Type	Docs	Plans
B		X

6RD05-0026

Building Permit Number

12528

Street Number

Valley Ford

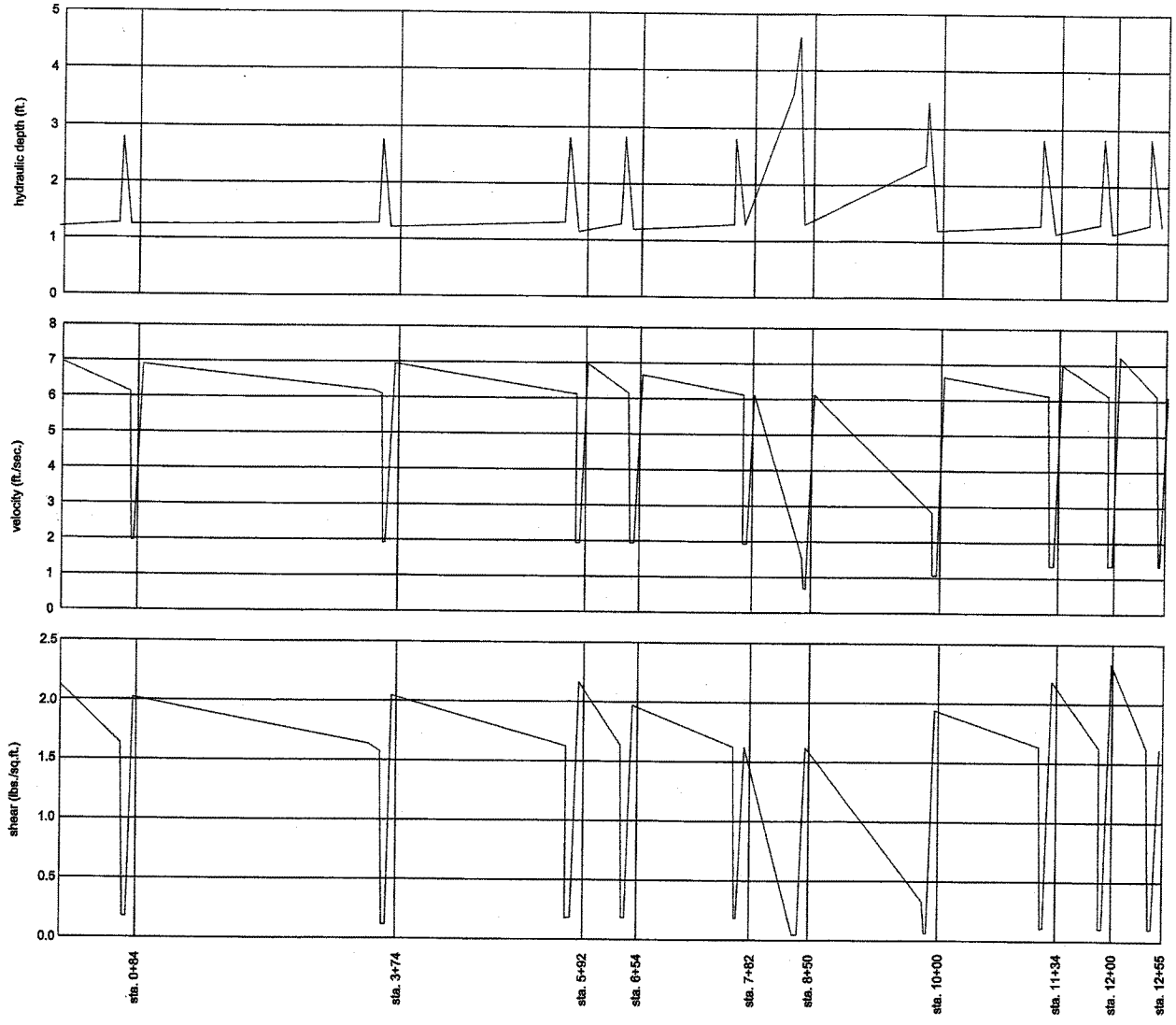
Street Name

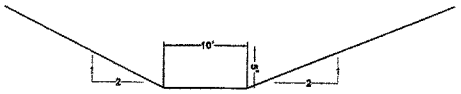
TW1

Community Code

027-020-006

APN





typical channel dimensions
mannings "n" .03

1800' Gully?

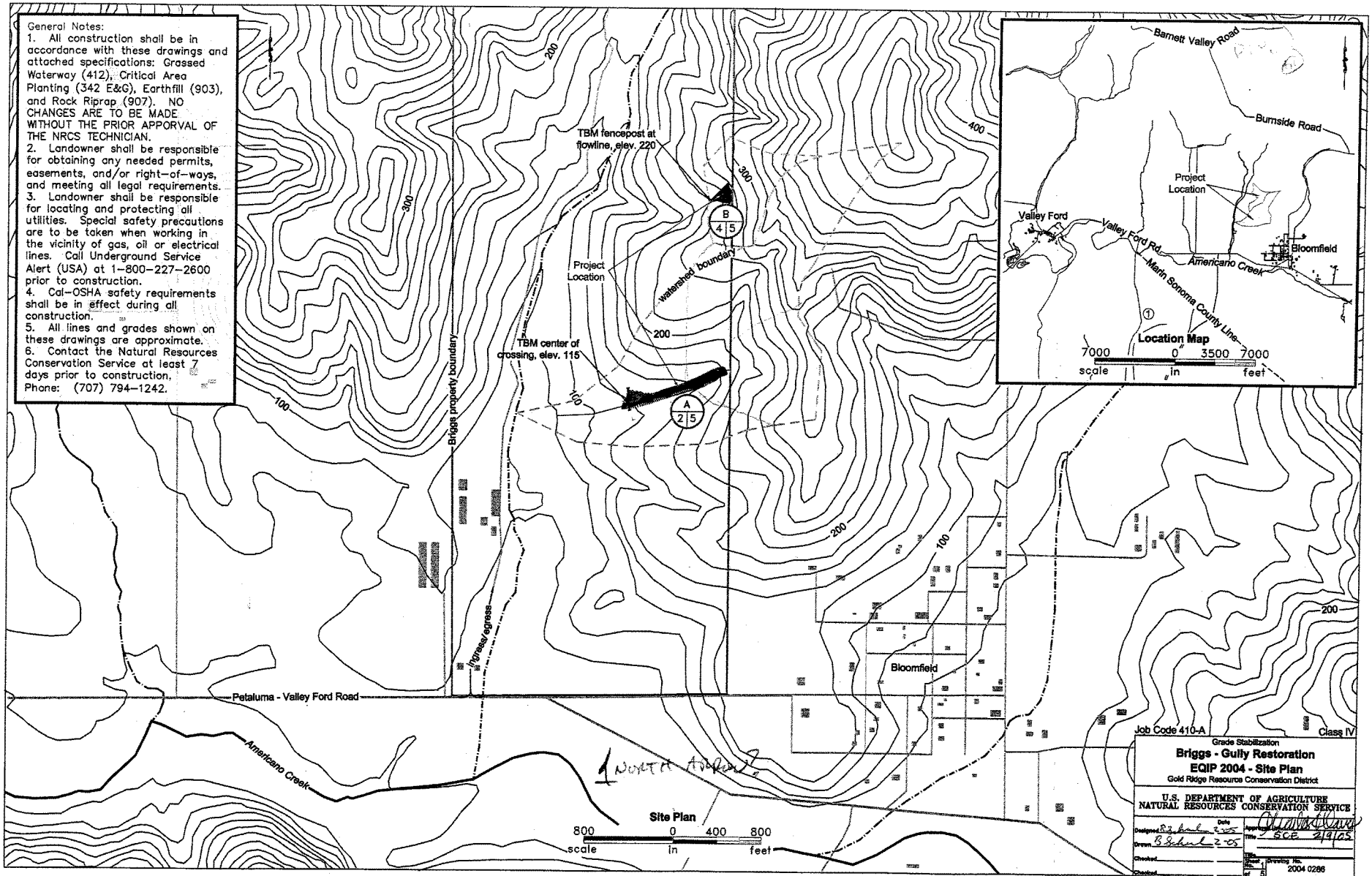
Grade Stabilization
Briggs - Gully Restoration
HEC-RAS Output - 100 Year Storm - 75 cfs
Gold Ridge Resource Conservation District

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed	Date	Approved by	
Drawn		Title	
Checked		Title Sheet No. n/a of n/a	Drawing No. 2004 0286
Checked			

- IN LARGE COUNTY SIZE AND NOTES SEE ATTACHED. - PLEASE + [illegible] FULL SIZE SHEETS, IF POSSIBLE.

General Notes:
1. All construction shall be in accordance with these drawings and attached specifications: Grassed Waterway (412), Critical Area Planting (342 E&G), Earthfill (903), and Rock Riprap (907). NO CHANGES ARE TO BE MADE WITHOUT THE PRIOR APPORVAL OF THE NRCS TECHNICIAN.
2. Landowner shall be responsible for obtaining any needed permits, easements, and/or right-of-ways, and meeting all legal requirements.
3. Landowner shall be responsible for locating and protecting all utilities. Special safety precautions are to be taken when working in the vicinity of gas, oil or electrical lines. Call Underground Service Alert (USA) at 1-800-227-2600 prior to construction.
4. Cal-OSHA safety requirements shall be in effect during all construction.
5. All lines and grades shown on these drawings are approximate.
6. Contact the Natural Resources Conservation Service at least 7 days prior to construction. Phone: (707) 794-1242.



Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Site Plan
Gold Ridge Resource Conservation District

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed RJ Schuh 2-05
Drawn RJ Schuh 2-05
Checked
Checked
Approved SCE 2/9/05
Title
Sheet No. 1 of 5
Drawing No. 2004 0286

- PLEASE CLEARLY LABEL GULLIES TO CORRESPOND BETWEEN PLANS & CALCS

PROJECT ADDRESS?

