EA (Round Coated Steel Pedestal Table with Advantage Finish). Frame color: Black, Seat/Top color Light Blue.

Provide shop drawings and receive approval.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, accepting delivery, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 10 - Trees

Scope: This work consists of furnishing and installing trees as specified in the plans and details.

Materials: Supplement subsection 632.2.6(1) of the WisDOT Specifications with the following: Provide 3" double shredded hardwood mulch.

Reference: Per Section 632 of the standard specifications. The entire planting beds shall be mulched where applicable.

Plant Establishment Period: Replace subsection 632.3.18.1.1 of the WisDOT Specifications with the following: A plant establishment period of 1 year shall follow the completion of planting for all trees, perennials and grasses areas.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for accepting delivery, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

Item 11 – Restoration

Scope: This work consists of restoration of areas disturbed during the project and includes furnishing and installing topsoil, and sod if required.

Reference: Per WisDOT Section 625, 627, 628, 629, 630, 631.
SEED: Seed Mixture shall be WisDOT #40, per Section 630. Seed shall be free of non-seed debris and invasive weed species.
ESTABLISHMENT PERIOD: Contractor to maintain new turf areas until a substantial growth (uniform 3-4" in height) is observed and approved by the Owner or A/E. Any bare areas greater than 5" square shall be re-seeded as necessary until growth is acceptable. Contractor shall water as required to produce substantial growth, temporary irrigation systems as needed shall be incidental to this item. Mowing shall occur as needed until final project acceptance. Turf should be kept at below 3" to avoid lay down.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

VILLAGE OF
McFarland

SUMMARY SHEET

MEETING DATE: **Tuesday, January 3, 2023**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Sayer Larson, Parks Superintendent**

AGENDA ITEM: **Discussion and action regarding the addition of shade structures to the Bocce Courts at William McFarland Park.**

PREVIOUS ACTION:
None.

ISSUE SUMMARY:
Four Lakes Bocce Association is requesting shade structures to be installed over the last uncovered benches at the north end of the bocce courts. The Village and Association have partnered on these types of projects before with the club providing a financial contribution to cover the material cost and the Village addressing the installation. This is a public amenity, the Village owns the responsibility for the maintenance and ongoing development of this structure. Material availability and labor shortage have made lining up an economical solution difficult similar to year's past. Thus far we have been able to locate the materials which are two to three times the cost the last time we added shade structures to the south end of the facility. The estimated cost for the materials is about $12,000 without labor, and initial proposals have seen this cost increase to over $20,000. The last time we did this project the total was around $7,000 with labor. To address this as economically as we can, we are suggesting adding the two additional shade structures to the bid for the Skate Park. The contractor for the Skate Park project (immediately adjacent) will need to install at least one shade structure for that project. Adding two more in close proximity takes advantage of economies of scale and provides a better outcome for the project than we presently have options for. Certainly, when bids are received then we can evaluate this again.

Staff continues to work on this proposal with the Association and their financial involvement in the project as well. Given the higher cost, we are proposing a cost sharing model to help take the entire burden off the club while still recognizing this is a public amenity.

FINANCIAL/BUDGET IMPACT:
Current project estimate is around $20,000 for materials and labor. Final costs will be reconciled and awarded at time of contract award for the Skate Park. The funding for the project will come from the Parks Fund.

VILLAGE PLAN REFERENCE:
None.

ORDINANCE REFERENCE:

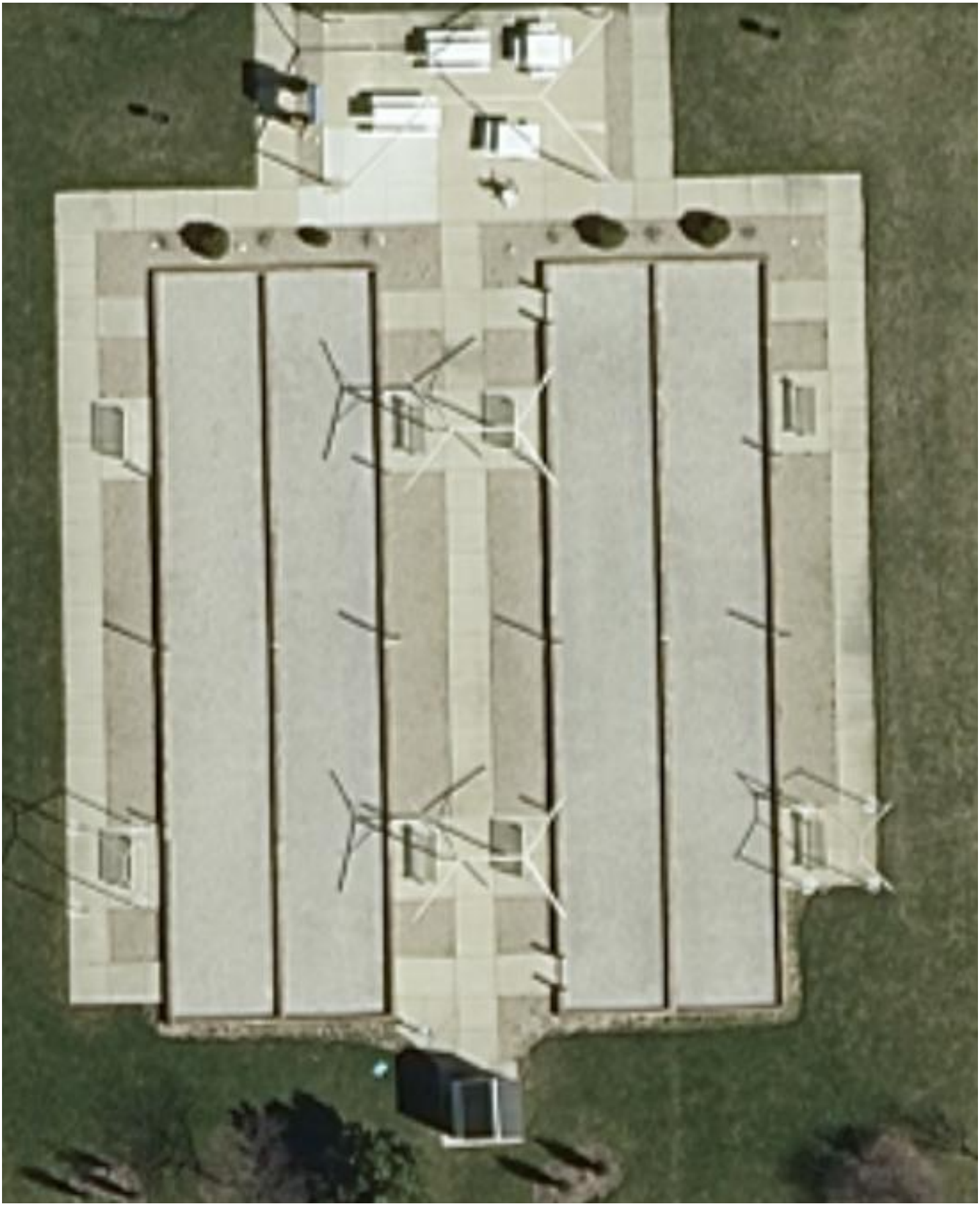
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Recommended Action:

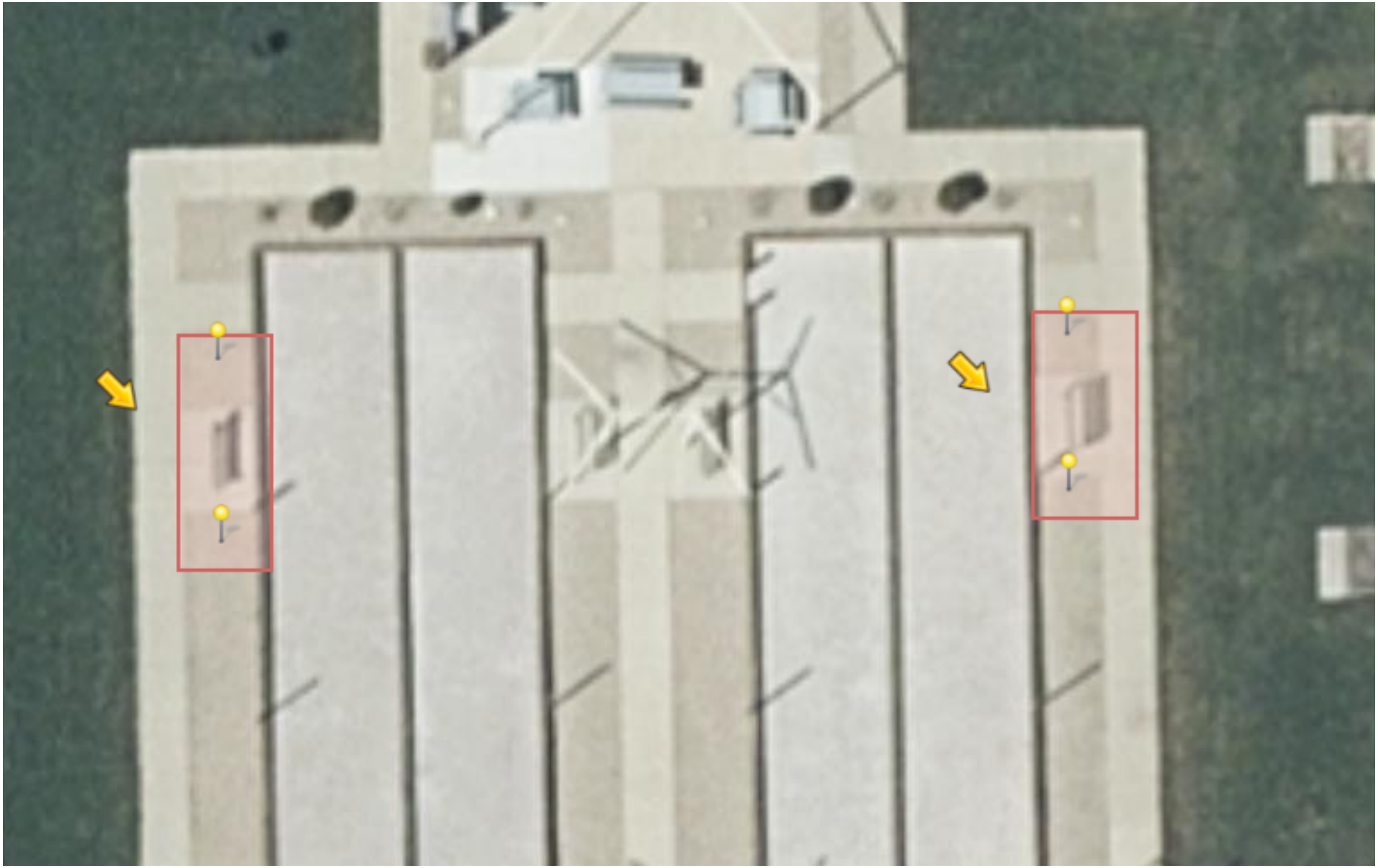
Motion, second to add two new shade structures to bid and specifications for the Skate Park Project in order to be constructed at the Bocce Courts. Further review of costs will occur at time of consideration for contract award of the Skate Park Project.

ATTACHMENTS:
1. Bocce aerial
2. Requested shade locations

Bocce aerial



Requested Shade Locations



VILLAGE OF
McFarland

SUMMARY SHEET

MEETING DATE: **Tuesday, January 3, 2023**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Sayer Larson, Parks Superintendent, Matt Schuenke, Village Administrator**

AGENDA ITEM: **Discussion and action to make a recommendation to the Village Board regarding irrigation work at Community Park.**

PREVIOUS ACTION:
The Parks and Recreation Committee recommended award of contract at its meeting on June 7, 2022.

The Village Board awarded contract for the first phase at Community Park on June 14, 2022.

ISSUE SUMMARY:
The proposal for full inground irrigation was discussed at the December committee meeting. The design displayed the proposed layout for the addition of lateral lines and sprinkler heads and the location of the control panel. The 2023 Budget added funding to the project to bring this system to a full inground irrigation system to improve turf performance as well as reduce staff labor. This would eliminate the need for any above-ground watering systems.

If the proposal is ultimately approved, this will be accomplished via a change order to the original contract. The installation of the additional inground irrigation materials will flow nicely into the work that will be resumed in the Spring. Work to conclude in Spring: Well and mainlines, finish grading and seeding.

Staff are seeking a recommendation from the committee to the Village Board regarding design approval for the irrigation work at Community Park.

FINANCIAL/BUDGET IMPACT:
The 2022 Budget was approved to allocate $1,100,000 for the Community Park project authorized earlier this year. This included $725,000 from borrowed money, $350,000 from the Parks Fund, and $25,000 from capital reserves. The 2023 Budget adds another $275,000 in borrowed money to support expanding the irrigation system. The expenses for the project were set as follows:

$	755,447	Construction Contract
$	(10,000)	Alternate (Spring 2023 Completion, Deduct)
$	6,000	Owner Furnished Gate
$	80,000	High Capacity Well
$	***73,000***	***Irrigation Mainlines***

$	***42,000***	***Water Wheel (3)***
$	***275,000***	***Inground Irrigation (2023 Budget Addition)***
$	45,916	Engineering/Construction Administration
$	8,857	Services (Asbestos Abatement, Soil Testing, Etc.)
$	100,000	Contingency (10% of Project Cost)
($	1,220)	Rounding
$1,375,000		Total Project Expense

Most of the mass grading work is complete within Phase 1 with fine grading and grass planting scheduled for the Spring next year. The 2023 Budget included additional funding of $275,000 to upgrade from the above irrigation mainlines and water wheels to an in ground irrigation system. The change order will align this additional work under the same lead contractor within the process to plant and grow the grass making for a better end product. Funds of $1.1 million committed in 2022 will remain and apply next year as well to close out the remainder of the contract once complete. Total project allocation is set at $1.375 million and expenses will be evaluated further upon review of the change order.

