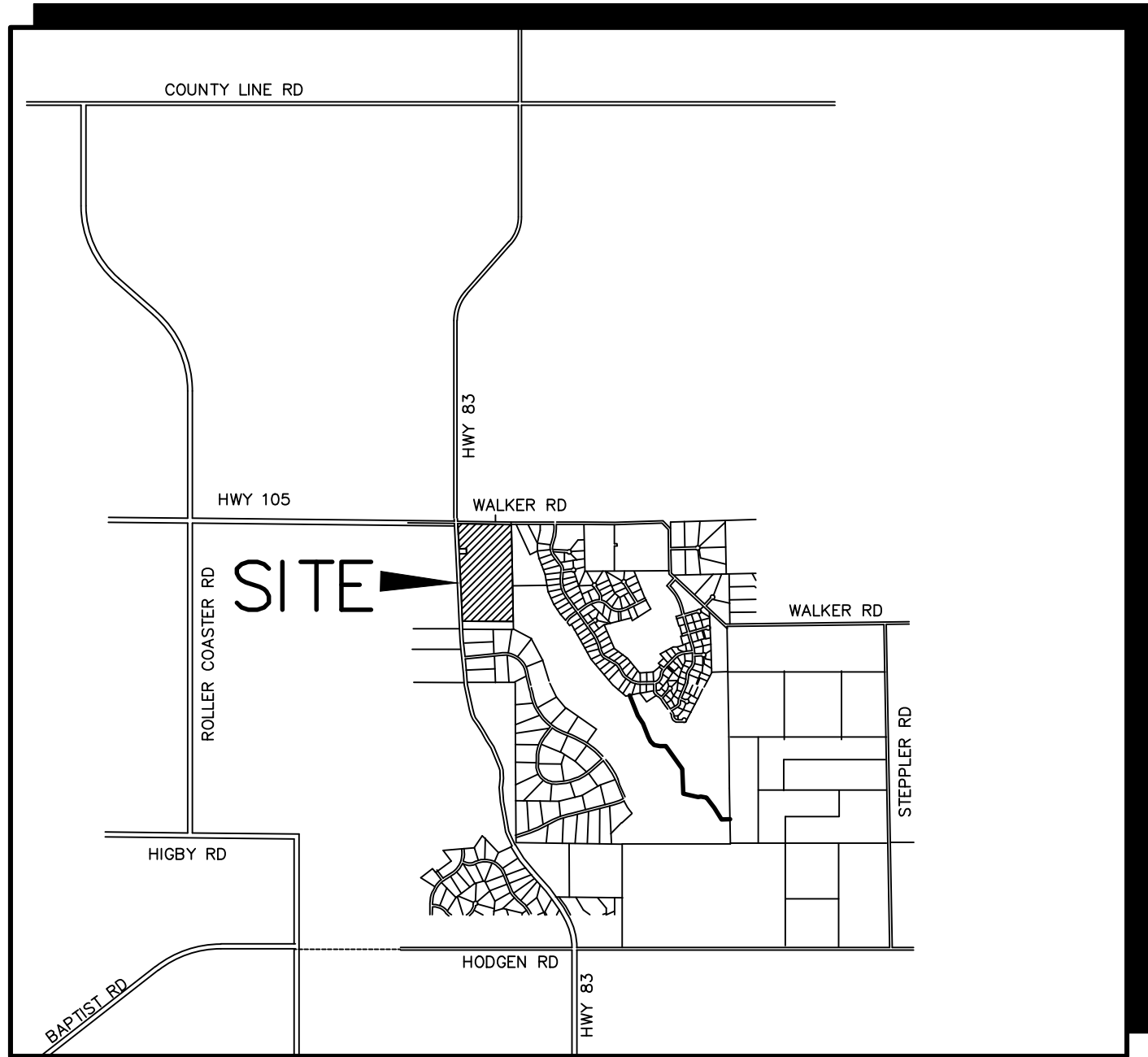
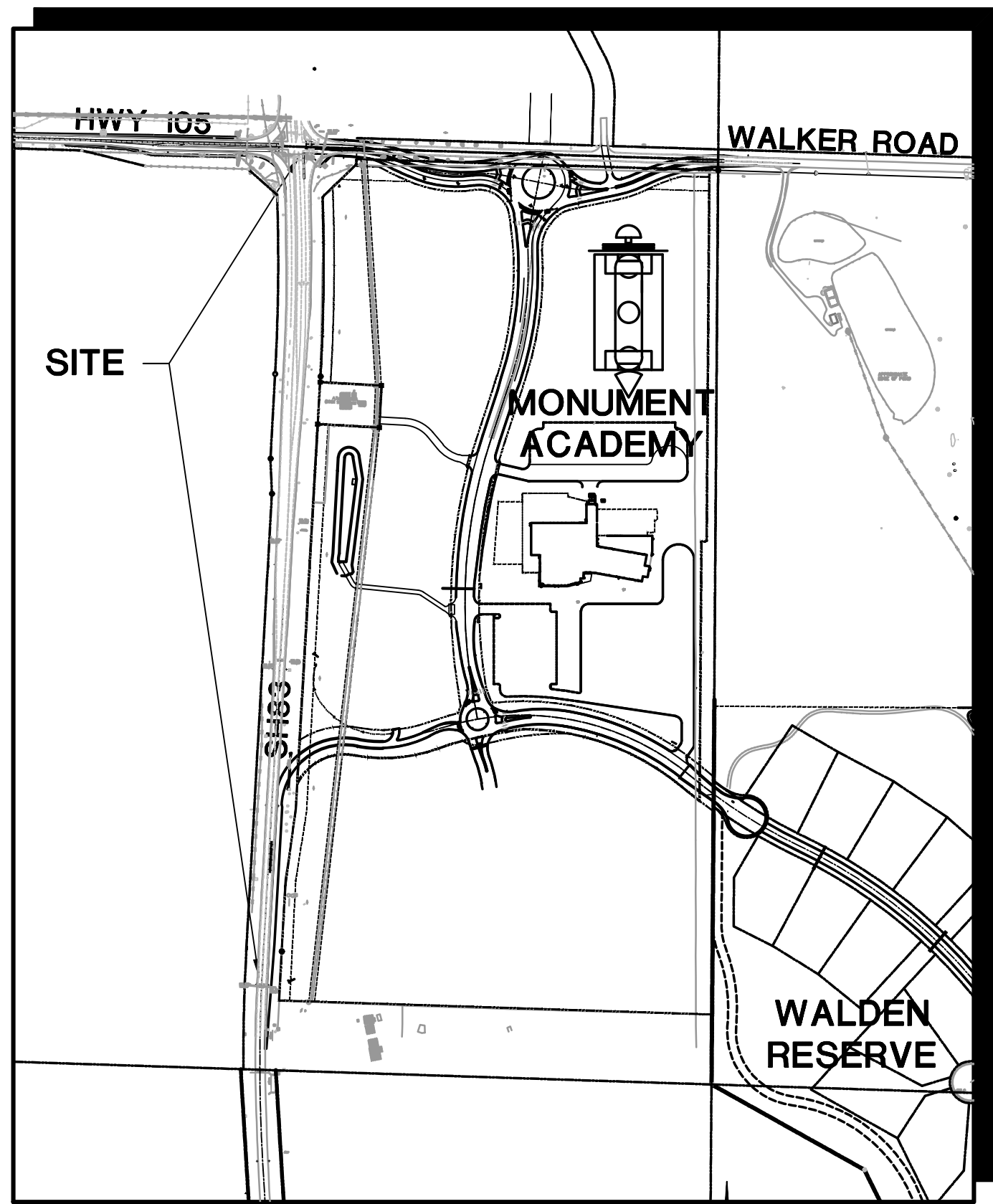


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VICINITY MAP
NOT TO SCALE



SITE MAP
NOT TO SCALE

BENCHMARK:
BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM ELEV.=7570.80
FOUND BRASS CAP IN CONCRETE INT HWY 83 & HODGEN RD.

BASIS OF BEARING:
COMMENCING AT THE SOUTHEAST CORNER OF SAID E1/2 NW1/4, SAID POINT ALSO
BEING THE SOUTHWEST CORNER OF THE NORTHEAST ONE-QUARTER (NE1/4) OF
SAID SECTION 15, AS MONUMENTED BY A 1/2" REBAR (NO CAP), FROM WHICH THE
SOUTHWEST CORNER OF THE NORTHWEST ONE-QUARTER (NW1/4) OF SAID SECTION
15, AS MONUMENTED BY A REBAR AND 3-1/4" ALUMINUM CAP STAMPED
"BERGE-BREWER LS 9646" BEARS N88°08'01"W, A DISTANCE OF 2636.22 FEET AND
IS THE BASIS OF BEARINGS USED HEREIN.

MONUMENT ACADEMY SH 83 Access Improvement Plans

El Paso County, Colorado

PREPARED FOR:
Walden Corporation
17145 Colonial Park Drive
Monument, CO 80132

PREPARED BY:
**JPS
ENGINEERING**
PREPARED BY:
19 East Willamette Avenue
Colorado Springs, Colorado 80903
March, 2020

AGENCIES/CONTACTS

DEVELOPER:	WALDEN CORPORATION 17145 COLONIAL PARK DRIVE MONUMENT, CO 80132 MR. BILL DUNSTON (719) 243-1111	WATER/WASTEWATER:	WALDEN CORPORATION PO BOX 1870 MONUMENT, CO 80132 MR. MATT DUNSTON (719) 339-2410
CIVIL ENGINEER:	JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719) 477-9429	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 399-3176
LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 (719) 520-6300	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719) 495-2283
STATE HIGHWAY	COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MR. ARTHUR GONZALES (719) 546-5732	TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800) 922-1987 A.T. & T. (LOCATORS) (719) 635-3674

CDOT GENERAL NOTES:

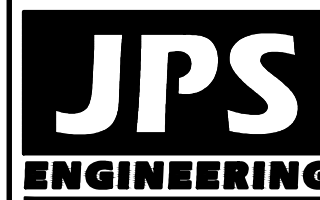
1. ALL CONSTRUCTION WITHIN THE STATE HIGHWAY RIGHT-OF-WAY SHALL CONFORM TO THE MOST CURRENT STATE DEPARTMENT OF HIGHWAYS, DIVISION OF HIGHWAYS AND STATE OF COLORADO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS WELL AS THE MOST CURRENT COLORADO DEPARTMENT OF TRANSPORTATION M&S STANDARDS AND THE MANUAL FOR UNIFORM TRAFFIC DEVICES (MUTCD). ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE STANDARD SPECIFICATIONS.
2. ACCESS CONSTRUCTION WITHIN HIGHWAY RIGHT OF WAY AND ALL HIGHWAY IMPROVEMENTS SHALL COMPLY WITH THE APPROVED ACCESS PERMITS. COPIES OF THE PERMITS SHALL BE AVAILABLE ON THE CONSTRUCTION SITE AT ALL TIMES.
3. PERMITTEE IS RESPONSIBLE FOR ANY UTILITIES DISRUPTED DURING CONSTRUCTION AND ALL EXPENSES INCURRED FOR THEIR REPAIR.
4. CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES TO OBTAIN ALL NECESSARY LOCATES 48 HOURS BEFORE CONSTRUCTION BEGINS. CALL BEFORE YOU DIG. UTILITY NOTIFICATION CENTER OF COLORADO: 1-800-922-1987.
5. ALL EDGES OF EXISTING ASPHALT ABUTTING NEW PAVEMENT SHALL BE SAWCUT AND TACKED.
6. CONTRACTOR SHALL BE REQUIRED TO STRIP EXISTING VEGETATION AND STOCKPILE THE MATERIAL FOR LATER REUSE IN RE-VEGETATION ACTIVITY. ALL EROSION CONTROL FEATURES RELEVANT TO THIS CONSTRUCTION SHALL BE MAINTAINED TO THE SATISFACTION OF CDOT UNTIL RE-VEGETATION HAS BEEN ESTABLISHED.
7. ALL DISTURBED AREAS SHALL BE COVERED WITH 6" OF TOPSOIL AND RESEEDED ACCORDING TO EXHIBIT A ATTACHED TO THE ACCESS PERMIT.
8. ALL PAVEMENT MARKING SHALL BE EPOXY PAINT PER CDOT SPECIFICATIONS UNLESS NOTED OTHERWISE.
9. EXISTING STRIPING SHALL BE REMOVED BY WATER BLASTING OR SAND BLASTING. NO GRINDING WILL BE ALLOWED.
10. CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC CONTROL PLANS AND OBTAIN PERMITS AS REQUIRED BY CDOT.
11. CONTRACTOR SHALL FIELD VERIFY GRADES PRIOR TO PAVING TO ENSURE POSITIVE DRAINAGE TRANSITION TO ADJACENT PAVEMENT.

SHEET INDEX

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SV1	SURVEY CONTROL PLAN
TY1	TYPICAL SECTIONS
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HW2.1	HIGHWAY 105 PLAN & PROFILE
HW3.1	SH 83 CROSS-SECTIONS
HW4.1	HIGHWAY 105 CROSS-SECTIONS
PP1	PINEHURST CIRCLE PLAN & PROFILE
INT1	SH83 & HWY105/WALKER ROAD INTERSECTION PLAN
U1-HW	INTERSECTION UTILITY PLAN
ST1.1	SIGNING AND STRIPING PLAN -- SH 83
ST2.1	SIGNING AND STRIPING PLAN -- HWY 105
C1.1-HW	GRADING AND EROSION CONTROL PLAN -- SH 83
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C3-HW	EROSION CONTROL NOTES & DETAILS
C4.1	STORMWATER MANAGEMENT PLAN (1 OF 4)
C4.2	STORMWATER MANAGEMENT PLAN (2 OF 4)
C4.3	STORMWATER MANAGEMENT PLAN (3 OF 4)
C4.4	STORMWATER MANAGEMENT PLAN (4 OF 4)

CDOT ACCESS PERMIT NUMBER: 219075 & 219076
THIS DESIGN IS IN FULL COMPLIANCE WITH SECTION 4 OF THE
STATE HIGHWAY ACCESS CODE, 2 CCR 601-1 EXCEPT FOR THE
FOLLOWING APPROVED DESIGN WAIVERS: N/A.

MONUMENT ACADEMY - SH 83 IMPROVEMENTS



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL BEFORE YOU DIG
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

No.	REVISION	DATE	BY
1	CDOT SUBMITTAL	3/16/20	JPS
2			
3			
4			
5			

TITLE SHEET

HORZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	8/28/19	LAST MODIFIED:	3/16/20
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

G1

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COLORADO
DEPARTMENT OF TRANSPORTATION
M&S STANDARDS PLANS LIST
July 04, 2012
Revised on March 5, 2013

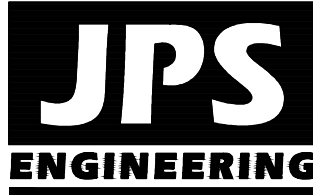
ALL OF THE M&S STANDARD PLANS, AS SUPPLEMENTED AND REVISED, APPLY TO THIS PROJECT WHEN USED BY DESIGNATED PAY ITEM OR SUBSIDIARY ITEM.

NEW OR REVISED STANDARD PLAN SHEETS APPLICABLE TO THIS PROJECT, INDICATED BY A MARKED BOX ■, WILL BE ATTACHED TO THE PLANS.

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□ S-630-7	ROLLING ROADBLOCKS FOR TRAFFIC CONTROL (3 SHEETS)	266-268

MONUMENT ACADEMY - SH 83 IMPROVEMENTS

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VERT. SCALE:	N/A	DESIGNED:	JPS
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CREATED:	8/31/19	LAST MODIFIED:	3/16/20
PROJECT NO:	040201	MODIFIED BY:	BJJ
SHEET:	G2		



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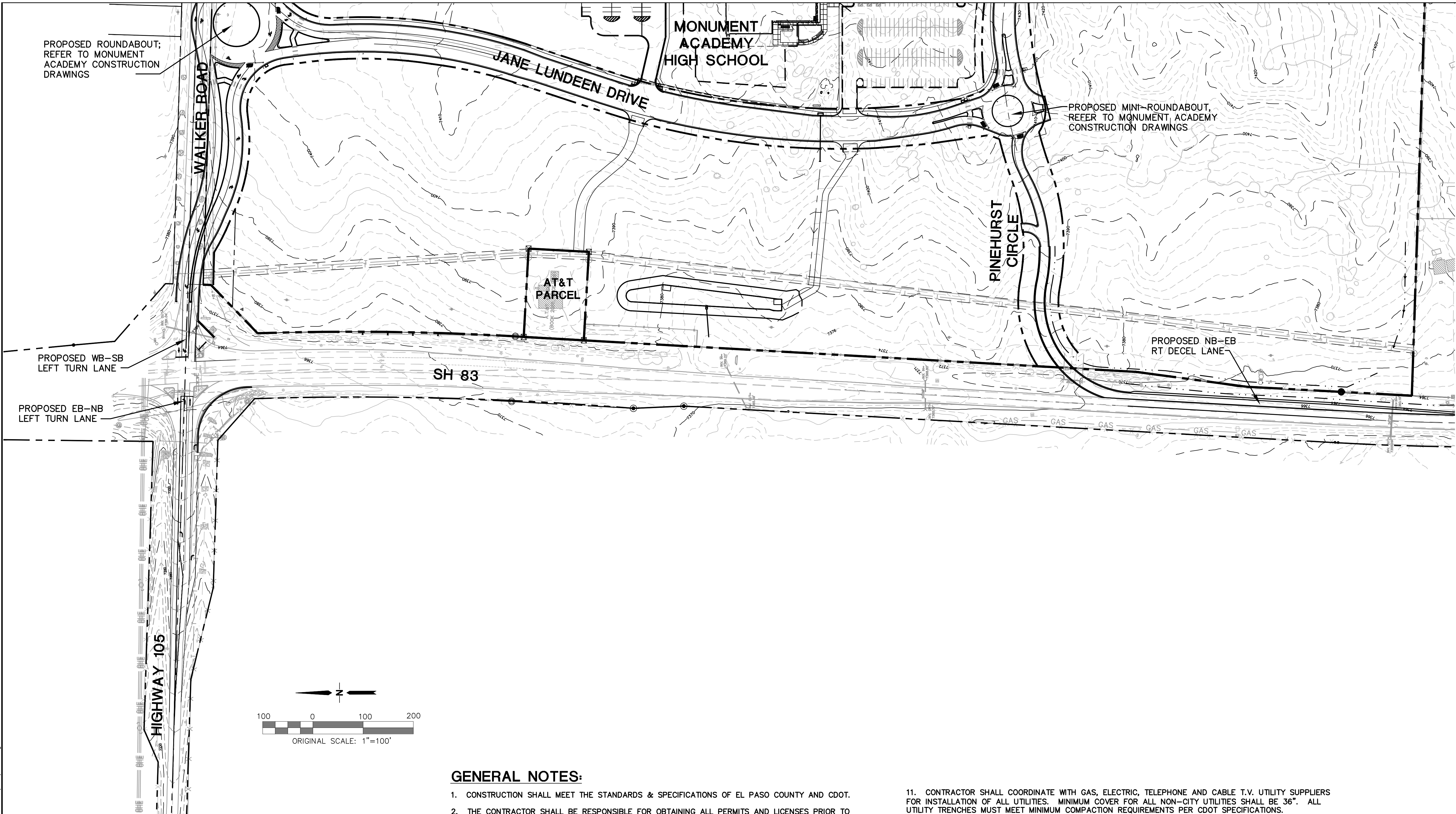


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1-800-922-1987
CALL OR VISIT US IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

REVISION	DATE	BY	NO.
CDOT SUBMITTAL	3/16/20	JPS	1

STANDARD PLAN LIST

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CDOT HIGHWAY ACCESS PERMITS:

- (A) #219075 - PINEHURST CIRCLE
(B) #219076 - WALKER ROAD

HIGHWAY ACCESS DESIGN DATA:

HIGHWAY CLASSIFICATION: R-A (REGIONAL HIGHWAY)

POSTED SPEED: 60 MPH

REQUIRED AUXILIARY LANES:

12' NB-EB RT DECEL @ PINEHURST CIRCLE

AUXILIARY LANE DESIGN CRITERIA:

(PER CDOT ACCESS CODE)

PINEHURST CIRCLE:

NB-EB RT DECEL LANE:

REQUIRED TOTAL LANE LENGTH = 700' (TABLE 4-6; 60 MPH)
TAPER = 12' * (25:1 RATIO) = 300'
DECEL LANE LENGTH = 400' + 300' = 700'

GENERAL NOTES:

- CONSTRUCTION SHALL MEET THE STANDARDS & SPECIFICATIONS OF EL PASO COUNTY AND CDOT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THESE APPROVED PLANS, A COPY OF THE ACCESS PERMIT(S) W/NTP(S) AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES:
 - CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
- RE-VEGETATION OF ALL DISTURBED SLOPES WITHIN THE RIGHT OF WAY SHALL BE DONE PER EXHIBIT "A" OF THE ACCESS PERMIT.
- STORM DRAIN PIPE SHALL BE RCP CLASS III W/ CLASS C BEDDING UNLESS OTHERWISE NOTED.
- STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED.
- CURB RETURN RADII ARE 35- FEET AT FLOWLINE UNLESS OTHERWISE NOTED.
- LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.

