



**Montana Department of
ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov
December 14, 2007

Andy Short, RS
Territorial-Landworks, Inc.
PO Box 3851
Missoula, MT 59806

RE: Big Horn Bluff
Sanders County
E.Q. #07-1680

Dear Andy:

The plans and supplemental information relating to the water supply, sewage, solid waste disposal, and storm drainage (if any) for the above referenced division of land have been reviewed as required by ARM Title 17 Chapter 36(101-805) and have been found to be in compliance with those rules.

Two copies of the Certificate of Subdivision Plat Approval are enclosed. The original is to be filed at the office of the county clerk and recorder. The duplicate is for your personal records.

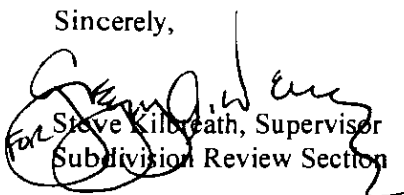
Development of the approved subdivision may require coverage under the Department's General Permit for Storm Water Discharges Associated with Construction Activity, if your development has construction-related disturbance of one or more acre. If so, please contact the Storm Water Program at (406) 444-3080 for more information or visit the Department's storm water construction website at <http://www.deq.state.mt.us/wqinfo/MPDES/StormwaterConstruction.asp>. Failure to obtain this permit (if required) prior to development can result in significant penalties.

Your copy is to inform you of the conditions of the approval. Please note that you have specific responsibilities according to the plat approval statement primarily with regard to informing any new owner as to any conditions that have been imposed.

If you wish to challenge the conditions of this Certificate of Subdivision Plat Approval, you may request a hearing before the Board of Environmental Review or the Department, pursuant to Section 76-4-126, MCA and the Montana Administrative Procedures Act.

If you have any questions, please contact this office.

Sincerely,


Steve Kilbreath, Supervisor
Subdivision Review Section

SK/gw

cc: County Sanitarian
County Planning Board

STATE OF MONTANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
CERTIFICATE OF SUBDIVISION APPROVAL
(Section 76-4-101 et seq., MCA)

TO: County Clerk and Recorder
Sanders County
Thompson Falls, Montana

E.Q. #07-1680
SAN08-16

THIS IS TO CERTIFY THAT the plans and supplemental information relating to the subdivision known as **BIGHORN BLUFF**

A Tract of land located in Sections 2, 3, 10 and 11 of T19N, R26W, Principal Meridian Montana in Sanders County, Montana

Consisting of 41 Lots, of which Lots 22 and 23 are greater than 20 acres and are exempt per 76-4-103 MCA, and Lots 1 – 21 and 24 - 41 have been reviewed by personnel of the Permitting & Compliance Division, and,

THAT the documents and data required by ARM Chapter 17 Section 36 have been submitted and found to be in compliance therewith, and,

THAT the approval of the Plat is made with the understanding that the following conditions shall be met:

THAT the lot size as indicated on the Plat to be filed with the county clerk and recorder will not be further altered without approval, and,

THAT each lot shall be used for one single family dwelling, and,

THAT each individual water system will consist of a well drilled to a minimum depth of 25 feet constructed in accordance with the criteria established in Title 17, Chapter 36, Sub-Chapters 1, 3, and 6 ARM and the most current standards of the Department of Environmental Quality, and,

THAT data provided indicates acceptable water source at a depth of approximately 26 - 349 feet, and,

THAT each individual sewage treatment system will consist of a septic tank with effluent filter and subsurface drainfield of such size and description as will comply with Title 17, Chapter 36, Sub-Chapters 1, 3, and 6 ARM, and,

THAT the subsurface drainfields for Lots 2, 9, 11, and 34 shall have an absorption area of sufficient size to provide an application rate of 0.3 gallons per day per square foot, and,

THAT the subsurface drainfields for Lots 10, 15, 19, 21, 28, 29, 33, 35 and 38 shall have an absorption area of sufficient size to provide an application rate of 0.4 gallons per day per square foot, and,

THAT the subsurface drainfields for Lots 1, 4, 6, 8, 12, 13, 14, 16, 20, 25, 32, 36, 37, 39, 40 and 41 shall have an absorption area of sufficient size to provide an application rate of 0.5 gallons per day per square foot, and,

THAT the subsurface drainfields for Lots 3, 5, 17, 18, 24, 26, 27, 30 and 31 shall have an absorption area of sufficient size to provide an application rate of 0.6 gallons per day per square foot, and,

THAT the subsurface drainfields for Lots 7 shall have an absorption area of sufficient size to provide an application rate of 0.8 gallons per day per square foot, and,

