

COUNTY OF SANTA CRUZ
PLANNING DEPARTMENT
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
(831) 454-2580

NOTICE OF PENDING ACTION

The Planning Department has received the following application. The identified planner may be contacted for specific information on this application.

APPLICATION NUMBER: 201243
SITUS: 355 Coates Dr., Aptos 95003

APN: 038-216-32

Proposal to recognize emergency installation of an approximately 38 linear foot retaining wall at the south side of the property authorized under Emergency Coastal Development Permit 191101. Requires a Coastal Development Permit (201243) and combined Soils and Geology Report Review (REV201023).

Project located on the south side of Coates Drive approximately 150 feet south of the intersection with Beach Gate Way (355 Coates Drive).

OWNER: Britt & Kelly Anderson
APPLICANT: Haro Kasunich & Associates
SUPERVISORIAL DISTRICT: 2
PLANNER: Jonathan DiSalvo, (831) 454-3157
EMAIL: Jonathan.DiSalvo@santacruzcounty.us

Public comments must be received by 5:00 p.m. September 24, 2020. A decision will be made on or shortly after September 25, 2020.

Appeals of the decision will be accepted until 5:00 p.m. two weeks after the decision date. Planner will provide notification of decision to any requesting party.

Information regarding the appeal process, including required fees, may be obtained by phoning (831) 454-2130.

EMERGENCY REPAIR OF STITCH PIER RETAINING WALL

PREPARED FOR:

**MR. AND MRS. DOUG BRITT
15012 DANIELLE PLACE,
MONTE SERENO, CALIFORNIA 95030**

PROJECT ADDRESS:

**355 COATES DRIVE, APTOS,
SANTA CRUZ COUNTY, CALIFORNIA 95003
APN: 038-216-28**

INSPECTIONS AND MAINTENANCE

THE REGISTERED GEOTECHNICAL AND CIVIL ENGINEER AND/OR HIS REPRESENTATIVE SHALL BE CALLED TO PERFORM CONSTRUCTION OBSERVATION AND TO MAKE A FINAL INSPECTION OF THE SITE TO ASSURE THAT THE WORK IS COMPLETED ACCORDING TO PLAN. WINTER STORM INSPECTIONS SHALL BE CONDUCTED TO IDENTIFY PROBLEM AREAS AND ASSESS THE NEED FOR CORRECTIVE ACTIONS. WRITTEN DOCUMENTATION SHOULD BE MAINTAINED THAT NOTES INSPECTION DATES, CORRECTIVE ACTIONS NEEDED AND CORRECTIVE ACTIONS TAKEN.

A MONITORING, REPORTING AND MAINTENANCE PROGRAM STATEMENT MUST BE RECORDED BEFORE THE FINAL BUILDING PERMIT.

SHEET INDEX:

1. AERIAL VIEW OF EXISTING BLUFF, VICINITY MAP AND PROJECT CONTACTS/CONSULTANTS
2. SITE PLAN-EMERGENCY REPAIR OF STITCH PIER RETAINING WALL
3. EMERGENCY STITCH PIER WALL-TABLE "A", TABLE "B", SECTIONS AND DETAILS
4. PROJECT NOTES AND STANDARD TABLES
5. CONSTRUCTION PLAN, EROSION AND STORM WATER POLLUTION PREVENTION PLAN

PROJECT CONTACTS/CONSULTANTS:

OWNERS:
MR. AND MRS. DOUG BRITT
15012 DANIELLE PLACE,
MONTE SERENO, CALIFORNIA 95030

GEOTECHNICAL ENGINEER:
HARO, KASUNICH AND ASSOCIATES, INC.
MOSES E. CUPRILL, P.E.
BRIAN SHEDDEN, P.E.
116 EAST LAKE AVENUE,
WATSONVILLE, CALIFORNIA 95076
(831) 707-1108

GEOLOGIST:
ZINN GEOLOGY
ERIK N. ZINN, P.E., C.E.G.
2231 40th AVENUE,
SANTA CRUZ, CALIFORNIA 95062
(831) 334-4833

CIVIL ENGINEER:
SOIL ENGINEERING CONSTRUCTION, INC.
GEORGE E. DREW, P.E.
927 ARGUELLO STREET,
REDWOOD CITY, CALIFORNIA 94063
(650) 367-9595

SURVEYOR:
BOWMAN & WILLIAMS
BRYAN F. HAPPEE, L.L.S.
1011 CEDAR STREET,
SANTA CRUZ, CALIFORNIA 95060
(831) 426-3560

ARCHITECT/PLANNER:
DENNIS NORTON
HOME DESIGN AND PROJECT PLANNING
712 C CAPITOLA AVENUE,
CAPITOLA, CALIFORNIA 95010
(831) 476-2616



