

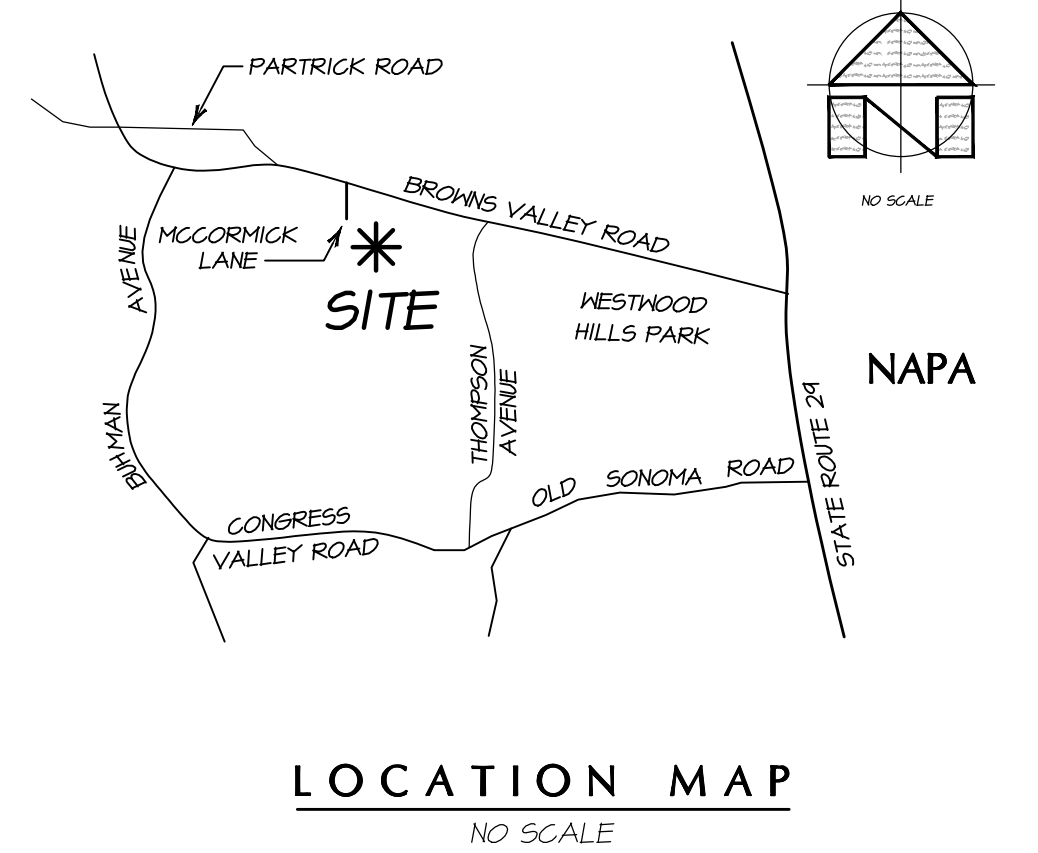
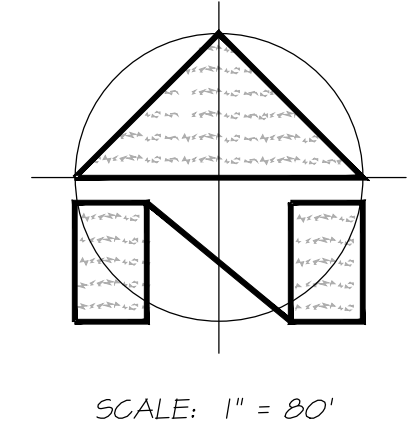
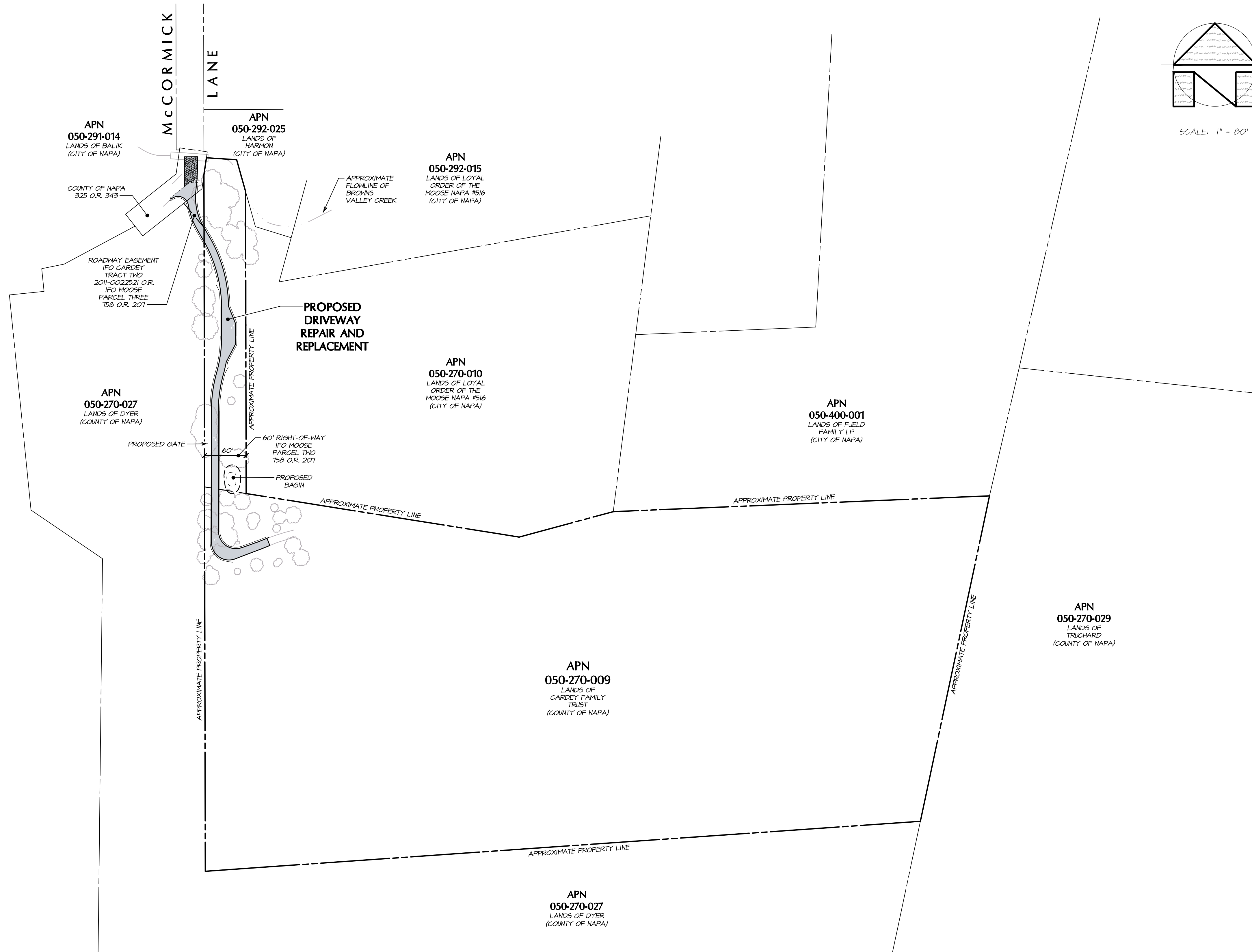
“G”

Plans

Cardey Residence Driveway Repair Use Permit Exception to
the Conservation Regulations, #P18-00116-UP &
Request for Exception to Road and Street Standards
Planning Commission Hearing June 20, 2018

CARDEY RESIDENCE

DRIVEWAY IMPROVEMENT PLAN



PROJECT INFORMATION:

PROPERTY OWNER & APPLICANT:
STEVEN M. AND ANDREA L. GARDEY
1100 MCCORMICK LANE
NAPA, CA 94558

PROJECT ADDRESS:
1100 MCCORMICK LANE
NAPA COUNTY, CA

ASSESSOR'S PARCEL NUMBER:
050-270-009

PARCEL SIZE:
14.95 ACRES

PROJECT SIZE:
0.6± ACRES
550± LF OF DRIVEWAY

ZONING:
COUNTY = AW / CITY = H5

SHEET INDEX*:

SHEET C1 OVERALL SITE PLAN
SHEET C2 GENERAL NOTES
SHEET C3 DEMOLITION PLAN
SHEET C4 GRADING & LAYOUT PLAN AND DRIVEWAY PROFILE
SHEET C5 CROSS SECTIONS (STA 10+00 - 11+25)
SHEET C6 CROSS SECTIONS (STA 11+50 - 13+00)
SHEET C7 CROSS SECTIONS (STA 13+50 - 16+50)
SHEET C8 UTILITY PLAN
SHEET C9 DETAIL SHEET
SHEET C10 EROSION CONTROL PLAN
SHEET C11 DETAIL SHEET

* NOTE: THE CALIFORNIA BEST MANAGEMENT PRACTICES SHALL BE CONSIDERED A PART OF THIS PLAN.

PROJECT SUMMARY:

THE PURPOSE OF THIS PLAN IS TO PROVIDE INFORMATION TO RECONSTRUCT, REPAIR AND REPLACE AN EXISTING COMPROMISED DRIVEWAY.

PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT R.C.E. 45102

OVERALL SITE PLAN

SCALE: 1" = 80'

NO.	DATE	DESCRIPTION	SHEETS	BY
02-26-18		STORM DRAIN REVISION	C3, C4, C6 & C10	KP

GEOTECHNICAL CONSULTANT

THIS GRADING PLAN HAS BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS OUTLINED IN THE PROJECT'S GEOTECHNICAL INVESTIGATION REPORT DATED AUGUST 25, 2017. THE GEOTECHNICAL INVESTIGATION REPORT SHALL BE CONSIDERED A PART OF THIS PLAN AND ALL GRADING WORK SHALL BE IN ACCORDANCE WITH SAID INVESTIGATION.

RGH CONSULTANTS

SEE PLAN REVIEW LETTER



OWNERSHIP OF DOCUMENTS

DES: PNB / RP
DRAWN: KP
CHECKED: PNB

BARTELT ENGINEERING - LAND PLANNING
CIVIL ENGINEERING - LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94559
www.barteltengineering.com
Telephone: 707-258-1301

COPYRIGHT 2018. ALL RIGHTS RESERVED.

CALIFORNIA

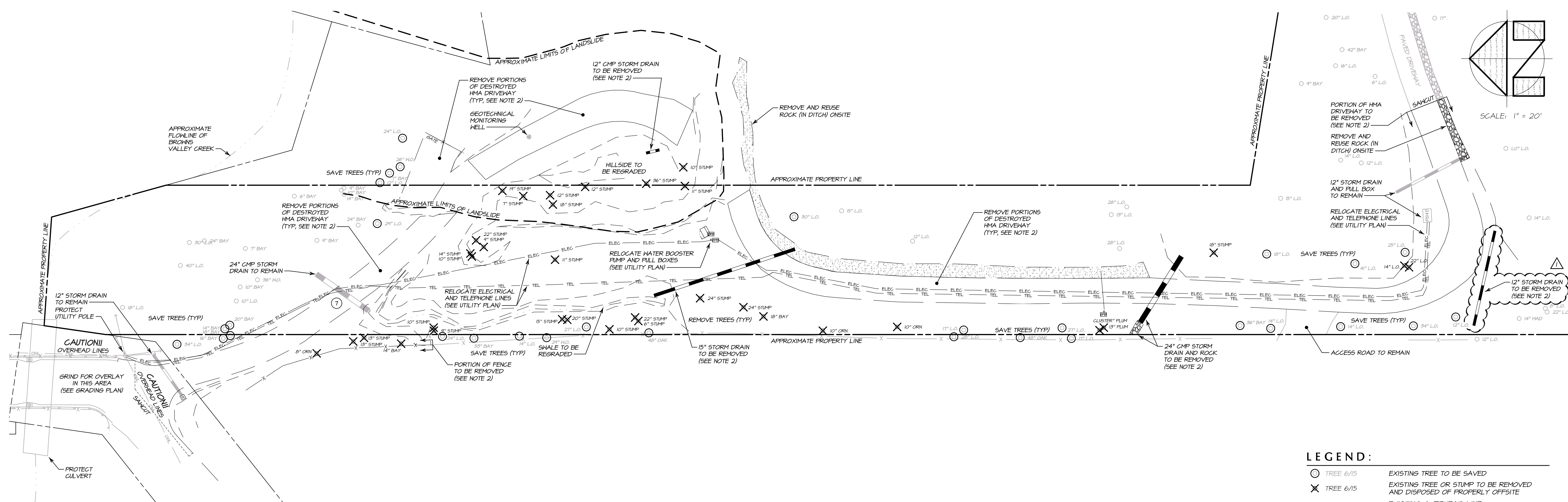
NAPA COUNTY

CARDEY RESIDENCE
OVERALL SITE PLAN

DATE: NOVEMBER 2017
JOB NO: 17-04
SHEET NO: C1

3/2/2018 - 3:44 PM I:\NAP\5\LAND PROJECTS\2018-2017\1024\DOT IMP ROAD\ACAD\PLANS\104-IMP\DWG\1-COVER_CSP_ARCH FULL BLEED D (8600 X 2400 INCHES) 1" = 1" PLOTTED @ BARTELT ENGINEERING 10/1/2018 10:01

3/12/2018 - 9:45 PM 161MP 51LAND PROJECT192005-2071104A001 IMP ROADACADIAFELANSIT04-IMP12MS CS-DENO ARCH FULL BLEED D (8K.00 X 24.00 INCHES) 1" = 1' PLOTTED @ BARTELT ENGINEERING 707-258-1301



DEMOLITION PLAN

SCALE: 1" = 20'

LEGEND:

○ TREE 6/15	EXISTING TREE TO BE SAVED
✕ TREE 6/15	EXISTING TREE OR STUMP TO BE REMOVED AND DISPOSED OF PROPERLY OFFSITE
— OHL —	EXISTING OVERHEAD LINE
— ELEC —	EXISTING STORM DRAIN LINE
— TEL —	EXISTING ELECTRICAL LINE TO BE REMOVED
— TEL —	EXISTING TELEPHONE LINE TO BE REMOVED
— TEL —	EXISTING STORM DRAIN LINE TO BE REMOVED

DEMOLITION NOTES:

1. ALL ITEMS TO BE ADDRESSED BY THIS DEMOLITION PLAN ARE HIGHLIGHTED IN BLACK UNLESS OTHERWISE NOTED.
2. OBJECTS TO BE REMOVED SHALL BE DISPOSED OF PROPERLY OFFSITE UNLESS NOTED OTHERWISE.
3. ALL EXISTING IMPROVEMENTS TO REMAIN SHALL BE PROTECTED FROM DAMAGE THROUGHOUT THE COURSE OF CONSTRUCTION.
4. UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL UTILITIES NOT SLATED FOR DEMOLITION.
5. CONTRACTOR SHALL DETERMINE LOCATION OF EXISTING GAS, ELECTRICAL, PHONE, CABLE TV, SANITARY SEWER AND POTABLE WATER LINES PRIOR TO START OF DEMOLITION.
6. ALL EXISTING UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE SAVED, REMOVED OR RE-ROUTED AS DIRECTED BY THE OWNER AND ENGINEER IN THE FIELD.
7. EXISTING WATER LINE IN THIS AREA TO BE REMOVED AND DISPOSED OF PROPERLY OFFSITE.
8. ALL TREES AND VEGETATION NOT MARKED FOR REMOVAL ARE TO BE SAVED THROUGHOUT THE COURSE OF DEMOLITION AND CONSTRUCTION UNLESS DIRECTED OTHERWISE BY THE OWNER. SEE TREE PRESERVATION NOTES.
9. ALL MISCELLANEOUS MATERIALS, VEGETATION AND ROOTS WITHIN THE PROJECT AREA THAT ARE NOT SPECIFICALLY ADDRESSED ON THIS PLAN ARE TO BE REMOVED AND DISPOSED OF PROPERLY OFFSITE BY THE CONTRACTOR.
10. SANKUT AND REMOVE EXISTING HMA PAVEMENT, GRAVEL AND CONCRETE AND DISPOSE OF PROPERLY OFFSITE.
11. COORDINATE ANY TEMPORARY STOCKPILING OF MATERIAL WITH THE ENGINEER.
12. ALL EXISTING WATER, ELECTRIC, PHONE AND CABLE TV UTILITIES THAT ARE SCHEDULED FOR DEMOLITION ARE TO BE LOCATED, PROPERLY DISCONNECTED BY THE APPROPRIATE UTILITY COMPANY AND DISPOSED OF PROPERLY OFFSITE.
13. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM NAPA COUNTY DEPARTMENT OF PUBLIC WORKS AND/OR THE CITY OF NAPA PUBLIC WORKS DEPARTMENT FOR ANY WORK WITHIN THE RIGHT-OF-WAY OF MCCORMICK LANE PRIOR TO THE START OF DEMOLITION ON THIS PROJECT.

