

REVISED 10/27/2015

COUNTY OF SANTA CLARA

General Construction

Specifications

GENERAL CONDITIONS

1.

All construction work shall be performed in accordance with the soils and/or geotechnical report prepared by Limited Geologic and Geotechnical Study and dated December 22, 2017. This report is supplemented by: 1) these plans and specifications, 2) the County of Santa Clara standard details, 3) the County of Santa Clara standard specs, 4) State of California standard details, 5) State of California standard specifications. In the event of conflict the former shall take precedence over the latter. The performance and completion of all work must be to the satisfaction of the County.
2.

Developer is responsible for installation of the improvements shown on these plans and he or his successor property owners are responsible for their continued maintenance.
3.

Developer shall be responsible for correction of any errors or omissions in these plans. The County shall be authorized to require discontinuance of any work and such correction and modification of plans as may be necessary to comply with County standards or conditions of development approval.
4.

Developer shall obtain encroachment permits from the Santa Clara valley water district and California department of transportation where needed. Copies of these permits shall be kept at the job site for review by the County's Inspector.
5.

Developer shall remove or trim all trees to provide an unobstructed fifteen (15) foot vertical clearance for roadway area.
6.

This plan authorizes the removal of only those trees with trunk diameters greater than 12 inches measured 4.5 feet above the ground that are shown to be removed unless an amended plan is approved or a separate tree removal permit is obtained from the planning office. It is the contractor's responsibility to ensure that removal of additional trees has been permitted.
7.

Developer shall provide adequate dust control as required by the County Inspector.
8.

All persons must comply with section 4442 of the public resources code and section 13005 of the health and safety code relating to the use of spark arresters.
9.

Upon discovering or unearthing any burial site as evidenced by human skeletal remains or artifacts, the person making such discovery shall immediately notify the County Coroner at (408) 454-2520 and land development engineering office at (408) 299-5730. No further disturbance of the site may be made except as authorized by the land development office in accord with provisions of this ordinance (County ordinance code section b6-18). 10. These plans are for the work described in the scope of work only. A separate permit will be required for the septic line construction. 11. Any deviation from these approved plans shall be re-approved in writing by the County Engineer prior to construction.

CONSTRUCTION STAKING

1.

The developer's engineer is responsible for the initial placement and replacement of construction grade stakes. The stakes are to be adequately identified, located, stabilized, etc. For the convenience of contractors. Lateral offset of stakes set for curbs and gutters shall not exceed 2 1/2 feet from back of curb.
2.

Any property line stakes or rod monuments disturbed during construction shall be replaced by developer's engineer and licensed land surveyor.
3.

Property line staking must be performed by the Project Engineer or land surveyor to establish or re-establish the project boundary and shall be inspected by the County Inspector prior to the beginning of the work.
4.

Proper construction stakes shall be set in the field by the Project Engineer or land surveyor and verified by the County Inspector prior to the commencement of grading.

CONSTRUCTION INSPECTION

1.

Contractor shall notify permit inspection unit, Santa Clara County prior to commencing work and for final inspection of work and site.
2.

The County requires a minimum of 24 hours advance notice for general inspection, 48 hours for asphalt concrete inspection.
3.

Inspection by Santa Clara County shall be limited to inspection of materials and processes of construction to observe their compliance with plans & specifications but does not include responsibility for the superintendent of construction, site conditions, equipment or personnel. Contractor shall notify the County land development Inspector at phone (408) 299-6868 at least 24 hours prior to commencing work and for final inspection of work and site.
4.

Developer and/or his authorized representative must submit written request for final inspection and acceptance. Said request shall be directed to the inspection office noted on the permit form.
5.

The contractor shall provide to the County construction Inspector with pad elevation and location certificates, prepared by the Project Engineer or land surveyor, prior to commencement of the building foundation.

SITE PREPARATION (CLEARING AND GRUBBING)

1.

Existing trees authorized for removal, roots, and foreign material in areas to be improved will be removed to an authorized disposal site as follows:
- a)

to a minimum depth of two feet below the finished grade of proposed roadways (either private or to be dedicated to public use)
- b)

from areas affected by the proposed grading except where noted on the plans.
2.

It shall be the responsibility of the developer to move or relocate utility poles and other obstructions in the way of construction.

UTILITY LOCATION, TRENCHING & BACKFILL

1.

Contractor shall notify USA (underground service alert) at 1-800-277-2600 a minimum of 24 hours before beginning underground work for verification of the location of underground utilities. Accurate verification as to size, location, and depth of existing underground conduits or facilities shall be the individual contractors responsibility. Plan locations are approximate and for general information only.
2.

All underground installations shall be in place and the trench backfilled and compacted before placing aggregate base material or surface structures. Surfacing may be done if the utility company concerned indicates by letter that it will bore. Unless specifically authorized by the County, gas and water mains shall be installed outside the paved areas.
3.

Trench backfill in existing pavement areas shall be sand material in accordance with the applicable provisions of the state specifications. The structural section for trench replacement shall consist of not less than 12 inches of approved aggregate base material compacted to a relative compaction of at least 95% and 4 inches of hot asphalt concrete placed in two lifts. Trench restoration for higher type pavements shall be made in kind or as directed by the County.
4.

Trench backfill in new construction areas shall be sand material compacted to a relative compaction of at least 90%. The requirement for select material may be waived by County if the native soil is suitable for use as trench backfill but the compaction requirements will not be thereby waived.
5.

Backfill and trench restoration requirements shall apply as minimum standards to all underground facilities installed by other firms or public agencies.

RETAINING WALLS

1.

Reinforced concrete and concrete masonry unit retaining walls shall have foundation and reinforcement inspected by the County Engineering Inspector and engineer of record prior to pouring the foundation and forming the wall.
2.

Segmental block retaining walls shall have foundation and reinforcement inspected by the County Engineering Inspector.

GRADING

1.

Excavated material shall be placed in the fill areas designated or shall be hauled away from the site to a County approved disposal site. Where fill material is to be placed on natural ground, it shall be stripped of all vegetation. To achieve a proper bond with the fill material, the surface of the ground shall be scarified to depth of 6" before fill is placed. Where natural ground is steeper than 5:1, it shall be benched and the fill keyed in to achieve stability. Where new fill is to be placed on existing fill the existing fill shall be removed until material compacted to 90% relative compaction is exposed. Then the new fill material shall be placed as per these construction notes. Fill material shall be placed in uniform lifts not exceeding 6" in uncompacted thickness. Before compaction begins, the fill shall be brought to a water content that will permit proper compaction by either 1) aerating the fill if it is too wet or moistening the fill with water if it is too dry. Each lift shall be thoroughly mixed before compaction to ensure a uniform distribution of moisture. Excess cut material shall not be spread or stockpiled on the site.
2.

Surplus earth fill material shall be placed in a single (8" max) thick layer compacted to withstand weathering in the area(s) delineated on the plan.
3.

No organic material shall be placed in any fill. No trees shall be removed outside of cut, fill or roadway areas.
4.

The upper 6" of subgrade below driveway access road or parking area shall be compacted to 95% of maximum density.
5.

Maximum cut slope shall be 2 horizontal to 1 vertical. Maximum fill slope shall be 2 horizontal to 1 vertical.

Earthwork Quantities						
	Cut	Fill	Net	Max Cut	Max Fill	Disturbed Area
Building*	48 cy	167 cy	119 cy (fill)	3.29'	4.84'	7,648 SF
Building Pad	11 cy	229 cy	218 cy (fill)	3.03'	3.53'	
Driveway	24 cy	204 cy	180 cy (fill)	1.69'	5.61'	
Pond	36 cy	0 cy	36 cy (cut)	5.00'	0.00'	
Total	119 cy	600 cy	481 cy (import)			196 SF

- Note: the quantities shown assume a 15% shrinkage of fill volumes
- Note: excess material shall be off hauled to a County approved dump site.
7.

Notify soils engineer two (2) days prior to commencement of any grading work to coordinate the work in the field.
8.

All materials for fill should be approved by the soils engineer before it is brought to the site.
9.

The upper 6" of the subgrade soil shall be scarified, moisture conditioned and compacted to a minimum relative compaction of 95%.
10.

All aggregate base material shall be compacted to a minimum 95% relative compaction.
11.

The geotechnical plan review letter must be reviewed and approved by the County geologist prior to final approval by the County Engineer for building occupancy.
12.

The project geotechnical engineer shall perform compaction testing and present the results to the County Engineering inspector prior to the construction of any paved area.
13.

Grading work between October 15th and April 15th is at the discretion of the Santa Clara County grading official.
14.

Total disturbed area for the project _____SF.
15.

WDID no _____
16.

The inspector may verify that a valid notice of intent (NOI) has been issued by the state and that a current and up to date storm water pollution prevention plan (SWPPP) is available on site.

TREE PROTECTION

1.

For all trees to be retained with a canopy in the development area or interfaces with the limits of grading for all proposed development on site, the trees shall be protected by the placement of rigid tree protective fencing, consistent with the County integrated landscape guidelines, and include the following:
- a.

The fencing shall be placed along the outside edge of the dripline of the tree or grove of trees.
- b.

The fencing shall be maintained throughout the site construction period and shall be inspected periodically for damage and proper function.
- c.

Fencing shall be repaired, as necessary, to provide a physical barrier from construction activities. Signage stating, "warning- this fencing shall not be removed without permission from the Santa Clara County planning office (408) 299-5770. County of Santa Clara tree protection measures may be found at <http://www.Scclanning.Gov>." shall be placed on the tree protective fencing until final occupancy.
2.

Prior to commencement of any construction activity, tree protective fencing shall be securely in place and inspected by the land development engineering inspector.
3.

See existing tree protection details for more information.

ACCESS ROADS AND DRIVEWAYS

1.

Driveway locations shall be as shown on the improvement plans with centerline stationing. The minimum concrete thickness shall be 6 inches throughout (with a maximum approach slope of 1 1/4 inches per foot).
2.

All driveway or common access road sections in excess of 15 longitudinal slope must be paved with a minimum 2-inch asphalt lift or full depth concrete lift prior to any combustible framing. The owner and prime contractor are responsible for maintaining project site access and neighborhood access for emergency vehicles and local residents.
3.

Roadways designated as not County maintained roads as shown on the plan will not be eligible for County maintenance until the roadways are improved (at no cost to the County) to the public maintenance road standards approved by the board of supervisors and in effect at such time that the roadways are considered for acceptance into the County's road system.
4.

All work in the County road right-of-way requires an encroachment permit from the roads and airports department. Each individual activity requires a separate permit - I.E. Cable, electrical, gas, sewer, water, retaining walls, driveway approaches, fences, landscaping, tree removal, storm drainage improvements, etc..

STREET LIGHTING

1.

Pacific gas & electric electroler service fee shall be paid by the developer and/or his authorized representative.

SANITARY SEWER

1.

The sanitary sewer and water utilities shown on these plans are not part of this grading permit and are shown for reference only.
2.

All materials and methods of construction of sanitary sewers shall conform to the specifications of the jurisdiction involved. Inspection of sanitary sewer work shall be done by said jurisdiction.

PORTLAND CEMENT CONCRETE

1.

Concrete used for structural purposes shall be class "a" (6 sack per cubic yard) as specified in the state standard specifications. Concrete placed must develop a minimum strength factor of 2800 psi in a seven-day period. The concrete mix design shall be under the continual control of the County inspector.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1.

Water all active construction areas at least twice daily.
2.

Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
3.

Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
4.

Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites. The use of dry powder sweeping is prohibited.
5.

Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. The use of dry powder sweeping is prohibited.
6.

All construction vehicles, equipment and delivery trucks shall have a maximum idling time of 5 minutes (as required by the california airborne toxic control measure title 13, section 2485 of california code of regulations (cor)). Engines shall be shut off if construction requires longer idling time unless necessary for proper operation of the vehicle.
7.

All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
8.

All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
9.

Post a sign that is at least 32 square feet minimum 2 inches letter height visible near the entrance of construction site that identifies the following requirements. Obtain encroachment permit for sign from roads department or other applicable agency if required.
- a.

15 miles per hour (mph) speed limit
- b.

5 minutes maximum idling time of vehicles
- c.

Telephone number to contact the bay area air quality management district regarding dust complaints. Note phone number of the bay area air quality management district air pollution complain hotline of 1-800-334-6367.
10.

All fill slopes shall be compacted and left in a smooth and firm condition capable of withstanding weathering.
11.

All exposed disturbed areas shall be seeded with brome seed spread at the rate of 5 lb. Per 1000 square feet (or approved equal). Seeding and watering shall be maintained as required to ensure growth.
12.

All ditches shall be lined per county standard sds.
13.

All storm drainage structures shall be installed with effective entrance & outfall erosion controls e.g. Sacked concrete rip-rap. Energy dissipaters shall be installed at all ditch outfalls. Where outfalls are not into an existing creek or water course, runoff shall be released to sheet flow.
14.

Prior to grading completion and release of the bond, all graded areas shall be reseeded in conformance with the county grading ordinance to minimize the visual impacts of the grade slopes and reduce the potential for erosion of the subject site.
15.

Permanent landscaping shown on the attached landscape plan must be installed and field approved by the county planning office prior to final approval by the county engineer, and final occupancy release by the building inspection office.
16.

The owner shall prepare and present a winterization report to the county inspector for review prior to october 15th of every year.
17.

The owner, contractor, and any person performing construction activities shall install and maintain construction best management practices (bmps) on the project site and within the santa clara county road right-of-way throughout the duration of the construction and until the establishment of permanent stabilization and sediment control to prevent the discharge of pollutants including sediment, construction materials, excavated materials, and waste into the santa clara county right-of-way, storm sewer waterways, roadway infrastructure. Bmps shall include, but not be limited to the following:
- a.

Prevention of pollutants in storm water discharges from the construction site and the contractor's material and equipment laydown / staging areas.
- b.

Prevention of tracking of mud, dirt, and construction materials onto the public road right-of-way.
- c.

Prevention of discharge of water run-off during dry and wet weather conditions onto the public road right-of-way.
18.

The owner, contractor, and any person performing construction activities shall ensure that all temporary construction facilities, including but not limited to construction materials, deliveries, hazardous and non-hazardous material storage, equipment, tools, portable toilets, concrete washout, garbage containers, laydown yards, secondary containment areas, etc. Are located outside the santa clara county road right-of-way.
19.

Erosion control plan is a guide and shall be amended as necessary to prevent erosion and illicit discharges on a year around basis, depending on the season, weather, and field conditions. Erosion control measures in addition to those noted in the permitted plans may be necessary. Failure to install site site and situationally appropriate erosion control measures may result in violations, fines, and a stoppage of work.

STORM DRAINAGE AND STORM WATER MANAGEMENT

1.

Developer is responsible for all necessary drainage facilities whether shown on the plans or not and he or his successor property owners are responsible for the adequacy and continued maintenance of these facilities in a manner which will preclude any hazard to life, health, or damage to adjoining property, consistent with npdes permit cas612008 / order no. R2-2009-0047 and npdes permit cas000004/ order no. 2013-0001-dwq.
2.

Drop inlets shall be county standard type 5 unless otherwise noted on the plans. The developer's engineer shall be responsible for the proper location of drop inlets. Where street profile grade exceeds 6% drop inlets shall be set at 50o angle curb line to accept water or as shown on the plans.
3.

Where culverts are installed the developer shall be responsible for grading the outlet ditch to drain to an existing swale or to an open area for sheet flow.
4.

Upon installation of driveway connections, property owners shall provide for the uninterrupted flow of water in roadside ditches.
5.

The county shall inspect underground drainage improvements and storm water management features prior to backfill.

AS-BUILT PLANS STATEMENT

This is a true copy of the As-Built Plans. There (____) were (____) were not) minor field changes - marked with the symbol (•). There (____) were (____) were not) plan revisions indicating significant changes reviewed by the county engineer and marked with the symbol Δ.

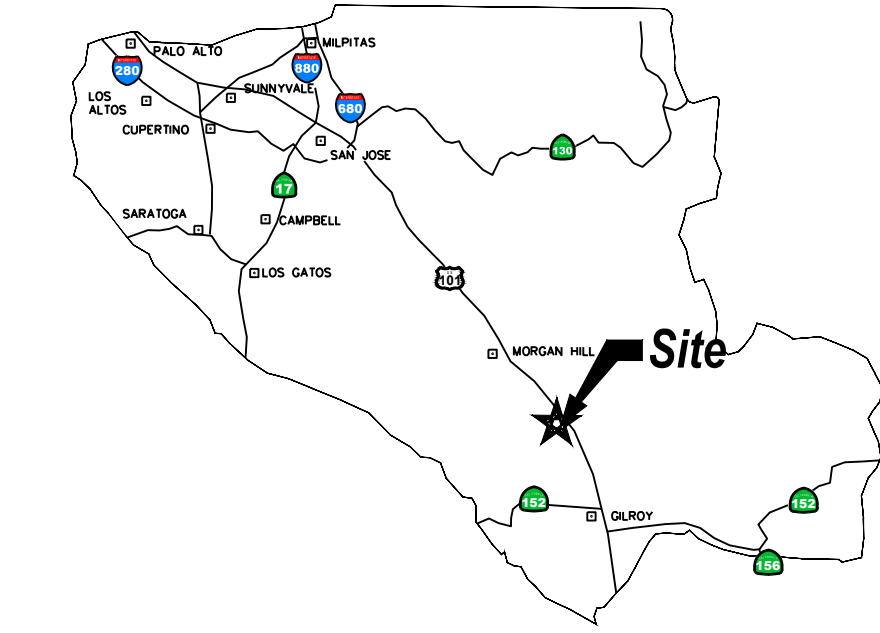
Date _____ Signature _____

Note: this statement is to be signed by the person authorized by the county engineer to perform the inspection work. A reproducible copy of the as-built plans must be furnished to the county engineer after construction.

GEOTECHNICAL ENGINEER OBSERVATION

1.

A construction observation letter from the responsible geotechnical engineer and engineering geologist detailing construction observations and certifying that the work was done in accordance with the recommendations in the geotechnical and geologic reports shall be submitted prior to the grading completion and release of the bond.



COUNTY LOCATION

MAP

SURVEY MONUMENT PRESERVATION

1.

The landowner / contractor must protect and ensure the perpetuation of survey monuments affected by construction activities.
2.