General Notes:

1. All construction shall be in accordance with these drawings and attached specifications: Grassed Waterway (412), Critical Area Planting (342 E&G), Earthfill (903), and Rock Riprap (907). NO CHANGES ARE TO BE MADE WITHOUT THE PRIOR APPORVAL OF THE NRCS TECHNICIAN.
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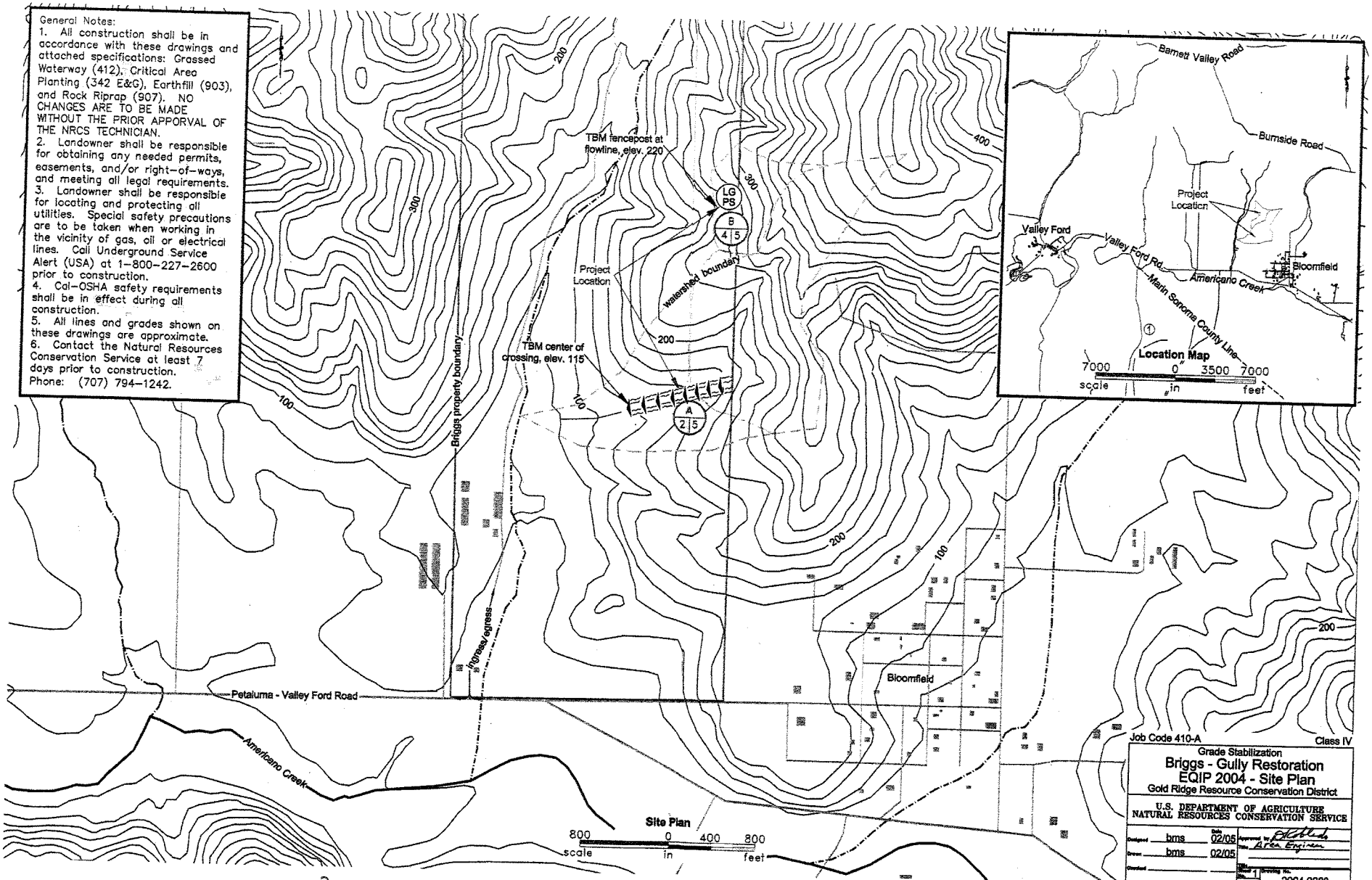


Job Code 410-A Class IV

Grade Stabilization

Briggs - Gully Restoration

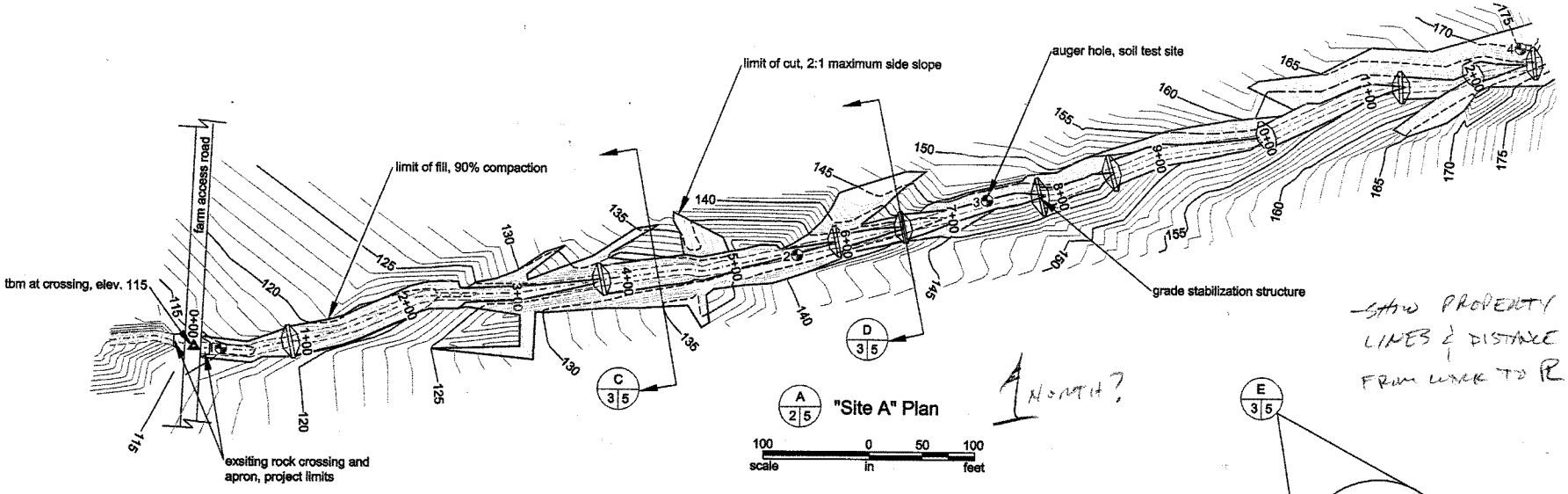
EQIP 2004 - Site Plan

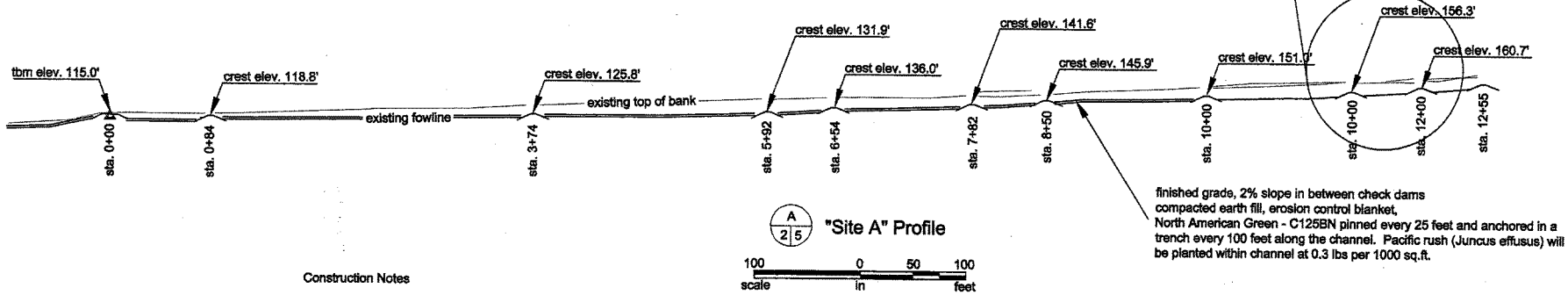
Gold Ridge Resource Conservation District

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed	bms	Date 02/05	Approved by Area Engineer
Drawn	bms	02/05	
Checked			Sheet No. 1 of 5
Checked			Drawing No. 2004 0286

-DUPLICATE SHEET?





Construction Notes

1. At all times, temporary construction excavations shall conform to safety regulations of applicable local, state, and federal agencies. The stability of temporary cut slopes and trenches shall be the responsibility of the contractor. The tops of temporary cut slopes and trenches should be rounded back to 2:1 in weak soil zones.
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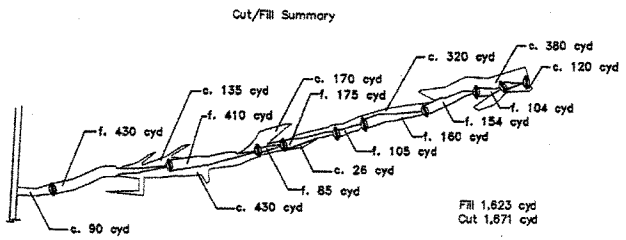
3. For any cut and fill operations as shown on the plans, the following shall apply:
   A. Salvage and stockpile the upper 4" of sod from the work areas and borrow disposal areas. Materials shall be spread on finished cut and fill surfaces and compacted by trackwalking at completion of other work. Borrow limits are within the work area. Maintain minimum 2' offset plus half the heights of cuts or fills from any property line. Remove tree roots, limbs, and other organic matter down to 1" diameter from borrow materials.
   B. Site preparation: Surface soils shall be scarified to a depth of 6" uniformly moisture conditioned to optimum +3% and compacted to 90% maximum dry density per ASTM D1557 prior to placement of fill.
   C. Earthwork fill: Use level lifts not to exceed 8" in thickness. Organic materials > 1" and rocks greater than 6" diameter are not permitted in the fill.
   D. Compaction requirements: 90% ASTM D1557 at optimum moisture content plus 3% for trench backfill, engineered fills.
   E. Maximum side slopes of 2.0H:1.0V for terraces, cut and fill slopes and vee ditches.
   F. Trim all finished slopes to neat uniform appearance prior to installation of erosion control vegetation.
   G. Grading should be completed during dry summer months when risk of runoff erosion and sediment transport is minimal, and when control of soil moisture is feasible.



