

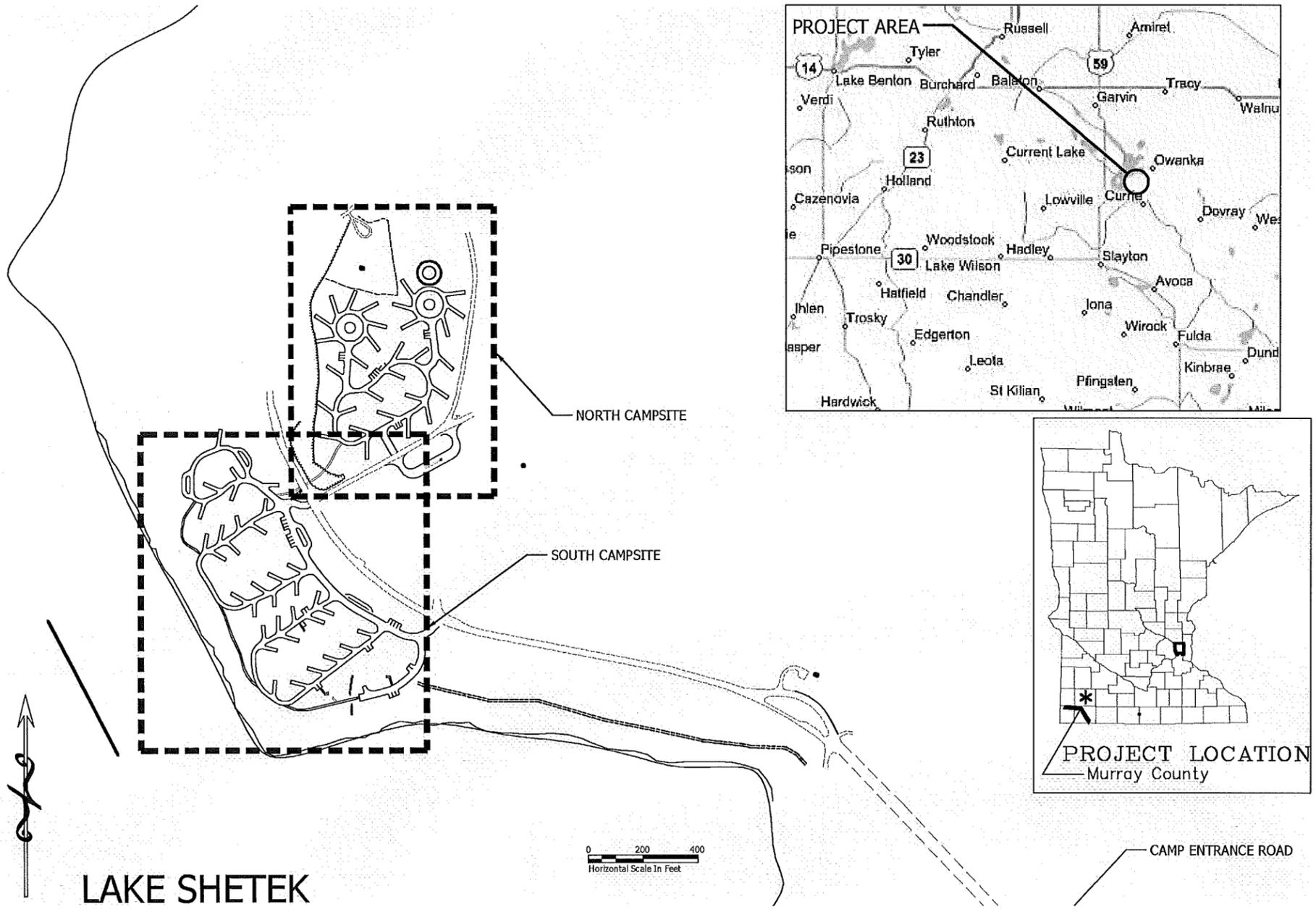
MINNESOTA DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF PARKS & TRAILS

LAKE SHETEK STATE PARK
 CAMPGROUND REHABILITATION

CODE ANALYSIS	
2006 IBC & CURRENT MINNESOTA STATE CODE	
1. CONSTRUCTION TYPE:	<u>V-B</u>
2. AREA:	<u>S.F.</u>
3. OCCUPANCY:	<u>U</u>
4. EXITS -	CHAPTER 10.

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VERIFY ALL DIMENSIONS AND LOCATIONS ON THE JOB. REPORT ALL DISCREPANCIES TO MANAGEMENT RESOURCES
 DO NOT SCALE DRAWINGS



Approval
D. Boyd 3/26/10 Date
 Division of Parks & Trails
J. [Signature] 3/26/10 Date
 Management Resources



DNR Division of Parks and Trails
 Campground Rehabilitation
 Lake Shetek State Park
 Murray County Section: 6 Township: 107 N Range: 40 W Near Currie

Title: **Title Sheet**
 Survey: WN 5/09 Drawn: JHP 3/10
 Drawn: DE 6/09 Drawn: JHP 3/10
 Checked: BS 6/09 Checked: JHP 3/10
 Horiz datum: NAD 83 ('96 ADJ) Vert datum: NAVD 88

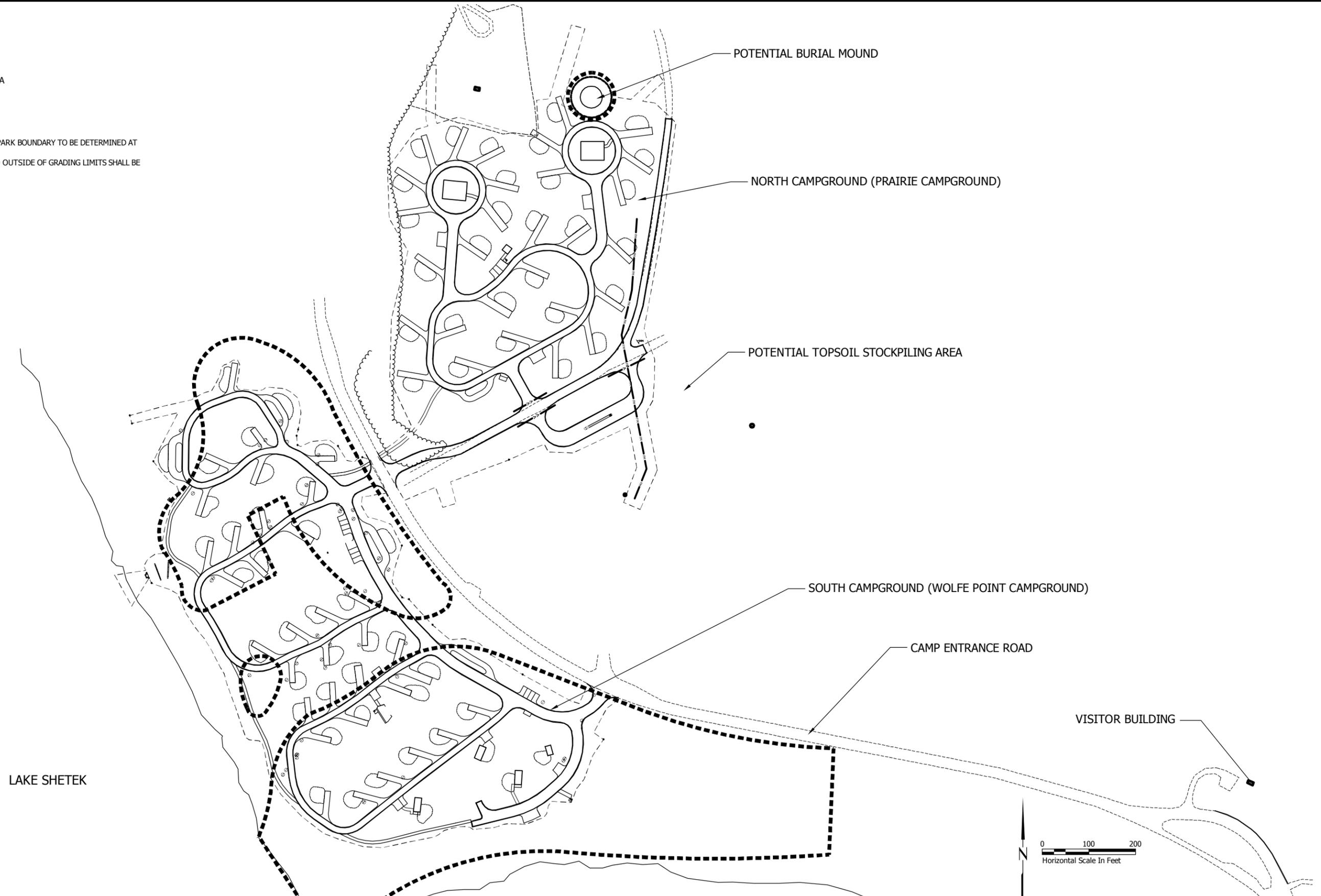
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 Req Number: HP070210
 File Number: SPK00220.00.21.02

LEGEND

 ARCHEOLOGICALLY SENSITIVE AREA

GENERAL NOTES:

1. STAGING AND STOCKPILING LOCATION WITHIN PARK BOUNDARY TO BE DETERMINED AT PRECONSTRUCTION MEETING.
2. GROUND DISTURBANCE IN SOUTH CAMPGROUND OUTSIDE OF GRADING LIMITS SHALL BE APPROVED BY ENGINEER.



BONESTROO PROJECT #: 548-09-123



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

Safety
Facilities
Materials
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Field Operations
Information Management

DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

Staging and Stockpiling Plan

Title: Staging and Stockpiling Plan

Survey: DNR Drawn: DNR Checked: DNR Horz datum: Assumed

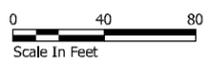
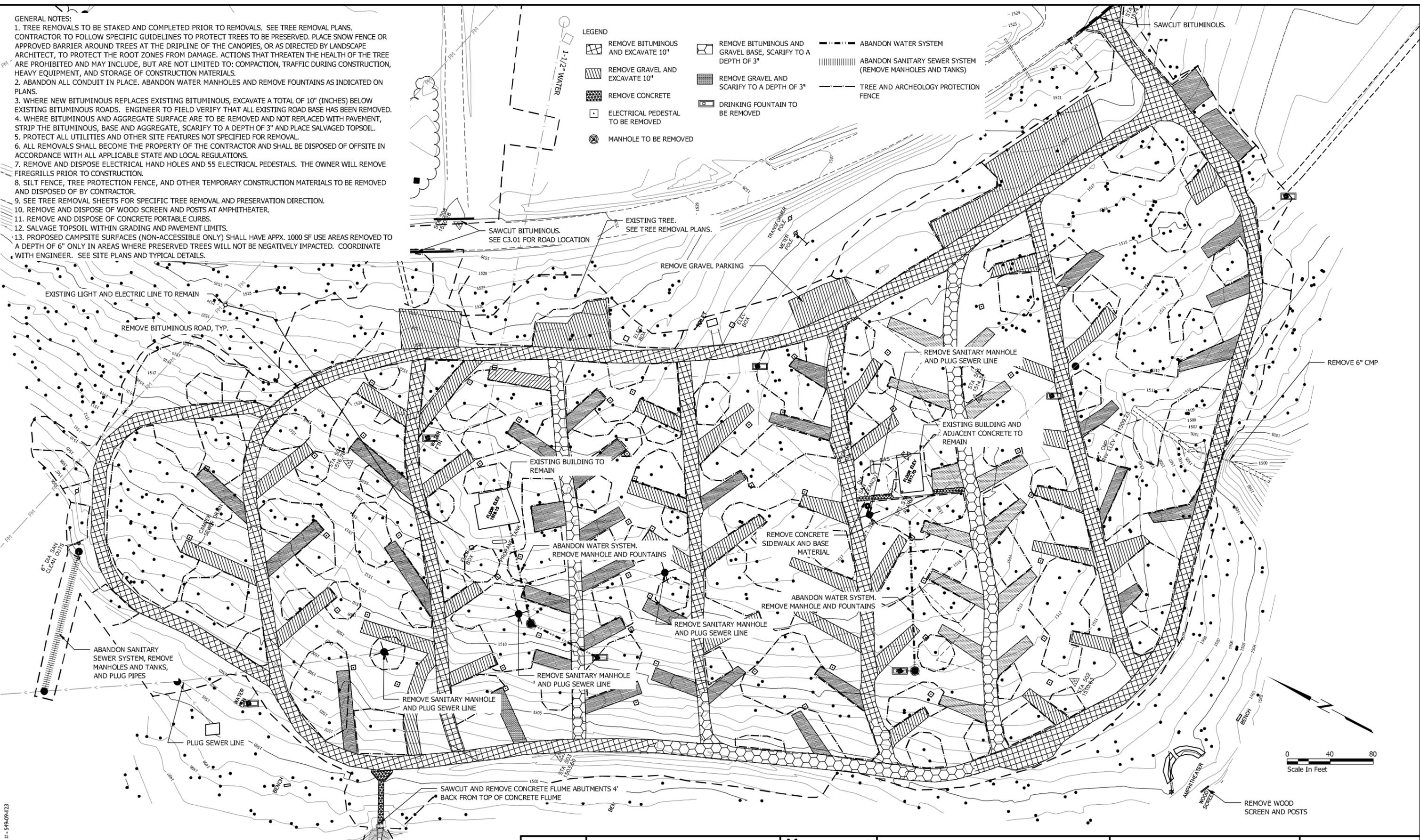
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Proj. Number: HP070210
File Number: SPK00220.00.12.02

- GENERAL NOTES:**
1. TREE REMOVALS TO BE STAKED AND COMPLETED PRIOR TO REMOVALS. SEE TREE REMOVAL PLANS. CONTRACTOR TO FOLLOW SPECIFIC GUIDELINES TO PROTECT TREES TO BE PRESERVED. PLACE SNOW FENCE OR APPROVED BARRIER AROUND TREES AT THE DRIPLINE OF THE CANOPIES, OR AS DIRECTED BY LANDSCAPE ARCHITECT, TO PROTECT THE ROOT ZONES FROM DAMAGE. ACTIONS THAT THREATEN THE HEALTH OF THE TREE ARE PROHIBITED AND MAY INCLUDE, BUT ARE NOT LIMITED TO: COMPACTION, TRAFFIC DURING CONSTRUCTION, HEAVY EQUIPMENT, AND STORAGE OF CONSTRUCTION MATERIALS.
 2. ABANDON ALL CONDUIT IN PLACE. ABANDON WATER MANHOLES AND REMOVE FOUNTAINS AS INDICATED ON PLANS.
 3. WHERE NEW BITUMINOUS REPLACES EXISTING BITUMINOUS, EXCAVATE A TOTAL OF 10" (INCHES) BELOW EXISTING BITUMINOUS ROADS. ENGINEER TO FIELD VERIFY THAT ALL EXISTING ROAD BASE HAS BEEN REMOVED.
 4. WHERE BITUMINOUS AND AGGREGATE SURFACE ARE TO BE REMOVED AND NOT REPLACED WITH PAVEMENT, STRIP THE BITUMINOUS, BASE AND AGGREGATE, SCARIFY TO A DEPTH OF 3" AND PLACE SALVAGED TOPSOIL.
 5. PROTECT ALL UTILITIES AND OTHER SITE FEATURES NOT SPECIFIED FOR REMOVAL.
 6. ALL REMOVALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
 7. REMOVE AND DISPOSE ELECTRICAL HAND HOLES AND 55 ELECTRICAL PEDESTALS. THE OWNER WILL REMOVE FIREGRILLS PRIOR TO CONSTRUCTION.
 8. SILT FENCE, TREE PROTECTION FENCE, AND OTHER TEMPORARY CONSTRUCTION MATERIALS TO BE REMOVED AND DISPOSED OF BY CONTRACTOR.
 9. SEE TREE REMOVAL SHEETS FOR SPECIFIC TREE REMOVAL AND PRESERVATION DIRECTION.
 10. REMOVE AND DISPOSE OF WOOD SCREEN AND POSTS AT AMPHITHEATER.
 11. REMOVE AND DISPOSE OF CONCRETE PORTABLE CURBS.
 12. SALVAGE TOPSOIL WITHIN GRADING AND PAVEMENT LIMITS.
 13. PROPOSED CAMPSITE SURFACES (NON-ACCESSIBLE ONLY) SHALL HAVE APPX. 1000 SF USE AREAS REMOVED TO A DEPTH OF 6" ONLY IN AREAS WHERE PRESERVED TREES WILL NOT BE NEGATIVELY IMPACTED. COORDINATE WITH ENGINEER. SEE SITE PLANS AND TYPICAL DETAILS.

- LEGEND**
- REMOVE BITUMINOUS AND EXCAVATE 10"
 - REMOVE BITUMINOUS AND GRAVEL BASE, SCARIFY TO A DEPTH OF 3"
 - REMOVE BITUMINOUS AND AGGREGATE SURFACE ARE TO BE REMOVED AND NOT REPLACED WITH PAVEMENT, STRIP THE BITUMINOUS, BASE AND AGGREGATE, SCARIFY TO A DEPTH OF 3" AND PLACE SALVAGED TOPSOIL.
 - REMOVE GRAVEL AND EXCAVATE 10"
 - REMOVE GRAVEL AND SCARIFY TO A DEPTH OF 3"
 - REMOVE CONCRETE
 - ELECTRICAL PEDESTAL TO BE REMOVED
 - MANHOLE TO BE REMOVED
 - ABANDON WATER SYSTEM
 - ABANDON SANITARY SEWER SYSTEM (REMOVE MANHOLES AND TANKS)
 - TREE AND ARCHEOLOGY PROTECTION FENCE
 - DRINKING FOUNTAIN TO BE REMOVED



BONESTROO PROJECT # - 549409-123



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

Safety
Facilities
Materials
Equipment
Field Operations
Information Management

DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Removals Plan**

Survey: DNR
Drawn: DNR
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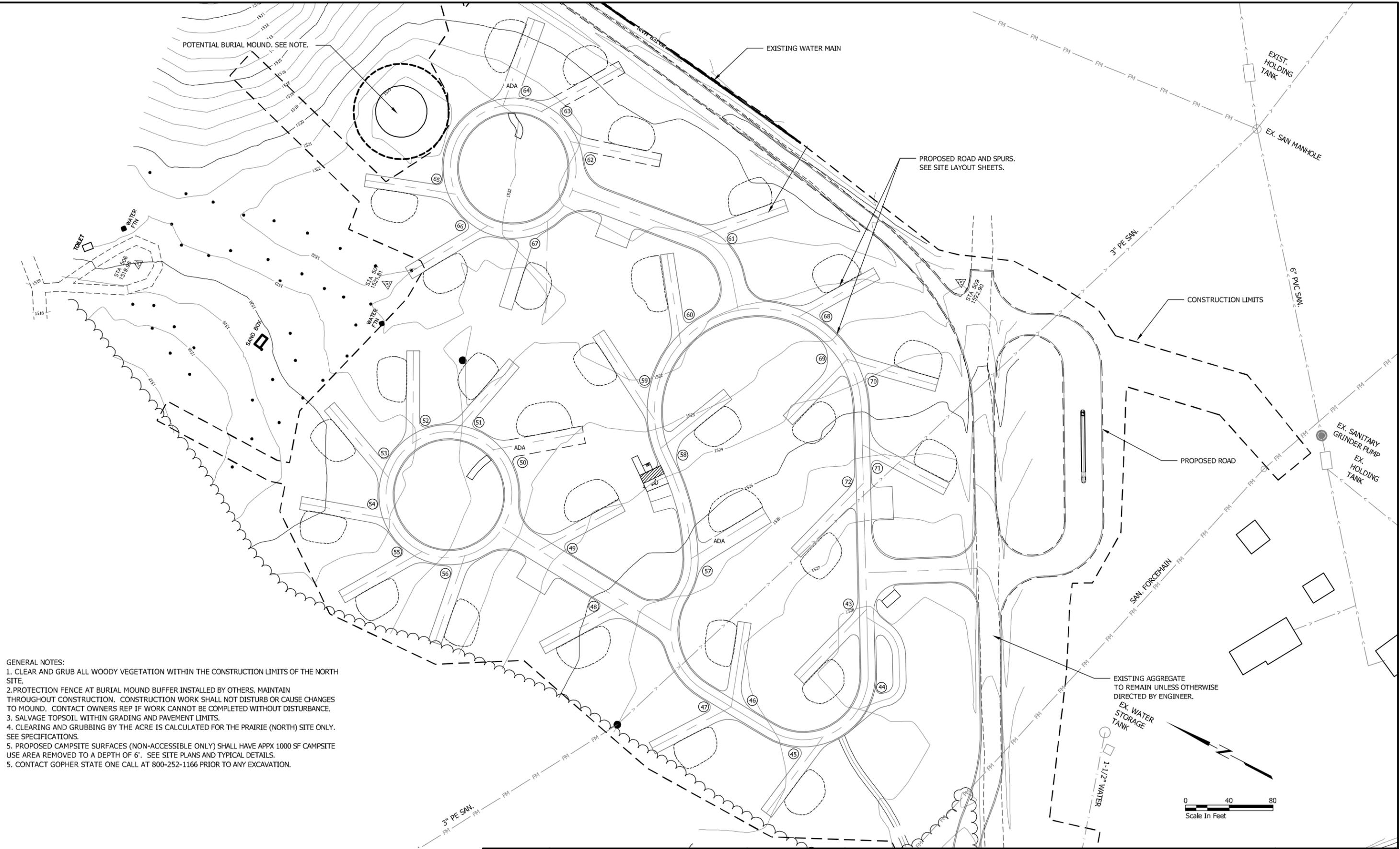
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Checked: WLC 3/10

Horz datum: Assumed
Vert datum: Assumed

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Proj. Number: HP070210
File Number: SPK00220.00.12.02

BONESTROO PROJECT # - 54949A123



- GENERAL NOTES:
1. CLEAR AND GRUB ALL WOODY VEGETATION WITHIN THE CONSTRUCTION LIMITS OF THE NORTH SITE.
 2. PROTECTION FENCE AT BURIAL MOUND BUFFER INSTALLED BY OTHERS. MAINTAIN THROUGHOUT CONSTRUCTION. CONSTRUCTION WORK SHALL NOT DISTURB OR CAUSE CHANGES TO MOUND. CONTACT OWNERS REP IF WORK CANNOT BE COMPLETED WITHOUT DISTURBANCE.
 3. SALVAGE TOPSOIL WITHIN GRADING AND PAVEMENT LIMITS.
 4. CLEARING AND GRUBBING BY THE ACRE IS CALCULATED FOR THE PRAIRIE (NORTH) SITE ONLY. SEE SPECIFICATIONS.
 5. PROPOSED CAMPSITE SURFACES (NON-ACCESSIBLE ONLY) SHALL HAVE APPX 1000 SF CAMPSITE USE AREA REMOVED TO A DEPTH OF 6'. SEE SITE PLANS AND TYPICAL DETAILS.
 5. CONTACT GOPHER STATE ONE CALL AT 800-252-1166 PRIOR TO ANY EXCAVATION.



