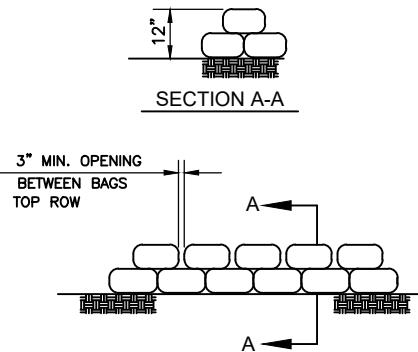
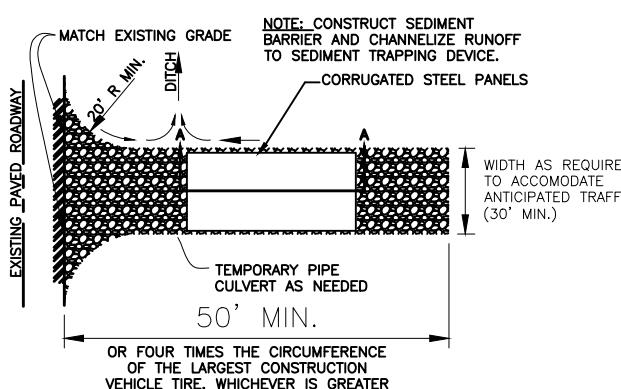
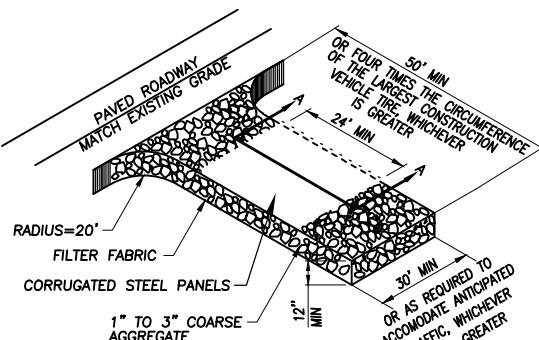


TYPICAL GRATE INLET PROTECTION
NOT TO SCALE



GRAVEL BAG BERM DETAILS (SE-6)

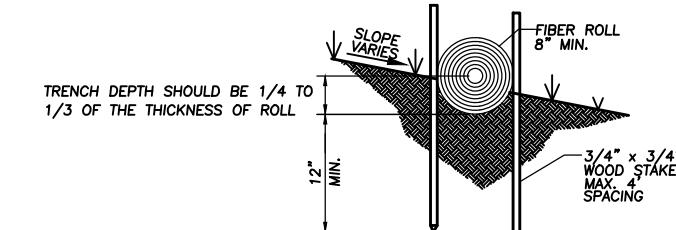
NOT TO SCALE



**STABILIZED CONSTRUCTION
ENTRANCE/ EXIT DETAIL (TC-1)**

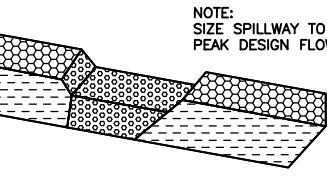
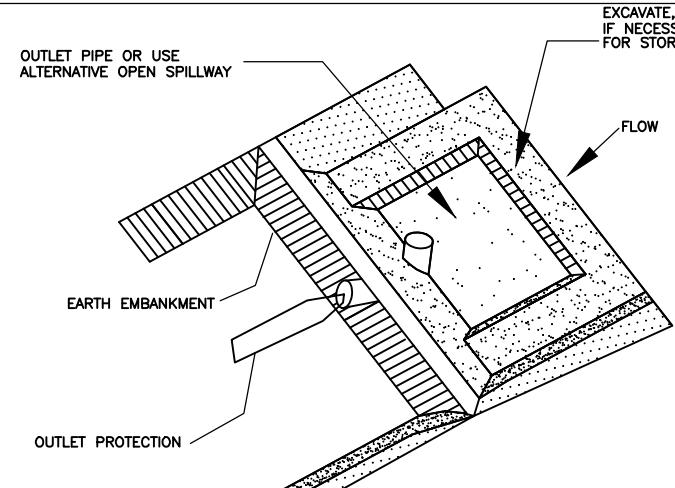
NOT TO SCALE

FIBER ROLL SPACING (INSTALL ALONG LEVEL CONTOURS)	
SLOPE	SPACING
0-25%	EVERY 20'
25-50%	EVERY 15'
50% OR >	EVERY 10'