Prior to the start of construction, the contractor shall locate, stake, and flag or otherwise identify with paint or other markings all permanent survey monuments of record and any unrecorded monuments that are discovered that are within 50 feet of the construction activity.
3.

The landowner, contractor and/or any person performing construction activities that will or may disturb an existing monument, corner stake, or any other permanent surveyed monument shall cause to have a licensed land surveyor or civil engineer, authorized to practice surveying, ensure that a corner record and/or record of survey are filed with the county surveyor's office prior to disturbing said monuments and reset permanent monument(s) in the surface of the new construction or set a witness monument(s) to perpetuate the location if any permanent monument could be destroyed, damaged, covered, disturbed, or otherwise obliterated. The licensed land surveyor or civil engineer shall file a corner record or record of survey with county surveyor prior to final acceptance of the project by the land development engineering inspector.

EXISTING TREE PROTECTION DETAILS

1.

Prior to the commencement of any grading, tree protective fencing shall be in place in accordance with the tree preservation plan and inspected by a certified arborist. The arborist shall monitor construction activity to ensure that the tree protection measures are implemented and adhered to during construction. This condition shall be incorporated into the grading plans.
2.

Fence shall be minimum 5 feet tall constructed of sturdy material (chain-link or equivalent strength/ durability).
3.

Fence shall be supported by vertical posts driven 2 feet (min) into the ground and spaced not more than 10 feet apart.
4.

Tree fencing shall be maintained throughout the site during the construction period, inspected periodically for damage and proper function, repaired as necessary to provide a physical barrier from construction activities, and remain in place until the final inspection.
5.

A sign that includes the words, "warning: this fence shall not be removed without the expressed permission of the santa clara county planning office," shall be securely attached to the fence in a visually prominent location.

note: tree protection requirements apply to any tree that is to remain on site and could potentially be subject to disturbance by the proposed work.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS

ISSUED BY: _____ DATE: _____

ENCROACHMENT PERMIT NO. _____

No work shall be done in the county's right-of-way without an encroachment permit, including the staging of construction material and the placement of portable toilets.

ENGINEER'S STATEMENT

I hereby state that these plans are in compliance with adopted County standards, the approved tentative map (or plan) and conditions of approval pertaining thereto dated File(s) No. _____

Date: _____ Signature _____



COUNTY ENGINEER'S NOTE

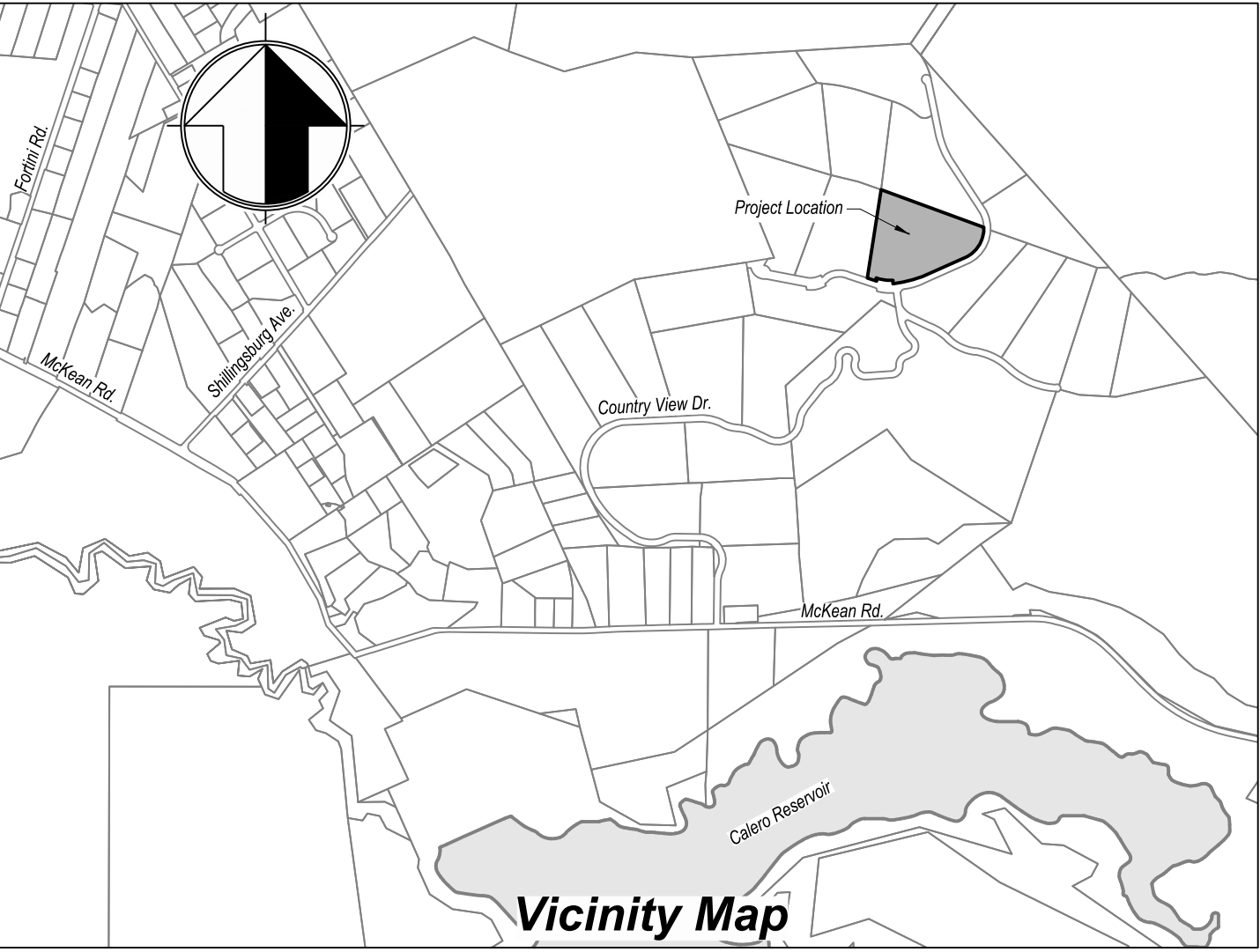
Issuance of a permit authorizing construction does not release the developer, permittee of engineer from responsibility for the correction of errors or omissions contained in the plans. If, during the course of construction, the public interest requires a modification of (or departure from) the specifications of the plans, the county shall have the authority to require the suspension of work, and the necessary modification or departure and to specify the manner in which the same is to be made.

Date _____ Signature _____

Christopher L. Freitas RC.E. No. 42107 Expiration date: 3/31/18

Improvement Plans

Trafalgar Homes - Country View Dr. - APN 708-47-030



Abbreviations

AC	Asphalt Concrete
AB	Aggregate Base
BLD	Building
BoW	Bottom of Wall
BW	Back of Sidewalk
CL	Centerline
EG	Existing Grade
EP	Edge of Pavement
EX	Existing
FF	Finish Floor
FG	Finish Grade
FL	Flow Line
GB	Grade Break
INV	Invert
MAX	Maximum
MIN	Minimum
NG	Natural Ground
PL	Property Line
PSE	Public Service Easement
PSDE	Private Storm Drain Easement
RCP	Reinforced Concrete Pipe
SW	Sidewalk
TC	Top of Curb
ToW	Top of Wall
Typ	Typical
WV	Water Valve

PROPOSED	EXISTING	DESCRIPTION
---	---	Project Property Line
---	---	Property Line
---	---	Centerline
---	---	Water Main
---	---	Overhead Electric Line
---	---	Fence, Type as shown
---	---	Benchmark
---	---	Monument, Type as shown
---	---	Section - Detail
---	---	Swale
---	---	Slope
---	---	Fire Hydrant
---	---	Sanitary Sewer Cleanout
---	---	Water Valve
---	---	Utility Pole

#

Sheet Title

1

Cover Sheet & Notes

2

Existing Topography

3

Site Plan

4

Grading Plan

5

Erosion Control Plan

6

Post-Construction SWCP

7

Santa Clara County BMP Sheet 1

8

Santa Clara County BMP Sheet 2

MH engineering Co.

16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
allena@mhengineering.com

Date: 5/3/18

APN 708-47-030

Revision 1

Co. File

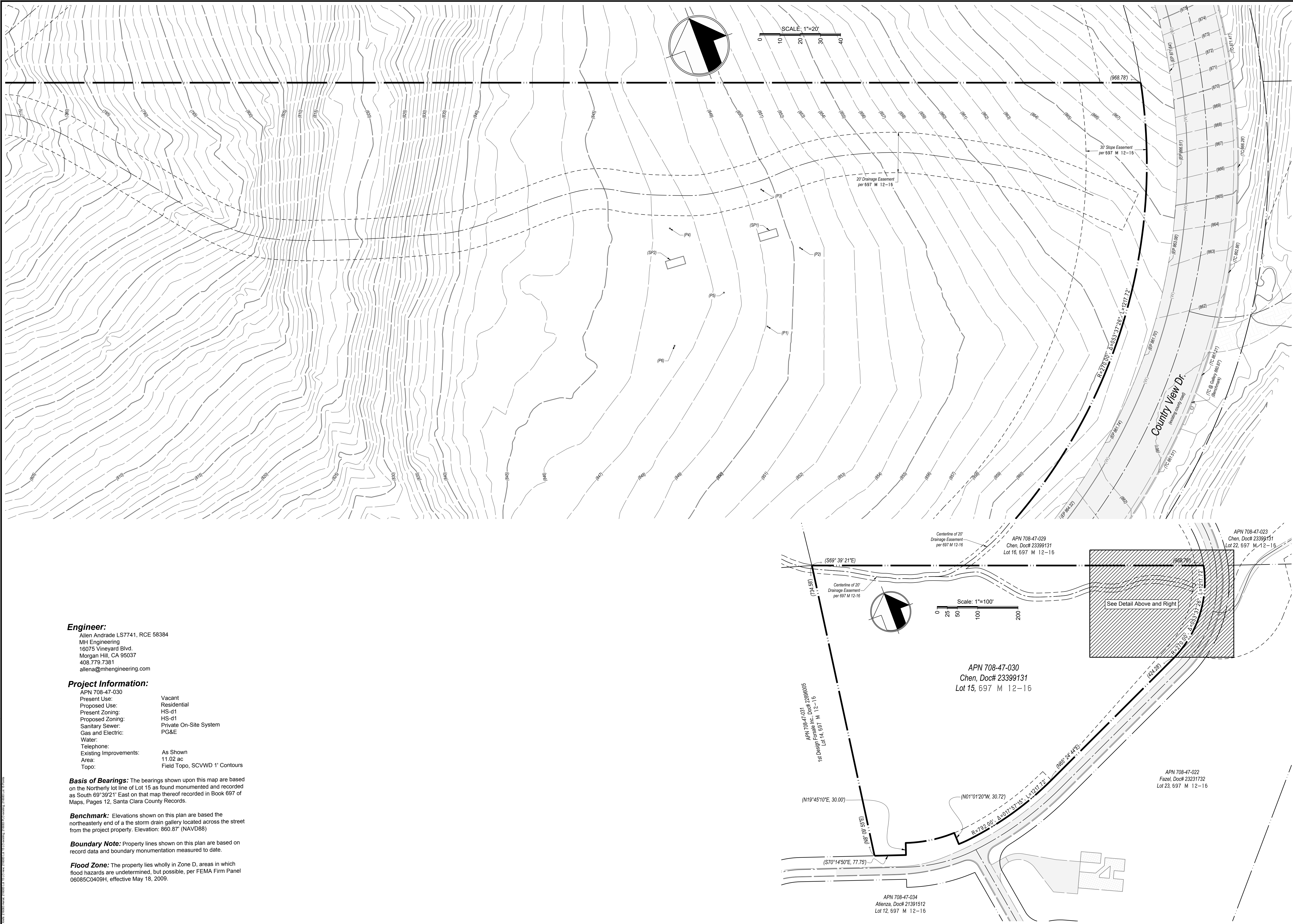
Revision 2

Sheet 1 of 6

APPLICANT: Trafalgar Homes

ROAD: Country View Dr.

COUNTY FILE NO.: 11041-17G



Engineer:

Allen Andrade LS7741, RCE 58384
MH Engineering
16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
allena@mhengineering.com

Project Information:

APN 708-47-030
Present Use: Vacant
Proposed Use: Residential
Present Zoning: HS-d1
Proposed Zoning: HS-d1
Sanitary Sewer: Private On-Site System
Gas and Electric: PG&E
Water:
Telephone:
Existing Improvements: As Shown
Area: 11.02 ac
Topo: Field Topo, SCVWD 1' Contours

Basis of Bearings: The bearings shown upon this map are based on the Northerly lot line of Lot 15 as found monumented and recorded as South 69°39'21" East on that map thereof recorded in Book 697 of Maps, Pages 12, Santa Clara County Records.

Benchmark: Elevations shown on this plan are based the northeasterly end of a the storm drain gallery located across the street from the project property. Elevation: 860.87' (NAVD88)

Boundary Note: Property lines shown on this plan are based on record data and boundary monumentation measured to date.

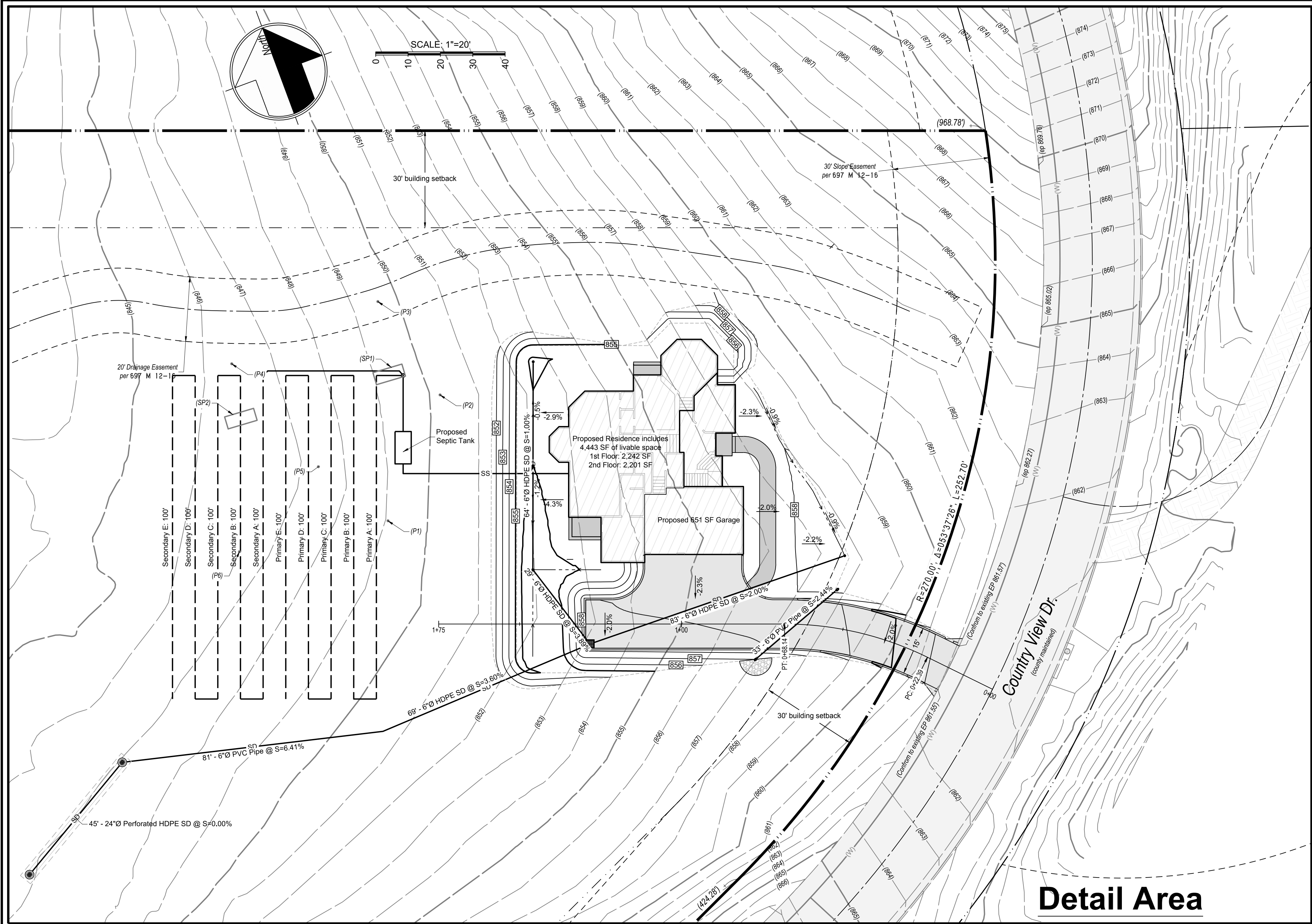
Flood Zone: The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible, per FEMA Firm Panel 06085C0409H, effective May 18, 2009.