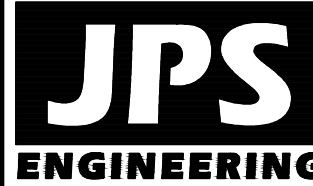
- CONTRACTOR SHALL COORDINATE WITH GAS, ELECTRIC, TELEPHONE AND CABLE T.V. UTILITY SUPPLIERS FOR INSTALLATION OF ALL UTILITIES. MINIMUM COVER FOR ALL NON-CITY UTILITIES SHALL BE 36". ALL UTILITY TRENCHES MUST MEET MINIMUM COMPACTION REQUIREMENTS PER CDOT SPECIFICATIONS.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
- REFER TO CDOT STANDARDS FOR BACKFILL AND COMPACTION SPECIFICATIONS.
- COORDINATE WITH MVEA FOR ELECTRIC SERVICE
- COORDINATE WITH BLACK HILLS ENERGY FOR GAS SERVICE
- ALL UTILITY TRENCHES SHALL MEET MINIMUM COMPACTION REQUIREMENTS PER CDOT SPECIFICATIONS.
- DISTURBED SLOPES STEEPER THAN 3:1 WILL REQUIRE EROSION CONTROL NETTING (EXCELSIOR OR EQUAL).
- ALL BEDDING AND PIPE MATERIALS SHALL COMPLY WITH M&S STANDARDS M-206-1 AND CDOT SPECIFICATION 712.13.

MONUMENT ACADEMY - SH 83 IMPROVEMENTS

HORZ. SCALE: 1"=100'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/31/19	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

HW1



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80903

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CALL 3 DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

DATE
3/16/20

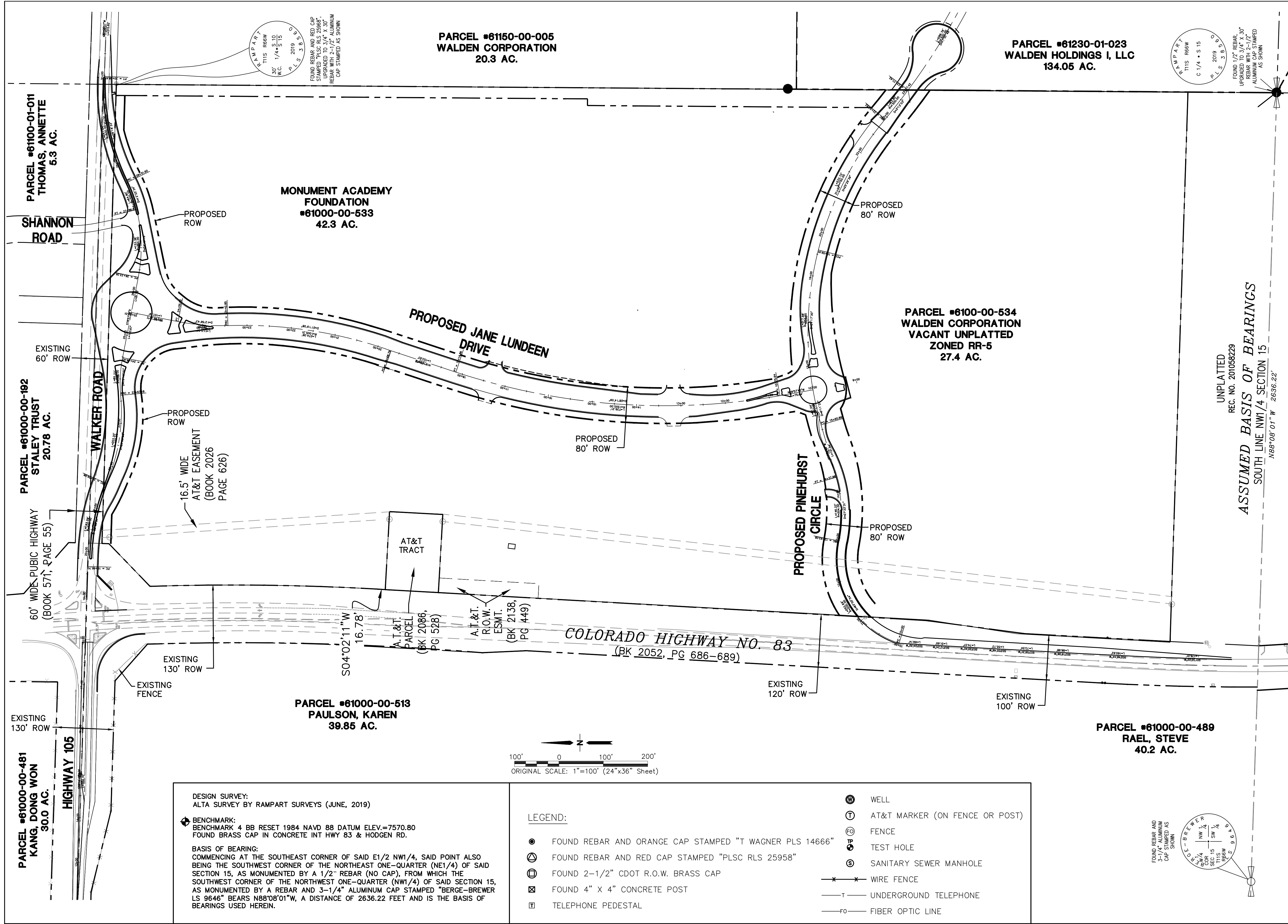
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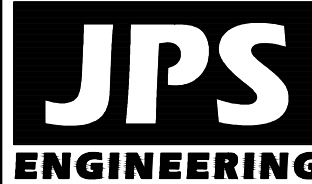
CDOT SUBMITTAL

No.

SITE PLAN
& GENERAL NOTES



MONUMENT ACADEMY - HWY 105 & SH83 IMPROVEMENTS



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80903

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CALL UTILITY NOTIFICATION

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**CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.**

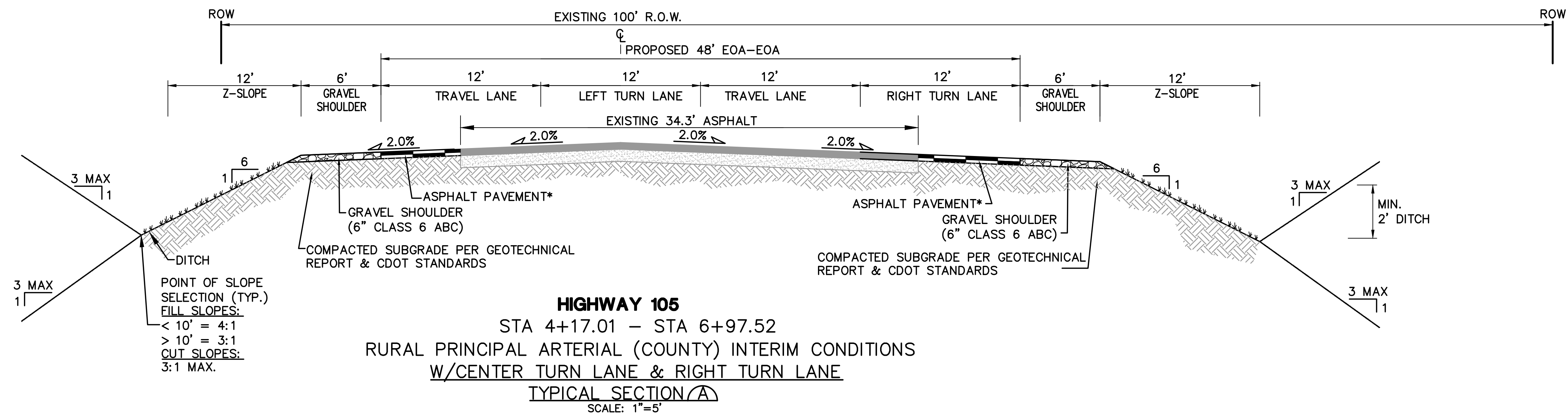
No.	REVISION	BY	DATE
①	COORD SUBMITTAL	JPS	3/16/20

SURVEY CONTROL PLAN

HORZ. SCALE:	1"=100'	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
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CREATED:	1/31/20	LAST MODIFIED:	3/16/20
PROJECT NO:	040201	MODIFIED BY:	BJJ
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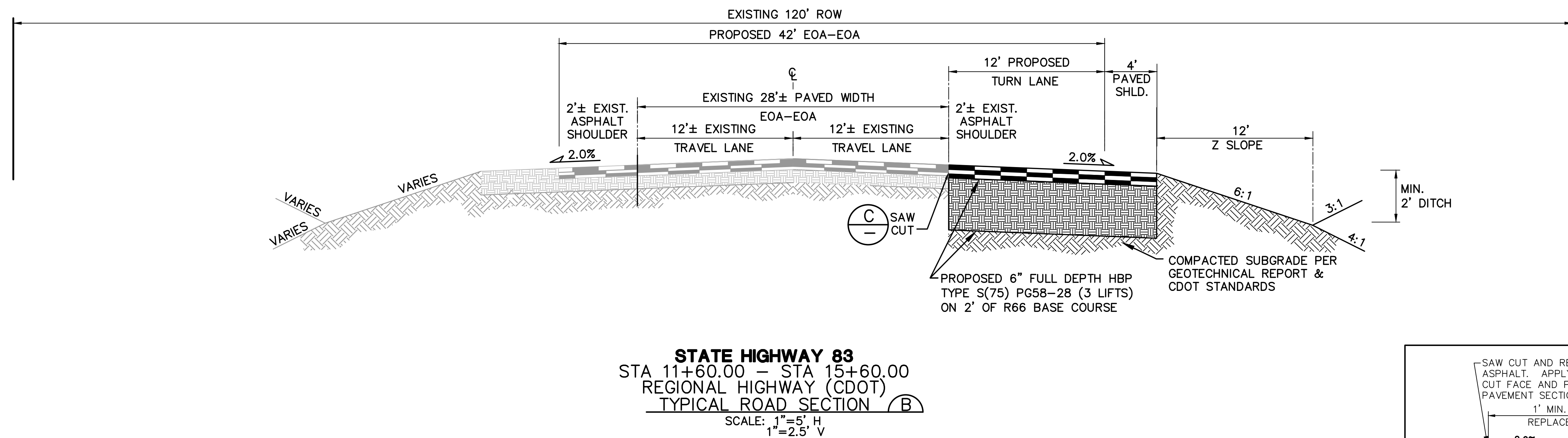
SV1

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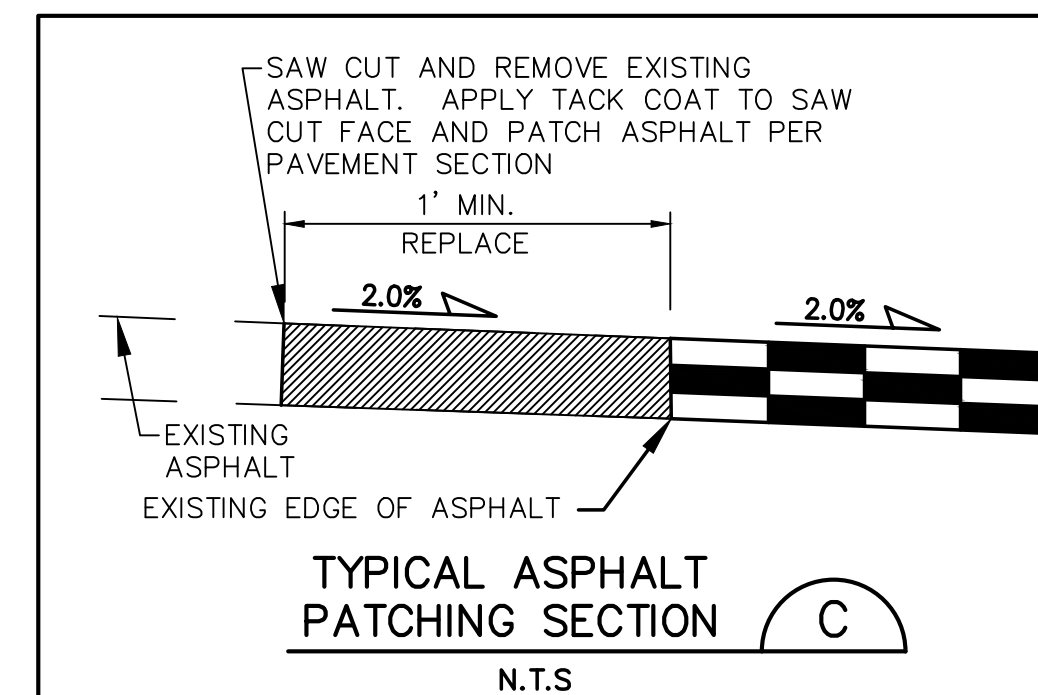
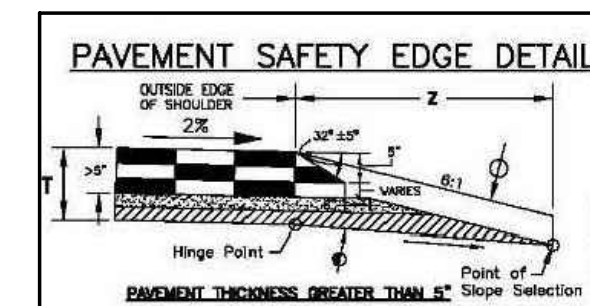


HIGHWAY 105
STA 4+17.01 - STA 6+97.52
RURAL PRINCIPAL ARTERIAL (COUNTY) INTERIM CONDITIONS
W/CENTER TURN LANE & RIGHT TURN LANE
TYPICAL SECTION A
SCALE: 1"=5'

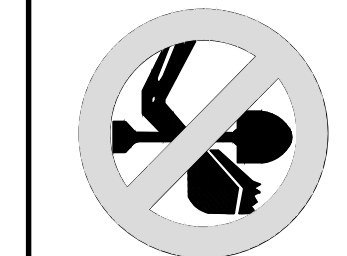
* PAVEMENT SECTION TO BE DESIGNED BY GEOTECHNICAL ENGINEER PER EPC SPECIFICATIONS.
(4" HBP OVER 8" ABC FOR BIDDING PURPOSES)



STATE HIGHWAY 83
STA 11+60.00 - STA 15+60.00
REGIONAL HIGHWAY (CDOT)
TYPICAL ROAD SECTION B
SCALE: 1"=5' H
1"=2.5' V



MONUMENT ACADEMY - SH 83 IMPROVEMENTS



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BEFORE YOU DIG GRADE OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
FOR THE MEMBER UTILITIES