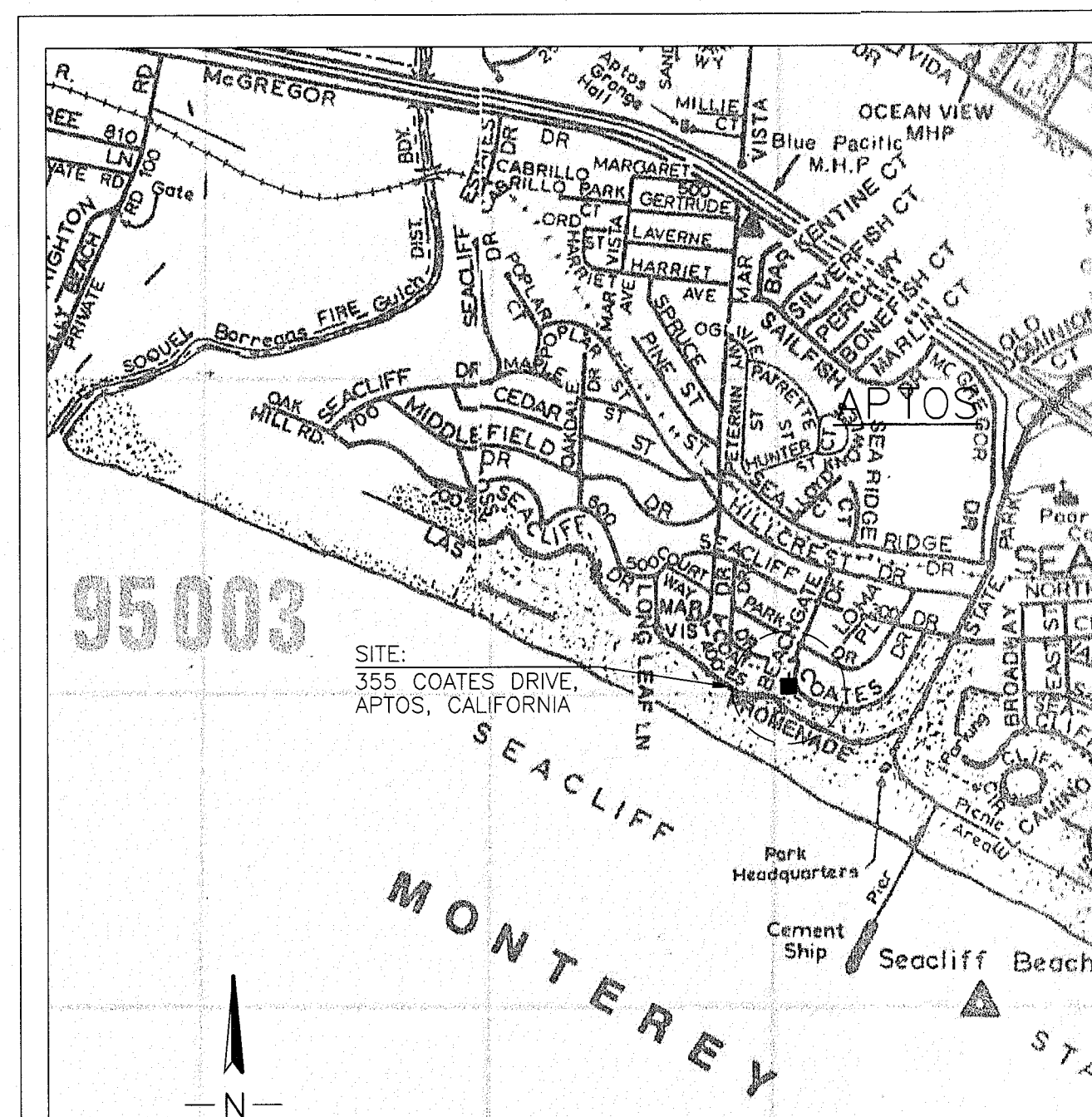
AERIAL VIEW OF EXISTING BLUFF

SCALE: N.T.S.

1

1

NOTE:
IMAGE FROM GOOGLE EARTH, 2016.
IMAGERY DATE: 4/5/2016.



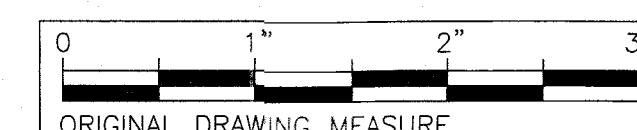
VICINITY MAP

SCALE: N.T.S.

2

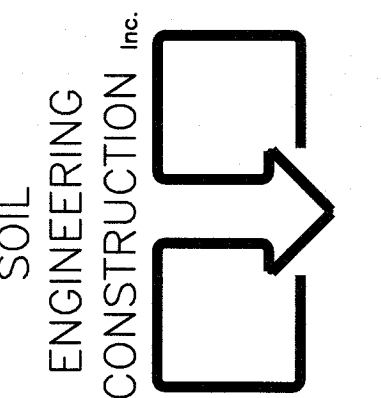
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NOTE:
FROM REGAL MAP CO.-
SANTA CRUZ COUNTY



ORIGINAL DRAWING MEASURE

SOIL ENGINEERING CONSTRUCTION, INC.
927 ARGUELLO STREET, REDWOOD CITY, CALIFORNIA 94063
PHONE (650) 367-9595 FAX (650) 367-8139



EXISTING
BLUFF, VICINITY MAP
AND PROJECT CONTACTS/
CONSULTANTS

EMERGENCY REPAIR OF
STITCH PIER WALL
MR. AND MRS. DOUG BRITT
355 COATES DRIVE,
APTOS, SANTA CRUZ COUNTY,
CALIFORNIA 95003

FILE NO.	
DATE	02-15-19
PROJECT	19-011
DWG. NO.	Coates Dr-355-I-01
REVISION	03-19-19
REVISION	04-04-19
REVISION	08-16-19
DESIGNED BY:	RH
CHECKED BY:	GEO

LEGEND:
- "EP" - DEPICTS: EMERGENCY STITCH PIER
- "T" - DEPICTS: TIEBACK ANCHOR

(N) EMERGENCY STITCH PIER RETAINING WALL, PIERS 2'-6" DIA. @ 5'-0" C.C. ±
TOTAL (8) EMERGENCY STITCH PIERS.
EXACT LOCATION TO BE DETERMINED
BY GEOTECHNICAL CONSULTANT IN FIELD

(N) TIEBACK ANCHORS, TOTAL (3)

ONCE EMERGENCY WALL IS CONSTRUCTED
PERMITTED WALL IN FRONT OF IT WILL
BE REMOVED

TO MINIMIZE VISUAL IMPACT RELATIVE
TO EXISTING RETAINING WALL EXPOSED
FACE OF NEW RETAINING WALL WILL
BE COVERED W/ ART ROCK FASCIA
THAT MIMICS NATURAL SLOPE

APPROX. LOCATION OF ONGOING
SLOPE FAILURE AREA

STATE OF CALIFORNIA
DEPT OF PARKS & REC
APN 038-201-01

NOTES:
- SITE PLAN FROM DRAWING BY DENNIS NORTON,
HOME DESIGN AND PROJECT PLANNING, DATED 12/12/18
AND REVISED 02/18/19.
- SITE PLAN DRAWING SUPPLIED BY OWNER/AGENT.