VILLAGE PLAN REFERENCE:
Accepted within the 2023-2027 Capital Improvement Plan and approved within the 2023 Budget.

ORDINANCE REFERENCE:
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
Recommended motion:

Motion, second to recommend to the Village Board approval of the design presented to provide full in-ground irrigation at Community Park.

ATTACHMENTS:
1. Community Park Irrigation

NOTES

- PRIOR TO CUTTING INTO THE SOIL, LOCATE ALL CABLES, CONDUITS, & OTHER UTILITIES THAT ARE COMMONLY FOUND UNDERGROUND, & TAKE PROPER PRECAUTIONS NOT TO DAMAGE OR DISTURB SUCH IMPROVEMENTS.
- THE INSTALLATION OF THE IRRIGATION SYSTEM SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS & CODES.
- THE IRRIGATION SYSTEM IS SHOWN DIAGRAMATICALLY FOR CLARITY. PIPE + HEAD PLACEMENT MAY NEED TO BE ADJUSTED TO ACCOMODATE SITE CONDITIONS.
- ADJUST ALL SPRAY HEADS TO AVOID OVERTHROW ONTO WALLS OR STREETS. AVOID UTILITY BOXES, TRANSFORMERS, ETC. USE DIFFERENT SPRAY PATTERNS THAN SHOWN IF OBSTACLES ENCOUNTERED REQUIRE IT.
- ALL PIPE + WIRING UNDER PAVING & ROADWAYS SHALL BE SLEEVED. PIPES MAY BE SLEEVED TOGETHER IF AN EQUIVALENT INCREASE IN SLEEVE SIZE IS MADE.
- CONTROLLER IS TO BE MOUNTED AS DETAILED. COORDINATE ELECTRICAL WORK WITH ELECTRICAL CONTRACTOR.
- CONTRACTOR TO INSTALL A GROUNDING LINE SURGE DEVICE A MIN. EVERY 500' & END OF LINE ALONG TWO-WIRE PATH.
- THE USE OF MANUFACTURER'S NAME AND MODEL OR CATALOG # IS FOR THE PURPOSE OF ESTABLISHING THE STANDARD OF QUALITY & CONFIGURATION DESIRED. DESIGN OF IRRIGATION SYSTEM IS BASED ON THESE MATERIALS. IF OTHER EQUIPMENT IS SUBSTITUTED, WITH APPROVAL, DESIGN REQUIREMENTS ARE TO BE ADJUSTED ACCORDINGLY.
- IRRIGATION SYSTEM REQUIRES A MIN. OF 300GPM @ 95PSI AT POINT OF CONNECTION.

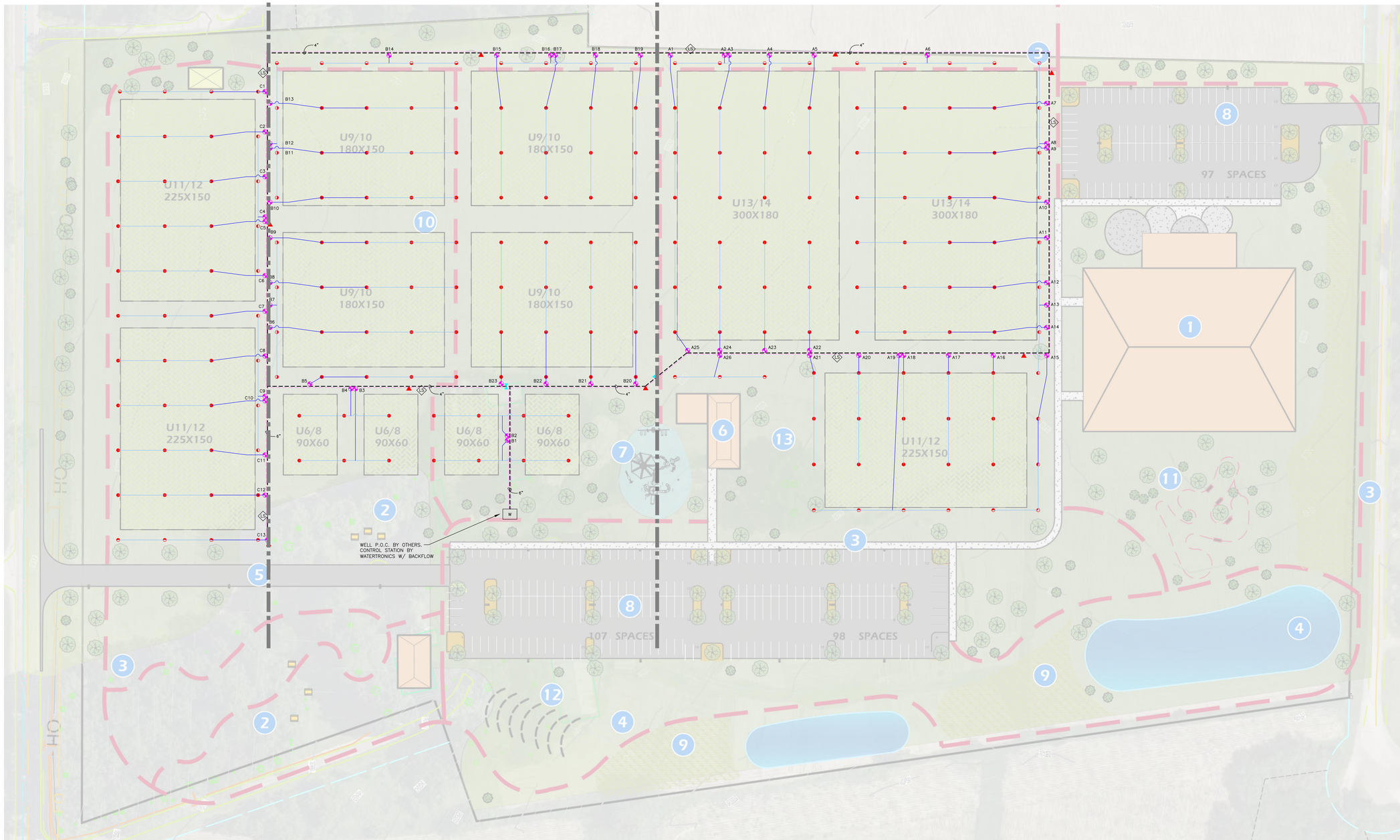
IRRIGATION LEGEND

SYMB.	DESCRIPTION
	HUNTER I-25-04 - #15 NOZZLE 57° RAD 14.3 GPM @ 60 PSI
	RAIN BIRD ELECTRIC VALVE 200-PGA W/ INTEGRATED LXIVM SOL
	QUICK COUPLING VALVE
	NIBCO GATE VALVE FOR ISOLATION SIZED TO LINE
W	WATERTRONICS CONTROL STATION PUMP AND CONTROLLER HOUSING
C	RAIN BIRD ELECTRIC CONTROLLER ESP-LXIVM 2-WIRE SYSTEM
LS	RAIN BIRD LINE SURGE DEVICE IVM-SD
	14/2 RAIN BIRD MAXI CABLE
	4" SDR21 CLASS 200 PVC PIPE - BE (UNLESS NOTED OTHERWISE)
	2" SDR21 CLASS 200 PVC PIPE - SW
	1-1/2" SDR21 CLASS 200 PVC PIPE - SW

