

# EXAMPLE O&M PLAN FOR REFERENCE ONLY



DRAWING NO. PROJECT: 20598-02BLCV

FOR TITLE BLOCK  
ADD NAME AS  
APPROPRIATE

DRAWING SCALE: HORIZONTAL: 1"=30' VERTICAL: 1"=10'

DESIGNED BY:	CWK
DRAWN BY:	CWK
CHECKED BY:	MDM
FILE NAME:	MSP01

ISSUE DATE: 1/29/2019

ADD NAME OF PROJECT

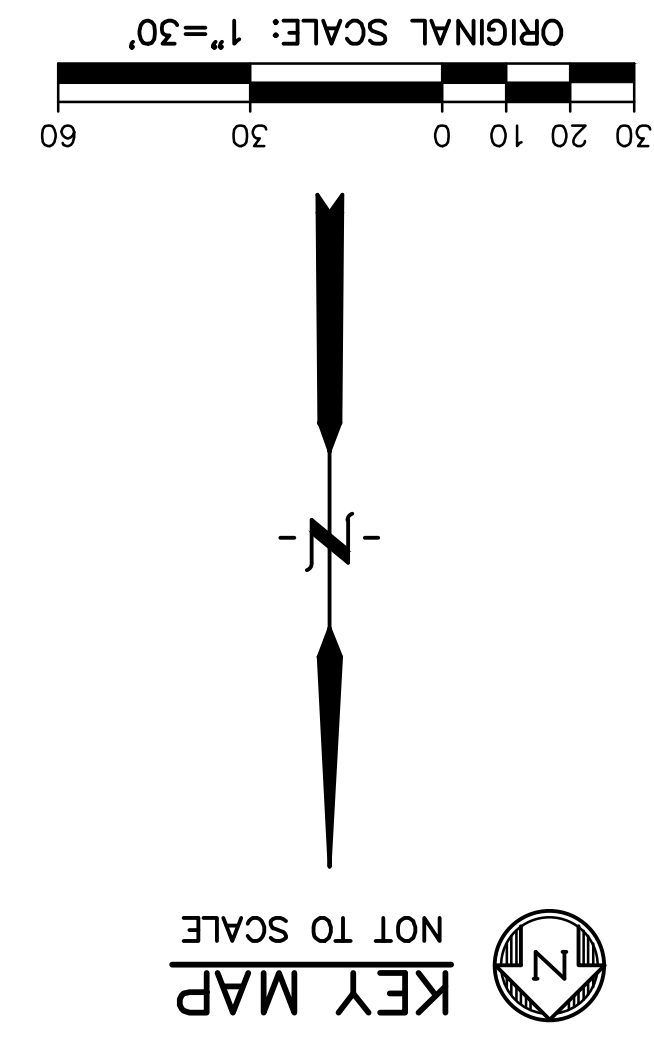
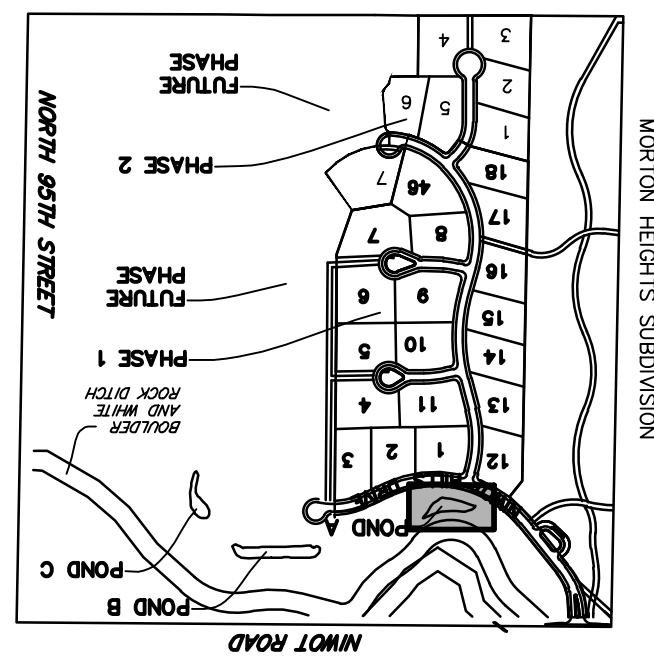
MAINTENANCE SITE PLAN FOR:

ADD OWNER/  
CLIENT  
INFORMATION  
AND/OR  
LOGOS

OWNER/CLIENT:

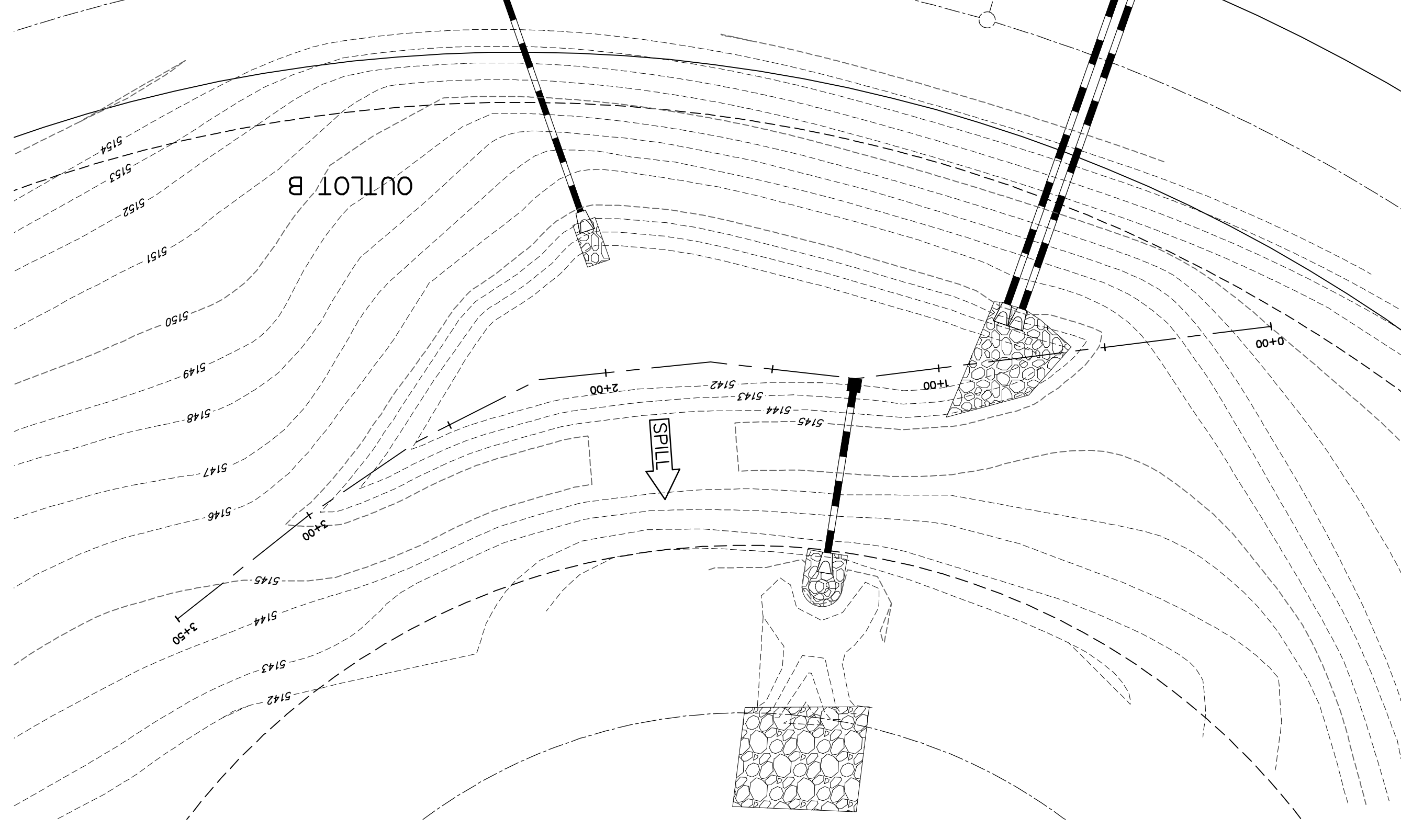
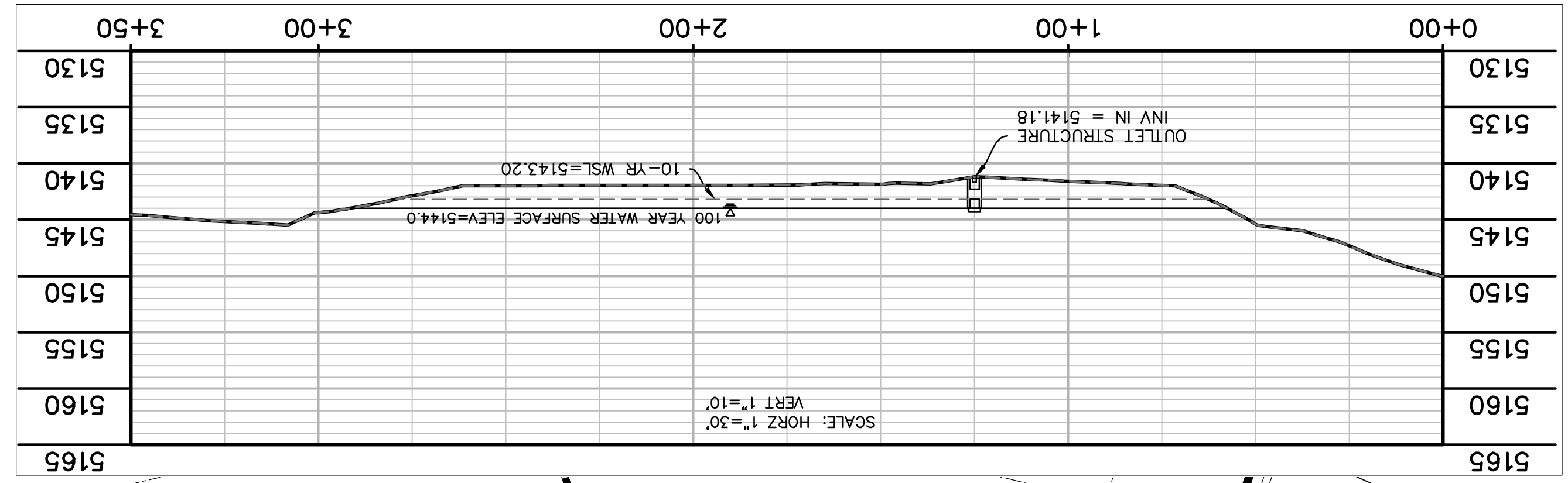