NO.	DATE	DESCRIPTION	BY
02-26-18		STORM DRAIN REVISION	KP



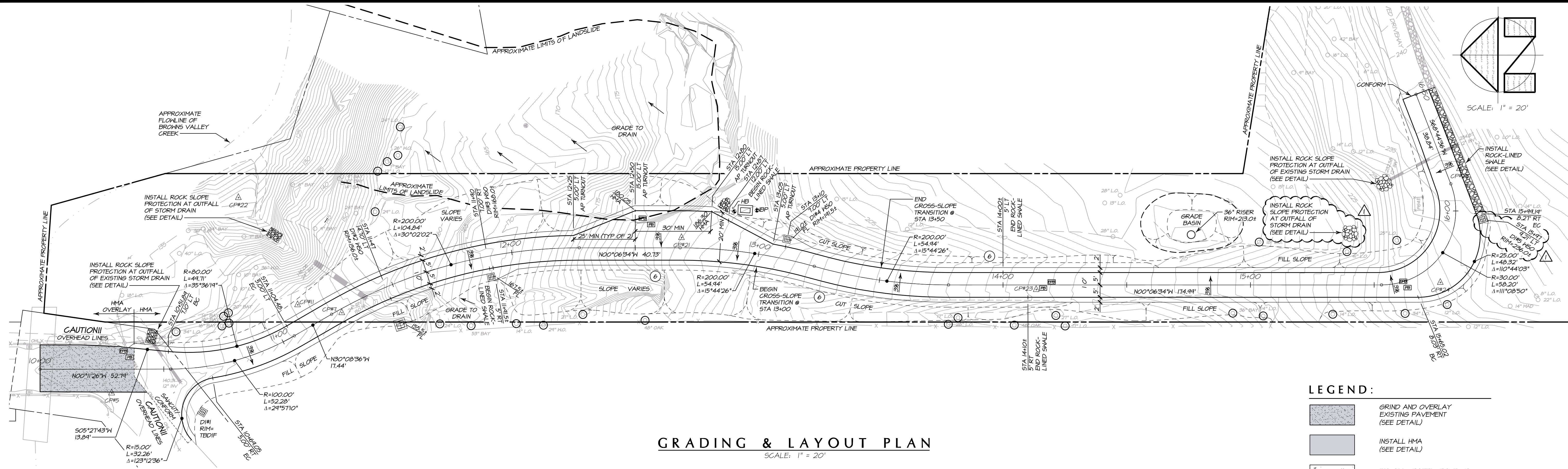
PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT R.C.E. 45102

BARTELT ENGINEERING - LAND PLANNING
 1303 Jefferson Street, 200 B, Napa, CA 94959
 www.barteltengineering.com
 Telephone: 707-258-1301

CARDY RESIDENCE DEMOLITION PLAN
 NAPA COUNTY CALIFORNIA

DATE: NOVEMBER 2017
 JOB NO: 17-04
 SHEET NO: **C3**
 OF 11

3/12/2018 - 9:42 PM, 1611P, S:\LAND PROJECTS\2018-2017\104\DOT IMP ROAD\ACAD\PLANS\104-IMP-DWG-C4-PLAN & PROFILE, ARCH FULL BLEED D (36.00 X 24.00 INCHES), 1" = 1', PLOTTED @ BARTELT ENGINEERING, 707-258-1301

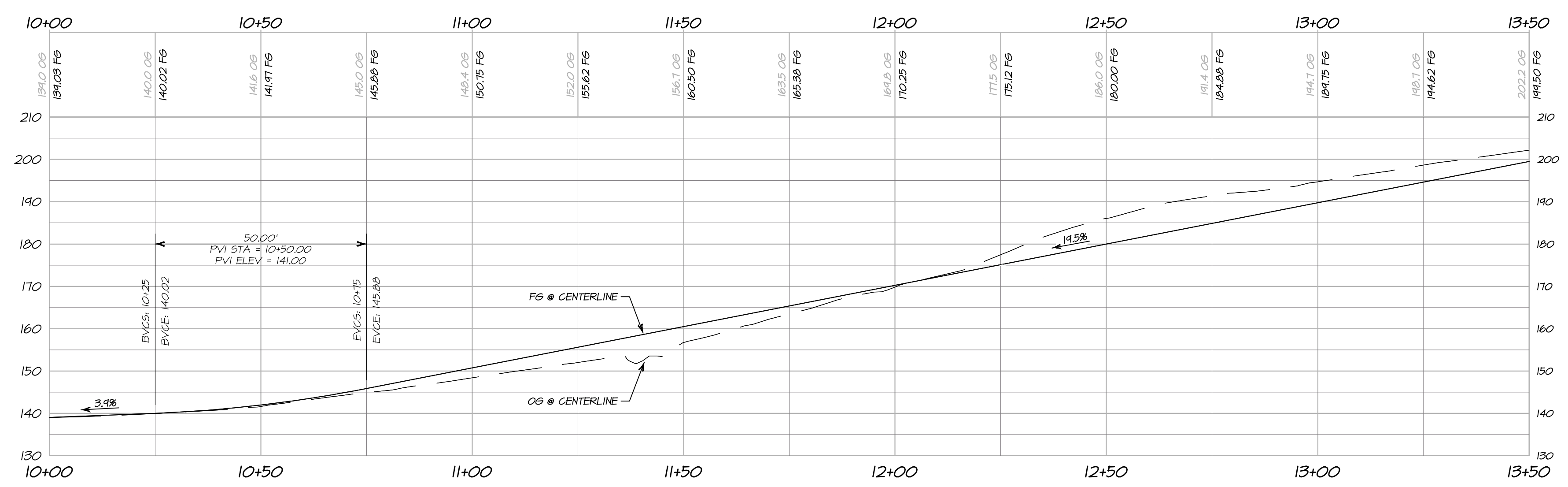


GRADING & LAYOUT PLAN

SCALE: 1" = 20'

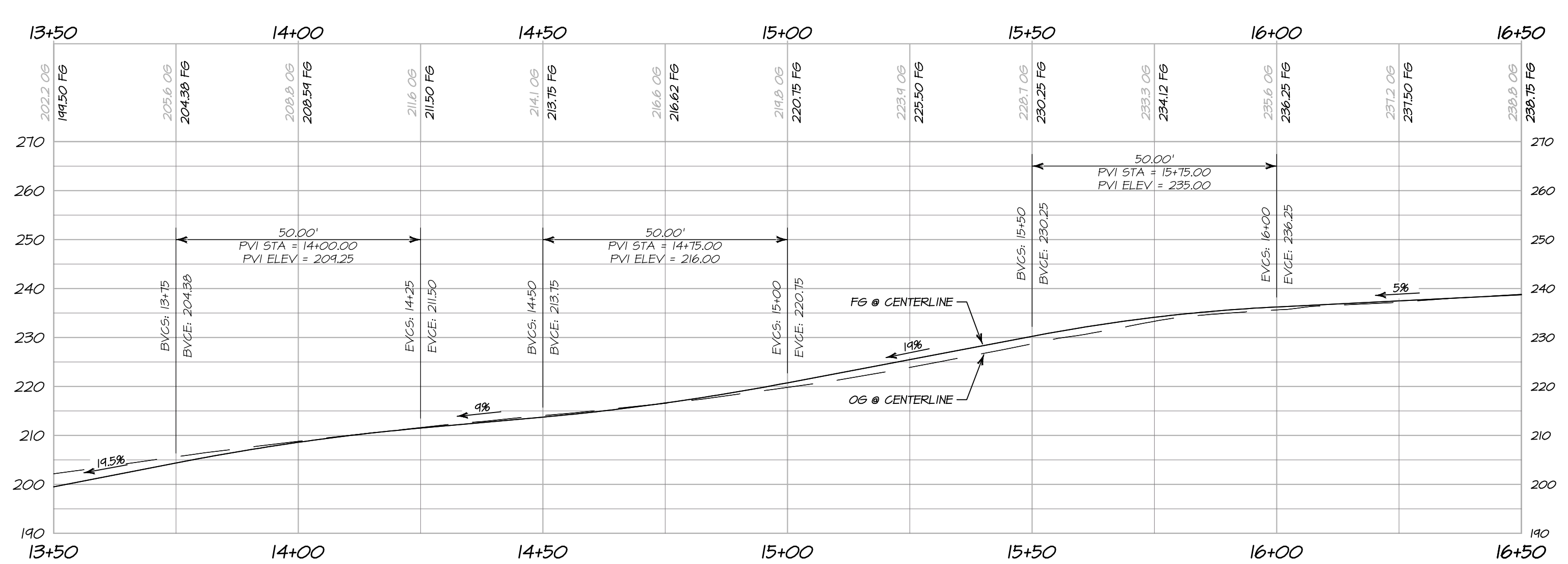
LEGEND:

- GRIND AND OVERLAY EXISTING PAVEMENT (SEE DETAIL)
- INSTALL HMA (SEE DETAIL)
- INSTALL TRAFFIC-RATED PCC (SEE DETAIL)
- TREE 6/15
- HB
- TBDIF TO BE DETERMINED IN FIELD
- WBP
- WSO WITH SIDE OPENING
- ALIGNMENT STATION
- ALIGNMENT GEOMETRY LOCATION



DRIVEWAY PROFILE - STA 10+00 THROUGH 13+50

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 20'



DRIVEWAY PROFILE - STA 13+50 THROUGH 16+50 (END)

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 20'

GRADING NOTES:

- REFER TO THE GEOTECHNICAL INVESTIGATION REPORT FOR OVER EXCAVATION, FILL PLACEMENT AND SUBSURFACE DRAINAGE RECOMMENDATIONS.
- ALL TRANSITIONS AND GRADE BREAKS SHALL BE GRADED WITH A SMOOTH CURVE AND BE APPROVED BY THE ENGINEER IN THE FIELD.
- ADJUST ALL UTILITY BOX LIDS TO NEW FINISH GRADE. ALL UTILITY BOXES AND LIDS ARE TO BE TRAFFIC-RATED IN ALL PAVED OR CONCRETE AREAS.
- CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE APPLICATION AND MAINTENANCE OF EROSION CONTROL MEASURES, INCLUDING SEDIMENT BARRIERS, SEEDING AND EROSION CONTROL BLANKETS. CONTRACTOR IS RESPONSIBLE TO TAKE APPROPRIATE ACTIONS TO PREVENT EROSION FOR THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES ARE SUBJECT TO APPROVAL BY NAPA COUNTY, BARTELT ENGINEERING AND THE OWNER. SEE EROSION CONTROL DETAILS.
- INSTALL NORTH AMERICAN GREEN BIONET G25BN EROSION CONTROL BLANKET OVER SEED ON ALL SLOPES 4:1 OR STEEPER.
- SHOULDER AND/OR TOE OF SLOPE TO BE ROCK-LINED (SEE DETAIL).
- CONTRACTOR SHALL FIELD VERIFY STORM DRAIN FLOWLINE, INVERT AND RIM ELEVATIONS PRIOR TO ORDERING STORM DRAIN STRUCTURES.



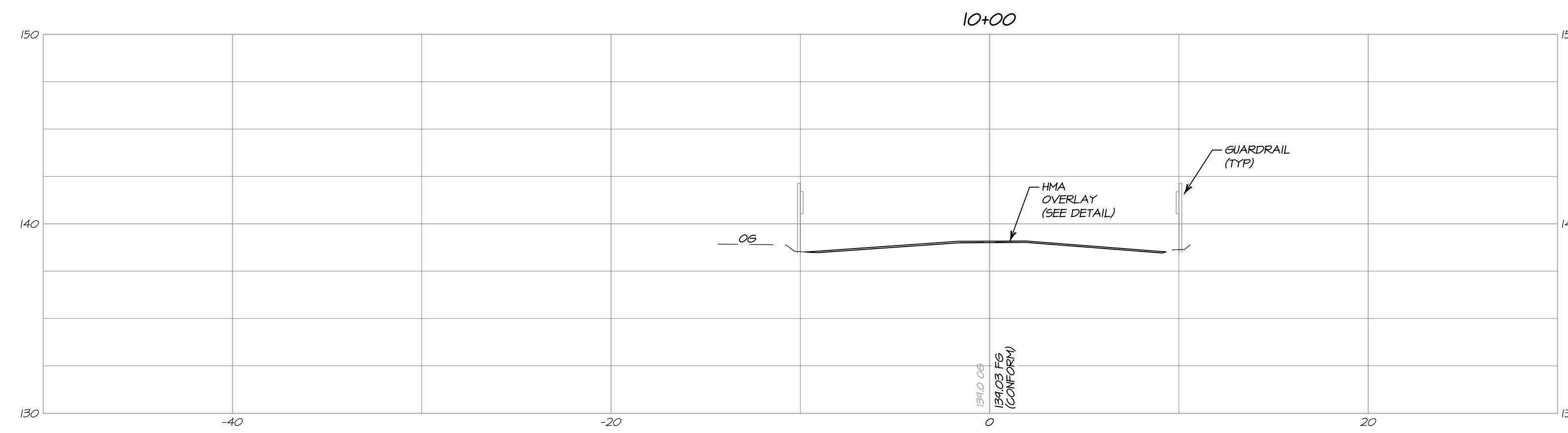
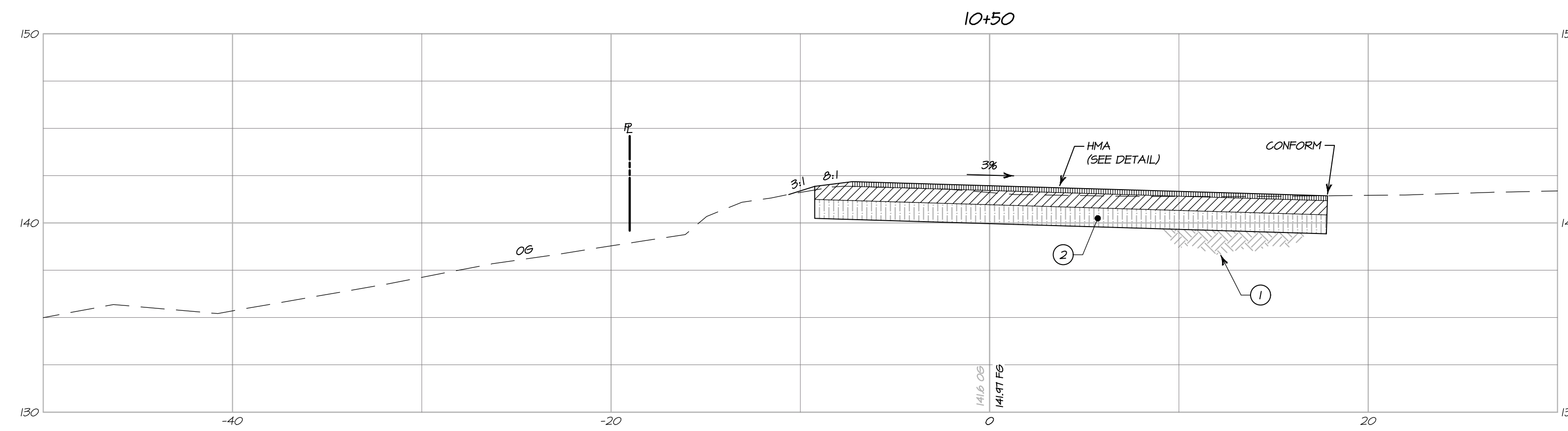
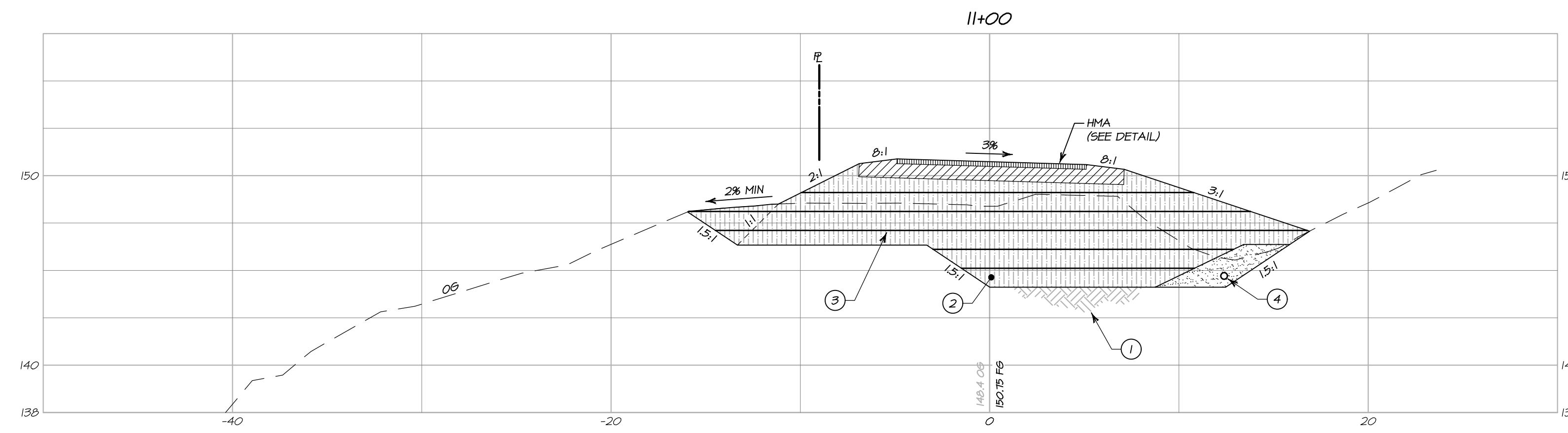
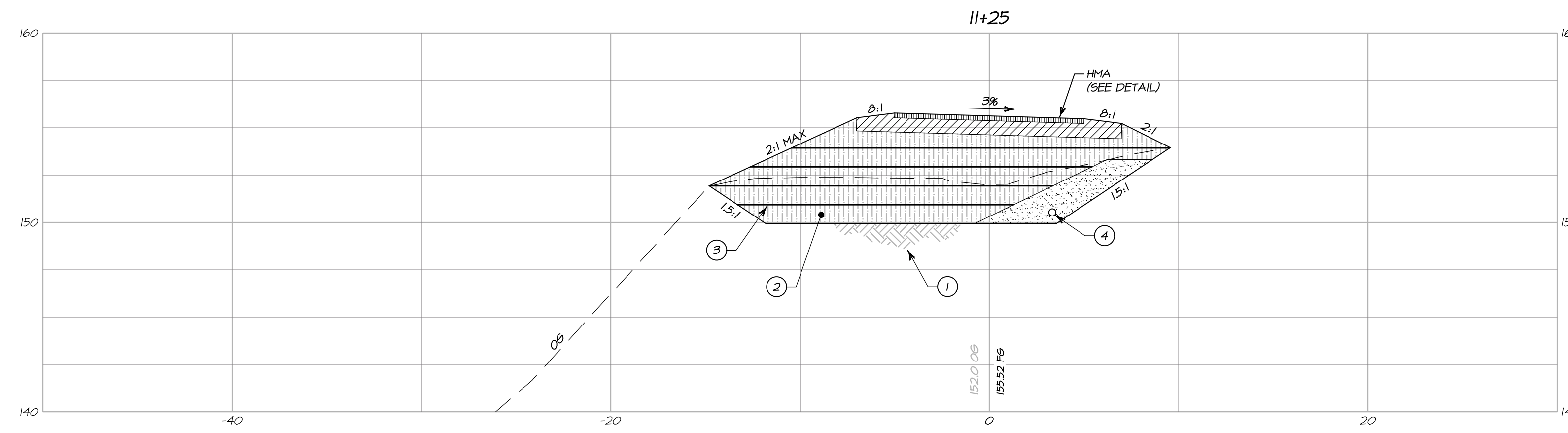
PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT
R.C.E. 45102