PHASE 3

PHASE 2

PHASE 1



1 IR1 OVERALL IRRIGATION PLAN
SCALE: 1" = 40'-0"
NORTH

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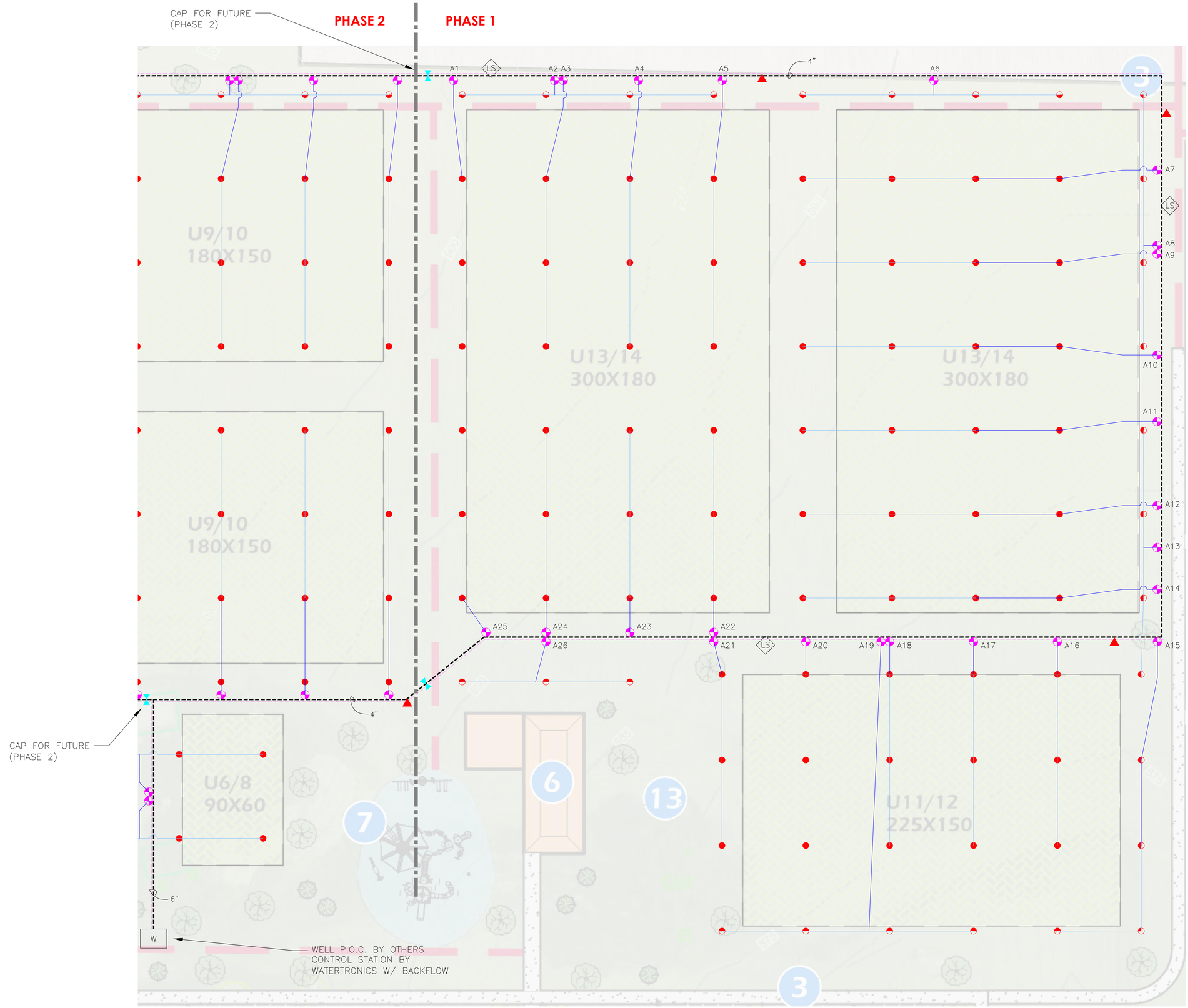
MCFARLAND COMMUNITY PARK
MCFARLAND, WI

IRRIGATION PLAN

SCALE: 1" = 40'
DRAWN BY: R.G.
DATE: 11/30/2022
DRAWING: 2022-026
DESIGN BY: R.G.
E SIZE
SHEET 1 OF 4

REVISED



1 / IR1 IRRIGATION PLAN – PHASE 1

SCALE: 1" = 20'-0"

NORTH

IRRIGATION LEGEND

SYMB.	DESCRIPTION
	HUNTER I-25-04 – #15 NOZZLE 57° RAD 14.3 GPM @ 60 PSI
	RAIN BIRD ELECTRIC VALVE 200-PGA W/ INTEGRATED LXIVM SOL
	QUICK COUPLING VALVE
	NIBCO GATE VALVE FOR ISOLATION SIZED TO LINE
W	WATERTRONICS CONTROL STATION PUMP AND CONTROLLER HOUSING
	RAIN BIRD ELECTRIC CONTROLLER ESP-LXIVM 2-WIRE SYSTEM
LS	RAIN BIRD LINE SURGE DEVICE IVM-SD
	14/2 RAIN BIRD MAXI CABLE
	4" SDR21 CLASS 200 PVC PIPE – BE (UNLESS NOTED OTHERWISE)
	2" SDR21 CLASS 200 PVC PIPE – SW
	1-1/2" SDR21 CLASS 200 PVC PIPE – SW

VALVE LEGEND

NO.	SIZE	FLOW (GPM)
A1	2"	42.9
A2	2"	57.2
A3	2"	42.9
A4	2"	42.9
A5	2"	42.9
A6	2"	57.2
A7	2"	57.2
A8	2"	57.2
A9	2"	57.2
A10	2"	57.2
A11	2"	57.2
A12	2"	57.2
A13	2"	57.2
A14	2"	57.2
A15	2"	57.2
A16	2"	42.9
A17	2"	42.9
A18	2"	42.9
A19	2"	49.2
A20	2"	42.9
A21	2"	42.9
A22	2"	42.9
A23	2"	42.9
A24	2"	42.9
A25	2"	42.9
A26	2"	42.9