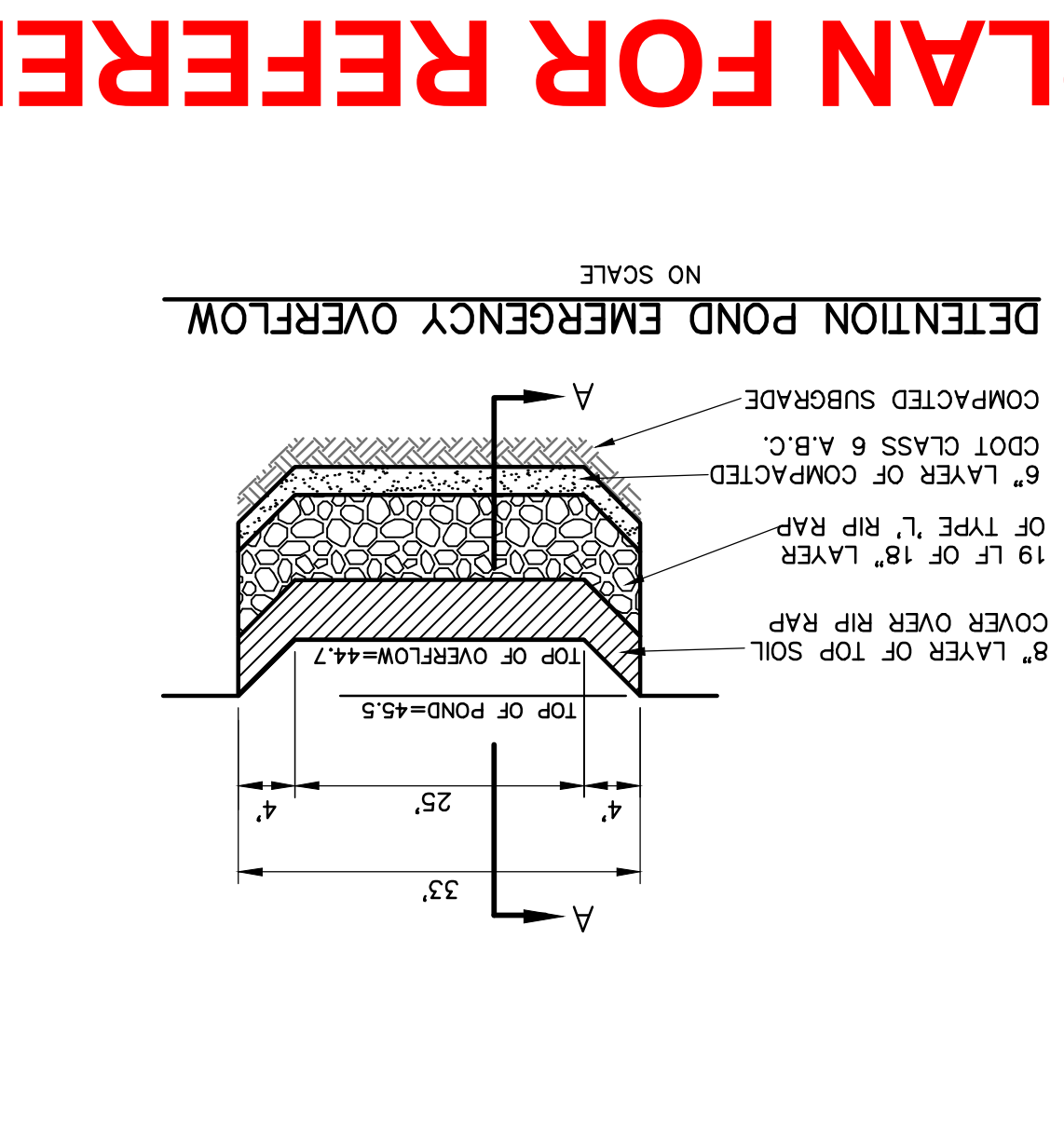
