PPA#: 16-0168

PARKING MAINTENANCE FY 2017

MONTANA STATE UNIVERSITY

BOZEMAN, MT

PREPARED FOR:
CAMPUS PLANNING, DESIGN & CONSTRUCTION
MONTANA STATE UNIVERSITY
BOZEMAN, MT
PHONE: 406-994-4131
FAX: 406-994-6572

PREPARED BY:
DOWL

SHEET INDEX

<table>
<thead>
<tr>
<th>SHEET NO.</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>COVER SHEET</td>
</tr>
<tr>
<td>C2</td>
<td>NOTES, LEGEND, ABBREVIATIONS, SURVEY CONTROL</td>
</tr>
<tr>
<td>C3</td>
<td>KEY MAP</td>
</tr>
<tr>
<td>C4</td>
<td>LINCOLN LOT</td>
</tr>
<tr>
<td>C5</td>
<td>YELLOWSTONE LOT</td>
</tr>
<tr>
<td>C6</td>
<td>LANGSTON LOT</td>
</tr>
<tr>
<td>C7</td>
<td>FACULTY COURT</td>
</tr>
<tr>
<td>C8</td>
<td>SOUTH FIELDHOUSE LOT – BAY B</td>
</tr>
<tr>
<td>C9</td>
<td>NORTH FIELDHOUSE LOT</td>
</tr>
<tr>
<td>C10</td>
<td>LOWS AND CLARK LOT</td>
</tr>
<tr>
<td>C11</td>
<td>SOUTH 12TH STREET LOT</td>
</tr>
<tr>
<td>C12</td>
<td>HAMILTON LOT, ROBERTS LOOP</td>
</tr>
<tr>
<td>C13</td>
<td>S. 7TH RESERVED LOT</td>
</tr>
<tr>
<td>C14</td>
<td>NOT USED</td>
</tr>
<tr>
<td>C15</td>
<td>NOT USED</td>
</tr>
<tr>
<td>C16</td>
<td>EAST UNIFIELD LOT</td>
</tr>
<tr>
<td>C17</td>
<td>SOUTH HEDGES LOT</td>
</tr>
<tr>
<td>C18</td>
<td>STADIUM EAST LOT</td>
</tr>
<tr>
<td>C19</td>
<td>STADIUM WEST LOT</td>
</tr>
<tr>
<td>C20</td>
<td>BISON LOT</td>
</tr>
<tr>
<td>C21</td>
<td>ANTILope LOT</td>
</tr>
<tr>
<td>C22</td>
<td>QUADS LOT</td>
</tr>
<tr>
<td>C23</td>
<td>SOUTH FIELDHOUSE LOT – BAY C</td>
</tr>
<tr>
<td>C24</td>
<td>NORTHEAST HEDGES LOT</td>
</tr>
<tr>
<td>C25</td>
<td>DEER STREET LOT</td>
</tr>
<tr>
<td>C26</td>
<td>MACKS LOT</td>
</tr>
<tr>
<td>C27</td>
<td>WEST UNIFIELD LOT</td>
</tr>
<tr>
<td>C28</td>
<td>SOUTH HEDGES LOT</td>
</tr>
<tr>
<td>C29</td>
<td>SOUTH FIELDHOUSE LOT – BAY D</td>
</tr>
<tr>
<td>C30</td>
<td>HARRISON STREET LOT</td>
</tr>
<tr>
<td>C31</td>
<td>DETAILS</td>
</tr>
<tr>
<td>C32</td>
<td>DETAILS</td>
</tr>
<tr>
<td>C33</td>
<td>DETAILS</td>
</tr>
</tbody>
</table>

SCALES ON SHEET:

SHEET 1: GREAT FALLS 200:1
SHEET 2: BILLINGS 200:1
SHEET 3: HARDIN 200:1
SHEET 4: SHERIDAN 200:1
SHEET 5: SIDNEY 200:1
SHEET 6: GLENDIVE 200:1
SHEET 7: LEWISTOWN 200:1
SHEET 8: BOZEMAN 200:1
SHEET 9: DILLON 200:1
SHEET 10: BUTTE 200:1
SHEET 11: HELENA 200:1
SHEET 12: MISSOULA 200:1
SHEET 13: KALISPELL 200:1
SHEET 14: SHELBY 200:1
SHEET 15: GLASGOW 200:1
SHEET 16: MILES CITY 200:1
SHEET 17: HAVRE 200:1
SHEET 18: ANACONDA 200:1

SCALE IN FEET:

0 200 400 200 400

PROJECT LOCATION:

MONTANA STATE UNIVERSITY

BOZEMAN, MT

PHONE: 406-994-4131
FAX: 406-994-6572
GENERAL NOTES:

1. Existing utilities are not shown on these plans. The contractor shall be responsible for contacting any and all utilities in the area a minimum of 48 hrs prior to performing any excavation on this project. Contact one-call for utility locate 1-800-424-5555.