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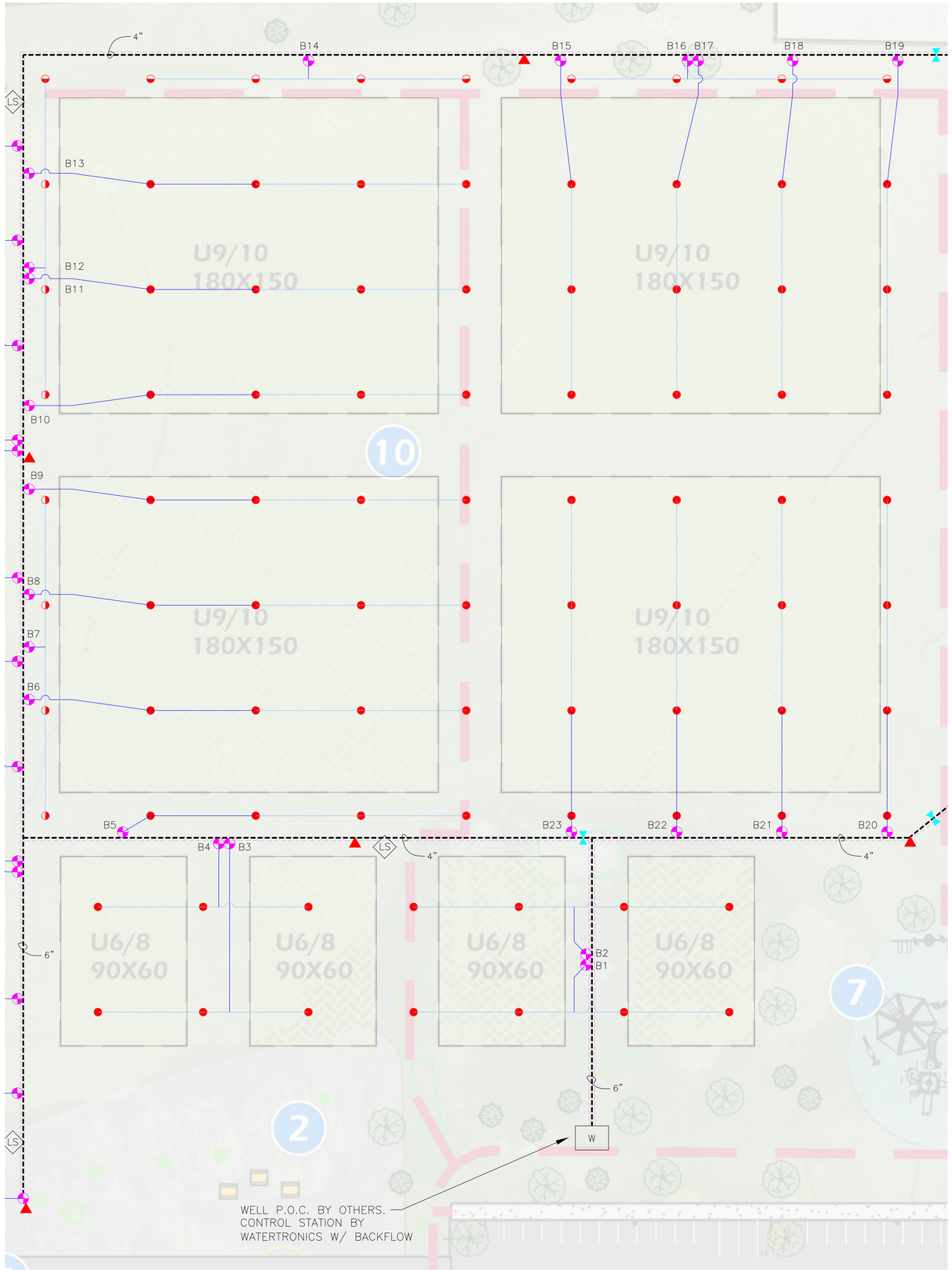
MCFARLAND COMMUNITY PARK
MCFARLAND, WI

IRRIGATION PLAN

SCALE: 1" = 20'
DRAWN BY: R.G.
DATE: 11/30/2022
DRAWING: 2022-026
DESIGN BY: R.G.
E SIZE
SHEET 2 OF 4

REVISED



1 IR1 IRRIGATION PLAN – PHASE 2

SCALE: 1" = 20'-0"

NORTH

IRRIGATION LEGEND

SYMB.	DESCRIPTION
	HUNTER I-25-04 – #15 NOZZLE 57° RAD 14.3 GPM @ 60 PSI
	RAIN BIRD ELECTRIC VALVE 200-PGA W/ INTEGRATED LXIVM SOL
	QUICK COUPLING VALVE
	NIBCO GATE VALVE FOR ISOLATION SIZED TO LINE
W	WATERTRONICS CONTROL STATION PUMP AND CONTROLLER HOUSING
	RAIN BIRD ELECTRIC CONTROLLER ESP-LXIVM 2-WIRE SYSTEM
LS	RAIN BIRD LINE SURGE DEVICE IVM-SD
	14/2 RAIN BIRD MAXI CABLE
	4" SDR21 CLASS 200 PVC PIPE – BE (UNLESS NOTED OTHERWISE)
	2" SDR21 CLASS 200 PVC PIPE – SW
	1-1/2" SDR21 CLASS 200 PVC PIPE – SW

VALVE LEGEND

NO.	SIZE	FLOW (GPM)
B1	2"	57.2
B2	2"	57.2
B3	2"	42.9
B4	2"	42.9
B5	2"	57.2
B6	2"	57.2
B7	2"	57.2
B8	2"	57.2
B9	2"	57.2
B10	2"	57.2
B11	2"	57.2
B12	2"	57.2
B13	2"	57.2
B14	2"	57.2
B15	2"	42.9
B16	2"	57.2
B17	2"	42.9
B18	2"	42.9
B19	2"	42.9
B20	2"	57.2
B21	2"	57.2
B22	2"	57.2
B23	2"	57.2