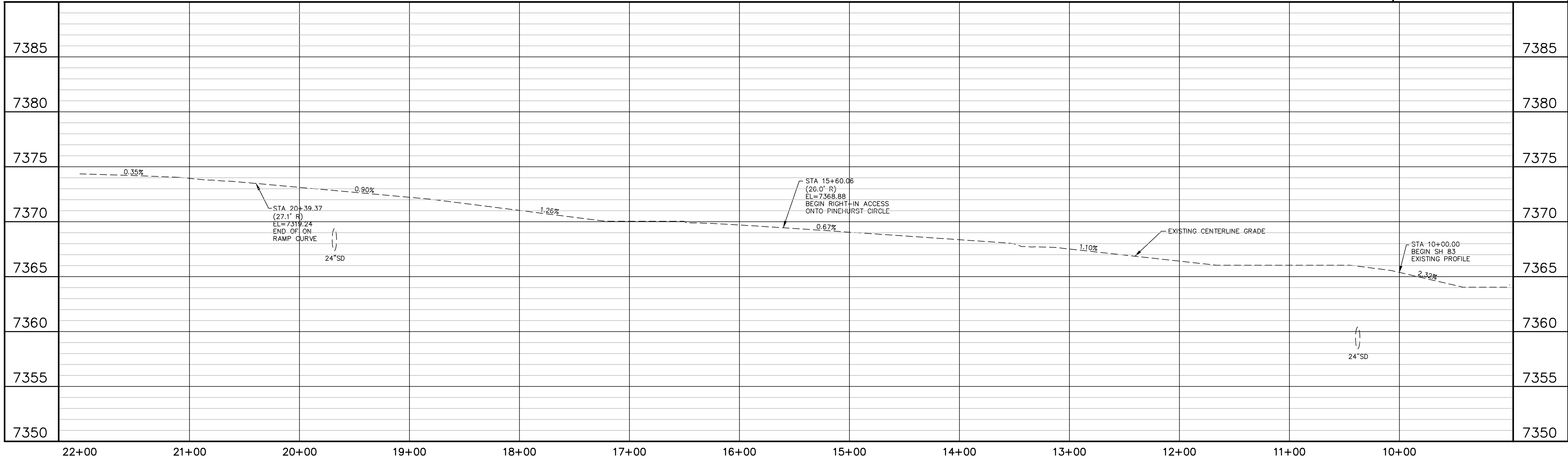
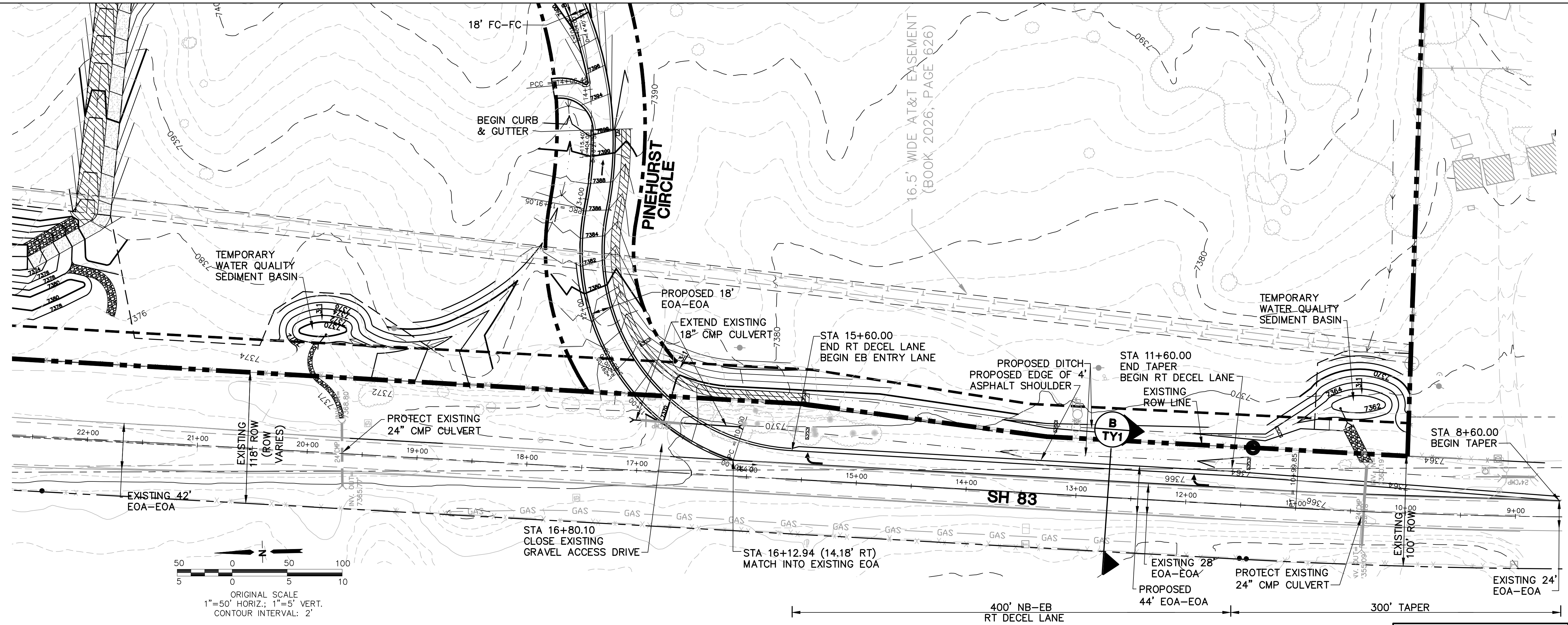
No.	REVISION	DATE	BY
1	CDOT SUBMITTAL	3/16/20	JPS
2			
3			
4			
5			
6			
7			
8			
9			
10			

TYPICAL SECTIONS

HORZ. SCALE: AS SHOWN	DRAWN: BJJ
VERT. SCALE: SD SHOWN	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/31/19	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: TY1

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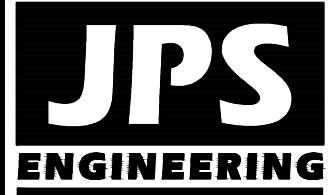


MONUMENT ACADEMY - SH 83 IMPROVEMENTS

HORZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'
SURVEYED: RAMPART
CREATED: 8/31/19
PROJECT NO: 040201
SHEET:

DRAWN: BJJ
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 3/16/20
MODIFIED BY: BJJ

HW1.1



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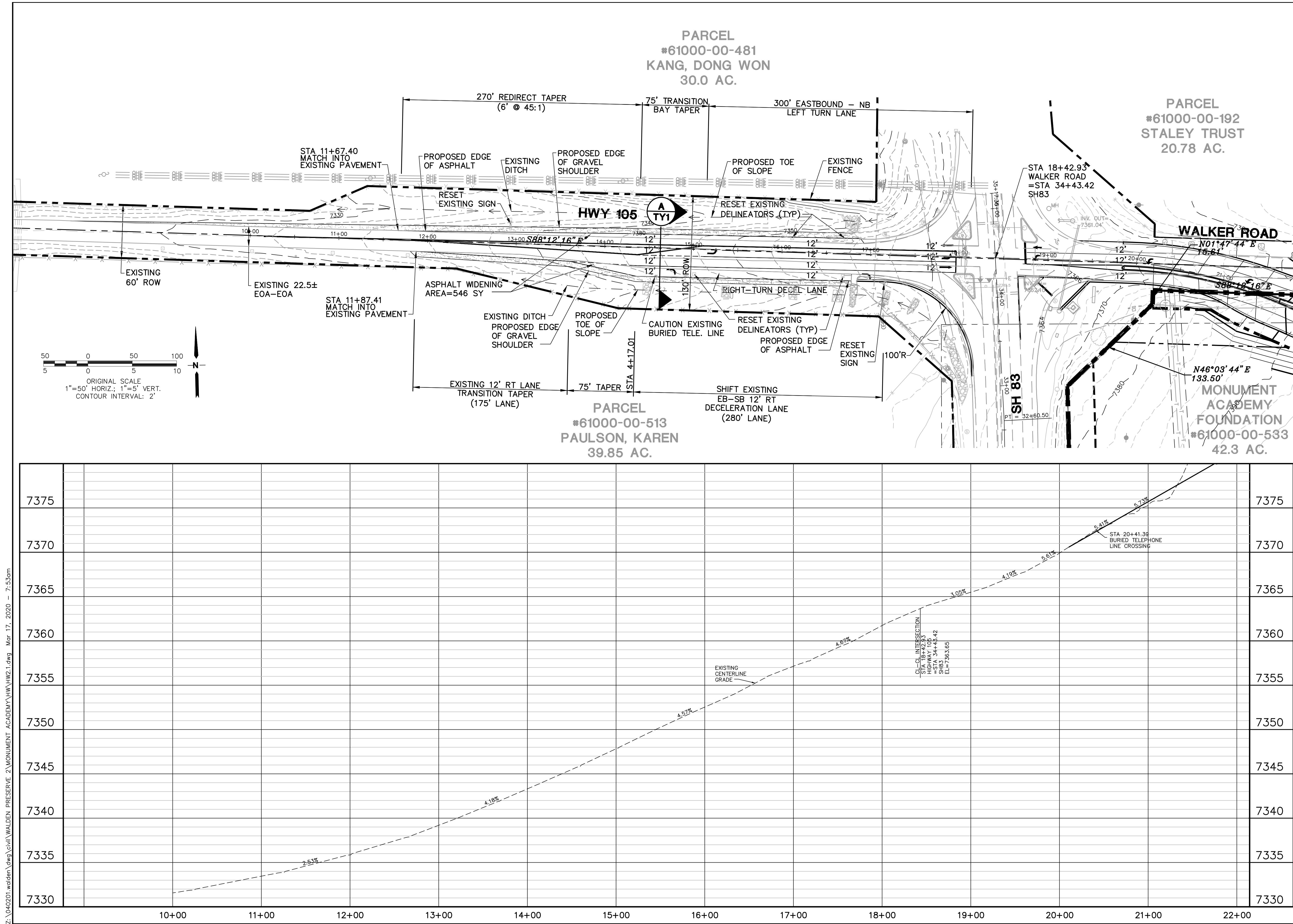


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MEMBER UTILITIES.