THAT the subsurface drainfields for Lots 6, 8, 34, 37 and 41 shall be shallow cap and fill and no deeper than 12 inches, and,

THAT the subsurface drainfield for Lot 7 shall be sand-lined and pressure dosed, and,

THAT the bottom of the drainfield shall be at least four feet above the water table, and,

THAT the storm drainage plan consists of six 12-inch culverts, one 18-inch culvert, three 24-inch culverts; two stormwater swales 2-feet wide at the bottom with 3:1 maximum side slopes and 1.5-feet deep running between Lots 9 and 10 and Lots 30 and 31; ten 2" - 6" washed rock rip rap erosion control structures 2-feet wide at the bottom with 3:1 and 4:1 maximum side slopes with a minimum depth of 1.5-feet with dimensions of 10-feet by 15-feet; 2-foot deep road side borrow ditches, 6 feet wide with 4:1 side slopes that includes road-side check dams 12" high made of 1" - 2" washed rock every 100 feet, and a detention pond located on Lot 6 all as shown on the enclosed Storm Drainage Plan (page 9 of the lot layout), and,

THAT water supply systems, sewage treatment systems and storm drainage systems will be located as shown on the approved plans, and,

THAT all sanitary facilities must be located as shown on the attached lot layout, and,

THAT the developer and/or owner of record shall provide each purchaser of property with a copy of the Plat, approved location of water supply and sewage treatment system as shown on the attached lot layout and a copy of this document, and,

THAT instruments of transfer for this property shall contain reference to these conditions, and,

THAT plans and specifications for any proposed sewage treatment systems will be reviewed and approved by the county health department and will comply with local regulations and ARM, Title 17, Chapter 36, Subchapters 3 and 9, before construction is started.

Page 3 of 3
Sanders County
Bighorn Bluff
E.Q. #07-1680

THAT departure from any criteria set forth in the approved plans and specifications and Title 17, Chapter 36, Sub-Chapters 1, 3, and 6 ARM when erecting a structure and appurtenant facilities in said subdivision without Department approval, is grounds for injunction by the Department of Environmental Quality.

Pursuant to Section 76-4-122 (2)(a), MCA, a person must obtain the approval of both the State under Title 76, Chapter 4, MCA, and local board of health under section 50-2-116(1)(i), before filing a subdivision plat with the county clerk and recorder.

YOU ARE REQUESTED to record this certificate by attaching it to the Plat filed in your office as required by law.

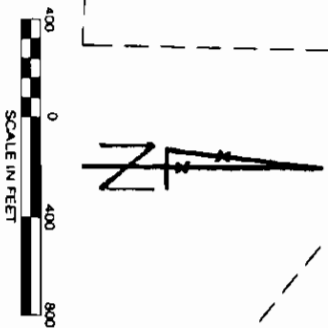
DATED this 14th December, 2007

RICHARD OPPER
DIRECTOR

By: 

Steven Kilbreath,
Subdivision Program Manager
Public Water and Subdivision Bureau
Permitting and Compliance Division
Department of Environmental Quality

Owner's Name: Doug Greer, Plum Creek



LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED LOT LINE
- EXISTING/ PROPOSED EASEMENT LINE
- EXISTING EDGE OF GRAVEL ROAD
- EXISTING IRRIGATION DITCH
- PROPOSED DRAINFIELD MIXING ZONE
- EXISTING STREAM
- PROPOSED STORMWATER SWALE

PROPOSED WELL W/ 50' NO SEALED COMPONENTS AND 100' ISOLATION ZONES

SP-XX

SOL PROFILE

PROPOSED DRAINFIELD AND REPLACEMENT AREA (THE NUMBER LABEL INDICATES APPLICATION RATE IN GPO/FT²)