NO.	DATE	DESCRIPTION	BY
1	02-26-18	STORY DRAIN REVISION	KP

CARDEY RESIDENCE
GRADING & LAYOUT PLAN AND PROFILE
NAPA COUNTY CALIFORNIA

DATE: NOVEMBER 2017
JOB NO: 17-04
SHEET NO: **C4**

BARTELT ENGINEERING
 CIVIL ENGINEERING - LAND PLANNING
 1303 Jefferson Street, 200 B, Napa, CA 94559
 www.barteltengineering.com
 Telephone: 707-258-1301



**CROSS SECTIONS
STA 10+00 - STA 11+25**

HORIZONTAL SCALE: 1" = 5'
VERTICAL SCALE: 1" = 5'

SECTION NOTES:

- ① SCARIFY AND RECOMPACT AT LEAST SIX (6) INCHES OF EXPOSED SUBGRADE TO A MINIMUM OF 90% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ② 12 INCHES MINIMUM OF OVER-EXCAVATION AND REPLACE AS ENGINEERED FILL COMPACTED TO 90% MINIMUM RELATIVE COMPACTION WITH UPPER SIX (6) INCHES COMPACTED TO 95% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ③ INSTALL TENSAR BX1200 GEOGRID OR APPROVED EQUAL PER MANUFACTURER'S REQUIREMENTS
- ④ INSTALL KEYWAY SUBDRAIN (SEE DETAIL AND GEOTECHNICAL REPORT)

NO.	DATE	DESCRIPTION	BY
02-26-18		NO CHANGE TO THIS SHEET	KP



PREPARED UNDER THE DIRECTION OF

PAUL N. BARTELT R.C.E. 45102

OWNERSHIP OF DOCUMENTS
THIS DRAWING IS THE PROPERTY OF BARTELT ENGINEERING AND SHALL NOT BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF BARTELT ENGINEERING. ALL CHANGES TO THE PLANS MADE BY ANY OTHER PARTY WITHOUT THE WRITTEN CONSENT OF BARTELT ENGINEERING SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO BARTELT ENGINEERING. THE CLIENT OF BARTELT ENGINEERING AND NOT THE ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION PROVIDED TO THE ENGINEER. BARTELT ENGINEERING SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING. THE ENGINEER'S SOLE RESPONSIBILITY TO VERIFY THAT THIS DRAWING REPRESENTS THE LATEST INFORMATION RELATIVE TO THE PROJECT.
© COPYRIGHT 2018. ALL RIGHTS RESERVED.

DES: PNB / RP
DRAWN: KP
CHECK: PNB

BARTELT ENGINEERING
CIVIL ENGINEERING - LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94559
www.barteltengineering.com
Telephone: 707-258-1301

CALIFORNIA

CARDEY RESIDENCE
CROSS SECTIONS
STA 10+00 - 11+25

NAPA COUNTY

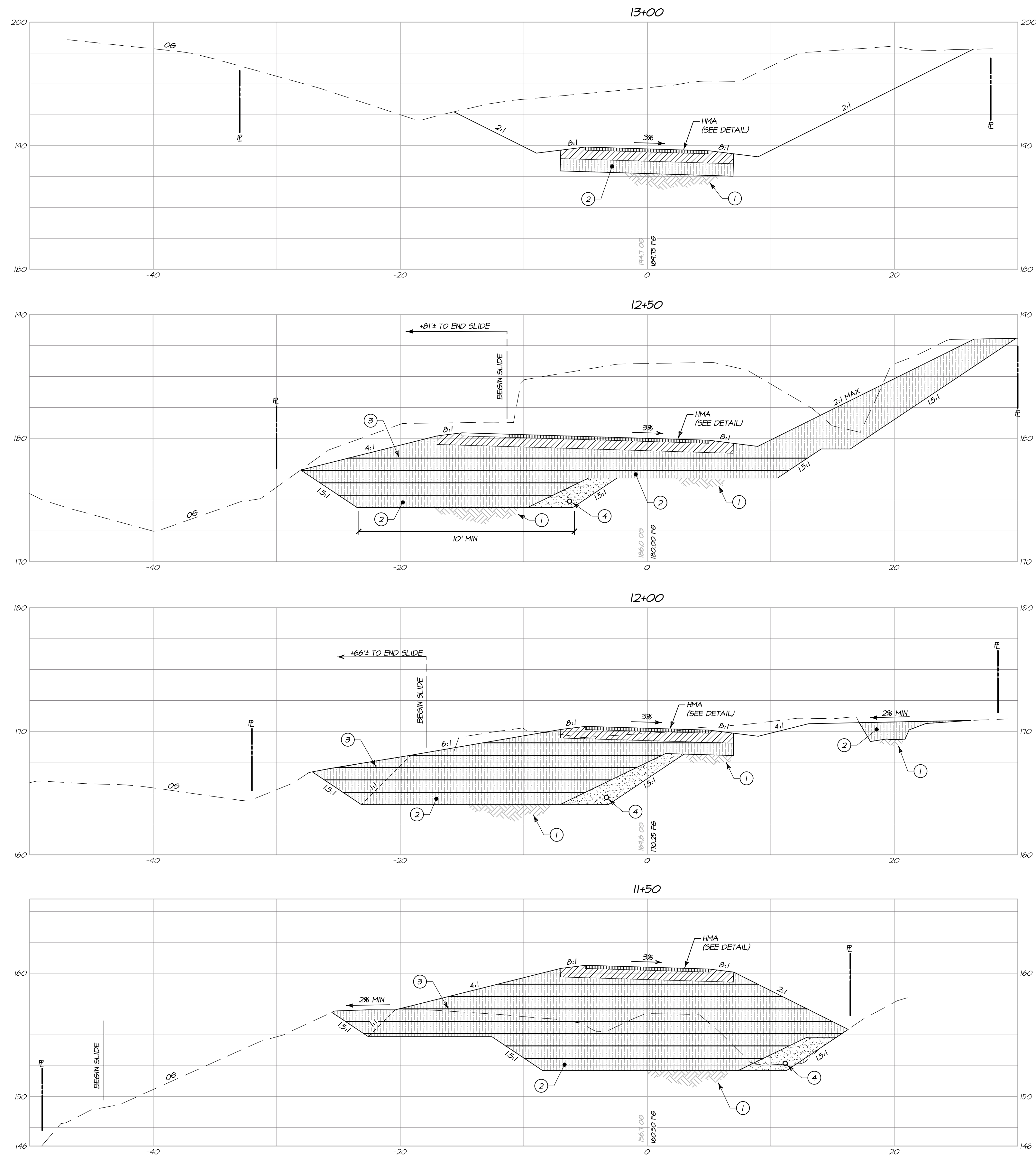
DATE: NOVEMBER 2017

JOB NO: 17-04

SHEET NO:

C5
OF 11

9/12/2018 - 9:42 PM I:\NAP\5\LAND PROJECTS\1803-2017\10\1001\1001\1001\1001\C5-CROSS SECTIONS 10+1125.ASC\FULL BLEED D (8.00 X 24.00 INCHES).1" = 1" PLOTTED @ BARTELT ENGINEERING 707-258-1301



**CROSS SECTIONS
STA 11+50 - STA 13+00**

HORIZONTAL SCALE: 1" = 5'
VERTICAL SCALE: 1" = 5'

SECTION NOTES:

- ① SCARIFY AND RECOMPACT AT LEAST SIX (6) INCHES OF EXPOSED SUBGRADE TO A MINIMUM OF 90% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ② 12 INCHES MINIMUM OF OVER-EXCAVATION AND REPLACE AS ENGINEERED FILL COMPACTED TO 90% MINIMUM RELATIVE COMPACTION WITH UPPER SIX (6) INCHES COMPACTED TO 95% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ③ INSTALL TENSAR BX1200 GEOGRID OR APPROVED EQUAL PER MANUFACTURER'S REQUIREMENTS
- ④ INSTALL KEYWAY SUBDRAIN (SEE DETAIL AND GEOTECHNICAL REPORT)

NO.	DATE	DESCRIPTION	BY
02-26-18		NO CHANGE TO THIS SHEET	KP



PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT R.C.E. 45102

OWNERSHIP OF DOCUMENTS
DES: PNB / RP
DRAWN: KP
CHECKED: PNB
© COPYRIGHT 2018. ALL RIGHTS RESERVED.