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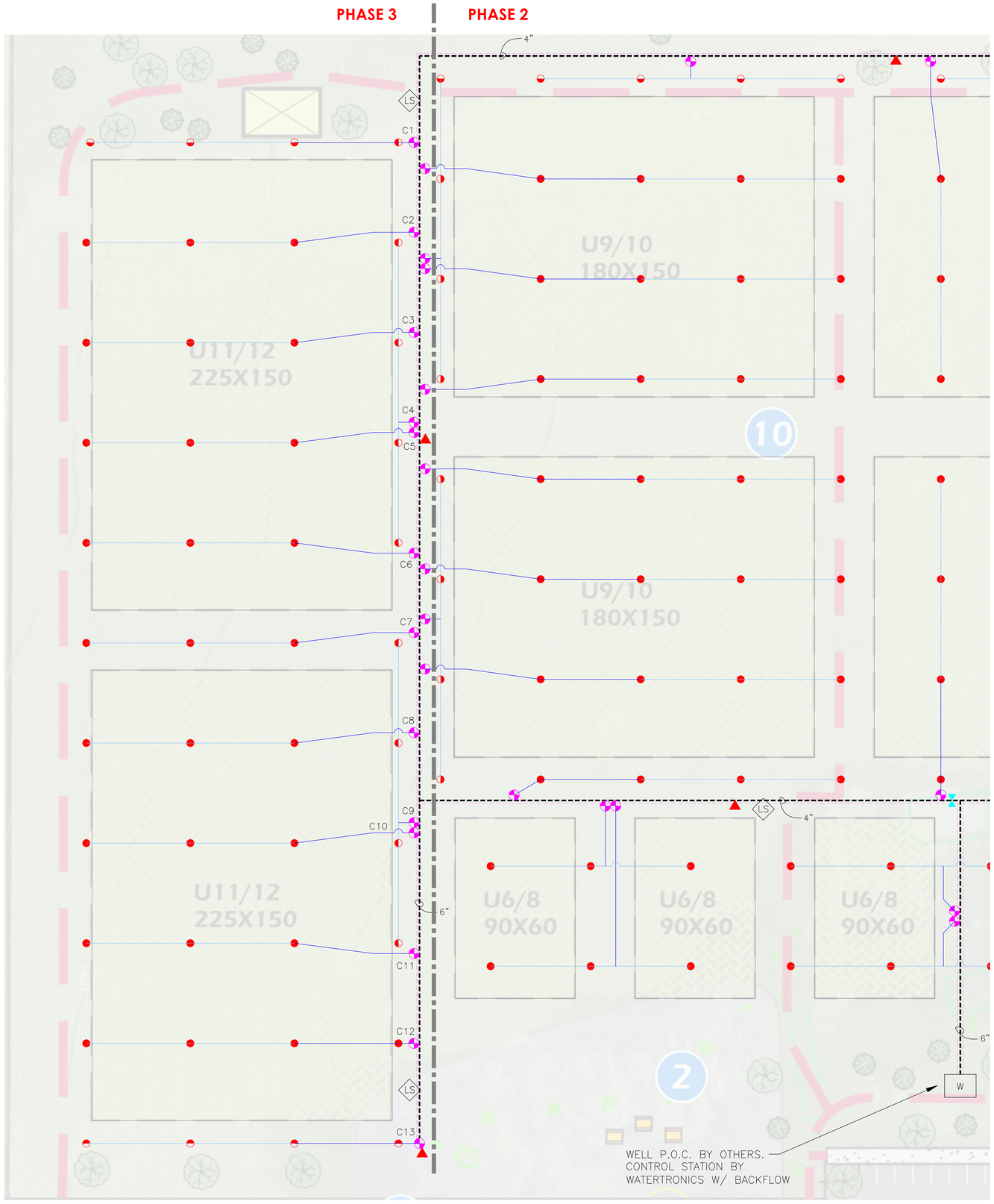
MCFARLAND COMMUNITY PARK
MCFARLAND, WI

IRRIGATION PLAN

DRAWING: 2022-026
DESIGN BY: R.G.
DRAWN BY: R.G.
SCALE: 1" = 20'
DATE: 11/30/2022
E SIZE
SHEET 3 OF 4

REVISED



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	1-1/2" SDR21 CLASS 200 PVC PIPE - SW

VALVE LEGEND

NO.	SIZE	FLOW (GPM)
C1	2"	57.2
C2	2"	42.9
C3	2"	42.9
C4	2"	57.2
C5	2"	42.9
C6	2"	42.9
C7	2"	42.9
C8	2"	57.2
C9	2"	42.9
C10	2"	42.9
C11	2"	42.9
C12	2"	57.2
C13	2"	57.2

1 / IR1 IRRIGATION PLAN - PHASE 3
SCALE: 1" = 20'-0"

NORTH

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MCFARLAND COMMUNITY PARK
MCFARLAND, WI
IRRIGATION PLAN

SCALE: 1" = 20'
DRAWN BY: R.G.
DATE: 11/30/2022
DRAWING: 2022-026
DESIGN BY: R.G.
E SIZE
SHEET 4 OF 4

REVISED

VILLAGE OF
McFarland

SUMMARY SHEET

MEETING DATE: **Tuesday, January 3, 2023**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Sayer Larson, Parks Superintendent**

AGENDA ITEM: **Discussion regarding Chapter 2 Parks and Recreation Facility Policy Section 2.04**

PREVIOUS ACTION:
The Parks, Recreation and Natural Resources Committee recommended approval to the Village Board of the Chapter 2 Parks and Recreation Facility Policy at their January 23, 2020 meeting.

The Village Board approved the Chapter 2 Parks and Recreation Facility Policy at their meeting on February 10, 2020.

ISSUE SUMMARY:
Section 2.04 of the Chapter 2 Parks and Recreation Facility Policy details the scheduling usage of parks and recreational facilities. Reservations open to the general public on the day after Martin Luther King Jr. Day through an online platform, Spotz. This platform handles reservations for park shelter facilities and, recently incorporated, the Bocce courts.

For organized leagues, they are permitted to reserve in advance of the opening for the general public. During the month of November, the department emails key contacts for organized leagues about their requests for the upcoming year. These requests can include shelters and fields. The organized league is informed they are to respond with applicable requests by December 15th. This allows the department time to incorporate any reservations into the online platform prior to opening in January. Organized leagues are also required to identify if an event is expected to have attendance in excess of 200 people. Field usage requests are tracked internally within the Public Works Department with the Parks Superintendent being the main contact for requests.

FINANCIAL/BUDGET IMPACT:
None.

VILLAGE PLAN REFERENCE:
Chapter 2 Parks and Recreation Facility Policy

ORDINANCE REFERENCE:
None.

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
No action required. This item is for discussion only.

ATTACHMENTS:

1. Chapter 2 - Athletic Field Usage Policy (PDF)

CHAPTER 2 Parks and Recreation Facility Policy

SECTION 2.01 Policy Purpose

McFarland parks and recreational facilities are provided primarily for the use and enjoyment of Village residents and those who pay property taxes to the Village of McFarland.

SECTION 2.02 Organization Responsibilities

The Public Works Department ("Department") has the responsibility for the maintenance and management of Village parks and facilities. Requests for parks utilization are managed by this Department. Special requests and requests outside the standard scope of usage will be reviewed and approved by the Parks, Recreation, and Natural Resources Committee ("Committee").

SECTION 2.03 Authorized Users

(a) **Personal/Individual Use.** Individuals wishing to use the public athletic fields may do so at their leisure, providing that another party has not previously reserved the fields. There is no charge for the use of these fields. Individuals may contact the Village to check the availability of a facility at any time. In the event that a field is not in use, but has been prepared for play later in the day, the Village asks that individual users respect this effort and chose an alternative location.

(b) **Organizational League Use:**

(1) Groups wishing to utilize the public athletic facilities on an on-going basis may do so with prior scheduling approval from the Parks Superintendent. Requests for field use are considered on a first-come, first-served basis, with an attempt to balance the needs of all groups utilizing a particular area. On-going field schedules are kept by the Parks Superintendent to facilitate the organized, efficient use of the fields throughout the year.

(2) Organized leagues will be charged a maintenance fee for their operation within Village Parks. The fee shall be set on a per individual basis for each season that they operate. The fee shall be set through Appendix A of the Village Code of Ordinances. In kind labor and materials will be considered in lieu of the fee subject to review and approval of the Department.