05/14/2018 3:30pm
FOR PLANCHECK ONLY
REGISTERED PROFESSIONAL ENGINEER
ALLEN T. ANDRADE
C58384
EXP. 12-31-2018
STATE OF CALIFORNIA
FOR PLANCHECK ONLY
signature must be printed and approved

MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

Existing Topography
Trafalgar-Country View Dr.-APN 708-47-036

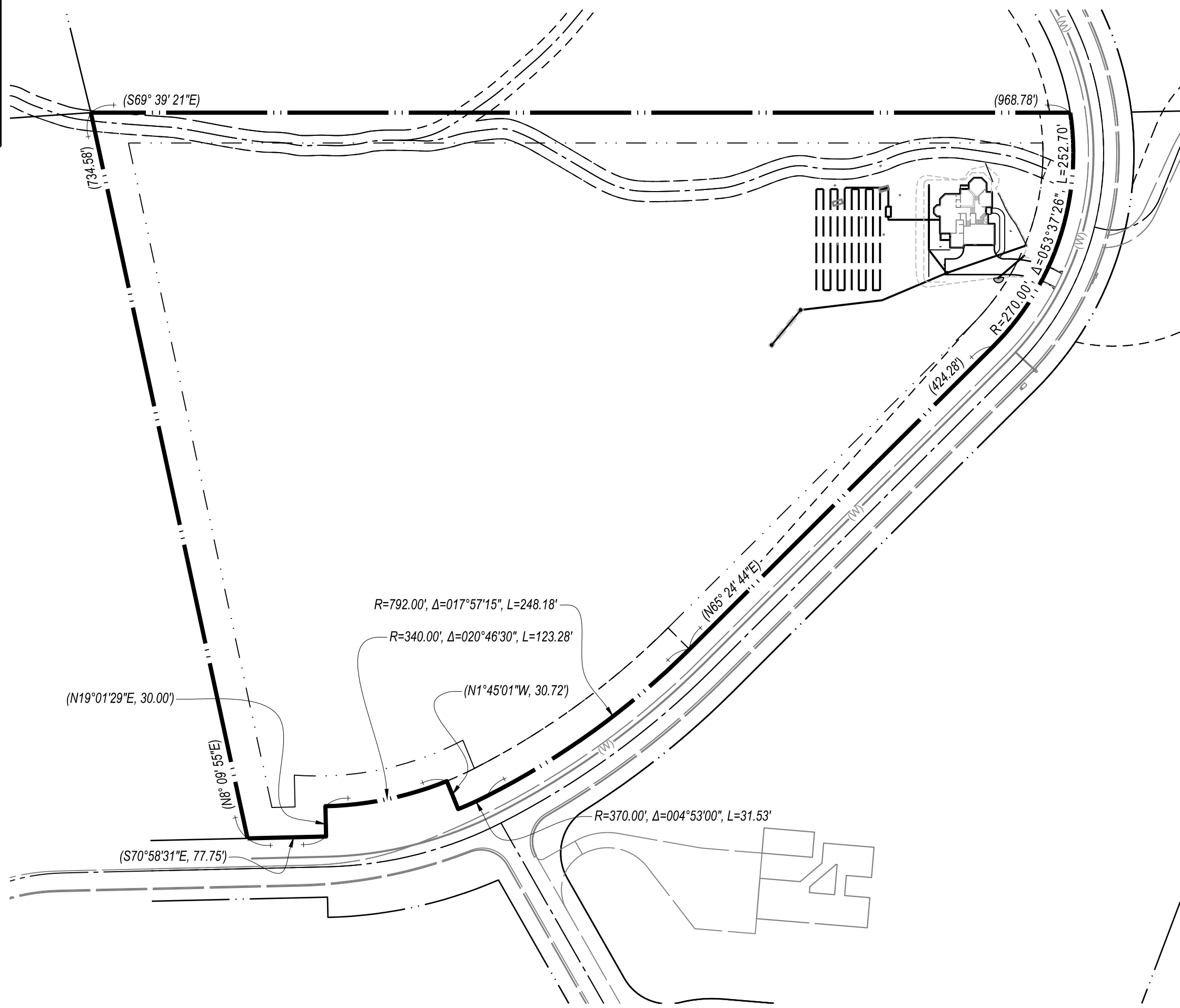
DATE: 5/31/18
SCALE: As Shown
DRAWN BY: KW
CHECKED BY: ATA
JOB NO.
216083
SHEET
2
OF
6



Detail Area



Vicinity Map



Engineer:
Allen Andrade LS7741, RCE 58384
MH Engineering
16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
allena@mhengineering.com

Project Information:
APN 708-47-030
Present Use: Vacant
Proposed Use: Residential
Present Zoning: HS-d1
Proposed Zoning: HS-d1
Sanitary Sewer: Private On-Site System
Gas and Electric: PG&E
Water: Great Oaks
Telephone: As Shown
Existing Improvements: 11.02 ac
Area: Field Topo, SCVWD 1'
Topo: Contours

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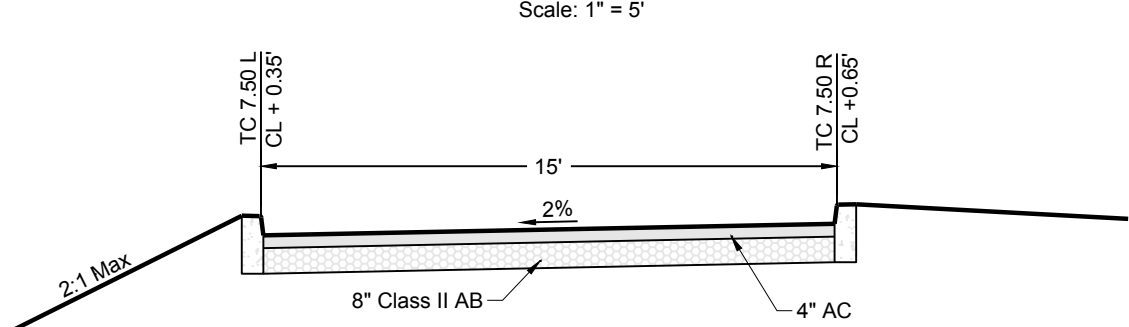
Note: Square footage shown is based on dimensions shown on Architectural Plan Sheets 2 and 3.

Landscaping Note: No landscaping is proposed

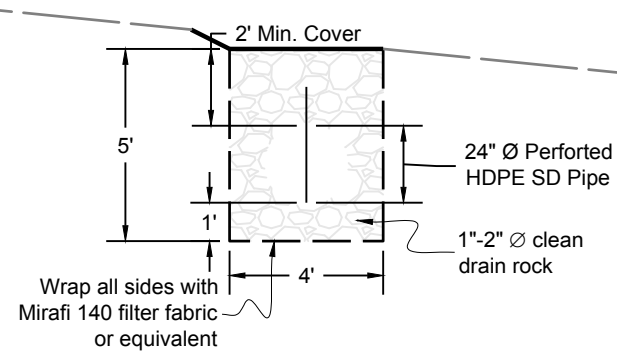
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Total	119 cy	600 cy	481 cy (import)			

Pervious vs Impervious Areas			
	Existing	Proposed	Difference
Parcel Area	469,890 SF	469,890 SF	0 SF
Building Footprint	0 SF	2,892 SF	2,892 SF
Sidewalks incl. patios	0 SF	308 SF	308 SF
Driveway	0 SF	2,307 SF	-2,307 SF
Total Impervious	0 SF	5,507 SF	5,507 SF
Pervious Areas	469,890 SF	464,383 SF	-5,507 SF
Total Pervious	469,890 SF	464,383 SF	-5,507 SF
Total Impervious	0 SF	5,507 SF	5,507 SF
Total Pervious	469,890 SF	464,383 SF	-5,507 SF

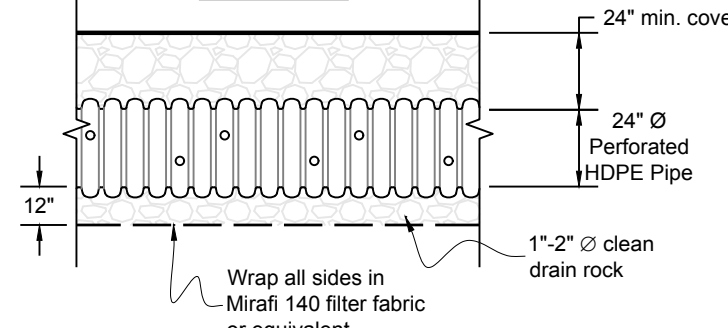
Typical Driveway Section



Underground Storage Detail A



Underground Storage Detail B



APPLICANT: Trafalgar Homes

ROAD: Country View Dr.

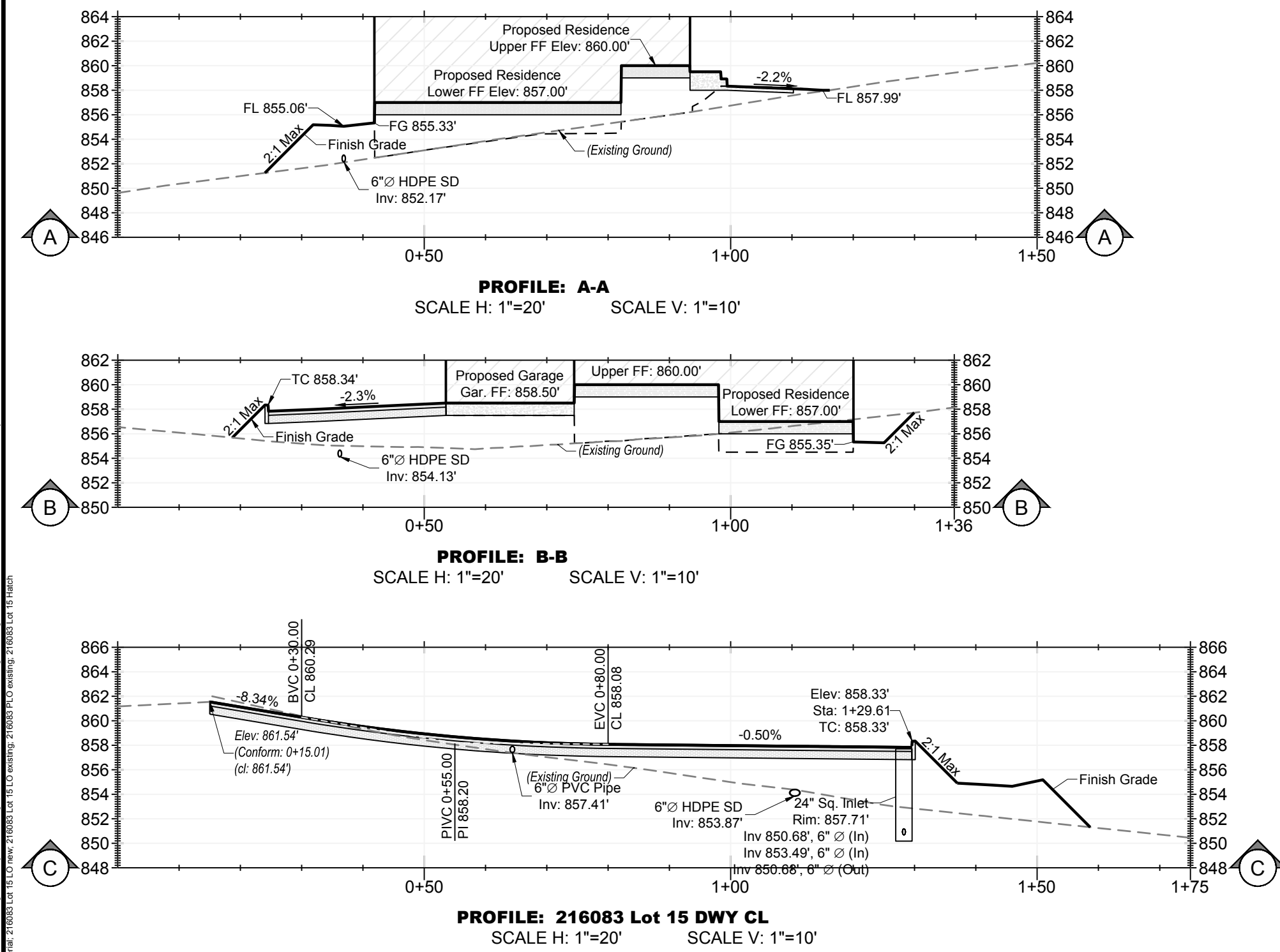
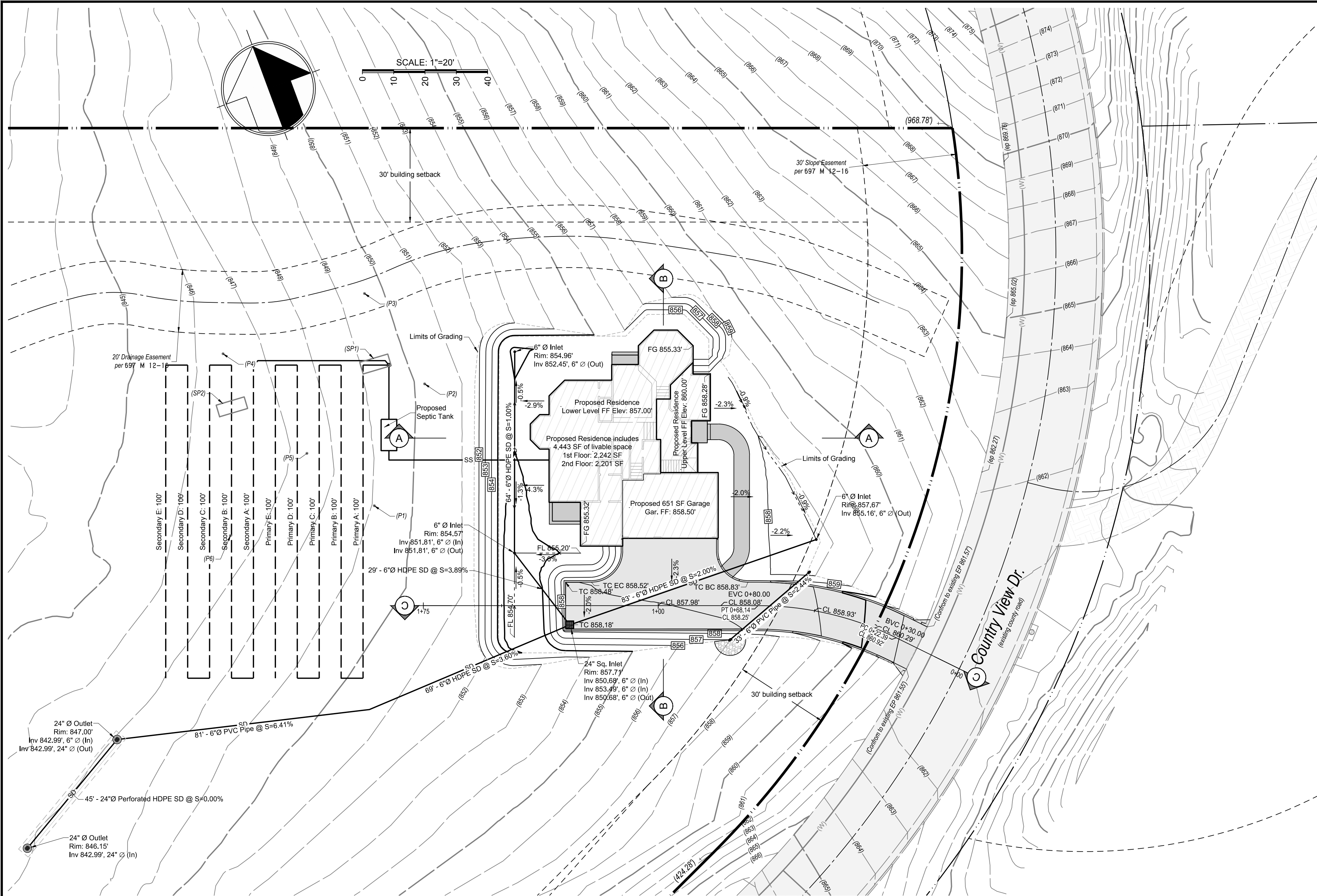
COUNTY FILE NO.: 11041-17G

05/17/2018 9:30am
FOR PLANCHCK ONLY
REGISTERED PROFESSIONAL ENGINEER
ALLEN T. ANDRADE
C58384
EXP. 12-31-2018
STATE OF CALIFORNIA
FOR PLANCHCK ONLY
signature and/or printed name approval

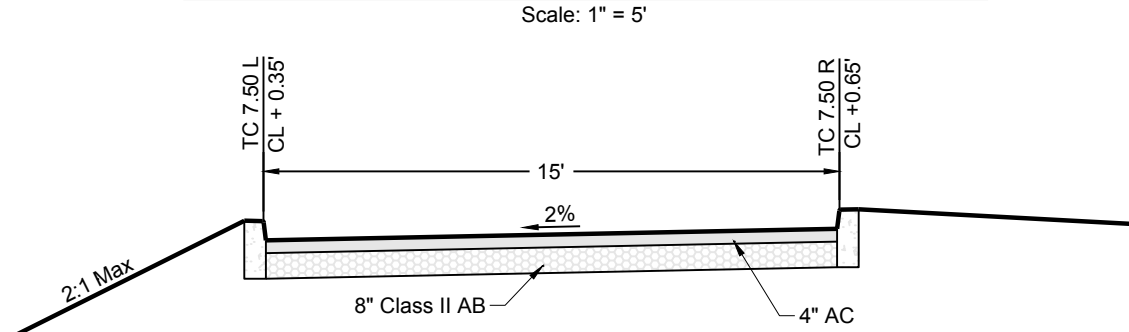
MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

Site Plan
Trafalgar-Country View Dr.-APN 708-47-036

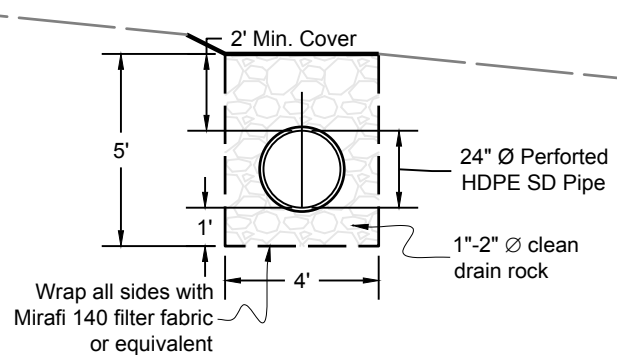
DATE: 5/31/18
SCALE: As Shown
DRAWN BY: KW
CHECKED BY: ATA
JOB NO. 216083
SHEET 3 OF 6



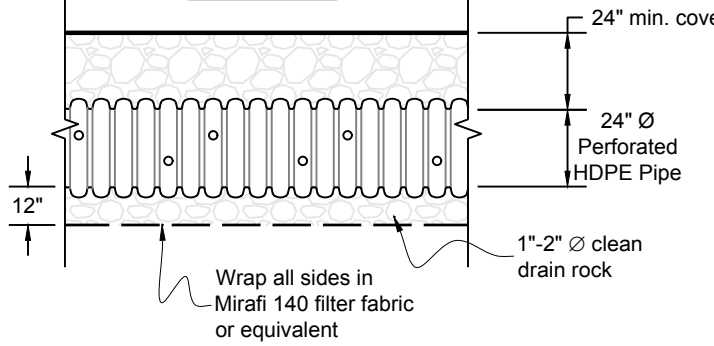
Typical Driveway Section



Underground Storage Detail A



Underground Storage Detail B



Vicinity Map



Engineer:
Allen Andrade LS7741, RCE 58384
MH Engineering
16075 Vineyard Blvd.
Morgan Hill, CA 95037
408.779.7381
allena@mhengineering.com

Project Information:
APN 708-47-030
Present Use: Vacant
Proposed Use: Residential
Present Zoning: HS-d1
Proposed Zoning: HS-d1
Sanitary Sewer: Private On-Site System
Gas and Electric: PG&E
Water: PG&E
Telephone: As Shown
Existing Improvements: 11.02 ac
Area: Field Topo, SCVWD 1'
Topo: Contours

Basis of Bearings: The bearings shown upon this map are based on the Northerly lot line of Lot 15 as found monumented and recorded as South 69°39'21" East on that map thereof recorded in Book 697 of Maps, Pages 12, Santa Clara County Records.