SITE PLAN-EMERGENCY REPAIR OF STITCH PIER RETAINING WALL

SCALE: 1"=10'

EXISTING
SINGLE STORY
RESIDENCE
355 COATES DRIVE
APN: 038-216-28

1
2

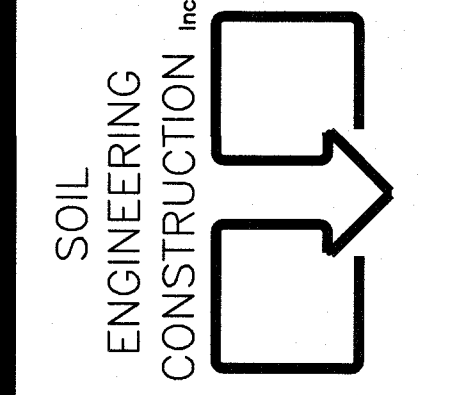
0 1" 2" 3"
ORIGINAL DRAWING MEASURE

SITE PLAN-
EMERGENCY REPAIR OF
STITCH PIER
RETAINING WALL

EMERGENCY REPAIR OF
STITCH PIER WALL
MR. AND MRS. DOUG BRITT
355 COATES DRIVE,
APTOS, SANTA CRUZ COUNTY,
CALIFORNIA 95003

FILE NO.	
DATE	02-15-19
PROJECT	19-011
DWG. NO.	Coates Dr-355-I-02
REVISION	03-19-19
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REVISION	08-16-19
DESIGNED BY:	RH
CHECKED BY:	GED

2 OF 5



SOIL
ENGINEERING
CONSTRUCTION, INC.
927 ARQUELLO STREET, REDWOOD CITY, CALIFORNIA 94063
PHONE (650) 367-9595 FAX (650) 367-8139

PROJECT NOTES:

GENERAL NOTES:

- DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH 2016 CBC, AS AMENDED BY STATE OF CALIFORNIA, AND COUNTY OF SANTA CRUZ CODES AND ORDINANCES.
- ALL DIMENSIONS, CONDITIONS AND LOCATION OF FACILITIES TO BE VERIFIED AND DETERMINED IN FIELD.
- EXACT LOCATION AND EXTENT OF EMERGENCY REPAIR OF SOLDIER PILE WALL MAY BE ADJUSTED AS FIELD CONDITIONS REQUIRE AT TIME OF CONSTRUCTION.
ENGINEER OF RECORD SHALL BE INFORMED ON ANY DEVIATION FROM APPROVED LOCATION OF EMERGENCY STITCH PIERS AND WILL SUBMIT TO BUILDING OFFICIALS REVISED CALCULATIONS AND REVISED DRAWINGS FOR APPROVAL.
- ALL EXPOSED STEEL SHALL BE GALVANIZED OR COATED WITH CORROSION INHIBITING PAINT.
- CAST-IN-PLACE CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:
- DRILLED PIERS: $f'c=4,000$ PSI
- CONCRETE WALL: $f'c=3,000$ PSI, $f'c=4,000$ PSI
USE CEMENT TYPE II - V PORTLAND CEMENT.
NORMAL WEIGHT CONCRETE.
CONCRETE TEST SPECIMEN SPECIAL INSPECTION MAY BE REQUIRED.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 FOR #4 BARS AND ABOVE.
- STEEL MEMBERS SHALL BE:
- ALL WIDE FLANGE STEEL MEMBERS SHALL CONFORM TO ASTM A992, GRADE 50,
- MISCELLANEOUS CHANNELS, ANGLES, AND PLATES SHALL CONFORM TO ASTM A36.
- STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE 46.
- ALL RETROFIT ANCHORS, LEVELERS AND HARDWARE TO BE BY SIMPSON STRONG-TIE COMPANY, INC., OR EQUAL.
- SECTION AT CONSTRUCTION JOINT (C.J.) MAKE ROUGH AND FORM KEY.
- REINFORCEMENT COVER:
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH SHALL HAVE MINIMUM 3" CONCRETE COVER,
- CONCRETE EXPOSED TO EARTH OR WEATHER SHALL HAVE MINIMUM 2" CONCRETE COVER FOR #6 BARS AND ABOVE,
1 1/2" FOR #5 BARS AND BELOW.
- SPLICES OF REBAR TO BE CLASS (B) SPLICE.
- EPOXY ADHESIVE, IF ANY, TO BE "SET-XP" BY SIMPSON STRONG-TIE COMPANY, INC., ESR-2508, OR EQUAL.
CONCRETE / GROUT PATCH SHALL BE APPROVED HIGH STRENGTH CEMENT BASED COMPOUND.
- TIEBACK ANCHOR NOTES:
SEE TIEBACK ANCHOR TABLE "B", AND RELEVANT NOTES, DETAILS AND SECTIONS.
TIEBACK ANCHORS TO BE BY DOI DYWIDAG, OR EQUAL.
TIEBACK ANCHORS SHALL BE DBL CORROSION PROTECTED.
USE ADEQUATE CENTRALIZERS, IF BAR IS USED, @ 10'-0" C.C.±.
HOLE DIA. AT CONTRACTOR'S OPTION, 6" DIA. IS USED IN DESIGN.
ALLOW HOLE CONCRETE BACKFILL CURE TIME BEFORE TESTING.
HOLES TO BE TREMIE PIPE GROUTED FROM BOTTOM OF HOLE FOR ENTIRE BONDED ZONE. GREASE FILLED PVC SLEEVE WILL BE PROVIDED OVER UNBONDED LENGTH TO ASSURE LOAD IS ONLY ON BONDED LENGTH.
SECOND STAGE OF GROUTING SHALL BE ACCOMPLISHED AFTER ACCEPTED TESTING, ALL WAY UP REMAINING HOLE.
FRACTURE GROUTING MAY BE UTILIZED, AT CONTRACTOR'S OPTION, TO ACHIEVE CONSIDERABLY HIGHER SOIL-GROUT BOND CAPACITY.
TIEBACK ANCHORS DEPTH MAY BE ADJUSTED WITH SOIL ENGINEER'S APPROVAL, BASED ON ACTUAL BOND STRENGTH DEVELOPED IN TEST PROGRAM, OR PER ACTUAL SOIL CONDITIONS AT TIME OF DRILLING OPERATION.
- SPECIAL INSPECTION (2016 CBC SEC. 1704, SEC. 107.2.1):
- SEE SPECIAL INSPECTION SCHEDULE.
UPON CONCLUSION OF CONSTRUCTION, ENGINEER OF RECORD WILL PREPARE SUMMARY LETTER OF HIS OBSERVATIONS RELATIVE TO EMERGENCY REPAIR CONSTRUCTION, AND AS-BUILT CONSTRUCTION CONDITIONS.
- DESIGN RECOMMENDATIONS AND PARAMETERS:
- GEOTECHNICAL INVESTIGATION, COASTAL BLUFF STABILIZATION, APN 038-216-28, 355 COATES DRIVE, APTOS, CALIFORNIA, BY HARO, KASUNICH AND ASSOCIATES, INC., PROJECT NO. SC11133, DATED JUNE 20, 2017 AND REVISED 3 JULY 2017.
- GEOLOGICAL INVESTIGATION, 355 COATES DRIVE, APTOS, CALIFORNIA, COUNTY OF SANTA CRUZ, APN 038-216-28, BY ZINN GEOLOGY, DATED 23 MARCH 2017.
- EMERGENCY REPAIR OF SOLDIER PILE RETAINING WALL, PROPOSED ADU CONSTRUCTION, APN 038-216-28, 355 COATES DRIVE, APTOS, CALIFORNIA, BY HARO, KASUNICH AND ASSOCIATES, INC., PROJECT NO. SC11133.5, DATED FEBRUARY 4, 2019.
- GEOTECHNICAL REPORT ADDENDUM FOR PROPOSED ADU, APN 038-216-28, 355 COATES DRIVE, APTOS, CALIFORNIA, BY HARO, KASUNICH AND ASSOCIATES, INC., PROJECT NO. SC11133.4, DATED FEBRUARY 15, 2019, AND REVISED MARCH 5, 2019.
- REVISED GEOTECHNICAL LETTER REPORT FOR EMERGENCY RETAINING WALL INCLUDING CHANGED FIELD CONDITIONS DURING CONSTRUCTION, PROPOSED EMERGENCY WALL CONSTRUCTION, APN 038-216-28, 355 COATES DRIVE, APTOS, CALIFORNIA, BY HARO, KASUNICH AND ASSOCIATES, INC., PROJECT NO. SC11133.5, DATED AUGUST 1, 2019.
- PROJECT SOIL ENGINEER: HARO, KASUNICH AND ASSOCIATES, INC., SHALL CONFIRM THAT REMEDIAL SLOPE REPAIR PLAN AND SPECIFICATIONS HAVE BEEN REVIEWED AND THAT IT HAS BEEN DETERMINED THAT RECOMMENDATIONS IN THEIR GEOTECHNICAL REPORT(S) ARE PROPERLY INCORPORATED INTO CONSTRUCTION PLANS.
SHALL BE RETAINED BY OWNER TO PROVIDE OBSERVATION AND TESTING SERVICES DURING CONSTRUCTION PER GEOTECHNICAL REPORT(S) RECOMMENDATIONS.
APPROVAL LETTER, INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO COUNTY OF SANTA CRUZ BUILDING AND PLANNING DEPARTMENT.
- ALL CONSTRUCTION SHALL COMPLY WITH RECOMMENDATIONS OF AFOREMENTIONED REPORT(S).