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

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DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Removals Plan**

Survey: DNR
Drawn: DNR
Checked: DNR
Horz datum: Assumed

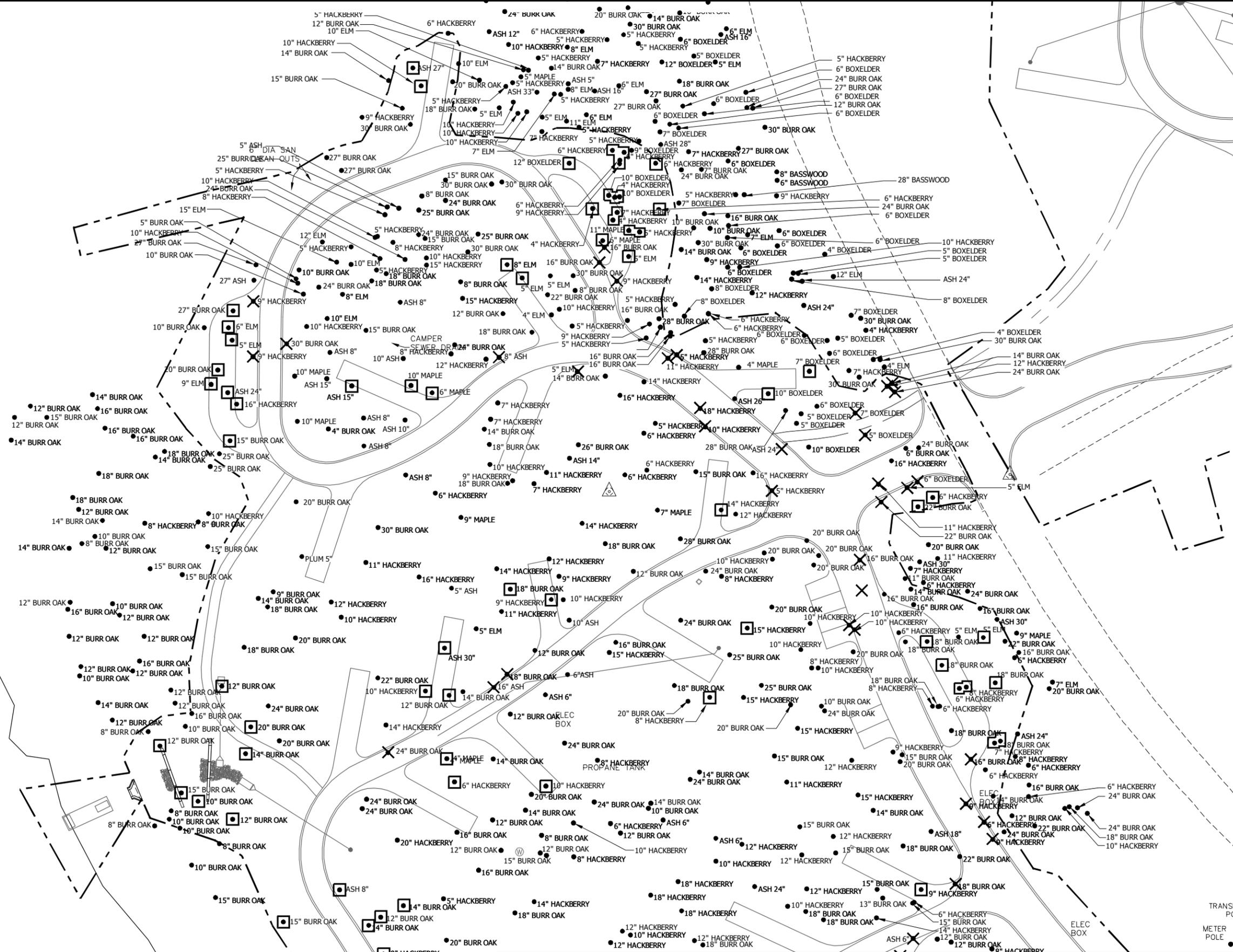
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BONESTROO PROJECT #: 549094123

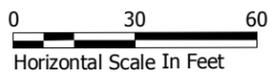


NOTE:

1. TREES TO BE REMOVED, AND PROPOSED LAYOUT OF ROADS AND SPURS, SHALL BE STAKED BY CONTRACTOR. TREES TO BE REMOVED AND STAKING APPROVED BY ENGINEER PRIOR TO REMOVALS.
2. CONTRACTOR SHALL NOT REMOVE ANY TREES OUTSIDE GRADING LIMITS.
3. ALL TREES TO BE PRESERVED SHALL BE PROTECTED FROM CONSTRUCTION DAMAGE INCLUDING BUT NOT LIMITED TO FALLING TREES, FALLING BRANCHES, AND ROOT COMPACTION. SEE NOTE ON C0.01 ABOUT SOIL COMPACTION AND TEMPORARY CONSTRUCTION TRAFFIC.
4. ALL TREES TO REMAIN THAT HAVE ROOT DISTURBANCE, SHALL HAVE ROOTS CUT TO A DEPTH AT LEAST AS DEEP AS ADJACENT EXCAVATION.
5. TREE CLEARING AT THE WOLF POINT (SOUTH) CAMPSITE SHALL TAKE PLACE IN TWO PHASES. THE FIRST PHASE SHALL CONSIST OF REMOVING TREES SHOWN ON THE PLAN SHEETS. THE SECOND PHASE SHALL IMMEDIATELY FOLLOW THE COMPLETION OF PHASE ONE CLEARING, AND SHALL CONSIST OF REMOVING ALL TREES AS DIRECTED BY THE ENGINEER.
6. ALL TREES TO BE REMOVED WITHIN PROPOSED ROADS, TRAILS, AND UTILITY CORRIDORS SHALL BE CLEARED AND GRUBBED. ALL TREES OUTSIDE THE ABOVE AREAS SHALL BE CLEARED AND HAVE THE STUMP GROUND TO A DEPTH OF 4" BELOW THE LOWEST EXISTING GRADE.

LEGEND:

- ✕ TREES TO BE CLEARED AND GRUBBED
- ◻ TREES TO BE CLEARED AND STUMPS GROUND



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DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Tree Removal Plan**

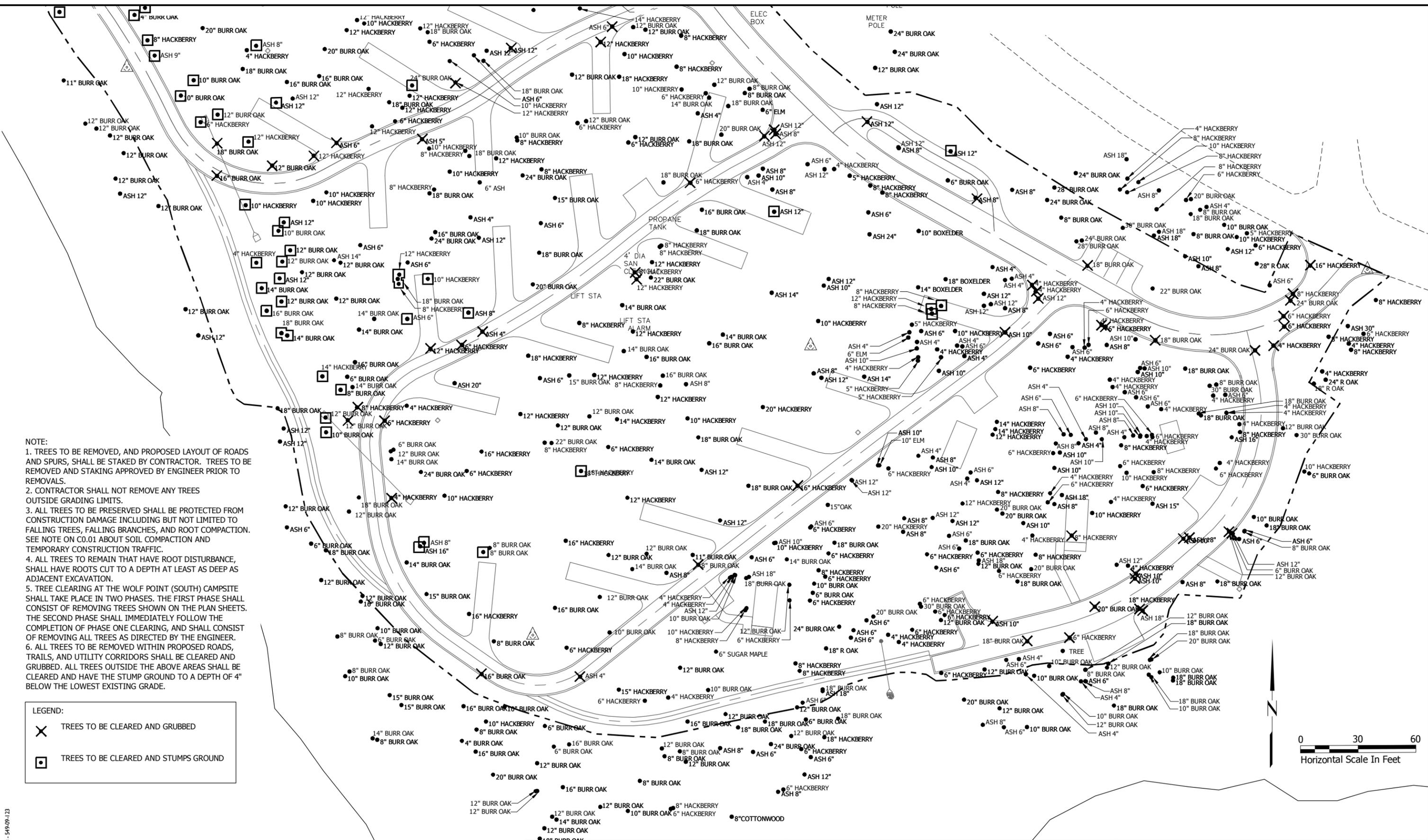
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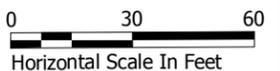
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- NOTE:
1. TREES TO BE REMOVED, AND PROPOSED LAYOUT OF ROADS AND SPURS, SHALL BE STAKED BY CONTRACTOR. TREES TO BE REMOVED AND STAKING APPROVED BY ENGINEER PRIOR TO REMOVALS.
 2. CONTRACTOR SHALL NOT REMOVE ANY TREES OUTSIDE GRADING LIMITS.
 3. ALL TREES TO BE PRESERVED SHALL BE PROTECTED FROM CONSTRUCTION DAMAGE INCLUDING BUT NOT LIMITED TO FALLING TREES, FALLING BRANCHES, AND ROOT COMPACTION. SEE NOTE ON C0.01 ABOUT SOIL COMPACTION AND TEMPORARY CONSTRUCTION TRAFFIC.
 4. ALL TREES TO REMAIN THAT HAVE ROOT DISTURBANCE, SHALL HAVE ROOTS CUT TO A DEPTH AT LEAST AS DEEP AS ADJACENT EXCAVATION.
 5. TREE CLEARING AT THE WOLF POINT (SOUTH) CAMPSITE SHALL TAKE PLACE IN TWO PHASES. THE FIRST PHASE SHALL CONSIST OF REMOVING TREES SHOWN ON THE PLAN SHEETS. THE SECOND PHASE SHALL IMMEDIATELY FOLLOW THE COMPLETION OF PHASE ONE CLEARING, AND SHALL CONSIST OF REMOVING ALL TREES AS DIRECTED BY THE ENGINEER.
 6. ALL TREES OUTSIDE THE ABOVE AREAS SHALL BE CLEARED AND GRUBBED. ALL TREES OUTSIDE THE ABOVE AREAS SHALL BE CLEARED AND HAVE THE STUMP GROUND TO A DEPTH OF 4\"/>

LEGEND:

-  TREES TO BE CLEARED AND GRUBBED
-  TREES TO BE CLEARED AND STUMPS GROUND



BONESTROO PROJECT #: 549094123



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Date: 03/29/2010 *Jeff McDowell*

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Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Tree Removal Plan**

Survey: DNR
Drawn: DNR
Checked: DNR

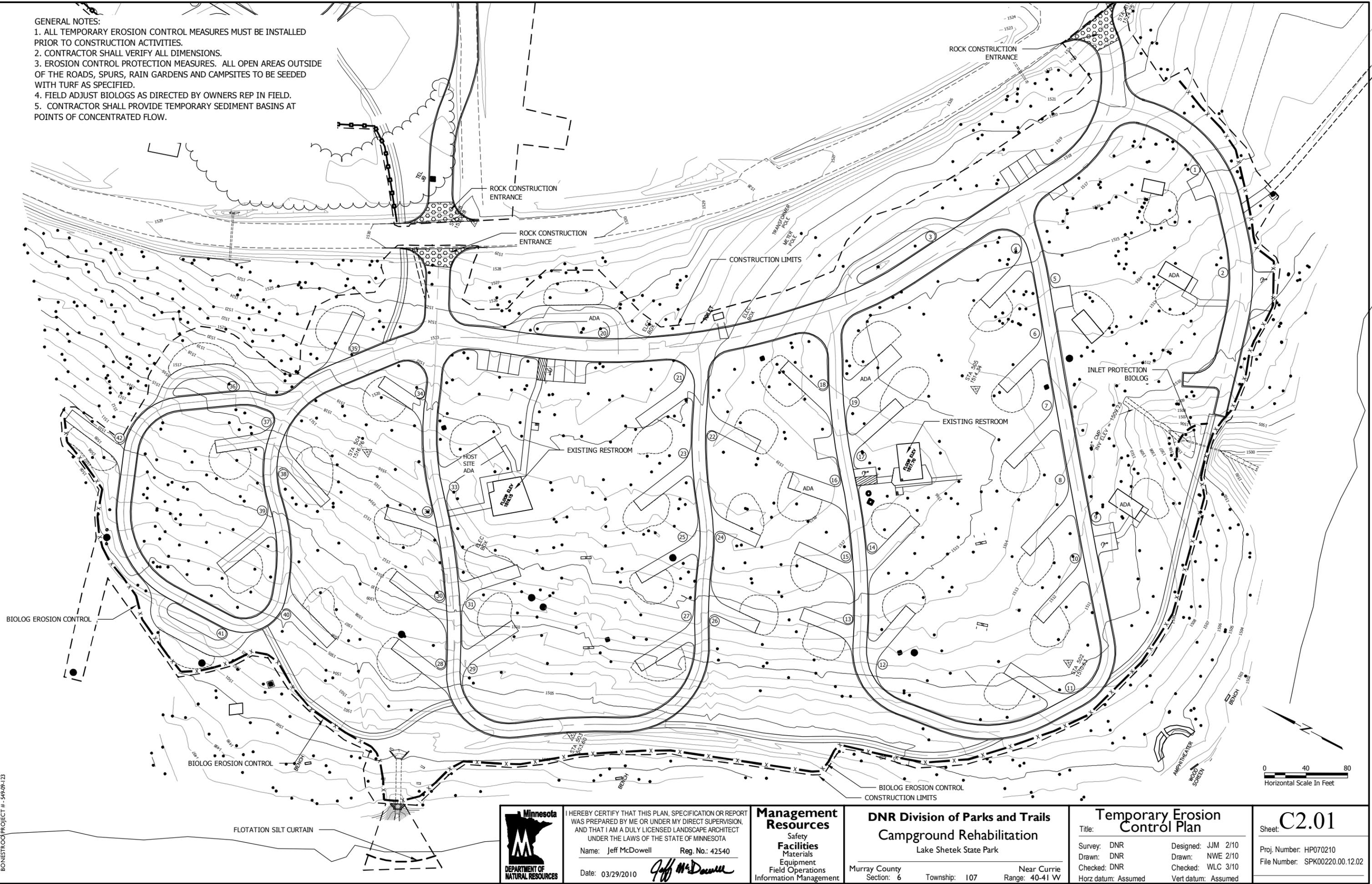
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Proj. Number: HP070210
File Number: SPK00220.00.12.02

- GENERAL NOTES:
1. ALL TEMPORARY EROSION CONTROL MEASURES MUST BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES.
 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
 3. EROSION CONTROL PROTECTION MEASURES. ALL OPEN AREAS OUTSIDE OF THE ROADS, SPURS, RAIN GARDENS AND CAMPSITES TO BE SEEDED WITH TURF AS SPECIFIED.
 4. FIELD ADJUST BIOLOGS AS DIRECTED BY OWNERS REP IN FIELD.
 5. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT BASINS AT POINTS OF CONCENTRATED FLOW.



BONESTROO PROJECT #: 549-09-123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

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DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Temporary Erosion Control Plan

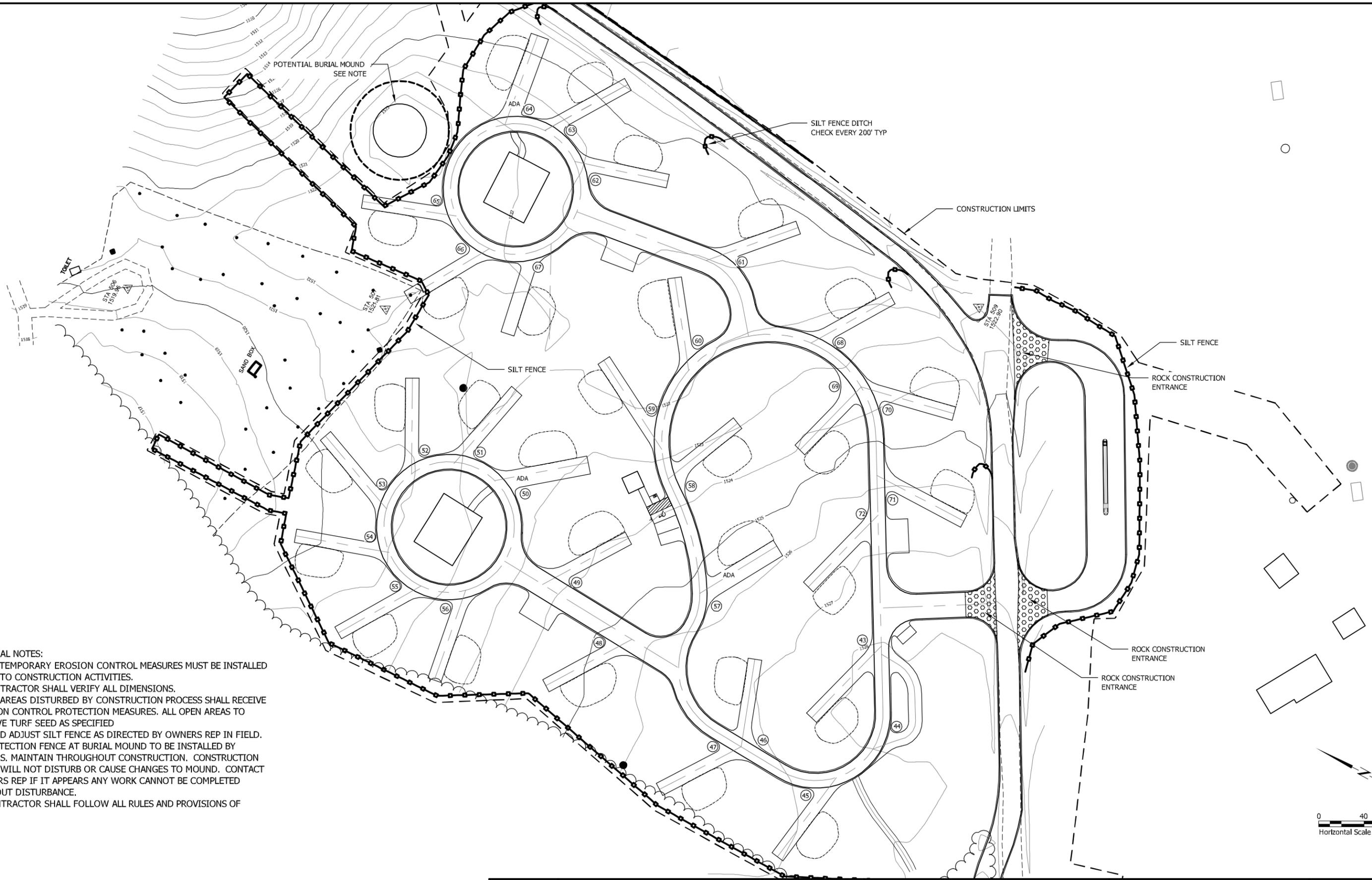
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File Number: SPK00220.00.12.02



GENERAL NOTES:

1. ALL TEMPORARY EROSION CONTROL MEASURES MUST BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. ALL AREAS DISTURBED BY CONSTRUCTION PROCESS SHALL RECEIVE EROSION CONTROL PROTECTION MEASURES. ALL OPEN AREAS TO RECEIVE TURF SEED AS SPECIFIED
4. FIELD ADJUST SILT FENCE AS DIRECTED BY OWNERS REP IN FIELD.
5. PROTECTION FENCE AT BURIAL MOUND TO BE INSTALLED BY OTHERS. MAINTAIN THROUGHOUT CONSTRUCTION. CONSTRUCTION WORK WILL NOT DISTURB OR CAUSE CHANGES TO MOUND. CONTACT OWNERS REP IF IT APPEARS ANY WORK CANNOT BE COMPLETED WITHOUT DISTURBANCE.
6. CONTRACTOR SHALL FOLLOW ALL RULES AND PROVISIONS OF SWPPP

BONESTROO PROJECT # - 54909A123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

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DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Temporary Erosion Control Plan

Title:
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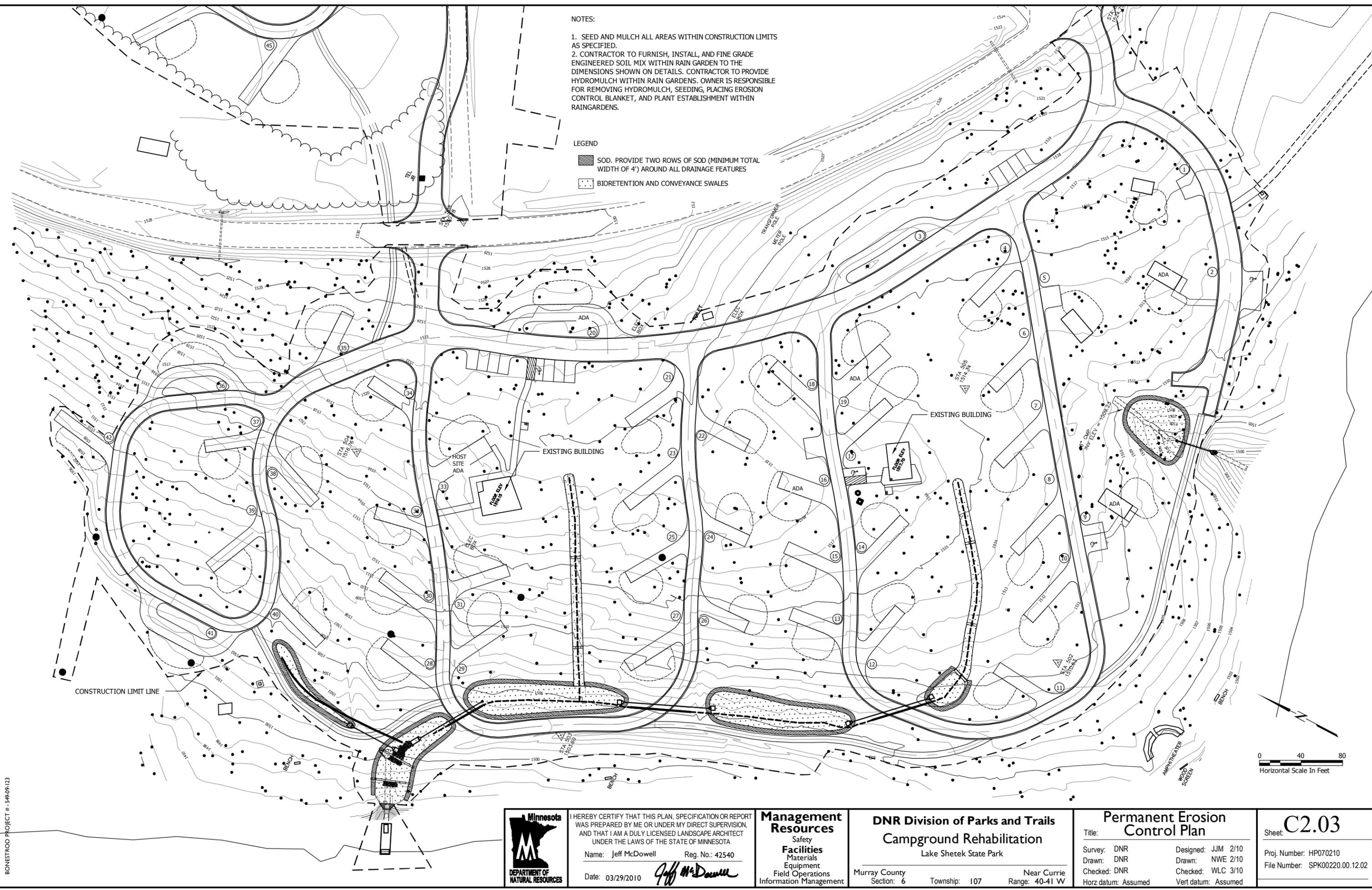
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 Proj. Number: HP070210
 File Number: SPK00220.00.12.02

NOTES:

1. SEED AND MULCH ALL AREAS WITHIN CONSTRUCTION LIMITS AS SPECIFIED.
2. CONTRACTOR TO FURNISH, INSTALL, AND FINE GRADE ENGINEERED SOIL MIX WITHIN RAIN GARDEN TO THE DIMENSIONS SHOWN ON DETAILS. CONTRACTOR TO PROVIDE HYDROMULCH WITHIN RAIN GARDENS. OWNER IS RESPONSIBLE FOR REMOVING HYDROMULCH, SEEDING, PLACING EROSION CONTROL BLANKET, AND PLANT ESTABLISHMENT WITHIN RAINGARDENS.