No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

SH 83 PLAN
& PROFILE

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MONUMENT ACADEMY - WALKER ROAD IMPROVEMENTS

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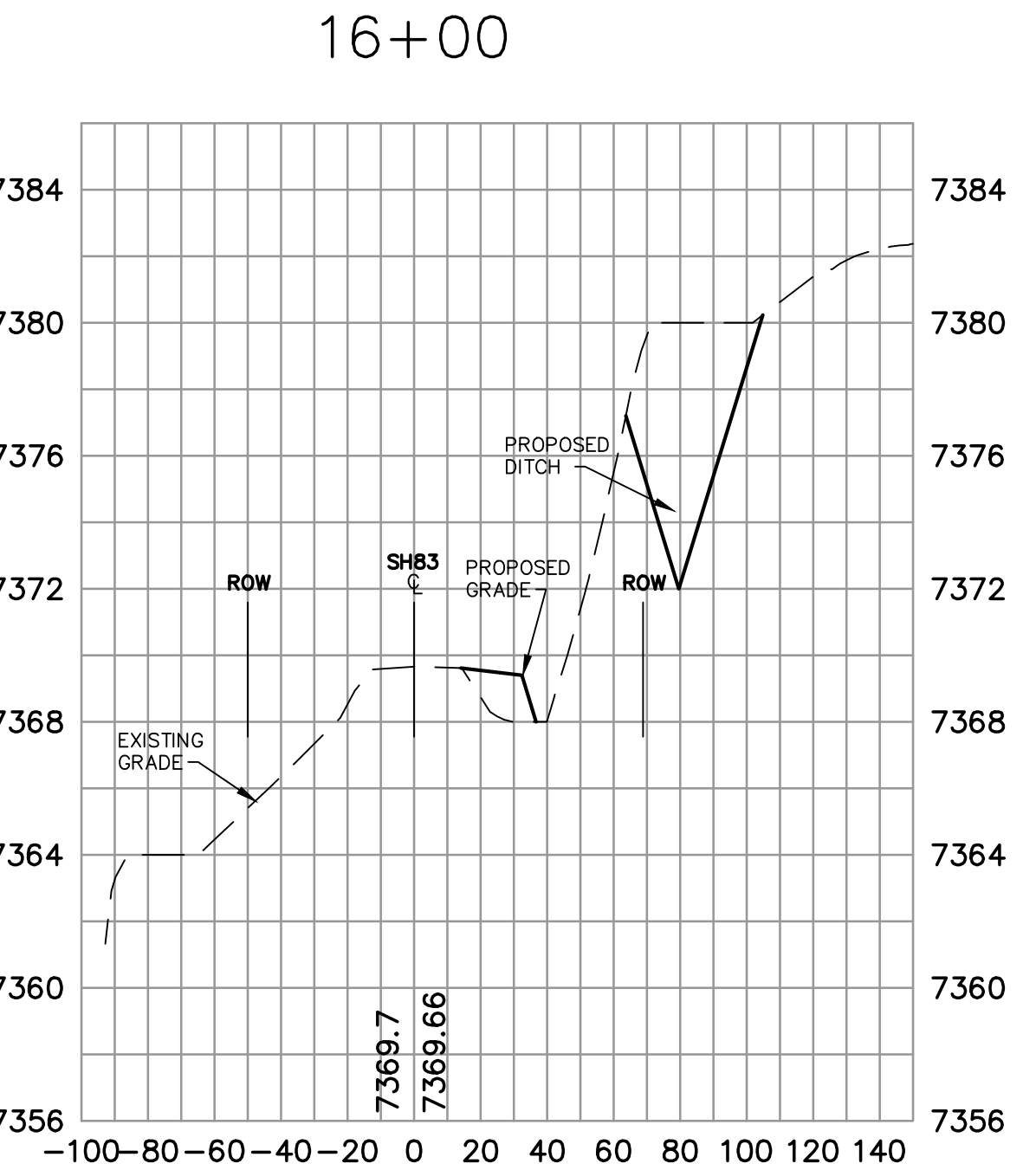
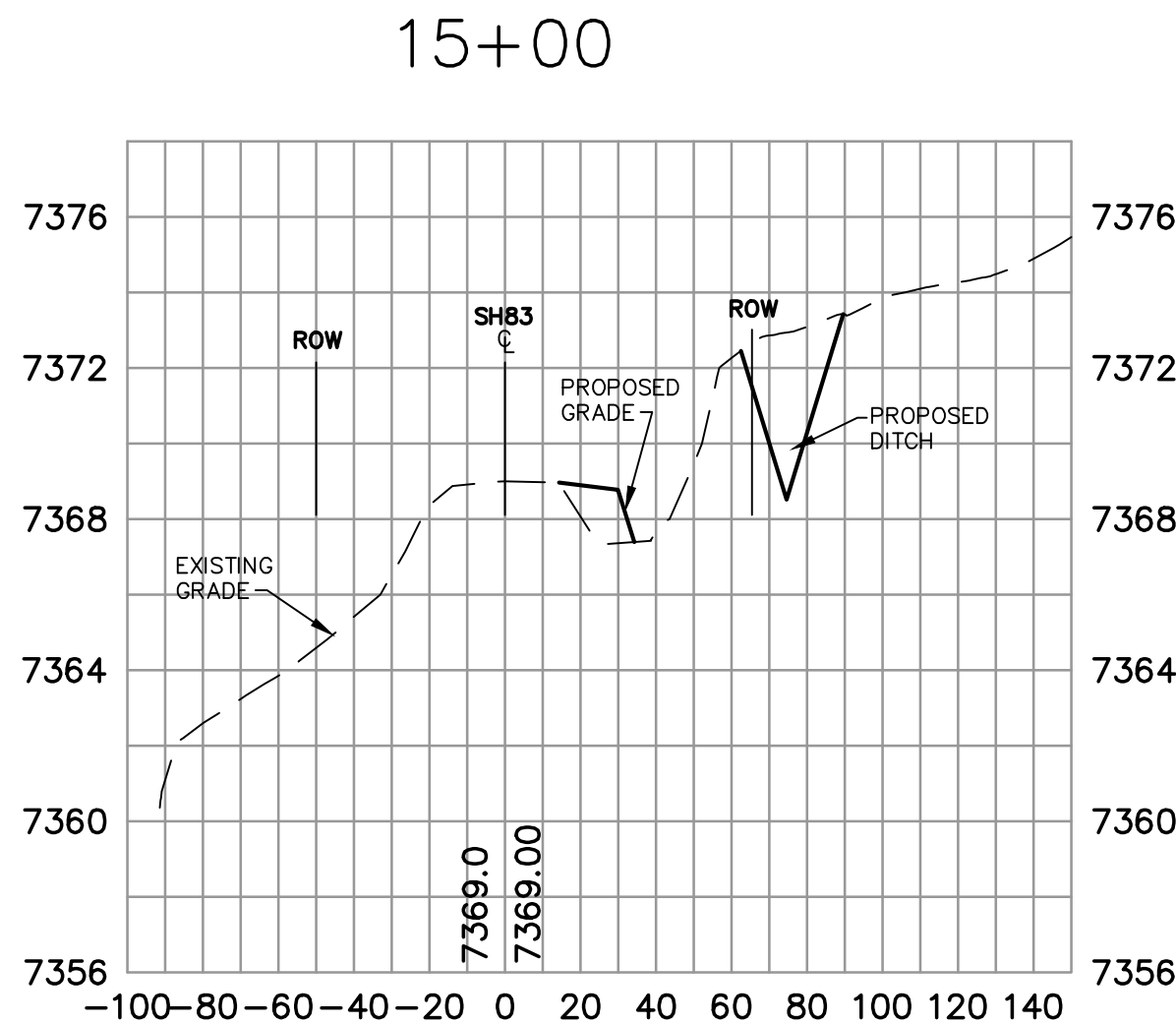
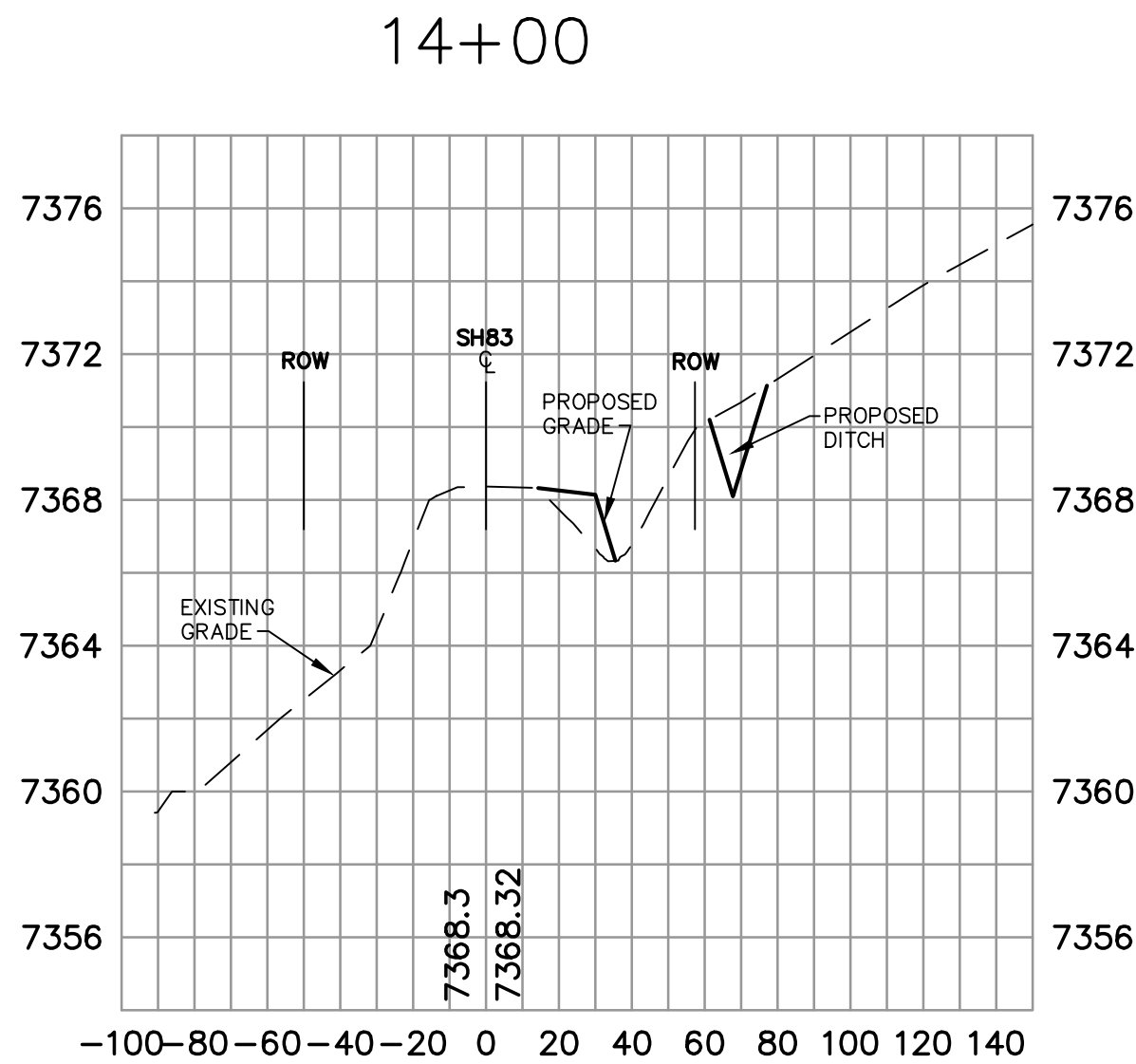
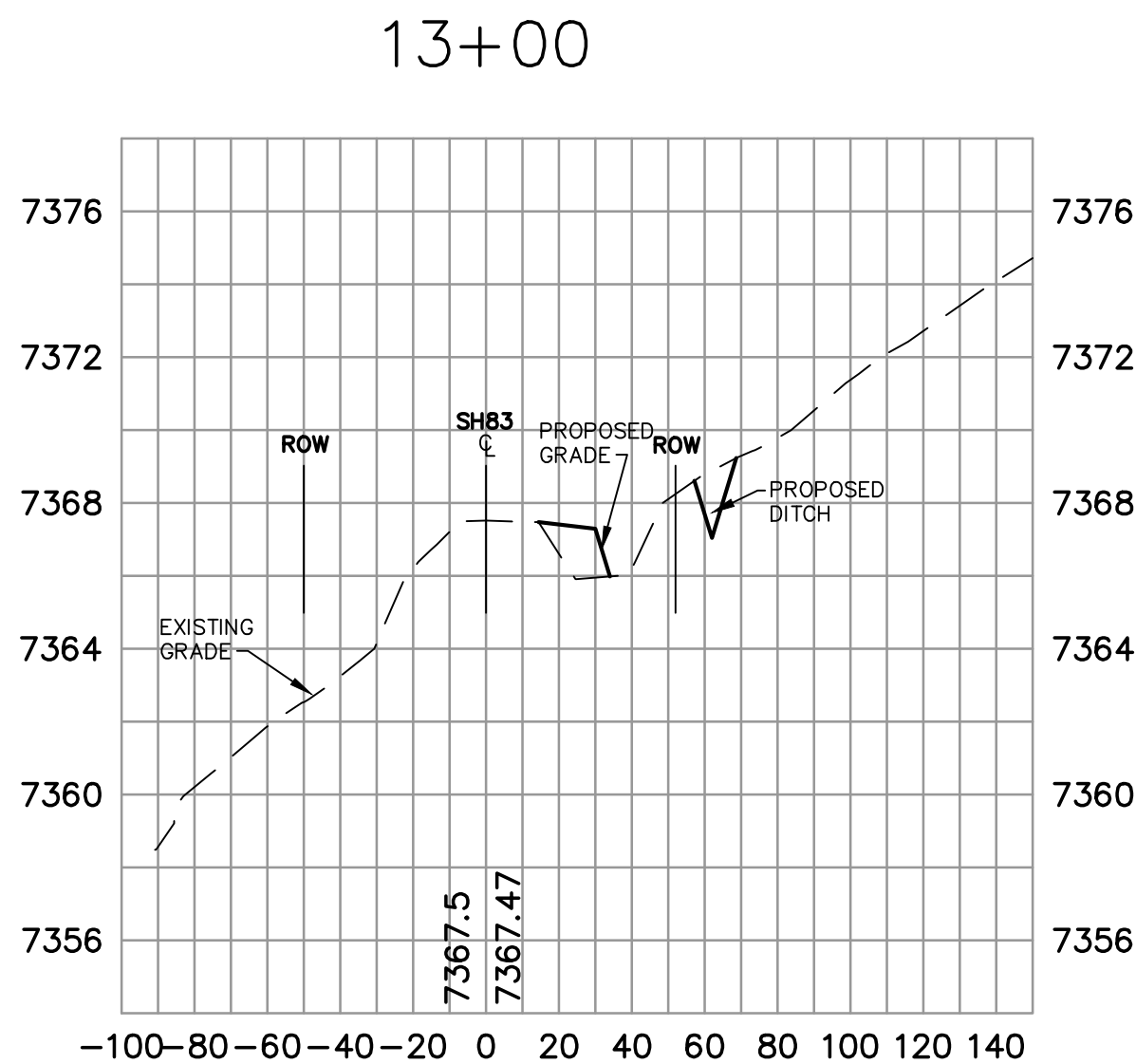
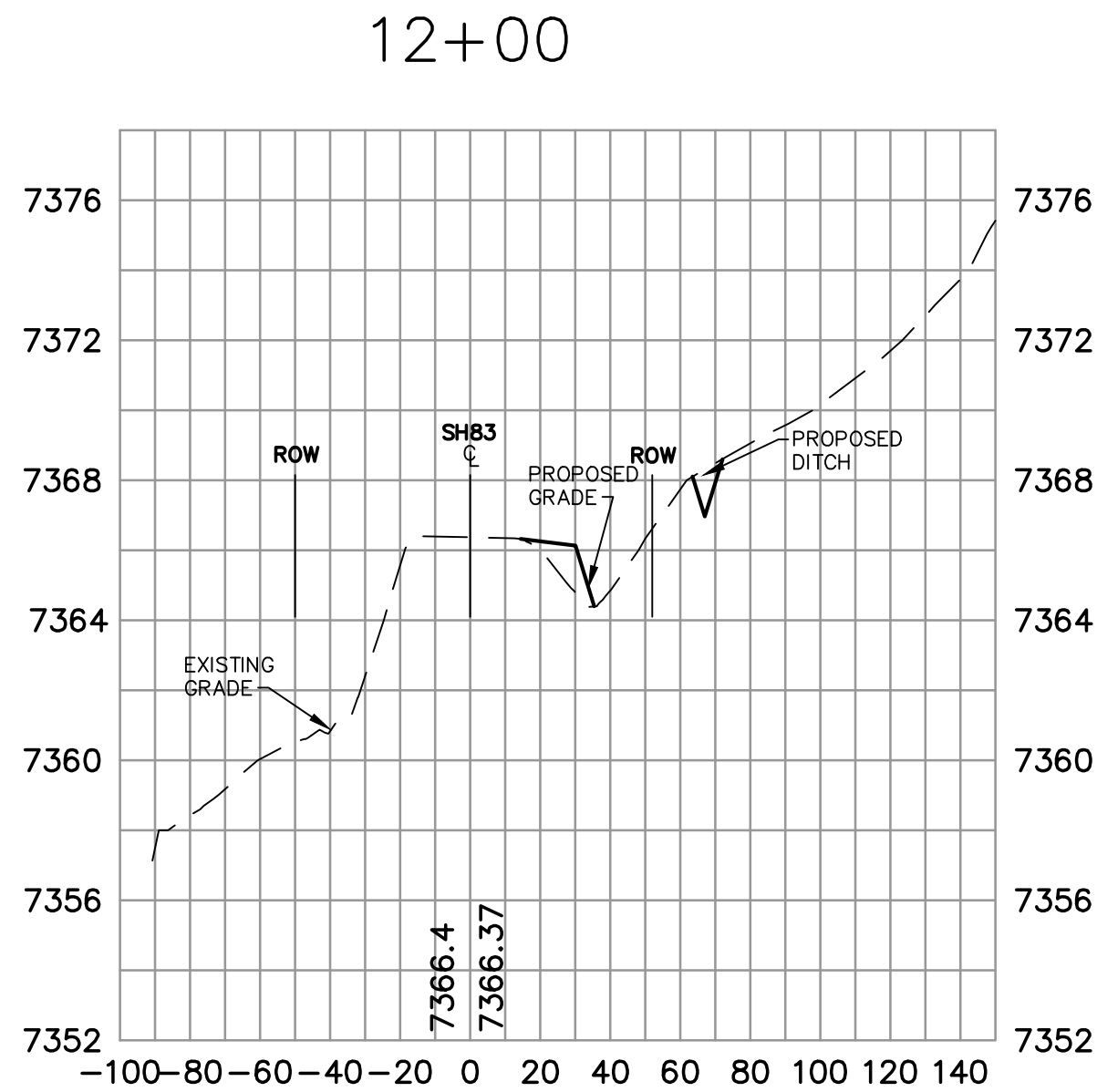
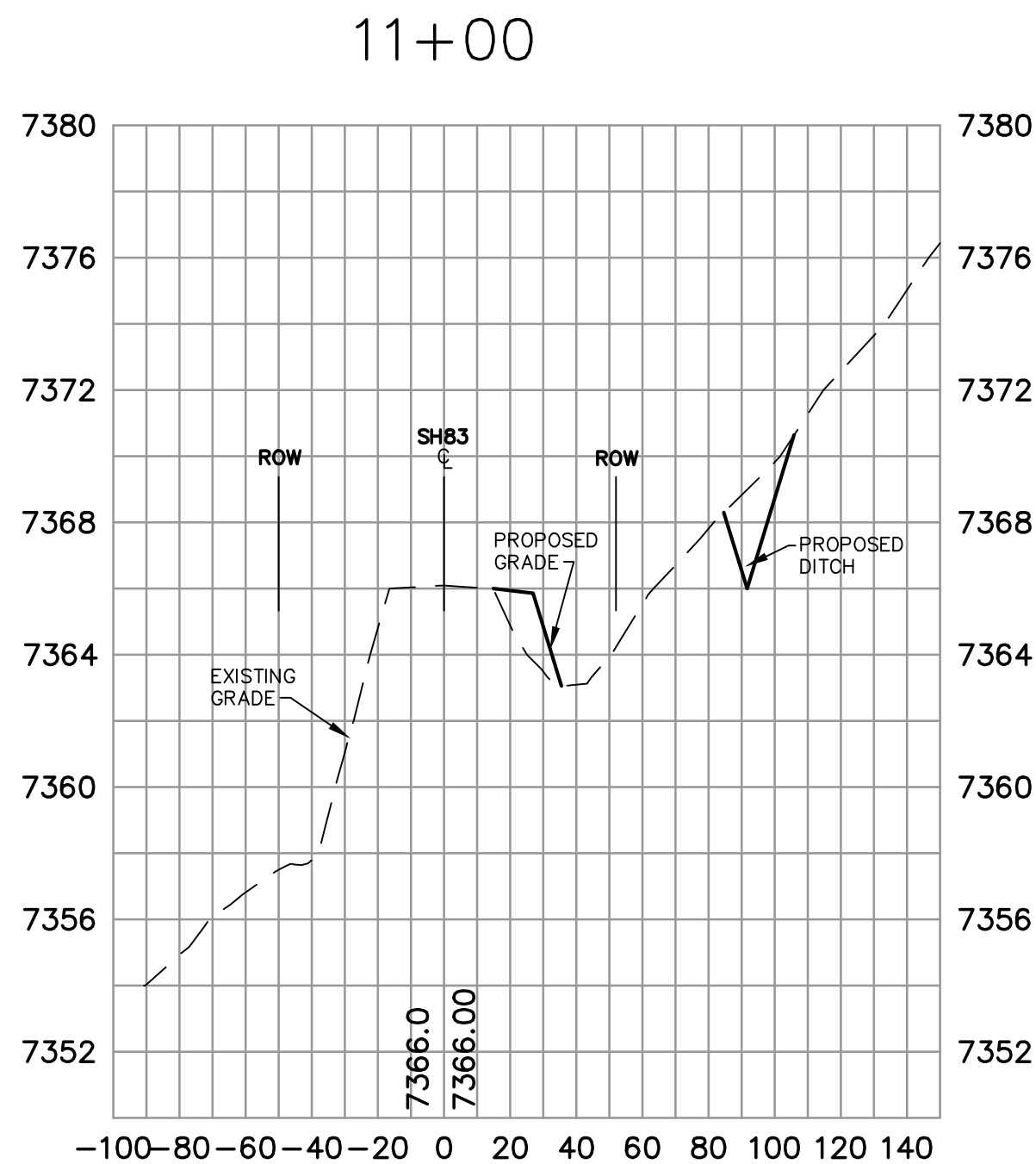
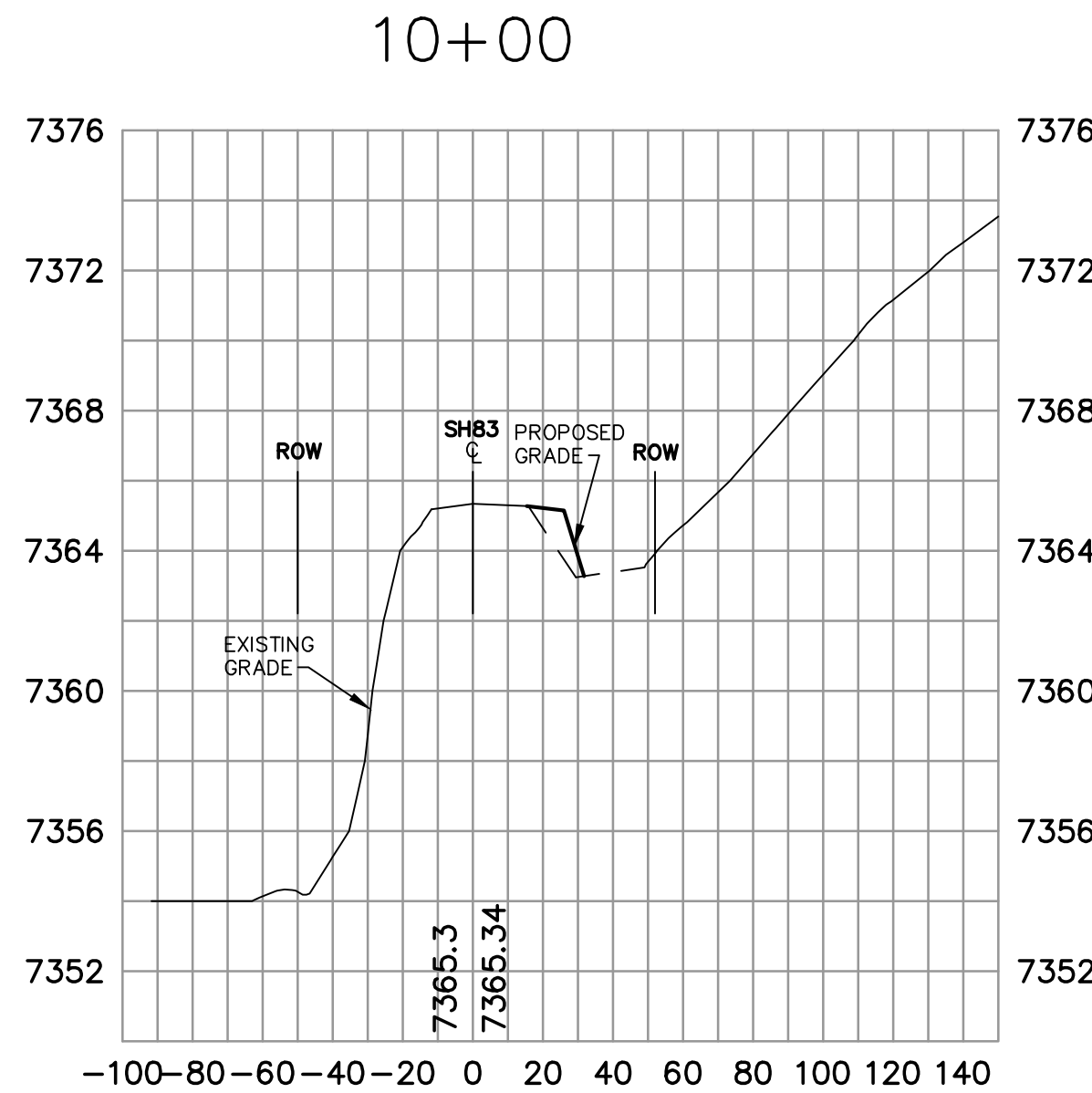
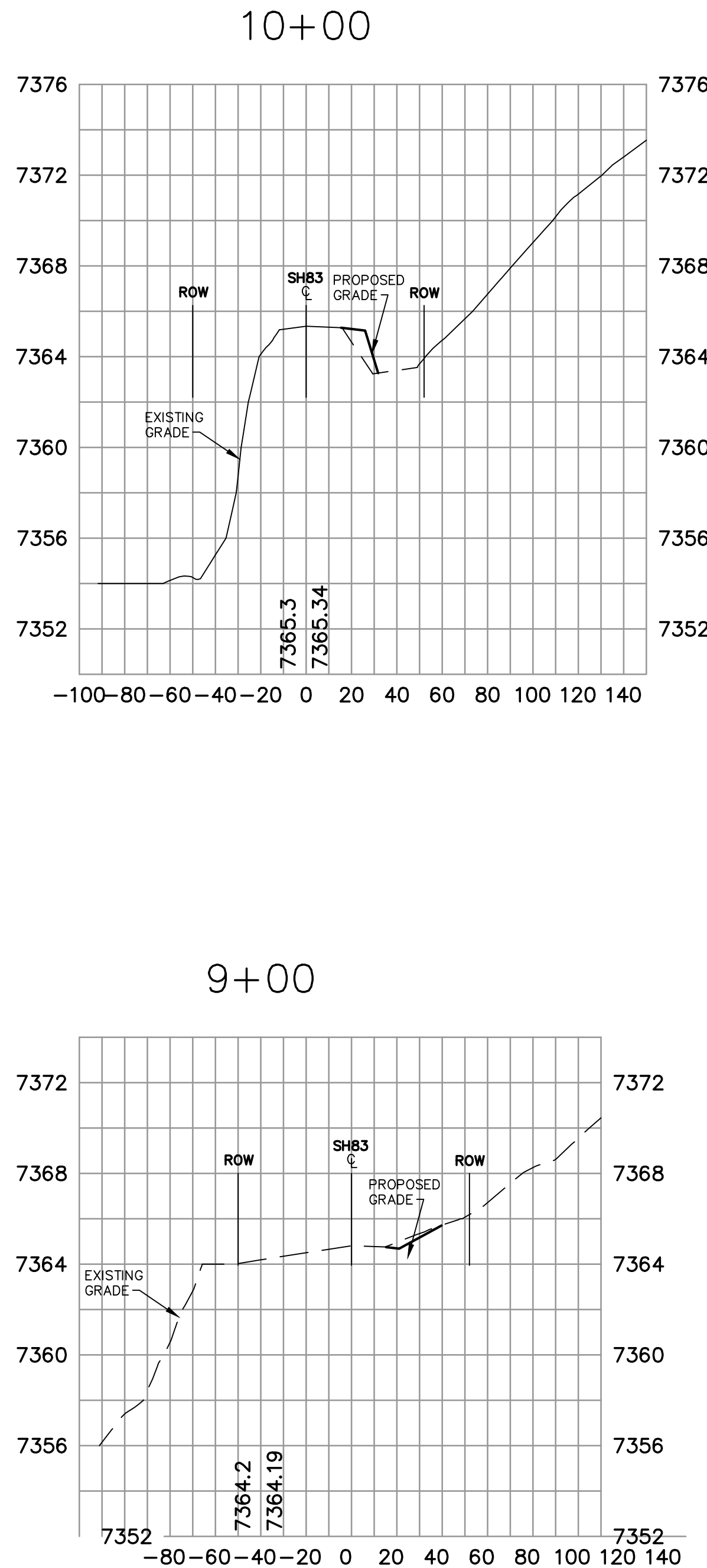
No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

HIGHWAY 105 PLAN & PROFILE

HORZ. SCALE:	1"=50'	DRAWN:	BJJ
VERT. SCALE: <th>1"=5'</th> <td>DESIGNED:</td> <td>JPS</td>	1"=5'	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	12/20/19	LAST MODIFIED:	3/16/20
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET: **HW2.1**

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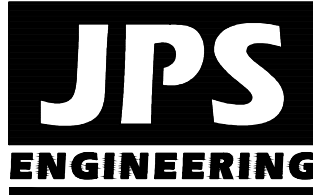
MONUMENT ACADEMY - SH83 IMPROVEMENTS