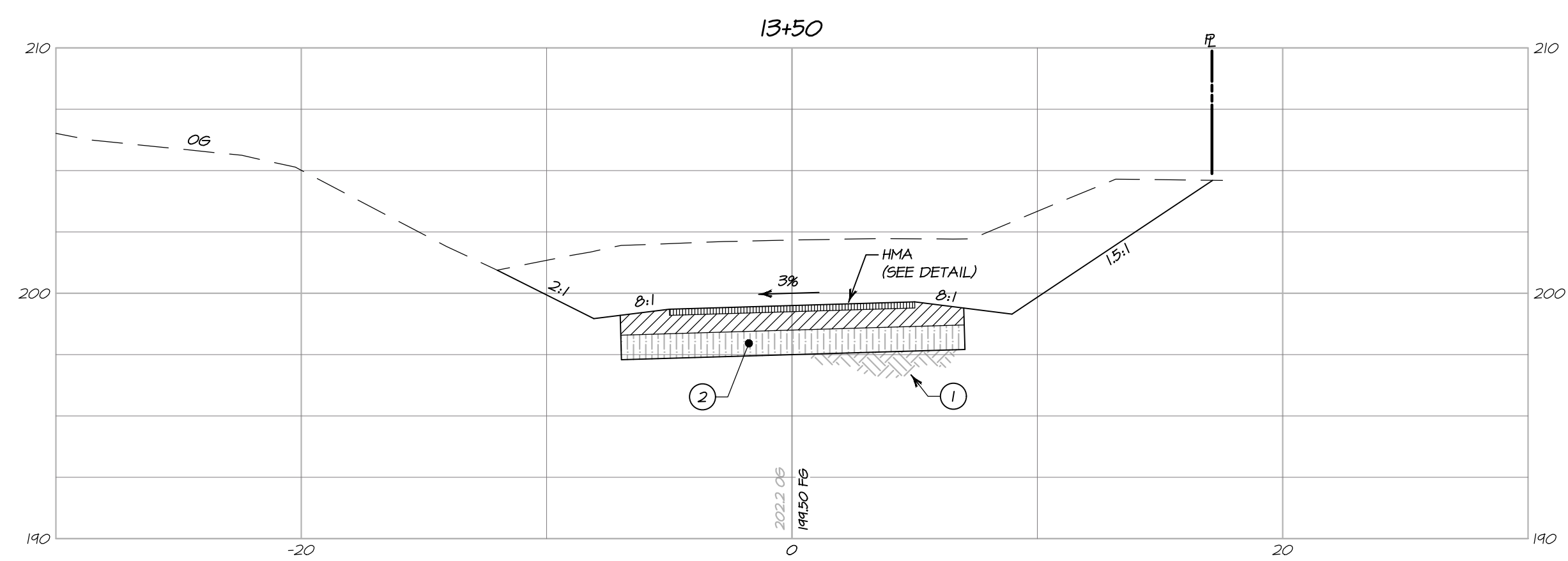
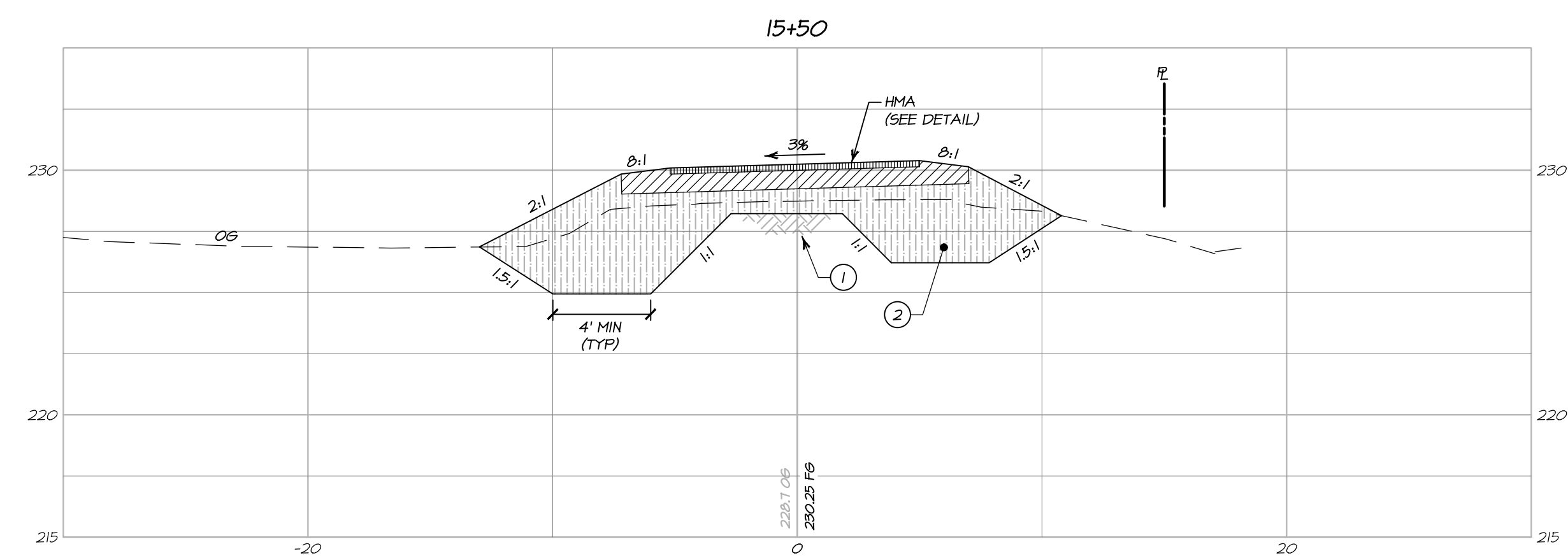
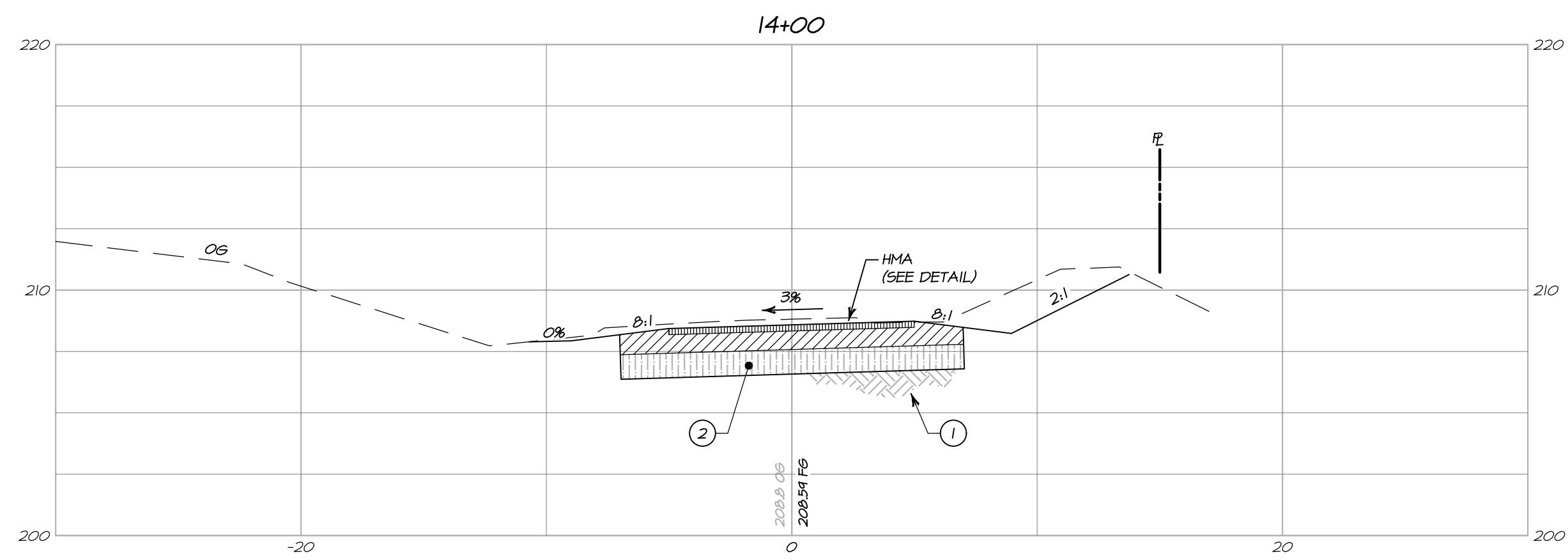
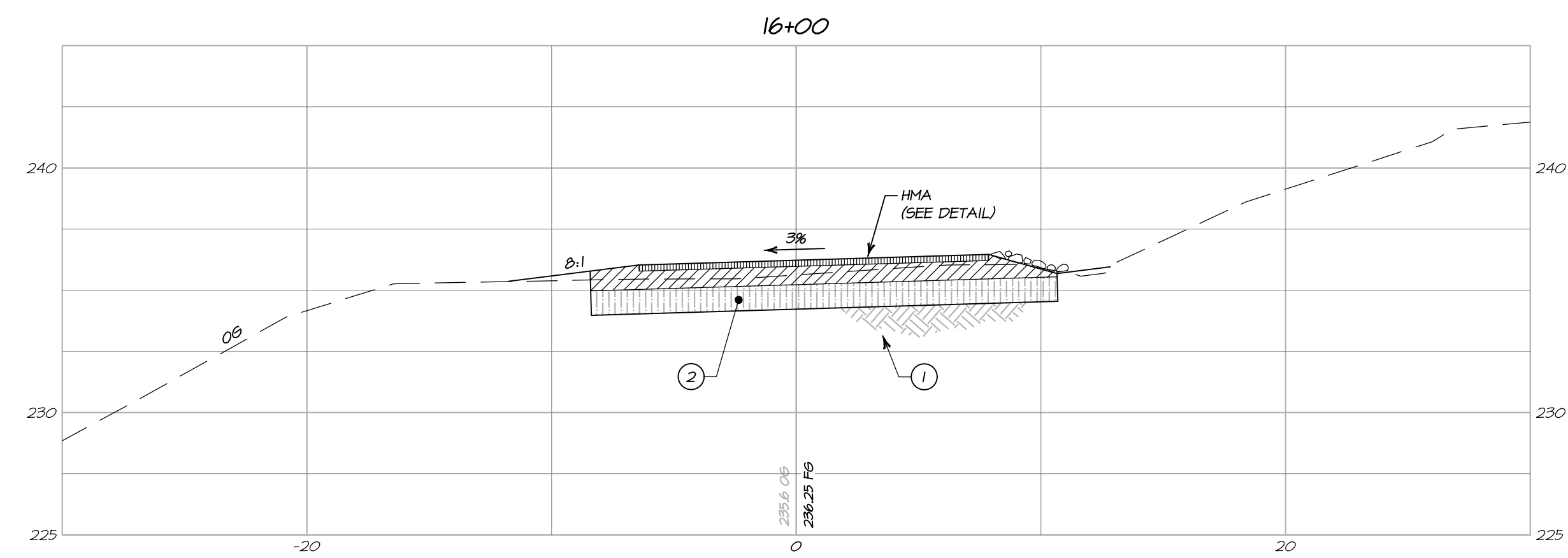
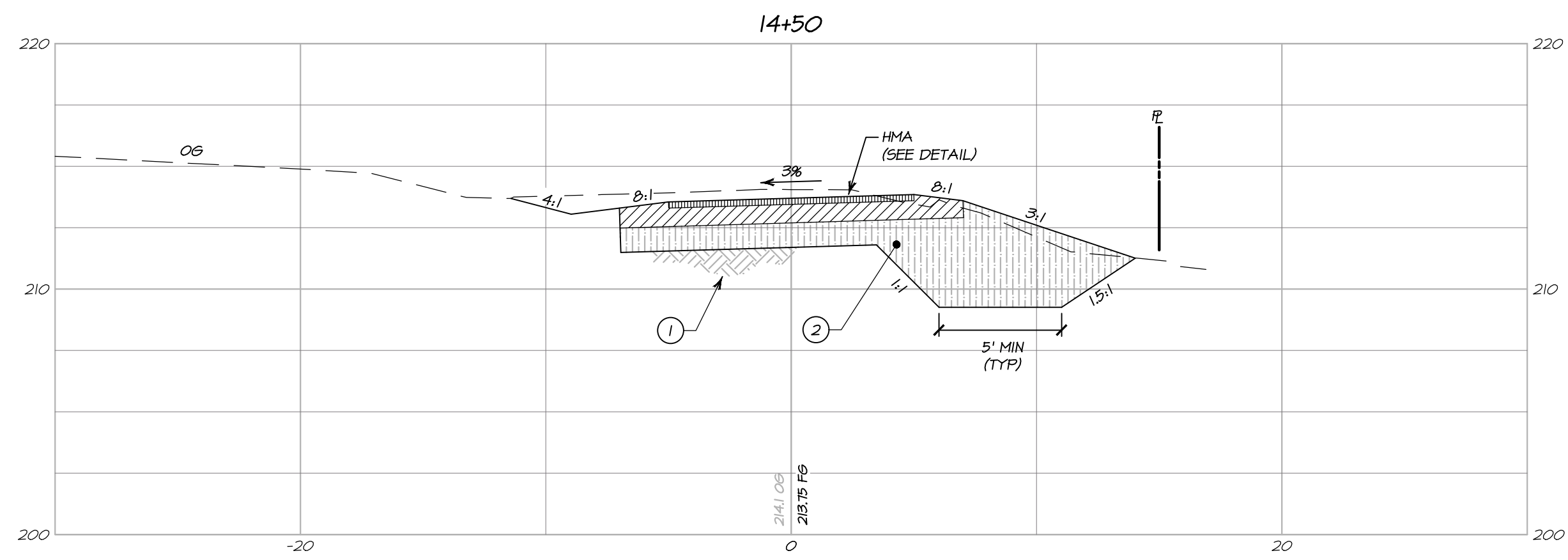
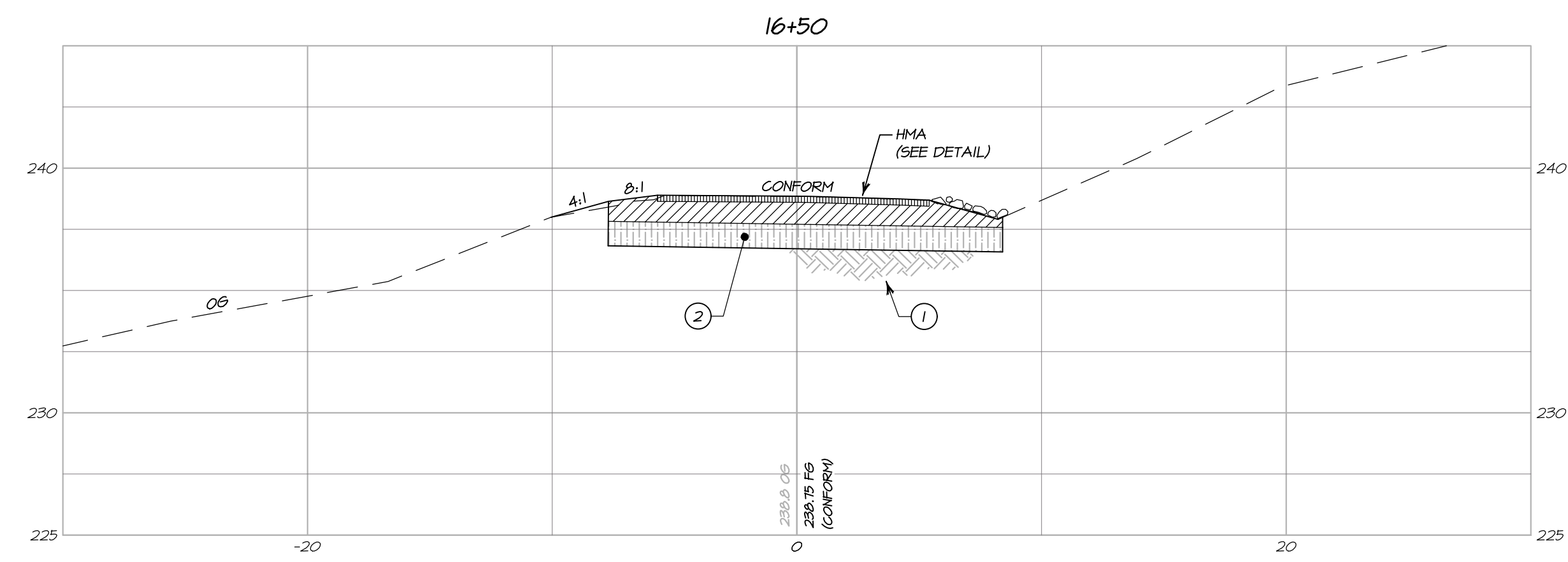
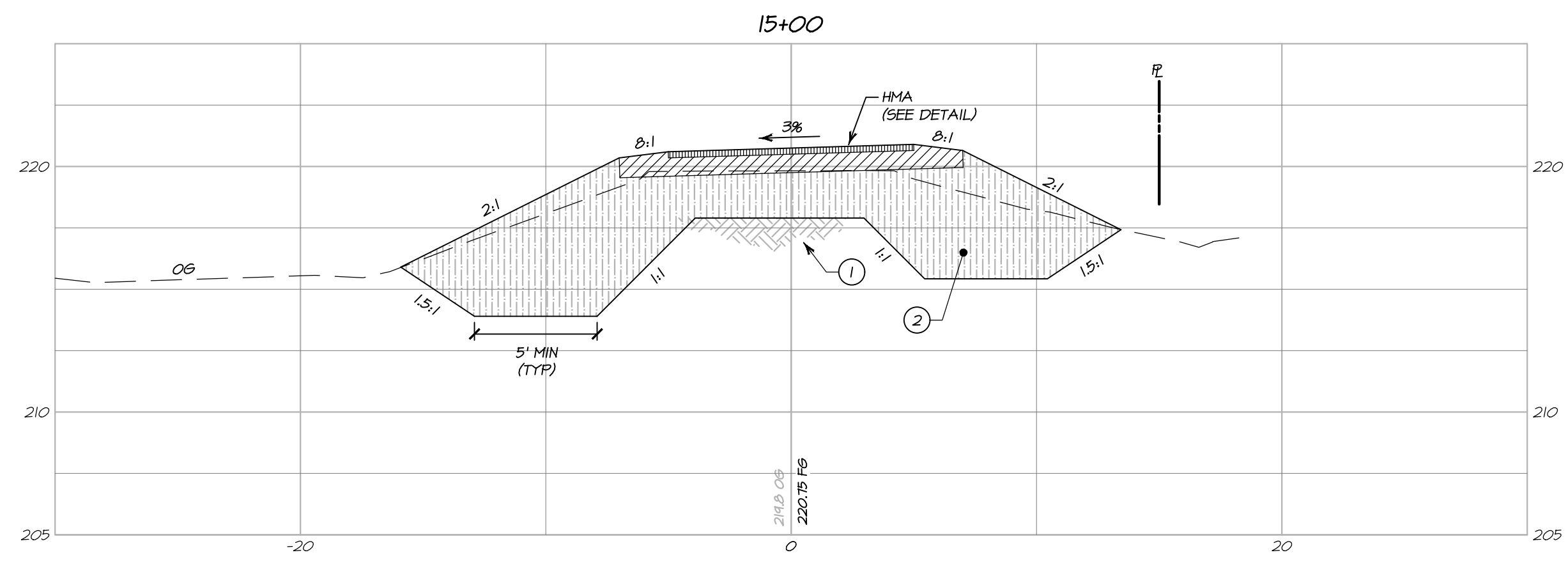
BARTELT ENGINEERING
CIVIL ENGINEERING - LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94559
www.barteltengineering.com
Telephone: 707-258-1301

**CARDEY RESIDENCE
CROSS SECTIONS
STA 11+50 - 13+00**

NAPA COUNTY
CALIFORNIA

DATE: NOVEMBER 2017
JOB NO: 17-04
SHEET NO:
C6
OF 11

9/12/2018 - 9:41 PM K:\WP 5\LAND PROJECTS\150009-2017\104001\WP ROAD\CAD\PLANS\1040-18_ARCH FILL BLEED D\186000 X 24.00 INCHES\1" = 1" PLOTTED # BARTELT ENGINEERING 707-258-1301



SECTION NOTES:

- ① SCARIFY AND RECOMPACT AT LEAST SIX (6) INCHES OF EXPOSED SUBGRADE TO A MINIMUM OF 90% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ② 12 INCHES MINIMUM OF OVER-EXCAVATION AND REPLACE AS ENGINEERED FILL COMPACTED TO 90% MINIMUM RELATIVE COMPACTION WITH UPPER SIX (6) INCHES COMPACTED TO 95% RELATIVE COMPACTION (SEE GEOTECHNICAL REPORT)
- ③ INSTALL TENSAR BX1200 GEOGRID OR APPROVED EQUAL PER MANUFACTURER'S REQUIREMENTS
- ④ INSTALL KEYWAY SUBDRAIN (SEE DETAIL AND GEOTECHNICAL REPORT)

**CROSS SECTIONS
STA 13+50 - STA 16+50**

HORIZONTAL SCALE: 1" = 5'
VERTICAL SCALE: 1" = 5'

NO.	DATE	DESCRIPTION	BY
02-26-18		NO CHANGE TO THIS SHEET	KP



PREPARED UNDER THE DIRECTION OF

PAUL N. BARTELT R.C.E. 45102

OWNERSHIP OF DOCUMENTS
DES: PNB / RP
DRAWN: KP
CHECKED: PNB
© COPYRIGHT 2018. ALL RIGHTS RESERVED.

BARTELT
ENGINEERING
CIVIL ENGINEERING - LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94559
www.barteltengineering.com
Telephone: 707-258-1301

CALIFORNIA

CARDEY RESIDENCE
CROSS SECTIONS
STA 13+50 - 16+50

NAPA COUNTY

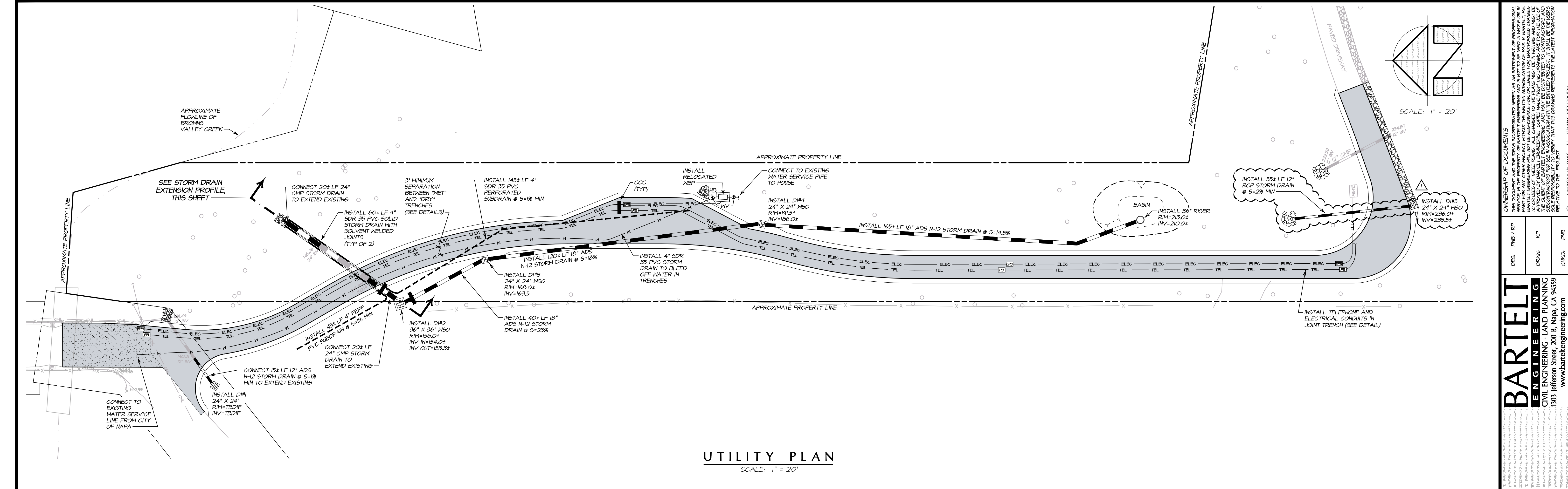
DATE: NOVEMBER 2017

JOB NO: 17-04

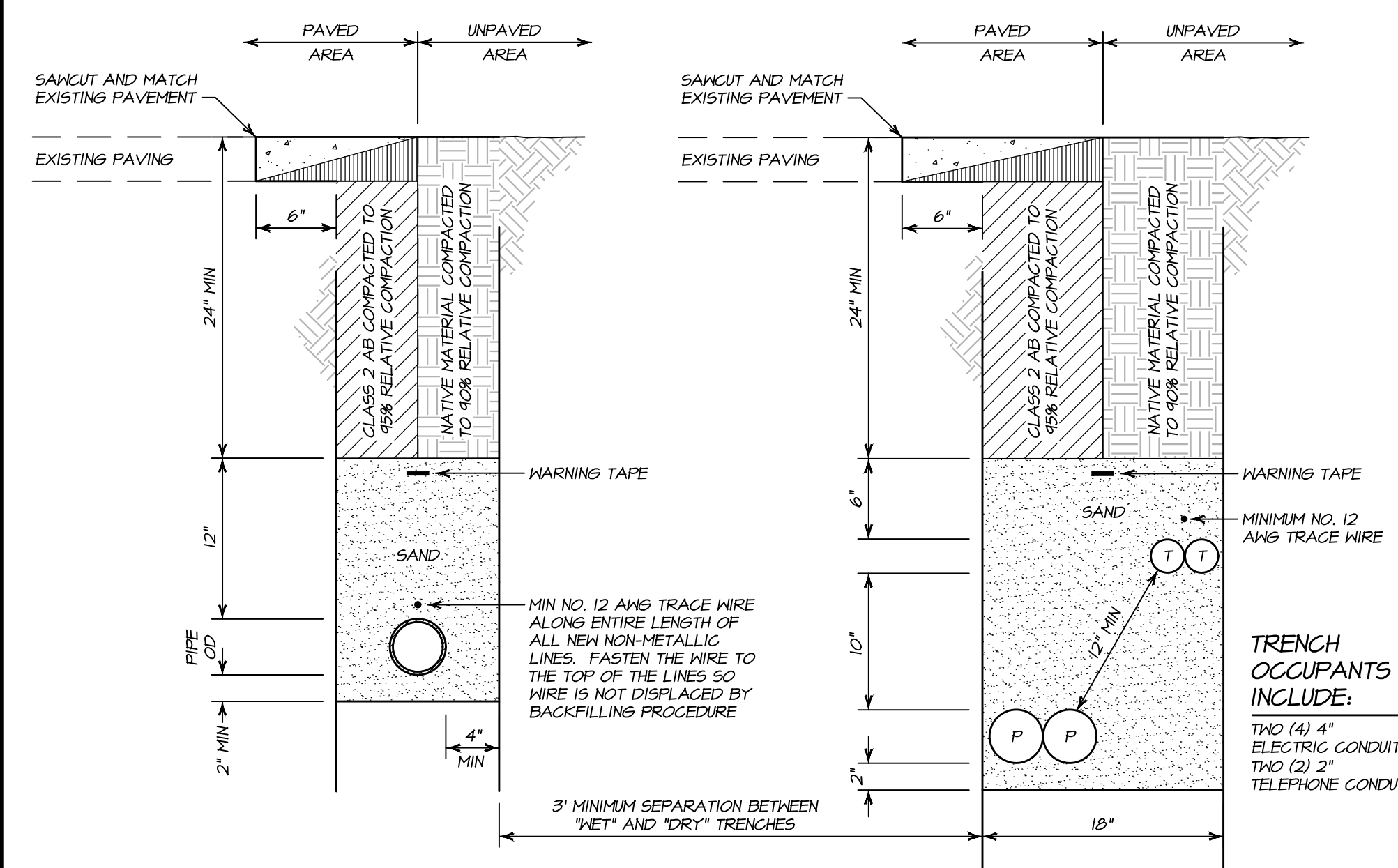
SHEET NO:

C7
OF 11

9/12/2018 - 9:41 PM K:\WP 5\LAND PROJECT\15009-2017\104001\WP ROAD\CAD\PLANS\104001\REF.DWG, C7-CROSS SECTIONS 13+50-16+50, ARCH FULL BLEED D (86.00 X 24.00 INCHES), 1" = 1', PLOTTED @ BARTELT ENGINEERING, 707-258-1301

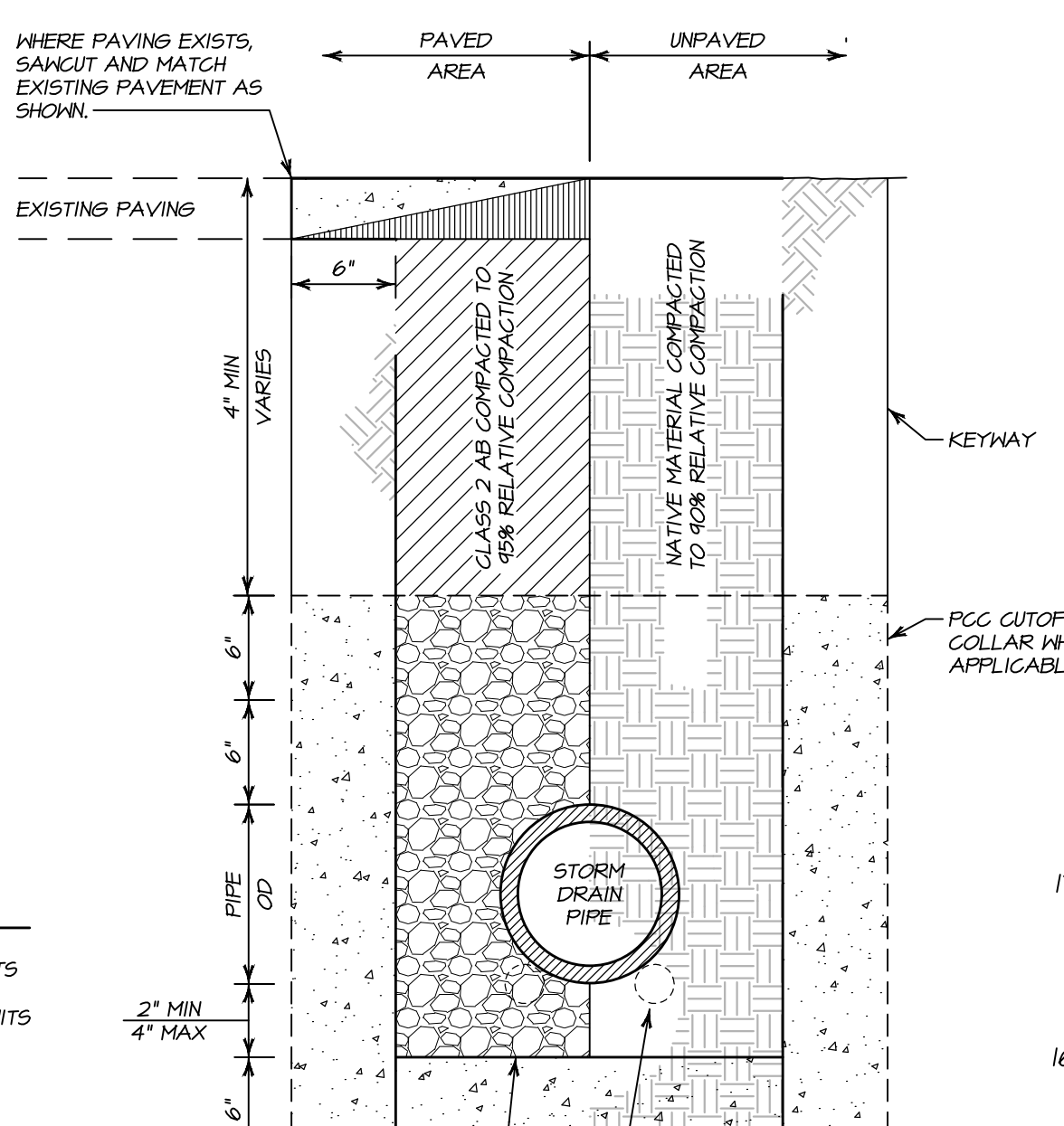


UTILITY PLAN
SCALE: 1" = 20'

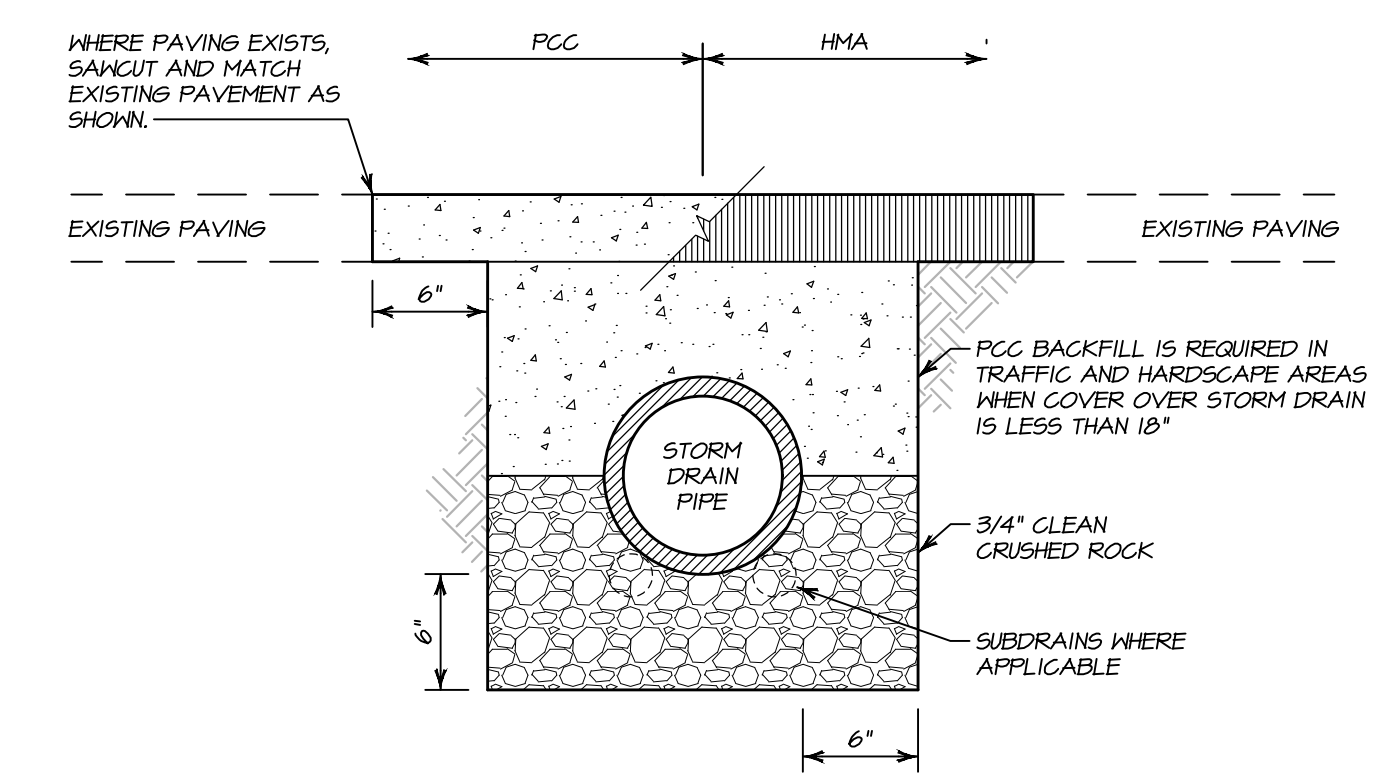


NOTE:
MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN PG&E UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS THREE (3) FEET WITH A MINIMUM ONE (1) FOOT OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A THREE (3) FEET HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF ONE FOOT OR LESS ARE NOT PERMISSIBLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM THREE (3) FEET SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:

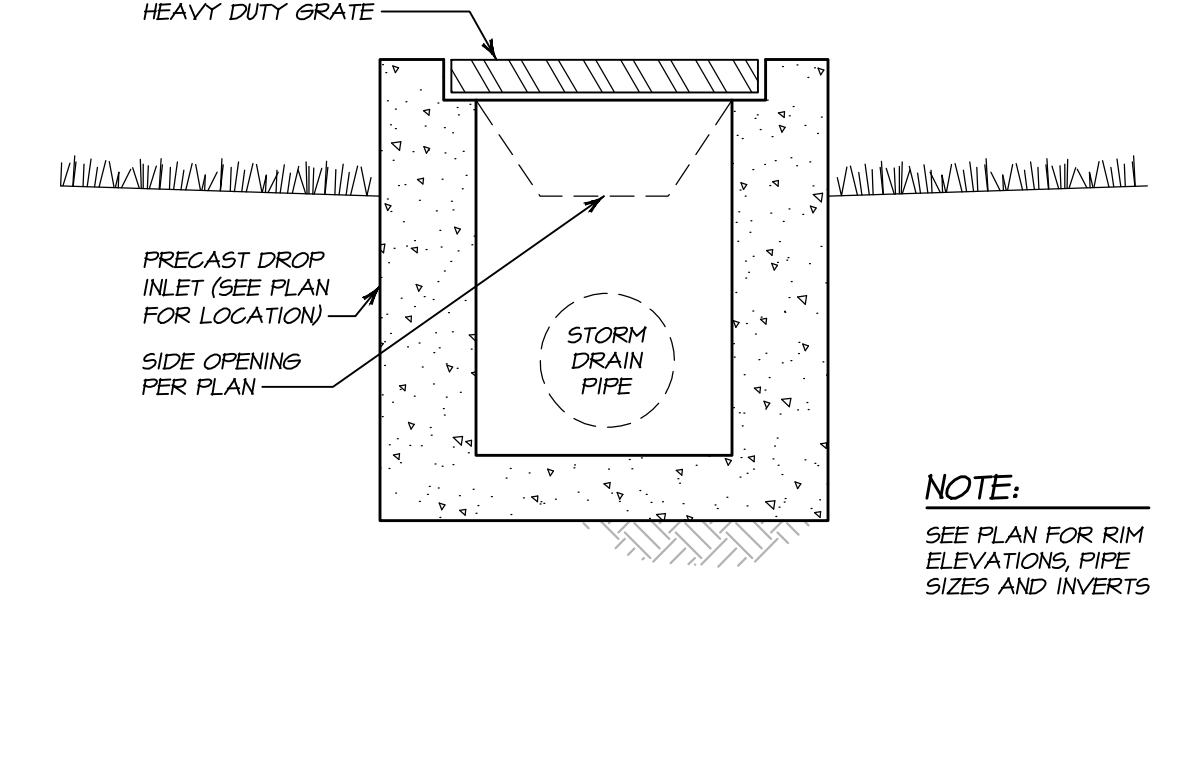
- BE MADE IN WRITINGS AND SUBMITTED TO THE COMPANY DURING THE PLANNING AND DESIGN PHASE OF PROJECT
- CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER
- INCLUDE A PROPOSED DESIGN
- AND, INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN EVENT ONE (1) FOOT OF UNDISTURBED EARTH CANNOT BE MAINTAINED.



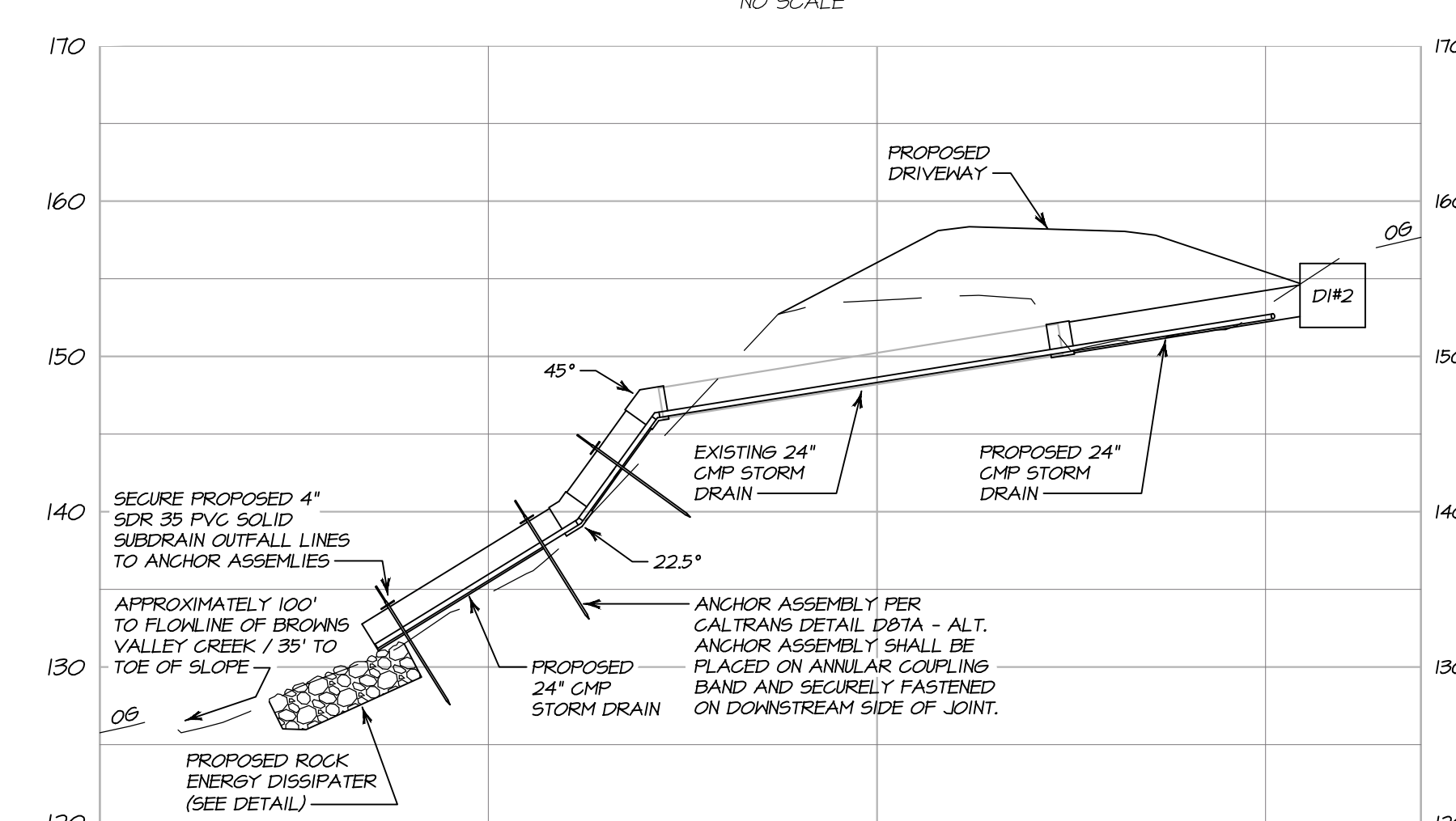
STORM DRAIN TRENCH DETAIL
NO SCALE



SHALLOW BURY STORM DRAIN TRENCH DETAIL
NO SCALE



DRAIN INLET WITH SIDE OPENING DETAIL
NO SCALE



STORM DRAIN EXTENSION PROFILE
SCALE: 1" = 10'



PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT R.C.E. 45102

- UTILITY NOTES:**
1. ALL STORM DRAIN PIPE SHALL BE ADS N12 PVC INSTALLED AT A MINIMUM SLOPE OF TEN PERCENT UNLESS OTHERWISE SPECIFIED.
 2. CONTRACTOR SHALL COORDINATE INSTALLATION OF SUBDRAINS WITH THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION OF UTILITIES.
 3. CONTRACTOR SHALL FIELD VERIFY STORM DRAIN FLOWLINE, INVERT AND RIM ELEVATIONS PRIOR TO ORDERING STORM DRAIN STRUCTURES.