LEGEND

-  SOD. PROVIDE TWO ROWS OF SOD (MINIMUM TOTAL WIDTH OF 4') AROUND ALL DRAINAGE FEATURES
-  BIORETENTION AND CONVEYANCE SWALES



BONESTROO PROJECT # - 549-09-123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

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DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Permanent Erosion Control Plan

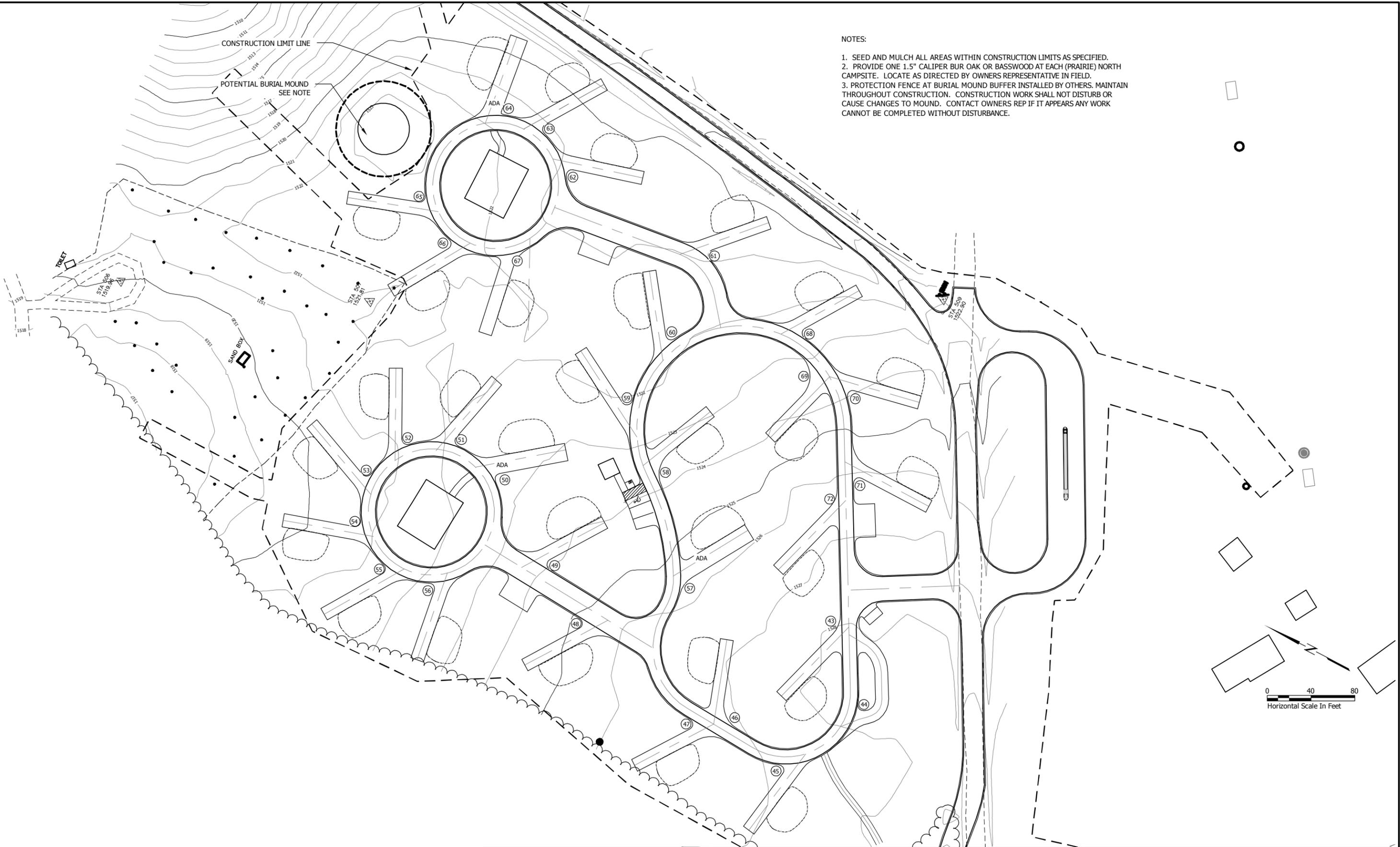
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Vert datum: Assumed

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Proj. Number: HP070210
File Number: SPK00220.00.12.02



NOTES:

1. SEED AND MULCH ALL AREAS WITHIN CONSTRUCTION LIMITS AS SPECIFIED.
2. PROVIDE ONE 1.5" CALIPER BUR OAK OR BASSWOOD AT EACH (PRAIRIE) NORTH CAMPSITE. LOCATE AS DIRECTED BY OWNERS REPRESENTATIVE IN FIELD.
3. PROTECTION FENCE AT BURIAL MOUND BUFFER INSTALLED BY OTHERS. MAINTAIN THROUGHOUT CONSTRUCTION. CONSTRUCTION WORK SHALL NOT DISTURB OR CAUSE CHANGES TO MOUND. CONTACT OWNERS REP IF IT APPEARS ANY WORK CANNOT BE COMPLETED WITHOUT DISTURBANCE.

BONETROO PROJECT #. 54949-123



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

Safety
Facilities
Materials
Equipment
Field Operations
Information Management

DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

Permanent Erosion Control Plan

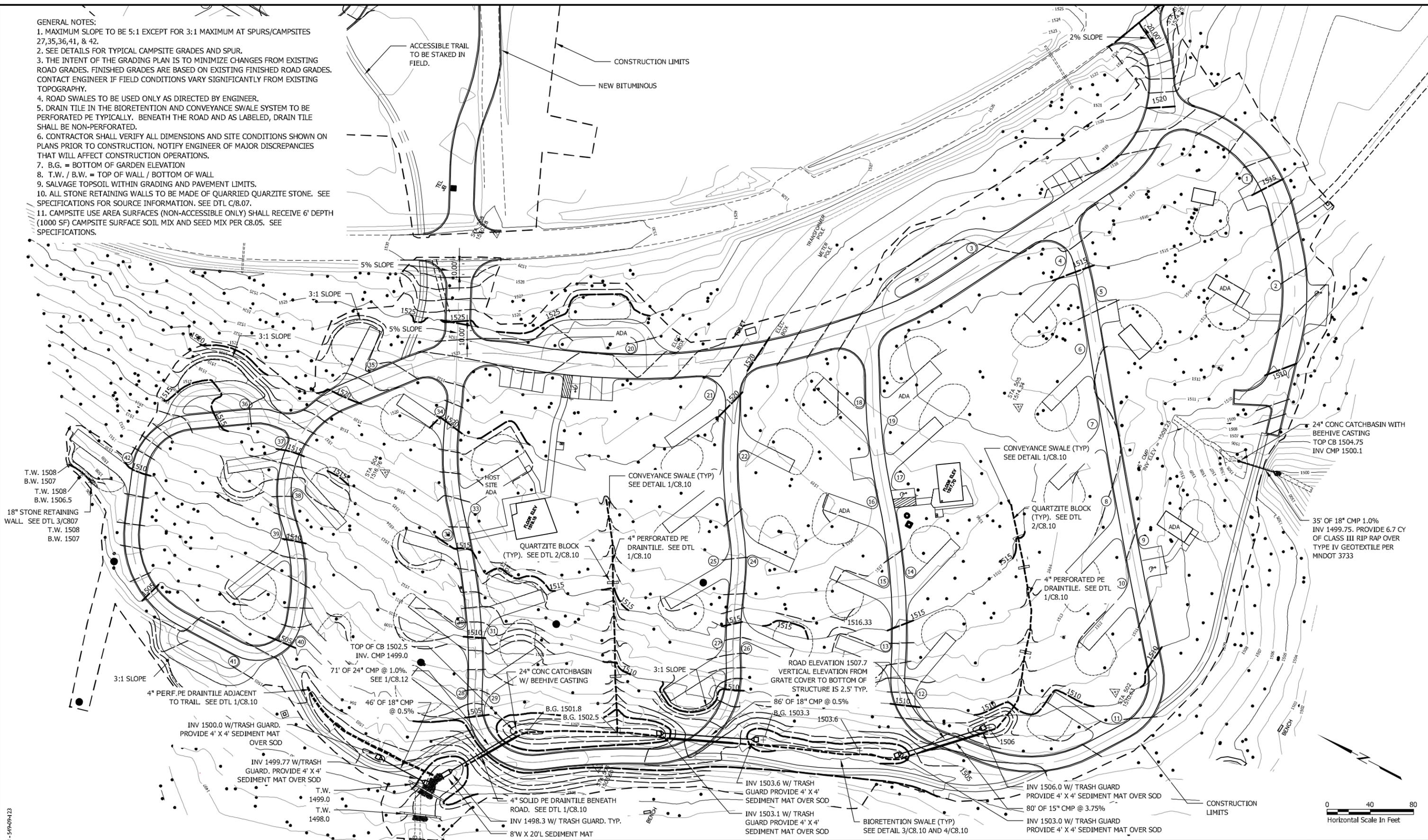
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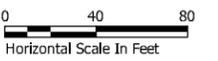
- GENERAL NOTES:
1. MAXIMUM SLOPE TO BE 5:1 EXCEPT FOR 3:1 MAXIMUM AT SPURS/CAMPSITES 27,35,36,41, & 42.
 2. SEE DETAILS FOR TYPICAL CAMPSITE GRADES AND SPUR.
 3. THE INTENT OF THE GRADING PLAN IS TO MINIMIZE CHANGES FROM EXISTING ROAD GRADES. FINISHED GRADES ARE BASED ON EXISTING FINISHED ROAD GRADES. CONTACT ENGINEER IF FIELD CONDITIONS VARY SIGNIFICANTLY FROM EXISTING TOPOGRAPHY.
 4. ROAD SWALES TO BE USED ONLY AS DIRECTED BY ENGINEER.
 5. DRAIN TILE IN THE BIORETENTION AND CONVEYANCE SWALE SYSTEM TO BE PERFORATED PE TYPICALLY. BENEATH THE ROAD AND AS LABELED, DRAIN TILE SHALL BE NON-PERFORATED.
 6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS SHOWN ON PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF MAJOR DISCREPANCIES THAT WILL AFFECT CONSTRUCTION OPERATIONS.
 7. B.G. = BOTTOM OF GARDEN ELEVATION
 8. T.W. / B.W. = TOP OF WALL / BOTTOM OF WALL
 9. SALVAGE TOPSOIL WITHIN GRADING AND PAVEMENT LIMITS.
 10. ALL STONE RETAINING WALLS TO BE MADE OF QUARRIED QUARTZITE STONE. SEE SPECIFICATIONS FOR SOURCE INFORMATION. SEE DTL C/8.07.
 11. CAMPSITE USE AREA SURFACES (NON-ACCESSIBLE ONLY) SHALL RECEIVE 6' DEPTH (1000 SF) CAMPSITE SURFACE SOIL MIX AND SEED MIX PER C8.05. SEE SPECIFICATIONS.



T.W. 1508
B.W. 1507
T.W. 1508
B.W. 1506.5
18" STONE RETAINING WALL. SEE DTL 3/C807
T.W. 1508
B.W. 1507

24" CONC CATCHBASIN WITH BEEHIVE CASTING
TOP CB 1504.75
INV CMP 1500.1

35' OF 18" CMP 1.0%
INV 1499.75. PROVIDE 6.7 CY OF CLASS III RIP RAP OVER TYPE IV GEOTEXTILE PER MNDOT 3733



BONESTROO PROJECT # - 549494123

PROVIDE 4' X 8' SEDIMENT MAT AT BASE OF EXISTING FLUME. SEDIMENT MAT INSTALLED OVER SOD AND TRM. SEE C8.12.
INSTALL TURF REINFORCEMENT MAT (TRM) OVER SOD. SEE C8.12.

PROVIDE 8' W X 4' L SEDIMENT MAT INSTALLED OVER SOD AND TRM AT NWL. SEE C8.12.

CONCRETE WINGWALLS. SEE DETAIL.



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
Name: Jeff McDowell Reg. No.: 42540
Date: 03/29/2010 *Jeff McDowell*

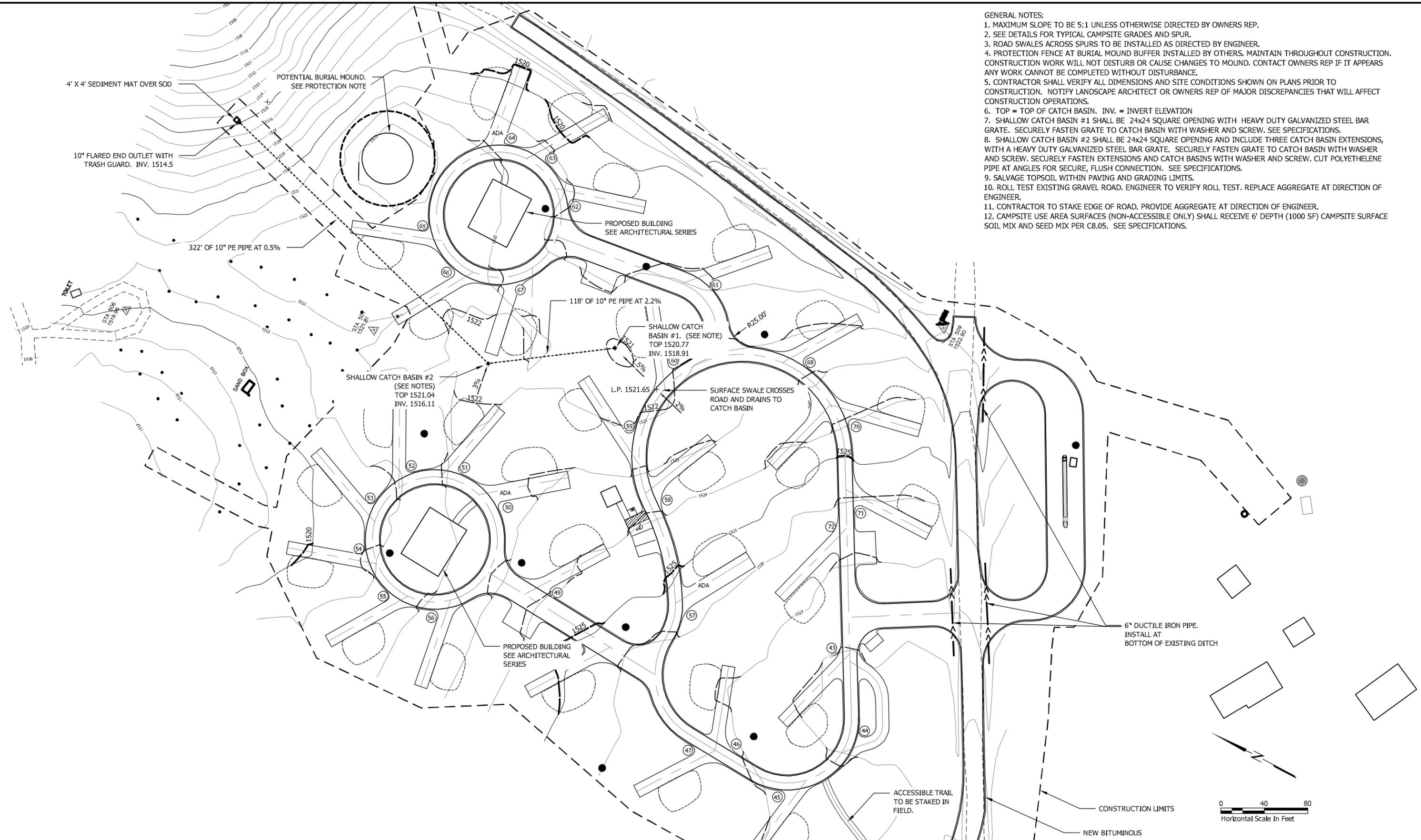
Management Resources
Safety
Facilities
Materials
Equipment
Field Operations
Information Management

DNR Division of Parks and Trails
Campground Rehabilitation
Lake Shetek State Park
Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Grading Plan**
Survey: DNR
Drawn: DNR
Checked: DNR
Horz datum: Assumed
Designed: JJM 2/10
Drawn: NWE 2/10
Checked: WLC 3/10
Vert datum: Assumed

Sheet: **C3.01**
Proj. Number: HP070210
File Number: SPK00220.00.12.02

- GENERAL NOTES:
1. MAXIMUM SLOPE TO BE 5:1 UNLESS OTHERWISE DIRECTED BY OWNERS REP.
 2. SEE DETAILS FOR TYPICAL CAMPSITE GRADES AND SPUR.
 3. ROAD SWALES ACROSS SPURS TO BE INSTALLED AS DIRECTED BY ENGINEER.
 4. PROTECTION FENCE AT BURIAL MOUND BUFFER INSTALLED BY OTHERS. MAINTAIN THROUGHOUT CONSTRUCTION. CONSTRUCTION WORK WILL NOT DISTURB OR CAUSE CHANGES TO MOUND. CONTACT OWNERS REP IF IT APPEARS ANY WORK CANNOT BE COMPLETED WITHOUT DISTURBANCE.
 5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS SHOWN ON PLANS PRIOR TO CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT OR OWNERS REP OF MAJOR DISCREPANCIES THAT WILL AFFECT CONSTRUCTION OPERATIONS.
 6. TOP = TOP OF CATCH BASIN. INV. = INVERT ELEVATION
 7. SHALLOW CATCH BASIN #1 SHALL BE 24x24 SQUARE OPENING WITH HEAVY DUTY GALVANIZED STEEL BAR GRATE. SECURELY FASTEN GRATE TO CATCH BASIN WITH WASHER AND SCREW. SEE SPECIFICATIONS.
 8. SHALLOW CATCH BASIN #2 SHALL BE 24x24 SQUARE OPENING AND INCLUDE THREE CATCH BASIN EXTENSIONS, WITH A HEAVY DUTY GALVANIZED STEEL BAR GRATE. SECURELY FASTEN GRATE TO CATCH BASIN WITH WASHER AND SCREW. SECURELY FASTEN EXTENSIONS AND CATCH BASINS WITH WASHER AND SCREW. CUT POLYETHYLENE PIPE AT ANGLES FOR SECURE, FLUSH CONNECTION. SEE SPECIFICATIONS.
 9. SALVAGE TOPSOIL WITHIN PAVING AND GRADING LIMITS.
 10. ROLL TEST EXISTING GRAVEL ROAD. ENGINEER TO VERIFY ROLL TEST. REPLACE AGGREGATE AT DIRECTION OF ENGINEER.
 11. CONTRACTOR TO STAKE EDGE OF ROAD. PROVIDE AGGREGATE AT DIRECTION OF ENGINEER.
 12. CAMPSITE USE AREA SURFACES (NON-ACCESSIBLE ONLY) SHALL RECEIVE 6" DEPTH (1000 SF) CAMPSITE SURFACE SOIL MIX AND SEED MIX PER C8.05. SEE SPECIFICATIONS.



BONESTRO PROJECT # - 549-09-123



HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
 Name: Jeff McDowell Reg. No.: 42540
 Date: 03/29/2010 *Jeff McDowell*

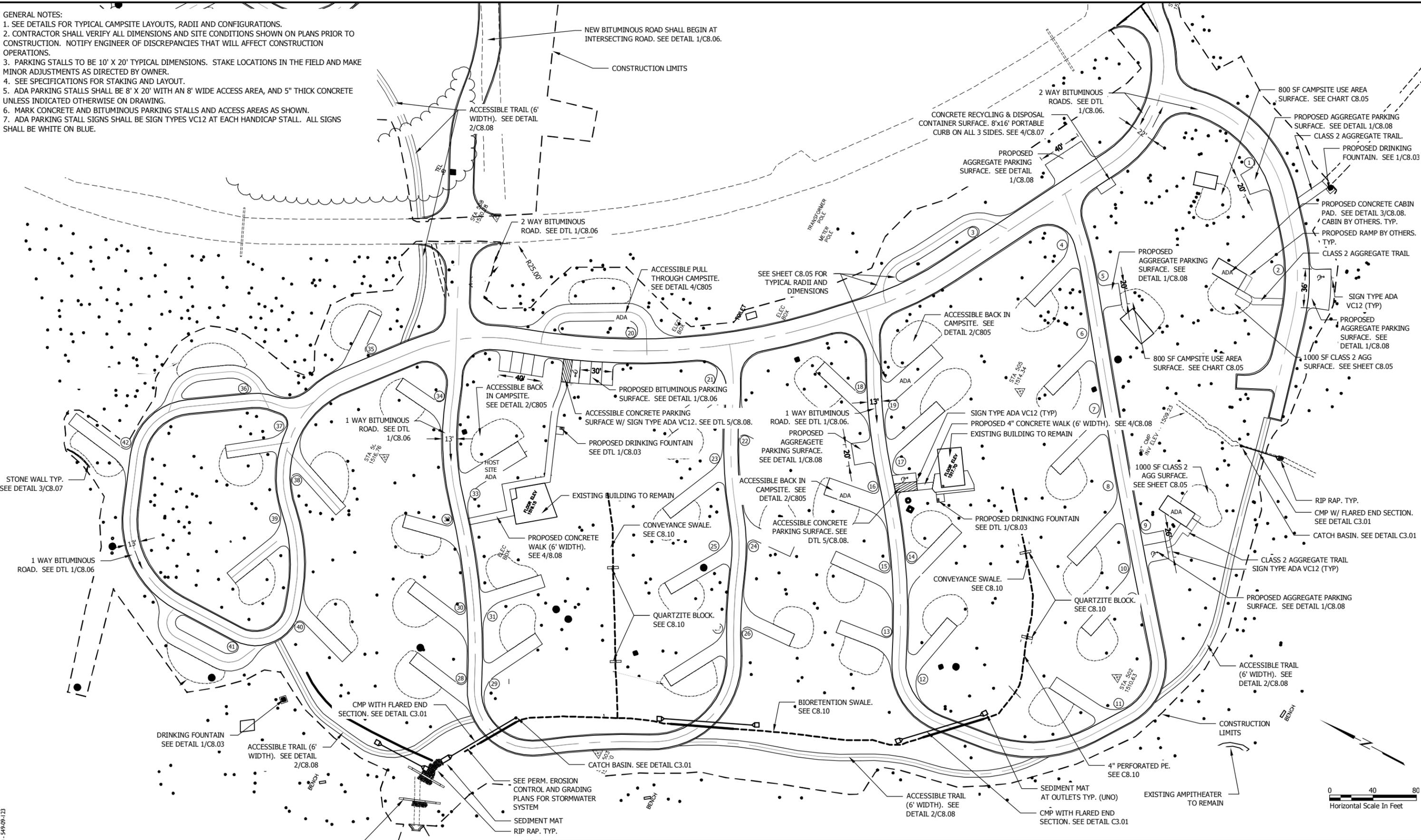
Management Resources
 Safety
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 Field Operations
 Information Management

DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park
 Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Grading Plan**
 Survey: DNR Drawn: DNR Checked: DNR
 Designed: JJM 2/10 Drawn: NWE 2/10 Checked: WLC 3/10
 Horz datum: Assumed Vert datum: Assumed

Sheet: **C3.02**
 Proj. Number: HP070210
 File Number: SPK00220.00.12.02

- GENERAL NOTES:
 1. SEE DETAILS FOR TYPICAL CAMPSITE LAYOUTS, RADII AND CONFIGURATIONS.
 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS SHOWN ON PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES THAT WILL AFFECT CONSTRUCTION OPERATIONS.
 3. PARKING STALLS TO BE 10' X 20' TYPICAL DIMENSIONS. STAKE LOCATIONS IN THE FIELD AND MAKE MINOR ADJUSTMENTS AS DIRECTED BY OWNER.
 4. SEE SPECIFICATIONS FOR STAKING AND LAYOUT.
 5. ADA PARKING STALLS SHALL BE 8' X 20' WITH AN 8' WIDE ACCESS AREA, AND 5" THICK CONCRETE UNLESS INDICATED OTHERWISE ON DRAWING.
 6. MARK CONCRETE AND BITUMINOUS PARKING STALLS AND ACCESS AREAS AS SHOWN.
 7. ADA PARKING STALL SIGNS SHALL BE SIGN TYPES VC12 AT EACH HANDICAP STALL. ALL SIGNS SHALL BE WHITE ON BLUE.