SH83

CROSS-SECTIONS

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VERT. SCALE: 1"=5'	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 1/24/20	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: HW3.1



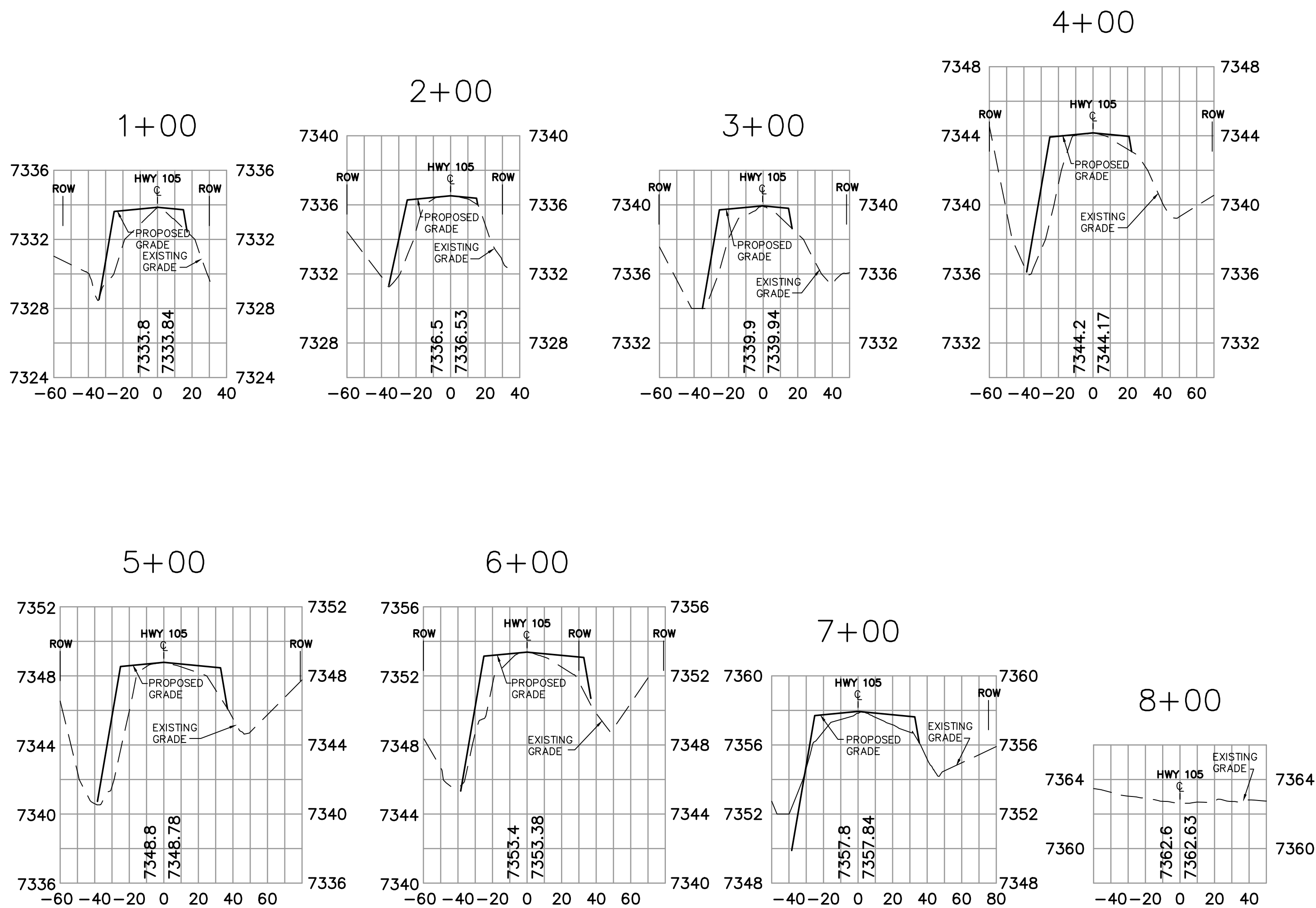
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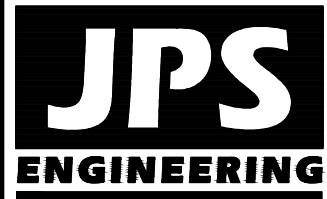
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FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

No.	REVISION	BY	DATE
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MONUMENT ACADEMY - HWY 105 IMPROVEMENTS



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BEFORE YOU DIG GRADE OR EXCAVATE
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UTILITIES

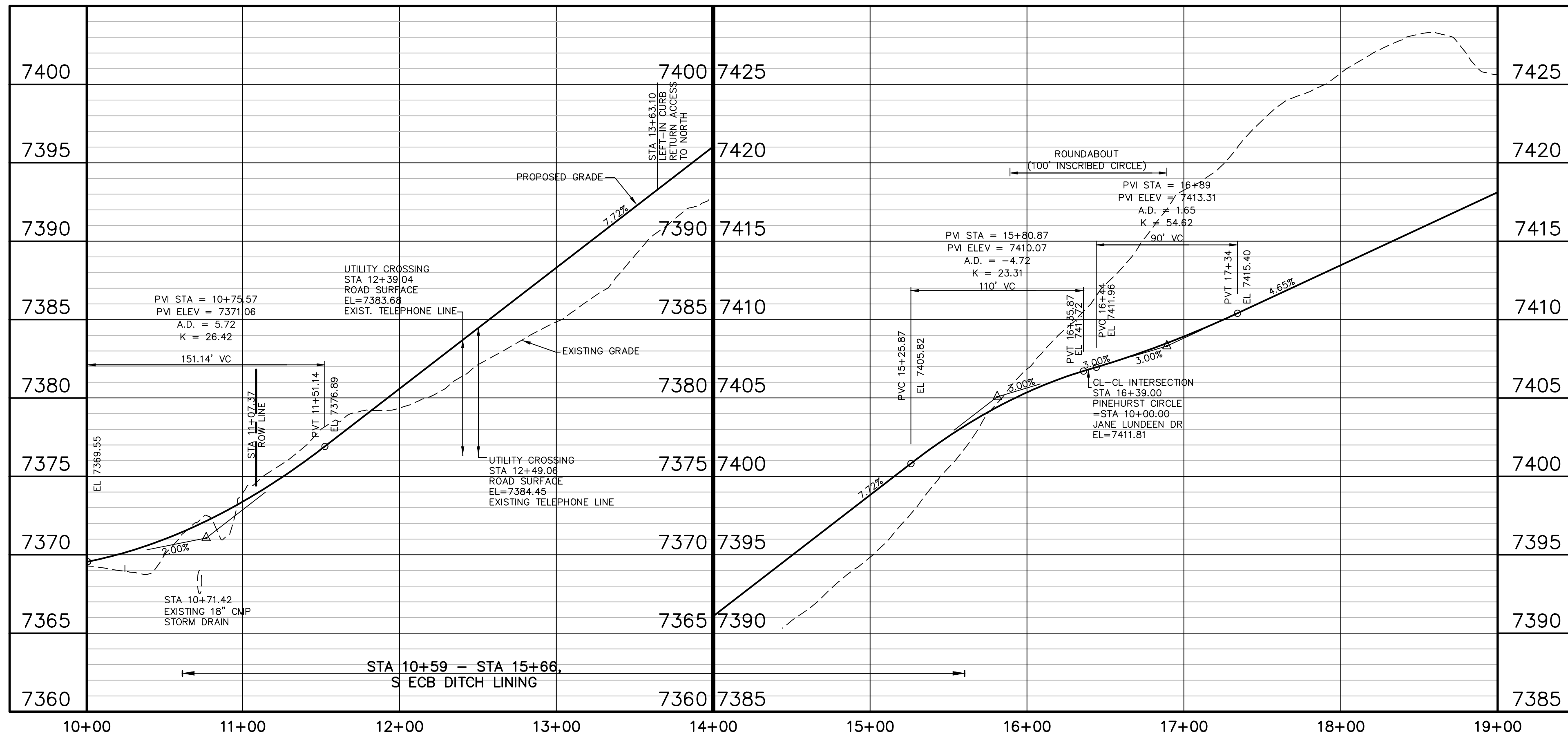
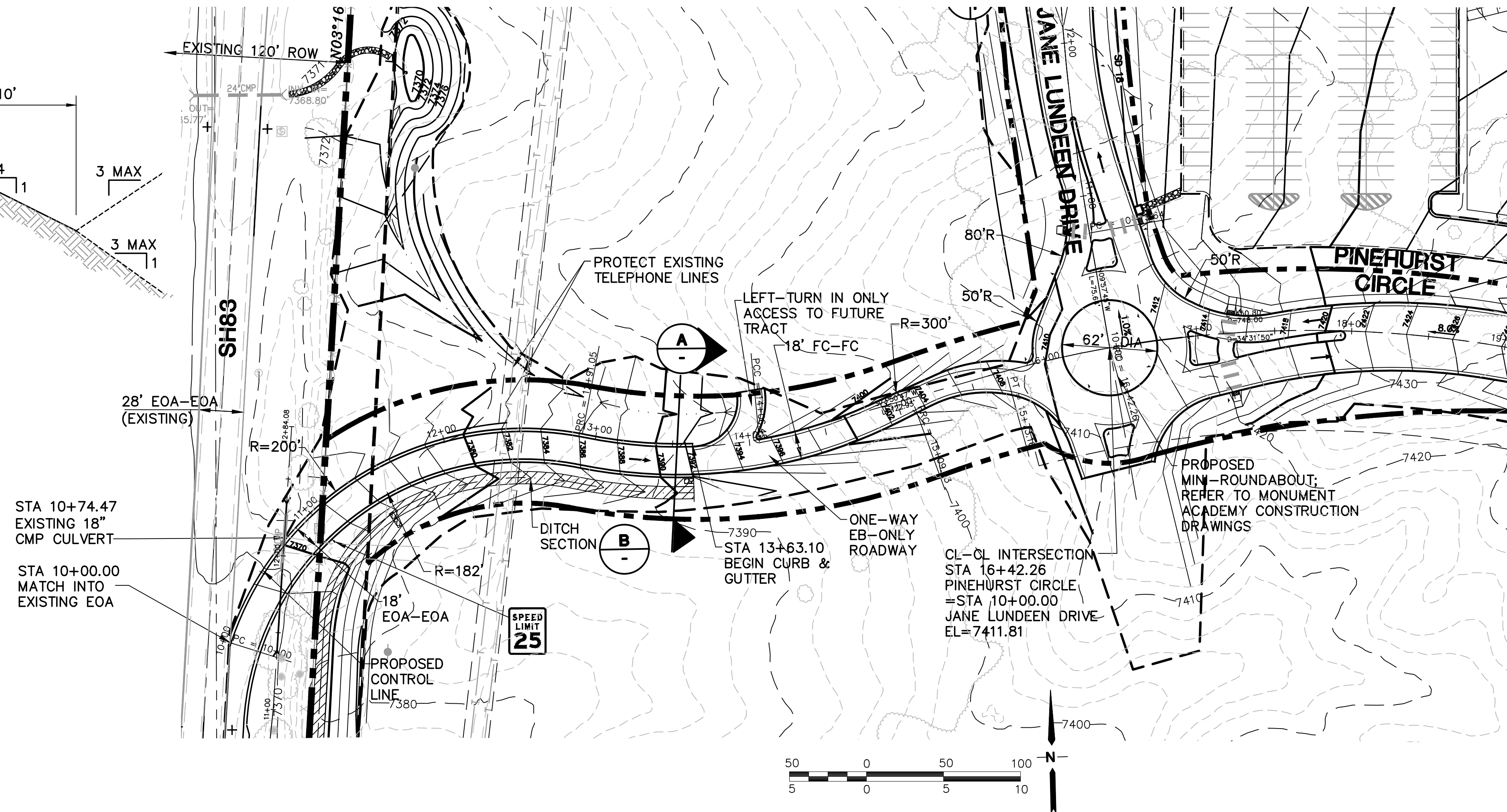
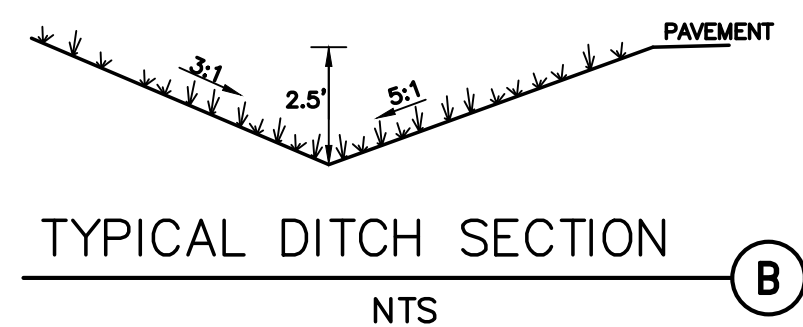
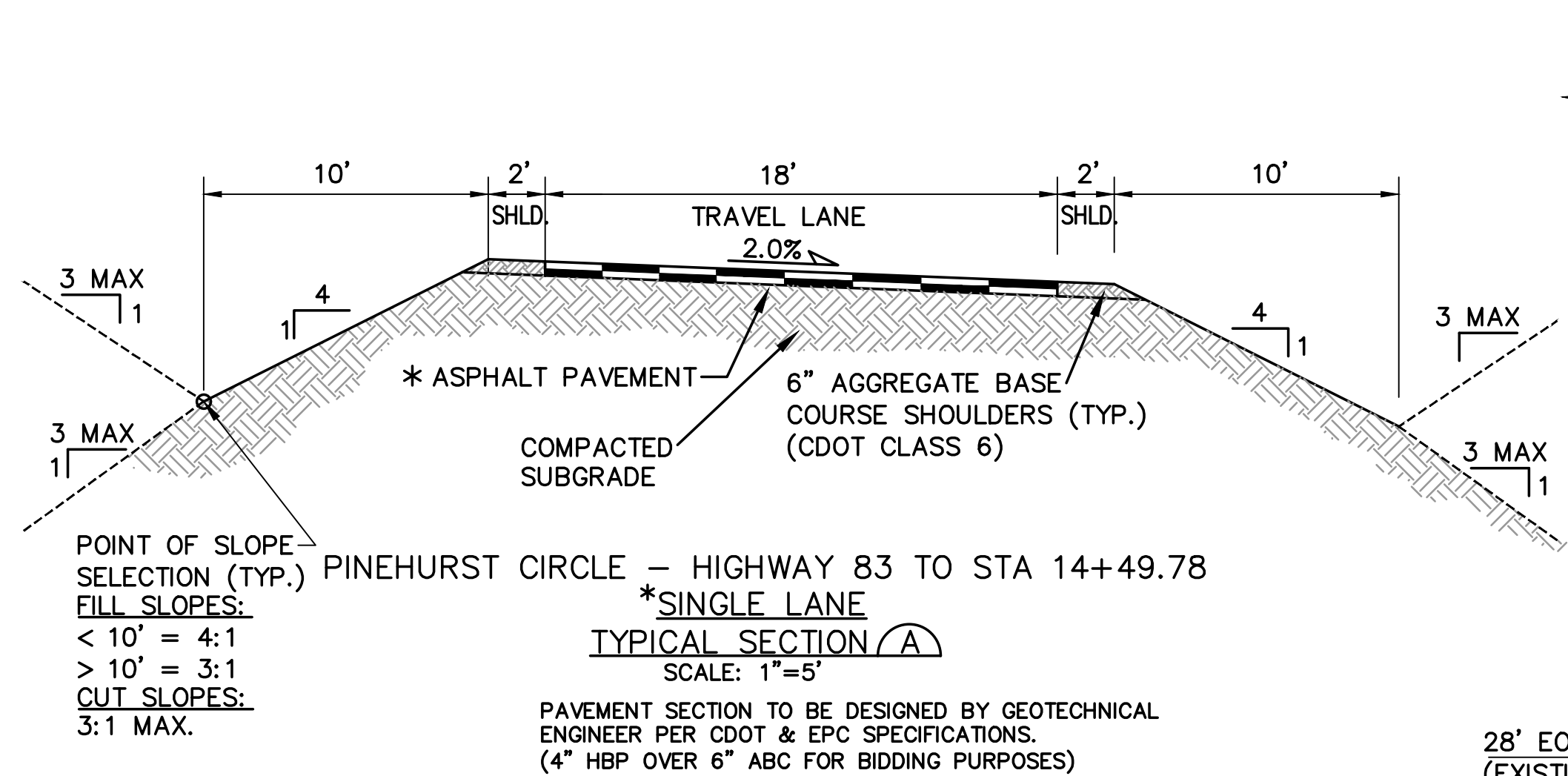
No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

HIGHWAY 105
CROSS-SECTIONS

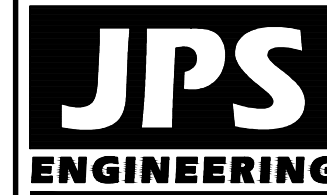
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VERT. SCALE: 1"=5'	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 1/31/20	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: HW4.1

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MONUMENT ACADEMY - SH 83 IMPROVEMENTS



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MEMBER UTILITIES

No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

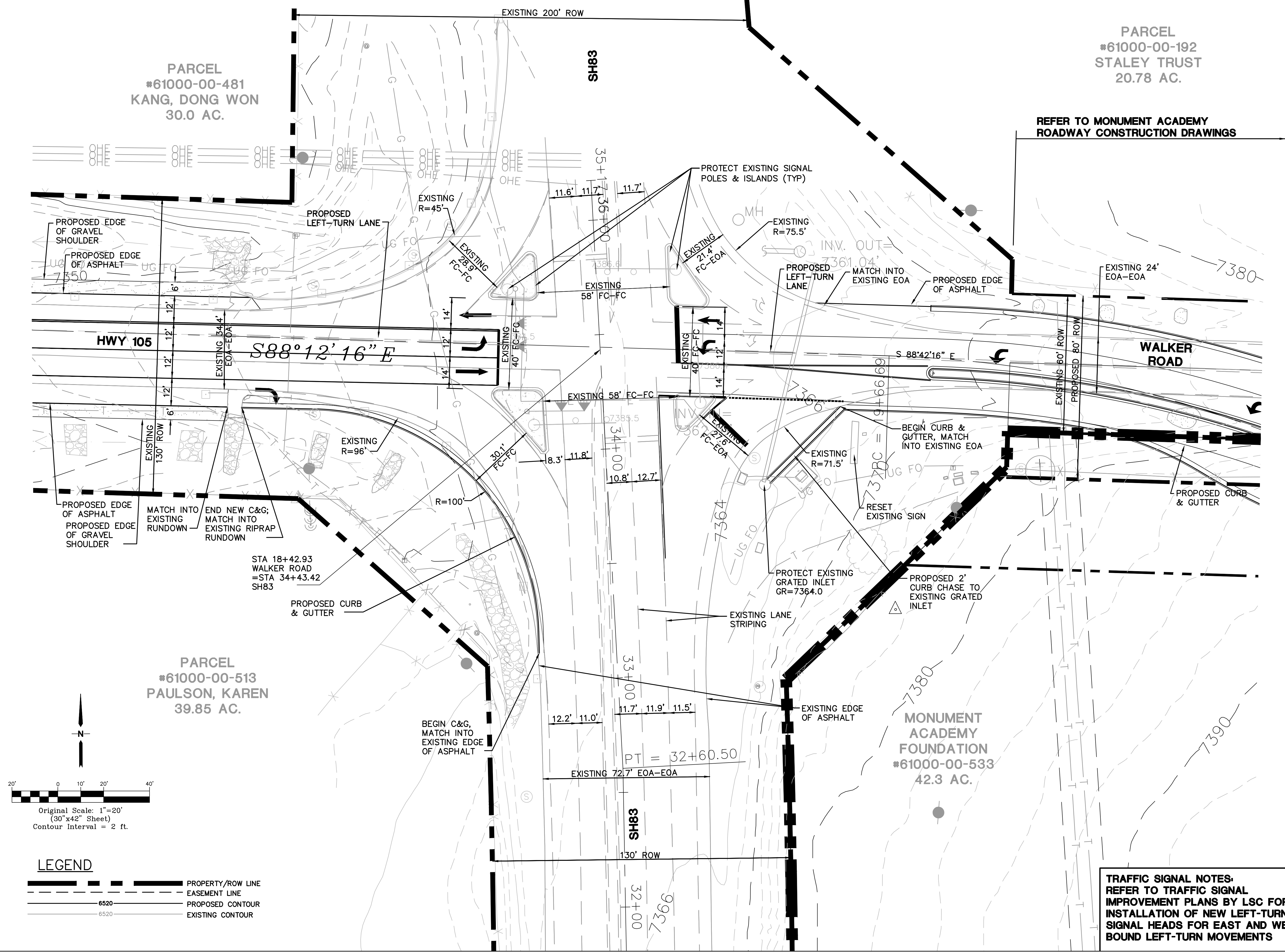
PINEHURST CIRCLE PLAN & PROFILE

HORZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'
SURVEYED: RAMPART
CREATED: 8/31/19
PROJECT NO: 040201
SHEET:

DRAWN: BJJ
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 3/16/20
MODIFIED BY: BJJ

PP1

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TRAFFIC SIGNAL NOTES:
REFER TO TRAFFIC SIGNAL
IMPROVEMENT PLANS BY LSC FOR
INSTALLATION OF NEW LEFT-TURN
SIGNAL HEADS FOR EAST AND WEST
BOUND LEFT-TURN MOVEMENTS

HORZ. SCALE:	1"=20'	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	1/09/20	LAST MODIFIED:	3/16/20
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

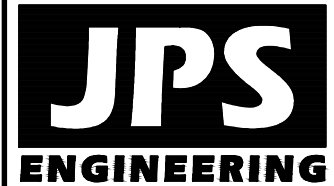
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MONUMENT ACADEMY

SH83 & HWY 105/ WALKER ROAD INTERSECTION PLAN

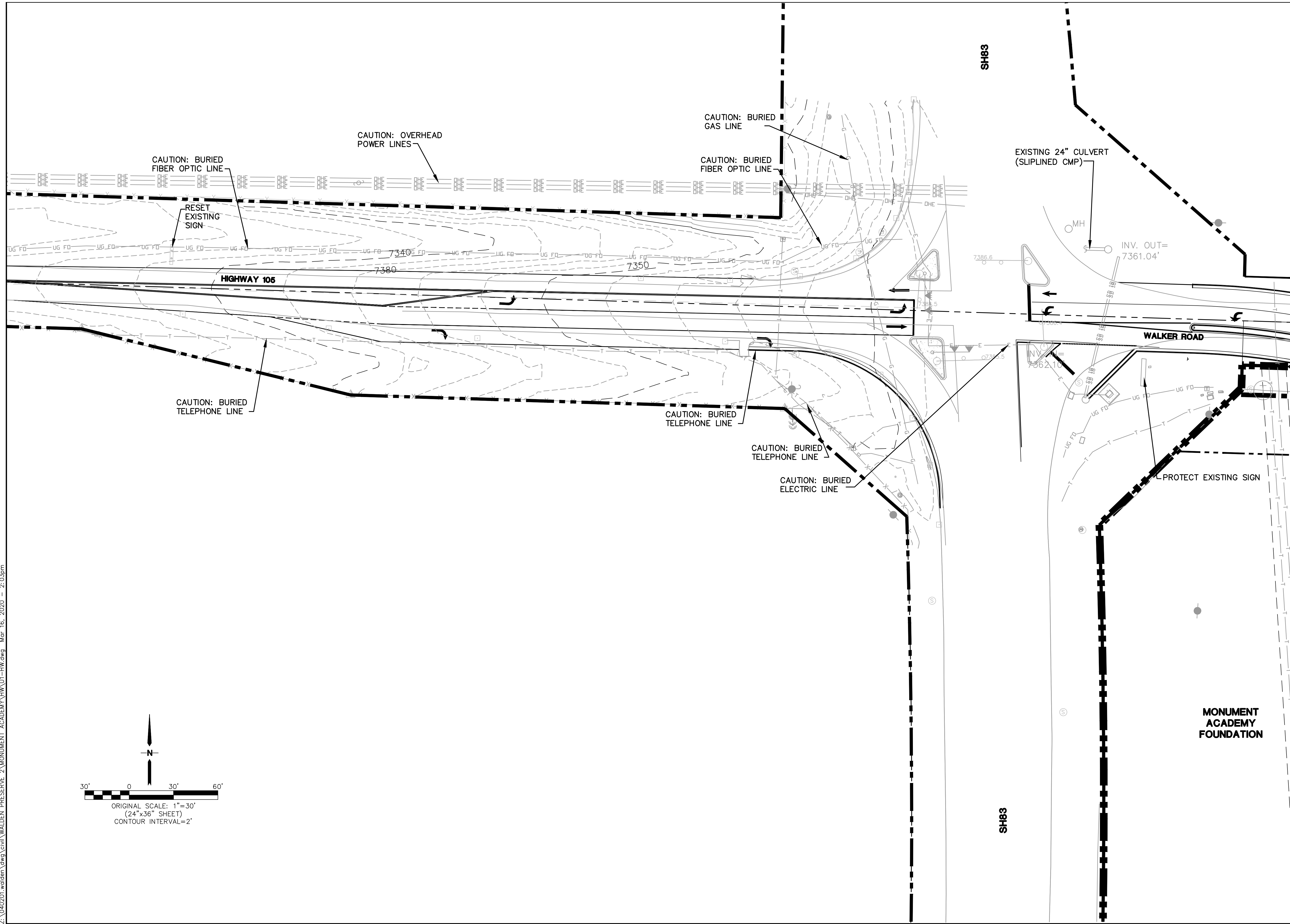
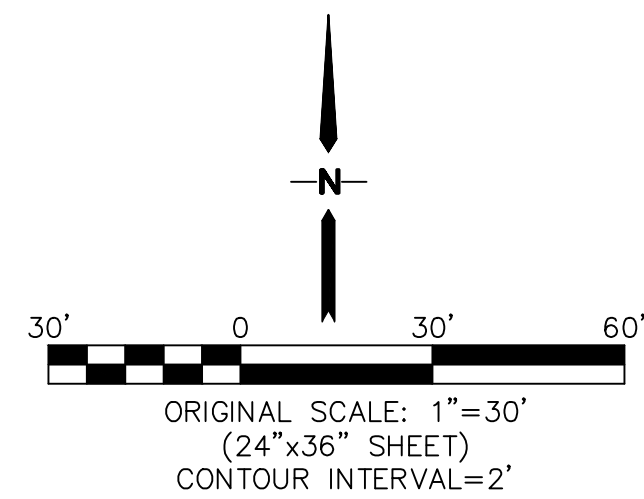


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MONUMENT ACADEMY - HWY 105 & SH83 IMPROVEMENTS

INTERSECTION UTILITY PLAN

No.

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CDOT SUBMITTAL

REVISION

BY

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DATE

3/16/20

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FOR THE MEMBER UTILITIES.

HORZ. SCALE: 1"=30'

VERT. SCALE: N/A

SURVEYED: RAMPART

CREATED: 1/31/20

PROJECT NO: 040201

DRAWN: BJJ

DESIGNED: JPS

CHECKED: JPS

LAST MODIFIED: 3/16/20

MODIFIED BY: BJJ

SHEET: U1-HW

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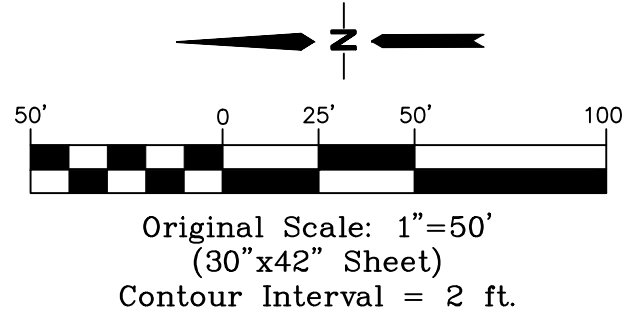
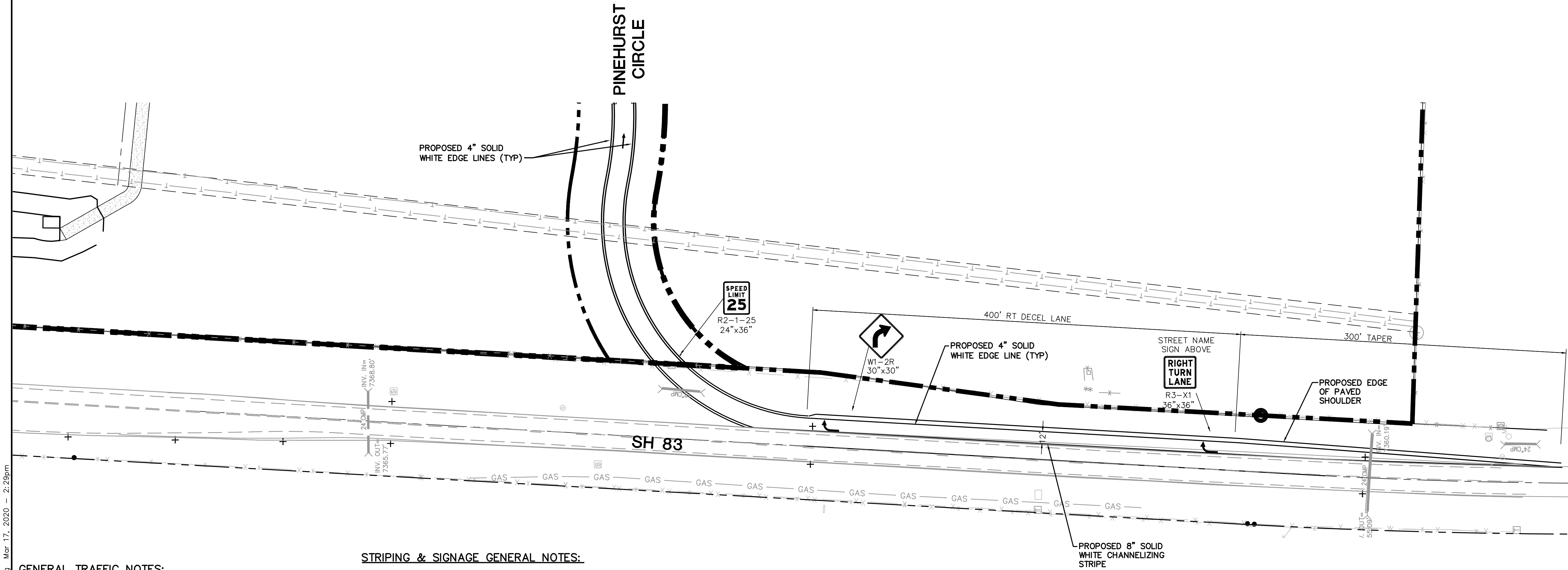
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GENERAL TRAFFIC NOTES:

- BEFORE EXCAVATING, CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING.
- APPROVAL OF THESE PLANS DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A CDOT PERMIT HAS BEEN ISSUED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING TRAFFIC SIGNS FROM THE START OF THE CONSTRUCTION PROJECT UNTIL ACCEPTANCE BY CDOT.
- ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS SHALL MEET OR EXCEED M.U.T.C.D. STANDARDS.
- THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING SIGNS, PAVEMENT MARKINGS OR TRAFFIC SIGNALS DURING THE PROJECT WITHOUT SIGNED AUTHORIZATION OF THE CDOT INSPECTOR ASSIGNED TO THE PROJECT.
- CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN, SUBMIT TO CDOT FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING THE TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING TRAFFIC SIGNAL MODIFICATIONS.

STRIPING & SIGNAGE GENERAL NOTES:

- INSTALLATION OF ALL STRIPING, SIGNS AND PAVEMENT MARKERS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVAL OF EXISTING PAVEMENT MARKINGS (SCARRING OF PAVEMENT IS NOT PERMITTED). AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OVERLAYING OR CHIP SEALING ROADWAY, IF SCARRING OCCURS DURING REMOVAL OF EXISTING OR TEMPORARY PAVEMENT MARKINGS. THE CDOT INSPECTOR WILL DETERMINE METHOD OF PAVEMENT REPAIR.
- ALL STRIPING AND SIGNING SHALL CONFORM TO THE MOST RECENT ADOPTED EDITION OF THE FOLLOWING MANUALS AND THEIR SUPPLEMENTAL AMENDMENTS:
 - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
 - CDOT STANDARDS SPECIFICATIONS
- ALL SIGNING AND STRIPING IS SUBJECT TO THE APPROVAL OF CDOT PRIOR TO INSTALLATION AND/OR REMOVAL.
- CONTRACTOR SHALL REMOVE ALL CONFLICTING STRIPING, PAVEMENT MARKINGS AND LEGENDS BY HYDROBLASTING, SANDBLASTING AND/OR GRINDING. ANY DEBRIS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- SIGN POSTS SHALL BE INSTALLED WITH S-614-8 TUBING WITH SLEEVE PER CDOT STANDARDS.
- ALL TRAFFIC SIGNS SHALL BE TYPE IV PER SECTION 713.06.
- ANY DEVIATION FROM THE STRIPING AND SIGNING PLANS SHALL BE APPROVED BY THE ENGINEER OF WORK AND THE CDOT INSPECTOR PRIOR TO ANY CHANGES BEING MADE IN THE FIELD.
- ALL SIGNS SHOWN ON THE STRIPING AND SIGNING PLANS SHALL BE NEW SIGNS PROVIDED AND INSTALLED BY THE CONTRACTOR, EXCEPT FOR EXISTING SIGNS SPECIFICALLY INDICATED TO BE RELOCATED OR TO REMAIN.
- STRIPED CROSSWALKS SHALL HAVE AN INSIDE DIMENSION OF 10 FEET AND CONTINENTAL CROSSWALKS SHALL HAVE A MINIMUM WIDTH OF 9 FEET UNLESS INDICATED OTHERWISE.
- ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS (EXCEPT WITHIN BIKE LANES) SHALL BE A MINIMUM OF 90 MIL THICKNESS THERMOPLASTIC OR PREFORM PLASTIC TAPE.
- ALL LONGITUDINAL LINES SHALL BE A MINIMUM OF 15 MIL THICKNESS EPOXY.
- CONTRACTOR SHALL NOTIFY CDOT A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO AND UPON COMPLETION OF STRIPING AND SIGNAGE.
- STOP BARS, CROSSWALKS AND SYMBOLS SHALL BE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS, ALL OTHER STRIPING SHALL BE EPOXY PER CDOT STANDARDS.

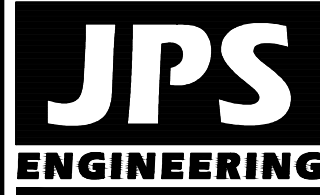


MONUMENT ACADEMY - SH 83 IMPROVEMENTS

**SIGNING & STRIPING
PLAN - SH 83**

HORIZ. SCALE: 1"=50'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/31/19	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:
ST1.1



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MEMBER UTILITIES

No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

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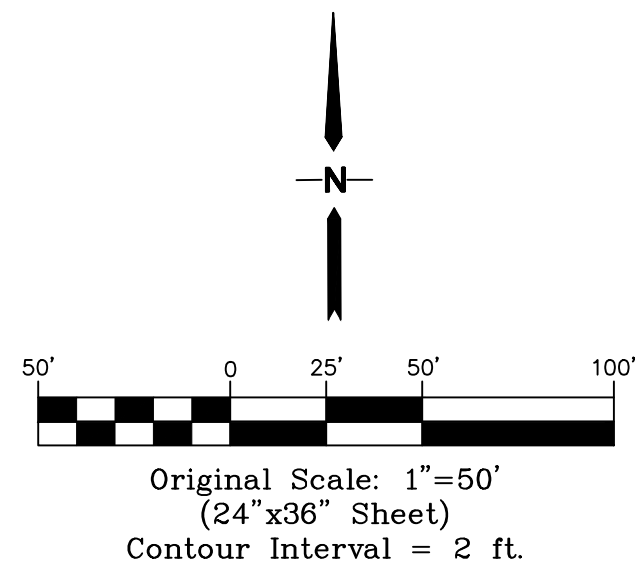
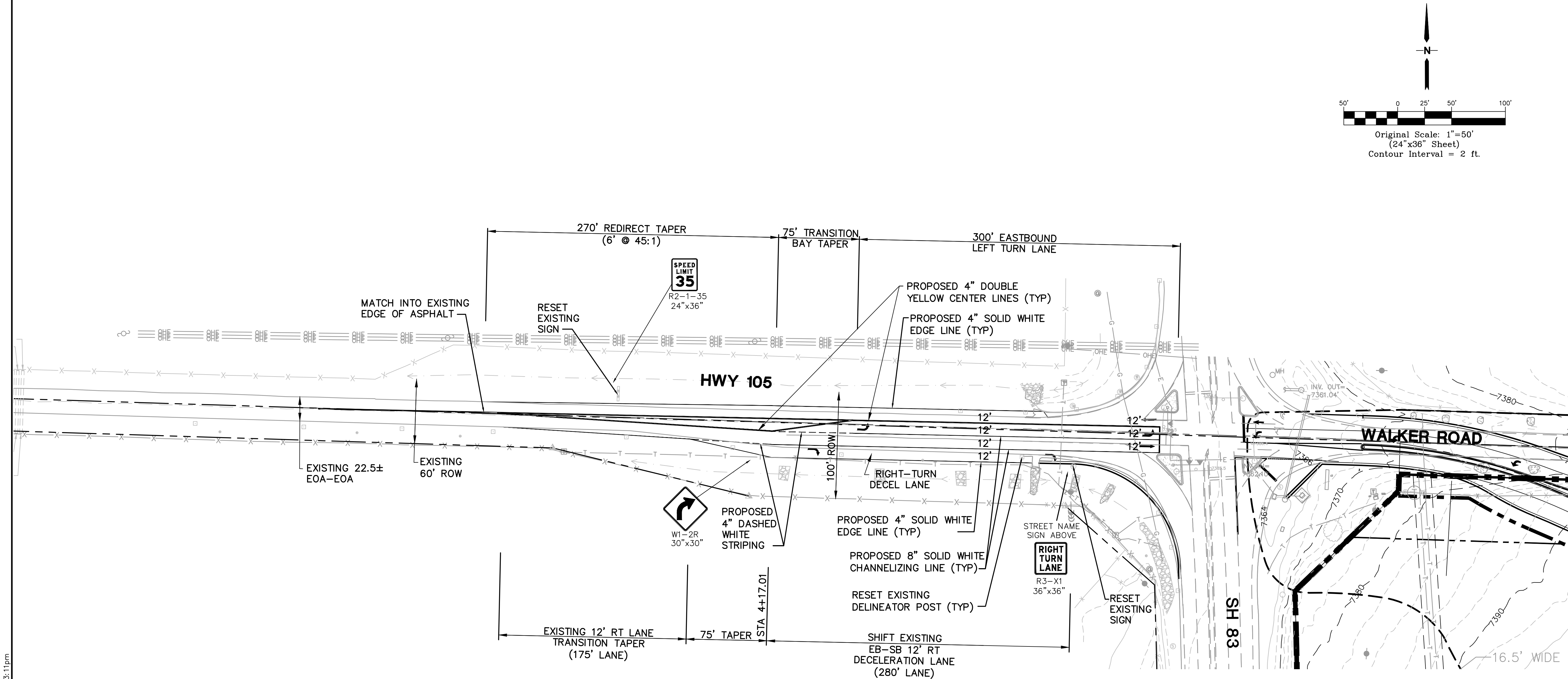
GENERAL TRAFFIC NOTES:

- BEFORE EXCAVATING, CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES.
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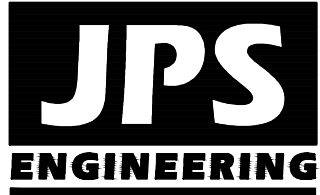
STRIPING & SIGNAGE GENERAL NOTES:

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- ALL LONGITUDINAL LINES SHALL BE A MINIMUM OF 15 MIL THICKNESS EPOXY.
- CONTRACTOR SHALL NOTIFY CDOT A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO AND UPON COMPLETION OF STRIPING AND SIGNAGE.
- STOP BARS, CROSSWALKS AND SYMBOLS SHALL BE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS, ALL OTHER STRIPING SHALL BE EPOXY PER CDOT STANDARDS.