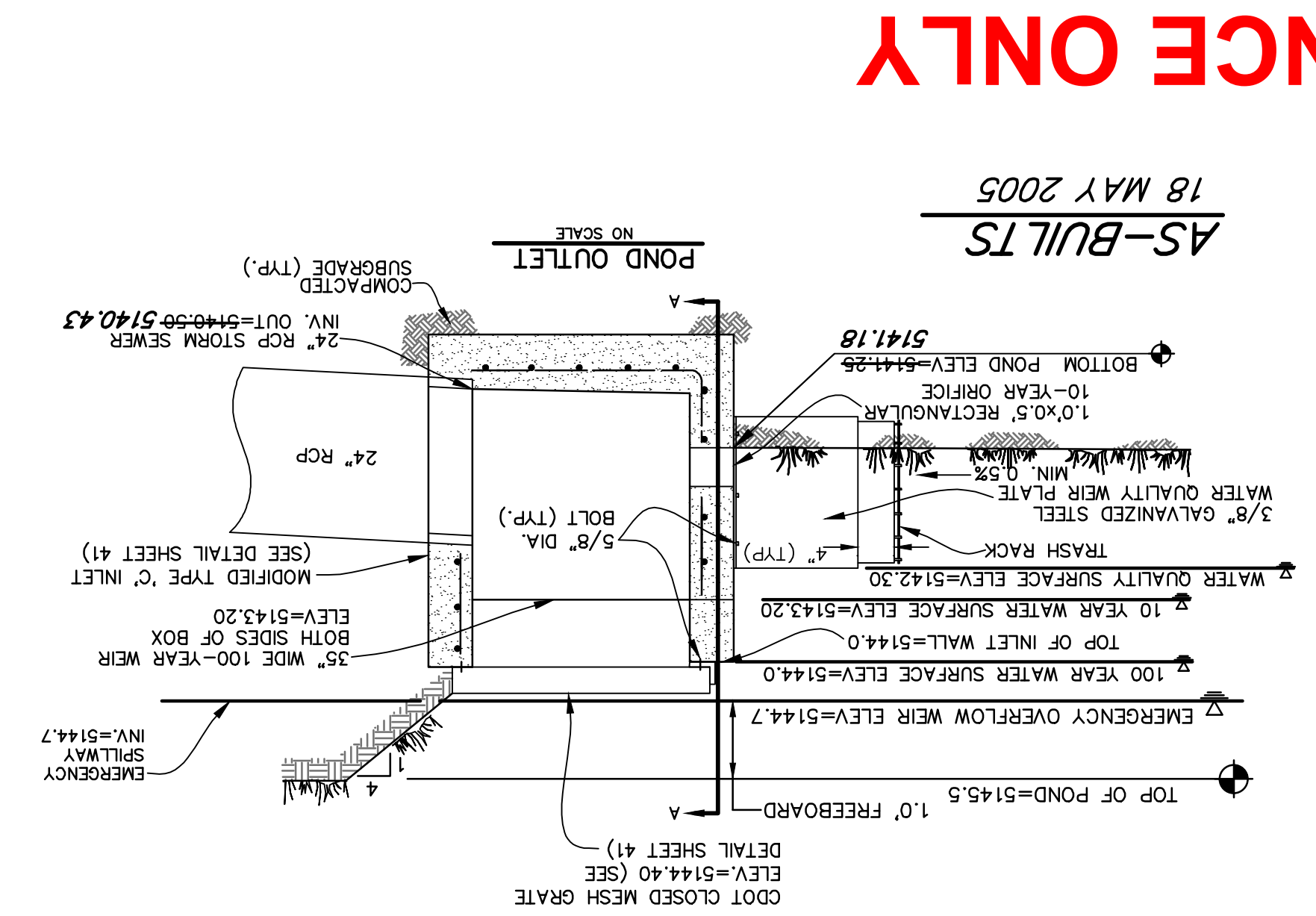
ADD DESIGN  
FIRM LOGO/  
INFORMATION  
, ETC.