BONESTROO PROJECT # 549094123



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

Safety
 Facilities
 Materials
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 Information Management

DNR Division of Parks and Trails
 Campground Rehabilitation
 Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Site Plan**

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 Checked: DNR

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 Drawn: NWE 2/10
 Checked: WLC 3/10

Horz datum: Assumed
 Vert datum: Assumed

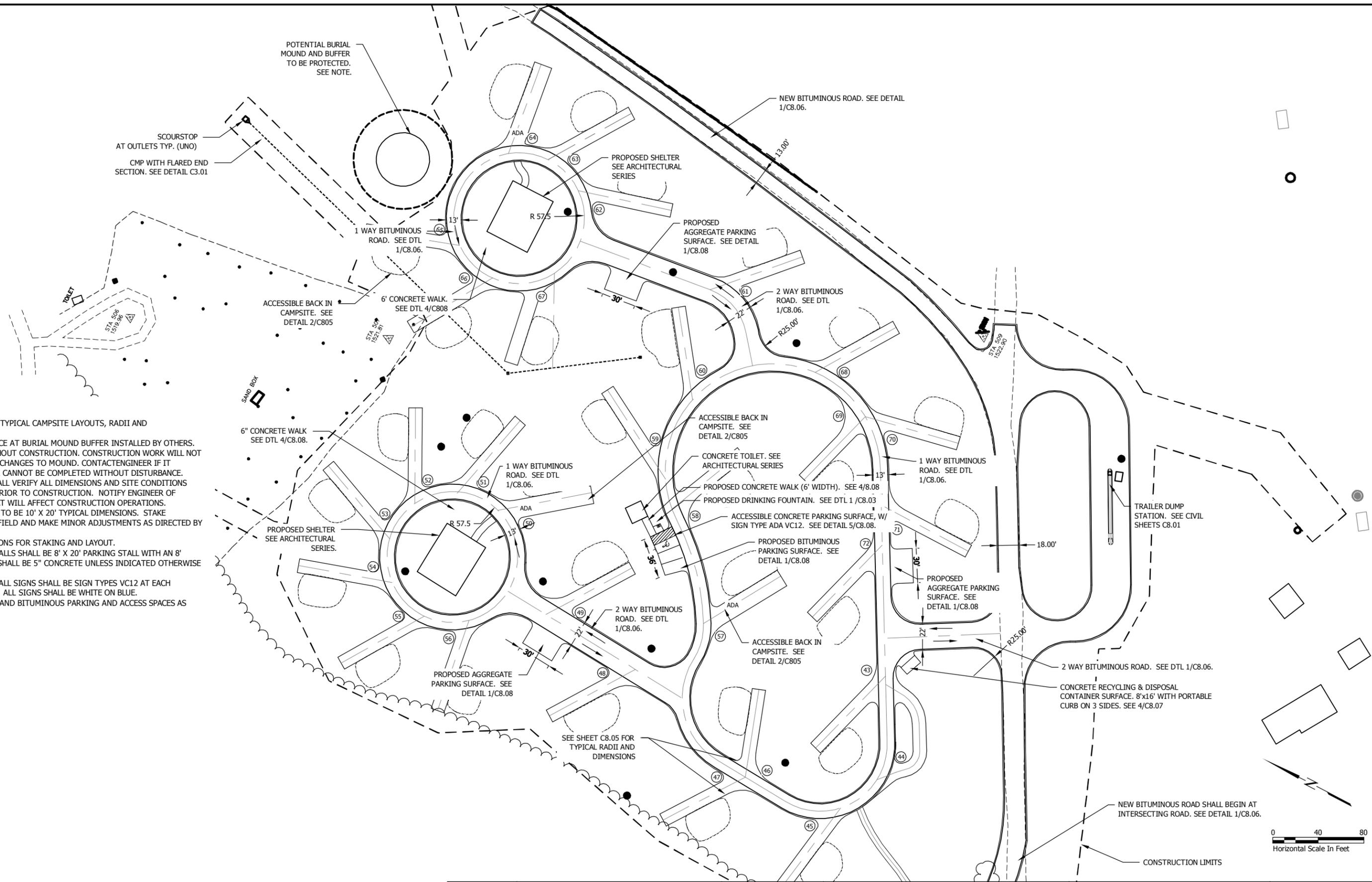
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Proj. Number: HP070210
 File Number: SPK00220.00.12.02

BONESTROO PROJECT #: 549094123

GENERAL NOTES:

1. SEE DETAILS FOR TYPICAL CAMPSITE LAYOUTS, RADII AND CONFIGURATIONS.
2. PROTECTION FENCE AT BURIAL MOUND BUFFER INSTALLED BY OTHERS. MAINTAIN THROUGHOUT CONSTRUCTION. CONSTRUCTION WORK WILL NOT DISTURB OR CAUSE CHANGES TO MOUND. CONTACT ENGINEER IF IT APPEARS ANY WORK CANNOT BE COMPLETED WITHOUT DISTURBANCE.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS SHOWN ON PLANS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES THAT WILL AFFECT CONSTRUCTION OPERATIONS.
4. PARKING STALLS TO BE 10' X 20' TYPICAL DIMENSIONS. STAKE LOCATIONS IN THE FIELD AND MAKE MINOR ADJUSTMENTS AS DIRECTED BY ENGINEER.
5. SEE SPECIFICATIONS FOR STAKING AND LAYOUT.
6. ADA PARKING STALLS SHALL BE 8' X 20' PARKING STALL WITH AN 8' ACCESS AREA, AND SHALL BE 5" CONCRETE UNLESS INDICATED OTHERWISE ON DRAWINGS.
7. ADA PARKING STALL SIGNS SHALL BE SIGN TYPES VC12 AT EACH ACCESSIBLE STALL. ALL SIGNS SHALL BE WHITE ON BLUE.
8. MARK CONCRETE AND BITUMINOUS PARKING AND ACCESS SPACES AS SHOWN.



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources

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Facilities
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Information Management

DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Site Plan**

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Drawn: NWE 2/10
Checked: WLC 3/10
Vert datum: Assumed

Sheet: **C3.04**

Proj Number: HP070210
File Number: SPK00220.00.12.02

NOTES

1. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND WATER MAIN
2. MAINTAIN 1.5 FEET VERTICAL SEPARATION BETWEEN SANITARY SEWER AND WATER MAIN



BONESTROO PROJECT # - 549-09-123



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Name: David Ahrens Reg. No.: 21711

Date: 03/29/2010 *David Ahrens*

Management Resources

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Campground Rehabilitation
Lake Shetek State Park

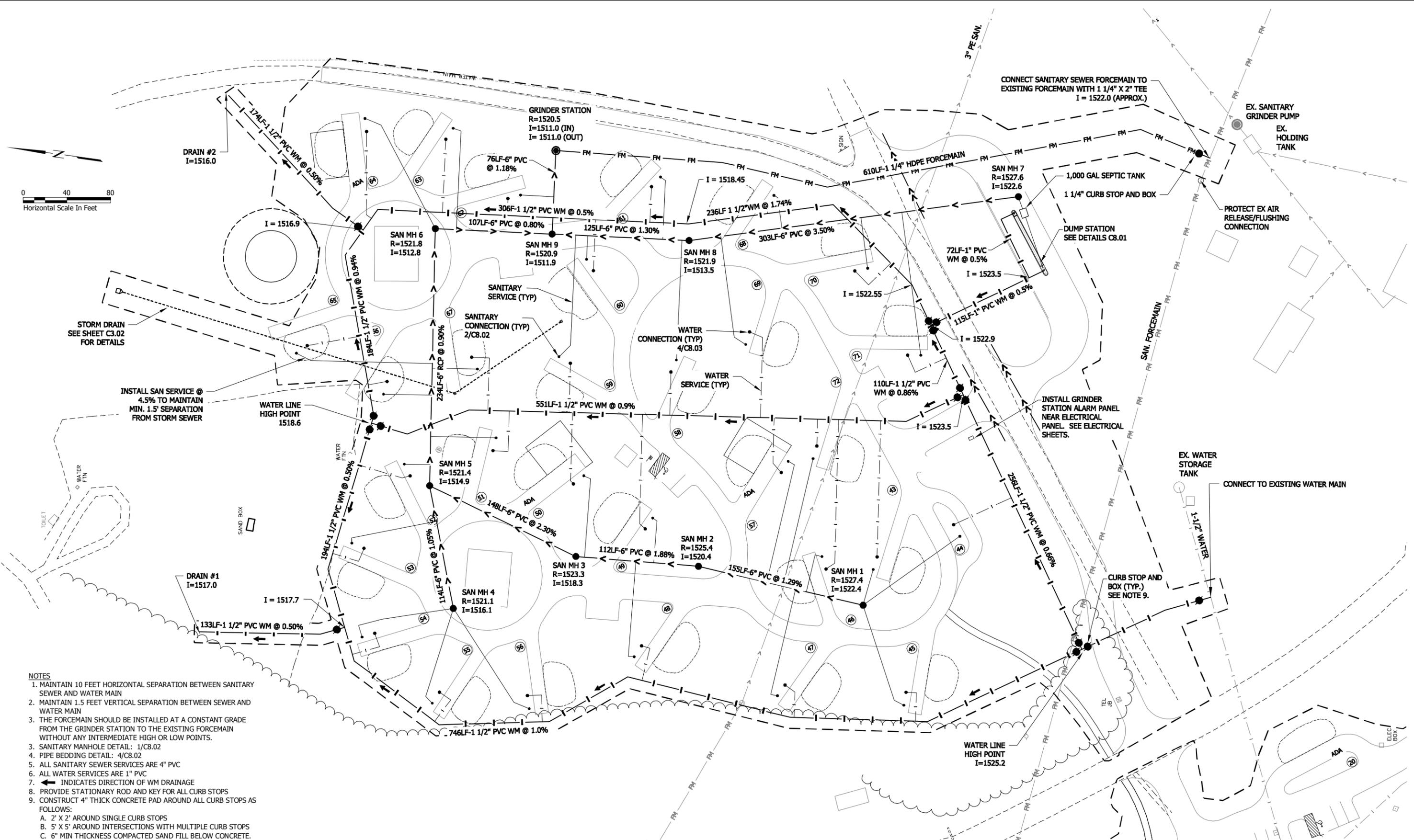
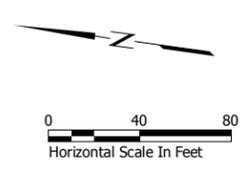
Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Utility Plan**

Survey: DNR	Designed: DAA 2/10
Drawn: DNR	Drawn: KMS 2/10
Checked: DNR	Checked: DAA 3/10
Horz datum: Assumed	Vert datum: Assumed

Sheet: **C4.01**

Proj. Number: HP070210
File Number: SPK00220.00.12.0



- NOTES**
1. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND WATER MAIN
 2. MAINTAIN 1.5 FEET VERTICAL SEPARATION BETWEEN SEWER AND WATER MAIN
 3. THE FORCEMAIN SHOULD BE INSTALLED AT A CONSTANT GRADE FROM THE GRINDER STATION TO THE EXISTING FORCEMAIN WITHOUT ANY INTERMEDIATE HIGH OR LOW POINTS.
 3. SANITARY MANHOLE DETAIL: 1/C8.02
 4. PIPE BEDDING DETAIL: 4/C8.02
 5. ALL SANITARY SEWER SERVICES ARE 4" PVC
 6. ALL WATER SERVICES ARE 1" PVC
 7. ← INDICATES DIRECTION OF WM DRAINAGE
 8. PROVIDE STATIONARY ROD AND KEY FOR ALL CURB STOPS
 9. CONSTRUCT 4" THICK CONCRETE PAD AROUND ALL CURB STOPS AS FOLLOWS:
 - A. 2' X 2' AROUND SINGLE CURB STOPS
 - B. 5' X 5' AROUND INTERSECTIONS WITH MULTIPLE CURB STOPS
 - C. 6" MIN THICKNESS COMPACTED SAND FILL BELOW CONCRETE.
 - D. VALVES SHALL BE A MINIMUM OF 18" FROM EDGE OF PAD.

BONESTROO PROJECT # 549-09-123



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Name: David Ahrens Reg. No.: 21711

Date: 03/29/2010 *David Ahrens*

Management Resources

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DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

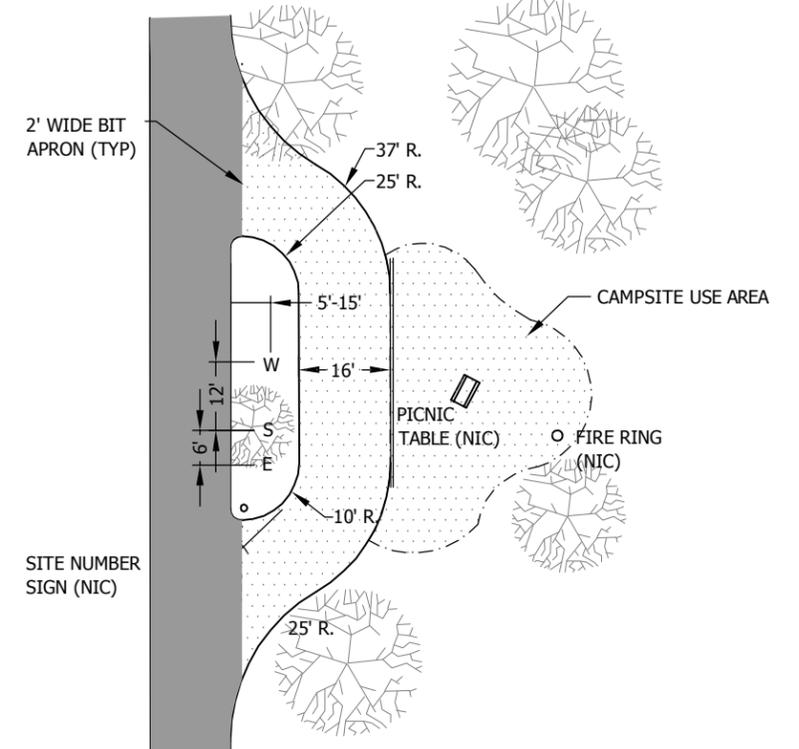
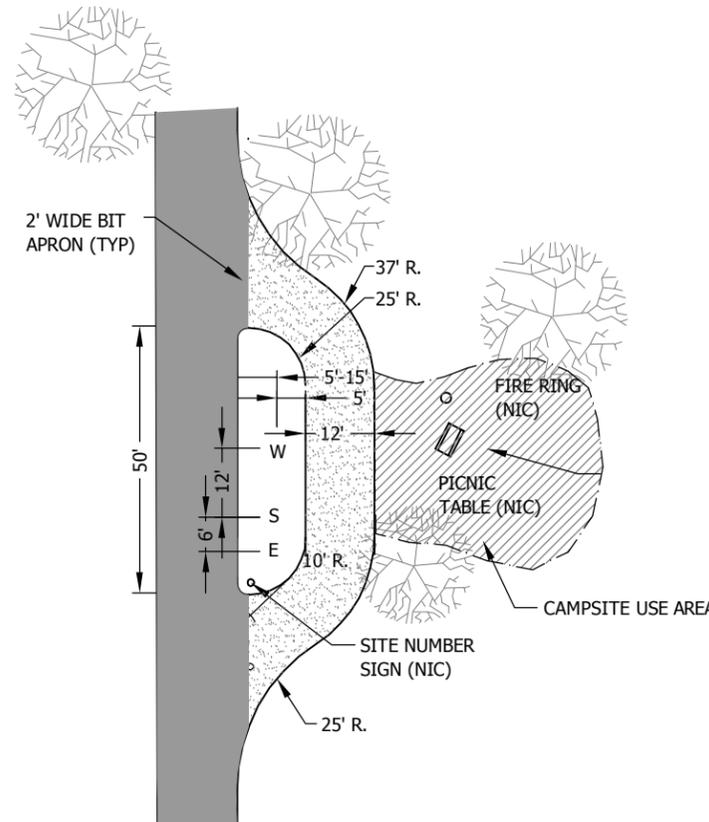
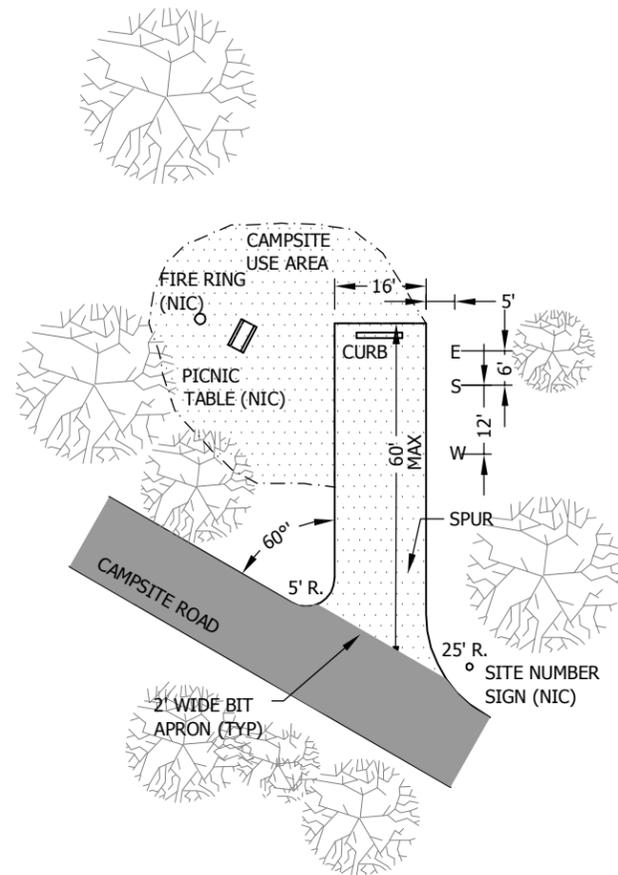
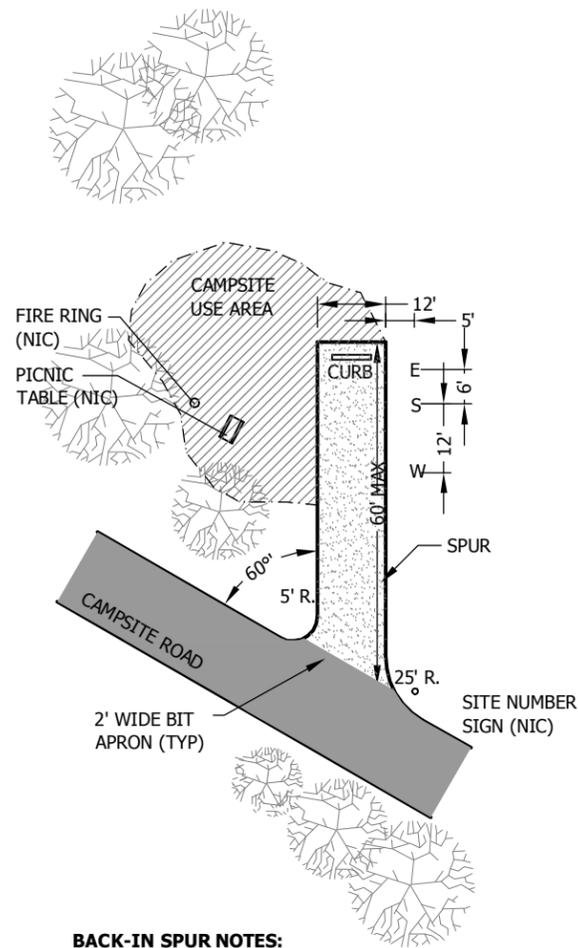
Title: **Utility Plan**

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Designed: DAA 2/10
Drawn: KMS 2/10
Checked: DAA 3/10
Vert datum: Assumed

Sheet: **C4.02**

Proj. Number: HP070210
File Number: SPK00220.00.12.0



BACK-IN SPUR NOTES:

1. BACK IN SPUR ANGLES MAY RANGE FROM 45 TO 60 DEGREES FOR SPURS ON THE OUTSIDE OF A LOOP WITH COUNTERCLOCKWISE TRAFFIC FLOW.
2. THE BACK 40' OF A BACK-IN SPUR MUST BE LEVEL, WITH A 1% MAXIMUM TOLERANCE (SEE SPUR RAMP SECTIONS)
3. 8' PORTABLE CURBS MADE OF RECYCLED MATERIAL SHALL BE PLACED 2' FROM THE END OF BACK-IN SPURS AND CENTERED.

PULL THROUGH SPUR NOTES:

1. SPUR AND CAMPSITE LOCATIONS SHALL BE STAKED ON SITE BY THE LANDSCAPE ARCHITECT OR ENGINEER.
2. THE MIDDLE 50' OF A PULL-THROUGH SPUR MUST BE LEVEL, WITH A 1% MAXIMUM TOLERANCE (SEE SPUR RAMP SECTIONS)

1 BACK-IN CAMPGROUND SPUR Scale: 1:1

2 ACCESSIBLE BACK-IN CAMPGROUND SPUR Scale: 1:1

3 PULL-THROUGH CAMPGROUND SPUR Scale: 1:1

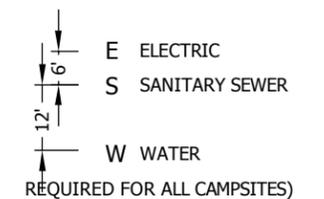
4 ACCESSIBLE - PULL-THROUGH CAMPGROUND SPUR Scale: 1:1

GENERAL NOTES:

1. SPUR AND CAMPSITE LOCATIONS SHALL BE STAKED ON SITE BY THE CONTRACTOR. ENGINEER TO REVIEW STAKING PRIOR TO ANY CONSTRUCTION.
2. STRIP TOPSOIL FROM AREAS TO BE SURFACED. GRADE SUBGRADE AND/OR PLACE MNDOT 3733.1 TYPE V GEOTEXTILE FABRIC AS DIRECTED BY ENGINEER TO ACHIEVE DESIRED LEVELING AND STABILIZATION. COMPACT SUBGRADE.
3. SPURS SHALL BE SURFACED WITH CLASS 5 AGGREGATE AT 6" COMPACTED DEPTH. ACCESSIBLE SPURS AND CAMPSITES SHALL BE SURFACED WITH CLASS 2 AGGREGATE AT 6" COMPACTED DEPTH.
4. EACH CAMPSITE AREA SHALL BE APPROXIMATELY 1000 S.F. AND IRREGULARLY SHAPED. ACCESSIBLE CAMPSITE AREAS SHALL BE APPROXIMATELY 1200 S.F. AND IRREGULARLY SHAPED. SEE DETAIL 2/C805 FOR ACCESSIBLE BACK-IN SPUR CAMPSITES AND DETAIL 4/C805 FOR ACCESSIBLE PULL-THROUGH CAMPSITES.
6. CAMPSITES SHALL BE SLOPED TO DRAIN AT 2% (ACCESSIBLE CAMPSITES AT 1-1/2%).
8. FIRE RING, PICNIC TABLE AND SITE NUMBER SIGN ARE NOT IN THIS CONTRACT. (NIC)

LEGEND:

- CLASS 5 AGGREGATE SURFACE
- ACCESSIBLE SURFACE- CLASS 2 AGGREGATE
- BITUMINOUS SURFACE
- CAMPSITE USE AREA SURFACE SOIL MIX (NON-ACCESSIBLE)
CLASS 5 (40%)
MORTAR SAND, MNDOT 3128 (40%)
COMPOST, GRADE 1 MNDOT 3890 (20%)
LIGHTLY COMPACT WITH SOD ROLLER AND HYDROSEED WITH FESCUE MIX
(CAMPSITE USE AREA SURFACE SEED MIX, SEE SPECIFICATIONS)



REQUIRED FOR ALL CAMPSITES

BONESTROO PROJECT #: 549094123



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 Name: Jeff McDowell Reg. No.: 42540
 Date: 03/29/2010 *Jeff McDowell*

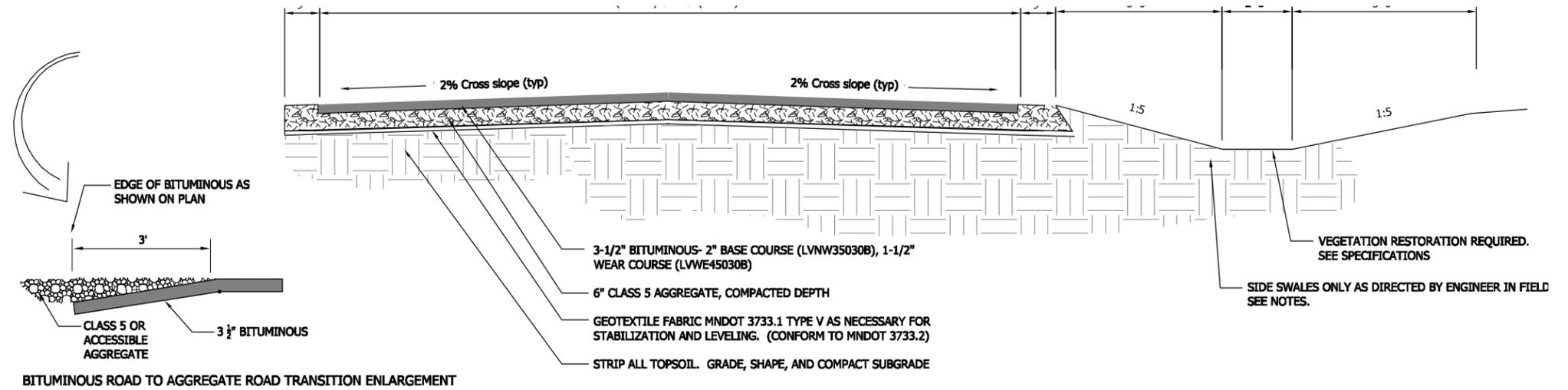
Management Resources
 Safety
Facilities
 Materials
 Equipment
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DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park
 Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

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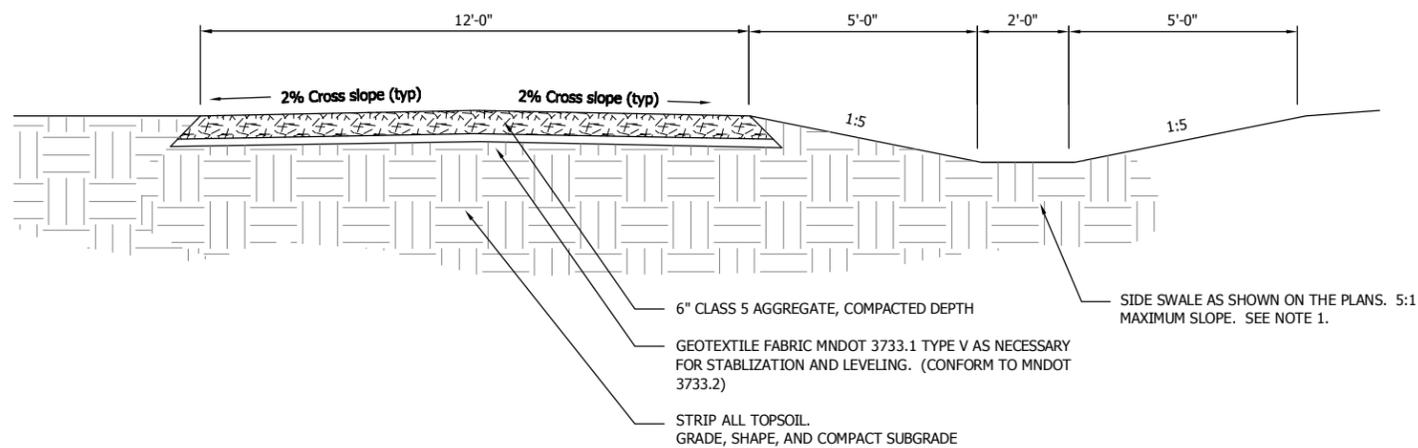
Sheet: **C8.05**
 Proj. Number: HP070210
 File Number: SPK00220.00.12.02

- NOTES:
1. SWALES ALONG SIDE OF THE ROAD WILL NOT BE REQUIRED EVERYWHERE. THE ENGINEER WILL DETERMINE SWALE LOCATION AND LINEAL FOOT LENGTH. SIDESLOPES SHALL BE 1:5 OR FLATTER. DRESS IN EDGES OF BITUMINOUS WITH SALVAGED TOPSOIL TO WITHIN ONE INCH OF THE TOP SURFACE.
 2. CROSS SLOPES ARE TYPICALLY 2% MAXIMUM GRADE. SEE C3.01 AND C3.02 FOR GRADING PLAN.
 3. STRIP TOPSOIL FROM AREA TO BE SURFACED AND STOCKPILE ON SITE.
 4. GEOTECHNICAL FABRIC TO BE PLACED AS DIRECTED IN FIELD BY OWNERS REPRESENTATIVE FOR ROAD LEVELING AND STABILIZATION.