±X.X%

DRAINFIELD SLOPE

EXISTING WELL

PROPOSED CULVERT

PROPOSED RIP-RAP APRON

DRAINAGE FLOW ARROW

RECEIVED

DEC 13 2007

MT DEQ PUBLIC WORKS STORM WATER MAINTENANCE
SUBDIVISIONS BUREAU

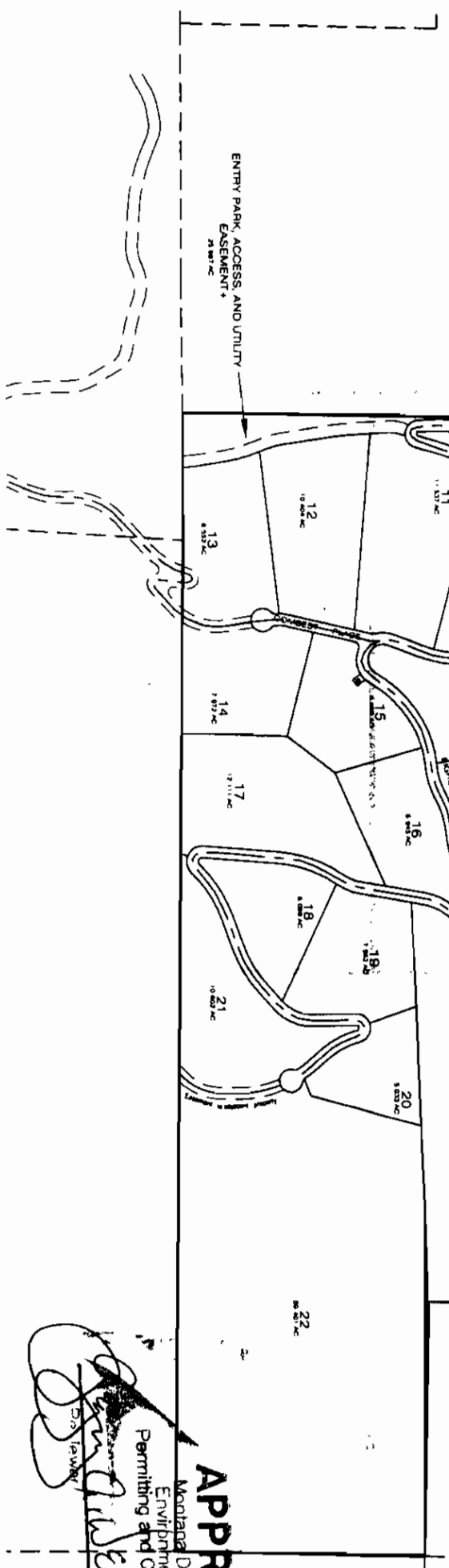
- STORM WATER FACILITIES INCLUDE SWALES, CULVERTS, AND RIP-RAP. ALL BASINS ARE SHOWN AND ALL STORMWATER FROM BASINS SHALL BE ROUTED VIA SWALES AND CULVERTS AS SHOWN.
- RIP-RAP SHALL BE KEPT CLEAR OF DEBRIS AND SHALL NOT BE FILLED OR ALTERED AFTER COMPLETION WITHOUT REVIEW BY MDEQ.
- LOTS SHALL BE DEVELOPED IN ACCORDANCE WITH THE MONTANA SEDIMENT AND EROSION CONTROL MANUAL, CHAPTER 5 TO REDUCE EROSION.
- THE BIGHORN BLUFF HOME OWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF THE ABOVE DESCRIBED FACILITIES IN ACCORDANCE WITH THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS.
- CHECK DAMS SHALL BE LOCATED IN ALL ROADSIDE DITCHES AND STORM WATER SWALES WITH A SPACING OF 100'.

STORM WATER KEY

- 17" HOPE SMOOTH INNER WALL CULVERT
- 18" HOPE SMOOTH INNER WALL CULVERT
- 24" HOPE SMOOTH INNER WALL CULVERT
- RIP-RAP EROSION CONTROL AREA. SEE DETAIL SHEET 9
- ROAD CROSS SECTION PER TYPICAL GRAVEL ROAD. SEE SHEET 9
- ROAD CROSS SECTION PER TYPICAL PAVED ROAD. SEE SHEET 9

NOTE
SEE DETAIL SHEET 9 FOR ADDITIONAL DRAINAGE FEATURES
NOT SHOWN HERE

APPROVED
Montana Department of
Environmental Quality
Permitting and Compliance Division
Andy Johnson
Date 12/14/07



Landworks
Consulting & Design, Inc.
P.O. Box 7034
Missoula, MT 59707

REVISIONS		BIGHORN BLUFF MDEQ SITE LAYOUT	LOCATION: SECTION 2, 3, 10 & 11, T19N, R26W, PMM SANDERS COUNTY, MONTANA	PREPARED FOR: PLUM CREEK	DATE OCT. 13, 2006	SHEET 1 OF 9
DATE	DESCRIPTION					