Benchmark: Elevations shown on this plan are based on the northeasterly end of a storm drain gallery located across the street from the project property. Elevation: 860.87' (NAVD88)

Boundary Note: Property lines shown on this plan are based on record data and boundary monumentation measured to date.

Flood Zone: The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible, per FEMA Firm Panel 06085C0409H, effective May 18, 2009.

Note: Square footage shown is based on dimensions shown on Architectural Plan Sheets 2 and 3.

Landscaping Note: No landscaping is proposed

07/17/2018 4:44pm
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REGISTERED PROFESSIONAL ENGINEER
ALLEN T. ANDRADE
C58384
EXP. 12-31-2018
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Grading Plan

Trafalgar-Country View Dr.-APN 708-47-036

DATE: 5/3/18
SCALE: As Shown
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JOB NO.
216083

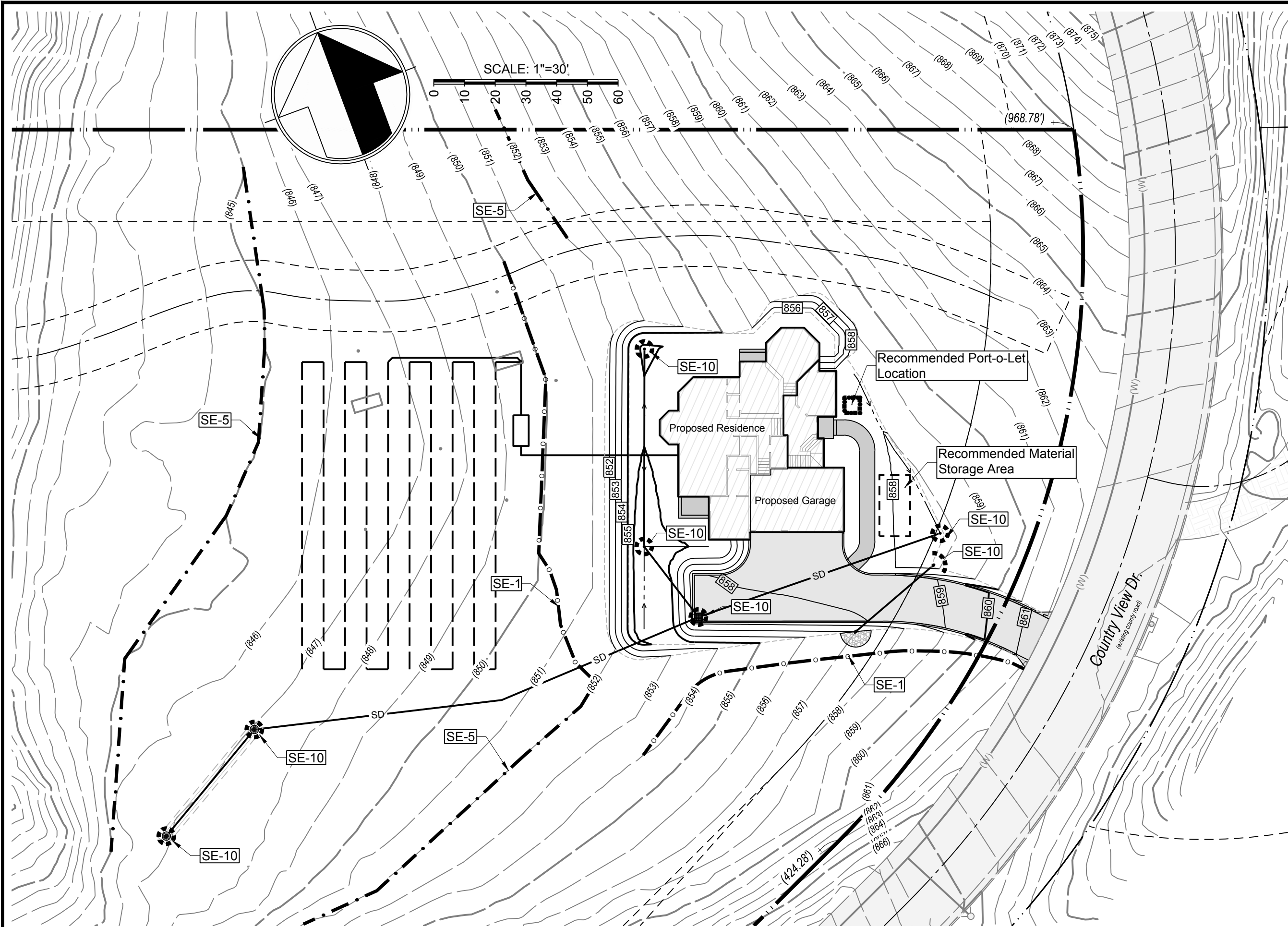
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APPLICANT: Trafalgar Homes

ROAD: Country View Dr.

COUNTY FILE NO.: 11041-17G



BMPs required by construction phase

- Mass Grading / Clearing & Grubbing phase
 - SE-1 Silt fence around perimeter of disturbed areas
 - TC-1 Stabilized construction entrance @ entry/exit points to paved roads
 - SE-5 Fiber Rolls around temporary stockpiles
 - SE-6 Gravel bags at ends of gutters at project limits
 - SE-10 Storm drain inlet protection at inlets in project vicinity
 - EC-4 Hydroseeded disturbed areas upon completion of grading in areas that are not subject to further disturbance
- Underground Utilities phase
 - SE-1 Silt fence around perimeter of project site
 - SE-5 Fiber Rolls around temporary stockpiles/trench spoils
 - SE-6 Gravel bags at ends of gutters at project limits
 - SE-10 Storm drain inlet protection at inlets in project vicinity and installed inlets
 - TC-1 Stabilized construction entrance @ entry/exit points to paved roads
- Vertical Construction phase
 - SE-1 Silt fence around perimeter of project site
 - SE-5 Fiber Rolls around stockpiles and at back of sidewalks once installed
 - SE-6 Gravel bags at ends of gutters at project limits
 - SE-10 Storm drain inlet protection at inlets in project vicinity and at any installed inlets
 - TC-1 Stabilized construction entrance @ entry/exit points to paved roads
 - EC-4 Hydroseeded disturbed areas that are not subject to further disturbance.
- Stabilization phase
 - SE-1 Silt fence around perimeter to remain in place until final landscaping is established
 - SE-5 Fiber Rolls to remain in place until final landscaping is complete
 - SE-6 Gravel bags to remain in place until final landscaping is established
 - SE-10 Storm drain inlet protection to remain in place until final landscaping is established
 - EC-4 Hydroseed all non-landscaped disturbed areas in project vicinity

Legend

- SE-1 Silt fence
- SE-5 Fiber Rolls
- SE-6 Gravel Bag Berm
- SE-10 Storm drain inlet protection
- TC-1 Stabilized construction entrance
- EC-4 Re-seed disturbed areas

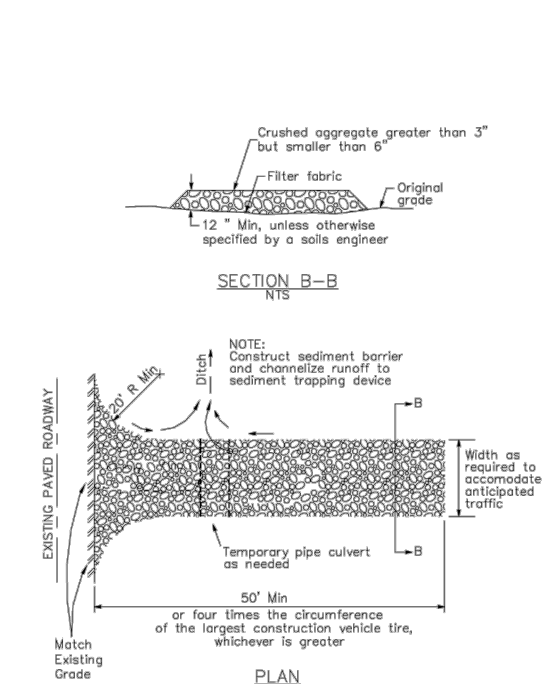
General Notes:

- Best management practices(BMPs) for this project shall be in substantial compliance at all times with the storm water pollution prevention plan (SWPPP) prepared for the project in accordance with the state water resources control board (SWRCB) order no. 2009-0009-DWD National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS00002. This permit requires that the SWPPP be kept up to date to reflect the changing site conditions and the SWPPP be kept up to date to reflect the changing site conditions and the SWPPP is to be available on site at all times for review by state and local inspectors.
- The erosion control measures are to be operable during the rainy season, September 15 to April 15. By September 15, grading, installation of storm drainage and erosion control facilities will need to be completed with erosion control planning established by that time, no grading shall occur between October 1 and April 15 unless authorized by the County Engineer.
- Standard drop inlet, underground drainage pipe and appurtenances shall be constructed prior to winterization and will remain as permanent tract improvements.
- Changes to this erosion and sediment control plan shall be made to meet field conditions only with the approval of or at the direction of the County Engineer. During the rainy season, all paved areas shall be kept clear of earth material and debris, the site shall be maintained so as to minimize sediment laden runoff to any storm drainage system.
- This plan covers only the first winter following grading. Plans are to be resubmitted for County approval prior to September 1 of each subsequent year until the tract improvements are accepted by the County.
- Seed and mulch are to be placed on all disturbed slopes steeper than 2% and higher than 3 feet, on all cut and fill slopes within or adjacent to all public rights of way and as directed by the County. Seed placed between May and September shall be irrigated as necessary to establish growth by October 1.
- Stabilized entrance shall be installed per detail TC-1&TC-3 of SWPPP manual prior to grading activities.
- Drain inlets shall be protected per details SE-10 of SWPPP manual prior to grading activities or as soon as practical.
- Sediment control BMPs shall be installed prior to grading activities or as soon as practical, and maintained year round.

County of Santa Clara Construction Stormwater Control Plan (CSCP) Notes:

- The contractor shall comply with all County of Santa Clara Standards, and is advised that the County has adopted the California Storm Water Quality Association (CASQA) Handbook for Construction as its Storm Water best management practices (BMP) standards. The BMPs contained within the County standards are minimum requirements. The contractor shall comply with all BMPs as directed by the County of Santa Clara, including but not limited to BMPs for sediment control, tracking control, waste management and materials pollution control, non-storm water management control, and erosion control. Examples of BMPs that are required include but are not limited to:
 - SE-10 storm drain inlet protection
 - SE-7 Street sweeping and vacuuming
 - WM-5 solid waste management
 - WM-9 sanitary/septic waste management
 - WM-10 concrete waste management
- Portable sanitary facilities shall have secondary containment, and be located on relatively level ground away from traffic areas and storm drain inlets.
- The contractor shall notify the County 48 hours in advance of the start of construction to request inspection of storm water BMPs. All storm water BMPs shall be in place prior to the start of construction, and maintained throughout the duration of the project. The interim CSCP is considered a "living document" which may be subject to change from time to time in order to facilitate construction. All requested changes must be approved by the County of Santa Clara prior to installation. The contractor shall inspect all storm water BMPs regularly to assure they are functioning properly. If a BMP fails, the contractor shall make repairs immediately and clean all portions of storm drain systems that may have been contaminated by failure of BMP to the satisfaction of the County of Santa Clara.
-

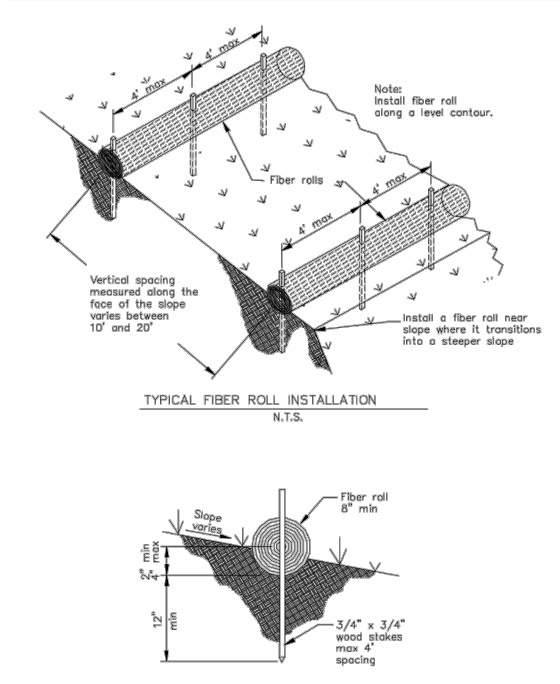
Stabilized Construction Entrance/Exit TC-1



Notes: TC-1 Stabilized Construction Entrance/Exit

- Inspection and Maintenance**
 - Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
 - Inspect local roads adjacent to the site daily. Sweep or vacuum to remove visible accumulated sediment.
 - Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment.
 - Keep all temporary roadway ditches clear.
 - Check for damage and repair as needed.
 - Replace gravel material when surface voids are visible.
 - Remove all sediment deposited on paved roadways within 24 hours.
 - Remove gravel and filter fabric at completion of construction

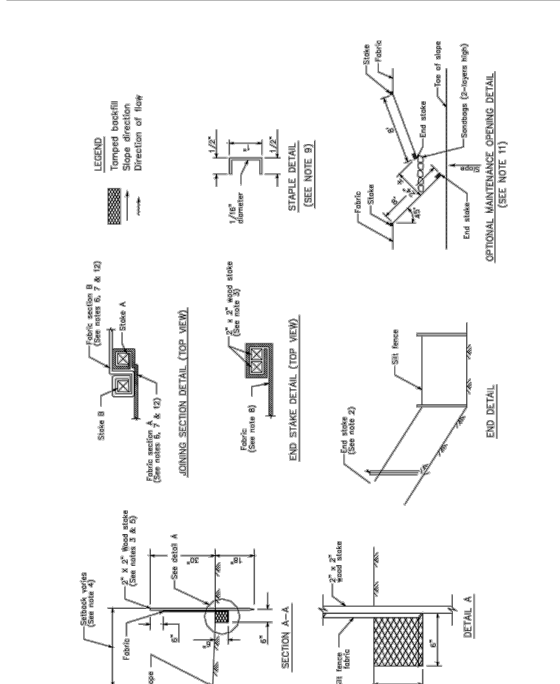
SE-5 Fiber Rolls



Notes: SE-5 Fiber Rolls

- Installation**
 - Locate fiber rolls on level contours spaced as follows:
 - Slope inclination of 4:1 (H:V) or flatter: Fiber rolls should be placed at a maximum interval of 20 ft.
 - Slope inclination between 4:1 and 2:1 (H:V): Fiber Rolls should be placed at a maximum interval of 15 ft. (a closer spacing is more effective).
 - Slope inclination 2:1 (H:V) or greater: Fiber Rolls should be placed at a maximum interval of 10 ft. (a closer spacing is more effective).
 - Turn the ends of the fiber roll up slope to prevent runoff from going around the roll.
 - Stake fiber rolls into a 2 to 4 in. deep trench with a width equal to the diameter of the fiber roll.
 - Drive stakes at the end of each fiber roll and spaced 4 ft maximum on center.
 - Use wood stakes with a nominal classification of 0.75 by 0.75 in. and minimum length of 24 in.
 - If more than one fiber roll is placed in a row, the rolls should be overlapped, not abutted.
- Inspection and Maintenance**
 - Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
 - Repair or replace split, torn, unraveling, or slumping fiber rolls.
 - If the fiber roll is used as a sediment capture device, or as an erosion control device to maintain sheet flows, sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when sediment accumulation reaches one-half the designated sediment storage depth, usually one-half the distance between the top of the fiber roll and the adjacent ground surface. Sediment removed during maintenance may be incorporated into earthwork on the site of disposal at an appropriate location.
 - If fiber rolls are used for erosion control, such as in a mini check dam, sediment removal should not be required as long as the system continues to control the grade. Sediment control BMPs will likely be required in conjunction with this type of application.

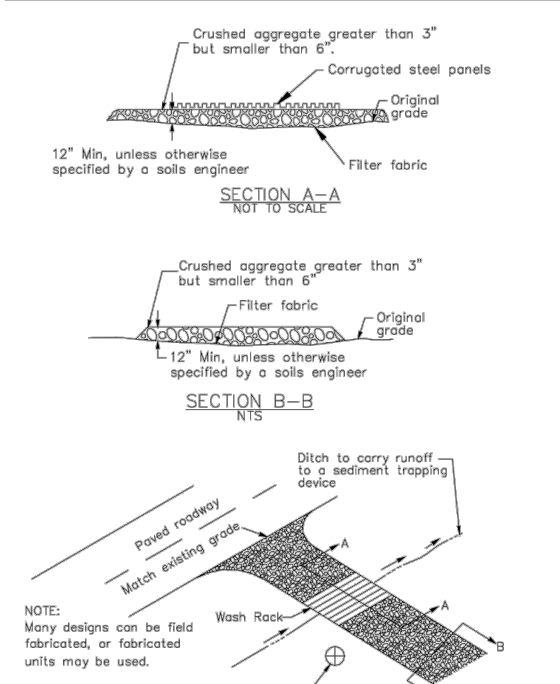
SE-1 Silt Fence



Notes: SE-1 Silt Fence

- Installation Guidelines**
 - Silt fences are to be constructed on a level contour. Sufficient area should exist behind the fence for ponding to occur without flooding or overtopping the fence.
 - A trench should be excavated approximately 6 in. wide and 6 in. deep along the line the proposed silt fence.
 - Bottom of the silt fence should be keyed-in a minimum of 12 in.
 - Posts should be spaced a maximum of 6 ft apart and driven securely into the ground a minimum of 18 in. or 12 in. below the bottom of the trench.
 - When standard strength filter fabric is used, a plastic or wire mesh support fence should be fastened securely to the upslope side of posts using heavy-duty wire staples at least 1 in. long. The mesh should extend into the trench. When extra-strength filter fabric and closer post spacing are used, the mesh support fence may be eliminated. Filter fabric should be purchased in a long roll, then cut to the length of the barrier. When joints are necessary, filter cloth should be spliced together only at a support post, with a minimum 6 in. overlap and both ends securely fastened to the post.
 - The trench should be backfilled with compacted native material.
 - Construct silt fences with a setback of at least 3 ft from the toe of a slope. Where a silt fence is determined to be not practicable due to specific site conditions, the silt fence may be constructed at the toe of the slope, but should be constructed as far from the toe of the slope as practicable. Silt fences close to the toe of the slope will be less effective and difficult to maintain.
- Inspection and Maintenance**
 - Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
 - Repair undercut silt fences.
 - Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months.
 - Silt fences that are damaged and become unsuitable for the intended purpose should be removed from the site of work, disposed of, and replaced with new silt fence barriers.
 - Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
 - Silt fences should be left in place until the upstream area is permanently stabilized. Until then, the silt fence must be inspected and maintained.
 - Holes, depressions, or other ground disturbance caused by the removal of the silt fences should be backfilled and repaired.