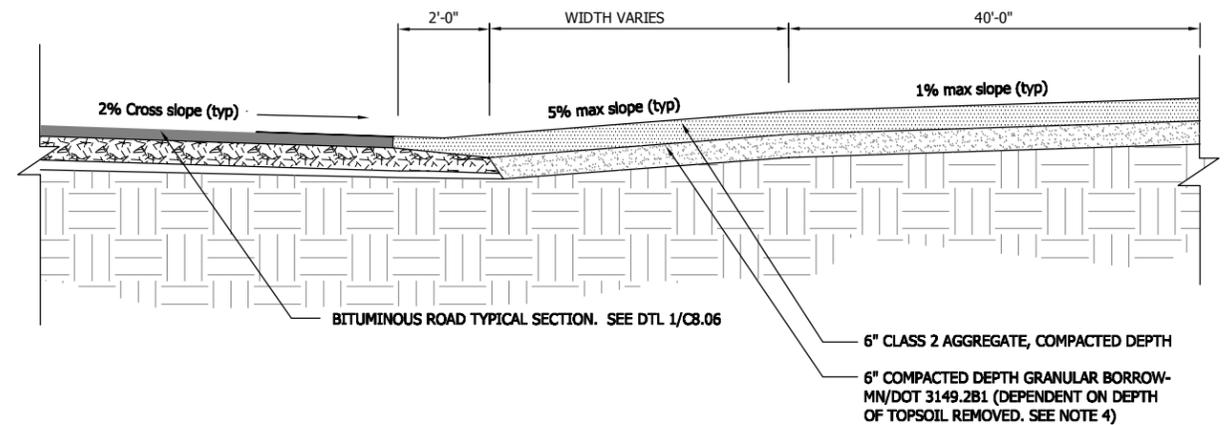
1 BITUMINOUS ROAD TYPICAL SECTION

NTS



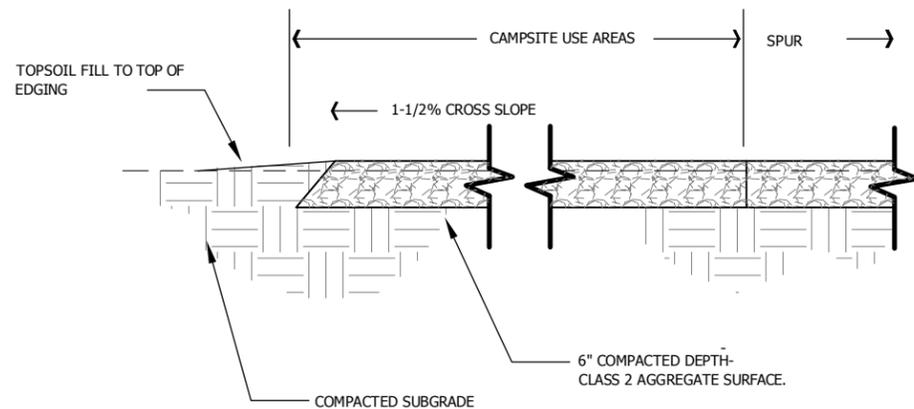
2 AGGREGATE ROAD / SPUR TYPICAL SECTION

NTS



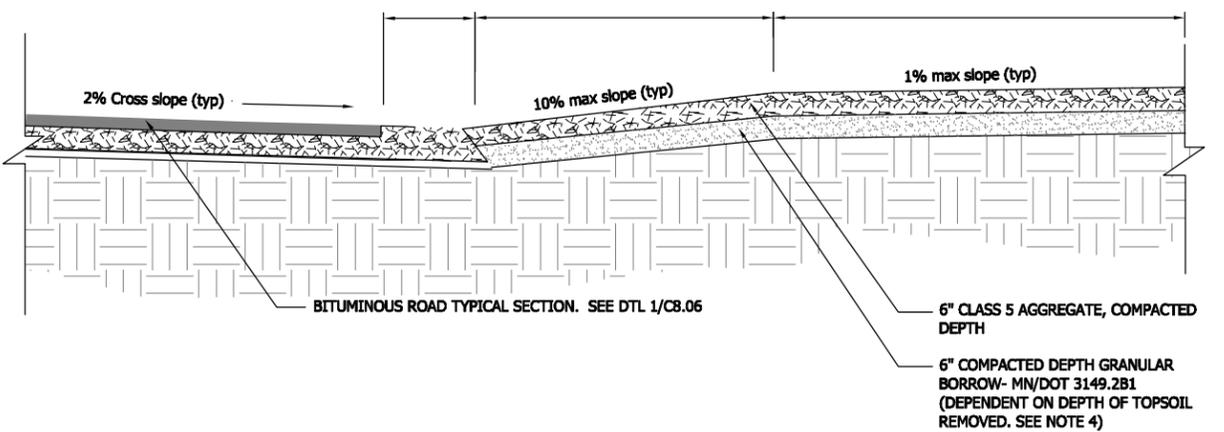
4 ACCESSIBLE SPUR RAMP SECTION -UPHILL

NTS



3 ACCESSIBLE AGGREGATE SURFACE

NTS



5 TYPICAL SPUR RAMP SECTION -UPHILL

NTS

BONESTROO PROJECT # - 549-09-123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010

Jeff McDowell

Management Resources

Safety Facilities

Materials Equipment

Field Operations Information Management

DNR Division of Parks and Trails

Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

Title: **Site Details**

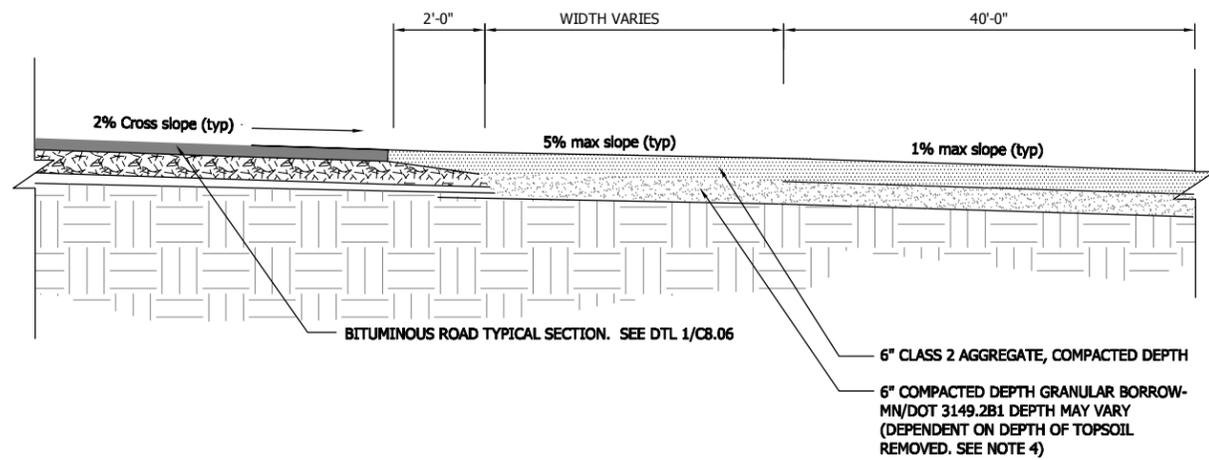
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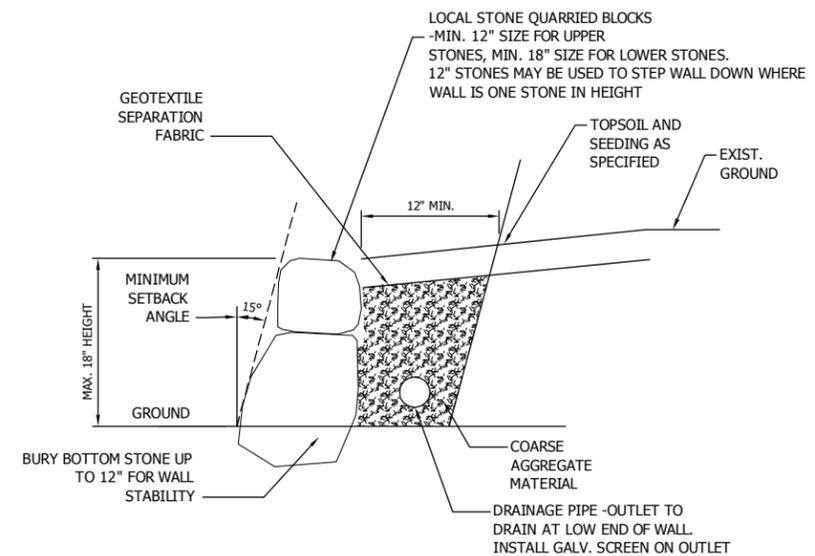
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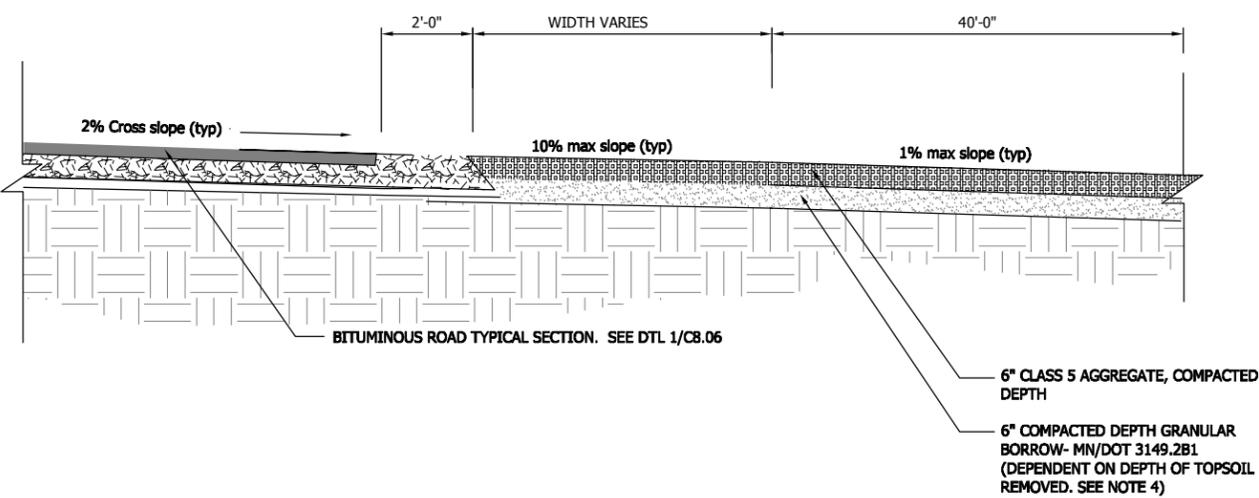
1 ACCESSIBLE SPUR RAMP SECTION -DOWNHILL

NTS



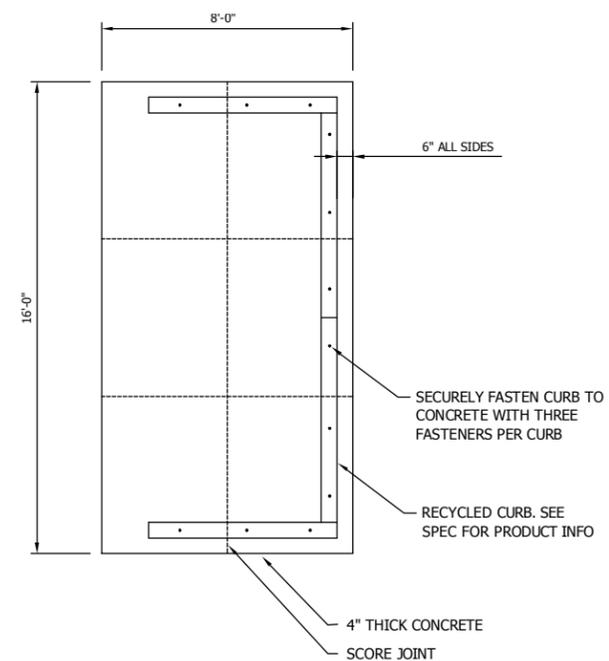
3 STONE RETAINING WALL

NTS



2 TYPICAL SPUR RAMP SECTION -DOWNHILL

NTS



4 RECYCLING CONTAINER DETAIL

NTS

BONESTROO PROJECT #: 549094123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010

Jeff McDowell

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**DNR Division of Parks and Trails
Campground Rehabilitation**

Lake Shetek State Park

Murray County
Section: 6

Township: 107

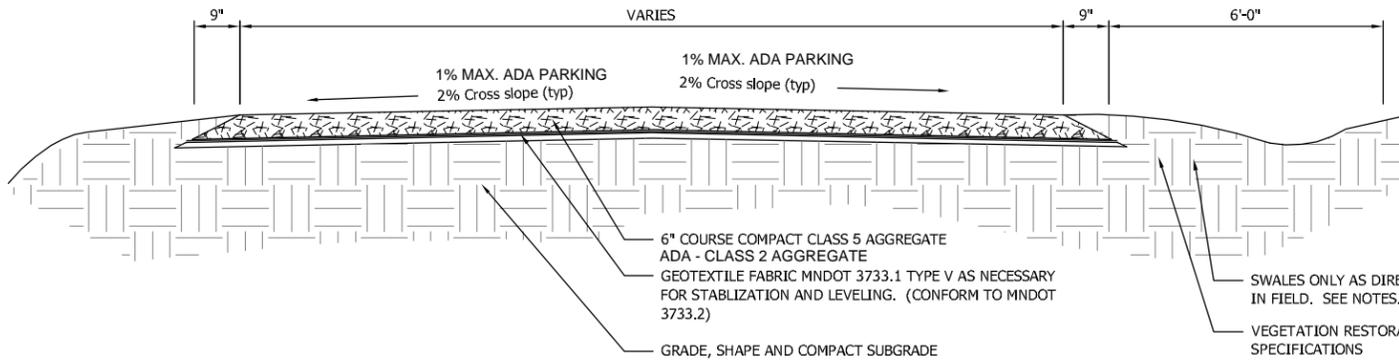
Near Currie
Range: 40-41 W

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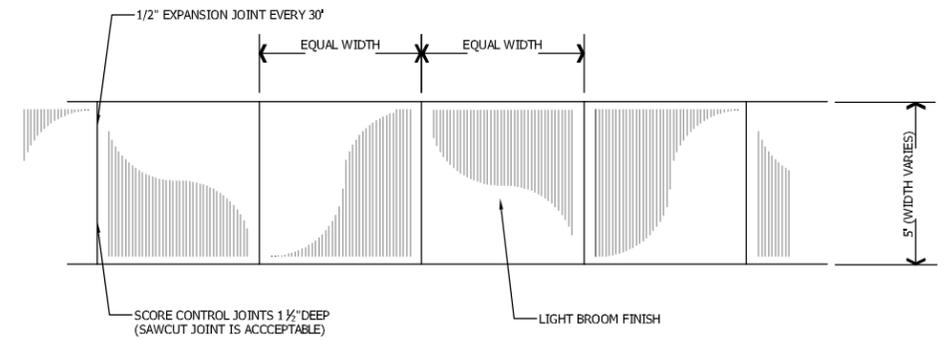
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NOTES:
 STRIP TOPSOIL WITH GRADING AND PAVING LIMITS AND STOCKPILE ON SITE AS DIRECTED BY OWNER'S REPRESENTATIVE

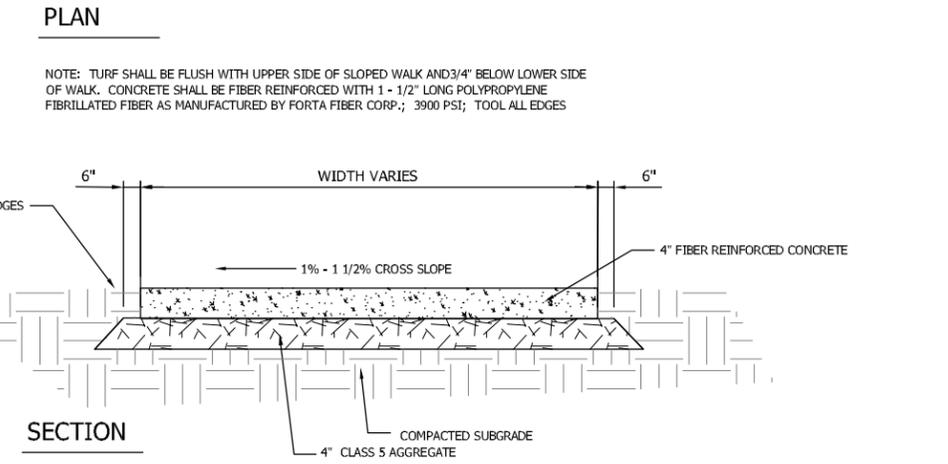
SWALES ADJACENT TO PARKING AND SPUR AREAS WILL NOT BE REQUIRED EVERYWHERE. THE ENGINEER WILL DETERMINE SWALE LOCATION AND LINEAL FOOT LENGTH. SIDESLOPES SHALL BE 1:5 OR FLATTER.

ADA PARKING/ACCESS SPACES: 1% MAX. SLOPE IN ANY DIRECTION



NOTES:
 TRAIL SHALL HAVE A 6" TAPERED SHOULDER ON EITHER SIDE (TYP)

MAXIMUM PROFILE GRADE = 4% (1:25 SLOPE). SEE GRADING PLAN.



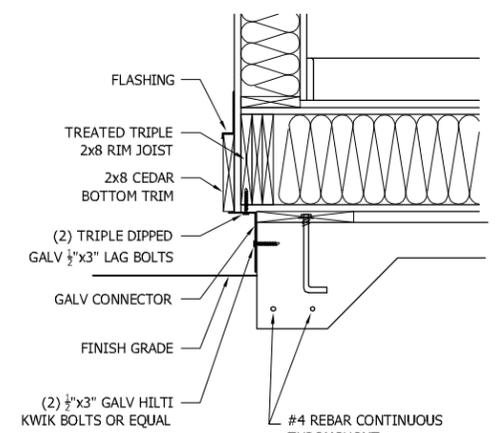
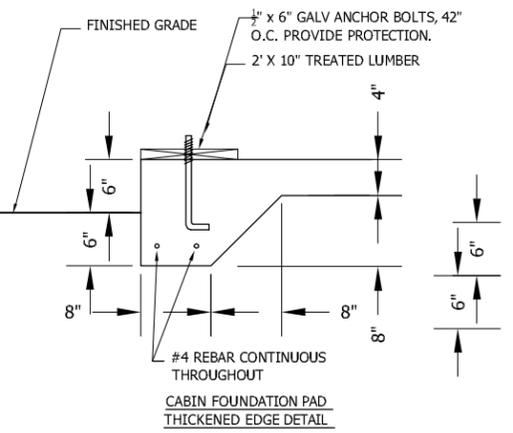
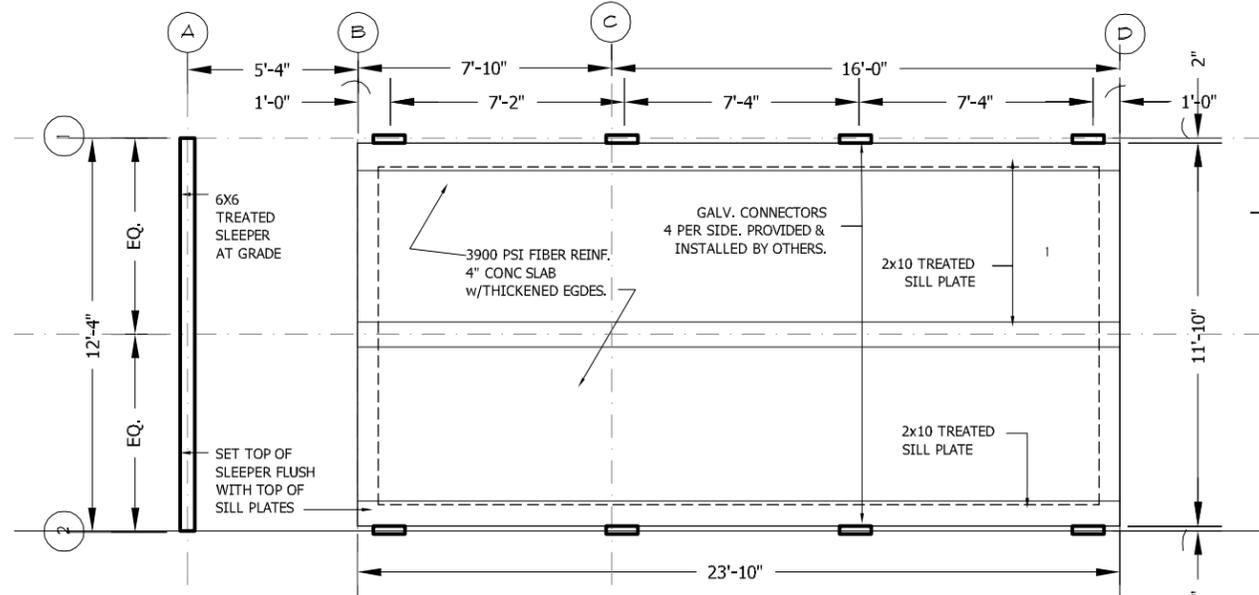
NOTE: TURF SHALL BE FLUSH WITH UPPER SIDE OF SLOPED WALK AND 3/4" BELOW LOWER SIDE OF WALK. CONCRETE SHALL BE FIBER REINFORCED WITH 1 - 1/2" LONG POLYPROPYLENE FIBRILLATED FIBER AS MANUFACTURED BY FORTA FIBER CORP.; 3900 PSI; TOOL ALL EDGES

NOTE: WALKS EXCEEDING 4.5% PROFILE GRADE, 2% CROSS SLOPE, AND LANDINGS EXCEEDING 2% IN ANY DIRECTION EXCEPT WHERE SPECIFICALLY NOTED ON THE PLANS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

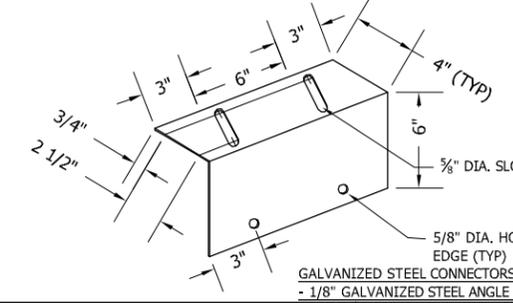
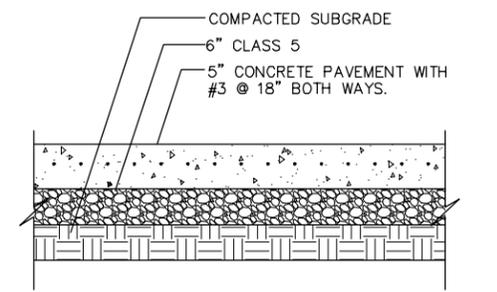
1 AGGREGATE ROAD / PARKING SURFACE - TYPICAL SECTION

2 ACCESSIBLE TRAIL - TYPICAL SECTION

4 CONCRETE WALK - TYPICAL SECTION



NOTE: SURFACE SHALL NOT EXCEED 1-1/2% SLOPE IN ANY DIRECTION.



NOTES:
 1. PROVIDE 12" COMPACTED CLASS 5 GRAVEL AS A LEVELING BASE UNDER CABIN FOUNDATION AND DECK SLEEPER (INCLUDED IN THE UNIT PRICE FOR FURNISHING CONCRETE SLAB).

2. TREATED SLEEPER AND SILL PLATES SHALL BE TREATED WITH ACZA OR ACQ TO A TOTAL ABSORPTION OF 0.60 LBS/CF OF WOOD. TREATMENT SHALL BE AS PER THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARDS.