PREPARED BY:



**BASIS OF BEARINGS**  
THE NE 1/4 OF SECTION 32 AS BEARING BEARINGS ARE REFERRED TO THE WEST LINE OF SECTION 32 PER THE RECORDED PLAT OF SUBDIVISION (ASSUMED MERIDIAN), 3-1/4" ALUMINUM CAP AT THE NORTHWEST CORNER OF SECTION 32, T2N, R69W OF THE 6TH P.M. ELEVATION=5119.30 NGVD 1929 DATUM.

**BENCHMARK**  
3-1/4" ALUMINUM CAP AT THE NORTHWEST CORNER OF SECTION 32, T2N, R69W OF THE 6TH P.M. ELEVATION=5119.30 NGVD 1929 DATUM.



- 1.0 General Information - Pond A**
- A. Property Owner
- B. Design Engineer
- ADD CONTACT INFORMATION**
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- 1.1 Hydraulic Information**
- C. Project Completion Date  
Phase 1 completed 2005 (included detention ponds)  
Phase 2 completed December-2019
- A. Flow Rates-  
**CONTROL INFLOW (CFS) RELEASE (CFS)**
- |          |         |       |
|----------|---------|-------|
| WQCV     | 40-hour | N/A   |
| 10-YEAR  | 3.14    | 20.78 |
| 100-YEAR | 54.04   | 21.50 |
- B. Pond Description- Extended Detention Basin, earthen with concrete outlet structure and buried rip rap emergency overflow. There is no forbay or micropool.
- C. Outlet Specifications
- | DESCRIPTION | TYPE          | VOLUME (AF) | WSEL    |
|-------------|---------------|-------------|---------|
| INVERT      | N/A           | 0           | 5141.18 |
| WQCV        | ORIFICE PLATE | 0.156       | 5142.30 |
| 10-YEAR     | REC. ORIFICE  | 0.173       | 5143.20 |
| 100-YEAR    | WEIR          | 0.324       | 5144.00 |
- A. Project Survey Information- Survey control information shown on drawing.
- B. Seed Mix- Boulder County, Plains Seed Mix, for specifications see:
- | Common Name       | Variety                      | % of Mix    | lb/acre      |
|-------------------|------------------------------|-------------|--------------|
| Side Oats         | Grama Bouteloua curtipendula | 15%         | 2.74         |
| Blue Grama        | Bouteloua gracilis           | 20%         | 0.84         |
| Buffalograss      | Buchloe dactyloides          | 15%         | 9.33         |
| WesternWheatgrass | Pascopyrum smithii           | 12.5%       | 3.96         |
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| Little Bluestem   | Schizachyrium scoparium      | 13%         | 1.74         |
| Green Needlegrass | Stipa viridula               | 12%         | 2.31         |
| <b>Totals:</b>    |                              | <b>100%</b> | <b>24.88</b> |
- C. Mow Area = 0.2 acres
- 2.0 General Facility Description-**  
Runoff generated from a portion of the subdivision is routed to roadside ditches and storm culverts to the pond. The water quality ponds and outlet structures are designed to detain a water quality volume, 10-year flood control volume and 100-year flood control volume. The ponds will have release rates for the WQCV, and the 10-year and 100-year rates controlled by an outlet structure.
- 2.1 Maintenance Notes**
- A. Maintenance Frequency  
Routine Maintenance typically consists of regularly scheduled mowing and trash and debris pickups for during the growing season. This includes items such as the removal of debris/material that may be clogging the outlet structure well screens and trash racks. These activities normally will be performed numerous times during the year and following significant rainfall events.
- B. Equipment and Special Tools Required (Routine Maintenance)  
Rake or Broom  
Mower  
Weed eater  
Shovel
- 2.2 Maintenance Procedure**  
A. Dewatering-should not be required at this facility.
- B. Sediment Removal- Major sediment removal (if required) consists of removal of large quantities of sediment or removal of sediment from vegetated areas. When removing large quantities of sediment typically deposited in vegetated areas. The volume of sediment removed should return the pond to design volumes and grades. The removed sediment shall be transported and disposed of.
- C. Debris Removal - Debris and other materials can clog the outlet work's well screen, office plates) and trash rack. This activity must be performed anytime other maintenance activities are conducted to ensure proper operation.
- D. Site Inspection- The facility should be inspected on an annual basis to evaluate the need for additional maintenance such as sediment removal, erosion control, riprap maintenance and structural repairs.
- E. Post-Maintenance Considerations- After sediment removal or repairs, the disturbed area may require re-vegetation.
- F. Access to detention ponds shall be from the Minot Hills Drive, access shall be by the least disruptive method available for the pond. No access roads are provided directly to the pond. Access shall be by the least disruptive method available for required inspection or maintenance.
- Must include at least general frequencies for routine inspections and maintenance activities in the Maintenance Notes or Procedures Section.**
- Section:**

O&M Plan is to be site-specific - example language only