(3) The Village does not accept any liability for the participants of these groups. All organized leagues shall sign an indemnification agreement and provide proof of insurance annually unless otherwise waived by the Village Administrator.

(4) The Village shall utilize the following criteria in determining which organized leagues will be authorized to use McFarland facilities:

(i) The residency of the requesting league is based on the business location of the organization rather than the residency distribution of individual team members.

(ii) The number of teams represented by the organized league and the extent of their scheduling needs.

(iii) The effect the league usage will have on Village facilities and whether or not the usage may unduly degrade the condition of the facility or overtax the maintenance capabilities/budget of the Village.

(iv) The intended use of the facility, why a particular facility is needed or desired for league use, and what other facility options are available to the league.

(v) If the activity is organized or sanctioned by the McFarland School District.

(5) Appeals of decisions made by the Parks Superintendent, and/or designee, regarding scheduling decisions made in accordance with this section shall be made to the Committee.

(c) **For-Profit Business Groups.** For-profit business groups wishing to utilize the public athletic facilities in McFarland on a short-term basis may do so with prior scheduling approval from the Department. Requests for field use are considered on an individual basis and are granted only after all McFarland groups have been scheduled. Requests for on-going use of a facility must be reviewed and approved by the Parks Superintendent. A field usage fee will be charged for the use of the facilities. This fee shall be established annually as part of Appendix A in the Village Code of Ordinances.

(d) **Village Community Organization Group Use.** The Village shall allow an exemption from the park rental fee for Village Community Organization Groups that do not charge a membership fee and/or are approved for an exemption for this purpose from the Committee. The Committee shall initially create and annually review the list of Community Organizations approved for the fee exemption. The list of exemptions shall be maintained as Appendix A of this Policy. All Village Community Organization Groups shall still be required to secure the deposit fee at the time of rental unless otherwise authorized by the Village Administrator.

SECTION 2.04 Scheduling Usage of Parks and Recreational Facilities

(a) The Department is assigned the responsibility of master scheduling the use of all Village parks and recreational facilities. All requests to reserve parks and recreational facilities must be approved by the Department. All facilities will be rented on a first come, first serve basis with reservations being accepted annually beginning the day after Martin Luther King Jr. Day.

(b) All Village parks and recreational facilities with restrooms, covered shelters, green space, and/or specially equipped athletic fields or courts may be reserved by the public. The restrooms shall be available for general use by the public rather than the exclusive use of the reserving group. A shelter reservation entitles exclusive use of the shelter, but not the park and restrooms.

(c) Organized leagues that are authorized users will be permitted to reserve in advance, time that is necessary to accommodate the scheduling of league play throughout the season.

(1) **Organizational League Scheduling**. To ensure that no scheduling conflicts will occur throughout the year, all league organizations desiring to use Village Park facilities must submit to the Department, by December 15th of the preceding year, a detailed schedule of dates and times that facilities are proposed to be used. The league organizations shall specifically identify any events in which attendance is expected to be in excess of 200 people at one time.

(2) The detailed scheduling by the Village of recreational facility usage during league seasons may be delegated to the recognized league organizations, subject to the following conditions:

(i) All organized leagues that are based in McFarland, or other groups authorized to use the facility, will be scheduled in a fair and unbiased manner.

(ii) Advance scheduling priority of specific days or times during the league season will be permitted, provided that sufficient non-scheduled blocks of time are made available for competing leagues to use at reasonably convenient times.

(iii) If the detailed scheduling has not been delegated to a league organization, the Department will schedule the usage.

(iv) The Village may make certain dates and times unavailable for use by organized leagues. When necessary, the Village may also preempt scheduled events with reasonable notice to the scheduling organization.

(3) The rescheduling of field usage due to inclement weather or field unavailability shall be done by the league organization that has been assigned the responsibility of doing the detailed scheduling. The league organization shall receive prior approval from the Department prior to initiating the process to reschedule. Make-up dates/times may not be reserved in advance if they fall outside the original block of dates and times assigned to the league. The rescheduling of events shall be done by the league organization in an unbiased manner that provides fair access to all authorized users.

(d) **Usage by the General Public.** The general public will be able to use non-scheduled time slots on a first come, first serve basis beginning the day after Martin Luther King Jr. Day annually.

SECTION 2.05 Capital Improvements and Equipment.

(a) Facilities may not be constructed or modified in a Village park by any organization without the prior approval of the Village and a written agreement specifying the purpose and duration of the intended use, liability, insurance coverage, maintenance responsibilities, and other details.

(b) Any league organization that is proposing an improvement to a recreational facility or requesting a change in maintenance practices shall appear before the PRNR Committee to explain the need.

(c) Any equipment that is placed in a Village park or recreational facility by an organization must have prior approval by the Parks Superintendent or designee and be left in playable condition if it is not removed between scheduled events. *EXAMPLE – soccer goals that are left in playing position may not be secured in such a manner as to prohibit their use by others.* The Village shall not be responsible for any normal wear and tear or damage that might occur to said equipment. Privately owned equipment that is removed from the park playing area between scheduled events may be kept private and does not need to be made available to other users. *EXAMPLE(s) – bases, field markers, balls, bocce balls, soccer goals and other such portable equipment.*

(1) Organized groups are not prohibited from working out cooperative financial agreements among themselves for sharing the acquisition, maintenance, and replacement costs of the equipment. The Village shall be provided a copy of any such agreements that exist but will not get involved in the enforcement of private agreements between parties.

(2) Failure to have cooperative sharing agreements in place shall not prohibit other organized groups from using equipment that is left in place between events.

(3) All league organizations are responsible for keeping the public areas (i.e. – bathrooms, kitchen areas, storage areas, etc.) in a condition that is neat and orderly in appearance. All equipment, food items and the like. that are not for public use or sale, must be secured and not available to the public. All league organizations shall be responsible for keeping the public areas they use during tournaments in a condition that is neat and orderly in appearance. All public areas will be kept to the satisfaction of the Parks Superintendent or designee.

SECTION 2.06 - Fee Structure

(a) The fees for rental and use of Village Parks and Facilities shall be set by the Village Board annually as part of Appendix A in the Village Code of Ordinances.

(b) The fee structure may be fully or partially waived by the Committee upon recommendation of Village Staff on a case by case basis based on the following factors:

(1) Whether the user organization has made previous or current financial or in-kind contributions to improve Village parks or recreational facilities.

(2) The residency of the group requesting the waiver, based on the business location of the organization rather than the residency distribution of individual team members.

(3) Whether the requesting group provides ongoing field maintenance services or other activities that are of benefit to other users or to Village residents at large.

(4) The nature and cost of services that the Village must provide to support the requested use.

(5) Whether the event is of general community interest.

(6) Whether the activity benefits the community at large by promoting positive societal values or behaviors.

(7) If other agreements are in place that address fee structure.

(c) All events or programs that are organized or sanctioned by the McFarland School District shall be exempt from fees.

(d) User fee and security deposit is to be paid at the time the reservation is made.