3. ON SITE INSTALLATION: PROVIDE 1/4" HARDWARE CLOTH OR CONTINUOUS SOFFIT VENT MATERIAL ATTACHED BETWEEN CABIN AND CONCRETE SLAB. F&I BY OTHERS.

4. PROVIDE SAFETY COVER FOR EMBEDDED BOLTS.

5. ON SITE INSTALLATION PROVIDE 1/4" HARDWARE CLOTH OR CONTINUOUS SOFFIT VENT MATERIAL ATTACHED BETWEEN CABIN AND CONCRETE SLAB

3 CABIN FOUNDATION PAD

5 ACCESSIBLE CONCRETE PARKING SURFACE

BONESTROO PROJECT # - 546094123



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010

Management Resources
 Safety Facilities
 Materials Equipment
 Field Operations
 Information Management

DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Site Details

Title: Site Details

Survey: DNR Drawn: NWE 2/10
 Checked: DNR

Designed: JJM 2/10
 Drawn: NWE 2/10
 Checked: WLC 3/10

Horz datum: Assumed Vert datum: Assumed

Sheet: **C8.08**

Proj. Number: HP070210
 File Number: SPK00220.00.12.02

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN OR DEAD BRANCHES, SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKE TREES ONLY AS SPECIFIED AT THE DIRECTION OF LANDSCAPE ARCHITECT

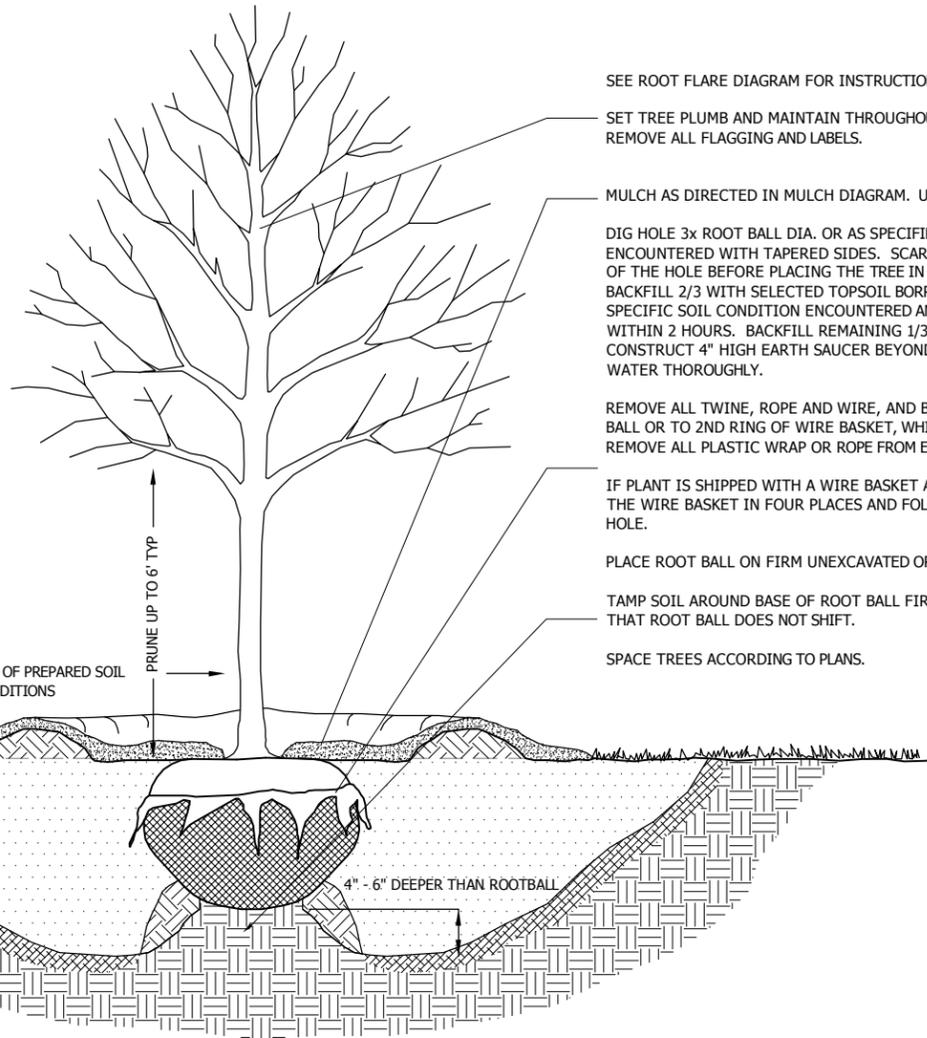
WRAP TREE TRUNKS AS SPECIFIED.

MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH IN THE FIELD.

CONTRACTOR IS RESPONSIBLE FOR TESTING PERCOLATION RATES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT OF ANY POTENTIAL DRAINAGE ISSUES PRIOR TO FINAL PLANTING. INSTALL APPROVED DRAINAGE MATERIALS AS DIRECTED.

ADD MYCORRHIZAL TRANSPLANT INOCULATE AT PLANTING TIME PER MANUFACTURER'S DIRECTIONS.

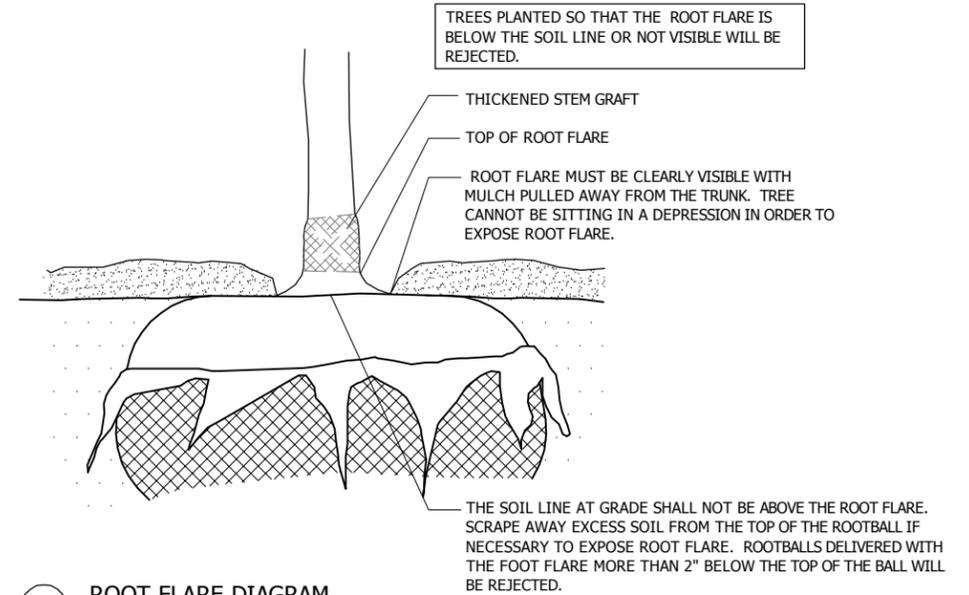
IF PLANT IS SHIPPED WITH A CONTAINER AROUND THE ROOTBALL, SLICE SIDES OF CONTAINER AND REMOVE COMPLETELY. USE FINGERS OR SMALL HAND TOOLS TO PULL ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY CIRCLING ROOTS.



1 B&B TREE PLANTING DETAIL

Not to Scale

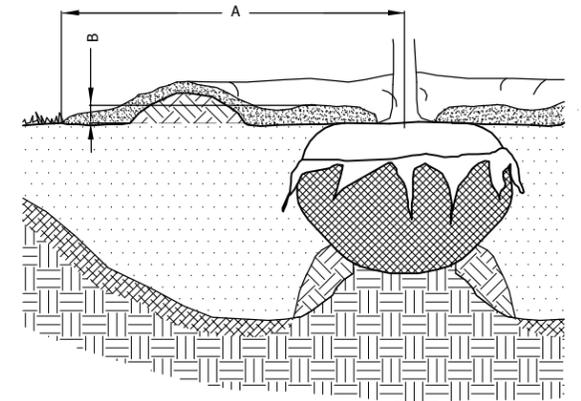
2 ROOT FLARE DIAGRAM



Not to Scale

- PULL MULCH BACK NO LESS THAN 3" AND NO MORE THAN 6" FROM TREE TRUNKS.
- IF THE MULCH DEPTH IS LESS THAN 3" ADDITIONAL MULCH IS REQUIRED TO PROVIDE THE MINIMUM DEPTH SPECIFIED IN CHART BELOW.
- SUBSIDING OR DETERIORATING MULCH IS ACCEPTABLE THROUGHOUT THE CONTRACT IF THE MULCH DEPTH IS MAINTAINED AT A MINIMUM 3" DEPTH.
- MULCH CONTAMINATED WITH SOIL MUST BE REMOVED AND REPLACED.

TYPE OF PLANT	A MULCH LINE TO CENTER OF PLANT	B DEPTH OF MULCH
DECIDUOUS TREES	3' MIN.	4" - 6"
DECIDUOUS SHRUBS	3' MIN.	4" - 6"



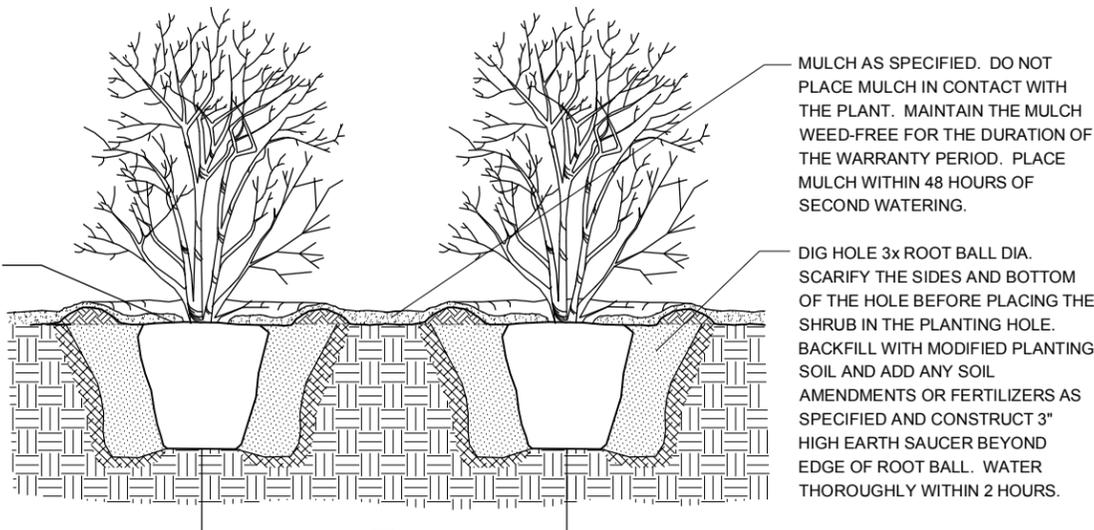
Not to Scale

3 MULCH DIAGRAM

IF PLANT IS SHIPPED WITH A CONTAINER AROUND THE ROOTBALL, SLICE SIDES OF CONTAINER AND REMOVE COMPLETELY. USE FINGERS OR SMALL HAND TOOLS TO PULL ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY CIRCLING ROOTS. REMOVE ALL ROPE, TWINE AND BURLAP FROM TOP HALF OF ROOT BALL FROM B&B SHRUBS.

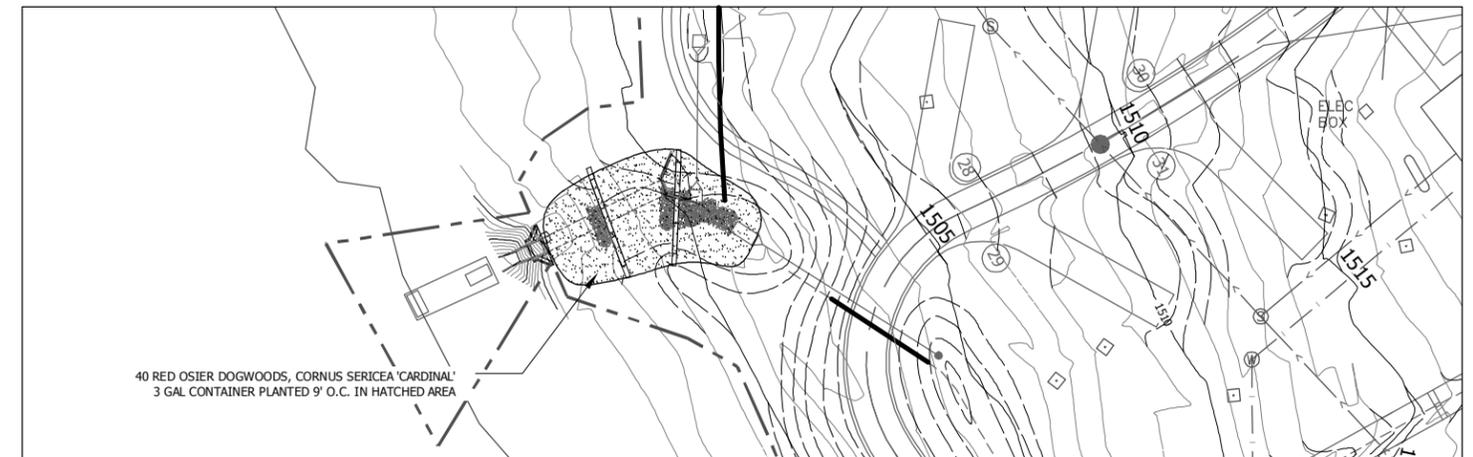
DO NOT HEAVILY PRUNE AT PLANTING. PRUNE ONLY BROKEN OR DEAD BRANCHES, RETAINING NATURAL FORM.

SET TOP OF ROOT BALL FLUSH TO GRADE OR 1-2 IN. HIGHER IN SLOWLY DRAINING SOILS. ADD MYCORRHIZAL TRANSPLANT INOCULANT AT PLANTING TIME PER MANUFACTURER'S DIRECTIONS.



Not to Scale

2 SHRUB PLANTING DIAGRAM



Not to Scale

4 DOGWOOD PLANTING PLAN

BONESTROO PROJECT # - 54909-173



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA

Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources
Safety
Facilities
Materials
Equipment
Field Operations
Information Management

DNR Division of Parks and Trails
Campground Rehabilitation
Lake Shetek State Park

Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

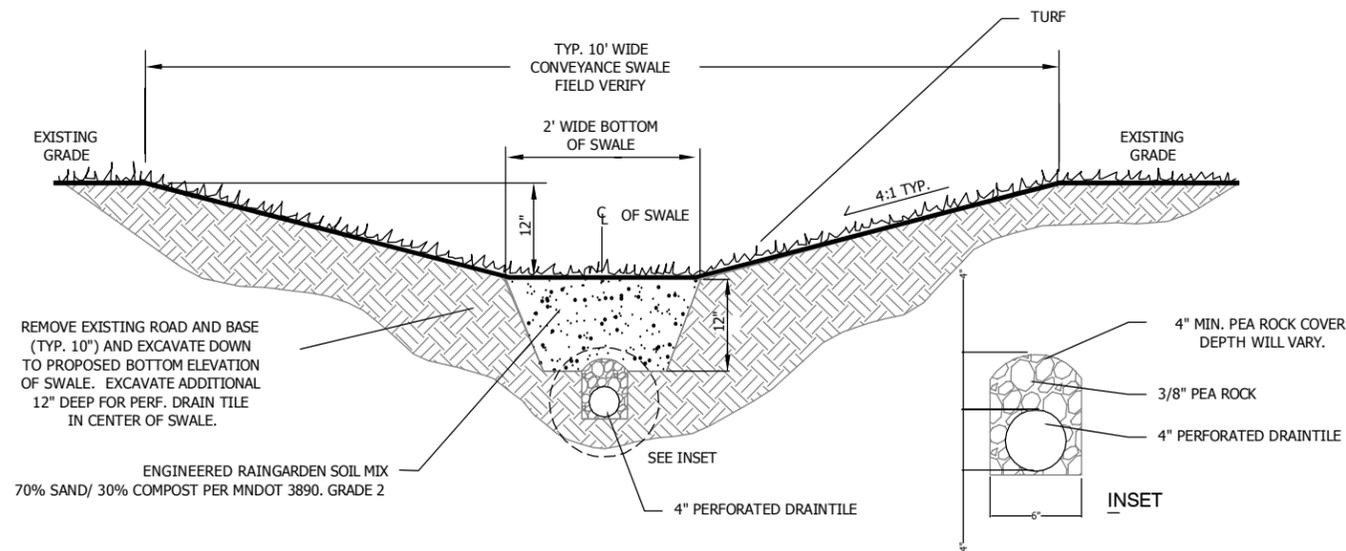
Title: **Site Details**

Survey: DNR
Checked: DNR
Horz datum: Assumed

Designed: JJM 2/10
Drawn: NWE 2/10
Checked: WLC 3/10
Vert datum: Assumed

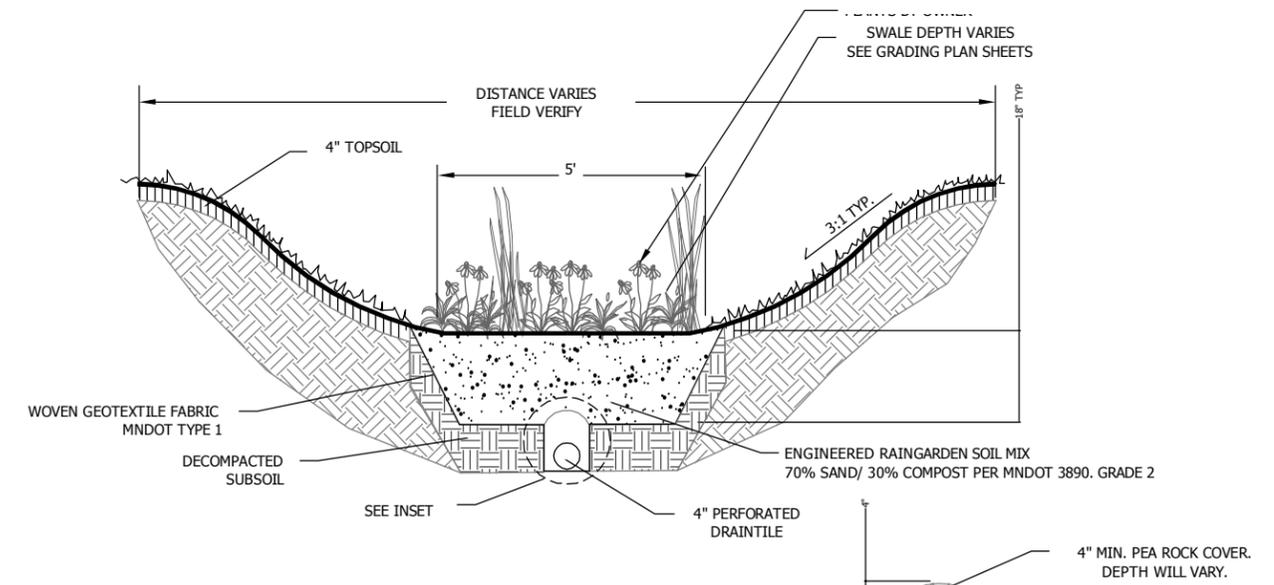
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Proj. Number: HP070210
File Number: SPK00220.00.12.02



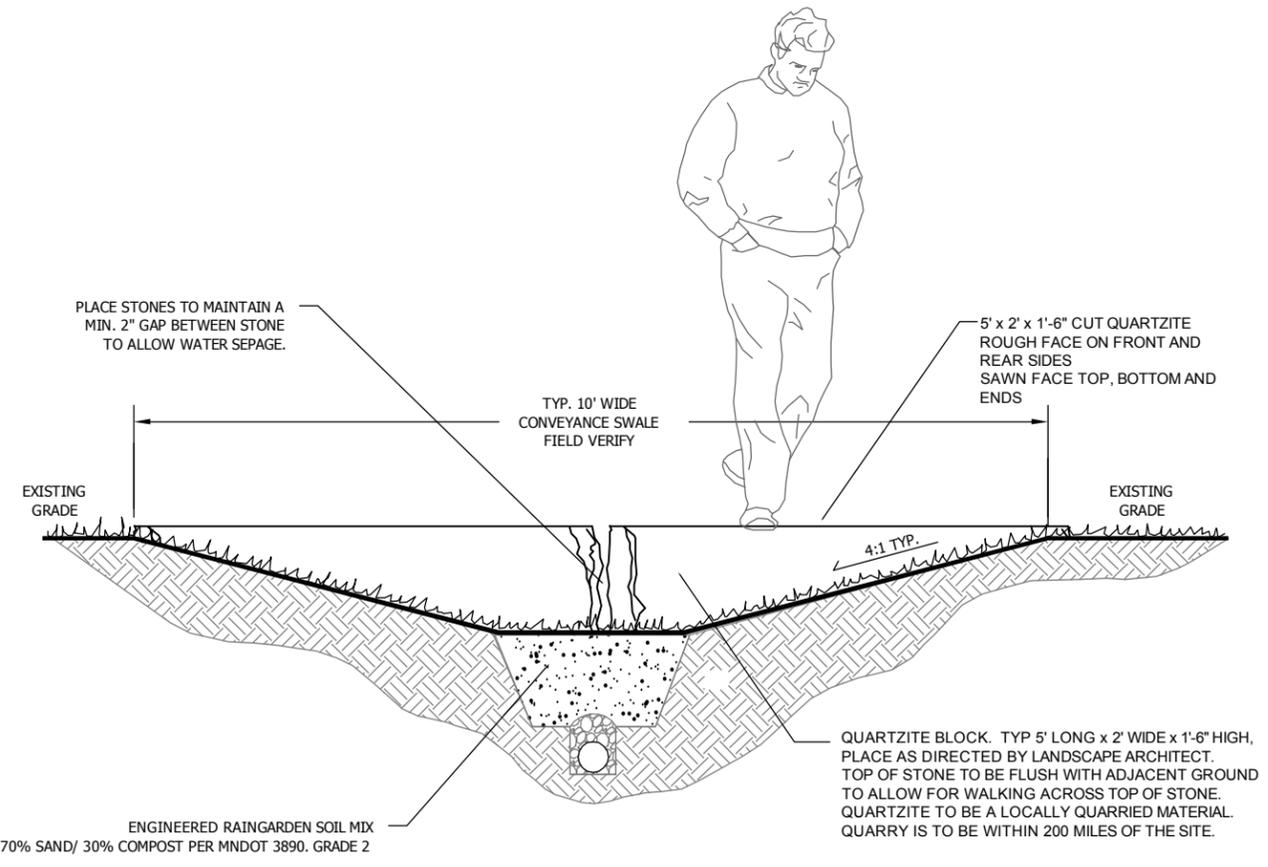
1 CONVEYANCE SWALE - CROSS SECTION

Not to Scale



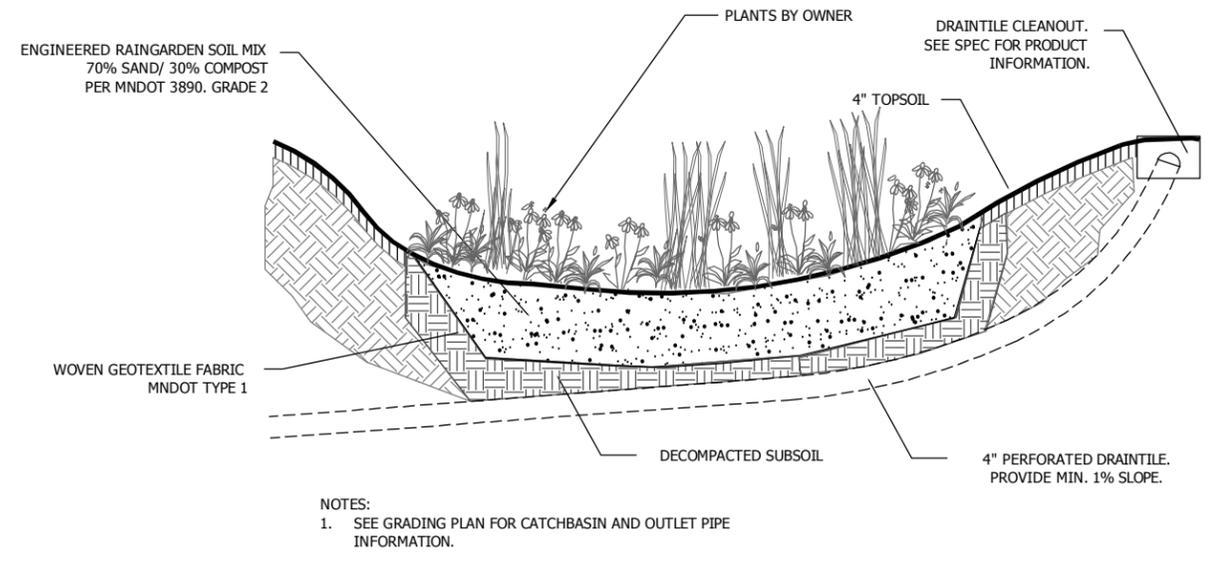
3 TYPICAL BIORETENTION SWALE - CROSS SECTION

Not to Scale



2 CONVEYANCE SWALE W/QUARTZITE BLOCKS - CROSS SECTION

Not to Scale



4 TYPICAL BIORETENTION SWALE - ELEVATION

Not to Scale

- NOTES:
1. SEE GRADING PLAN FOR ELEVATIONS.
 2. DECOMPACT SUBSOIL TO A MINIMUM DEPTH OF 6" PRIOR TO PLACING AMENDED SOIL MIX.
 3. PLACE AMENDED SOIL MIX AND LIGHTLY PACK TO ELIMINATE SETTLING, BUT DO NOT COMPACT AND LESSEN INFILTRATION RATES.