2. Contractor shall field verify prior to construction. The contractor is required to take all precautionary means to protect existing utilities.

3. Where conditions are encountered which appear different from those indicated on the plans or in the specifications, the contractor shall notify the engineer prior to the performance of work.

4. Widths and materials shall conform to the 9th edition of the "Montana Public Works Standard Specifications" and modifications therein to be made by the State Engineer. The contractor shall verify the engineer's approval of all construction drawings, plans, and specifications. Any changes made by the contractor shall be reviewed and approved by the engineer.

5. Construction safety and sanitation facilities shall be provided by the contractor and maintained for the requirements of authorities having jurisdiction.

6. The contractor shall protect adjacent private and public property from damage during construction.

7. The contractor shall replace existing fencing and roadside appurtenances displaced or damaged by construction.

8. Lots & street closures shall be coordinated with & approved by MSU Parking Services a minimum of 48 hrs prior to closure.

9. Contractor is responsible for purchasing parking permits from MSU for work crew, site parking services at 7th & Kady.

10. Construction staging area and scope of work. Contractor to use parking lots with active work as staging area. Site staging is all areas immediately adjacent to the project. The project staging area shall be utilized for all storage, except where the staging area is not accessible. All vehicles other than materials delivery trucks must have valid parking permit and be parked in designated MSU parking lot. All vehicles to leave staging area immediately upon completion. The contractor is responsible for repair of any damaged areas of buildings and landscaping. Contractor is to obtain approval of construction staging set-up from MSU construction inspector before beginning construction.

11. Contractor shall provide and dispose of all abandoned facilities that are a result of these improvements as described herein and in the specifications. Contractor shall remove any previously abandoned facilities encountered during construction. This shall include all pipe materials within the excavation limits, all curbs and gutters, sidewalks, asphalt, etc. All manholes (complete), valve boxes (for value boxes that are abandoned in place). The top of the pipe assembly shall be considered incidental.

12. Contractors shall procure the necessary guardrails and stormwater control permits (see section 0-600 of the specifications).

13. All areas disturbed during construction shall be restored to existing condition at the contractor's expense.

14. Any road closure must be coordinated through the engineer, MSU and City of Bozeman (where applicable), detour routes must be submitted for approval through the engineer and will be provided to MSU and City of Bozeman (where applicable). The contractor shall be responsible for all traffic control, including but not limited to, detours, signage and flagging personnel.

15. The contractor shall maintain and provide a set of as built drawings to the engineer prior to final acceptance.

16. The contractor shall route & crack seal all cracks prior to applying seal coat.

17. The contractor shall clean the parking lot prior to applying seal coat.

18. Ambient air temperature shall be at least 50°F & rising before applying any seal coat.

19. All dimensions & areas are approximate. Contractor to be paid by N-place quantities.

GENERAL PROJECT LEGEND

EXISTING ITEMS

NEW ITEMS

EXISTING UTILITIES

NEW UTILITIES

EXISTING CONTOUR (100' INTERVAL)

NEW IRRIGATION MAIN

NEW ELECTRIC POLE

NEW ELECTRIC METER

EXISTING Curb & Gutters

NEW IRRIGATION SERVICE CONNECTION

EXISTING ELECTRIC SIREN

NEW LIGHT POLE

EXISTING JUNCTION BOX

NEW SCHUTT-HEINMANN ASSEMBLY

EXISTING EDGE OF GRAVEL

NEW SENSOR

EXISTING STORM CATCH BASIN

NEW STORM MAINTENANCE

EXISTING GUARDRAIL

NEW STREET

EXISTING STREETWELL

NEW TOP OF CURB

EXISTING RAILROAD TRACKS

NEW RAILROAD TRACKS

EXISTING SANITARY SEWER MAIN

NEWSTORM SEWER MANHOLE

EXISTING ROADWAY CORD

NEW TEE

EXISTING SIGN

NEW TEE

EXISTING SANITARY SEWER MANHOLE

NEW TEE

EXISTING GAS LINE

NEW TEE

EXISTING SANITARY SEWER MANHOLE

NEW TEE

EXISTING SIGNAL

EXISTING WATER MAIN

EXISTING TEL/ELECTRICAL LINE

EXISTING WATER METER

EXISTING PEDES.