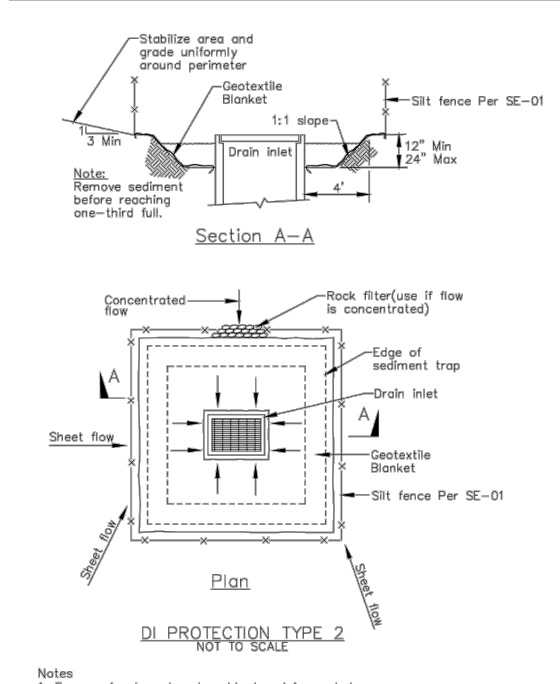
Entrance/Outlet Tire Wash TC-3



Notes: TC-3 Entrance/Outlet Tire Wash

- Inspection and Maintenance**
 - Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and at two-week intervals in the non-rainy season to verify continued BMP implementation.
 - Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.
 - Remove accumulated sediment in wash rack and/or sediment trap to maintain system performance.
 - Inspect routinely for damage and repair as needed.

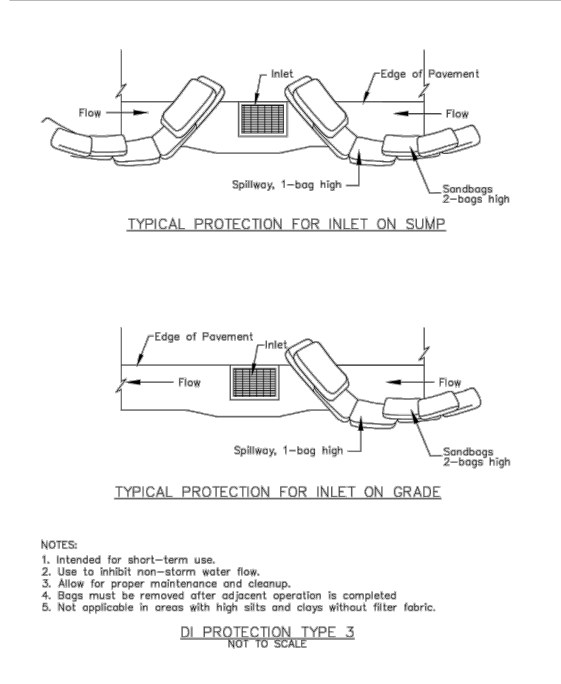
Storm Drain Inlet Protection SE-10



Notes: SE-10 Storm Drain Inlet Protection

- DI Protection Type 2 - Excavated Drop Inlet Sediment Trap** - The excavated drop inlet sediment trap (Type 2) is shown in the attached figures. Install filter fabric fence in accordance with DI Protection Type 1. Size excavated trap to provide a minimum storage capacity calculated at the rate 67 yd³/acre of drainage area.
- Inspection and Maintenance**
 - Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
 - Filter Fabric Fences. If the fabric becomes clogged, torn, or degrades, it should be replaced. Make sure the stakes are securely driven in the ground and are in good shape (i.e., not bent, cracked, or splintered, and are reasonably perpendicular to the ground). Replace damaged stakes.
 - Gravel Filters. If the gravel becomes clogged with sediment, it must be carefully removed from the inlet and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, consider using the sediment-laden stone as fill material and put fresh stone around the inlet. Inspect bags for holes, gashes, and snags, and replace bags as needed. Check gravel bags for proper arrangement and displacement.
 - Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
 - Remove storm drain inlet protection once the drainage area is stabilized.
 - Clean and regrade area around the inlet and clean the inside of the storm drain inlet as it must be free of sediment and debris at final inspection.

SE-10 Storm Drain Inlet Protection



SE-6 Gravel Bag Berm

- Design and Layout**
 - Locate gravel bag berms on level contours.
 - Slopes between 20:1 and 2:1 (H:V): Gravel bags should be placed at a maximum interval of 50 ft (a closer spacing is more effective), with the first row near the slope toe.
 - Slopes 2:1 (H:V) or steeper: Gravel bags should be placed at a maximum interval of 25 ft (a closer spacing is more effective), with the first row placed the slope toe.
 - Turn the ends of the gravel bag barriers up slope to prevent runoff from going around the berm.
 - Allow sufficient space up slope from the gravel bag berm to allow ponding, and to provide room for sediment storage.
 - For installation near the toe of the slope, consider moving the gravel bag barriers away from the slope toe to facilitate cleaning. To prevent flows behind the barrier, bags can be placed perpendicular to a berm to serve as cross barriers.
 - Drainage area should not exceed 5 acres.
- In Non-Traffic Areas:**
 - Height = 18 in. maximum
 - Top width = 24 in. minimum for three or more layer construction
 - Top width = 12 in. minimum for one or two layer construction
- In Construction Traffic Areas:**
 - Height = 12 in. maximum
 - Top width = 24 in. minimum for three or more layer construction.
 - Top width = 12 in. minimum for one or two layer construction.
 - Side slopes = 2:1 or flatter.
 - Butt ends of bags tightly
 - On multiple row, or multiple layer construction, overlap butt joints of adjacent row and row beneath.
 - Use a pyramid approach when stacking bags.
- Materials**
 - Bag Material: Bags should be woven polypropylene, polyethylene or polyamide fabric or burlap, minimum unit weight of 4 ounces/yd². Mullen burst strength exceeding 300 b/in² in conformance with the requirements in ASTM designation D3786, and ultraviolet stability exceeding 70% in conformance with the requirements in ASTM designation D4355.
 - Bag Size: Each gravel-filled bag should have a length of 18 in., width of 12 in., thickness of 3 in., and mass of approximately 33 lbs. Bag dimensions are nominal, and may vary based on locally available materials.
 - Fill Material: Fill material should be 0.5 to 1 in. Class 2 aggregate base, clean and free from clay, organic matter, and other deleterious material, or other suitable open graded, non-cohesive, porous gravel.

Inspection and Maintenance

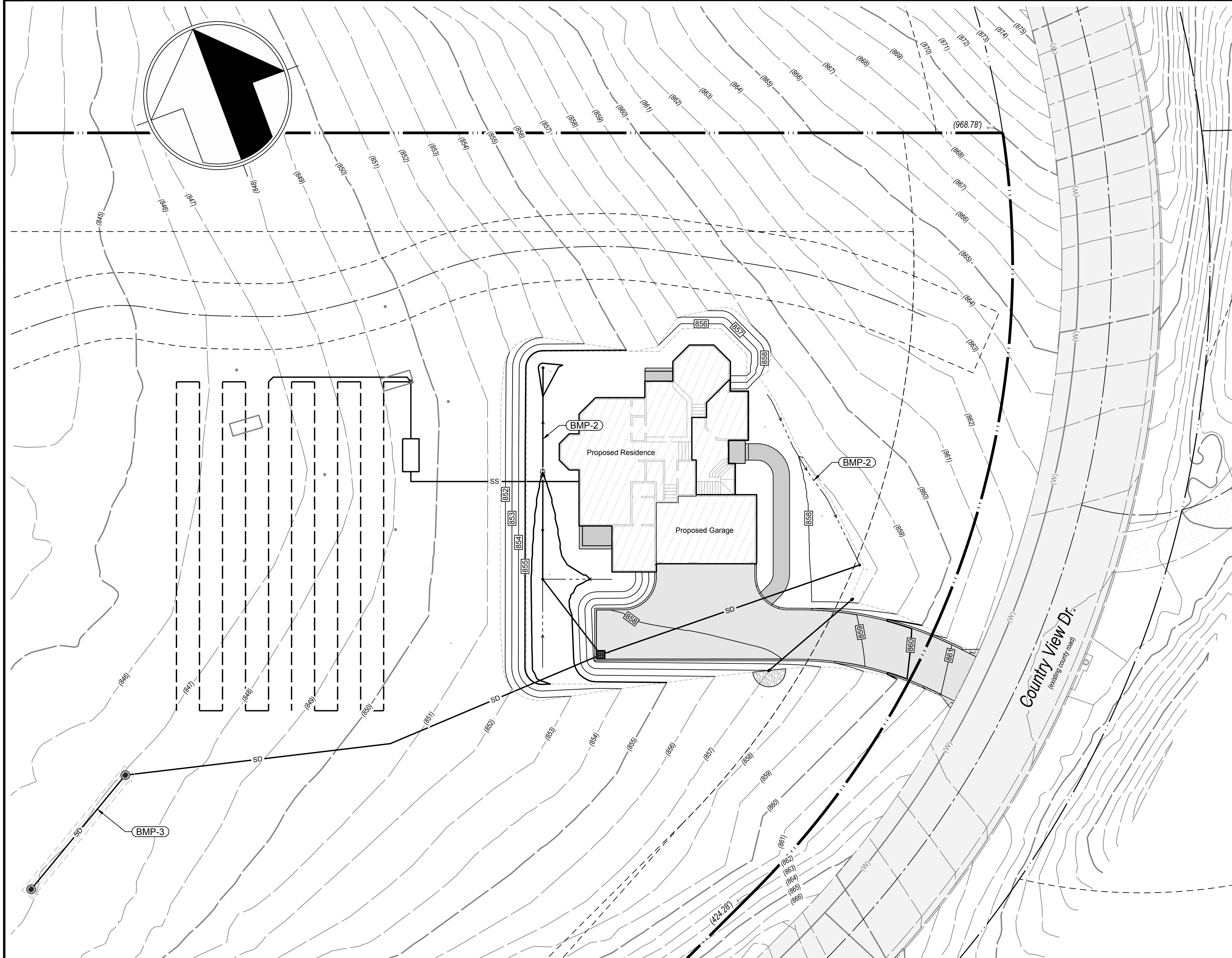
- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
- Gravel bags exposed to sunlight will need to be replaced every two to three months due to degrading of the bags.
- Reshape or replace gravel bags as needed.
- Repair washouts or other damage as needed.
- Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment should be removed when the sediment accumulation reaches one-third of the barrier height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
- Remove gravel bag berms when no longer needed. Remove sediment accumulation and clean, re-grade, and stabilize the area. Removed sediment should be incorporated in the project or disposed of.



MH engineering Co.
16075 Vineyard Boulevard
Morgan Hill, CA 95037

Erosion Control Plan
Trafalgar-Country View Dr.-APN 708-47-036

DATE:	5/31/18	SCALE:	As Shown	DRAWN BY:	KW	CHECKED BY:	ATA
JOB NO.	216083						
SHEET	5						
OF	6						



BMP - 1. Site Housekeeping

- Objective:
 - To reduce impacts from storm water runoff by developing and implementing good housekeeping practices.
- General Housekeeping:
 - Keep parking areas, material storage and staging areas clean and orderly.
 - Establish a daily checklist to confirm cleanliness and adherence to proper storage and security. Where feasible, individual employees should be assigned specific inspection responsibilities and given the authority to remedy any problems found.
 - Provide an adequate number of trash and recycling receptacles.
 - Post "No Littering" signs and enforce anti-littering laws.
 - Dispose of wash water properly. Wash water shall not be allowed to flow to the storm drain system.
 - Sediment and sweeping debris shall be properly disposed.
- Mechanical Sweeping:
 - Mechanical sweeping shall be performed on a scheduled basis. The frequency of mechanical sweeping shall be based on visual observation of waste accumulation.
 - Mechanical sweeping equipment shall only be used by personnel trained in using mechanical sweeping equipment.
 - Mechanical sweeping of all outside equipment staging areas, materials storage areas and parking areas will be performed at least once prior to the onset of the wet season (September 15th).
 - Mechanical sweeping will be coordinated with maintenance activities on other storm water treatment measures located on the site (i.e. stormceptors, CDS units, drain inlet filters).
- Dispose of debris properly.
- Manual Sweeping:
 - Manual sweeping will be used in areas where mechanical sweeping cannot be effectively implemented.
- Manual sweeping will be coordinated with maintenance activities on other storm water treatment measures located on the site.
- Dispose of debris properly.
- Surface Cleaning:
 - Surface cleaning shall be used in areas where heavy oil deposits are encountered.
 - Dry cleaning methods (e.g. application of absorbent followed by sweeping and vacuuming) shall be employed first to prevent the discharge of pollutants to the storm drain system.
 - If wet cleaning is required to effectively remove pollutants, all wash water shall be collected and disposed to landscape or the sanitary sewer, as appropriate. If discharge to the sanitary sewer is necessary, prior approval from County of Santa Clara is required.
- Dispose of debris properly.
- Vector Control:
 - Ensure that there are no areas of standing water on site. Areas of standing water shall be drained or cleared as soon as they are located.
 - Vector Control District: The Santa Clara County Vector Control District (SCCVD) will be contacted as needed for assistance should any mosquito issues arise. Mosquito larvicides should be applied only when absolutely necessary as indicated by the SCCVD, and then only by a licensed professional or contractor. The contact information for SCCVD follows.
- Pesticide Reduction Plan and Measures:
 - Objectives: to reduce or eliminate the use of chemicals necessary to prevent pests of the landscape and to reduce the potential for pesticides to runoff the landscape.
 - Employ non-chemical controls (biological, physical and cultural controls) before using chemicals to treat a pest problem.
 - Use geotextiles and apply 2-4 inches of mulch to exposed soils to prevent weed growth.
 - Replace problem plants with locally adapted, pest resistant plants. Do not plant invasive species.
 - Prune plants properly and at the appropriate time of year.
 - Limit fertilizer use unless soil testing indicates a deficiency. Slow-release or organic fertilizer is preferable.
 - Provide adequate irrigation for landscape plants. Do not over water.
 - Sweep up spilled fertilizer and pesticides. Do not wash away or bury such spills.
 - If chemical controls are necessary, use least-toxic pesticide first. Avoid the use of broad-spectrum pesticides.
 - Do not over apply pesticide. Spray only where the infestation exists. Follow the manufacturer's instructions for mixing and applying materials.
 - Only licensed, trained pesticide applicators shall apply pesticides.
 - Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging pesticides into runoff. With the exception of pre-emergent pesticides, avoid application if rain is expected.
 - Unwanted/unused pesticides shall be disposed as hazardous waste.
 - Correspondence: Correspondence regarding inspections and maintenance of the storm water treatment measures shall be provided to the County Engineer as required and according to the schedule outlined in this SWRMP.