RECEIVED

DEC 12 2007

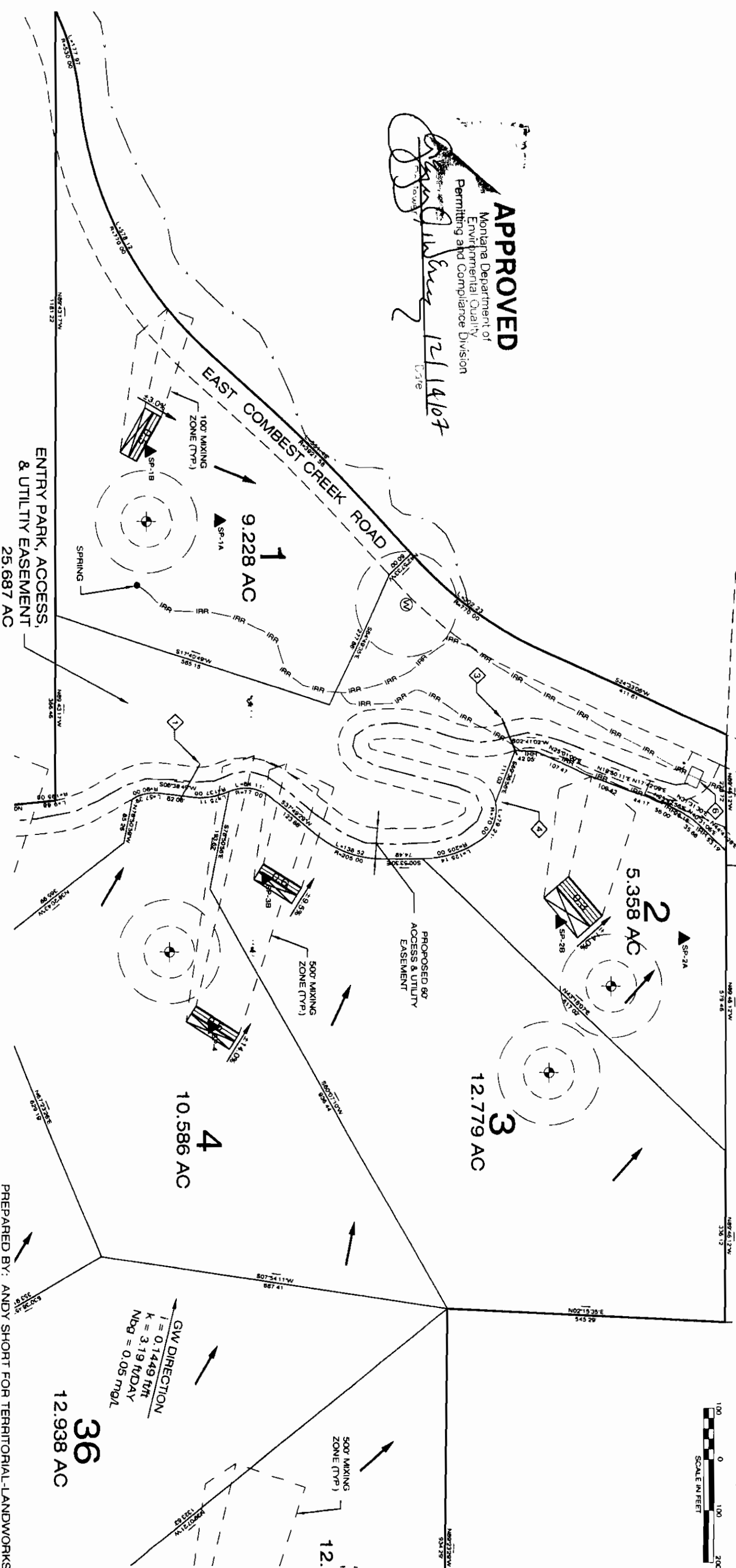
NORTH PLUM CREEK WATER
SOUTH PLUM CREEK



APPROVED

Montana Department of
Environmental Quality
Permitting and Compliance Division

Christina Lee 12/14/07
12/14/07



GW DIRECTION
 $i = 0.1449 \text{ ft/ft}$
 $k = 3.19 \text{ ft/DAY}$
 $Nbg = 0.05 \text{ mg/L}$