Job Code 410-A Class IV

Grade Stabilization

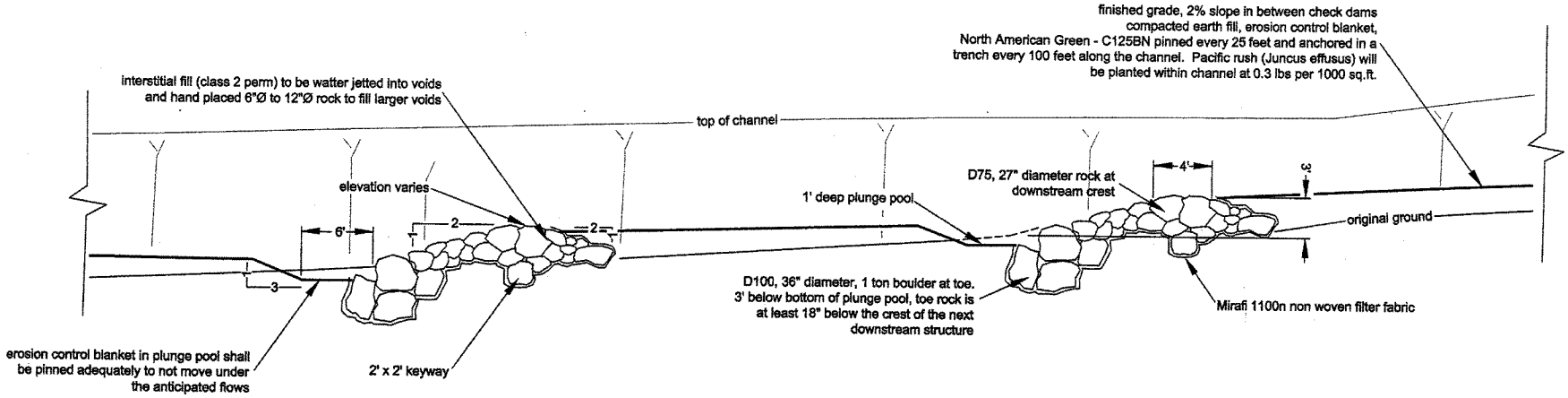
Briggs - Gully Restoration
EQIP 2004 - Plan & Profile "Site A"

Gold Ridge Resource Conservation District

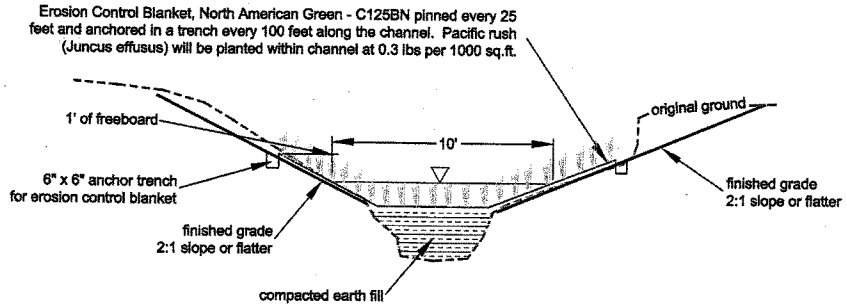
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed	bms	02/05	Approved by	Don Eyrg
Drawn	bms	02/05	Title	
Checked			Sheet No.	2
Checked			of	5

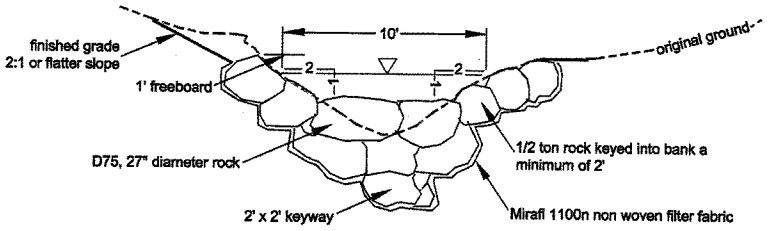
Drawing No. 2004 0286



E 3|5 "Site A" Grade Stabilization
Typical Grade Stabilization Structure Profile



C 3|5 "Site A" Lined Channel
Typical Cross Section



D 3|5 "Site A" Grade Stabilization
Typical Cross Section at Centerline

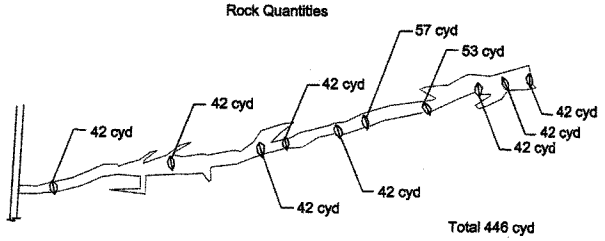
Construction Notes

Rock Riprap Installation. Rock shall be sound, dense, and durable with a bulk specific gravity of not less than 2.5. Rock shall be angular to subangular. Sub rounded or rounded shall not be permitted. The greatest dimension not greater than 2 times the least dimension. The rock shall conform to the grading limits given below:

Size, inches	Percent Passing
36	100
27	75
21	50
15	20
10	10

Geotextile Fabric Installation:
1. The surface on which the geotextile is to be placed shall be graded to the neat lines and grades as shown on the drawings. The surface shall be reasonably smooth and free of loose rock and clods, holes, depressions, projections, muddy conditions and standing or flowing water. The fabric shall be placed and loosely laid over the surface smoothly.
2. The fabric panels shall be overlapped a minimum of 18 inches for vertical laps and 24 inches for horizontal laps. The fabric shall be placed parallel to the direction of flow. It shall be placed so that upstream end or higher panel will be placed under the downstream or lower panel.
3. Riprap shall be placed, not dropped.

Rock Quantities



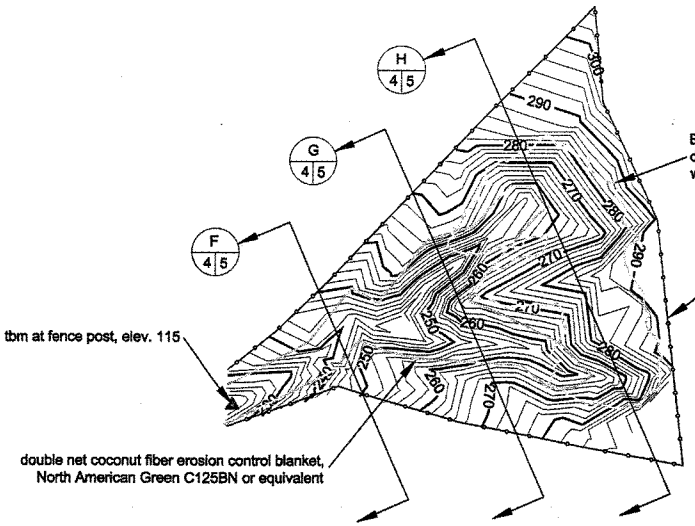
Total 446 cyd

Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Cross Sections and Details "Site A"
Gold Ridge Resource Conservation District

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

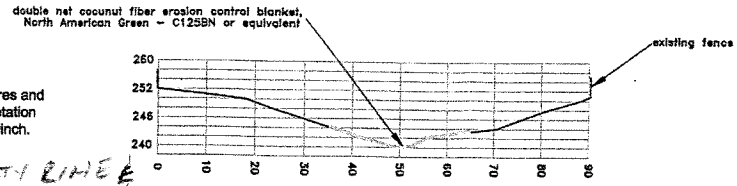
Designed	bms	02/05	Approved by: Title: Area Engr
Drawn	bms	02/05	
Checked			Sheet No. 3 of 5
Checked			Drawing No. 2004 0286