PUBLIC WORKS REQUIREMENTS:

- OWNER SHALL APPLY FOR AND OBTAIN TEMPORARY ENCROACHMENT PERMITS, IF APPLICABLE, FROM DEPARTMENT OF PUBLIC WORKS FOR ALL WORK IN RIGHT OF WAY, EASEMENTS OF PROPERTY IN WHICH COUNTY HOLDS INTEREST, INCLUDING DRIVEWAY, SIDEWALKS, SEWER CONNECTIONS, SEWER CLEANOUTS, CURB DRAINS, OR STORM DRAIN CONNECTIONS IN FIELD.
- ALL CONSTRUCTION RELATED ACTIVITIES WHICH REQUIRE COUNTY PERMIT SHALL BE ALLOWED ONLY DURING HOURS OF 8:00 A.M. TO 5:00 P.M., MONDAY THROUGH FRIDAY AND 9:00 A.M. TO 4:00 P.M. SATURDAYS. NO CONSTRUCTION ACTIVITY OR RELATED ACTIVITIES SHALL BE ALLOWED OUTSIDE OF AFOREMENTIONED HOURS OR ON SUNDAYS AND FOLLOWING HOLIDAYS: NEW YEAR'S DAY, PRESIDENT'S DAY, MEMORIAL DAY, 4TH OF JULY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY. ALL GASOLINE POWERED CONSTRUCTION EQUIPMENT SHALL BE EQUIPPED WITH AN OPERATING MUFFLER OR BAFFLING SYSTEM AS ORIGINALLY PROVIDED BY MANUFACTURER, AND NO MODIFICATION TO THESE SYSTEMS IS PERMITTED.
VERIFY AFOREMENTIONED HOLIDAY SCHEDULE AND HOURS WITH COUNTY OF SANTA CRUZ BUILDING DEPARTMENT.
- CONTRACTOR SHALL ENSURE THAT APPLICABLE BEST MANAGEMENT PRACTICES (BMPs) FROM COUNTY OF SANTA CRUZ STORM WATER POLLUTION PREVENTION PROGRAM (STOPPP) ARE FOLLOWED TO PREVENT DISCHARGE OF SOIL OR ANY CONSTRUCTION MATERIAL INTO GUTTER, STORM DRAIN, OR CREEK.

SITE WORK NOTES:

- ALL EXISTING TREES TO REMAIN, UNLESS IT IS DETERMINED TO BE SAFETY HAZARD DURING CONSTRUCTION.
SOME BUSHES AND BRUSH SHALL BE REMOVED AS NECESSARY.