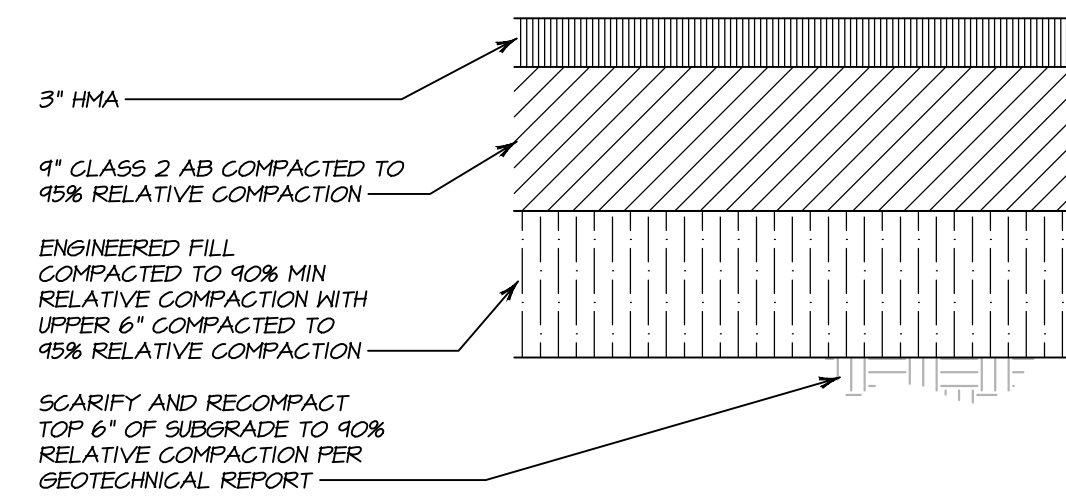
NO.	DATE	DESCRIPTION	BY
02-26-18		STORM DRAIN REVISION	KP

BARTELT ENGINEERING
CIVIL ENGINEERING - LAND PLANNING
1303 Jefferson Street, 200 B, Napa, CA 94959
www.barteltengineering.com
Telephone: 707-258-1301

CARDEY RESIDENCE UTILITY PLAN

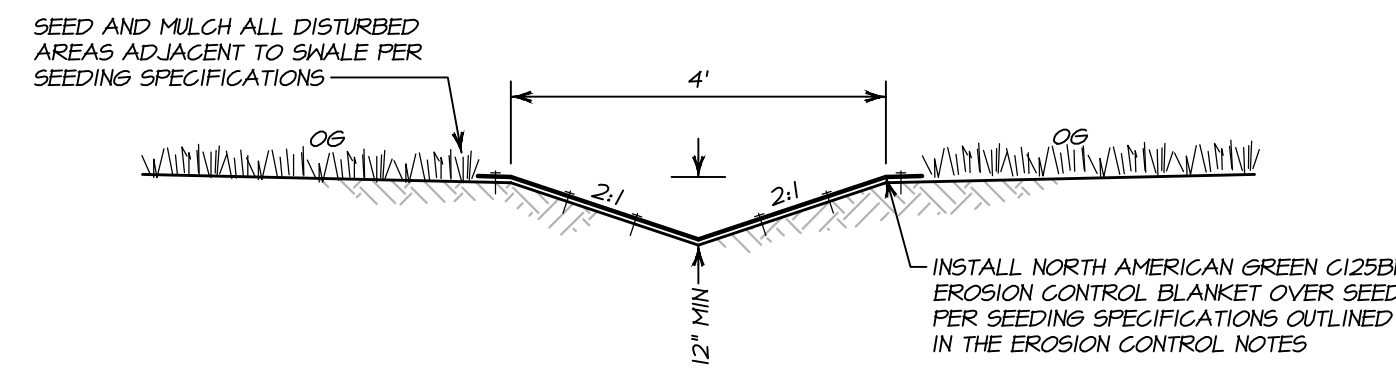
NAPA COUNTY CALIFORNIA

DATE: NOVEMBER 2017
JOB NO: 17-04
SHEET NO: **C8** OF 11



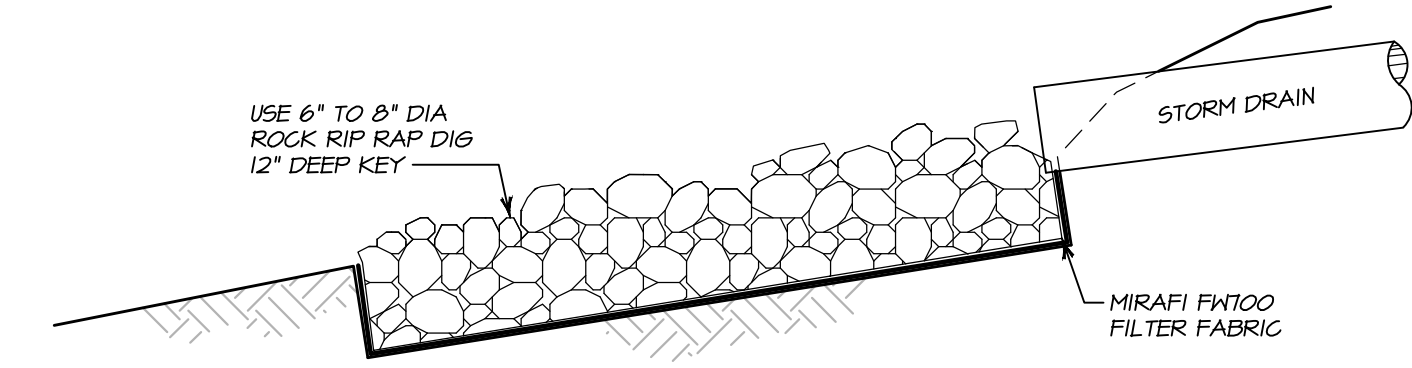
HMA PAVING SECTION

NO SCALE



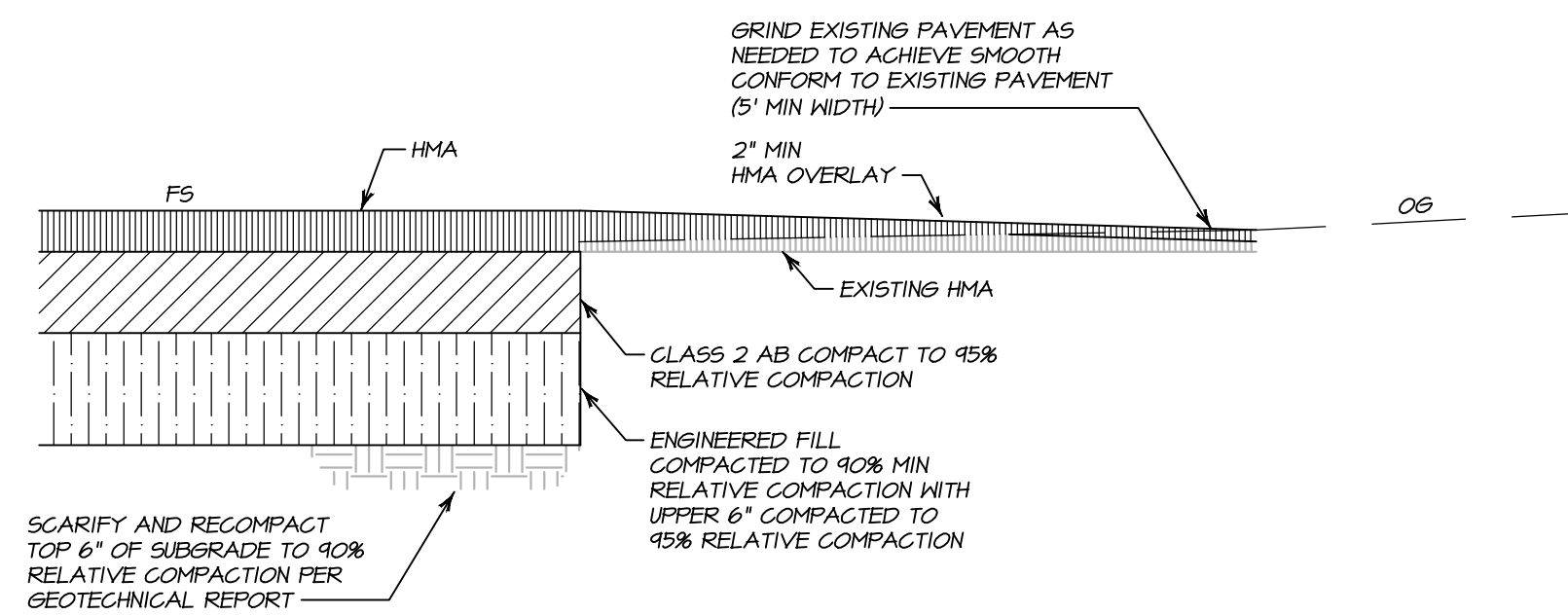
GRASS-LINED SWALE DETAIL

NO SCALE



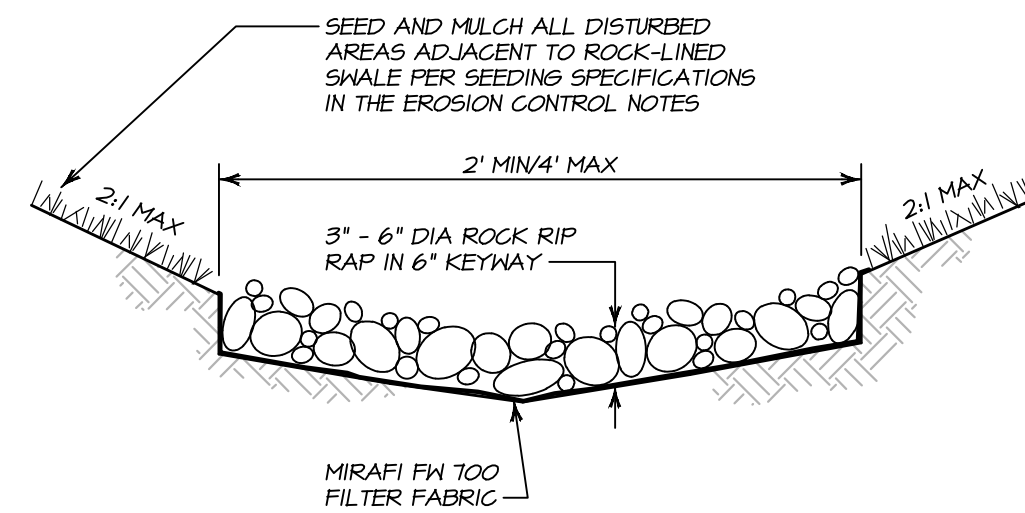
ROCK ENERGY DISSIPATER DETAIL

NO SCALE



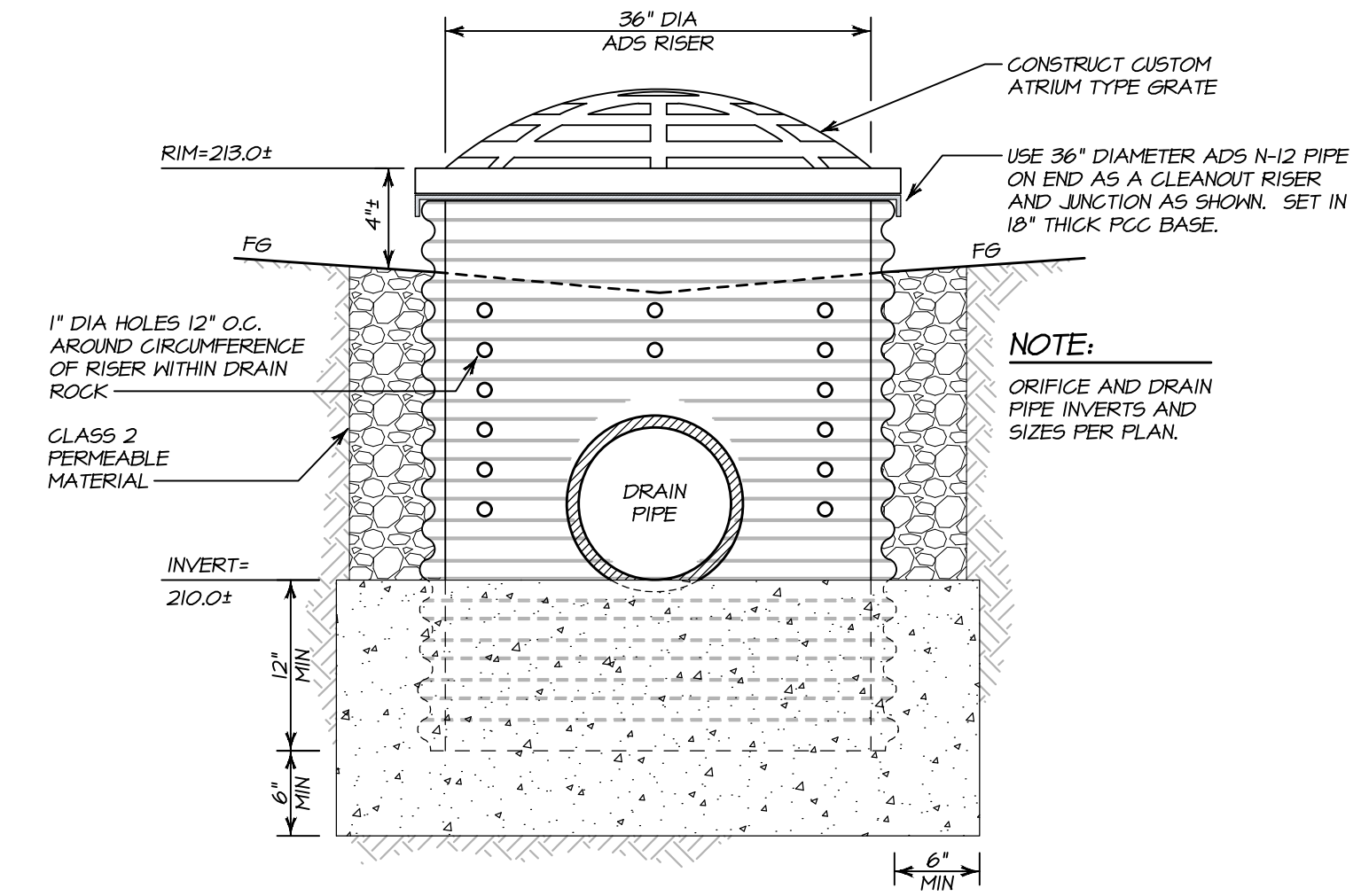
HMA GRIND & OVERLAY DETAIL

NO SCALE



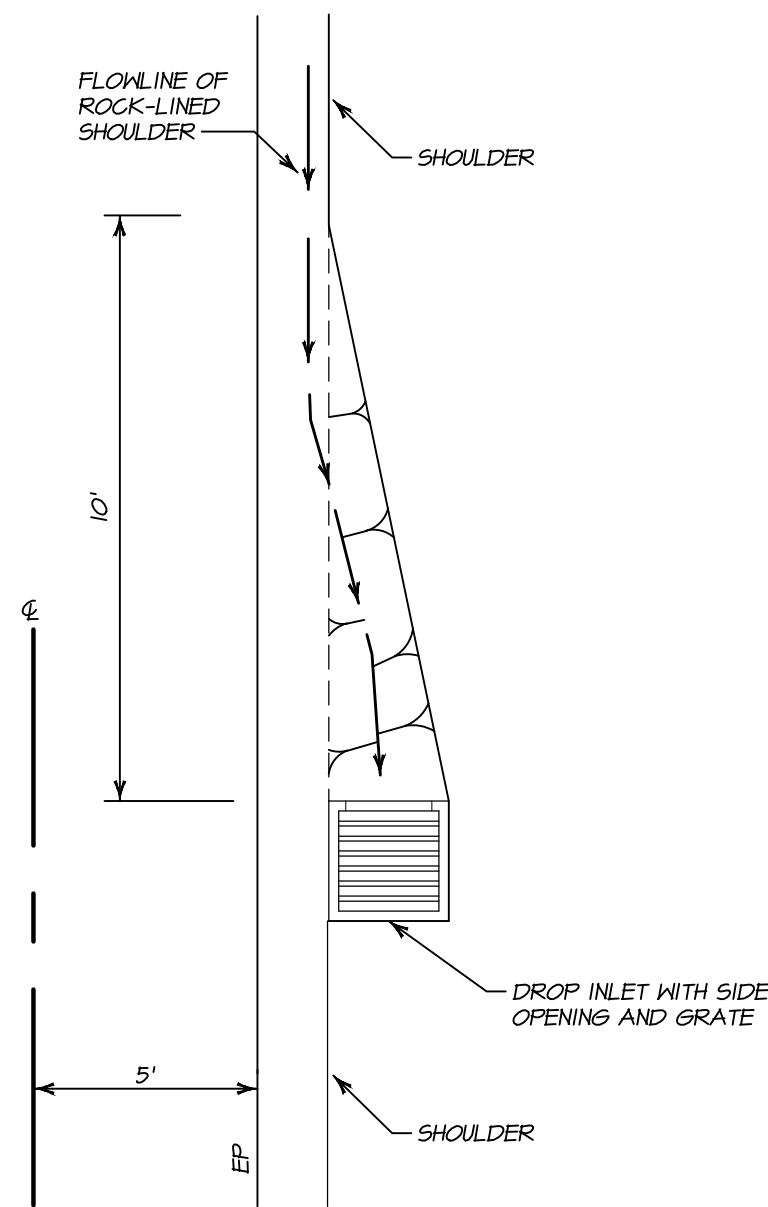
ROCK-LINED SWALE DETAIL

NO SCALE



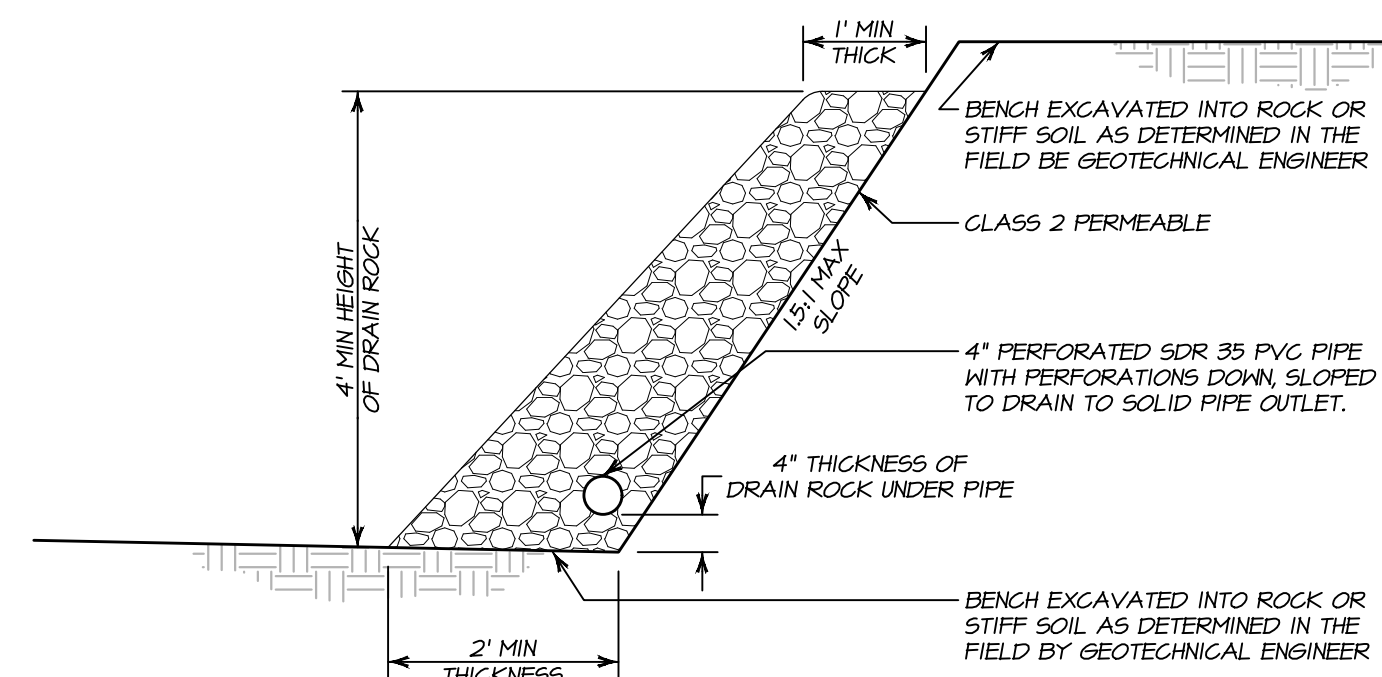
SEDIMENT BASIN DRAIN INLET DETAIL

NO SCALE



DROP INLET WITH SIDE OPENING DETAIL

NO SCALE



KEYWAY SUBDRAIN DETAIL

NO SCALE

NO.	DATE	DESCRIPTION	BY
02-26-10		NO CHANGE TO THIS SHEET	KP



PREPARED UNDER THE DIRECTION OF

PAUL N. BARTELT R.C.E. 45102

OWNERSHIP OF DOCUMENTS
 THIS DOCUMENT IS THE PROPERTY OF BARTELT ENGINEERING AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED. THE CLIENT OF BARTELT ENGINEERING AND ANY OTHER PARTY USING THIS DOCUMENT SHALL BE RESPONSIBLE TO CONTRACTOR AND ARCHITECT FOR THE LATEST INFORMATION RELATIVE TO THE PROJECT.
 © COPYRIGHT 2010. ALL RIGHTS RESERVED.