Landworks
Consulting & Design Inc

1000 1st St. N
Billings, MT 59102
406-324-2222

REVISIONS	
DATE	DESCRIPTION

ENTRY PARK, ACCESS,
& UTILITY EASEMENT
25.687 AC

BIGHORN BLUFF

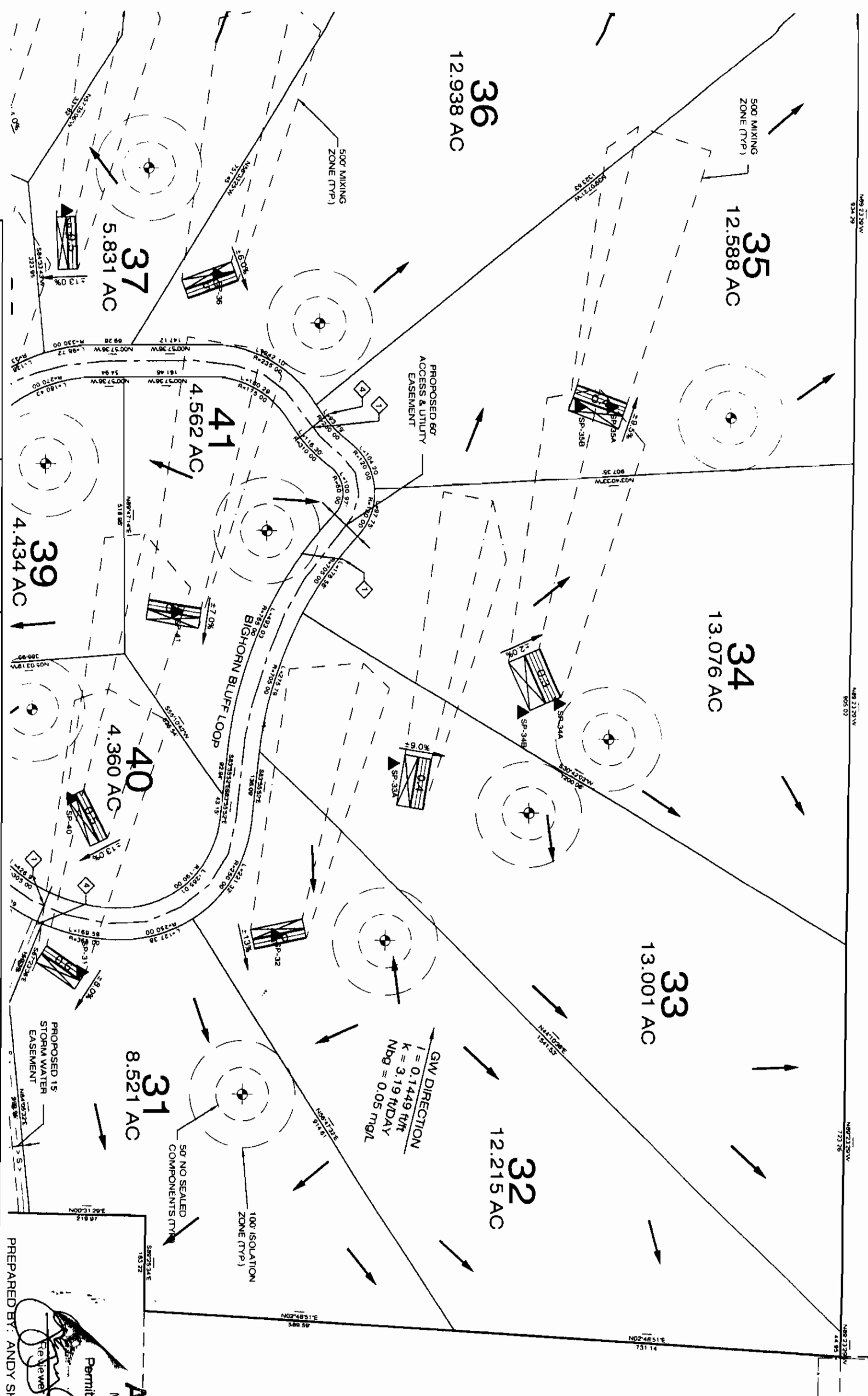
MDEQ SITE LAYOUT

LOCATION:
SECTION 2, 3, 10 & 11, T19N, R26W, PMM
SANDERS COUNTY, MONTANA

PREPARED FOR
PLUM CREEK

DWG LOCATION	
Z:\2006 PROJECTS\1234 - PLUM CREEK-COMBESTONW\SITE-LAYOUT	LANDWORKS PROJECT NO
06-1234	FLAT FILE NO.
DATE	SHEET
OCT. 13, 2006	2 OF 9

RECEIVED
DEPT 2007
OCT 13 2006
SCALE IN FEET
0 100 200



APPROVED
Montana Department of
Environmental Quality
Permitting and Compliance Division
Andy Short
Date: 12/14/07
PREPARED BY: ANDY SHORT FOR TERRITORIAL-LANDWORKS, INC.