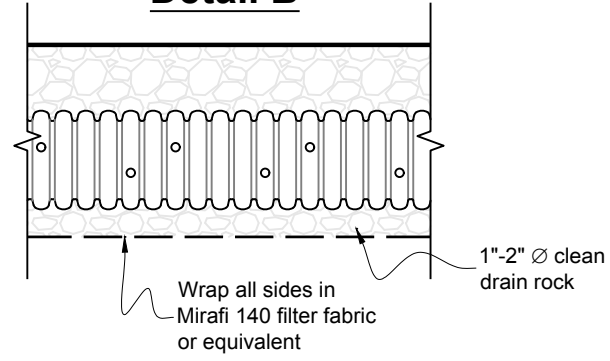
BMP -2 Vegetated (Bio) Swale Maintenance Plan

- Objectives:
 - The maintenance objectives for vegetated swale systems include keeping up the efficiency of the channel and maintaining a dense, healthy grass (or plant) cover.
- Inspection Schedule:
 - Visual inspections shall be conducted monthly, particularly after heavy runoff, to ensure normal functioning of swale (i.e. no pooling, or blockage)
 - Detailed inspections shall be conducted at least twice annually with inspections occurring (1) at the end of the wet season (May 1st) to schedule summer maintenance, (2) before major fall (September 15th), runoff in preparation for winter, and (3) after periods of heavy runoff. The objective of detailed inspections is to identify erosion, damage to vegetation, grass or plant height, debris, litter, areas of sediment accumulation, and pools/standing water, if any issues exist, activities as outlined in Section 3. Maintenance Activities will be conducted.
- Inspection reports due to Public Works: May 1st and September 15th
- Inspection certification by a qualified R.C.E. due to Public Works: September 30
- Maintenance Activities:
 - Routine or preventative maintenance refers to procedures that are performed on a regular basis to keep the swale aesthetic and in proper working order. Routine maintenance includes debris removal, soil and sediment removal, and clearing of vegetation around flow control devices to prevent clogging. Routine maintenance also includes the maintenance of a healthy vegetative cover. Dead turf or other unhealthy vegetative areas will need to be replaced after being discovered.
 - Erosion: Areas of erosion and slope failure shall be repaired and reseeded (or sodded) as soon as possible. Eroded areas near the inlet or outlet may also need to be lined with riprap, which will be determined on a case by case basis.
 - Damage to vegetation: If the channel develops ruts or holes, it shall be repaired utilizing a suitable soil that is properly tamped and seeded. The grass cover should be thick; if it is not, it shall be reseed as necessary. If possible, flow will be redirected until new grass is firmly established to avoid deterioration. If invasive species and/or weeds develop, promptly remove to avoid disruption to original vegetation.
 - Grass or plant height: Mow as required by plant variety to maintain at least 4-6" grass height or to suppress weeds and woody vegetation. Litter must be removed prior to mowing. During the growing season mow as indicated by species to promote growth and pollutant uptake. Remove cuttings and dispose/compost. Species in the swale include: Red Fescue.
 - Debris / Litter: Remove all litter or debris within swale and prior to mowing and as inspections warrant. Keep swale free of debris.
 - Areas of sediment accumulation: Remove sediment by hand with a flat-bottomed shovel whenever sediment covers vegetation or begins to reduce swale capacity. Maintain clean curb cuts to avoid soil and vegetation buildup. Sediment accumulating near culverts and in channels should be removed when it builds up to 75 mm (3 in.) at any spot, or covers vegetation. If inlet flow spreaders and/or under drains installed, keep all inlet flow spreaders even and free of debris. If cobblets or other similar flow spreaders are used, ensure that cobblets do not become embedded in sediment. Remove any debris in under drains that could cause clogging. (At least two times per year)
 - Pools and standing water: Observe soil at the bottom of the swale for uniform aeration throughout. If portions of the swale do not drain within 5 days after the end of a storm, the soil shall be filled and replanted. Remove any debris or accumulation of sediment.
 - Irrigation: Water plants in swales during dry conditions. Confirm that irrigation is adequate and not excessive.
 - Pesticides and Fertilizers: Application of pesticides and fertilizers shall be minimal. Biological, physical, and cultural controls shall be used prior to pesticide and fertilizer use.
 - Non-routine or corrective maintenance refers to any rehabilitative activity that is not performed on a regular basis. This includes flow control structure replacement or the major replacement and cleaning of aquatic vegetation. Non-routine maintenance will be completed as needed.
- Vector Control:
 - Objective: To prevent conditions within swales that attract and/or promote the growth of disease vectors, including but not limited to mosquitoes, rodents, and flies.
- Maintenance Activities for Vector Control:
 - Inspections: Regular inspections will determine if swales have pools of standing water or debris accumulation. Inspections will be conducted prior to the rainy season, after major storm events, and at least once during the dry season to ascertain that standing water drains from the swale within 5 days.
 - Holes in ground: Abate potential vectors by filling holes in the ground in and around the swale and by insuring that there are no areas where water stands longer than 5 days following a storm.
 - Other maintenance activities: If any obstructions develop (e.g. debris accumulation, invasive vegetation, clogging of outlets and/or under drains) within the swale, appropriate maintenance activities shall be implemented to correct the obstruction. Refer to Section 3 for details on specific maintenance activities.
- Vector Control District: The Santa Clara County Vector Control District (SCCVD) will be contacted as needed for assistance should any mosquito issues arise. Mosquito larvicides should be applied only when absolutely necessary as indicated by the SCCVD, and then only by a licensed professional or contractor.

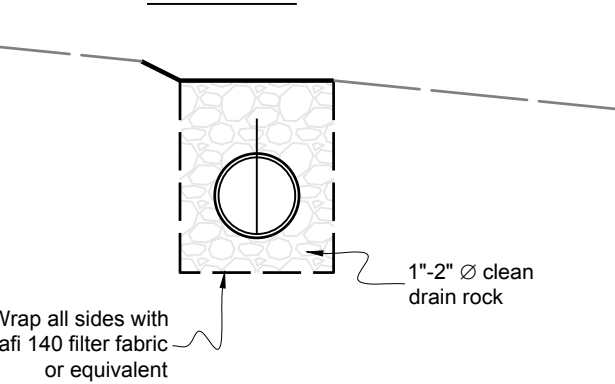
BMP - 3 Perforated HDPE underground storage area

- Objectives:
 - With adequate pre-treatment of storm water before it enters the Perforated HDPE underground storage, heavy sediments, trash, and other debris will not enter the system. Therefore, most maintenance efforts should be directed at the pre-treatment structures to ensure they are functioning properly. To monitor the accumulation of fine sediments that may enter the detention/retention area, Perforated HDPE underground storage systems may include a monitoring well, flush ports, or both.
- Monitoring Wells:
 - Inlets and risers that run from the bottom of the Perforated HDPE underground storage up to ground level, these are typically used to visually inspect the system and take simple measurements to gauge the depth of accumulated sediments.
- Flush Ports:
 - Inlets and risers are used as flush ports. As water is pumped into water will flush down to the bottom of the system to create turbulence, thereby re-suspending accumulated sediments.
- After pumping water into the pipe, flushing is completed by vacuuming sediment laden water out of the system either through the inlet structure or through the flush port. The diameter of the flush port is determined by a number of factors including the rate at which water will be pumped into the system, the number of flush ports incorporated, and the possible requirement of vacuuming through the port. Experience has shown that an 18" port is more than adequate for virtually any required use, with 12" - 15" ports more common when vacuuming will be performed at the inlet structures.
- Installing the Maintenance System:
 - Maintenance inlets and risers will be installed with the initial construction
- Maintenance Intervals:
 - Maintenance Schedules for the Perforated HDPE underground storage System are a function of the contributing area and the type of pre-treatment specified. A standard maintenance schedule may include quarterly inspections through the first year of use, with yearly inspections thereafter. Flushing should be performed if sediment should reach a pre-determined depth or volume of the storage capacity which reduces performance of the system to unacceptable levels.
- Availability:
 - All system components, including caps, lids, and valve boxes are available from local suppliers.

Underground Storage Detail B



Underground Storage Detail A



Source Control Measures

1 Potential Sources of Runoff Pollutants	2 Locations	3 Structural/Permanent Controls	4 BMPs
<p>A. Observe storm drain inlets (unauthorized non-stormwater discharge and accidental spills or leaks)</p>	<p>Locations of inlets.</p>	<p>Mark all inlets with the words "No Dumping Flow to Bay" or similar.</p>	<p>Maintain and periodically repaint or replace inlet markings.</p> <p>Provide stormwater pollution prevention information to new site owners, lessors, or operators.</p> <p>See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance" in the CANSQA Stormwater Quality Handbooks at www.cahnpubsandbooks.com</p> <p>Include the following in lease/all agreements: Occupant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.</p>
<p>B. Need for future indoor & structural pest control</p>		<p>New building design features that discourage entry of pests.</p>	<p>Provide Integrated Pest Management information to owners, lessors, and operators.</p>
<p>C. Landscape/ Outcrop Possible Use/Building and Grounds Maintenance</p>	<p>Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained.</p> <p>Show self-retaining landscape areas, if any.</p> <p>Show stormwater treatment and retention SCMs. (See instruction in Chapter 4.)</p>	<p>Final landscape plans will accomplish all of the following:</p> <p>Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.</p> <p>Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.</p> <p>Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.</p> <p>Consider using pot-resistant plants, especially adjacent to landscapes.</p> <p>To ensure successful establishment, select plants appropriate to site soils, slopes, climates, sun, wind, rain, local use, or recreational, ecological contexts, and plant interactions.</p>	<p>Maintain landscaping using minimum or no pesticides.</p> <p>See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance" in the CANSQA Stormwater Quality Handbooks at www.cahnpubsandbooks.com</p> <p>Provide IPM information to new owners, lessors and operators.</p>
<p>D. Pools, open ponds, decorative fountains, and other water features.</p>	<p>Future pools, spas etc. shall be located at time of permit application.</p>	<p>Future pools, spas etc. shall be subject to local requirements upon application for permit.</p>	<p>See applicable operational BMPs in Fact Sheet SC-72, "Treatment and Pool Maintenance" in the CANSQA Stormwater Quality Handbooks at www.cahnpubsandbooks.com</p>



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16075 Vineyard Boulevard
Morgan Hill, CA 95037

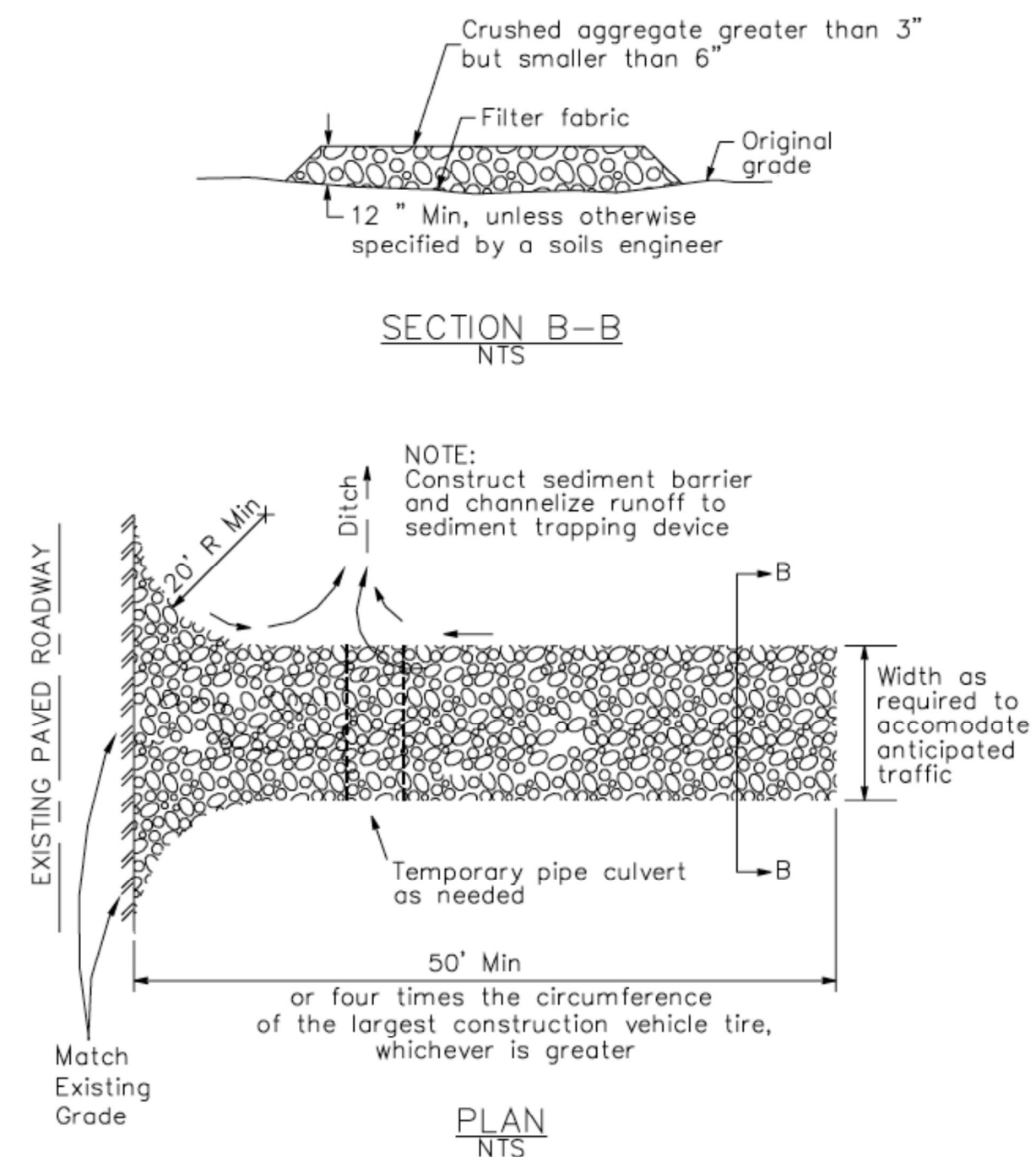
Post-Construction SWCP
Trafalgar-Country View Dr.-APN 708-47-036

DATE: 5/31/18
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SHEET 6 OF 6

3

Stabilized Construction Entrance/Exit

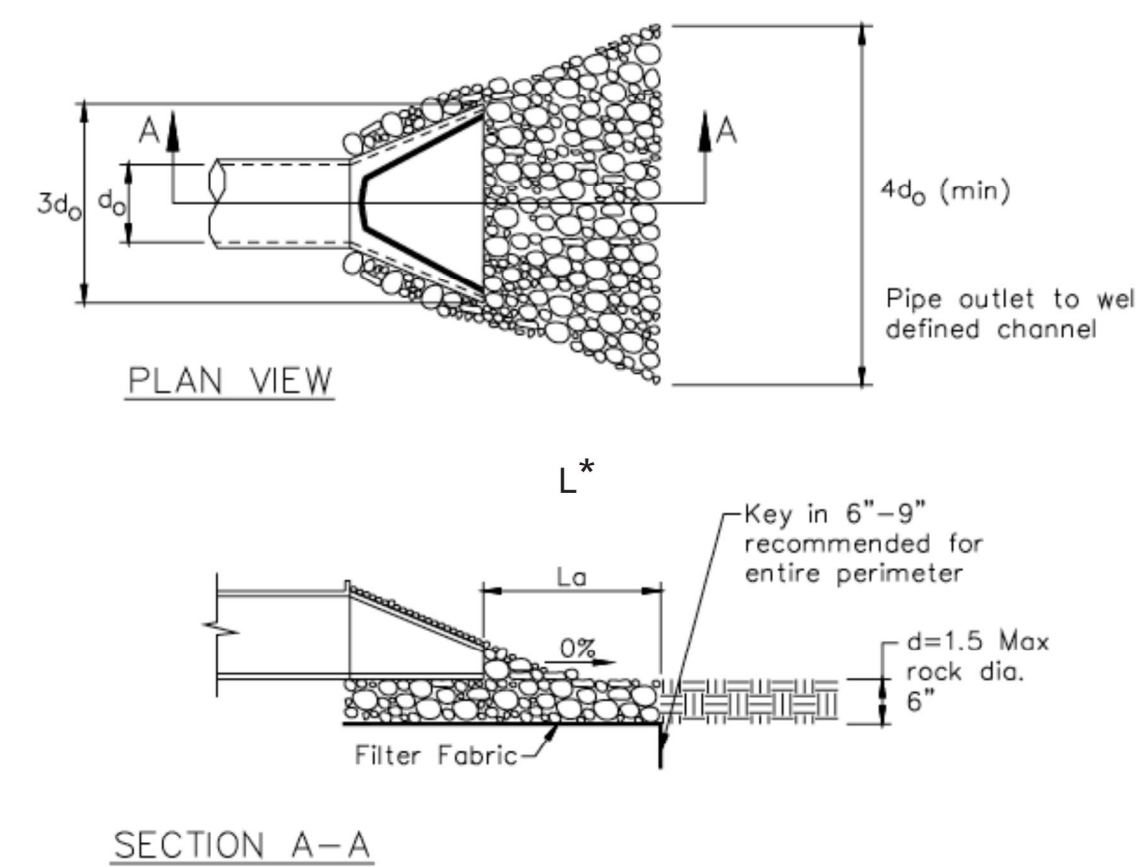
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4