NORTH

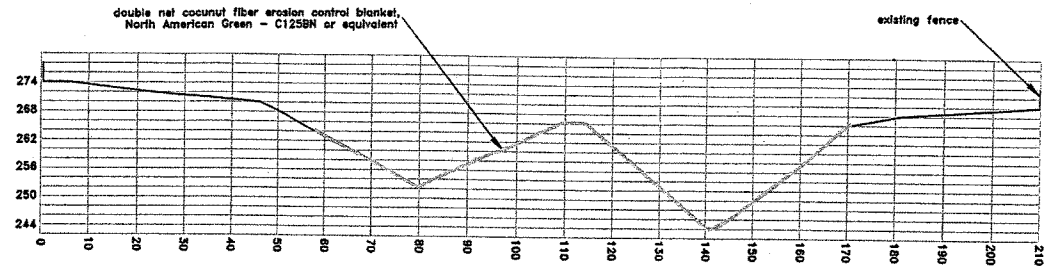
B 4|5 "Site B" Plan

100 0 50 100
scale in feet

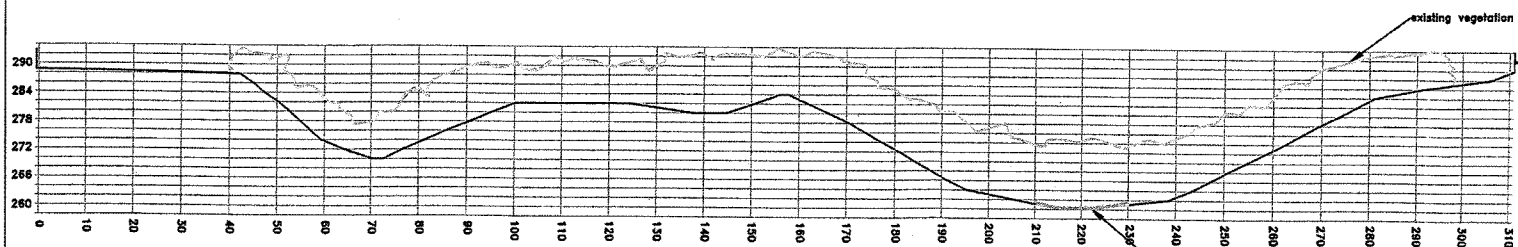


F 4|5 Cross Section scale as shown

- SHOW PROPERTY LINE & DISTANCE FROM WORK TO P.L.
- APPROX. P.L.?
- DISTINGUISH BETWEEN EXISTING & PROPOSED GRADE



G 4|5 Cross Section scale as shown



H 4|5 Cross Section scale as shown

Construction Notes

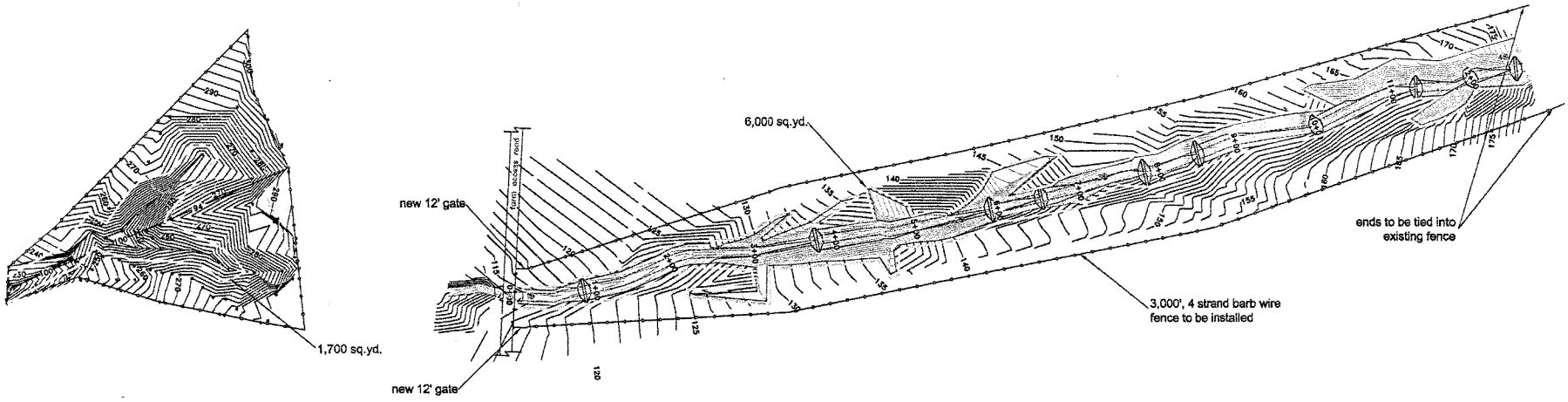
1. Sort and remove existing buried old tires, and other deleterious non-native imported materials located intermittently throughout the work area. Stockpile and remove to approved landfill in accordance with applicable County and State transportation and disposal regulations.
2. Remove tires with minimal disturbance to existing vegetation. Trees to be saved will be marked.
3. Install specified erosion control blanket to disturbed areas per manufacturer's recommendations. Rocks larger than 6 inches in diameter, trash, weeds, and other debris will be removed prior to installation of erosion control blanket.

Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Plan "Site B"
Gold Ridge Resource Conservation District

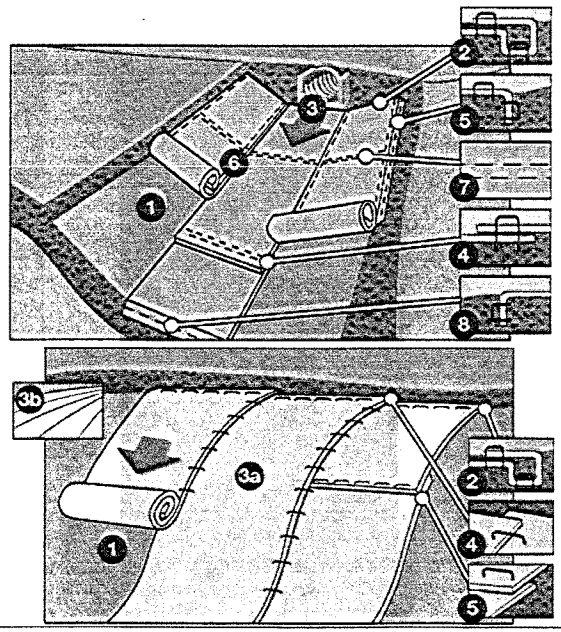
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed	bms	02/05	Approved by:
Drawn	bms	02/05	Title: Area Engr
Checked			Sheet 4 of 5
Checked			Drawing No. 2004 0286



Reseeding - Erosion Control Blanket Installation- Plan

100 0 50 100
scale in feet



North American Green - C125BN - Channel Installation Instructions

1. Prepare soil before installing blankets, including any necessary application of lime, fertilizer, and seed (seed with recommended native grass seed at 60lbs per acre).

2. Begin at the top of the slope by anchoring the blanket in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) ofblanket extended beyond the up-slope portion of the trench. Anchor the blanket with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30cm) portion of blanket back over seed and compacted soil. Secure blanket over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the blanket.

3. Roll center blanket in direction of water flow on bottom of channel. Blankets will unroll with appropriate side against soil surface. All blankets must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using optional Dot System?, staples/stakes should be placed through each of the colored dots corresponding to the appropriate staple pattern.

4. Place blankets end over end (shingle style) with a 4"-6" (10cm-15cm) overlap. Use a double row of staples staggered 4" (10cm) apart and 4" (10cm) on center to secure blankets.

5. Full length edge of blankets at top of side slopes must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.

6. Adjacent blankets must be overlapped approximately 2"-5" (5cm-12.5cm) (depending on blanket type) and stapled.

7. In high flow channel applications, a staple check slot is recommended at 30 to 40 foot (9m-12m) intervals. Use a double row of staples staggered 4" (10cm) apart and 4" (10cm) on center over entire width of channel.

8. The terminal end of the blankets must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.

North American Green - C125BN - Slope Installation Instructions

1. Prepare soil before installing blankets, including any necessary application of lime, fertilizer, and seed.

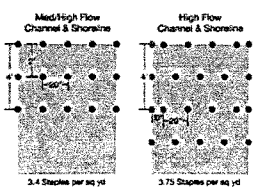
2. Begin at the top of the slope by anchoring the blanket in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) of blanket extended beyond the up-slope portion of the trench. Anchor the blanket with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30cm) portion of blanket back over seed and compacted soil. Secure blanket over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the blanket.

3. Roll the blankets (a) down or (b) horizontally across the slope. Blankets will unroll with appropriate side against the soil surface. All blankets must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using optional Dot System?, staples/stakes should be placed through each of the colored dots corresponding to the appropriate staple pattern.

4. The edges of parallel blankets must be stapled with approximately 2"-5" (5cm-12.5cm) overlap depending on blanket type.

5. Consecutive blankets spliced down the slope must be placed end over end (shingle style) with an approximate 3" (7.5cm)overlap. Staple through overlapped area, approximately 12" (30cm) apart across entire blanket width.

Staple Pattern



Grade Stabilization

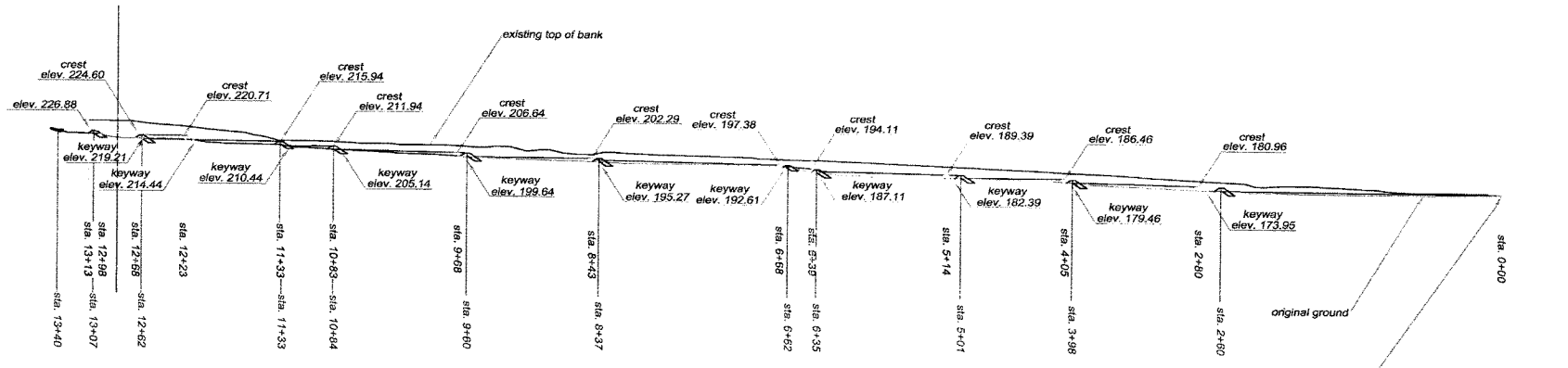
Briggs - Gully Restoration

Reseeding - Erosion Control Blanket - Plan

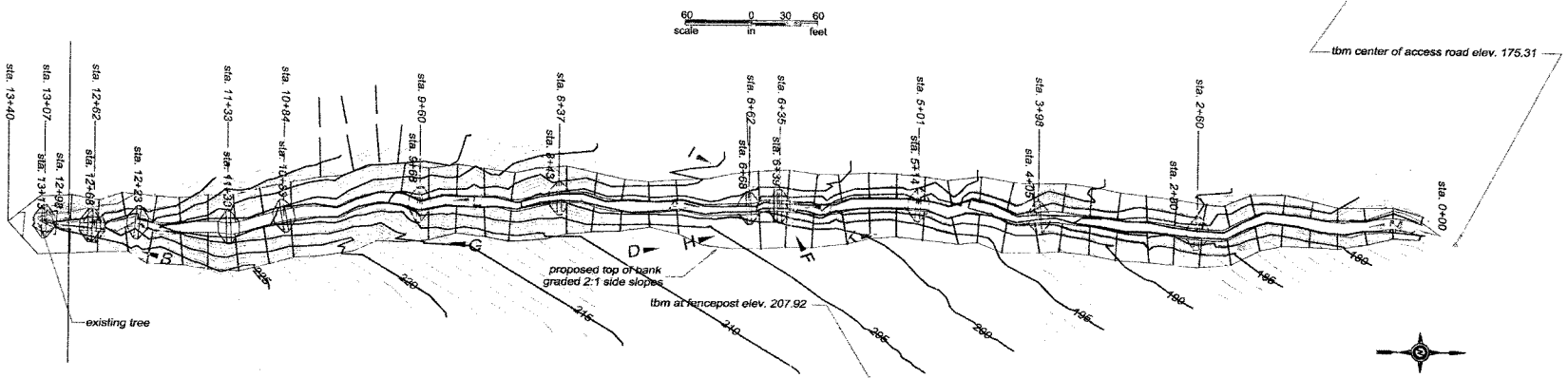
Gold Ridge Resource Conservation District

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Designed BS	Date 2-05	Approved by D Robb	
Drawn BS	2-05	Title Area Engr	
Checked		Title	
Checked		Sheet No. 5 of 5	Drawing No. 2004 0286



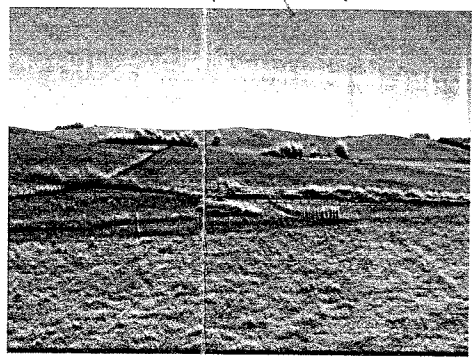
Briggs Grade Stabilization - Site A Profile

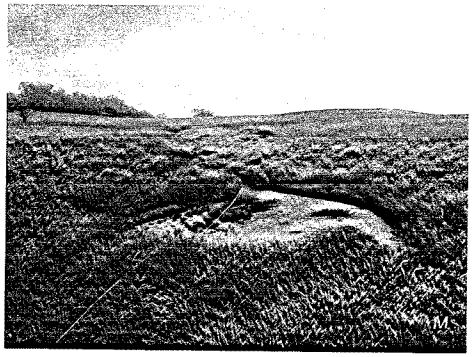


Briggs Grade Stabilization - Site A Plan

Legend

- sta. 5+01 — as built stationing
- D — photo point September '05
- F — photo point December '05
- J — photo point April '06





Construction Notes

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   E. Maximum side slopes of 2 (H):1 (V) for terraces, cut and fill slopes and vee ditches.
   F. Trim all finished slopes to neat uniform appearance prior to installation of erosion control vegetation.
   G. Grading should be completed during dry summer months when risk of runoff erosion and sediment transport is minimal, and when control of soil moisture is feasible.