REVISIONS	
DATE	DESCRIPTION

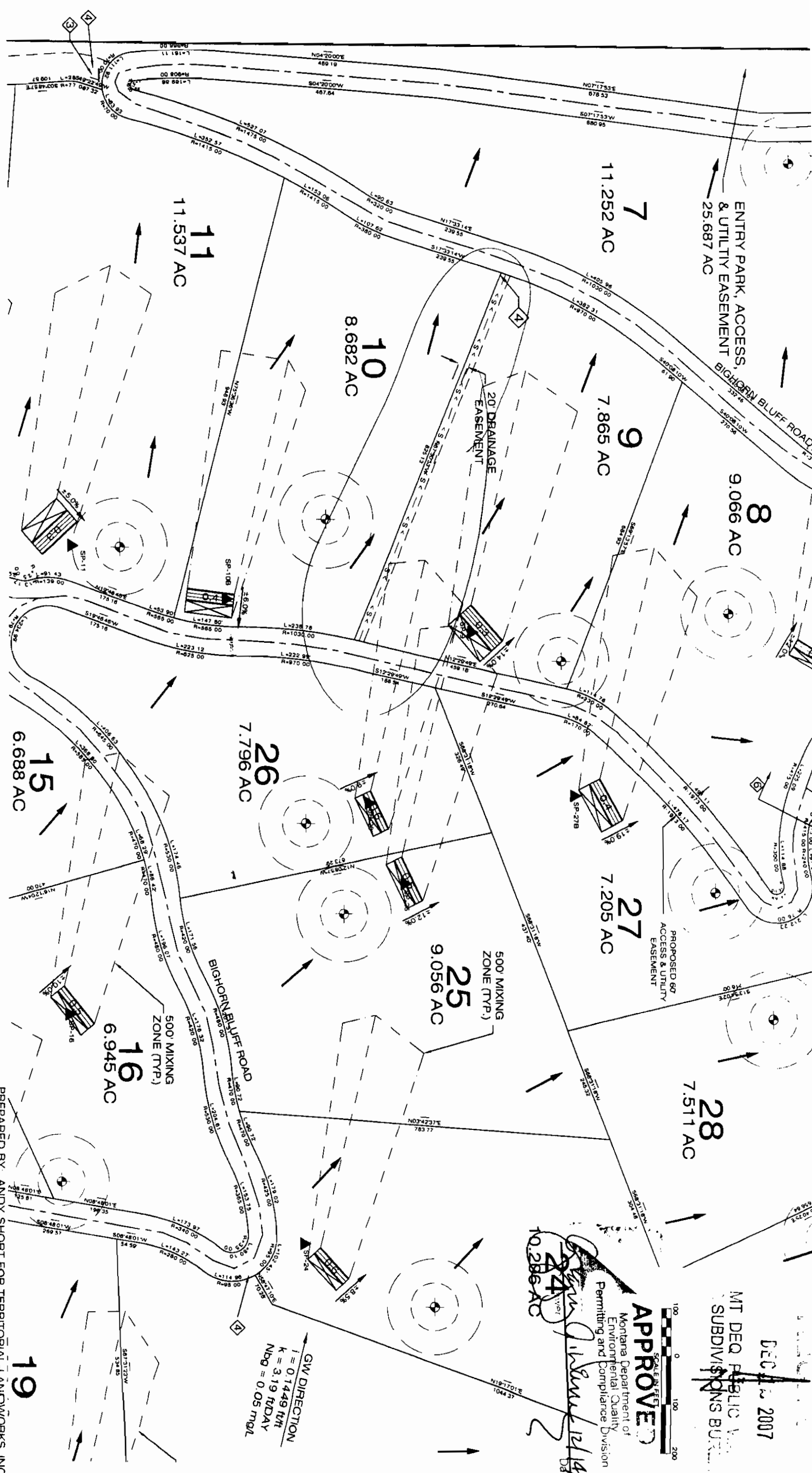
BIGHORN BLUFF	
MDEQ SITE LAYOUT	
LOCATION:	SECTION 2, 3, 10 & 11, T19N, R26W, P1M1 SANDERS COUNTY, MONTANA
PREPARED FOR:	PLUM CREEK
DWG LOCATION:	2.12006 PROJECTS/1234 - PLUMB CREEK-COMBESTOWS/SITE-LAYOUT
LANDWORKS PROJECT NO.:	06-1234
DATE:	OCT. 13, 2006
SHEET:	3 OF 9

Landworks
Consulting & Design, Inc.
P.O. Box 2079
Missoula, MT 59807
Ph: 406.243.1111
Fax: 406.243.1111