Velocity Dissipation Devices

CASQA Detail EC-10



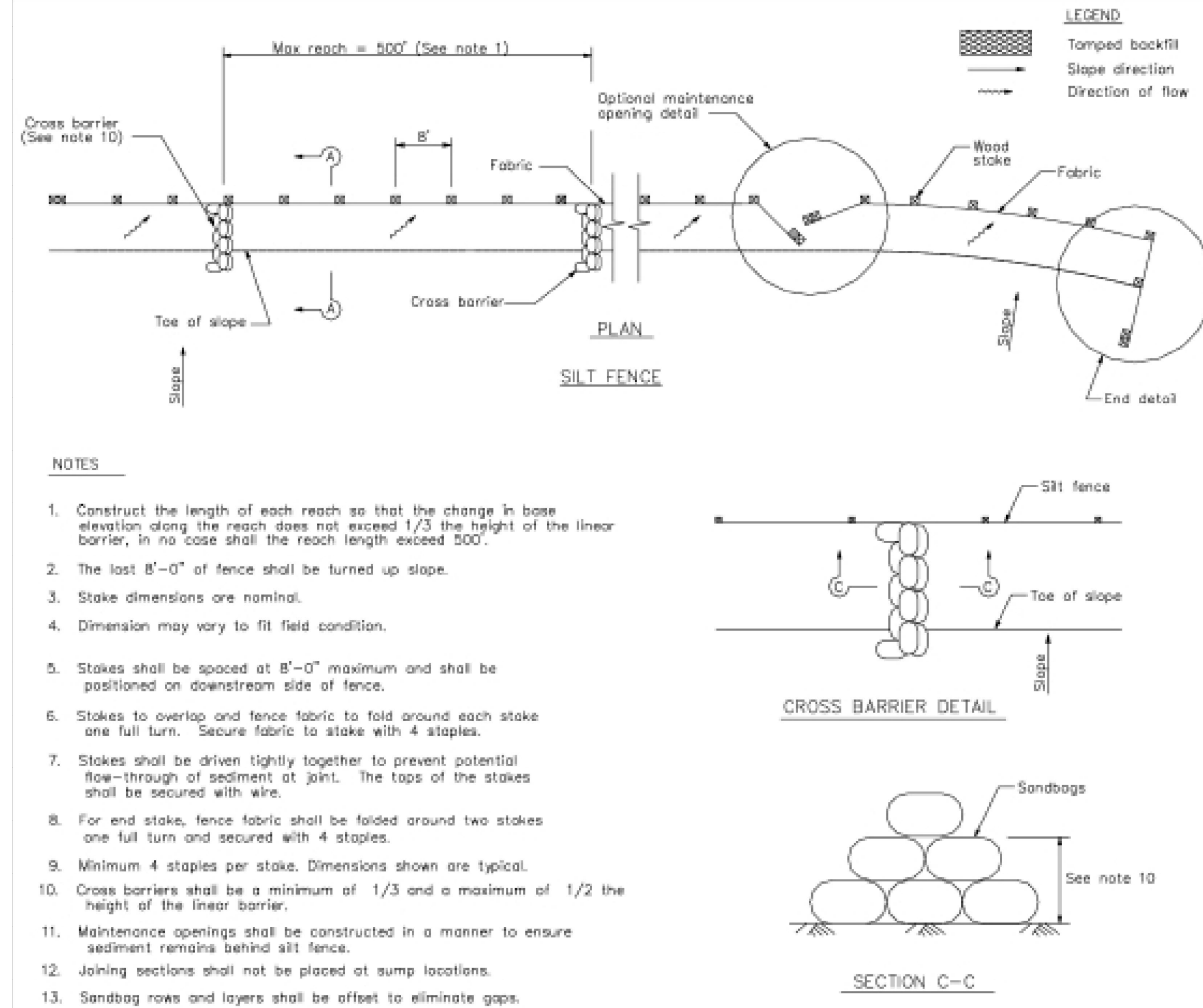
* Length per ABAG Design Standards

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

1

Silt Fence

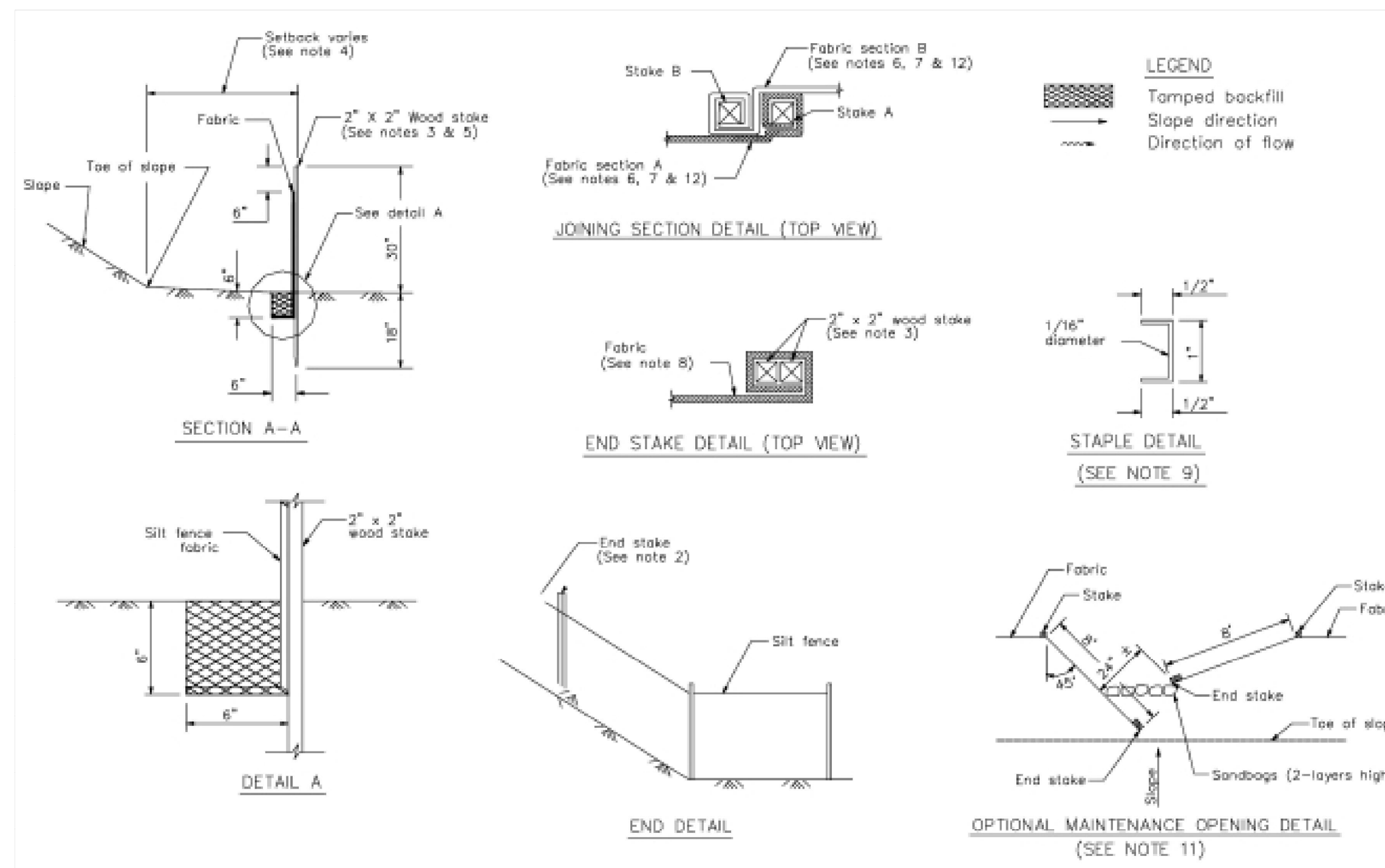
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2

Silt Fence

CASQA Detail SE-1

**STANDARD BEST MANAGEMENT PRACTICE NOTES**

- Solid and Demolition Waste Management:** Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
- Hazardous Waste Management:** Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
- Spill Prevention and Control:** Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
- Vehicle and Construction Equipment Service and Storage:** An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
- Material Delivery, Handling and Storage:** In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- Handling and Disposal of Concrete and Cement:** When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
- Pavement Construction Management:** Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
- Contaminated Soil and Water Management:** Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
- Sanitary/Septic Water Management:** Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
- Inspection & Maintenance:** Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES**1. Sediment Control Management:**

Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

Storm Drain Inlet and Catch Basin Inlet Protection:

All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

Dust Control: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures (tarps, straw bales, silt fences, etc.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.

- Erosion Control:** During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- Inspection & Maintenance:** Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- Project Completion:** Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

Trafalgar-Country View Dr-APN 708-47-030

Project Information

Best Management Practices and Erosion Control Details Sheet 1

County of Santa Clara

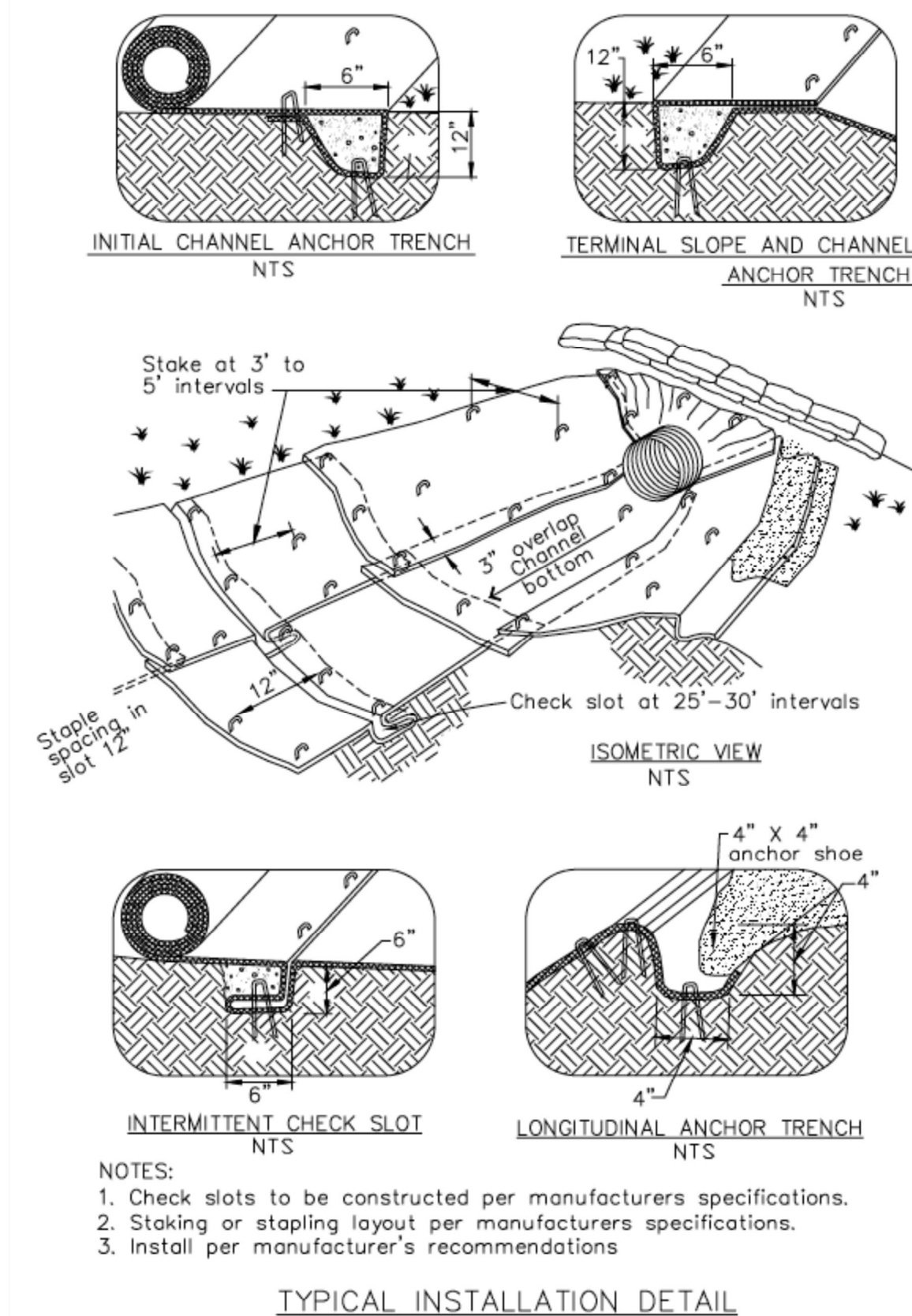


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Geotextiles and Mats

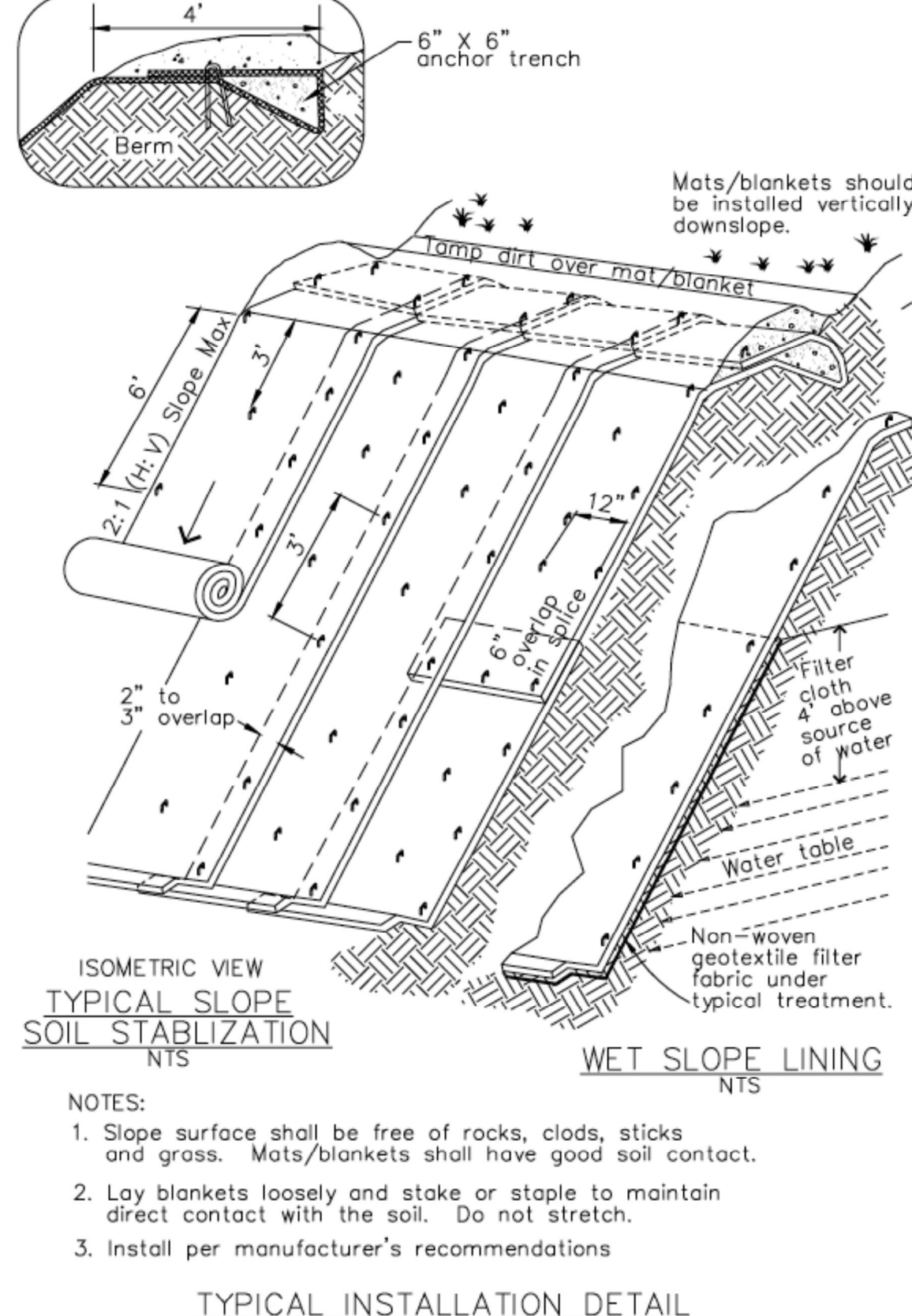
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5

Geotextiles and Mats

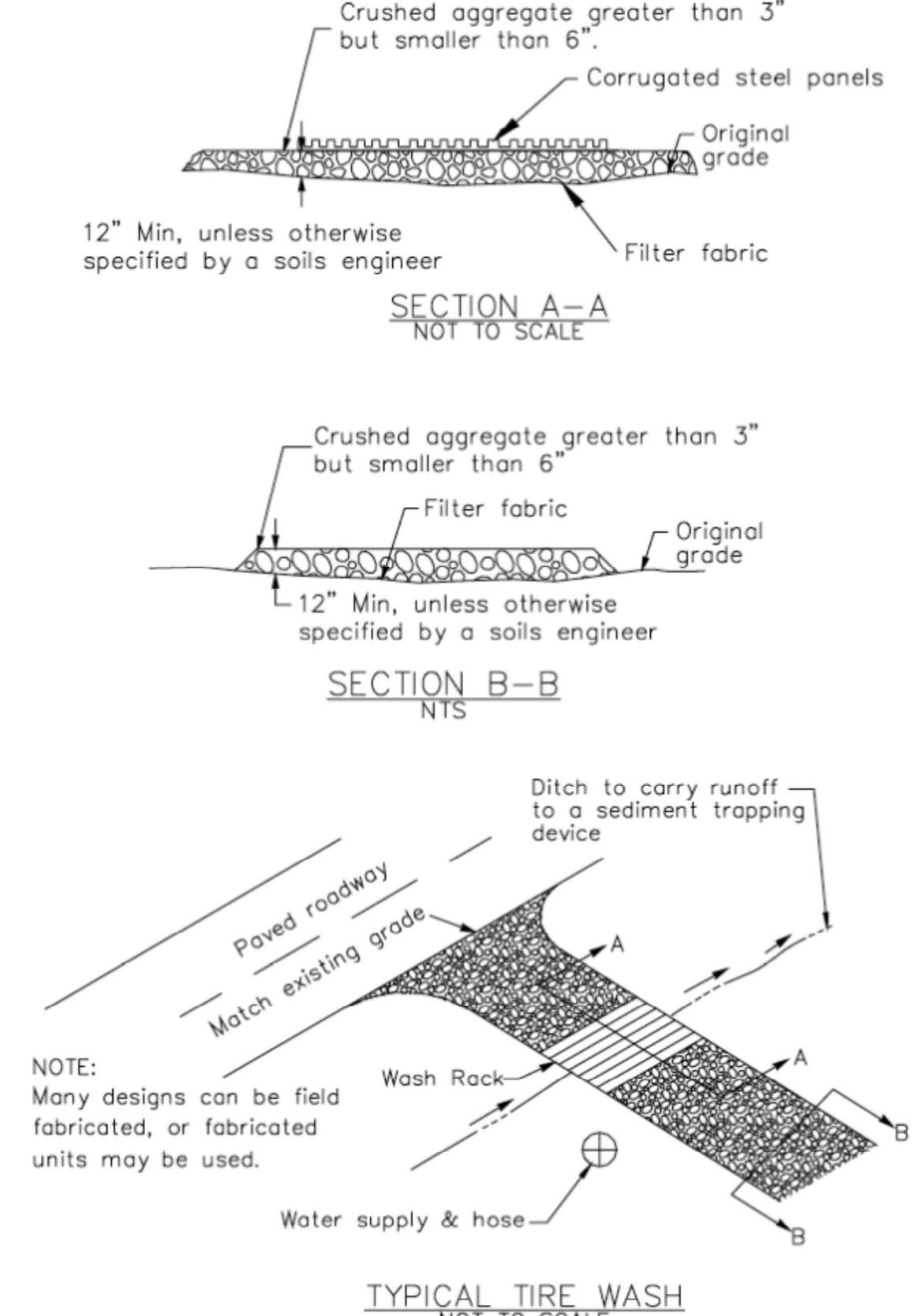
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3