Class IV

Job Code 410-A

	Date
Designed BS	8/29/05
Drawn BS	8/29/05
Checked	
Approved	

Briggs - Gully Restoration
EQIP 2004
as built

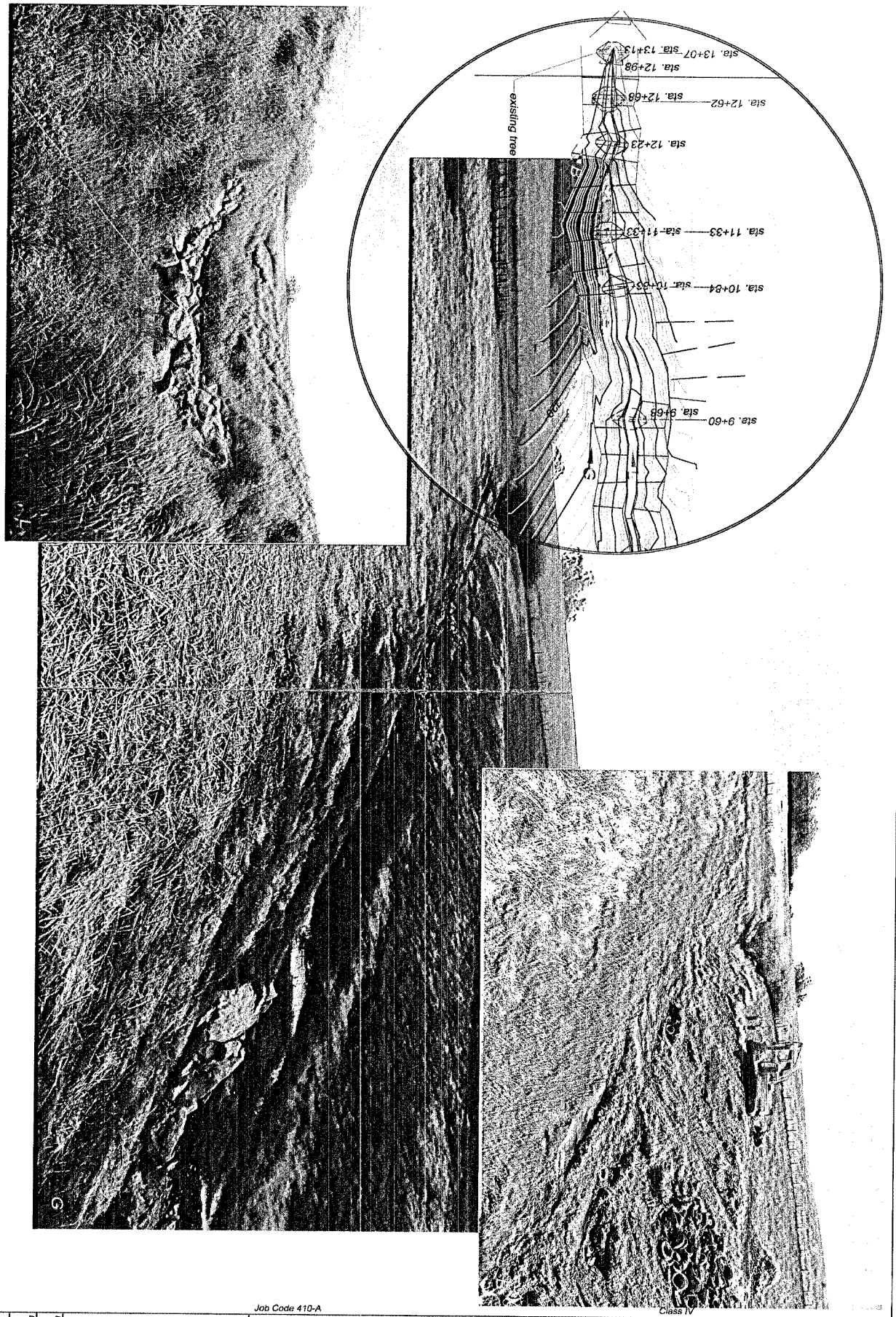
Gold Ridge Resource Conservation District

USDA NRCS
Natural Resources Conservation Service

File No.

Drawing No.

Sheet 1 of 4



Job Code 410-A

Class IV

Sheet 2 of 4

Drawing No.

File No.

USDA NRCS

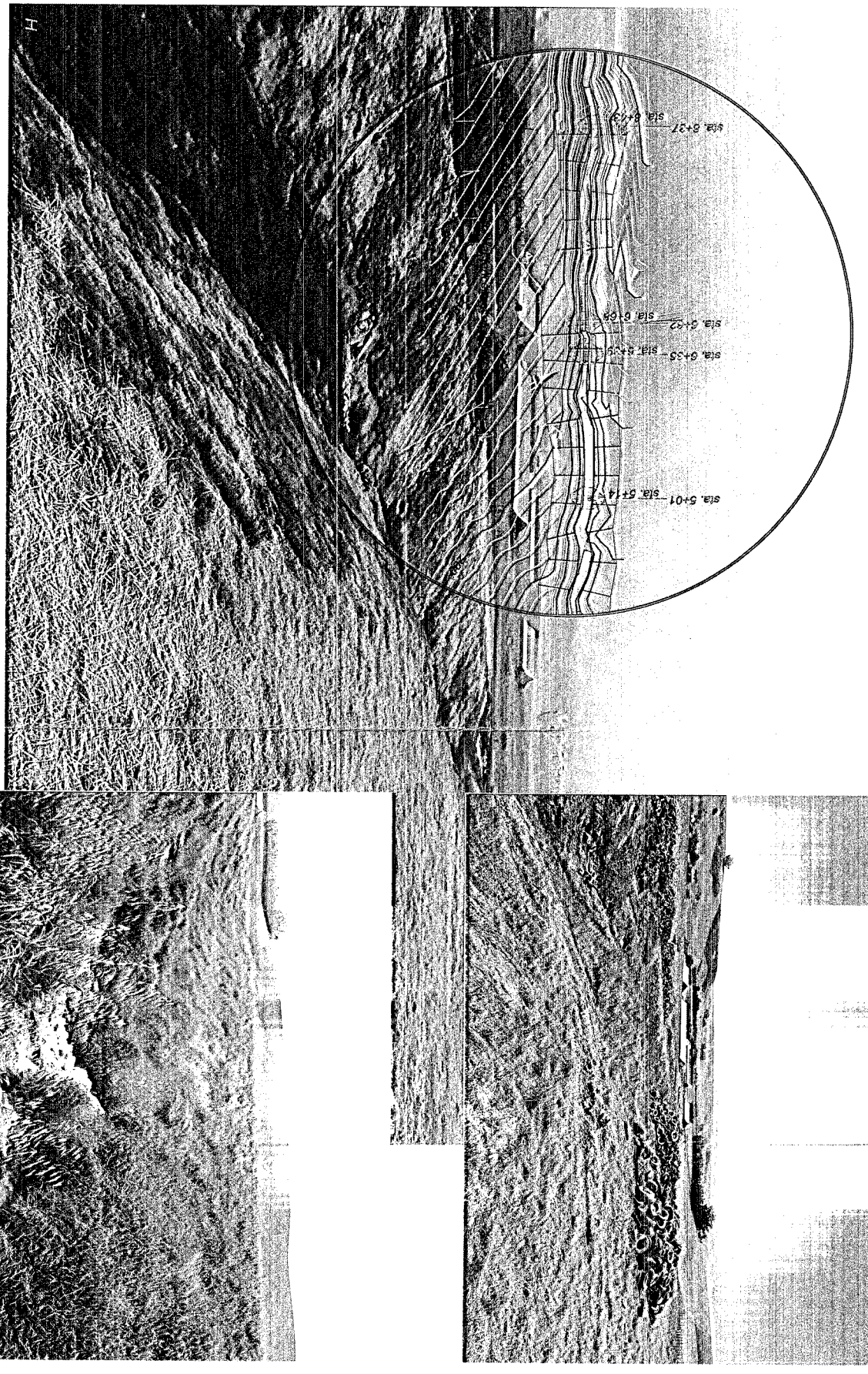
Natural Resources Conservation Service

Briggs - Gully Restoration
EQIP 2004

as built

Gold Ridge Resource Conservation District

		Date
Designed	BS	8/25/09
Drawn	BS	8/25/09
Checked		
Approved		



Job Code 410-A

Class IV

Sheet 3 of 4	Drawing No.	File No.	USDA NRCS Natural Resources Conservation Service	Briggs - Gully Restoration EQIP 2004 as built Gold Ridge Resource Conservation District	Designed BS 8/25/08 Drawn BS 8/25/08 Checked Approved

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE LATEST EDITION OF APPENDIX CHAPTER 33 OF THE CALIFORNIA BUILDING CODE, APPLICABLE SONOMA COUNTY REGULATIONS, AND SECTION 20 OF THE CALTRANS STANDARD SPECIFICATIONS.

2. THE APPROVED PLANS SHALL CONFORM WITH THE EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES CONTAINED IN THE LATEST EDITIONS OF THE FOLLOWING PUBLICATIONS OR AN EQUIVALENT BEST MANAGEMENT PRACTICE:

EROSION AND SEDIMENT CONTROL FIELD MANUAL BY THE SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD. MANUAL OF STANDARDS FOR EROSION & SEDIMENT CONTROL MEASURES BY THE ASSOCIATION OF BAY AREA GOVERNMENTS. CONSTRUCTION SITE BEST MANAGEMENT PRACTICES MANUAL BY CALTRANS. STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK BY THE CALIFORNIA STORMWATER QUALITY ASSOCIATION.

3. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.

4. THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT NO. CAS000002 WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY DISTURBING LAND EQUAL TO OR GREATER THAN ONE ACRE. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.

5. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE.

6. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (OCTOBER 15 - APRIL 15).

7. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER ACTUAL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. STORM EVENTS PRODUCE AT LEAST 1 INCH OF PRECIPITATION IN A 24 HOUR PERIOD. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.

8. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS. CHANGES SHALL BE NOTED ON THE PLAN WHEN MADE.

9. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT, TRASH , NUTRIENTS, PATHOGENS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASHWATER AND CHLORINATED WATER.

10. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON PAVED AREAS WITHIN THE COUNTY RIGHT-OF-WAY, SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY.

11. EXPOSED SLOPES SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING 70% VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS.

12. WHENEVER IT IS NOT POSSIBLE TO UTILIZE EROSION PREVENTION MEASURES, EXPOSED SLOPES SHALL EMPLOY SEDIMENT CONTROL DEVICES, SUCH AS FIBER ROLLS AND SILT FENCES. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM TOE OF SLOPE.

13. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS: FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SLOPE. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE.

APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZER SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

MATERIALS	APPLICATION RATE (POUNDS PER ACRE)
SEED MIX	
Bromus mollis (BLANDO BROME)	40
Trifolium hirtum (HYKON ROSE CLOVER)	20
FERTILIZER	
16-20-0 & 15% SULPHUR	500
MULCH	
STRAW	4000
HYDRAULIC STABILIZING*	
M-BINDER OR SENTINEL	75-100
EQUIVALENT MATERIAL	PER MANUFACTURER

*NON-ASPHALTIC, DERIVED FROM PLANTS

14. THE OWNER SHALL PROTECT STORM DRAIN INLETS FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.

15. ENERGY DISSIPATERS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY STORM WATER FLOW LEADING TO SOIL EROSION.

16. SOIL AND MATERIAL STOCKPILES SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCITON SITE.

17. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY, OR AS NECESSARY, AND REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE ARRANGED.

18. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS.

19. PROPER APPLICATION, CLEANING AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DUSCHARGE OF POLLUTANTS.

20. WHEN UTILIZED, TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED TO PREVENT THE DISCHARGE OF POLLUTANTS.

21. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

GENERAL NOTES (NRCS):

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND ATTACHED SPECIFICATIONS: GRASSED WATERWAY (412), GRADE STABILIZATION - ROCK DROPS (410A), CRITICAL AREA PLANTING (342 E&G), EARTHFILL (503), AND ROCK RIPRAP (907). NO CHANGES ARE TO BE MADE WITHOUT THE PRIOR APPROVAL OF THE NRCS TECHNICIAN.

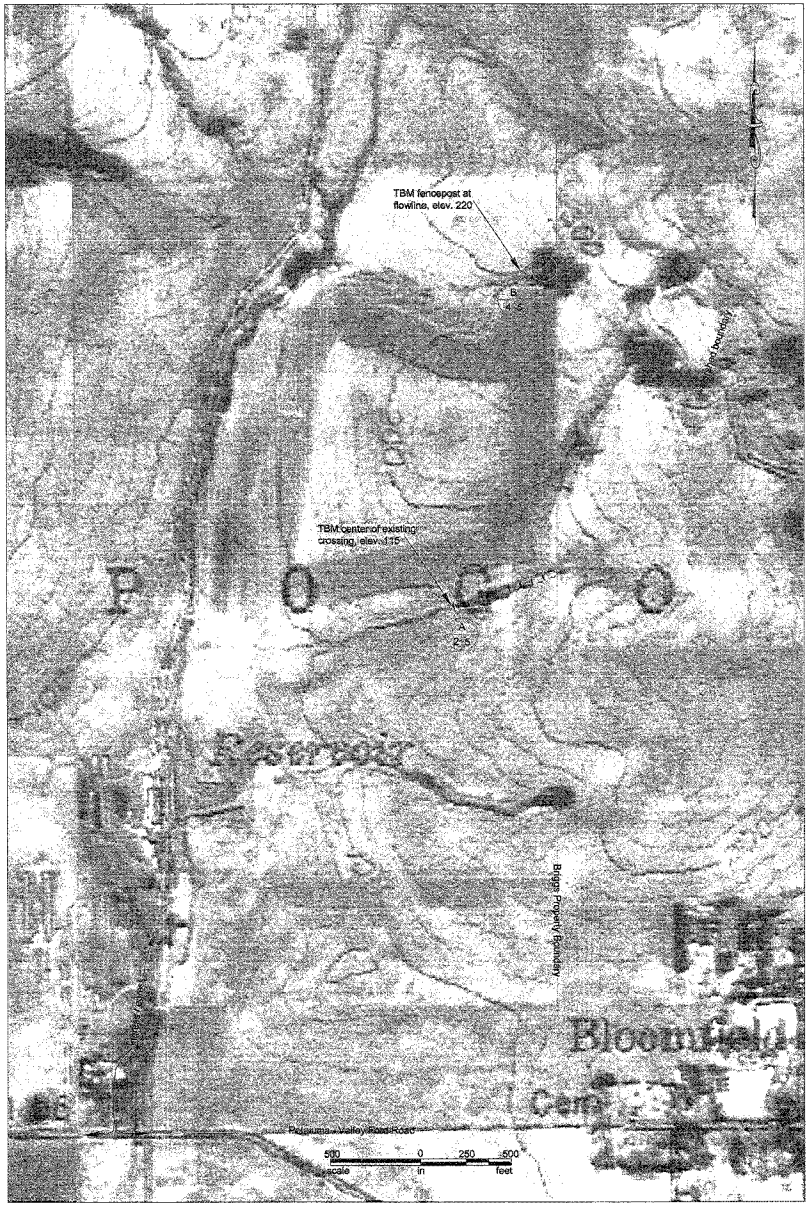
2. LANDOWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY NEEDED PERMITS, EASEMENTS, AND/OR RIGHT-OF-WAYS, AND MEETING ALL LEGAL REQUIREMENTS.

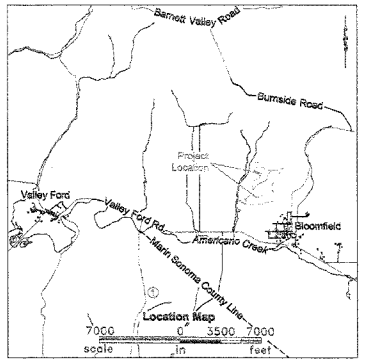
3. LANDOWNER SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES. SPECIAL SAFETY PRECAUTIONS ARE TO BE TAKEN WHEN WORKING IN THE VICINITY OF GAS, OIL OR ELECTRICAL LINES. CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 PRIOR TO CONSTRUCTION.

4. CAL-OSHA SAFETY REQUIREMENTS SHALL BE IN EFFECT DURING ALL CONSTRUCTION.

5. ALL LINES AND GRADES SHOWN ON THESE DRAWINGS ARE APPROXIMATE.

6. CONTACT THE NATURAL RESURCES CONSERVATION SERVICE AT LEAST 7 DAYS PRIOR TO CONSTRUCTION. PHONE: (707) 794-1242.





Grading Notes

1. Perform grading in accordance with the latest edition of appendix Chapter 33 of the California Building Code, applicable Sonoma County regulations.

2. Existing drainage courses receiving waters from this site and located throughout this site shall remain open and clear of debris to properly convey storm water. If existing drainage courses receiving waters from this site are located in the county right-of-way and need maintenance, contact the department of transportation and public works at (707) 565-2231 for further assistance. In any event, the owner and/or contractor shall be held liable for any damage due to obstructing natural drainage patterns.

3. Retaining walls are not approved under this grading permit. Retaining walls require a separate building permit, unless exempted.

4. The contractor shall immediately notify the design engineer upon discovering significant discrepancies, errors or omisions in the plans. Prior to proceeding, the owner shall have the plans revised to clarify identified discrepancies, errors or omissions. The revised plans shall be subject to review by the chief building official.

5. The contractor shall be responsible for notifying underground service alert (U.S.A.), toll free at 1-800-642-2444, at least two working days prior to excavation. The contractor shall uncover relevant utilities to verify thier location and elevation. If unexpected or conflicting utilities are encountered during excavation, notify U.S.A.. The utility owner and/or the project engineer immediately. Utilities include but are not limited to water, sewer, electrical, gas, telephone and cable TV.

6. In the event cultural resources (I.E., historical, archaeological, and paleontological resources, and human remains) are discovered during grading or other construction activities, work shall be halted within a 100 foot radius of the find. The northwest information center shall be notified at (707) 664-0880. A qualified archeologist shall be consulted for an on-site evaluation. Additional mitigation may be required by the county per the archeologist's recommendations. If human burials or human remains are encountered, the contractor shall also notify the county coroner at (707) 565-5070.

7. Should grading operations encounter hazardous materials, or what appear to be hazardous materials, stop work in the affected area immediately and contact 911 or the appropriate agency for further instruction.

8. The grading permit and an approved copy of the grading plans shall be maintained on the project site throughout the duration of construction activities.

9. Drainage facilities and grading shall be inspected before receiving final approval. The contractor shall consult the project job card for coordination of inspection requests.