DES: PNB / RP
 DRAWN: KP
 CHECK: PNB

BARTELT ENGINEERING
 CIVIL ENGINEERING - LAND PLANNING
 1303 Jefferson Street, 200 B, Napa, CA 94559
 www.barteltengineering.com
 Telephone: 707-258-1301

CALIFORNIA

CARDEY RESIDENCE
 DETAIL SHEET

NAPA COUNTY

DATE: NOVEMBER 2017

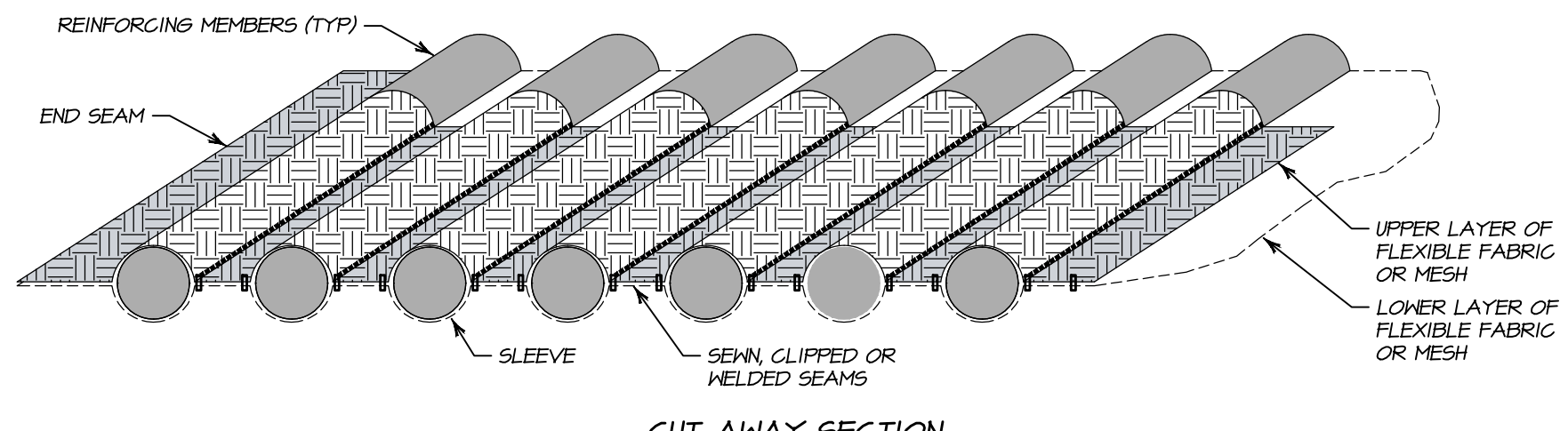
JOB NO: 17-04

SHEET NO:

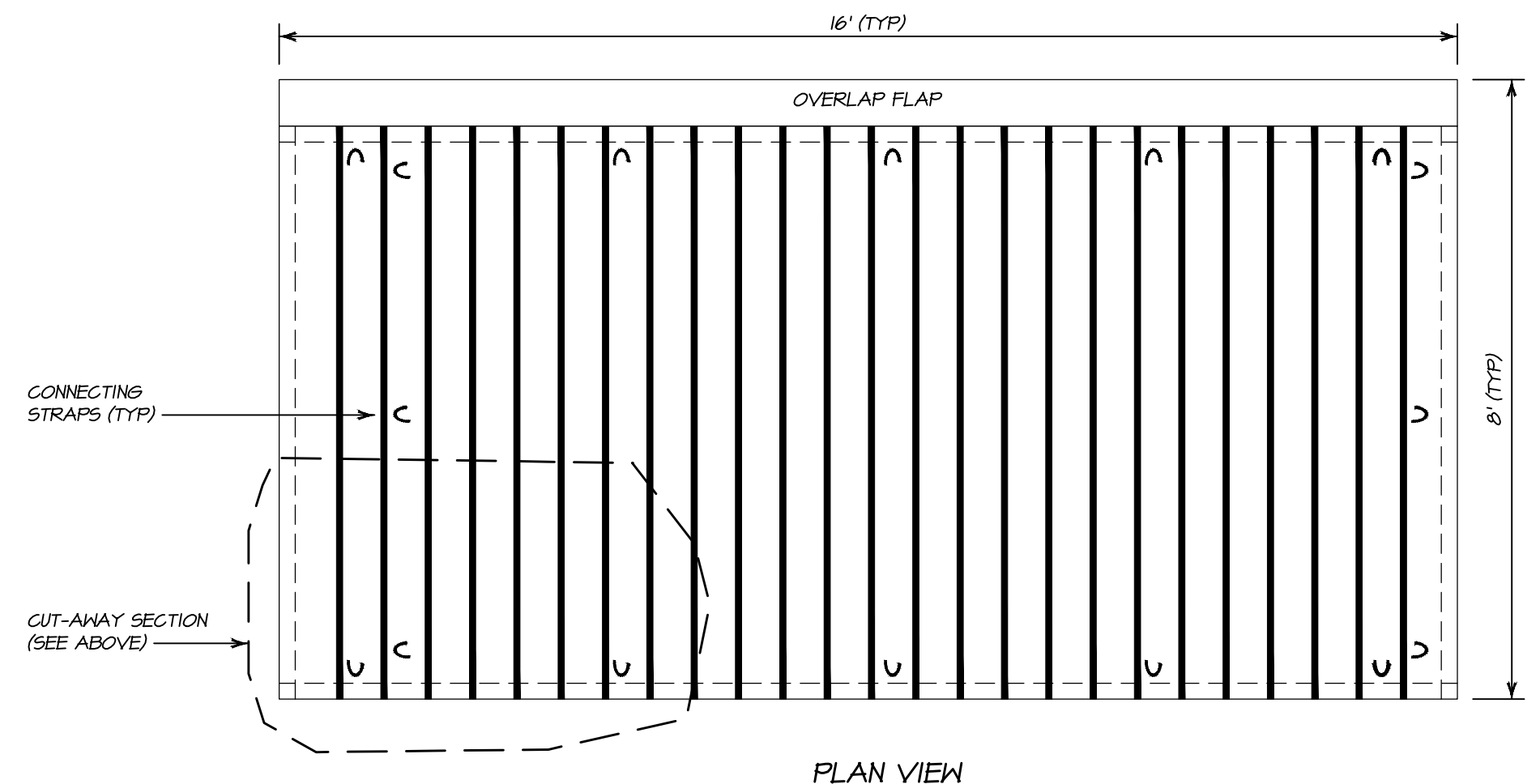
C9

OF 11

3/12/2018 - 9:40 PM I:\G:\P\5\LAND PROJECTS\17-04-IMP\DWG_C1-DETAILS GRAD_ARCH FILL BLEED D (8600 X 2400 INCHES).JPG - PLOTTED @ BARTELT ENGINEERING 10/17/2018 10:30



NOTE:
ENDS ARE SEWN OR CLIPPED SHUT TO CONFINE REINFORCING MEMBERS (NOT SHOWN)

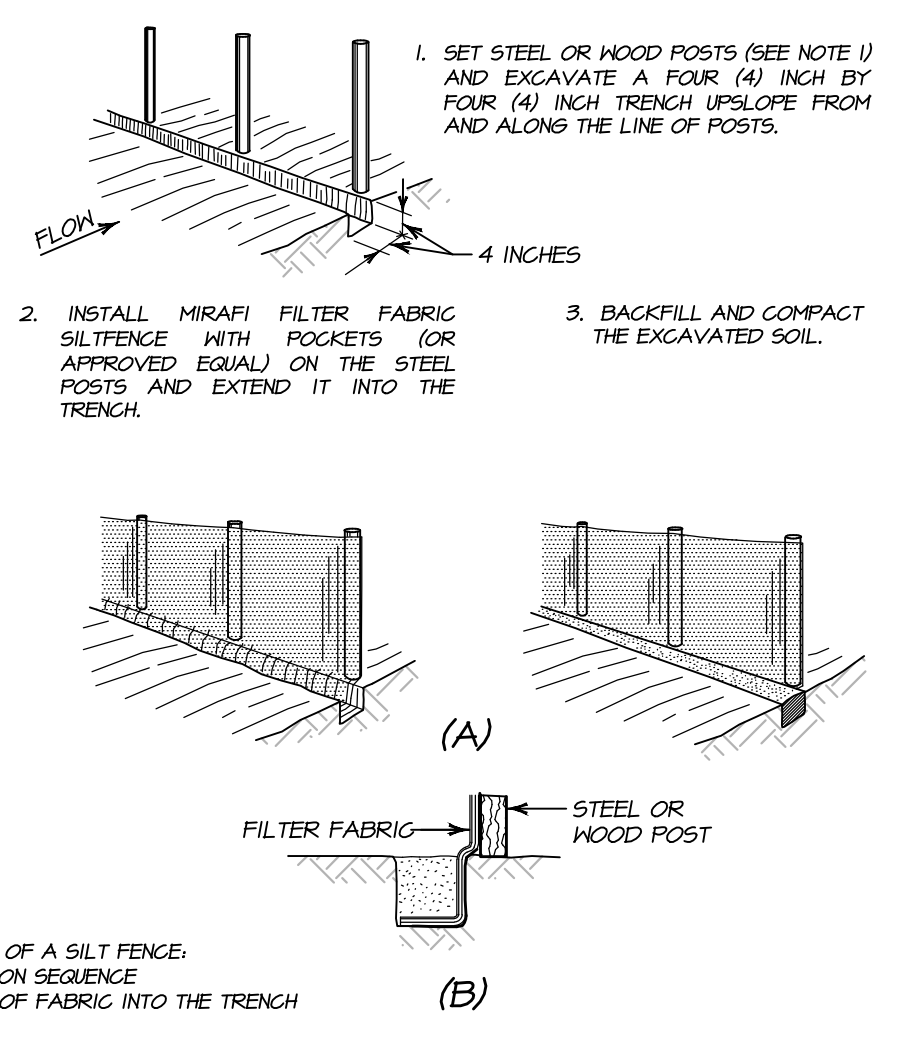


NOTE:
AGES MUD MAT
www.brockwhite.com

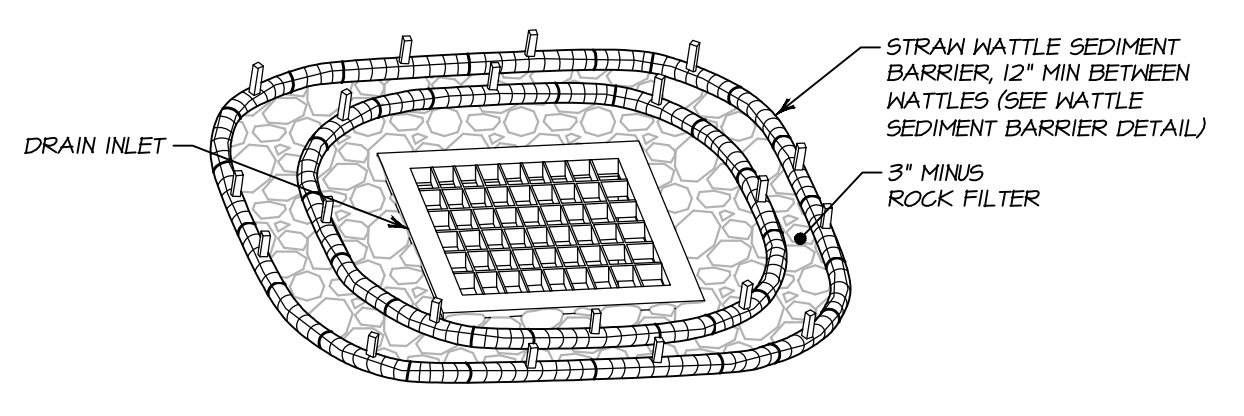
AGES MUD MAT TEMPORARY CONSTRUCTION ENTRANCE/EXIT DETAIL
NO SCALE

INSTALLATION OF SILT FENCE SEDIMENT BARRIER

- LAY OUT A SUITABLE FENCE LINE AND SET POSTS ALONG IT. ON SLOPES, ALIGN THE FENCE ALONG THE CONTOUR AS CLOSELY AS POSSIBLE. IN SMALL SLOPES, CURVE THE FENCE LINE UPSTREAM AT THE ENDS TO DIRECT THE FLOW TOWARD THE MIDDLE OF THE FENCE.
- SPACE POSTS ON SIX (6) FOOT CENTERS AND DRIVE THEM A MINIMUM OF 12 INCHES INTO THE GROUND. POSTS FOR SILT FENCES CAN BE EITHER 1-1/2 INCHES MINIMUM DIAMETER HARD WOOD OR 133 POUNDS PER FOOT STEEL WITH A MINIMUM LENGTH OF FIVE (5) FEET. STEEL POSTS MUST HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
- FASTEN THE FILTER FABRIC TO THE UPHILL SIDE OF THE FENCE POSTS, AND EXTEND TO SIX (6) TO EIGHT (8) INCHES INTO THE TRENCH. THE HEIGHT OF THE FENCE SHOULD NOT EXCEED 36 INCHES. DO NOT STAPLE FABRIC ONTO TREES. WHEN JOINTS ARE NECESSARY, SPLICE THE FILTER CLOTH AT A SUPPORT POST, WITH A MINIMUM SIX (6) INCHES OVERLAP, AND SECURELY FASTEN BOTH ENDS TO THE POST.
- BACKFILL THE TRENCH OVER THE TOE OF THE FABRIC AND COMPACT THE SOIL.
- PREFABRICATED SILT FENCE WITH POSTS MAY BE USED AS AN ALTERNATE TO SETTING STEEL OR WOOD POSTS.

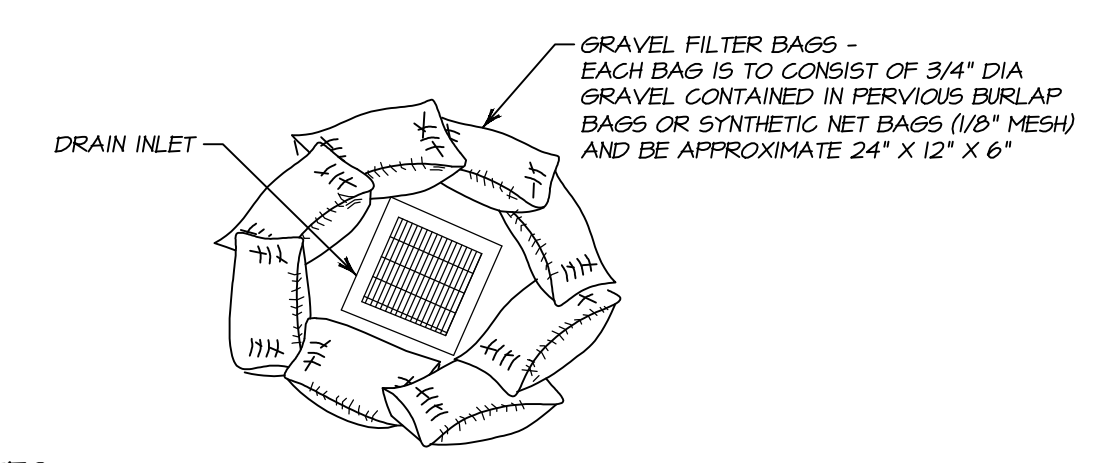


SILT FENCE SEDIMENT BARRIER DETAIL
NO SCALE



- NOTES:**
- THIS DETAIL APPLIES TO DRAIN INLETS LOCATED IN NON-PAVED AREAS ONLY.
 - FLANGE AND OVERLAP ENDS OF STRAW WATTLE SEDIMENT BARRIER SO THAT NO SPACE EXISTS BETWEEN THE ENDS OF THE SEDIMENT BARRIER.
 - REMOVE SEDIMENT AND DEBRIS AS IT ACCUMULATES TO ALLOW DRAINAGE INTO THE STORM DRAIN SYSTEM.
 - REMOVE FILTER AFTER CONSTRUCTION.