Entrance/Outlet Tire Wash

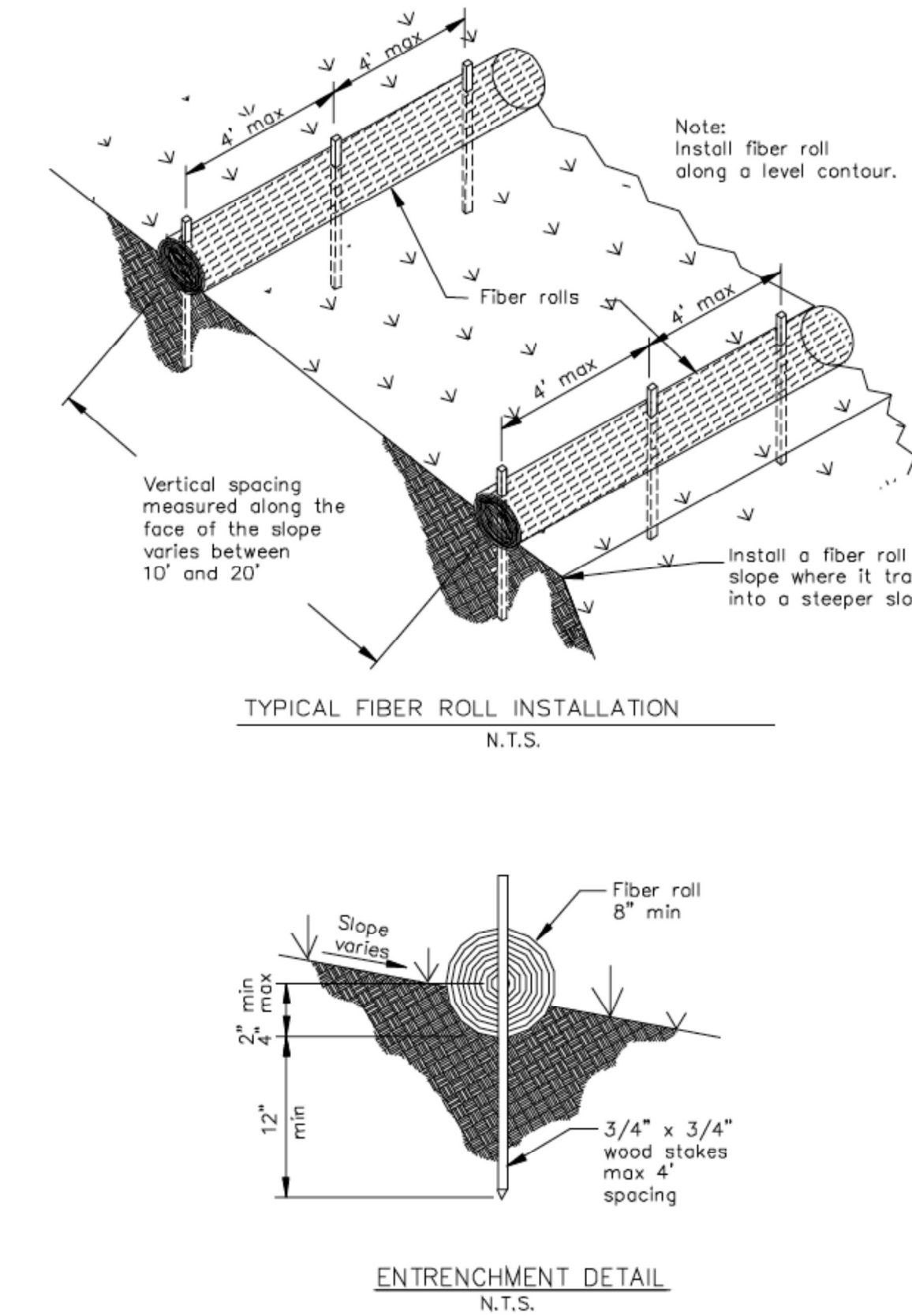
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1

Fiber Rolls

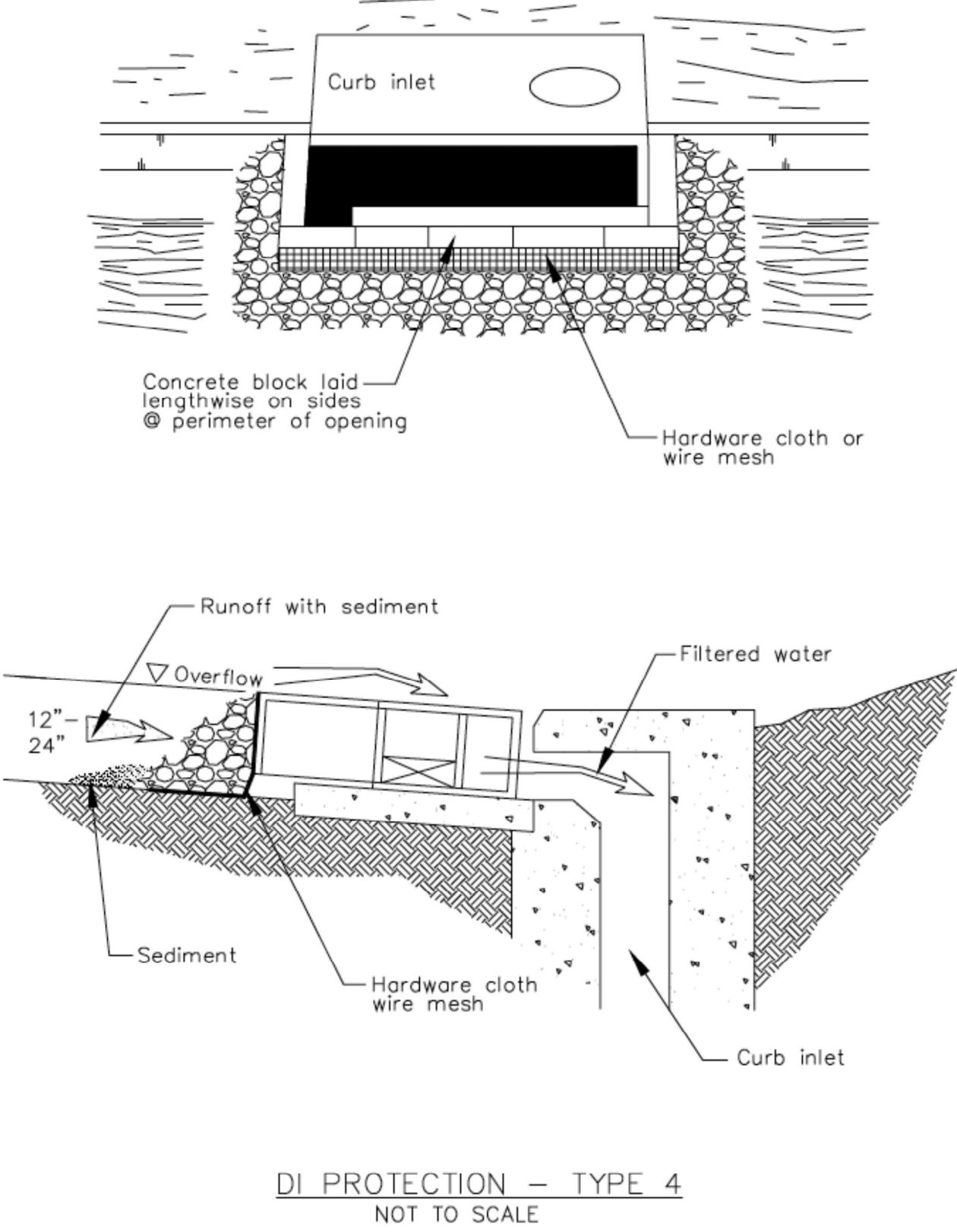
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Storm Drain Inlet Protection

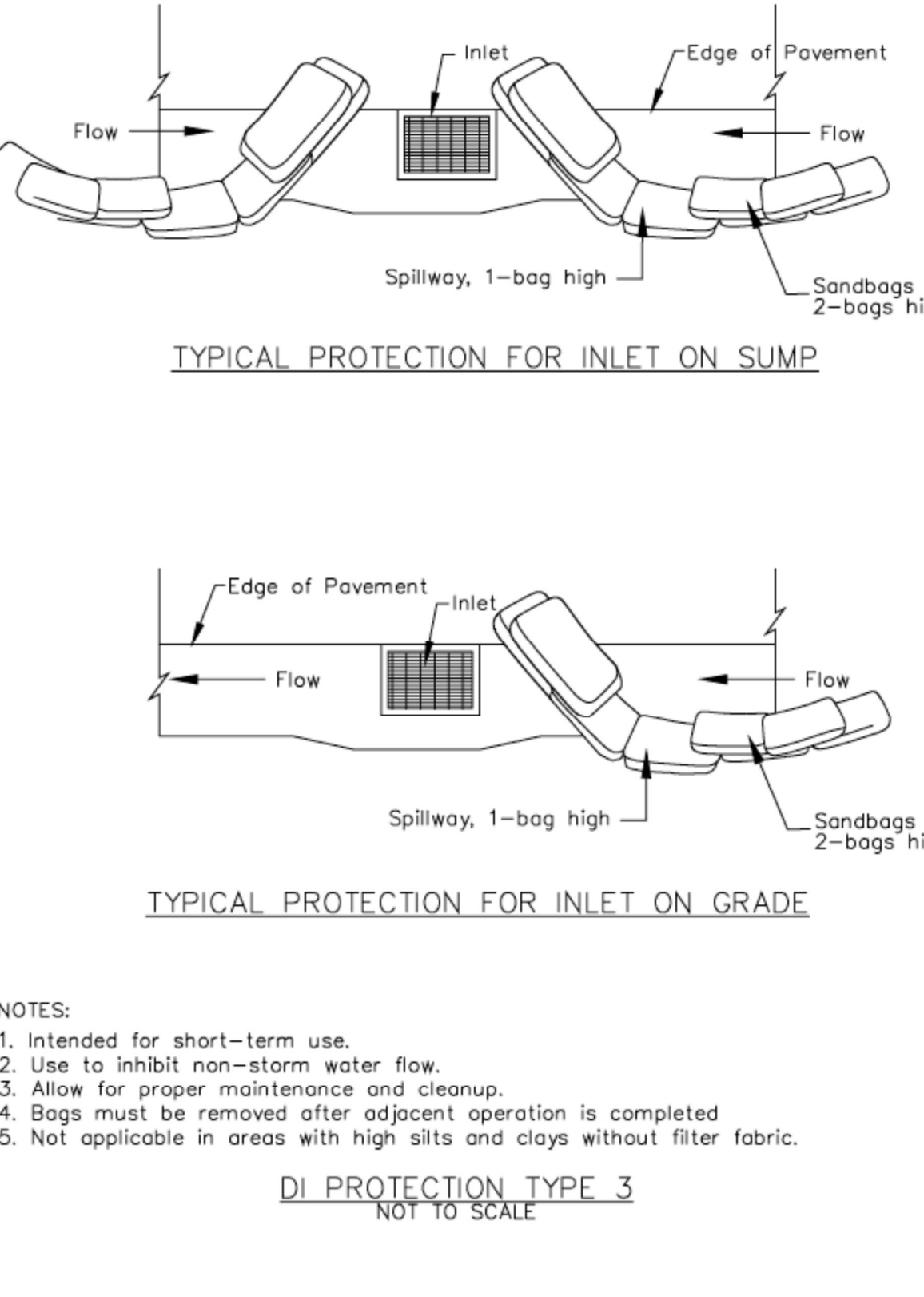
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Storm Drain Inlet Protection

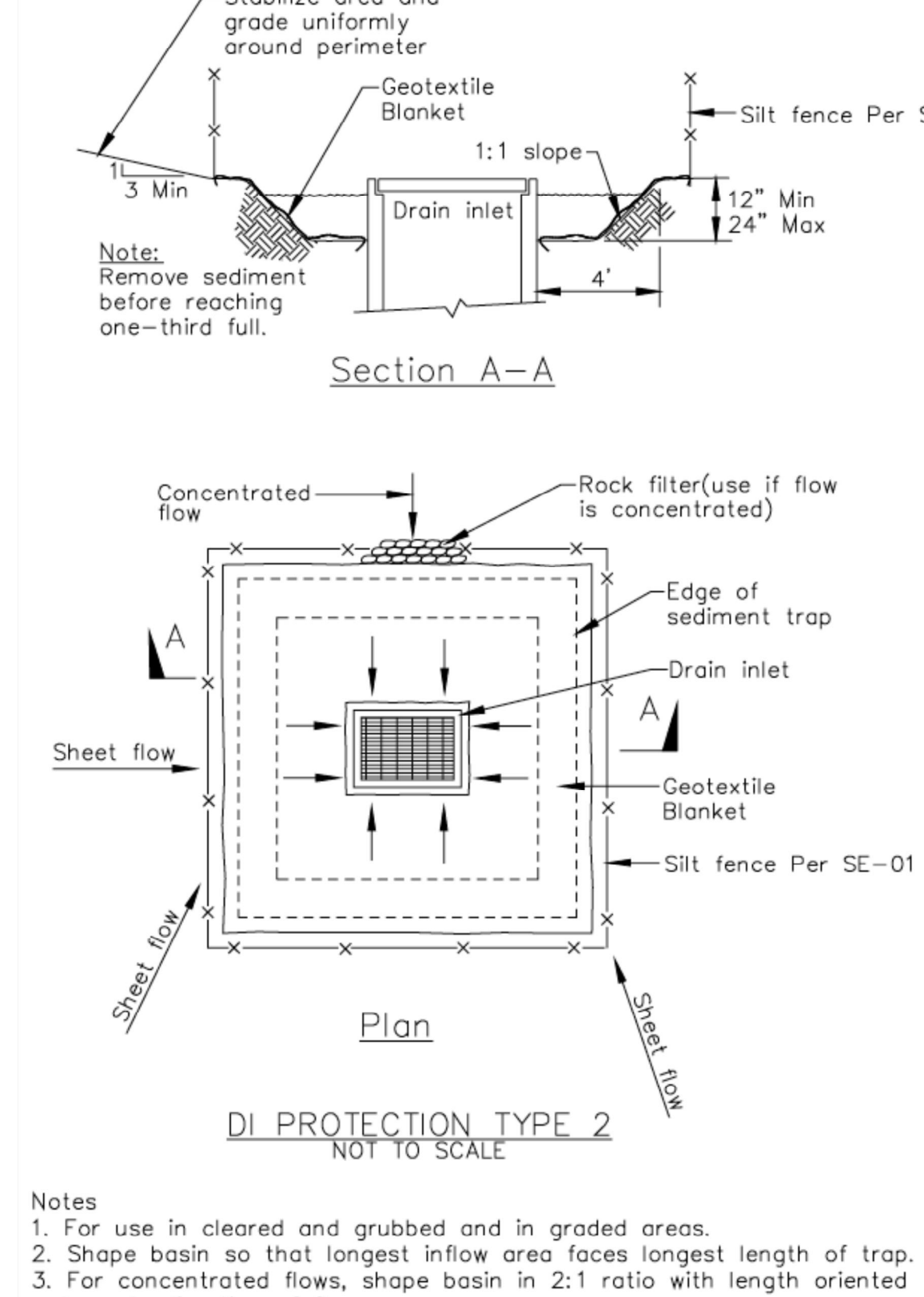
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Storm Drain Inlet Protection

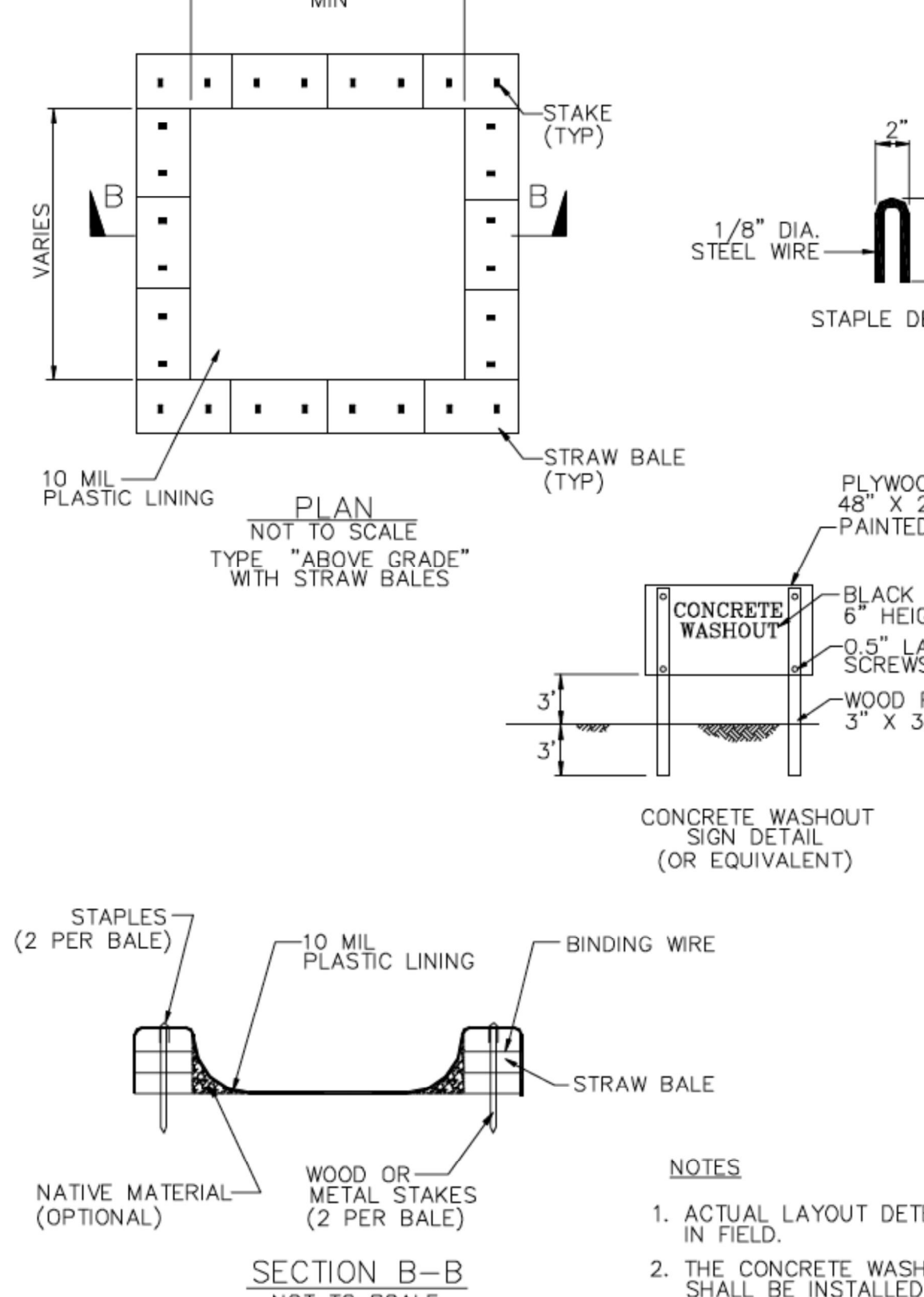
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2

Concrete Waste Management

CASQA Detail WM-8



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Project Information