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BY DRAINAGE REVIEW SECTION
PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT

GRADING
APPROVED
PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT
as noted
subject to attached conditions
requires inspection by Soil Engineer

Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Site Plan
Gold Ridge Resource Conservation District

Briggs Ranch
12628 Petaluma - Valley Ford Rd.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

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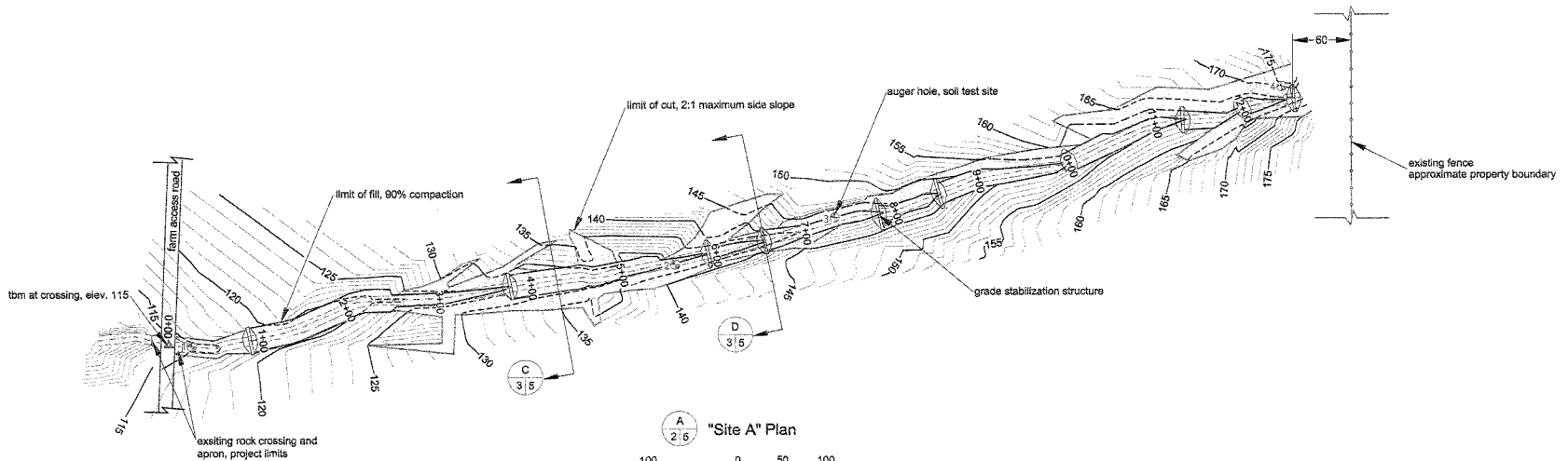
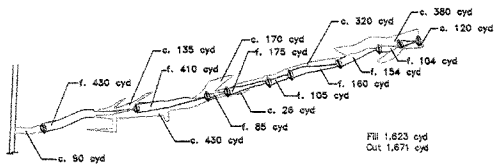


Construction Notes

1. At all times, temporary construction excavations shall conform to safety regulations of applicable local, state, and federal agencies. The stability of temporary cut slopes and trenches shall be the responsibility of the contractor. The tops of temporary cut slopes and trenches should be rounded back to 2:1 in weak soil zones.
2. Minor earthwork and shaping may occur in small lowland swell areas to smooth locations where tree root removal has occurred or to facilitate installation of drainage improvements. Minimum volumes of earthwork associated with vee ditching and pipe trenching are expected.
3. For any cut and fill operations as shown on the plans, the following shall apply:
   A. Salvage and stockpile the upper 4" of sod from the work areas and borrow disposal areas. Materials shall be spread on finished cut and fill surfaces and compacted by trackwalking at completion of other work. Borrow limits are within the work area. Maintain minimum 2' offset plus half the heights of cuts or fills from any property line. Remove tree roots, limbs, and other organic matter down to 1" diameter from borrow materials.
   B. Site preparation: Surface soils shall be scarified to a depth of 6" uniformly moisture conditioned to optimum +3% and compacted to 90% maximum dry density per ASTM D1557 prior to placement of fill.
   C. Earthwork fill: Use level lifts not to exceed 8" in thickness. Organic materials > 1" and rocks greater than 6" diameter are not permitted in the fill.
   D. Compaction requirements: 90% ASTM D1557 at optimum moisture content plus 3% for trench backfill, engineered fills.
   E. Maximum side slopes of 2.0H:1.0V for terraces, cut and fill slopes and vee ditches.
   F. Trim all finished slopes to neat uniform appearance prior to installation of erosion control vegetation.
   G. Grading should be completed during dry summer months when risk of runoff erosion and sediment transport is minimal, and when control of soil moisture is feasible.

Cut/Fill Summary



Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Plan & Profile "Site A"
Gold Ridge Resource Conservation District

Briggs Ranch
12528 Petaluma - Valley Ford Rd.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

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DATE
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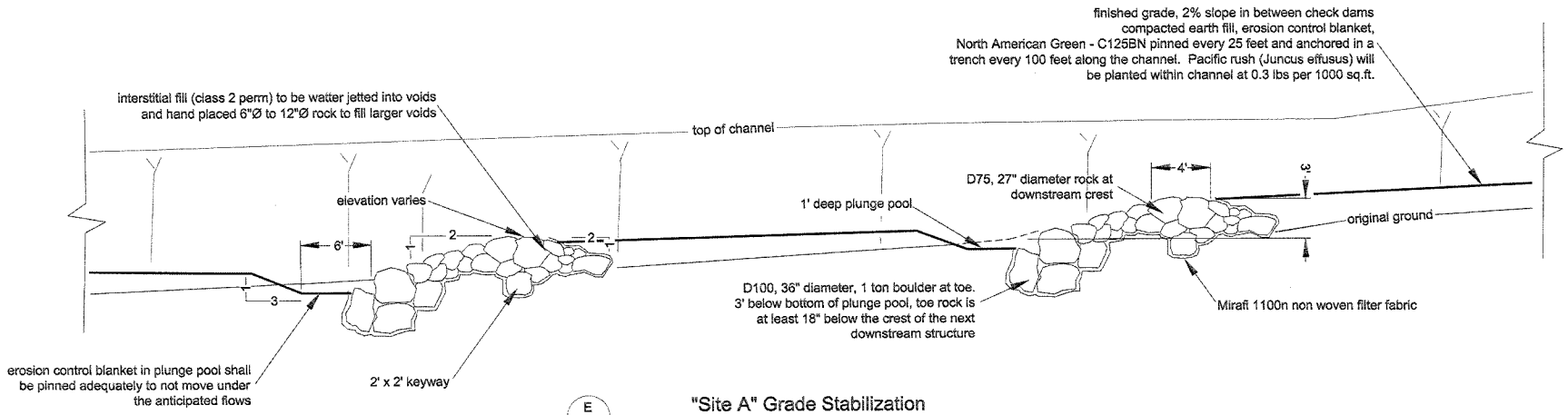
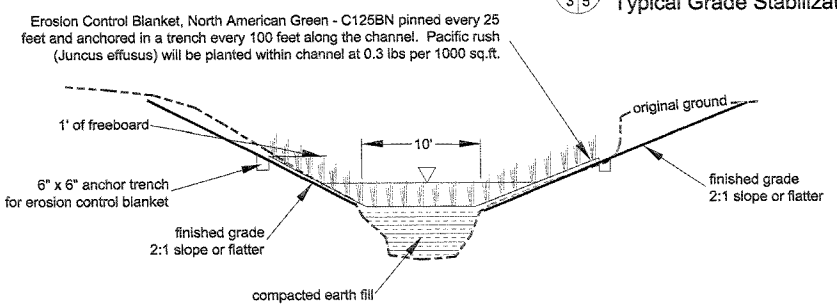
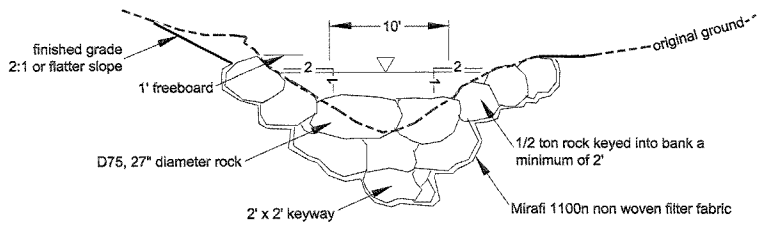
☐ subject to soil report recommendations
☐ requires inspection by Soil Engineer



E 3 5 "Site A" Grade Stabilization
Typical Grade Stabilization Structure Profile



C 3 5 "Site A" Lined Channel
Typical Cross Section



D 3 5 "Site A" Grade Stabilization
Typical Cross Section at Centerline

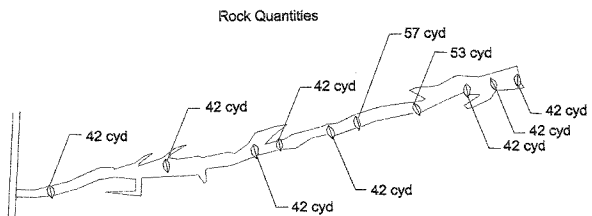
Construction Notes

Rock Riprap Installation. Rock shall be sound, dense, and durable with a bulk specific gravity of not less than 2.5. Rock shall be angular to subangular. Sub rounded or rounded shall not be permitted. The greatest dimension not greater than 2 times the least dimension. The rock shall conform to the grading limits given below:

Size, Inches	Percent Passing
36	100
27	75
21	50
15	20
10	10

Geotextile Fabric Installation:
1. The surface on which the geotextile is to be placed shall be graded to the neat lines and grades as shown on the drawings. The surface shall be reasonably smooth and free of loose rock and clods, holes, depressions, projections, muddy conditions and standing or flowing water. The fabric shall be placed and loosely laid over the surface smoothly.
2. The fabric panels shall be overlapped a minimum of 18 inches for vertical laps and 24 inches for horizontal laps. The fabric shall be placed parallel to the direction of flow. It shall be placed so that upstream end or higher panel will be placed under the downstream or lower panel.
3. Riprap shall be placed, not dropped.