STRAW WATTLE DRAIN INLET FILTER DETAIL
NO SCALE

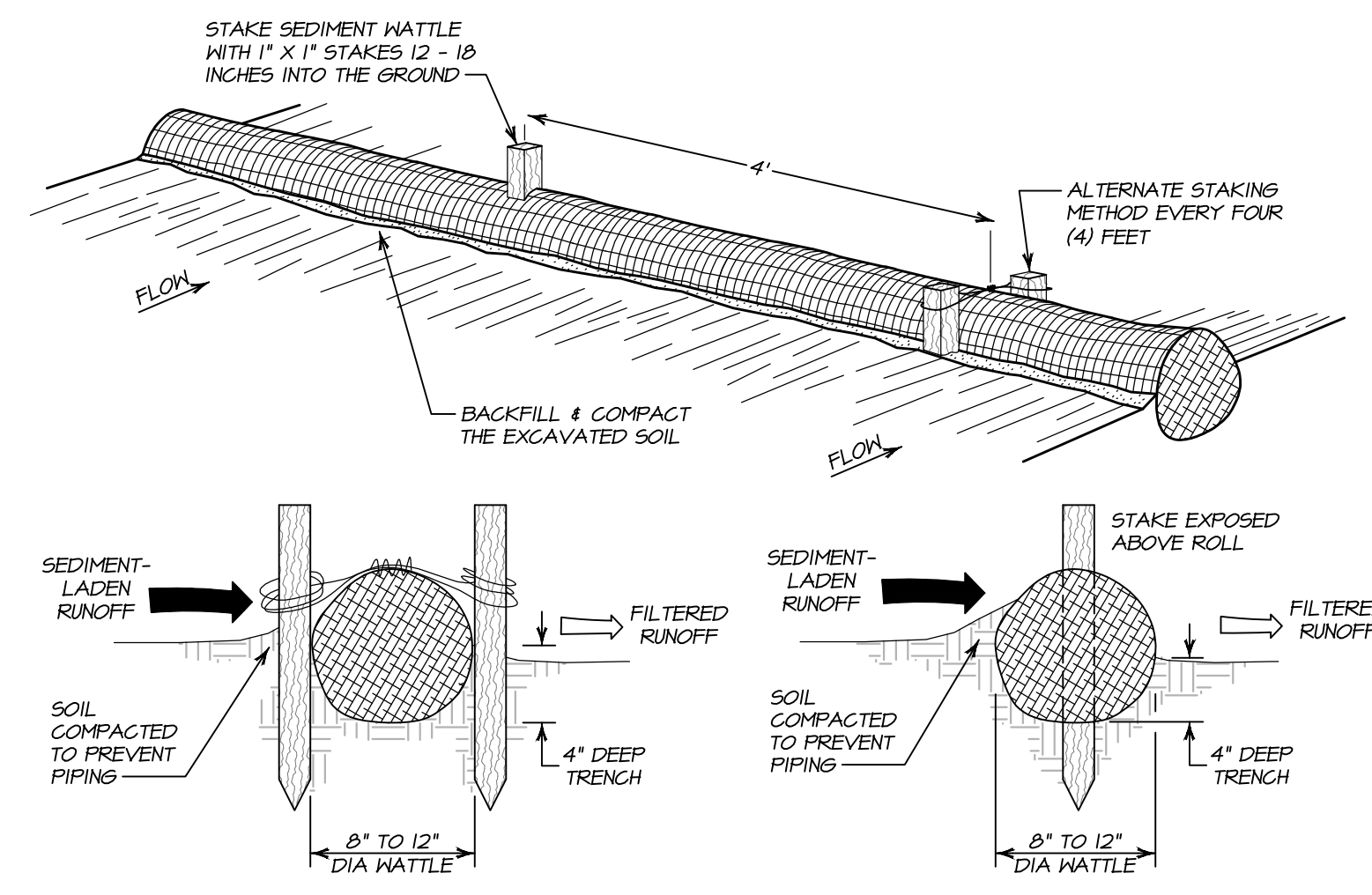


- NOTES:**
- THIS DETAIL APPLIES TO DRAIN INLETS LOCATED IN PAVED AREAS ONLY.
 - PLACE AND OVERLAP ENDS OF GRAVEL BAG SEDIMENT BARRIER SO THAT NO SPACE EXISTS BETWEEN THE ENDS OF EACH INDIVIDUAL SEDIMENT BARRIER.
 - REMOVE SEDIMENT AND DEBRIS AS IT ACCUMULATES TO ALLOW DRAINAGE INTO THE STORM DRAIN SYSTEM.
 - REMOVE FILTER AFTER CONSTRUCTION.

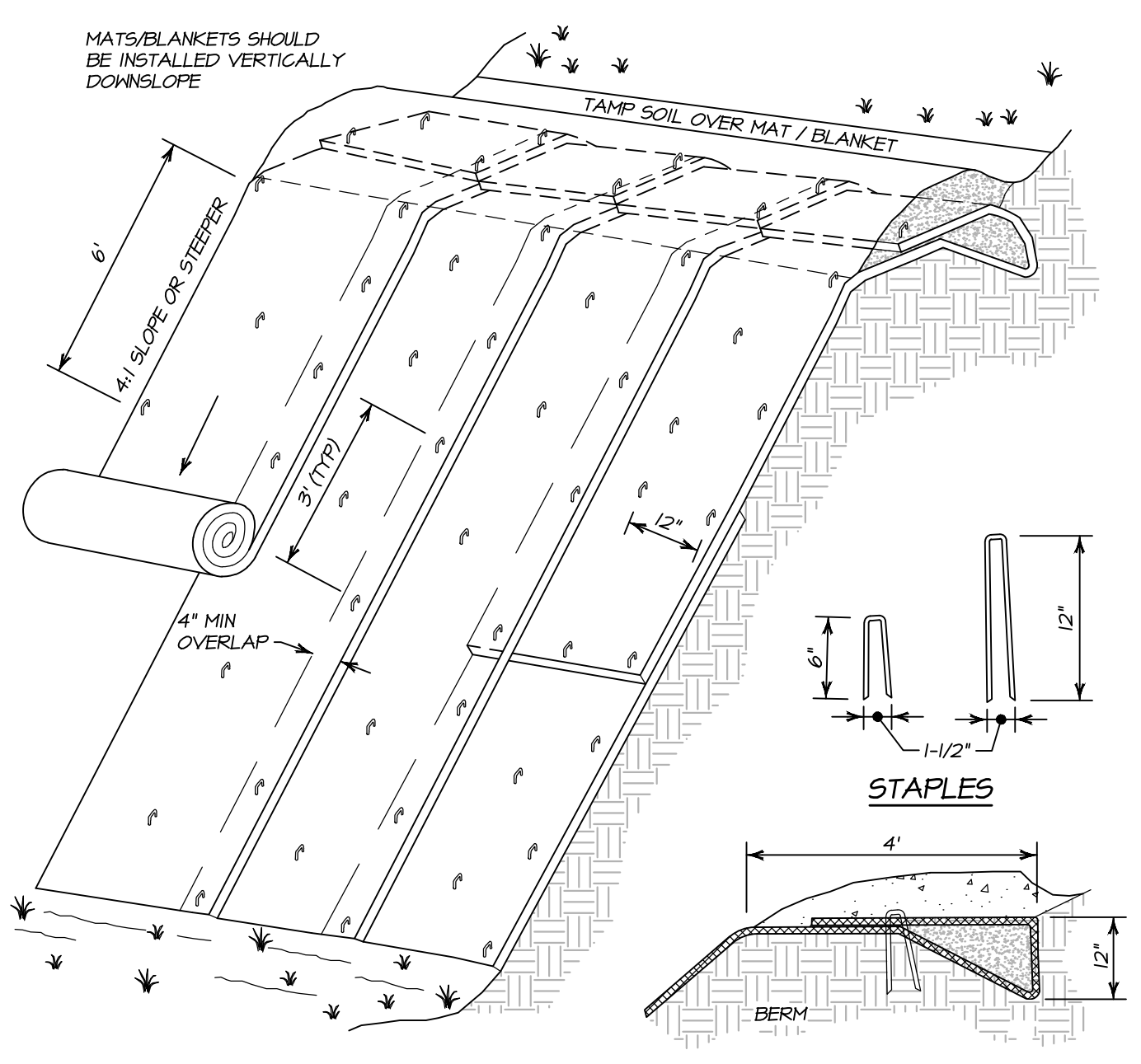
GRAVEL BAG SEDIMENT FILTER INSTALLATION DETAIL
NO SCALE

INSTALLATION OF WATTLE SEDIMENT BARRIER

- PREPARE THE SLOPE BEFORE THE WATTLE PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
- DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
- IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR. START BUILDING TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
- CONSTRUCT TRENCHES AT CONTOUR INTERVALS DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
- USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY ONE (1) OR TWO (2) INCHES OF STAKE EXPOSED ABOVE ROLL.
- INSTALL STAKES AT LEAST EVERY FOUR (4) FEET APART THROUGH THE WATTLE AS SHOWN BELOW.
- STRAW WATTLE SHALL BE 100% BIODEGRADABLE.
- WATTLES AND STAKES SHALL BE REMOVED AND DISPOSED OF PROPERLY OFFSITE ONCE COVER CROP IS ESTABLISHED AND NOTICE IS RECEIVED FROM ENGINEER.

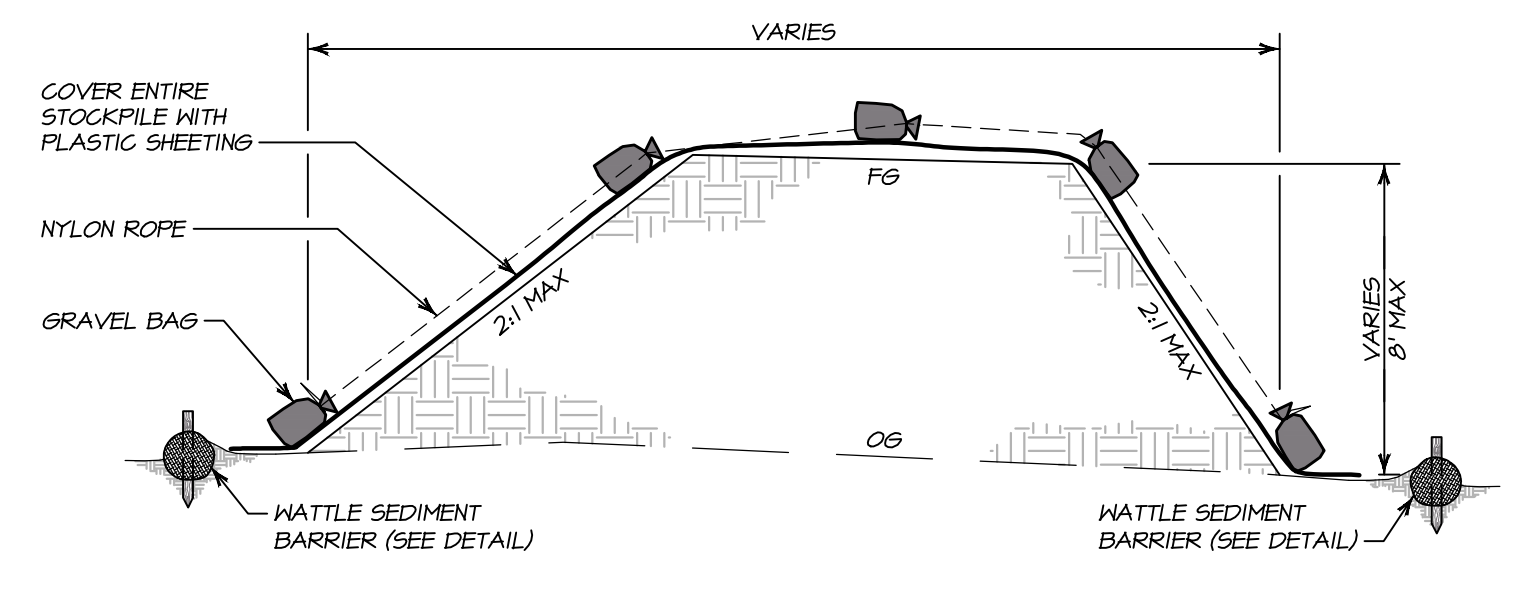


WATTLE SEDIMENT BARRIER DETAIL
NO SCALE



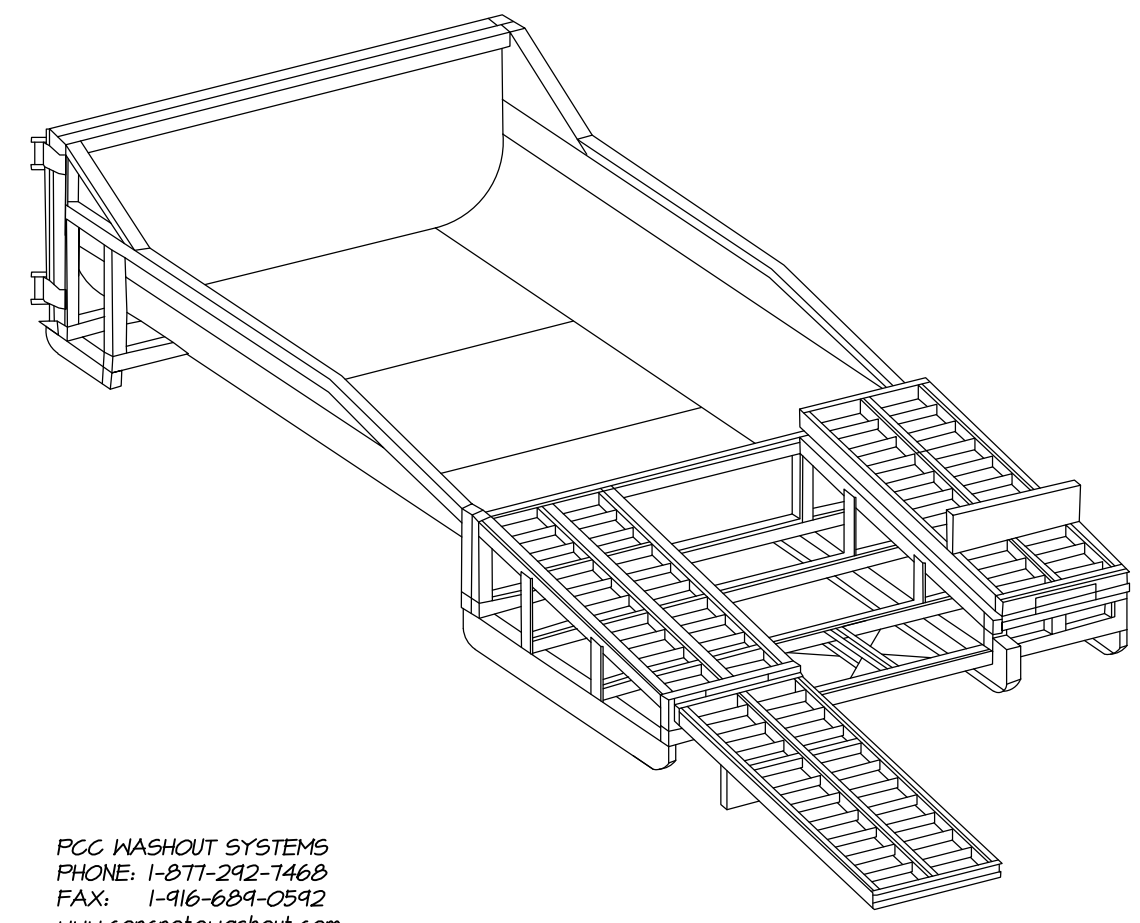
- NOTES:**
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - APPLY PERMANENT SEEDING BEFORE FLAGGING BLANKETS.
 - LAY NORTH AMERICAN GREEN BIONET CLOSER BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

SLOPE STABILIZATION & EROSION CONTROL BLANKET INSTALLATION DETAIL
NO SCALE



- NOTES:**
- IF STOCKPILE IS TOPSOIL, IT MAY BE PROTECTED BY APPLYING STRAW MULCH AND EROSION CONTROL SEED MIX IN PLACE OF PLASTIC SHEETING. IF GRASSES FAIL TO ESTABLISH EFFECTIVE COVER, PLASTIC SHEETING WILL BE REQUIRED.
 - PLASTIC SHEETING SHALL BE SECURELY HELD IN PLACE WITH A LINE OF GRAVEL BAGS SLUNG OVER THE TOP OF THE STOCK PILE WITH ROPE.

TYPICAL STOCKPILE CROSS SECTION
NO SCALE



PORTABLE PCC WASHOUT CONTAINER DETAIL
NO SCALE



PREPARED UNDER THE DIRECTION OF
PAUL N. BARTELT R.C.E. 45102

BARTELT ENGINEERING - LAND PLANNING
 1303 Jefferson Street, 200 B, Napa, CA 94559
 www.barteltengineering.com
 Telephone: 707-258-1301

OWNERSHIP OF DOCUMENTS
 THIS DRAWING IS THE PROPERTY OF BARTELT ENGINEERING AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF BARTELT ENGINEERING. ALL CHANGES TO THIS DRAWING SHALL BE THE RESPONSIBILITY OF THE CLIENT. THE CLIENT OF BARTELT ENGINEERING AND MAY BE DISTRIBUTED TO CONTRACTORS AND SOLE RESPONSIBILITY TO VERIFY THAT THIS DRAWING REPRESENTS THE LATEST INFORMATION RELATIVE TO THE PROJECT.
 © COPYRIGHT 2016. ALL RIGHTS RESERVED.

DES: PNB / RP
 DRAWN: KP
 CHECK: PNB

DATE: NOVEMBER 2017
 JOB NO: 17-04
 SHEET NO: C11 OF 11

CARDEY RESIDENCE
 DETAIL SHEET
 NAPA COUNTY
 CALIFORNIA

3/12/2018 - 3:54 PM, 640MP, 5/LAND PROJECT/530305-2017/104/1001 IMP ROAD/ACAD/P/ANST/104-IMP.DWG, C:\DETAILS\REP_ARCH\FULL BLEED D (26.00 X 24.00 INCHES), 1" = 1' PLOTTED @ BARTELT ENGINEERING, 707-258-1301

NO.	DATE	DESCRIPTION	BY
02-26-18		NO CHANGE TO THIS SHEET	KP