(e) Reservations cancelled less than thirty (30) days prior to the event only get the security deposit returned.

(f) No refunds will be made due to inclement weather or other circumstances.

(g) If there are damages to the park in excess of the security deposit, the security deposit will not be returned and the excess cost of repair shall be the responsibility of the renter.

Adopted: February 10, 2020 Revised: None.

CHAPTER 2 Parks and Recreation Facility Policy

Appendix A

The following are a list of Village Community Organization Groups that the Committee has determined may be exempt from paying the park shelter rental fee:

4-H

Ally's Honky Tonk Hustle

American Legion

Boy Scouts

Chamber of Commerce

Family Festival

Friends of McFarland Parks

Friends of the Library

Garden Club

Girl Scouts

JAM Fest

Lioness Club

Lions Club

McFarland Hockey

McFarland Music Boosters

McFarland Soccer Club

McFarland Softball Association

McFarland Youth Center

McFarland Youth Softball

Optimists

School District of McFarland

VILLAGE OF
McFarland

SUMMARY SHEET

MEETING DATE: **Tuesday, January 3, 2023**

SECTION: **Business**

DEPARTMENT: **Public Works**

CONTACT: **Sayer Larson, Parks Superintendent**

AGENDA ITEM: **Discussion regarding scheduling and tournaments for the pickleball courts and the disc golf course.**

PREVIOUS ACTION:
none

ISSUE SUMMARY:
This year the Village opened Orchard Hill Disc Golf Course and an 8 court pickleball complex at William McFarland Park. As we approach the upcoming season, use structure needs to be established.

The disc golf course opened July 22nd and closed November 14th. There is an established daily or annual permit required by users. The course is open daily for play from late spring to late fall during park hours 6am to 10pm. The course saw moderate amounts of play throughout the week, with peak use on weeknights and weekends. The course was well received and praised as one of the best 9-hole courses around.

During the season, public works was contacted with a request to permit tournament play. The request was not approved due to the shortened season and wanting to meet the needs of annual permit holders due to the truncated season. Tournaments generally close the course to public play from Friday afternoon to Sunday afternoon (48 hours). Courses that host tournament play annually generally permit 2-3 tournaments per season.

The pickleball courts opened for play on October 8th and were closed due to weather on November 15th. The courts were free to use on a first come first serve basis utilizing open play guidelines during park hours 6am to 10pm daily. The courts saw heavy use in the mornings of most days and moderate use in the evenings. The courts have been highly praised for design and facility support.

Throughout the Dane County community, there are 15 municipalities that offer some sort of pickleball courts. These could be dedicated pickleball courts or dual tennis/pickleball courts. The majority of dedicated pickleball courts lie outside of the City of Madison Park system.

There is no consensus amongst court usage between reservations and open play. This is also true for renting courts to a third party for league play. Those municipalities that hosted tournaments in 2022 only permitted one.

Public Works has yet to receive any formal requests for leagues through entities such as CAPA (Capital Area Pickleball Association). CAPA works with Sun Prairie Parks, Recreation & Forestry. An

example of a schedule matrix is included in the packet. There have been nominal requests for court reservations.

Public Works has received comments from community members as to how they would like the courts to be operated. The general consensus of comments received are courts should be open play and free to use. Community members have also offered to lead public events such as learn to play pickleball.

Staff recommendations for tournament play on disc golf course is to limit closure of the course to no more than two events per season. Duration of closure is not to exceed three continuous days per event.

Staff recommendations for tournament play at pickleball courts is to limit closure of the courts to no more than two events per season. Duration of closure is not to exceed four continuous days per event. Staff also recommends open play guidelines with no reservations. This will enable staff to evaluate court usage during the 2023 season.

FINANCIAL/BUDGET IMPACT:
None

VILLAGE PLAN REFERENCE:
None

ORDINANCE REFERENCE:
None

BOARD, COMMISSION OR COMMITTEE RECOMMENDATION:
No action on this item. This is for discussion only.

ATTACHMENTS:
1. Sun Prairie CAPA

CITY OF SUN PRAIRIE Wisconsin
PARKS, RECREATION & FORESTRY

2022 Pickleball Court Schedule

Wyndham Hills Community Park
675 N. Heatherstone Drive
(10 dedicated pickleball courts)

Effective September 1-November 1, 2022

Day	Time	Courts	Skill Level/Type of Play
Monday	5:00-7:00 am	7-10	All Skill Levels Organized Play
	7:00-9:00 am	3-6	3.0+ Intermediate Organized Play
	7:30-10:30 am	9-10	3.75+ High Intermediate *★requires advanced sign up*
	9:00 am-Noon	3-6	3.5+ Round Robin *★requires advanced sign up*
		1,2,7,8	Social Intermediate Organized Play
	10:30 am-12:30 pm	9-10	Social Intermediate Organized Play
	4:00-7:00 pm	7-10	3.75-4.5 Round Robin *★requires advanced sign up*
	5:00-8:00 pm	3-6	3.0+ Intermediate *★requires advanced sign up*
Tuesday	9:00-11:00 am	7-10	3.0+ Round Robin *★requires advanced sign up*
	9:00 am-Noon	3-6	3.5+ High Intermediate *★requires advanced sign up*
	5:00-8:00 pm	7-10	Social Intermediate Organized Play
Wednesday	5:00-7:00 am	7-10	All Skill Levels Organized Play
	7:00-9:00 am	3-6	3.0+ Intermediate Organized Play
	9:00 am-Noon	1-6	Social Intermediate Organized Play
	9:00 am-Noon	8-10	4.0+ Advanced *★requires advanced sign up*
	5:00-8:00 pm	3-6	3.5+ High Intermediate *★requires advanced sign up*
Thursday	7:00-9:00 am	3-6	3.0+ Intermediate Organized Play
	9:00-11:00 am	3-6	Skills, Drills & Round Robin Play *★requires advanced sign up*
	9:00 am-Noon	7-10	3.5+ Intermediate *★requires advanced sign up*
	1:00-3:00 pm	3-4	Meetup Event (TBD)
	5:00-8:00 pm	3-6	3.75+ High Intermediate *★requires advanced sign up*
Friday	5:00-7:00 am	7-10	All Skill Levels Organized Play
	9:00 am-Noon	1-6	Social Intermediate Organized Play
	9:00 am-Noon	8-10	4.0+ Advanced *★requires advanced sign up*
Saturday	8:00-10:00 am	3-4	3.75+ High Intermediate *★requires advanced sign up*
Sunday	9:00 am-Noon	3-6	4.0+ Advanced *★requires advanced sign up*

When courts are full during organized play and during times not listed on the schedule, players waiting should use paddle holders

- For activities requiring advanced sign up, please contact the PRF Dept @ cshelton@cityofsunprairie.com

- There are two tennis courts striped for Pickleball @ Orfan Park (2050 St. Albert the Great Drive)
- Go to www.usapickleball.org for skill level ratings
- For a full schedule of Parks & Rec classes, visit rec.cityofsunprairie.com

Updated 9/1/2022