Rock Quantities



Total 446 cyd

Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Cross Sections and Details "Site A"
Gold Ridge Resource Conservation District

Briggs Ranch
12526 Petaluma - Valley Ford Rd.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

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25 days
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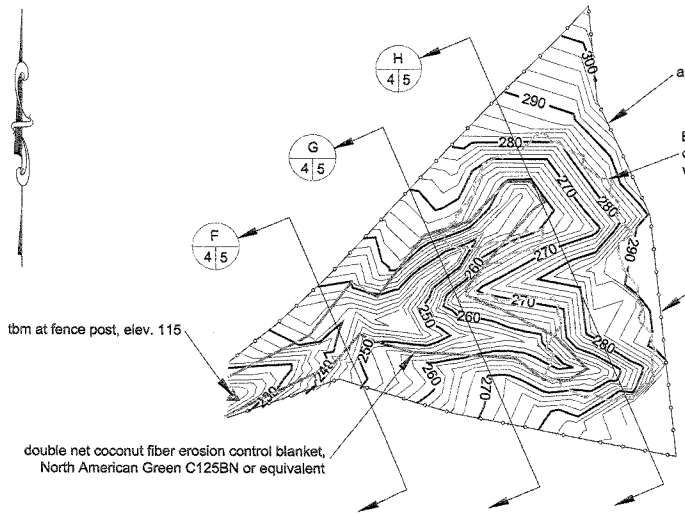
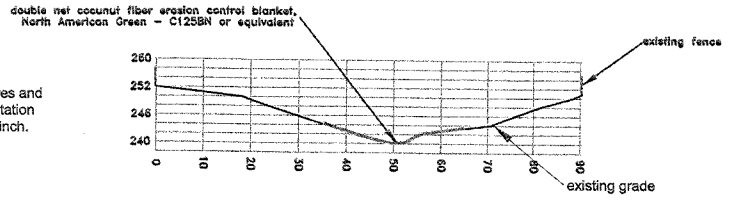
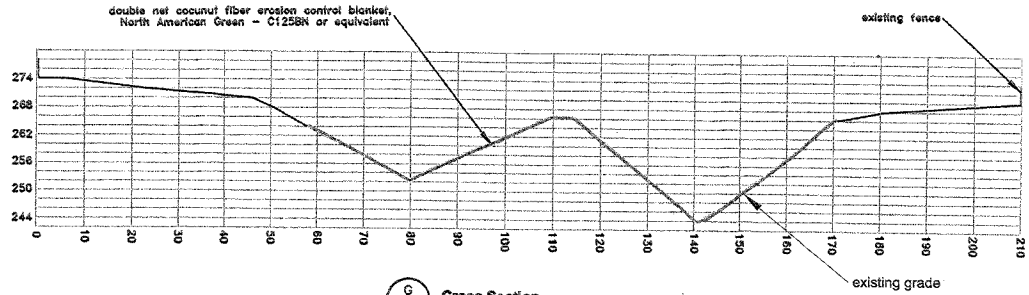


B 4|5 "Site B" Plan

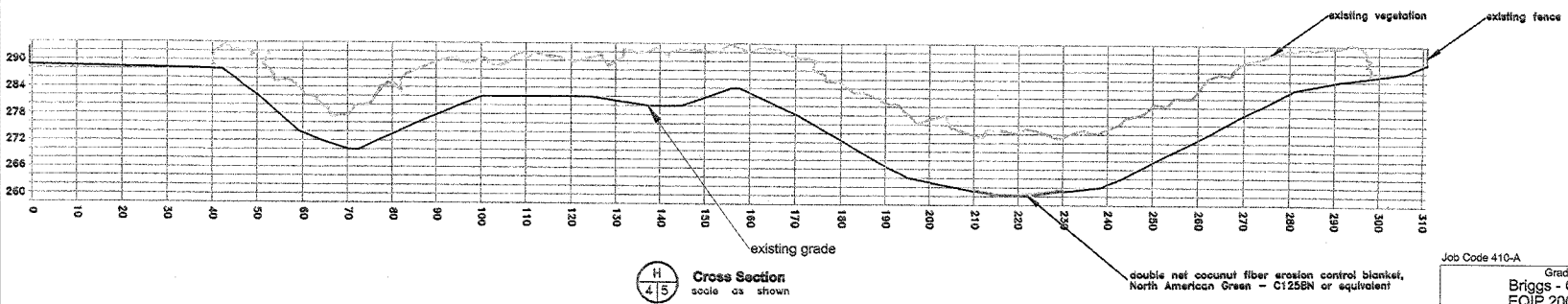
scale 100 0 50 100 in feet



F 4|5 Cross Section scale as shown



G 4|5 Cross Section scale as shown



H 4|5 Cross Section scale as shown

Construction Notes

1. Sort and remove existing buried old tires, and other deleterious non-native imported materials located intermittently throughout the work area. Stockpile and remove to approved landfill in accordance with applicable County and State transportation and disposal regulations.
2. Remove tires with minimal disturbance to existing vegetation. Trees to be saved will be marked.
3. Install specified erosion control blanket to disturbed areas per manufacturer's recommendations. Rocks larger than 6 inches in diameter, trash, weeds, and other debris will be removed prior to installation of erosion control blanket.

Job Code 410-A Class IV

Grade Stabilization
Briggs - Gully Restoration
EQIP 2004 - Plan "Site B"
Gold Ridge Resource Conservation District

Briggs Ranch
12528 Petaluma - Valley Ford Rd.

U.S. DEPARTMENT OF AGRICULTURE
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PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT

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☐ as noted
☐ subject to attached conditions
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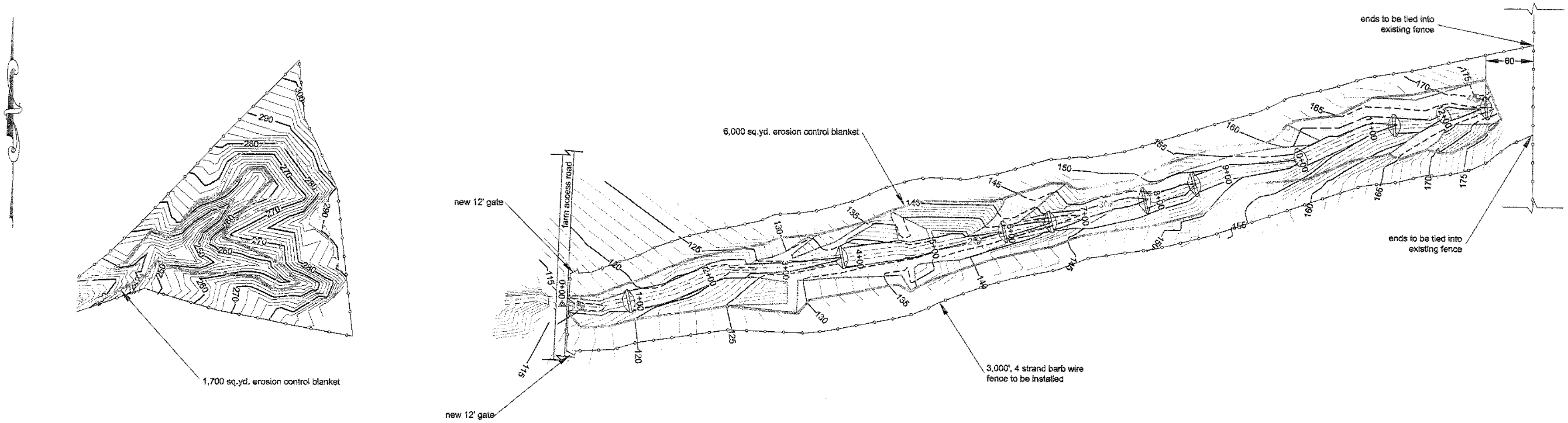
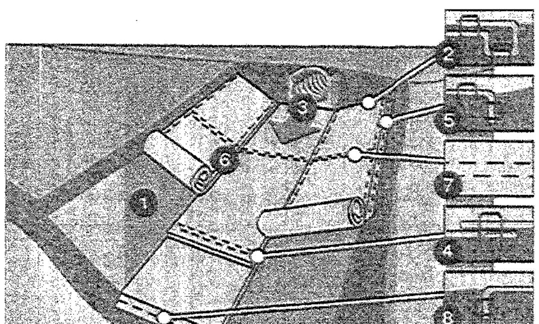
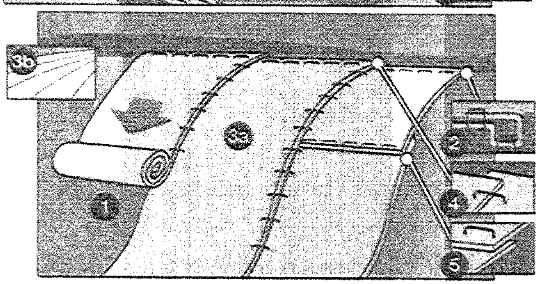
☐ requires inspection by Soil Engineer



Reseeding - Erosion Control Blanket Installation - Plan

100 0 50 100
scale in feet





North American Green - C125BN - Channel Installation Instructions

1. Prepare soil before installing blankets, including any necessary application of lime, fertilizer, and seed (seed with recommended native grass seed at 60lbs per acre).

2. Begin at the top of the slope by anchoring the blanket in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) ofblanket extended beyond the up-slope portion of the trench. Anchor the blanket with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30cm) portion of blanket back over seed and compacted soil. Secure blanket over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the blanket.

3. Roll center blanket in direction of water flow on bottom of channel. Blankets will unroll with appropriate side against soil surface. All blankets must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using optional Dot System?, staples/stakes should be placed through each of the colored dots corresponding to the appropriate staple pattern.

4. Place blankets end over end (shingle style) with a 4"-6" (10cm-15cm) overlap. Use a double row of staples staggered 4" (10cm) apart and 4" (10cm) on center to secure blankets.

5. Full length edge of blankets at top of side slopes must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.

6. Adjacent blankets must be overlapped approximately 2"-5" (5cm-12.5cm) (depending on blanket type) and stapled.

7. In high flow channel applications, a staple check slot is recommended at 30 to 40 foot (9m-12m) intervals. Use a double row of staples staggered 4" (10cm) apart and 4" (10cm) on center over entire width of channel.

8. The terminal end of the blankets must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep x 6" (15cm) wide trench. Backfill and compact the trench after stapling.

North American Green - C125BN - Slope Installation Instructions

1. Prepare soil before installing blankets, including any necessary application of lime, fertilizer, and seed.

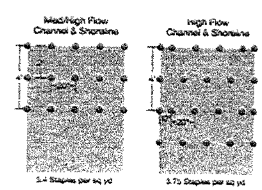
2. Begin at the top of the slope by anchoring the blanket in a 6" (15cm) deep x 6" (15cm) wide trench with approximately 12" (30cm) of blanket extended beyond the up-slope portion of the trench. Anchor the blanket with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to compacted soil and fold remaining 12" (30cm) portion of blanket back over seed and compacted soil. Secure blanket over compacted soil with a row of staples/stakes spaced approximately 12" (30cm) apart across the width of the blanket.

3. Roll the blankets (a) down or (b) horizontally across the slope. Blankets will unroll with appropriate side against the soil surface. All blankets must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide. When using optional Dot System?, staples/stakes should be placed through each of the colored dots corresponding to the appropriate staple pattern.

4. The edges of parallel blankets must be stapled with approximately 2"-5" (5cm-12.5cm) overlap depending on blanket type.

5. Consecutive blankets spliced down the slope must be placed end over end (shingle style) with an approximate 3" (7.5cm)overlap. Staple through overlapped area, approximately 12" (30cm) apart across entire blanket width.

Staple Pattern



Job Code 410-A Class IV

Grade Stabilization Briggs - Gully Restoration Reseeding - Erosion Control Blanket - Plan Gold Ridge Resource Conservation District			
Briggs Ranch 12528 Petaluma - Valley Ford Rd.			
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GRADING
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