BONESTROO PROJECT # - 54909.123



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Date: 03/29/2010

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Campground Rehabilitation

Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

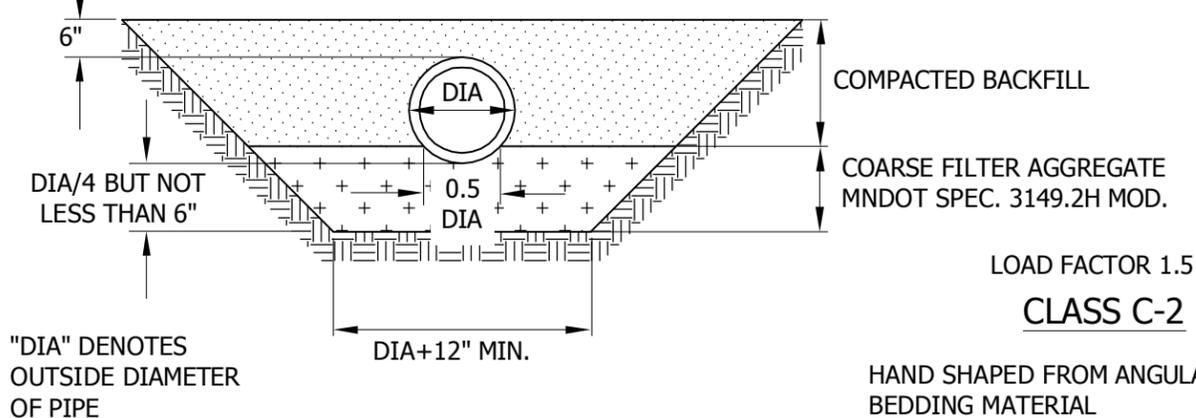
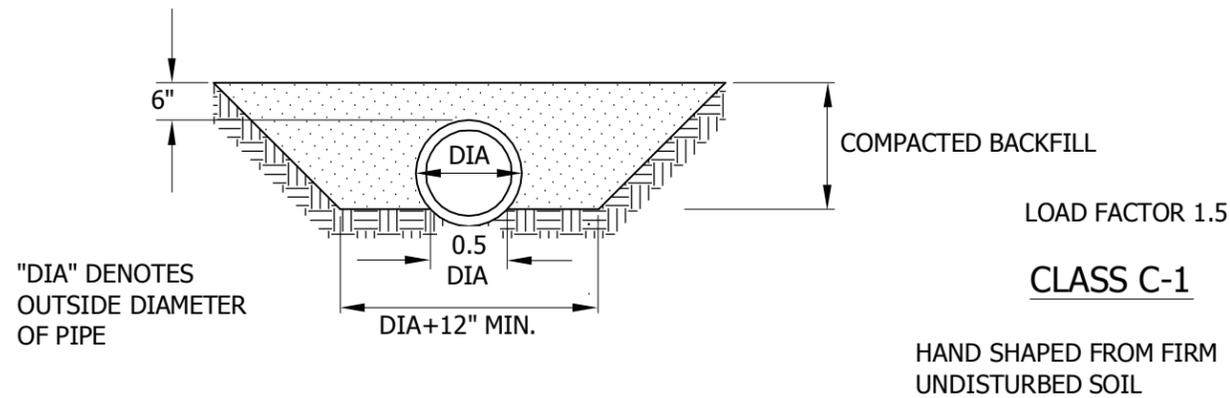
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Survey: DNR
Drawn: DNR
Checked: DNR
Horz datum: Assumed

Designed: JJM 2/10
Drawn: NWE 2/10
Checked: WLC 3/10
Vert datum: Assumed

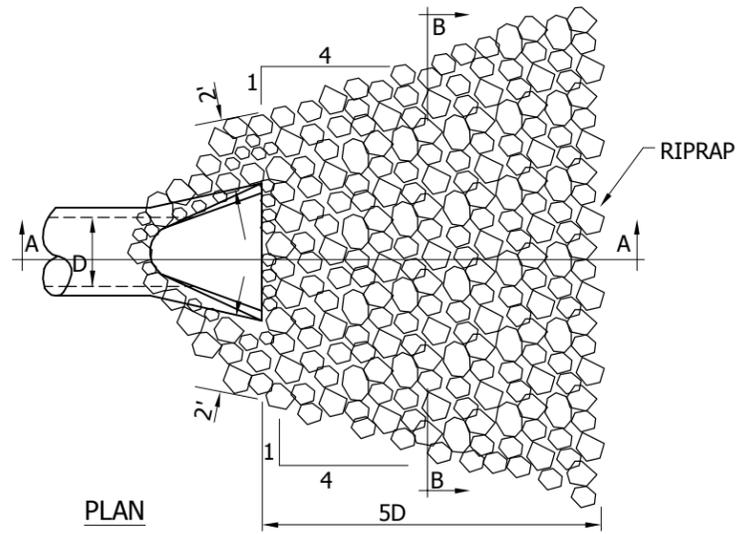
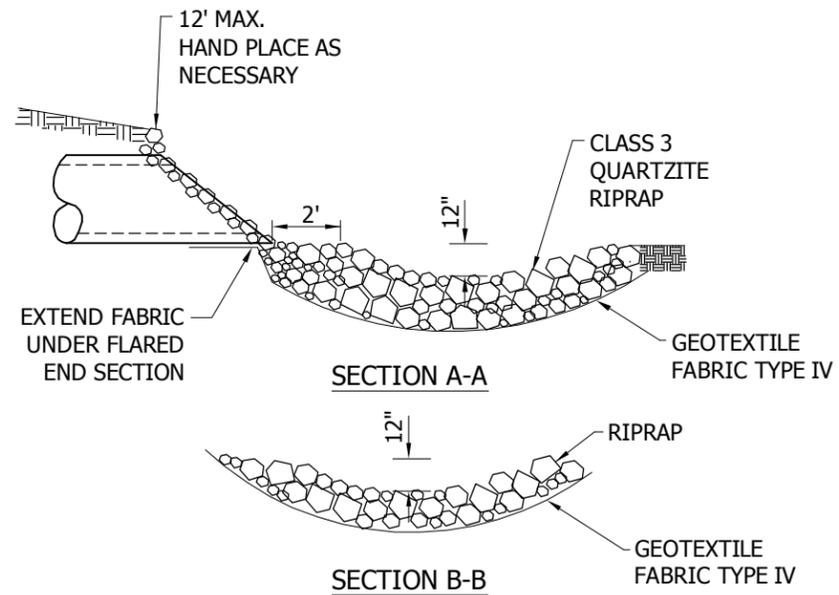
Sheet: **C8.10**

Proj. Number: HP070210
File Number: SPK00220.00.12.02



1 CORRUGATED METAL CULVERT UNDER ROAD DETAIL

Not to Scale



PIPE DIA. (IN.)	GALV. (IN.)	DIMENSIONS				REMARKS	
		A	B	H	W		
12	16	6	5	6	21	24	1 PIECE
15	16	7	8	6	26	30	"
18	16	8	10	6	31	36	"
21	16	9	12	6	36	42	"
24	16	10	13	6	41	48	"
30	14	12	15	8	51	60	"
36	14	14	18	9	60	72	2 PIECES, 1 SPLICE
42	12	16	22	11	69	84	"
48	12	18	27	12	78	90	"
54	12	18	30	12	84	102	"
60	12	18	33	12	87	114	3 PIECES, 2 SPLICES
66	12	18	36	12	87	120	"
72	12	18	39	12	87	126	"
78	12	18	42	12	87	132	"
84	12	18	45	12	87	138	"

NOTES:
 FOR OTHER APPROVED CONNECTIONS, SEE STANDARD P. AT F 3124.
 MULTIPLE PANEL BODIES SHALL HAVE 2" MIN. LAP SEAMS WHICH ARE TO BE JOINED BY 3/8" DIA. RIVETS OR BOLTS (GALVANIZED) SPACED AT 6" MAX. C. TO C. NUTS SHALL BE TIGHTENED TO 75 FT-LB. TORQUE.
 WHERE METAL APRONS ARE TO BE FASTENED TO HELICALLY CORRUGATED PIPE, AN APPROVED CONNECTION SHALL BE USED.
 THE TOP EDGE OF ALL APRONS SHALL HAVE TUBING REINFORCING (SEE SECTION A-A). THE TUBING SHALL BE SUPPLEMENTED WITH 2" X 2" X 1/4" GALV. ANGLE FOR 60" THRU 72" DIA. AND 2-1/2" X 2-1/2" X 1/4" GALV. ANGLE FOR 78" AND 84" DIA. ALTERNATE ROLLED TOP EDGE DESIGNS APPROVED BY THE MNDOT MATERIALS SECTION MAY BE USED.

APPROVED Nov. 13, 1986
 R.H. Sullivan
 Director
 Materials, Research and Standards

STATE OF MINNESOTA
 DEPARTMENT OF TRANSPORTATION
 METAL APRON FOR C.S. PIPE

SPECIFICATION REFERENCE
 2501
 REVISED 5-3-99 A.K.L.

STANDARD PLATE NO.
 3123J

2 FLARED OUTLET WITH RIPRAP

Not to Scale

BONESTROO PROJECT # - 54909.123



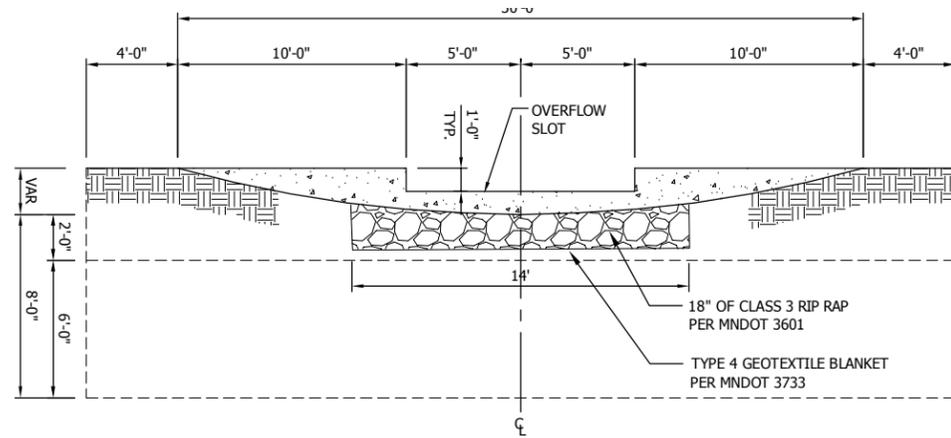
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
 Name: Jeff McDowell Reg. No.: 42540
 Date: 03/29/2010

Management Resources
 Safety Facilities Materials Equipment Field Operations Information Management

DNR Division of Parks and Trails
 Campground Rehabilitation
 Lake Shetek State Park
 Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

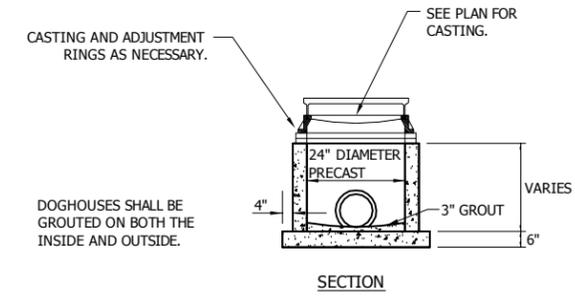
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 Survey: DNR Drawn: DNR Checked: DNR
 Designed: KL 2/10 Drawn: KL 2/10 Checked: JM 3/10
 Horz datum: Assumed Vert datum: Assumed

Sheet: C8.11
 Proj. Number: HP070210
 File Number: SPK00220.00.12.02



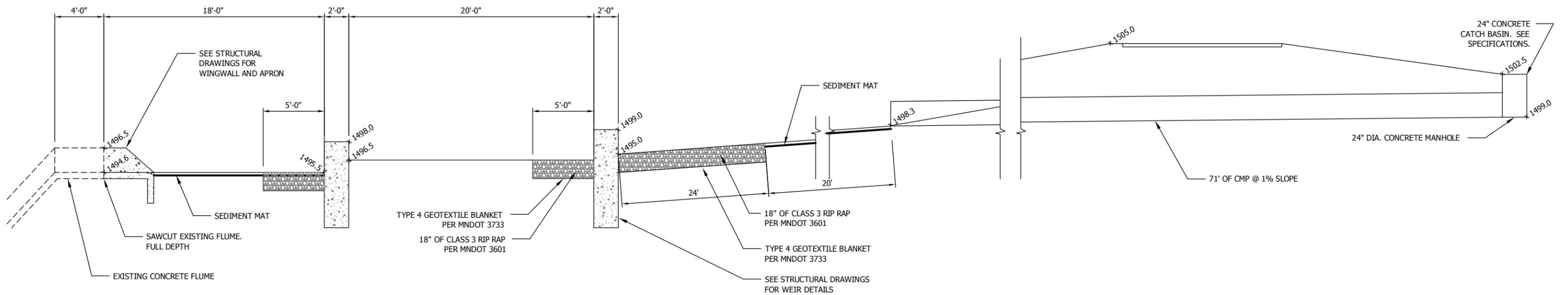
1 TYPICAL WEIR WALL ELEVATION (SEE STRUCTURAL FOR DETAILS)

Not to Scale



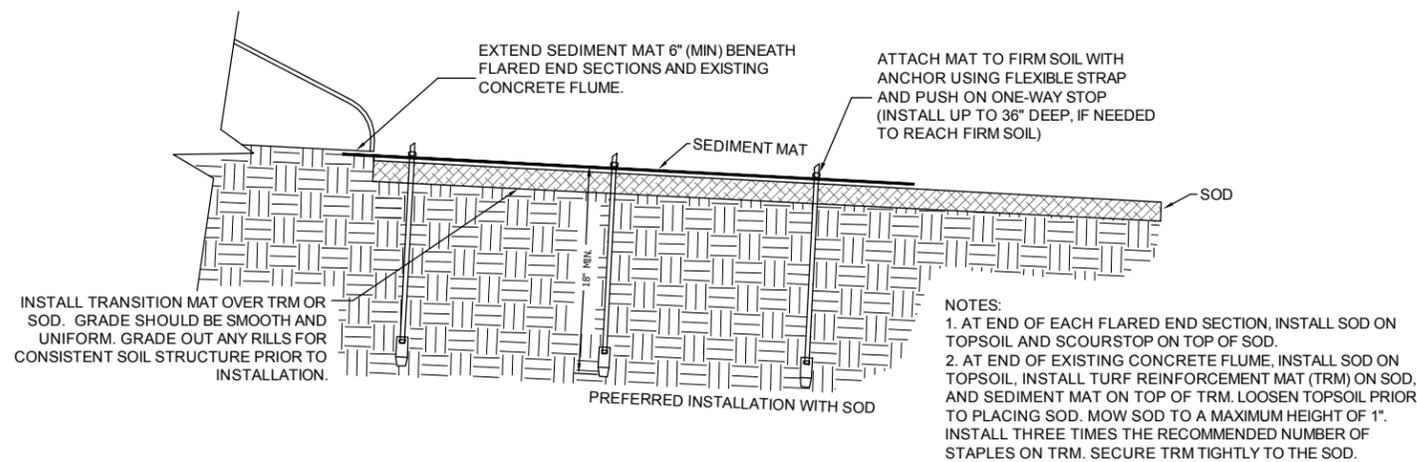
3 CONCRETE CATCH BASIN DETAIL

Not to Scale



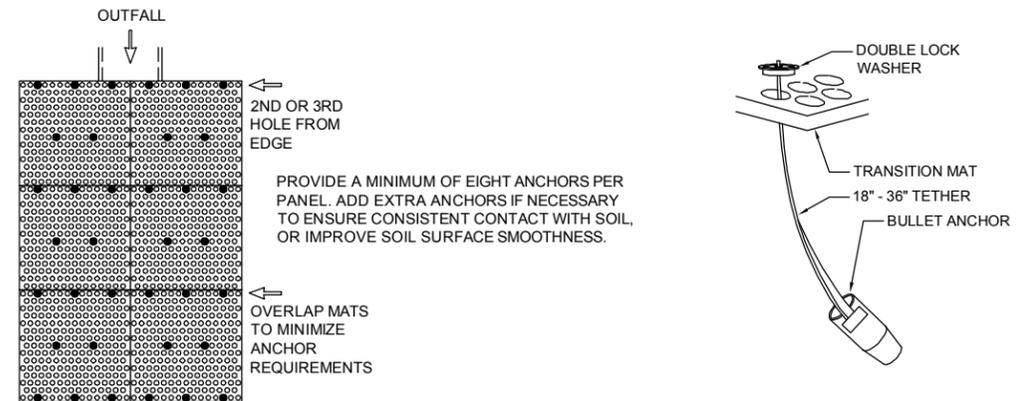
2 TYPICAL WEIR WALL SECTION

Not to Scale



4 TYPICAL SEDIMENT MAT DETAILS

Not to Scale



BONESTROO PROJECT #: 549094123



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Name: Jeff McDowell Reg. No.: 42540

Date: 03/29/2010 *Jeff McDowell*

Management Resources
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DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park

Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

Title: **Stormwater Details**

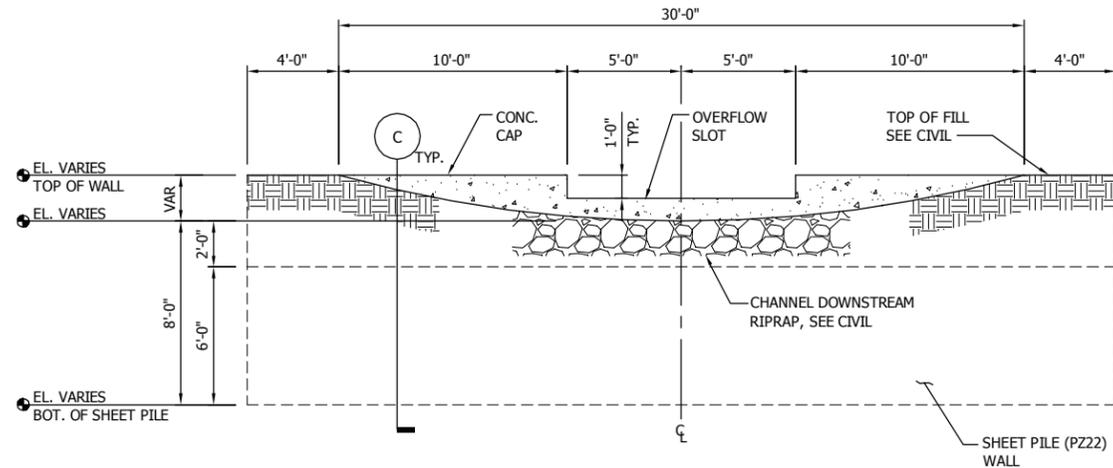
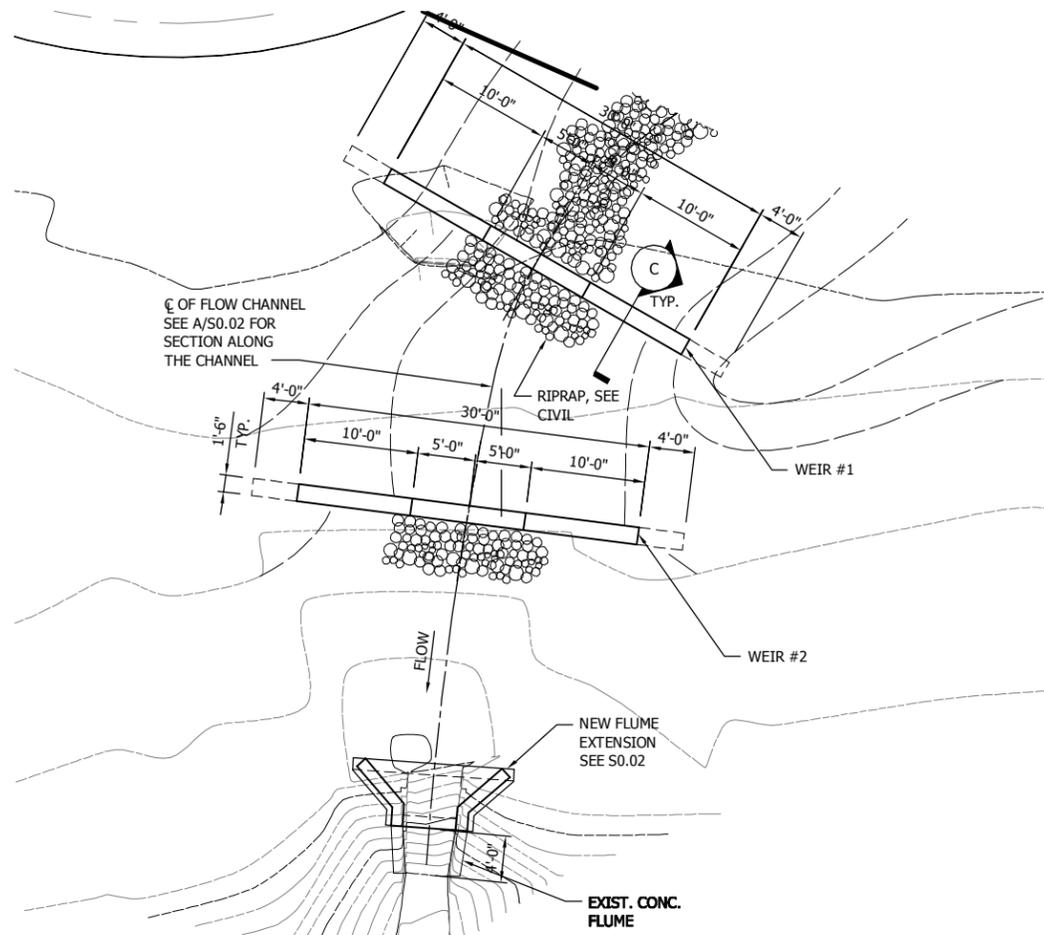
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Designed: KL 2/10 Drawn: KL 2/10 Checked: JM 3/10

Horz datum: Assumed Vert datum: Assumed

Sheet: **C8.12**

Proj. Number: HP070210
 File Number: SPK00220.00.12.02

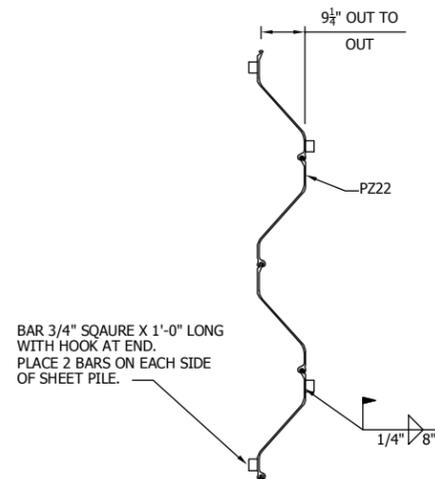
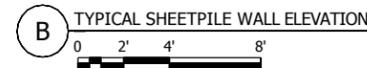


SHEET PILING CRITICAL ELEVATIONS

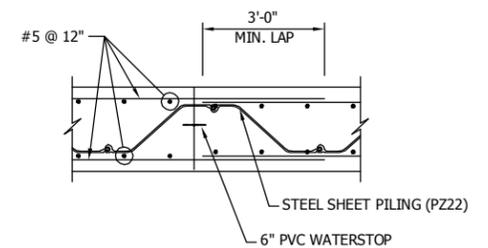
I.D.	STATION	GRADE @ CHANNEL ALIGNMENT	TOP OF WALL	BOT. OF SHEET PILING
WEIR #1	NOTE 1	SEE CIVIL	1499.00	1489.00
WEIR #2	NOTE 1	SEE CIVIL	1498.00	1488.00

NOTES:

- CONTRACTOR TO STAKE AND FIELD VERIFY EXACT LOCATION OF WEIR STRUCTURES.