MT DEQ PUBLIC
SUBDIVISIONS BUREAU

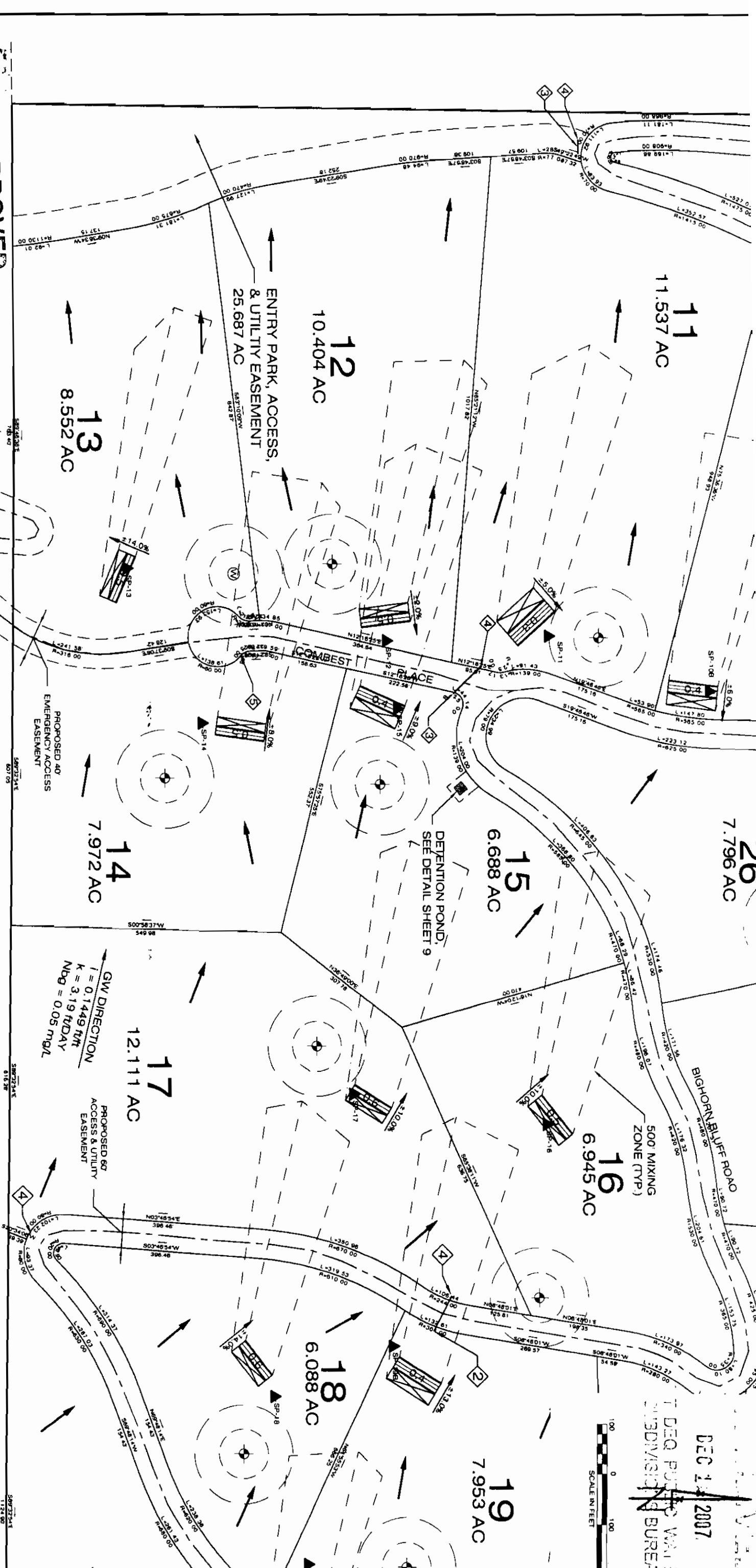
Montana Department of
Environmental Quality
Permitting and Compliance Division

27
10:28:40
Date



REVISIONS		LOCATION: BIGHORN BLUFF MDEQ SITE LAYOUT	LOCATION: SECTION 2, 3, 10 & 11, T19N, R26W, PMM SANDERS COUNTY, MONTANA	DWG LOCATION Z:\2006 PROJECTS\1234 - PLUMB CREEK-COMBEST\DWG\SITE-LAYOUT
DATE	DESCRIPTION			
		PREPARED FOR PLUMB CREEK	DATE OCT. 13, 2006	SHEET 6 OF 9
		LANDWORKS PROJECT NO 06-1234	PLAT FILE NO. X-XX	

DEC 14 2007
TERRITORIAL LANDWORKS, INC.
DIVISION BUREAU



APPROVED

Montana Department of
Environmental Quality
Permitting and Compliance Division

7.14.107

Landworks
Consulting & Design, Inc.