EXISTING FIRE HYDRANT

EXISTING WATER MAIN

EXISTING CLOSED POREM" POWER LINE

EXISTING SUMP STOP

EXISTING UTILITIES POLE

EXISTING PUMP

EXISTING UTILITY ANCHOR

COMMON ABBREVIATIONS

SD: STORM DRAIN
PP: POWER POLE
GA: GUY ANCHOR
TH: TOP EDGE OF PAVEMENT
LF: LINEAR FEET
SL: ELEVATION
(TMP): TEMPERATURE
W: WATERSHED
RS: REVISED
D: DOWNSPOUT
C: CATCH BASIN
RD: ROADWAY
MH: MANHOLE
CL: CENTERLINE
FL: FRONTLINE

SURVEY CONTROL POINT LOCATION

SURVEY DATABASE:

NAD83 (1990)
VERT: SADT
DATACOLOR: WGS84

CARTOGRAPHIC COORDINATE SYSTEM:

MONTANA STATE PLANS (INTERNATIONAL SYSTEM OF UNITS)

5-1-17

REVIEWED BY: ZWL
DRAWN BY: HV

PARKING MAINTENANCE BY 2017 NOTES, LEGEND, ABBREVIATIONS, SURVEY CONTROL
IMPORT 18" MINUS ROAD MIX MATERIAL, PLACE, GRADE & COMPACT ENTIRELY BLACKTOP, LEAVING A SMOOTH SURFACE THAT PERPETUATES EXISTING DAMAGE.

RESURFACING PARKING LOT ENTRANCE
LOT ARIA: 52,309 SF
4" PAINT STRIPING: 3,181 L
PAINT CURB: 480B L
ASPHALT SPOT REPAIR: 300 SF

RESTRIP ENTIRE PARKING LOT AND CURVES
WHERE PAINT IS EXISTING MATCH EXISTING COLOR

LANGFORD LOT
CLEAN, ROLL, & CHECK SEAL ENTIRE PARKING LOT

W. HARRISON STREET
LANGFORD HALL
WOOL LAB
FACULTY COURT

CLEAN GUTTER & DRAIN SEAL ENTIRE PARKING LOT

RESTATE ENTIRE PARKING LOT AND CURB WHERE PAINT IS EXISTING MATCH EXISTING COLOR

PAINT CURB AS INDICATED (YELLOW PAINT)

LOT AREA 20,285 SF
4" PAINT STRIPING 1,334 LF
CURB PAINT 64.8 LF
AGGRAVATION SPOT REPAIR 5'

PARKING MAINTENANCE FY 2017

MONTANA STATE UNIVERSITY

PPA #16-086
4522.11957,01

5-1-17

REVIEWED BY: ZWL
DRAWN BY: HV
RESTRIPI NG PLAN w/ RELOCATED LIGHT POLES

MATCH LINE SEE SHEET C21

SOUTH FIELDHOUSE LOT
CLEAN, ROUT CANOPY
SEAL AND SEAL COAT
ENTIRE PARKING LOT

LOT AREA: 91,040 SF
1" P H ALK STRIPING: 6,730 LF
CURB PAINT: 290.3 SF
ASPHALT SPOT REPAIR: 10.775 SF
NORTH FIELDHOUSE LOT

PARKING MAINTENANCE FY 2017

NORTH FIELDHOUSE LOT
CLEAN, ROLL & CRACK SEAL, ENTIRE PARKING LOT

RECTIFY ENTIRE PARKING LOT AND CURBS WHERE PAINT IS EXISTING. MATCH EXISTING COLOR

LOT AREA
14199 SF

PAINT STRIPING
6130 LF

CURB PAINT
8493 LF

CRACK SEAL
NORMAL SPOT REPAIR
5 SF
LOT AREA 50,752 SF
CURB PAINT 2,425 LF
CURB SEAL 1,000 LF
ASPHALT SPOT REPAIR 50 SF

RESTRIP ENTIRE PARKING LOT AND CURB
WHERE PAINT IS EXISTING, MATCH EXISTING COLOR

LEWIS AND CLARK LOT
CLEAN, BOLT & CRACK SEAL ENTIRE PARKING LOT
LOT 73,115 SF
4" PAINT STRIPING 4,894 LF
CURB PAINT 192.3 LF
CRACK SEAL 63.2 LF
ASPHALT SPOT REPAIR 5 SF