MONUMENT ACADEMY - HIGHWAY 105 IMPROVEMENTS



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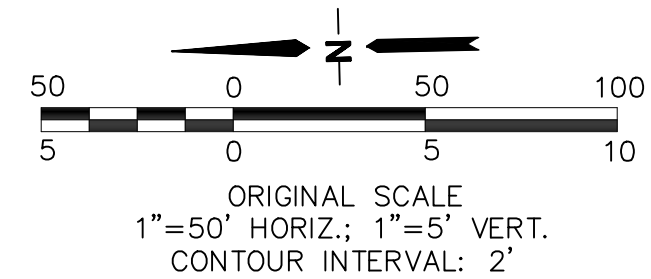
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FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

No.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20

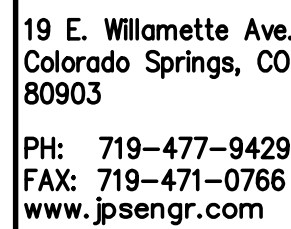
**SIGNING & STRIPING
PLAN - HWY 105**

HORIZ. SCALE: 1"=50'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 1/27/20	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:
ST2.1



**GRADING & EROSION
CONTROL PLAN - SH 83**

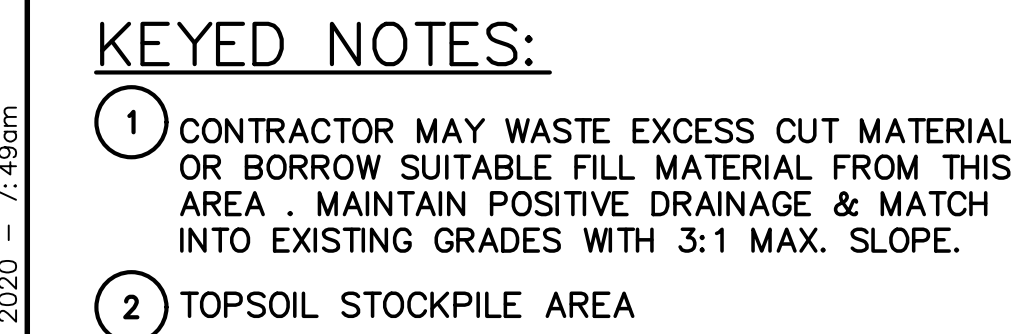


No.	REVISION	BY	DATE
①	COORD SUBMITTAL	JPS	3/16/20

HORZ. SCALE: 1"=50'	DRAWN: BJJ
VERT. SCALE: 1"=5'	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 1/27/20	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

C1.1-HW

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NOTE:
ALL EROSION CONTROL MEASURES SHALL CONFORM
TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA
MANUAL, VOLUME 2 REQUIREMENTS

HIGHWAY 105 GRADING & EROSION CONTROL PLAN

JPS
ENGINEERING

19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsegr.com

 CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

No.	REVISION	BY	DATE
①	COORD SUBMITTAL	JPS	3/16/20

HORIZ. SCALE: 1"=50'	DRAWN: BJ
VERT. SCALE: 1"=5'	DESIGNED: JP
SURVEYED: RAMPART	CHECKED: JP
CREATED: 1/27/20	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJ
SHEET:	
C2.1-HW	

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NPDES NOTES

1. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS OF WAYS AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER, OR AS DIRECTED BY THE ENGINEER.
2. THIS CONSTRUCTION ACTIVITIES STORMWATER MANAGEMENT PLAN HAS BEEN SUBMITTED AS PART OF AN APPLICATION FOR AN EROSION AND SEDIMENT CONTROL PERMIT FILED WITH CDPHE. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE CONTRACTOR DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL BE THE OBLIGATION OF THE LAND OWNER AND/OR HIS SUCCESSORS OR HEIRS; UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.
3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
4. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT.
5. A LAYER OF SUITABLE MULCH SHALL BE APPLIED TO ALL DISTURBED PORTIONS OF THE SITE WITHIN 14 DAYS OF THE COMPLETION OF GRADING. SAID MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE AND SHALL BE TACKED OR FASTENED BY AN APPROVED METHOD SUITABLE FOR THE TYPE OF MULCH USED.
6. THE CONTRACTOR SHALL LOCATE, INSTALL, AND MAINTAIN ALL EROSION CONTROL AND WATER QUALITY "BEST MANAGEMENT PRACTICES" AS INDICATED IN THE APPROVED CONSTRUCTION ACTIVITIES STORMWATER MANAGEMENT PLAN. BMP'S SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT.
7. AT A MINIMUM, THE CONTRACTOR SHALL INSPECT ALL BMP'S BI-WEEKLY AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP WHEN THE SEDIMENT LEVEL REACHES ONE-HALF THE HEIGHT OF THE BMP, OR, AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP.
8. THE CONTRACTOR SHALL PROPERLY COVER ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT WITHIN PUBLIC RIGHTS OF WAY.
9. THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE IS PROHIBITED.
10. THE USE OF OSHA APPROVED COLORED WARNING CAPS ON REBAR OR FENCE POSTS USED WITH EROSION CONTROL MEASURES IS NOT ACCEPTABLE.
11. SOILS THAT WILL BE STOCKPILED FOR MORE THAN 60 DAYS SHALL BE MULCHED AND SEEDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF A DRAINAGE WAY, ADDITIONAL SEDIMENT CONTROLS SUCH AS TEMPORARY DIKES OR SILT FENCE SHALL BE REQUIRED.
12. *UNLESS CONFINED IN A PREDEFINED, BERMED CONTAINMENT AREA, THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM DRAINAGE SYSTEM IS PROHIBITED.
13. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE.
14. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS.
15. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED.

EROSION CONTROL NOTES:

AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE CONTRACTOR SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD-PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, COLORADO 80246-1530
ATTN.: PERMITS UNIT

CONTRACTOR SHALL PROVIDE A COPY OF THE CDPHE PERMIT TO CDOT.

SEEDING MIX:

ALL DISTURBED AREAS SHALL BE RE-SEEDED WITH SEED MIX AS SPECIFIED ON SHEET C204.

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR HYDRO-SEED PER CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT SPEC-SECTION 213.

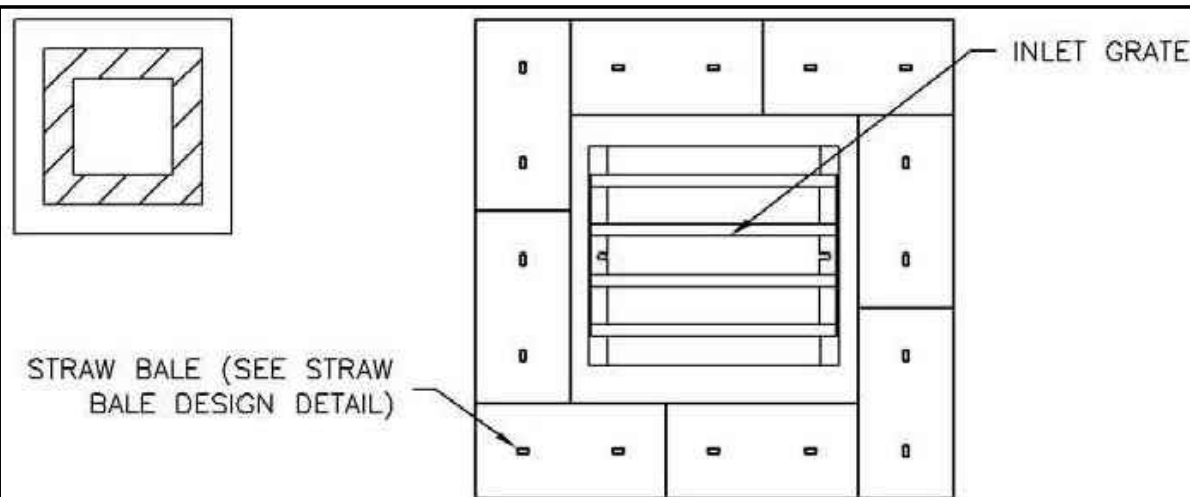
SEDIMENT CONTROL MAINTENANCE PROGRAM:

	FREQUENCY
PERIODIC SITE INSPECTIONS	BI-WEEKLY
RE-VEGETATION OF EXPOSED SOILS	WITHIN 21 DAYS OF GRADING
SEDIMENT REMOVAL FROM BMP'S	MONTHLY
REMOVAL OF BMP'S	AFTER STABILIZATION ACHIEVED

- 1 AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.
- 2 ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S	APRIL, 2020
SITE GRADING	APRIL, 2020
SEEDING & MULCHING	AUGUST, 2020
STABILIZATION	AUGUST, 2021



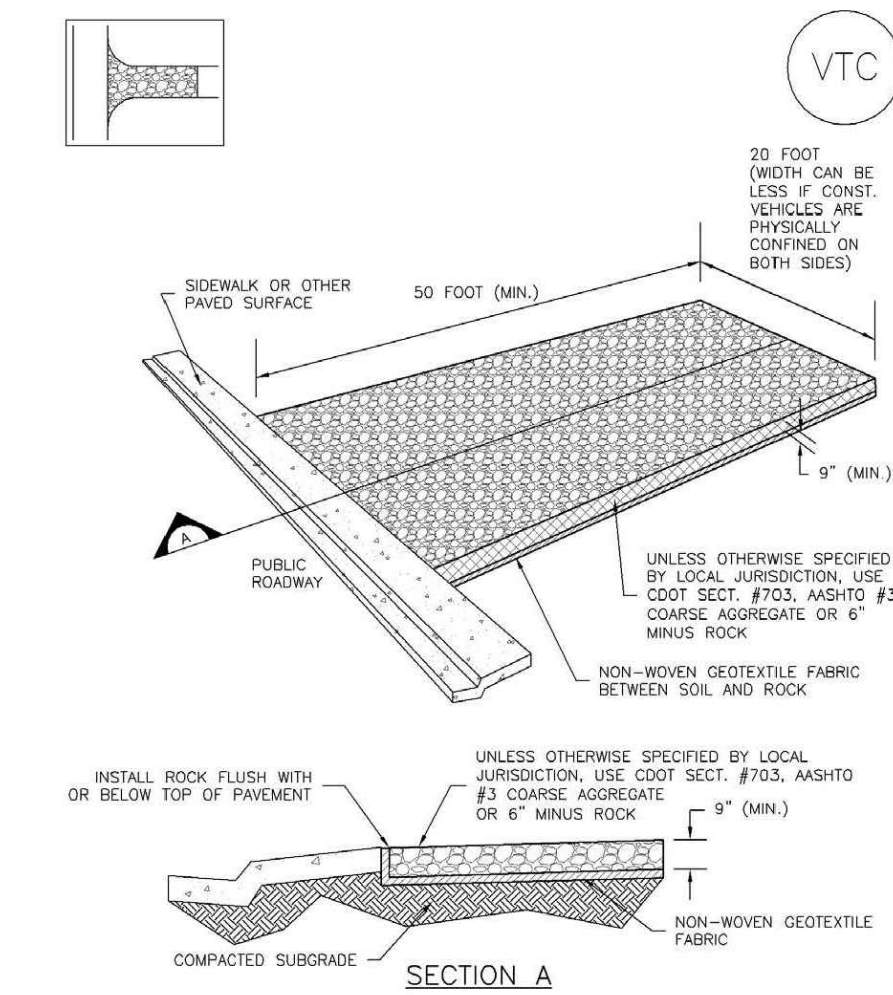
IP-6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.

Vehicle Tracking Control (VTC)

SM-4

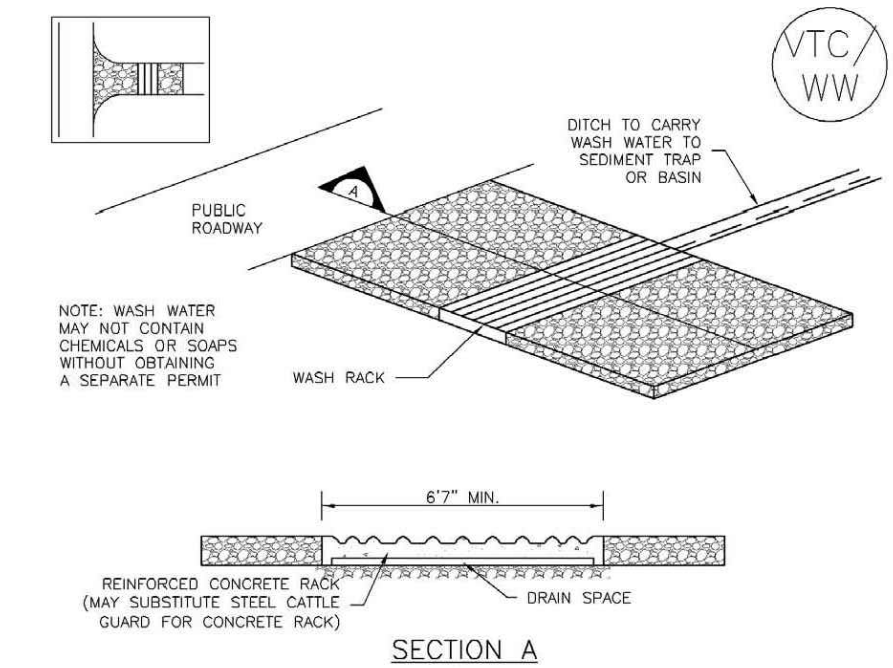


VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 VTC-3

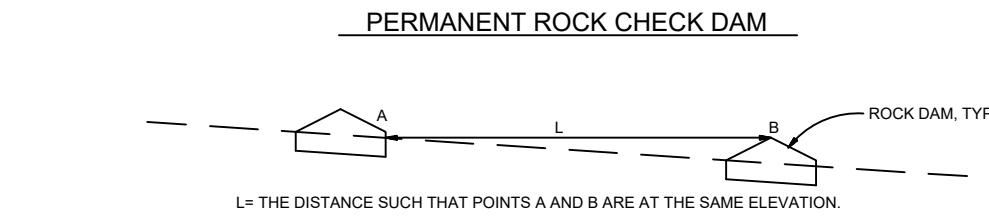
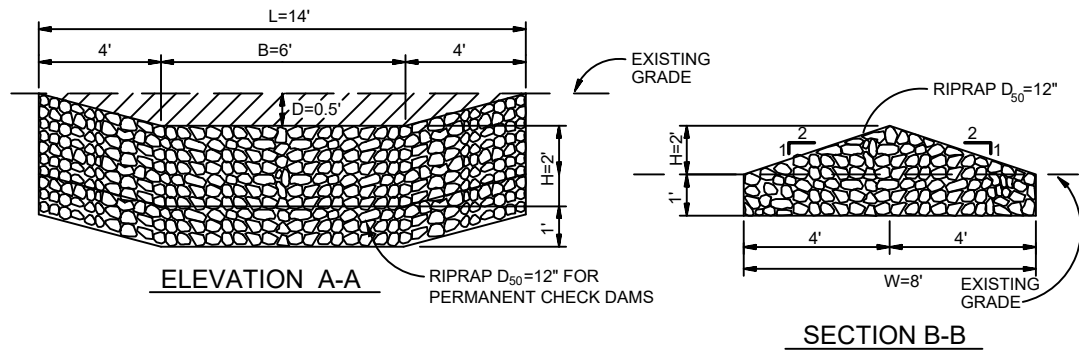
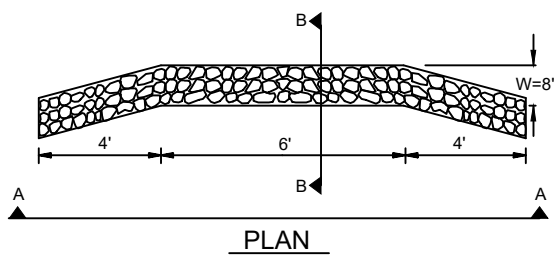
SM-4

Vehicle Tracking Control (VTC)



VTC-2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK

VTC-4 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 November 2010



ROCK CHECK DAM

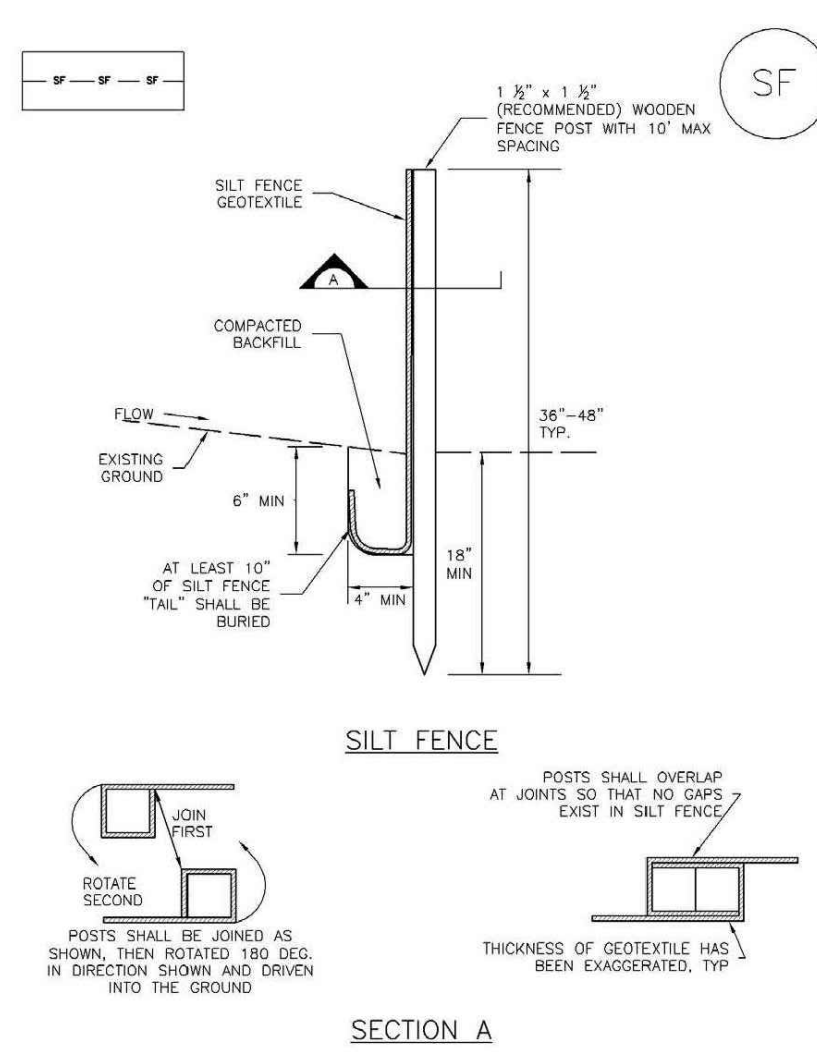
MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.
2. REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.
3. ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED. 3. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
4. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