STATEMENT OF SPECIAL INSPECTIONS

2016 CBC SEC. 1704:

- SPECIAL INSPECTION REQUIRED FOR:
- SOILS REPORT
 - CONCRETE $f'c=4,000$ PSI, $f'c=3,000$ PSI
 - REINFORCING STEEL $F_y=60$ KSI
- SOILS (2016 CBC TABLE 1705.6):
 - VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY (PERIODICALLY DURING TASK LISTED).
 - VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL (PERIODICALLY DURING TASK LISTED).
 - PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS (PERIODICALLY DURING TASK LISTED).
 - VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL (CONTINUOUS DURING TASK LISTED).
 - PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY (PERIODICALLY DURING TASK LISTED).
 - TIEBACK ANCHORS (2016 CBC TABLE 1705.6):
 - SOIL ENGINEER'S REPRESENTATIVE TO OBSERVE DRILLING PROCESS TO CONFIRM DEPTH OF TIEBACK ANCHORS.
 - SOIL ENGINEER'S REPRESENTATIVE TO OBSERVE PROOF TESTING OF TIEBACK ANCHORS:
 - ALL TIEBACK ANCHORS TO BE PROOF TESTED.
 - ANCHOR TEST LOAD (T.L.) @ 133% D.L. (SEE TIEBACK ANCHOR TABLE "B").
 - ANCHOR LOCK-OFF LOAD @ 60% D.L. (SEE TIEBACK ANCHOR TABLE "B").
 - ANCHORS TESTING PROCEDURE TO BE IN GENERAL CONFORMANCE WITH PTI MANUAL (POST TENSIONING INSTITUTE).
 - UPON CONCLUSION OF ANCHORS TESTING, SOIL ENGINEER WILL PREPARE SUMMARY LETTER OF HIS OBSERVATIONS RELATIVE TO BOTH LOAD TESTING, ANCHOR DEPTH, HEADSCARP REPAIR AND AS-BUILT CONSTRUCTION CONDITIONS.

- CONCRETE CONSTRUCTION (2016 CBC TABLE 1705.3):
 - INSPECTION OF REINFORCING STEEL AND PLACEMENT (PERIODIC).
 - VERIFYING USE OF REQUIRED DESIGN MIX (PERIODIC):
 $f'c=3,000$ PSI, W/C RATIO=0.59, TYPE II - V PORTLAND CEMENT.
 $f'c=4,000$ PSI, W/C RATIO=0.48, TYPE II - V PORTLAND CEMENT.
LAB TESTING OF CONCRETE SPECIMENS MAY BE REQUIRED.
- CAST-IN-PLACE DEEP FOUNDATION ELEMENTS CONSTRUCTION (2016 CBC TABLE 1705.7 & 1705.8):
 - OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT (CONTINUOUS).
 - VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, LENGTH, EMBEDMENT INTO SUPPORTING MATERIAL AND ADEQUATE END-BEARING STRATA CAPACITY (CONTINUOUS).
- DRAINS/EROSION CONTROL INSPECTION:
 - VERIFY MATERIALS AND PLACEMENT OF DRAINS/EROSION CONTROL. (PERIODICALLY DURING TASK LISTED).

FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN INSPECTIONS SHALL BE SUBMITTED AT POINT IN TIME AGREED UPON BY PERMIT APPLICANT AND BUILDING OFFICIAL PRIOR TO START OF WORK.
IF NOT SPECIFICALLY AGREED AND/OR REQUIRED, FINAL REPORT WILL BE SUBMITTED AFTER WORK COMPLETION.

ESTIMATED GRADING VOLUME CALCULATIONS:
APPROX. VOLUME OF CUT/DRILL: $(2.5)(7.5)(27.5)(4)=2,063516$ CFT=76 CY
APPROX. VOLUME OF CUT: $(2.5)(1.0)(16)(3)=120$ CFT=5 CY
APPROX. VOLUME OF FILL: N/A
APPROX. VOLUME OF CUT/DRILL & FILL: 81 CY
TOTAL ESTIMATED GRADING VOLUME: 81 CY
OFF-HAUL OF CUT/DRILL SOIL MATERIAL TO APPROVED FACILITY.
NO IMPORT OF SOIL MATERIAL IS ANTICIPATED.

STRUCTURAL DESIGN PARAMETERS:

DESIGN PARAMETERS FOR BLUFF RETAINING SYSTEM AT EMERGENCY RETAINING WALL AS PER REPORT:
- REVISED GEOTECHNICAL LETTER REPORT FOR EMERGENCY RETAINING WALL INCLUDING CHANGED FIELD CONDITIONS DURING CONSTRUCTION, PROPOSED EMERGENCY WALL CONSTRUCTION, APN 038-216-28, 355 COATES DRIVE, APTOS, CALIFORNIA, BY HARO, KASUNICH AND ASSOCIATES, INC., PROJECT NO. SC11133.5, DATED AUGUST 1, 2019.

CONCRETE RETAINING WALL:
- SOIL ACTIVE PRESSURE OF 70 PCF-EFW, WALL MAY VARY IN HEIGHT BETWEEN 6 TO 12 FEET ABOVE GROUND AND 4 FEET BELOW GROUND. THIS WILL RESULT IN TOTAL WALL HEIGHTS OF 16 FEET IN SOME LOCATIONS. THIS ACTIVE LATERAL EARTH PRESSURE INCLUDES SEISMIC AND RESIDENTIAL SURCHARGE.
- FOR RETAINING WALL RESTRAINED AT TOP USE 40H UNIFORM EARTH PRESSURE.
- SOIL PASSIVE PRESSURE ON SUPPORTING PIERS OF 550 PCF-EFW ACTING OVER (2) PIER DIAMETERS, 1'-0" BELOW ACTIVE STRESS FIELD SHALL BE NEGLECTED FOR PASSIVE RESISTANCE.
- ALLOWABLE SOIL BEARING PRESSURE OF 8,000 PSF PLUS 1/3 INCREASE FOR SHORT DURATION LOADING.
- PIERS 2'-6" DIA. AND DESIGN SPACING @ 5'-0" C.C. (2 PIER DIAMETERS), MINIMUM DEPTH OF 25 FEET.
- DRAINED CONDITION, 4'-0" OF WALL BELOW GROUND WILL INCLUDE HYDROSTATIC SURCHARGE.

WALL W/ GROUTED TIEBACK ANCHORS:
- TIEBACK ANCHORS 15'-0" (MIN.) UNBONDED ZONE AND 10'-0" (MIN.) BONDED ZONE, 4" TO 8" IN DIAMETER, WORKING SHAFT FRICTION OF 1,500 PSF FOR NON-PRESSURE GROUTING APPLICATION AND 2,300 PSF FOR PRESSURE GROUTING APPLICATION.
- TIEBACKS INSTALLED AT INCLINATION OF 20' (10' TO 30' MAX.) FROM HORIZONTAL.
- TIEBACK POST TENSIONED CAPACITY OF 50.0 KIPS EACH.
ACTUAL CAPACITY AND SPACING WILL BE DETERMINED IN DESIGN.

TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION				
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD*	IBC REFERENCE
1. Inspect reinforcement, including prestressing tendons, and verify placement.	—	X	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. Reinforcing bar welding: a. Verify weldability of reinforcing bars other than ASTM A706. b. Inspect single-pass fillet welds, maximum $\frac{1}{16}$ ", and c. Inspect all other welds.	—	X	AWS D1.4 ACI 318: 26.5.4	—
3. Inspect anchors cast in concrete.	—	X	ACI 318: 17.8.2	—
4. Inspect anchors post-installed in hardened concrete members. ^b a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors not defined in 4.a.	X	X	ACI 318: 17.8.2.4 ACI 318: 17.8.2	—
5. Verify use of required design mix.	—	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	—	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	1908.10
7. Inspect concrete and shotcrete placement for proper application techniques.	X	—	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	—	X	ACI 318: 26.4.7-26.4.9	1908.9
9. Inspect prestressed concrete for: a. Application of prestressing forces; and b. Grouting of bonded prestressing tendons.	X X	—	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3	—
10. Inspect erection of precast concrete members.	—	X	ACI 318: Ch. 26.8	—
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	—	X	ACI 318: 26.10.2	—
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	—	X	ACI 318: 26.10.1(b)	—

For SI: 1 inch = 25.4 mm.
a. Where applicable, see also Section 1705.12, Special inspections for seismic resistance.
b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with 17.8.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

106 2016 CALIFORNIA BUILDING CODE

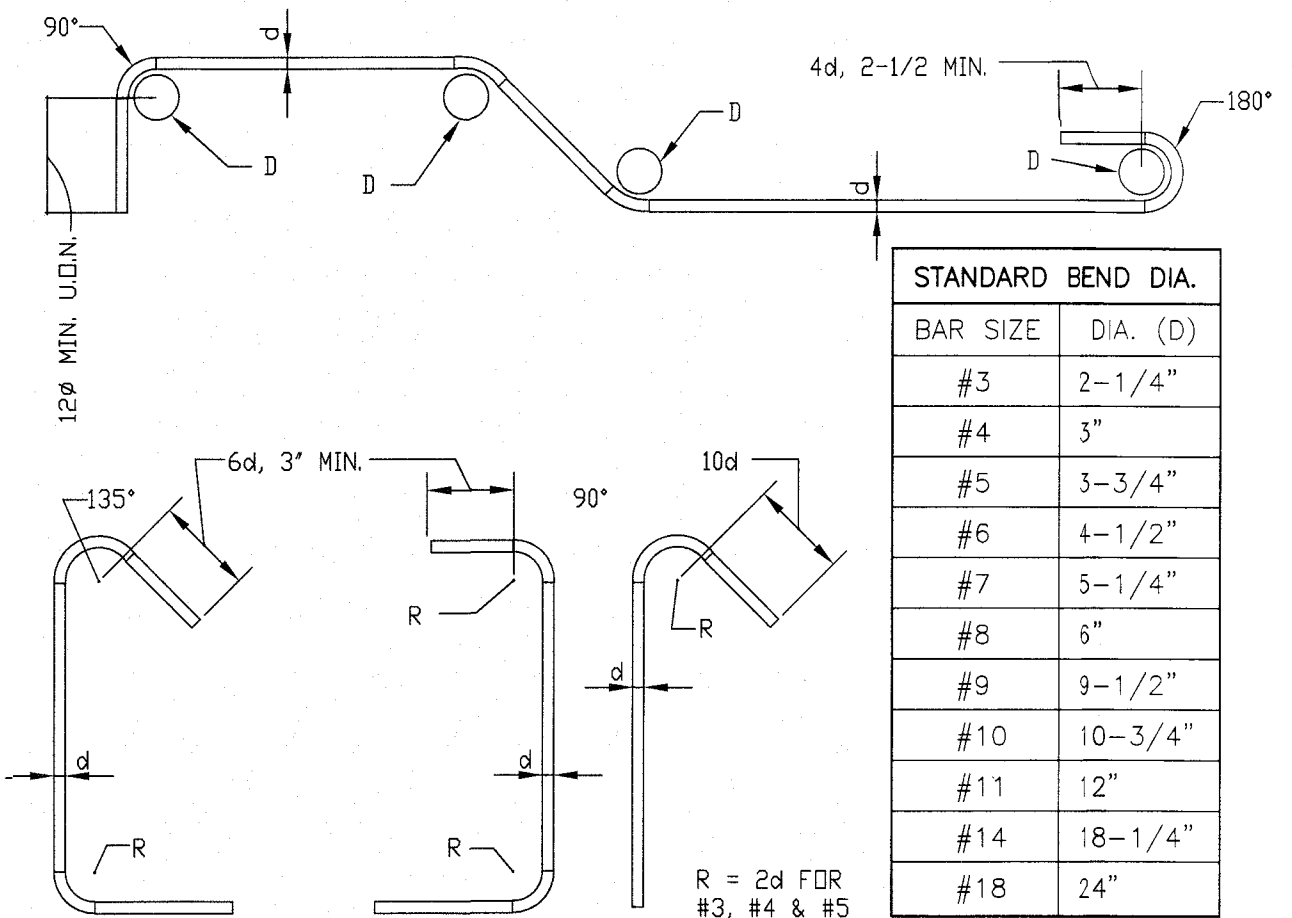
TABLE 1705.6 REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	—	X
2. Verify excavations are extended to proper depth and have reached proper material.	—	X
3. Perform classification and testing of compacted fill materials.	—	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	—
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	—	X
6. Tieback Anchors proof test	X	—

2016 CALIFORNIA BUILDING CODE 107

MIN. DEVELOPMENT LENGTH IN INCHES (Ld):		
	$f'c = 3.0$ ksi	$f'c = 4.0$ ksi
#4	23"	19"
#5	28"	24"
#6	34"	29"
#7	62"	54"
#8	71"	61"

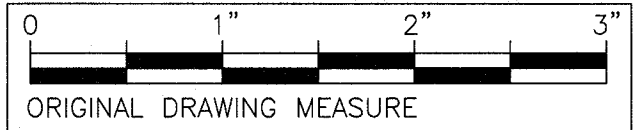
LAP LENGTH IN INCHES (1.3 Ld):		
	$f'c = 3.0$ ksi	$f'c = 4.0$ ksi
#4	30"	25"
#5	37"	32"
#6	44"	38"
#7	81"	70"
#8	92"	80"

NOTE:
- FOR LAP SPLICES USE CLASS "B" SPLICES, (LAP OF 1.30 Ld).
- AT CONTRACTOR'S OPTION, HIGH STRENGTH COUPLERS MAY BE UTILIZED. (COUPLERS TO DEVELOP AT LEAST 125% SPECIFIED YIELD STRENGTH f_y OF BAR)
- FOR CONCRETE OF $f'c = 2.5$ KSI USE TABLE FOR $f'c = 3.0$ KSI.