RESTRIPE ENTIRE PARKING LOT AND CURBS WHERE PAINT IS LOSING MATCH PAINTING COLOR

SOUTH 12TH STREET LOT
CLEAN, REST & CRACK SEAL, ENTIRE PARKING LOT

SCALE IN FEET
RESTORE ENTIRE PARKING LOT WHERE PAINT IS EXISTING MATCH EXISTING COLOR
(NOTE: NO CURB PAINTING IN HAMILTON LOT)

HAMILTON LOT
CLEAN, ROOT & CRACK SEAL ENTIRE PARKING LOT

LOT AREA 20,376 SF
4" PAINT STRIPING 1,360 LF
CURB PAINT 0 LF
CRACK SEAL 57 LF
ASPHALT SPOT REPAIR 57 SF

SEE SHEET C11

RESTORE ENTIRE PARKING LOT AND CURBS WHERE PAINT IS EXISTING MATCH EXISTING COLOR

ROBERTS LOOP
LOT AREA 14,138 SF
4" PAINT STRIPING 796 LF
CURB PAINT 301 LF
CRACK SEAL 62 LF
ASPHALT SPOT REPAIR 57 SF

ROBERTS LOOP
CLEAN, ROOT & CRACK SEAL ENTIRE PARKING LOT
NOTE: NO CURB PAINTING THIS SHEET

RESERVE ENTIRE STREET PARKING AREAS WHERE PAINT IS EXISTING. MATCH EXISTING COLOR

5. 7TH RESERVED PARKING
CLEAN, BOLT & CRACK SEAL ENTIRE PARKING AREAS

MATCH LINE SEE ABOVE

MATCH LINE SEE BELOW

LOT AREA 51,230 SF
4" PAINT STRIPE 3"C
CURB PAINT 8" U/P
CRACK SEAL 8" U/P
ASPHALT SPOT REPAIR 9"
EA 1006-586-8834

MONTANA STATE UNIVERSITY

PPA #16-0168

5-1-17

REVIEWED BY: ZWL

DRAWN BY: HV

4522.11957.01

PARKING MAINTENANCE FY 2017

EAST LINFIELD LOT

AREA WITHIN CONSTRUCTION STAGING AREA (NC)

RESTORE ENTIRE PARKING LOT AND CURB WHERE PAINT IS EXISTING MATCH EXISTING COLOR

CLEAN, ROLL & CRACK SEAL ENTIRE PARKING LOT

CLEVELAND ST. CURB PAINTING NOT IN CONTRACT (1/70)

2006 NORTH PARK DRIVE

2019 DOWELL ASSOCIATES, INC.

4622.11957.01

5-1-17

SHEET C14
REMOVE AND REPLACE 3.21% OF GRAVEL SECTION.
PLACE GRADE & COMPACT AREA LEAVING A SMOOTH
SURFACE THAT DISPERSES EXISTING DRAINAGE.

MATCH LINE SEE SHEET C17
MATCH LINE SEE SHEET C16

REPLACE 10,040 SF GRAVEL, SEED, PLANT, GRADE & COMPACT LEAVING A SMOOTH SURFACE THAT PROHIBITS EXISTING GROUNDWATER.