Standard Details	Check Dam Construction Detail and Maintenance Requirements
------------------	---

Silt Fence (SF)

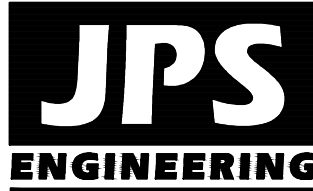
SC-1



SF-1. SILT FENCE

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SF-3

MONUMENT ACADEMY - SH 83 IMPROVEMENTS



19 E. Willamette Ave.
Colorado Springs, CO
80903

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FAX: 719-471-0766
www.jpsengr.com



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FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

NO.	REVISION	BY	DATE
1	CDOT SUBMITTAL	JPS	3/16/20
2			
3			
4			

EROSION CONTROL
NOTES & DETAILS

HORZ. SCALE: AS SHOWN	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/31/19	LAST MODIFIED: 3/16/20
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: C3-HW

FOR INFORMATION ONLY – TO FULFILL CDPS PERMIT REQUIREMENTS
STORMWATER MANAGEMENT PLAN – ADDITIONAL INFORMATION FOR PERMITTED PROJECT

1. PROJECT SITE DESCRIPTION: SH83 Access Improvements for Monument Academy

2. MS4 phase I ____ phase II

3. RECEIVING WATER:ED

RECEIVING WATER NAME: West Cherry Creek
DISTANCE FROM PROJECT: 0.50 Mile
SENSITIVE or TMDL (Total maximum daily load) YES NO
WETLAND IMPACTS: YES NO
STREAM IMPACTS: YES NO
THREATENED AND ENDANGERED SPECIES: N/A

4. ESTIMATED RUNOFF COEFFICIENT
Pre: 0.35 Post construction: 0.64

5. EXISTING SOIL DATA: Tomah–Crowfoot loamy sands; HSG–B
6. ACRES OF DISTURBANCE:

Total area of construction site: 64–ac.
Total area of disturbance: 4.6–ac.
Acreage of seeding: 3–ac.

7. EXISTING VEGETATION, INCLUDING PERCENT COVER: Native prairie grasses; approximately 50% coverage
Date of Survey: September 2018

8. POTENTIAL POLLUTANTS/MATERIALS HANDLING AND SPILL PREVENTION: Vehicle fueling, Off–Site Tracking

9. OTHER NON–STORMWATER DISCHARGES: N/A

10. OTHER DRAINAGE AREAS NOT ON THE SWMP: N/A

SITE MAP COMPONENTS:
Pre–construction

1. Construction site boundaries:
2. All areas of soil disturbance and areas of cut and fill:
3. Areas used for storage of building materials, soils or wastes:
4. Location of any dedicated asphalt or concrete batch plants:
5. Location of any major erosion control facilities or structures:
6. Springs, streams, wetlands and other surface water:
7. Boundaries of 100 year flood plains, if determined:
8. Location of any fisheries, spawning areas or threatened and endangered species habitat:
9. Unique landscape and cultural sites to be protected:
10. Locations of protected trees, shrubs and wetlands:

REFERENCES TO SPECIFICATIONS, DETAILS AND NOTES

The Contractor and Erosion Control Supervisor shall refer to all specifications, details and notes pertaining to this project to ensure adherence to the CDPS permit. Items that will be available at the project trailer include:

- 107.25, 208, 212, 213, and 216 of the Standard Specifications, Standard Special Provisions and Project Special Provisions
- M&S Standard Plans
- CDOT Erosion Control and Stormwater Quality Guide
- Copy of Biological Opinion, if applicable

The project title sheet and drainage/hydraulic sheets shall be copied and attached to the SWMP package.

Contractor spill contingency prevention plan and response procedures shall be copied and attached to the SWMP package.

INTENT OF STORMWATER MANAGEMENT PLAN

1.) The intent of this SWMP is to: Maintain proper erosion control during and after construction.

NOTES:

- Contractor shall obtain all required permits.
- The ECS shall read and be familiar with CDOT’s, "Erosion and Stormwater Quality Guide".
- The SWMP shall be implemented in a minimum of three phases: first construction activity, during construction and prior to final acceptance.

FAILURE TO PERFORM

Failure to implement SWMP puts the project in automatic violation of the stormwater construction permit.

Computer File Information		Index of Revisions			Colorado Department of Transportation		As Constructed	Stormwater Management Plan			Project No./Code
Creation Date:	1/06	Initials:				xxx xxx xxx	No Revisions:				xxx
Last Modification Date:		Initials:					Revised:	Designer:	Structure Numbers		xxx
Full Path:							Void:	Detailer:			
Drawing File Name:								Sheet Subset:	Subset Sheets:	1 of 4	
Acad Ver.	2004	Scale:		Units: English							Sheet Number C4.1

FIRST CONSTRUCTION ACTIVITIES
THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

SITE MAP COMPONENTS:

During construction items shall be added by the Erosion Control Supervisor:

1. Areas used for storage of building materials, soils or wastes – per potential pollution source report, see Standard Specification 107.25 (b)5.
2. Location of any dedicated asphalt or concrete batch plants – per potential pollution source report, see Standard Specification 107.25 (b)5.
3. Location of work access routes during construction:
4. Location of borrow and waste locations:

PRIOR TO WORK COMMENCING:

- 1.) Erosion control measures shall be implemented in accordance with the approved schedule prior to any construction.
- 2.) Perimeter control shall be established as the first item on the SWMP.
- 3.) Identify and implement BMPs for other pollutants listed in spill contingency prevention plan, equipment maintenance and vehicle washing. Add BMP locations to the SWMP.
- 4.) In areas where appropriate, existing topsoil may be "peeled" back into windrows (not in wetland areas), perpendicular to the slope to act as a BMP instead of silt fence. Berms shall be compacted with a minimum of 2 passes from a rubber tire vehicle. Windrows shall be paid for as 208 Temporary Berm.

OFFSITE DRAINAGE:

- 1.) Project site shall be evaluated by the Erosion Control Supervisor for all water draining into or through the project site. Revise the SWMP accordingly.

INLET PROTECTION:

- 1.) The ECS shall review existing inlets and culverts to determine if inlet protection is needed due to water flow patterns. Prior to construction commencing, inlets needing protection, shall be evaluated and SWMP revised accordingly.

STABILIZED CONSTRUCTION ENTRANCE:

- 1.) It is estimated that 2 stabilized construction entrances will be required as directed.

DURING CONSTRUCTION

DURING CONSTRUCTION – The Contractor shall monitor and evaluate potential pollutant sources throughout the term of the Contract.

- 1.) Contractor shall certify that construction equipment has been cleaned prior to site arrival. Vehicles shall be free of soil and debris capable of transporting noxious weed seeds or roots onto the site.
- 2.) Vehicle cleaning may occur on site, in approved areas, where wash water can be contained.

GRADING AND SLOPE STABILIZATION:

- 1.) Pursue and stabilize all disturbances to completion. Provide stabilization schedule showing dates when areas are to be completed and stabilized. Maintain revisions to the schedule and obtain approval for schedule changes in accordance with Standard Specification 108.
- 2.) Disturbed surfaces shall be left in a roughened condition at all times by equipment tracking, scarifying or disking the surface on contour with a 2 to 4 inch minimum variation in soil surface.
- 3.) Placement of topsoil or soil conditioner, seed, mulch and mulch tackifier (or blankets) will not to be done in a single operation, but shall be completed:
 - a.) when areas have been completed, permanent stabilization shall occur within 7 days,
 - b.) when disturbed areas where work is temporarily halted shall be temporarily stabilized within 7 days after activity has ceased unless work is to be resumed within 30 calendar days after the activity ceased as authorized by the Engineer.
- 4.) When disturbed areas exceed limits referenced in Standard Specification 208 or during the summer and winter when seeding is not allowed, temporary stabilization shall occur. Temporary stabilization shall not be paid for the convenience of the Contractor. Temporary stabilization shall consist of:
 - a.) 1.5 tons certified weed free forage per acre, mechanically crimped into the soil in combination with an organic mulch tackifier. Mulch and mulch tackifier will be paid for separately.

DURING CONSTRUCTION

GRADING AND SLOPE STABILIZATION: continued

- 5.) It is estimated that 3 or more mobilizations shall be required and will be included in the price of the work.

6.) The Contractor shall limit construction activities to those areas within the limits of disturbance to toe of slope (or as indicated on Plans) as shown on the plans and cross-sections. Construction activities in addition to normal construction procedures shall include the on-site parking of vehicles or equipment, on-site staging, on-site batch plants, haul roads or work access and any other action which would disturb existing conditions. Off road staging areas or stockpiles must be pre approved by the Engineer. Disturbances beyond these limits shall be restored to the original condition by the Contractor at the Contractor's expense.

7.) The Erosion Control Supervisor shall tabulate additional disturbances not identified in the SWMP and documented in the permit. Indicate locations and quantities on the SWMP.

CONCRETE WASHOUT:

- 1.) It is estimated that 1 concrete washout structure shall be required on the project.

2.) Washout areas shall be checked by the ECS and maintained as required.

3.) When approved by the Engineer an "urban" concrete washout structure may be used. Urban concrete washout examples are rigid plastic baby-pools, wooden boxes lined with heavy duty plastic or waterproof 55 gallon drums. Baby pools may be used a maximum of three times, if not damaged. After use structure must be removed from the project site.

SAW CUTTING:

- 1.) The Contractor shall protect all storm drain facilities adjacent to locations where pavement cutting operations involving wheel cutting, saw cutting, wand blasting or abrasive water jet cutting are to take place.

INLET PROTECTION:

1.) Newly constructed inlets and culverts shall be protected continually throughout construction and immediately upon completion of construction. The Contractor shall remove sediment, milling, debris and other pollutants generated from the system, prior to use, at no additional cost to the project.

2.) When riprap is called for at the outlet of a culvert, it shall be installed within 24 hours upon completion of each pipe.

UNFORESEEN ADDITIONAL BMPs:

Additional BMP's may include, but are not limited to:

SOIL RETENTION BLANKET

1.) Blanket shall be placed in the flow lines of ditches and swales steeper than 2%. All slopes 2.5:1 and steeper shall require blanket. CDOT Landscape Architect shall be contacted by the Engineer for blanket recommendations.

DITCH CHECKS

1.) Checks are required on ditches/swales steeper than 1%, spacing shall be per Standard Plan M-208-1. CDOT Landscape Architect or Hydraulic Engineer shall be contacted by the Engineer for check recommendations.

Computer File Information				Index of Revisions			Colorado Department of Transportation		As Constructed	Stormwater Management Plan			Project No./Code	
Creation Date:	1/06	Initials:	<div></div>				<div><div>xxx xxx xxx</div></div> <div>XXX</div> <div>FAX: xxx</div>		No Revisions:				xxx	
Last Modification Date:		Initials:	<div></div>						Revised:	Designer:	Structure Numbers		xxx	
Full Path:			<div></div>							Detailer:			Sheet Number C4.2	
Drawing File Name:			<div></div>						Void:	Sheet Subset:	Subset Sheets:	2 of 4		
Acad Ver.	2004	Scale:	Units: English											

DURING CONSTRUCTION

MATERIALS HANDLING:

- 1.) Material stockpile locations for projects in sensitive areas. Any material stockpiles shall be located away from sensitive areas and confined so that no material or their run-off will enter state waters. Locations shall be approved by the Engineer in consultation with Region Environmental.
- 2.) Silt fence, berms or other sediment control devised shall be placed at the toe (or just beyond toe) of all stockpiles (including topsoil). Sediment control for stockpiles will not be paid for separately.
- 3.) There shall be no stockpiling or side casting of waste materials including but not limited to paint chips, asphalt, and concrete adjacent to any state waters that could potentially result from project activities.
- 4.) Containment and cleanup of equipment fuel, oil and lubricant leaks

Contractor shall inspect and certify equipment and vehicles daily to ensure petroleum, oils, and lubricants (POL) are not leaking onto the soil or pavement. Absorbent material or containers approved by the Engineer shall be used to prevent leaking POL from reaching the soil or pavement. Contractor shall have ready approved absorbent material or containers of sufficient capacity to contain any leak POL that can reasonable be foreseen. All materials resulting from POL leakage control and cleanup shall be property of the Contractor and removed from the site. The cost for control and cleanup of POL leaks shall not be paid for separately, but shall be included in the cost of the work.

STREET CLEANING:

- 1.) Whenever sediment is transported onto the highway, the road shall be cleaned as needed. Street washing will not be allowed. Storm drain inlet protection shall be in place prior to shoveling or sweeping. Street cleaning will not be paid for separately.

GENERAL SITE CONDITIONS:

- 1.) At the end of each day the Contractor shall be responsible for collecting all trash and disposing it in appropriate containers. Containers shall be emptied as needed.

MAINTENANCE OF EROSION CONTROL DEVICES:

- 1.) Inspections shall be continuous and repairs or replacements of erosion control measures shall be made within 2 days or as directed by the Engineer. Erosion bales, silt fence, erosion logs, storm drain inlet protection devices shall be inspected following each occurrence of precipitation or snow melt event that may cause erosion. Sediment shall be cleaned out when silt depth is 50% or greater then erosion control device. Sediment removal and disposal shall be paid for as:

– Shall not paid for separately, cost of cleaning is included in the erosion control device.

INSPECTIONS:

- 1.) The project is subject to inspections by CDPHE, COE, EPA and Colorado Department of Transportation at any time.
- 2.) Inspection of the stormwater management system shall be performed at least every 14 calendar days and after the occurrence of precipitation or snow melt event that may cause erosion or run-off. Time span greater than 14 calendar days is a violation of the CDPS permit.

RECORD KEEPING

THE FOLLOWING ARE REQUIREMENTS OF FORM 1176
In accordance with Standard Specification 208.03(c).

- 1.) Keeping accurate and complete records is a requirement of the Stormwater Construction Permit; enforcement action, including fines could result if records are not adequate.
- 2.) The SWMP should be considered a "living document" that is continuously reviewed and modified. Changes to the SWMP, including but not limited to: additions, deletions, changing locations of BMP's shall be marked in the plans, dated and signed at time of occurrence.

- 3.) All inspection and maintenance activities or other repairs shall be documented by the ECS and kept on the project site.

- 4.) Records of spill, leaks or overflows that result in the discharge of pollutants must be documented and maintained. Information that should be recorded for all occurrences include the time and date, weather conditions, reasons for spill, etc. Some spills may need to be reported to the Water Quality Control Division immediately. Specifically, a release of any chemical, oil, petroleum product, sewage, etc., which may enter state waters must be reported.

- 5.) At 14 day inspections incidents of noncompliance, such as uncontrolled releases of pollutants including mud, muddy water or measurable quantities of sediment found off-site shall be noted, along with a brief explanation as to measures taken to prevent future violations and measures taken to clean up sediment that has left the site.

- 6.) After measures have been taken to correct any problems and recorded, or where a report does not identify incidents of noncompliance, the report shall contain a signed certification* indicating the site is in compliance.

* By signing the certificate the signer certifies:
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that a qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PRIOR TO FINAL ACCEPTANCE

- 1.) After all concrete operations are complete, areas affected by these operations (including washout areas) shall be restored by the Contractor at no additional cost to the project.

- 2.) Prior to final acceptance, a final walk through of the project shall occur with the CDOT Landscape Architect, Engineer, Region Environmental, Hydraulics and Maintenance in attendance. At this time BMPs shall be inspected for cleaning, maintenance or removal. Areas will be inspected for any additional BMP's that may be required.

- 3.) BMP's shall be removed when 70% of preexisting cover has been established within the disturbed project limits. BMP's subject to removal shall be determined at the final walk through of the project. The Contractor shall remove approved BMP's; cost of BMP removal will be included in the BMP.

- 4.) Upon completion of work required by walk through the ECS will modify the SWMP to an accurate depiction of what remains on the project site.

Computer File Information				<div><div></div><div></div><div></div><div></div><div></div></div>	Index of Revisions			Colorado Department of Transportation		As Constructed		Stormwater Management Plan			Project No./Code		
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SEEDING PLAN

Soil preparation, seeding, mulching and mulch tackifier will be required for an estimated 2.4 acres of disturbed area within the right-of-way limits which are not surfaced. The following types and rates shall be used:

REFER TO EXHIBIT A OF ACCESS PERMIT

SEEDING APPLICATION: Drill seed 0.25” to 0.5” into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25” to 0.5” into the soil.

MULCHING APPLICATION: Apply 1 1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier. On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of mulch and mulch tackifier.

SPECIAL REQUIREMENTS: Due to high failure rates hydromulching and/or hydroseeding will not be allowed.

SOIL CONDITIONING AND FERTILIZER REQUIREMENTS:

a.) Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY/1000 SF.

b.) Fertilizer shall consist of 90% fungal biomass (mycelium) and 10% potassium–magnesia with a grade of 6–1–3 or approved equal. Fertilizer shall be applied as follows.

COMMERCIAL FERTILIZER	ANALYSIS(%)	LBS. NUTIENT/ACRE
Nitrogen	18	27
Phosphorus	46	69

RESEEDING OPERATIONS/CORRECTIVE STABILIZATION

Prior to final acceptance

a.) Seeded areas shall be reviewed at 14 day inspections by the Erosion Control Supervisor for bare soils caused by surface or wind erosion. Bare areas caused by surface or gully erosion, blown away mulch, etc. shall be regraded, seeded, mulched and have mulch tackifier (or blanket) applied as necessary.

b.) Areas where seed has not germinated after one season shall be evaluated by the Engineer and CDOT Landscape Architect. Areas that have not germinated shall have seed, mulch and mulch tackifier (or blanket) reapplied. Work shall be paid for by appropriate bid item.

c.) The Contractor shall maintain, mow to control weeds or apply herbicide to control weeds in the seeded areas until Final Acceptance. Work shall be paid for as FA Erosion Control.

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