D SHEET PILING DETAIL
NO SCALE



E DETAIL
0 1' 2' 4'

STRUCTURAL NOTES

MATERIALS:

- CONCRETE 4000 PSI AT 28 DAYS
- REINFORCEMENT BARS ASTM A615, GRADE 60
- STEEL SHEET PILING ASTM A-572, GRADE 50 SECTION PZ-22

CONSTRUCTION NOTES:

- PILING DIMENSIONS SHOWN ARE FOR COLD ROLLED SECTION. ADJUST AS NECESSARY IF HOT ROLLED SECTION IS USED.
- DISCONTINUE SHEET PILE DRIVING IF REFUSAL IS ENCOUNTERED. NOTIFY ENGINEER IF SPECIFIED PILING DEPTH IS NOT ACHIEVED.
- REBAR LAP SPLICE LENGTHS AND 90 DEG. END HOOKS SHALL BE AS SHOWN BELOW UNLESS NOTED:

REINF. BAR	SPLICE LENGTH, IN.	90 DEG. HOOK
#4	32	8
#5	40	10
#6	48	12
- REINFORCING BARS SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED:
 - CONCRETE CAST AGAINST EARTH 3"
 - ALL OTHER CONCRETE 2"
- BEVEL ALL EXPOSED CORNERS OF CONCRETE 3/4" X 3/4"

C TYPICAL WEIR SECTION
0 1' 2' 4'

BONESTROO PROJECT # 549-09-123



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Name: *Philip J. Carroll* Reg. No.: 19204

Date: 03/29/2010

Management Resources
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DNR Division of Parks and Trails
Campground Rehabilitation
Lake Shetek State Park

Murray County Section: 6 Township: 107 Range: 40-41 W Near Currie

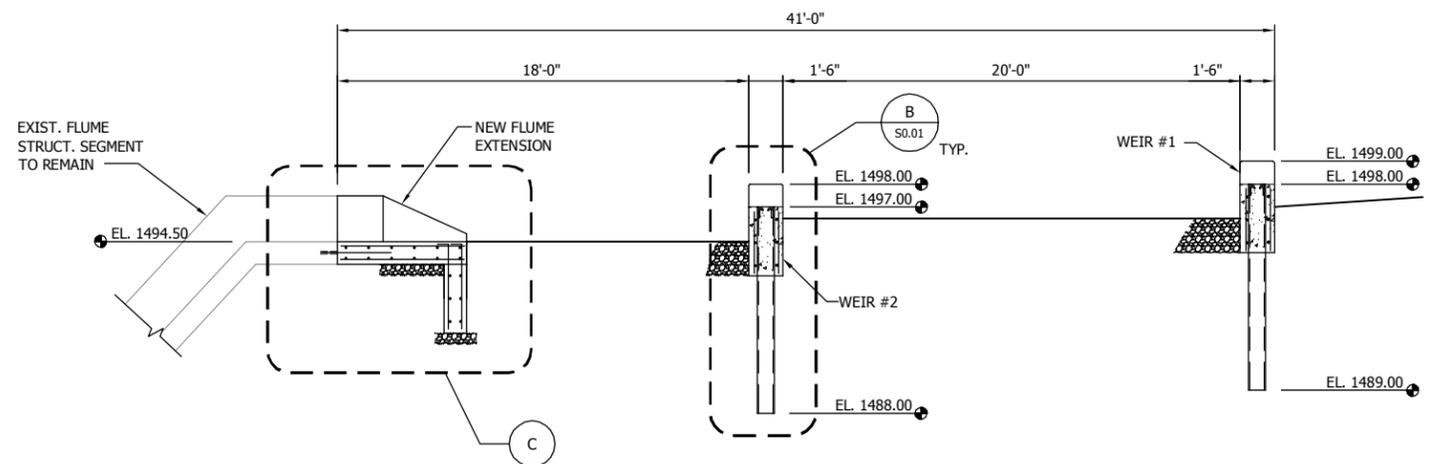
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Survey: DNR
Drawn: BONESTROO
Checked: DNR
Horz datum: Assumed

Designed: ABT 3/22
Drawn: JGB 3/22
Checked: ABT 3/22
Vert datum: Assumed

Sheet: **S0.01**

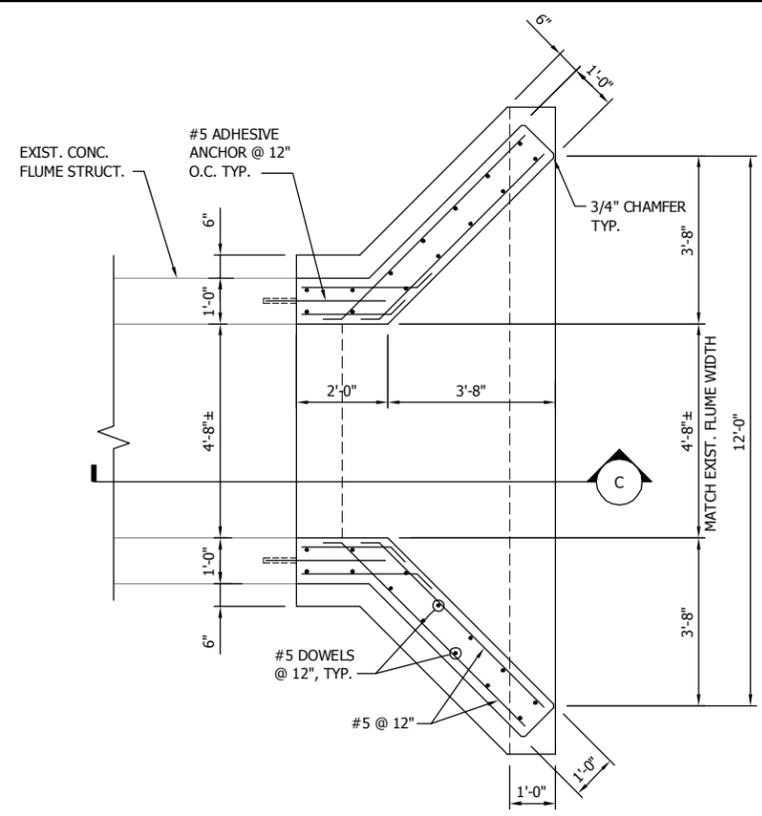
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File Number: SPK00220.00.12.02



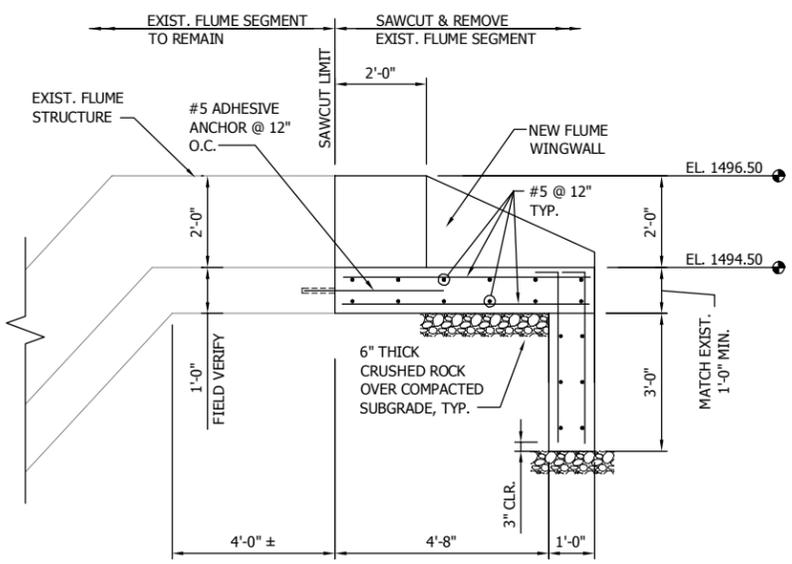
NOTES:

1. THE DISTANCE BETWEEN STRUCTURES AS PROVIDED IS APPROXIMATE. CONTRACTOR TO STAKE AND FIELD VERIFY EXACT LOCATIONS.
2. SEE CIVIL DRAWINGS FOR ALL OTHER REQUIREMENTS INCLUDING SIZE, TYPE & EXTENT OF GEOTEXTILE BLANKET, SCOUR STOP & RIPRAP.

A SECTION - ALONG CENTERLINE OF FLOW CHANNEL
 0 2' 4' 8'



B PLAN
 0 1' 2' 4'



C SECTION
 0 1' 2' 4'

BONESTROO PROJECT # - 549-05-123



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 Name: *Philip J. Carroll* Reg. No.: 19204
 Date: 03/29/2010

Management Resources
 Safety
Facilities
 Materials
 Equipment
 Field Operations
 Information Management

DNR Division of Parks and Trails
Campground Rehabilitation
 Lake Shetek State Park
 Murray County Section: 6 Township: 107 Near Currie Range: 40-41 W

WEIR PLANS AND SECTIONS
 Title:
 Survey: DNR
 Drawn: BONESTROO
 Checked: DNR
 Horz datum: Assumed
 Designed: ABT 3/22
 Drawn: JGB 3/22
 Checked: ABT 3/22
 Vert datum: Assumed

Sheet: **S0.02**
 Proj. Number: HP070210
 File Number: SPK00220.00.12.02

SPECIFICATIONS

BID & WILL INCLUDE ALL MATERIALS NECESSARY TO FURNISH AND INSTALL ONE PRECAST CONCRETE VAULT, FLOOR SLAB, SIDE WALLS, ROOF AND ENTRY PAD.

1. CONCRETE FLOOR, WITHOUT FLOOR DRAIN, SHALL BE 8" THICK WITH 3/4" REBAR 2" FROM THE BOTTOM OF SLAB AND 3/8" REBAR 2" FROM THE TOP OF SLAB 8" O.C. OR EQUIVALENT. INSTALL CONCRETE FLOOR WITH 1% SLOPE TOWARD DOOR, 1% VARIANCE ALLOWED. APPLY TWO-COMPONENT, CATALYZED WATER-BORNE POLYAMIDE EPOXY WITH A MICRONIZED POLYMER ADDITIVE TO PROVIDE A UNIFORM, SLIP-RESISTANT TEXTURE. COLOR SHALL BE GREY.

2. ALL WALLS, ROOF, FLOOR AND ENTRY SLAB SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 4,000 PSI.

3. ALL WALLS SHALL BE PRECAST CONCRETE SHALL BE COLORED: 'SOLOMON' LEATHER - 338.

4. FRONT EXTERIOR WALL SHALL BE 6" THICK AND REMAINING WALLS SHALL BE 4" THICK WITH #4 REBAR AT 12" O.C.

5. EXTERIOR WALL SURFACE SHALL HAVE A VERTICAL BARN BOARD FORM LINER FINISH. APPLY TWO (2) COATS PURE ACRYLIC WATER-REPELLENT PENETRATING STAIN & ONE (1) COAT CLEAR ACRYLIC ANTI-GRAFFITI SEALER. COLOR: 'SHERWIN WILLIAMS' STURDY BROWN - 6031

6. INTERIOR WALLS AND CEILING SURFACE SHALL BE A TROWELLED SMOOTH FINISH AND APPLY TWO (2) COATS MODIFIED ACRYLIC WATER-REPELLENT PENETRATING STAIN AND ONE (1) COAT CLEAR ACRYLIC ANTI-GRAFFITI SEALER. COLOR SHALL BE WHITE. PRODUCTS TO BE APPROPRIATE FOR APPLICATION TO CONCRETE.

7. THE PRECAST CONCRETE ROOF SHALL BE 5" THICK WITH TWO REBAR LAYERS: 1/2" REBAR AT 12" O.C. AT BOTTOM OF PANEL, AND 3/8" REBAR AT 12" O.C. AT TOP OF PANEL. MAINTAIN 1 1/2" MINIMUM COVER FOR THE REBAR. THE PRECAST CONCRETE SHALL BE COLORED: 'SOLOMON' SLATE - 920. THE EXTERIOR SHALL HAVE A CEDAR SHAKE DESIGN CAST IN AT THE FACTORY AND SHALL RECEIVE ONE COAT OF PRIMER AND TWO COATS OF PAINT, COLOR: 'SHERWIN WILLIAMS' GAUNTLET GRAY - 7019, INCLUDING ROOF OVERHANG AND EDGES.

8. ENTRY PAD SHALL BE 4" THICK WITH #4 REBAR 12" O.C. OR EQUIVALENT. PAD SHALL REST FLUSH WITH FLOOR ON 2x8 x 12'-0" TREATED BOARD ATTACHED TO CONCRETE WITH CEMENT ANCHORS. INSTALL PAD PER MINNESOTA ADA CODE.

9. ALL JOINTS SHALL BE SECURELY WELDED TOGETHER, CAULKED, SEALED AND PAINTED.

10. ENTRANCE DOORS SHALL BE TWO (2) 18 GAUGE 3'-0"x6'-8" STEEL DOORS WITH 5-3/4" FRAMES AND TWO (2) COATS OF EXTERIOR ACRYLIC LATEX SEMI-GLOSS ENAMEL PAINT SHALL BE APPLIED. COLOR SHALL BE SELECTED BY ARCHITECT. PROVIDE TWO (2) 18"x18" LOUVERS WITH CENTER MOUNTED BUG SCREEN, ONE LOUVER AT EACH DOOR. PAINT LOUVERS TO MATCH DOOR. PROVIDE 10"x36" STAINLESS STEEL KICK PLATE AT EACH SIDE OF EACH DOOR (4 TOTAL).

11. HARDWARE REQUIREMENTS PER DOOR AS SPECIFIED OR APPROVED EQUAL:

HINGES: UPPER - ONE (1) - STANLEY FBB173 4-1/2x4-1/2 - 26D
LOWER - TWO (2) - STANLEY 2060R 4-1/2x4-1/2 - 26D
DOOR LEVER: SCHLAGE AL405 - SAT - 626

12. FRAMED WINDOWS W/ TRANSLUCENT CORRUGATED LEXAN PANELS SHALL BE PROVIDED, TWO FRONT AND TWO REAR. REAR WINDOW SILLS SHALL BE AT 6'-10" ABOVE FLOOR. FRONT WINDOWS SHALL BE INTEGRATED WITH DOOR FRAME.

13. ADA APPROVED UNISEX RESTROOM SIGNS SHALL BE AFFIXED TO THE BUILDING WALL 60" ABOVE EXTERIOR CONC. PAD AND TO THE LATCH SIDE OF THE ENTRANCE DOORS, PER MINNESOTA ADA CODE REQUIREMENTS (2 TOTAL, ONE AT EACH DOOR).

14. GRAB BARS SHALL BE 1-1/2" O.D. STAINLESS STEEL CONCEALED SURFACE MOUNTED. PROVIDE 3 GRAB BARS AT EACH HANDICAP ACCESSIBLE STOOL, ONE (1) 36" LONG, ONE (1) 42" LONG AND ONE (1) 18" LONG. INSTALL PER MINNESOTA ADA CODE REQUIREMENTS.

15. STOOLS SHALL BE TWO (2) ROMTECH HANDICAP ACCESSIBLE CROSS STITCHED POLYETHYLENE STOOLS WITH PLASTIC TOILET SEAT AND COVER, WHITE IN COLOR.

16. TOILET PAPER HOLDERS SHALL BE TWO (2) ROYCE ROLLS TP-3 WITH LOCK. TOILET PAPER DISPENSERS SHALL BE INSTALLED WITHIN REACH BELOW THE HORIZONTAL GRAB BAR WITH THE LEADING EDGE OF THE DISPENSER 1" TO 9" IN FRONT OF THE WATER CLOSET. THE OUTLET OF THE DISPENSER SHALL BE LOCATED A MINIMUM OF 15" ABOVE THE FLOOR WITH AT LEAST 2" OF CLEARANCE BETWEEN THE TOP OF THE DISPENSER AND THE HORIZONTAL GRAB BAR (MSBC 1341.0448 SUBPART 6).

17. VAULT ACCESS SHALL BE TWO (2) NEENAH 5900-D CAST IRON FRAMES WITH BOLTED COVER OR EQUIVALENT.

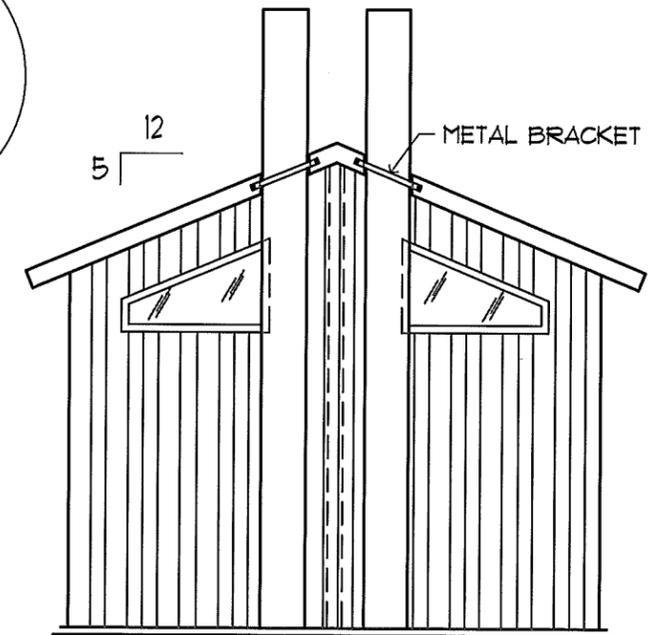
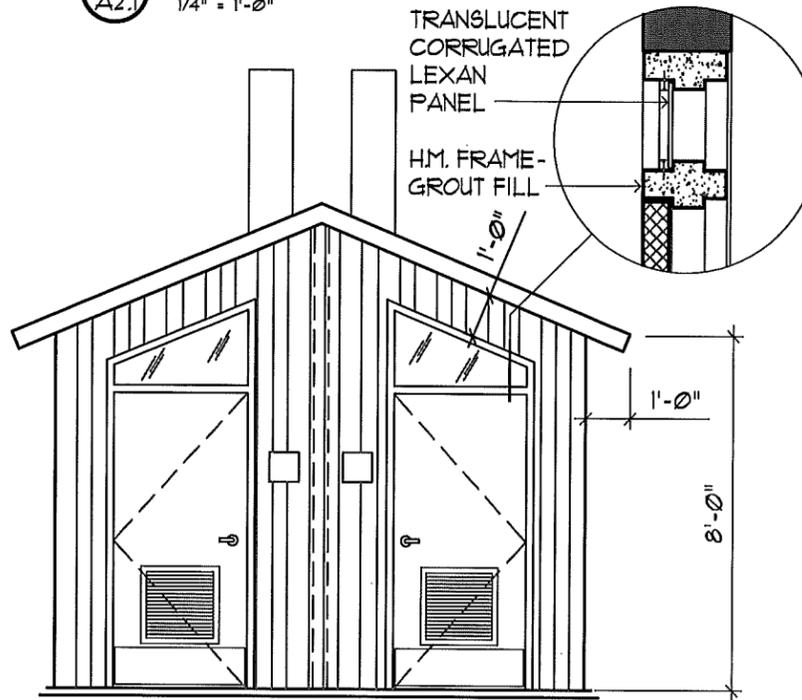
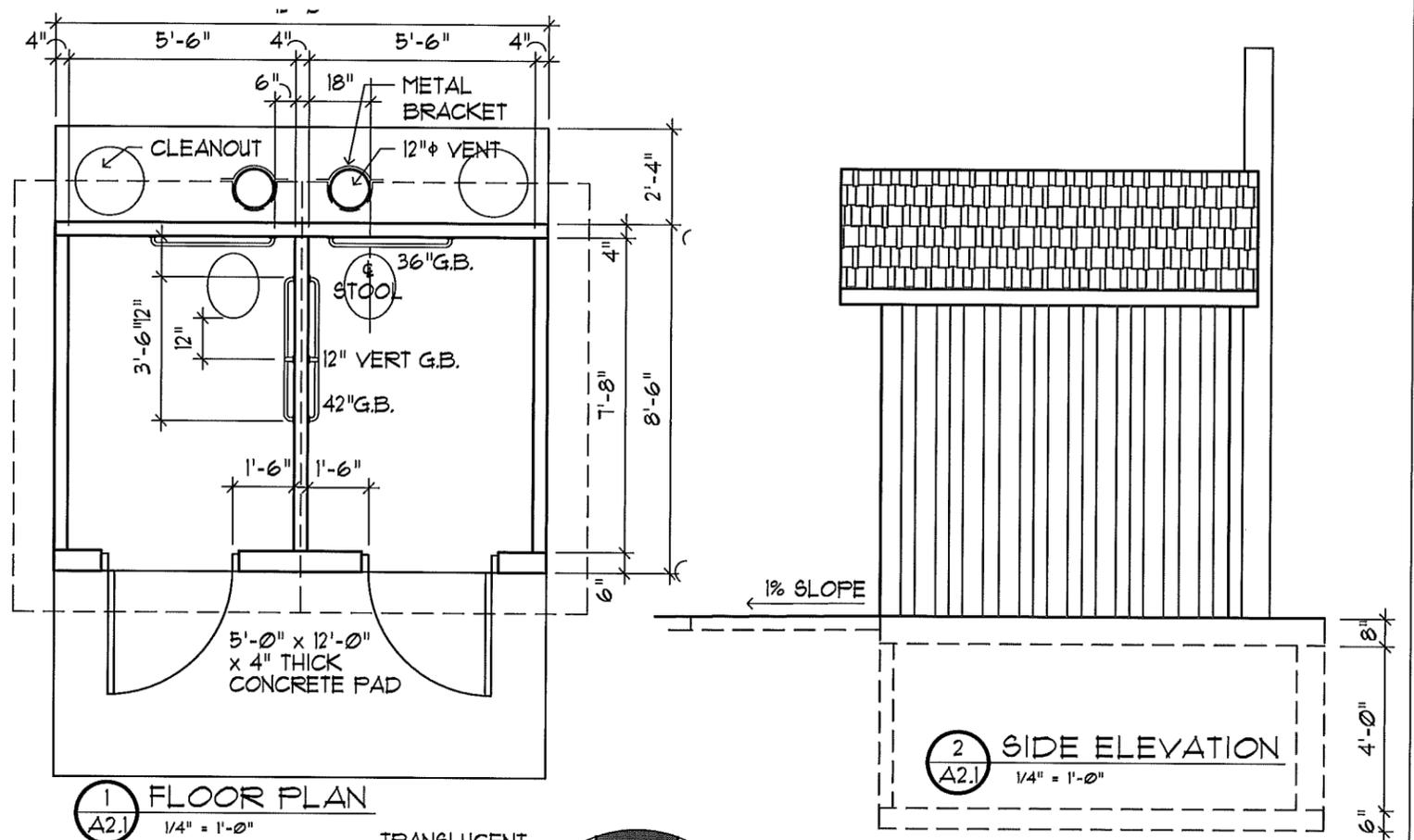
18. VAULTS SHALL BE 48" INSIDE DEPTH, SAME WIDTH AS THE EXTERIOR OF THE TOILET BUILDING, AND 2'-4" LONGER THAN THE TOILET BUILDING TO THE REAR OF THE BUILDING (SEE PLAN 1/44). A DIVIDER WALL SHALL SEPARATE THE VAULTS. THE VAULTS SHALL SLOPE TOWARD THE CLEANOUT MANHOLES.

19. TWO (2) VENT PIPES 12" IN DIA, HDPE SMOOTH INTERIOR AND EXTERIOR, CONTAINING A MIN. OF 2% CARBON BLACK, 'POLYPIPE' PRODUCT FROM ER8, INC OR EQUIVALENT. COLOR: BLACK, SHALL BE PLACED IN THE FLOOR SLAB AND EXTEND THROUGH ROOF EDGE TO HEIGHT OF 4'-0" ABOVE THE ROOFLINE.

20. VAULT EXTERIOR BOTTOM AND WALLS SHALL BE WATERPROOFED. WATERPROOFING INCLUDES TWO (2) COATS SEMI-MASTIC WITH 6 MIL. POLYETHYLENE VAPOR BARRIER. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

21. SUBMITTALS FOR ALL PRODUCTS USED IN THIS PROJECT SHALL BE PROVIDED TO DNR ARCHITECTS FOR REVIEW & APPROVAL. SUBMITTALS SHALL INCLUDE:

- 1) SHOP DRAWINGS FOR BUILDING COMPONENTS
- 2) BUILDING DETAILS, INCLUDING CONCRETE PANELS AND PANEL CONNECTION METHODS & MATERIALS, SIGNED BY AN ENGINEER LICENSED IN THE STATE OF MINNESOTA
- 3) PRODUCT CUT SHEETS, INCLUDING VOC INFORMATION FOR PAINTS AND FINISHES
- 4) SAMPLES OF LEXAN WINDOW PRODUCT
- 5) COLORED CONCRETE SAMPLES (9"x9"x1") FOR THE ROOF COLOR AND WALL COLOR



1 FLOOR PLAN
A2.1 1/4" = 1'-0"

2 SIDE ELEVATION
A2.1 1/4" = 1'-0"

3 FRONT ELEVATION
A2.1 1/4" = 1'-0"

4 REAR ELEVATION
A2.1 1/4" = 1'-0"



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
Name: *[Signature]* Reg. Number: 20131
Date: 7/26/10

Management Resources
Safety
Facilities
Materials
Equipment
Field Operations
Information Management

DNR Division of Parks and Trails
Campground
Lake Shetek State Park
Murray County Section: 6 Township: 107 N Range: 40 W Near Currie

Title: Concrete Toilet
Survey: WN 5/09 Designed: PKP 12/09
Drawn: DE 6/09 Drawn: TL 12/09
Checked: BS 6/09 Checked: PKP 12/09
Horz datum: NAD 83 ('96 ADJ) Vert datum: NAVD 88

Sheet: A2.1
Req. Number: HP070210
File Number: SPK00220.00.21.02