STANDARD REINF. HOOKS AND BENDS

NOTES:
- HOOK LENGTHS ARE MINIMUMS. LONGER HOOKS SHALL BE PROVIDED WHERE DETAILED ON DRAWINGS.
- BAR STIRRUP AND TIE CONFIGURATION SHALL BE AS SHOWN ON DRAWINGS.



SOIL ENGINEERING CONSTRUCTION, INC.
927 ARGUELLO STREET, REDWOOD CITY, CALIFORNIA 94063
PHONE (650) 367-9595 FAX (650) 367-8139



PROJECT NOTES AND
STANDARD TABLES

EMERGENCY REPAIR OF
STITCH PIER WALL

MR. AND MRS. DOUG BRITT
355 COATES DRIVE,
APTOS, SANTA CRUZ COUNTY,
CALIFORNIA 95003

FILE NO.	
DATE	02-15-19
PROJECT	19-011
DWG. NO.	Coates Dr-355-I-04
REVISION	2 04-04-19
REVISION	3 08-16-19
DESIGNED BY:	RH
CHECKED BY:	GED

LEGEND:
- "EP" - DEPICTS: EMERGENCY STITCH PIER
- "T" - DEPICTS: TIEBACK ANCHOR

APPROX. LOCATION OF PROPOSED EROSION CONTROL MEASURES. FINAL INSTALLATION MAY BE ADJUSTED BASED ON FIELD RECOMMENDATIONS BY PROJECT ENGINEER. EROSION CONTROL MEASURES TO BE MAINTAINED IN WORKING CONDITION FOR DURATION OF PROJECT

(N) EMERGENCY STITCH PIER RETAINING WALL, PIERS 2'-6" DIA. @ 5'-0" C.C. + TOTAL (8) EMERGENCY STITCH PIERS. EXACT LOCATION TO BE DETERMINED BY GEOTECHNICAL CONSULTANT IN FIELD

(N) TIEBACK ANCHORS, TOTAL (3)

ONCE EMERGENCY WALL IS CONSTRUCTED PERMITTED WALL IN FRONT OF IT WILL BE REMOVED

TO MINIMIZE VISUAL IMPACT RELATIVE TO EXISTING RETAINING WALL EXPOSED FACE OF NEW RETAINING WALL WILL BE COVERED W/ ART ROCK FASCIA THAT MIMICS NATURAL SLOPE

APPROX. LOCATION OF ONGOING SLOPE FAILURE AREA

STATE OF CALIFORNIA
DEPT OF PARKS & RECL
APN 038-201-01

0 5' 10' 20' 40'
SCALE: 1"=10'

NOTES:
- SITE PLAN FROM DRAWING BY DENNIS NORTON, HOME DESIGN AND PROJECT PLANNING, DATED 12/12/18 AND REVISED 02/18/19.
- SITE PLAN DRAWING SUPPLIED BY OWNER/AGENT.

CONSTRUCTION PLAN, EROSION AND STORM WATER POLLUTION PREVENTION PLAN
SCALE: 1"=10'

1
5

LID 2.2.1
LID 2.2.2
LID 2.2.3
LID 2.2.4

LID 2.2.1
LID 2.2.2
LID 2.2.3
LID 2.2.4

BMP LEGEND

DPLU659 BROW DITCH
DIRECTION OF LOT DRAINAGE

MATERIAL & WASTE MANAGEMENT CONTROL BMP's:

WM-1 MATERIAL DELIVERY & STORAGE
WM-4 SPILL PREVENTION AND CONTROL
WM-8 CONCRETE WASTE MANAGEMENT
WM-5 SOLID WASTE MANAGEMENT
WM-9 SANITARY WASTE MANAGEMENT

TEMPORARY RUNOFF CONTROL BMP's:

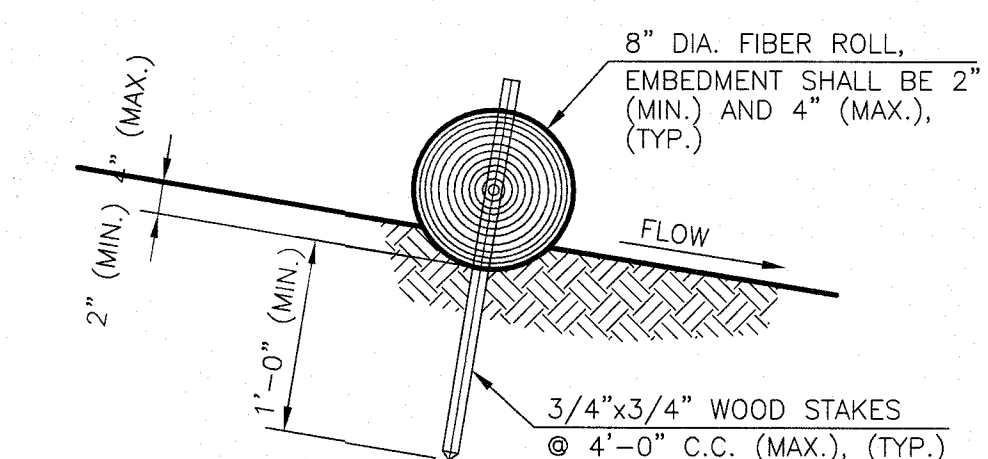
SC-1 SILT FENCE SF SF
SC-5 FIBER ROLL FR FR
SC-6 GRAVEL BAGS
SC-7 STREET SWEEPING AND VACUUMING, T.B.D.
SC-10 STORM DRAIN INLET PROTECTION, T.B.D.