PO Box 1003
Missoula, MT 59701

REVISIONS	
DATE	DESCRIPTION

BIGHORN BLUFF
MDEQ SITE LAYOUT

LOCATION
SECTION 2, 3, 10 & 11, T19N, R26W, PMM
SANDERS COUNTY, MONTANA

PREPARED FOR	PLUM CREEK
DATE	OCT. 13, 2006
DWG LOCATION	Z:\2006 PROJECTS\1234 - PLUMB CREEK-COMBEST TOWNSITE LAYOUT
LANDWORKS PROJECT NO	06-1234
FLAT FILE NO.	X-XX
SHEET	7 OF 9

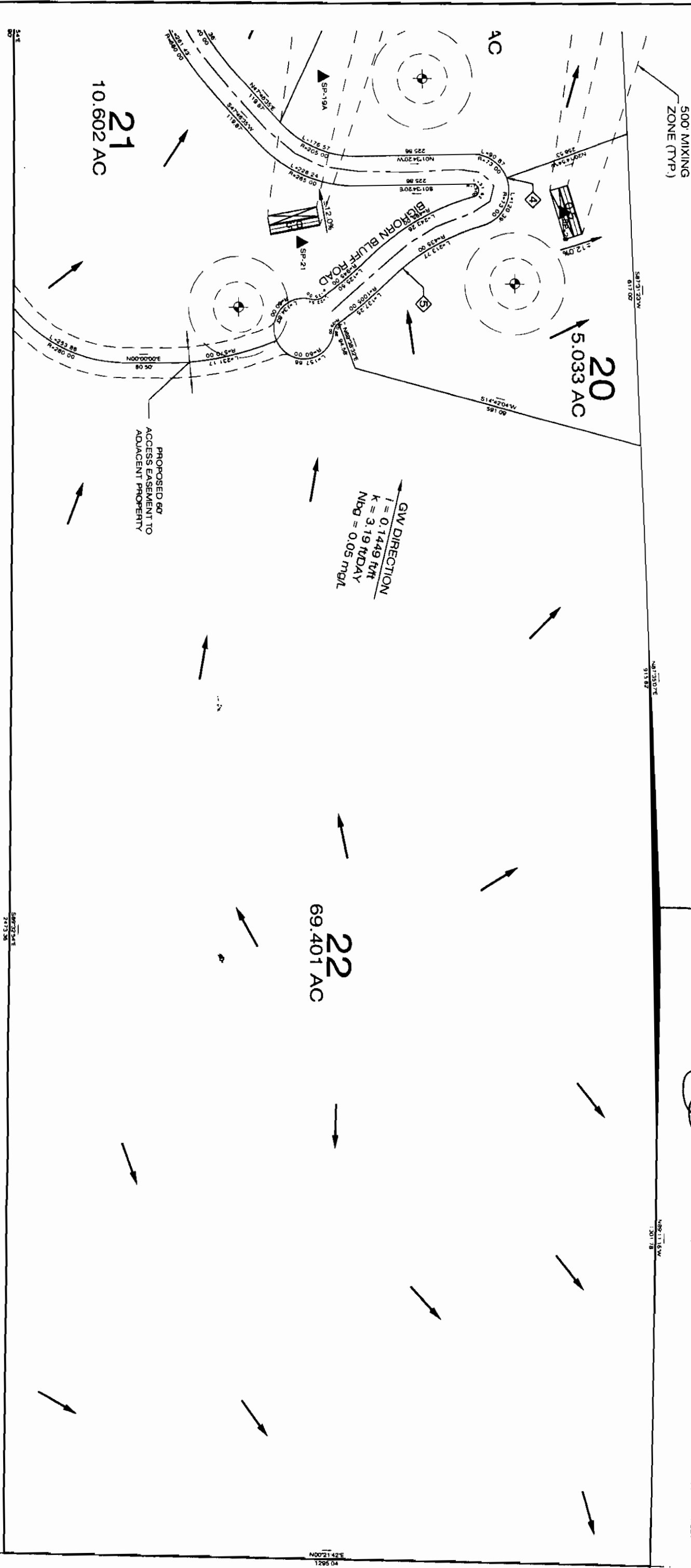
APPROVED

Montana Department of
Environmental Quality
Permitting and Compliance Division

[Signature]
Date 12/14/07

DEC 12 2007

PLUMB CREEK
SUBDIVISIONS BUREAU



Landworks
Consulting & Design Inc

4111 C. ...
PO Box 203
Mandan, MT 59207

REVISIONS	
DATE	DESCRIPTION

BIGHORN BLUFF	
MDEQ SITE LAYOUT	

LOCATION:	
SECTION 2, 3, 10 & 11, T19N, R26W, PMM	
SANDERS COUNTY, MONTANA	
PREPARED FOR	PLUMB CREEK

DWG LOCATION	
2.12006 PROJECTS11234 - PLUMB CREEK-COMBESTDOWSITE-LAYOUT	
LANDWORKS PROJECT NO	06-1234
DATE	OCT. 13, 2006
FLAT FILE NO	X-XX
SHEET	8 OF 9

PREPARED BY: ANDY SHORT FOR TERRITORIAL-LANDWORKS, INC.