LOT AREA
6" PAINT STRIPING SF
CURB PAINT LF
CRACK SEAL
ASPHALT SPOT REPAIR SF
BISON LOT

BISON LOT
CLEAN, ROUT & CRACK SEAL ENTIRE PARKING LOT

RECONFIGURE STRIPING AS SHOWN. INSTALL 2 HANDICAP PARKING SIGNS

INSTALL SIGN POST BASE (TYP.) 6 TOTAL

RESTRIPE ENTIRE PARKING LOT AND CURB
WHERE PAINT IS EXISTING. WATCH EXISTING COLOR

LOT AREA 8,016 SF
4" PAVEMENT STRIPING 3,296 LF
CURE PAINT
CRACK SEAL
ASPHALT SPOT REPAIR 50 SF
MATCH LINE SEE SHEET C24

4" PAINT STRIPPING  7.433 LF
CURB PAINT  132.3 LF
Drain SEAL  5F
ASPHALT SPOT REPAIR  5F

REVIEWED BY:  ZWL
DRAWN BY: HV

PARKING MAINTENANCE FY 2017
ANTELOPE LOT

LOT AREA  471500 SF

RESTRIPE ENTIRE PARKING LOT AND CURBS
WHERE PAINT IS EXISTING, MATCH EXISTING COLOR

CLEAN, MOW & DRAWD
SEAL ENTIRE PARKING LOT

C19
5-1-17

MONTANA STATE UNIVERSITY
REPLACE ENTIRE PARKING LOT AND CURB WHERE PAINT IS EXISTING MATCH EXISTING COLOR

SOUTH FIELDHOUSE LOT CLEAN, ROOT & CRACK SEAL ENTIRE PARKING LOT

LOT AREA 90,790 SF
4" PAINT STRIPPING 7,972 LF
CURB PAINT 386 LF
CRACK SEAL 50 LF
ASPHALT SPOT REPAIR 50 LF

MATCH LINE SEE SHEET C6
MATCH LINE SEE SHEET C16

PARKING MAINTENANCE FY 2017
SOUTH FIELDHOUSE LOT - BAY C

MONTANA STATE UNIVERSITY
PPA #16-0168
5-1-17
REVIEWED BY: ZWL
DRAWN BY: HV

4522.11957.01

MAP OF THE UNIVERSITY OF MONTANA
PARKING MAINTENANCE erfahren
PAVEMENT WORK
LOT 13
PPA #16-0008
4522.11957.01
C21
5-1-17
LOT AREA 97,580 SF

= PAINT STRIPING 1,016 LF
= CRACK SEAL 482.5 LF
= ASPHALT SPOT REPAIR 50 SQ

REVIEWED BY: ZWL
DRAWN BY: HV

PARKING MAINTENANCE FY 2017
NORTH HEDGES LOT

PROPOSED ROAD ADDITION TO S 15TH AVENUE

NORTH HEDGES LOT
CLEAN & ROLL (SHRUB)
SEAL ENTER PARKING LOT
LOT AREA: 91,375 SF
4" PAINT STRIPING: 0.971 LF
CURB PAINT: 156.1 LF
CRACK SEAL: 0.001 LF
 ASPHALT SPOT REPAIR: 0.0 SF
MATCH LINE SEE SHEET C21

SOUTH FIELDHOUSE LOT - BAY D

KAGY BLVD

MATCH LINE SEE SHEET C21

RESTORE ENTIRE PARKING LOT AND CURB WHERE PAINT IS EXISTING. WATCH EXISTING COLOR.

LOT AREA: 76,295 SF
4" PAVEMENT STRIPING 5,120 LF
CURB PAINT 433 LF
CRACK SEAL 490 LF
ASPHALT SPOT REPAIR 5 FT

SOUTH FIELDHOUSE LOT CLEAN SOUT & CRACK SEAL ENTIRE PARKING LOT.
HARRISON STREET LOT
CLEAN, ROUT & CRACK SEAL ENTIRE PARKING LOT

HARRISON STREET LOT
CLEAN, ROUT & CRACK SEAL ENTIRE PARKING LOT

RECONSTRUCT HC RAMP, SMOOTH ADJACENT SIDEWALK AT NEAREST CONSTRUCTION JOINT.

REPLACE ENTIRE PARKING LOT AND CURB WHERE PAINT IS EXISTING MATCH EXISTING COLOR

LOT AREA 43,325 SF
4" PAINT STRIPING 2,592 LF
CURB PAINT 633.3 LF
CRACK SEAL 401 LF
ASPHALT SPOT REPAIR 35 SF
PARKING LOT SECTION

1. REMOVE AND REPLACE ASPHALT AND GRAVEL AREAS AS SHOWN IN THE PROJECT DRAWINGS.
2. EXCAVATE SECTION DEPTH AND COMPACT SUBGRADE TO 50% ASTM D698.
3. DISPOSE OF EXCAVATED MATERIALS IN A LAWFUL MANNER.
4. GEOTEXTILE SHALL BE A WOVEN FABRIC WOVEN IN A CONFORMAL MANNER.
5. COMPACT BASE COURSE TO 50% ASTM D698 + 28% optimum moisture.
6. BEFORE PAVING SAMPLING ADJACENT ASPHALT IN STRAIGHT LINES WITH A CLEAN EDGE.
7. COMPACT ASPHALT PAVEMENT TO 95% ASTM D2041. MATCH ADJACENT GRADES AND PERPETUATE EXISTING DRAINAGE.
8. MILLED ASPHALT MAY BE USED FOR BASE GRAVE MATERIAL IN THE SOUTH FIELD/LOT "B" LOT, BUT SHOULD HAVE A 3" LEVELING COURSE OF 1 1/2"-MINUS ROAD MIX BEFORE PAVING.

HANDICAP RAMP

2. FOR A LIST OF SUPPLIERS VISIT WWW.WEBER-BOARD.gov.
3. TRUNCATED DOWNS ARE RECOMMENDED AT PAVEMENT CROSSFALLS.
4. DETAILS ILLUSTRATED HERE ARE FOR ILLUSTRATION PURPOSES ONLY.
5. SEE FLANGES SHALL BE 10'-1" MINIMUM SLOPE.