LOW IMPACT DEVELOPMENT BMP's:

LID 2.2.1 CONSERVATION OF NATURAL DRAINAGES, WELL DRAINED SOILS AND SIGNIFICANT VEGETATION
LID 2.2.2 MINIMIZE DISTURBANCES TO NATURAL DRAINAGES
LID 2.2.3 MINIMIZE AND DISCONNECT IMPERVIOUS SURFACES
LID 2.2.4 MINIMIZE SOIL COMPACTION

NOTES:
- EROSION CONTROL MEASURES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.

NOTE:
- MATERIAL AND WASTE MANAGEMENT AREAS SHALL BE TARP COVERED W/ PERIMETER CONTROLS (WATTLES, ETC.) TO PREVENT STORM WATER POLLUTION.



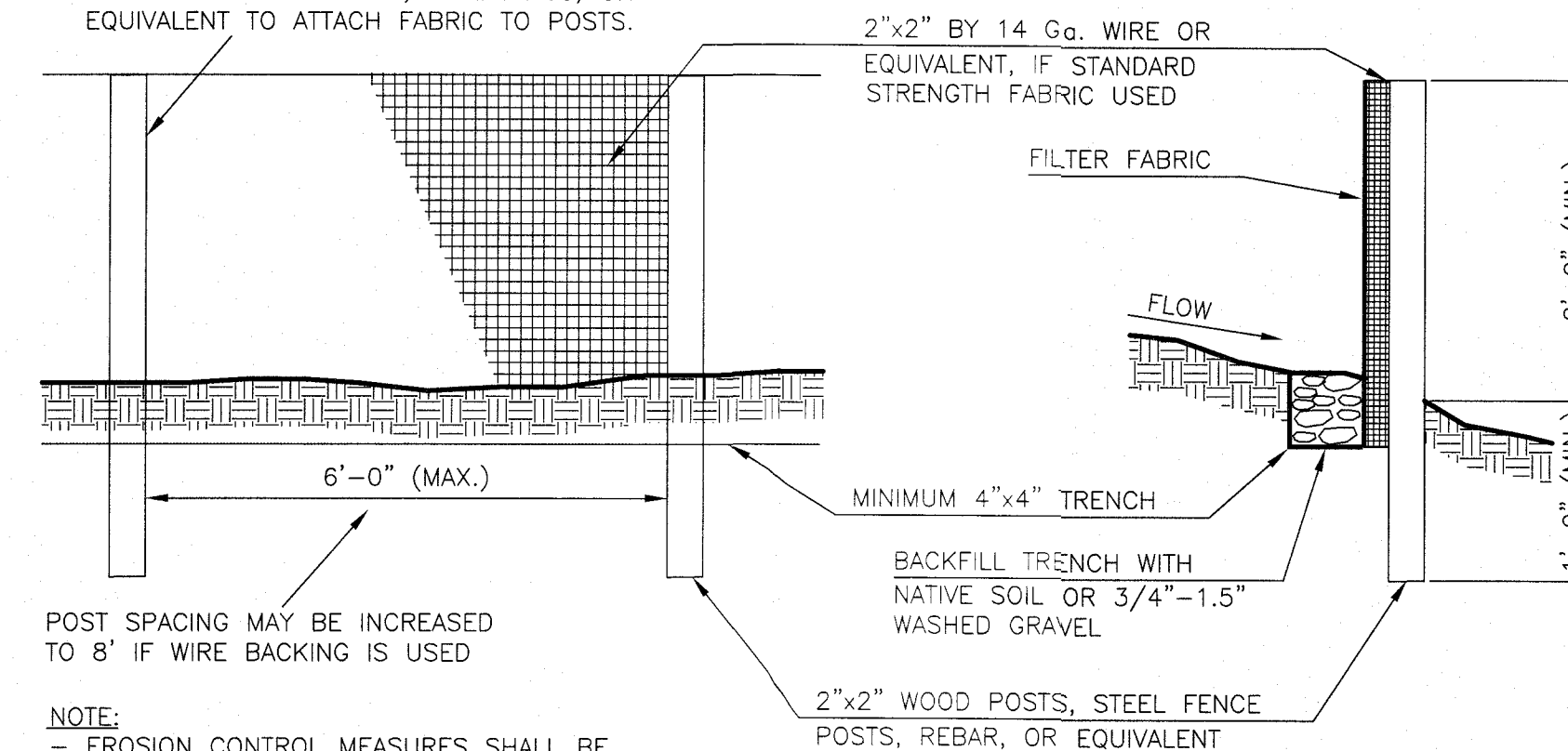
NOTE:
- INSTALLATION OF FIBER ROLL IS PREFERRED OPTION FOR EROSION CONTROL.
- EROSION CONTROL MEASURES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.
- FINAL LOCATION AS DIRECTED BY GEOTECHNICAL CONSULTANT IN FIELD.

SECTION-FIBER ROLL

SCALE: 1"=1'-0"

F
5

JOINTS IN FILTER FABRIC SHALL BE SPLICED AT POSTS. USE STAPLES, WIRE RINGS, OR EQUIVALENT TO ATTACH FABRIC TO POSTS.



POST SPACING MAY BE INCREASED TO 8' IF WIRE BACKING IS USED

NOTE:
- EROSION CONTROL MEASURES SHALL BE INSTALLED ALONG CONTOUR WHENEVER POSSIBLE.

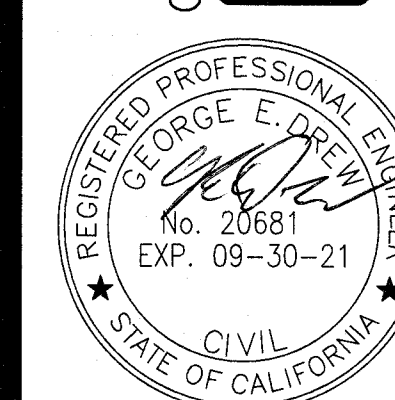
ALT. SECTION-SILT FENCE EROSION CONTROL

SCALE: 1"=1'-0"

E
5

0 1' 2' 3'
ORIGINAL DRAWING MEASURE

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CONSTRUCTION PLAN, EROSION AND STORM WATER POLLUTION PREVENTION PLAN

EMERGENCY REPAIR OF STITCH PIER WALL

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FILE NO.
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REVISION ALL NEW DWG. 08-16-19
REVISION
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DESIGNED BY: RH
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