TYPICAL FIBER ROLL INSTALLATION

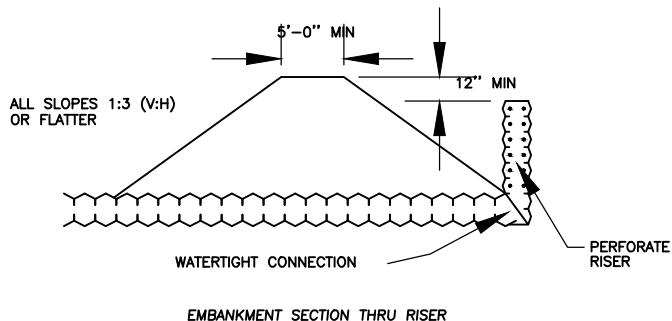
NOT TO SCALE



TYPICAL OPEN SPILLWAY

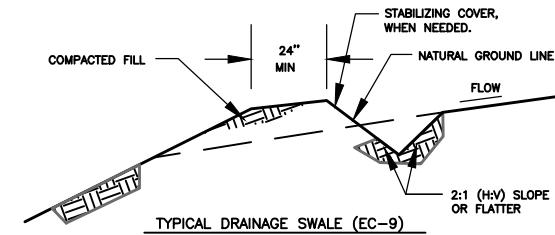
NOTES:

1. TEMPORARY SEDIMENT TRAPS SHALL ONLY BE USED FOR SMALL DRAINAGE AREAS (<5 ACRES). IF CONTRIBUTING DRAINAGE AREA IS GREATER THAN 5 ACRES, SUBDIVIDE INTO SMALLER CATCHMENT AREAS OR USE SEDIMENT BASINS (SE-2).
2. TRAP SHOULD BE SITUATED ACCORDING TO THE FOLLOWING CRITERIA: (1) BY EXCAVATING A SUITABLE AREA OR WHERE A LOW EMBANKMENT CAN BE CONSTRUCTED ACROSS A SWALE, (2) WHERE FAILURE WOULD NOT CAUSE LOSS OF LIFE OR PROPERTY DAMAGE, AND (3) TO PROVIDE ACCESS FOR MAINTENANCE, INCLUDING SEDIMENT REMOVAL AND SEDIMENT STOCKPILING IN A PROTECTED AREA.
3. AT A MINIMUM, SEDIMENT TRAP SHOULD BE SIZED TO ACCOMMODATE A SETTLING ZONE VOLUME OF 67 CUBIC YARDS PER ACRE OF CONTRIBUTING DRAINAGE AREA, AND A SEDIMENT STORAGE ZONE VOLUME OF 33 CUBIC YARDS PER ACRE OF CONTRIBUTING DRAINAGE AREA.
4. OUTLET PIPE OR OPEN SPILLWAY MUST BE DESIGNED TO CONVEY ANTICIPATED PEAK FLOWS, AND BE STABILIZED WITH VEGETATION OR ROCK TO PROTECT OUTLET AGAINST EROSION.
5. WHEN A RISER IS USED, AT LEAST THE TOP TWO-THIRDS OF THE RISER SHOULD BE PERFORATED WITH 0.5 IN DIAMETER HOLES SPACED 8 IN VERTICALLY AND 10-12 IN HORIZONTALLY. WHERE AN EARTH OR STONE OUTLET IS USED, THE OUTLET CREST ELEVATION SHOULD BE AT LEAST 1 FT BELOW THE TOP OF EMBANKMENT. WHERE CRUSHED STONE IS USED, STONE SHOULD MEET AASHTO M43 SIZE NO. 2 OR 24, OR EQUIVALENT MSHA NO. 2.
6. FENCING SHOULD BE PROVIDED TO PREVENT UNAUTHORIZED ENTRY.
7. SEDIMENT THAT ACCUMULATES IN TRAP SHOULD BE REMOVED AFTER EACH RAIN EVENT, AND WHEN ACCUMULATION REACHES ONE-THIRD OF TRAP CAPACITY. SEDIMENT REMOVED DURING MAINTENANCE MAY BE INCORPORATED INTO EARTHWORK ON-SITE OR PROPERLY DISPOSED OFF-SITE.
8. CORRECTIVE MEASURES SHOULD BE TAKEN IF TRAP DOES NOT Dewater COMPLETELY IN 96 HOURS OR LESS TO PREVENT VECTOR PRODUCTION. ANY DewaterING SHALL BE IN ACCORDANCE WITH BMP NS-2.



TYPICAL SEDIMENT TRAP (SE-3)

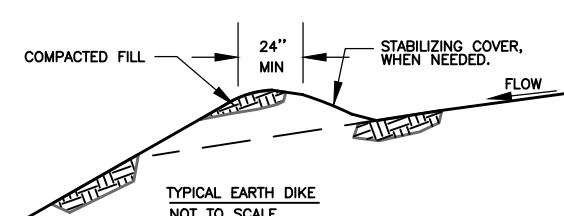
NOT TO SCALE



TYPICAL DRAINAGE SWALE (EC-9)
NOT TO SCALE

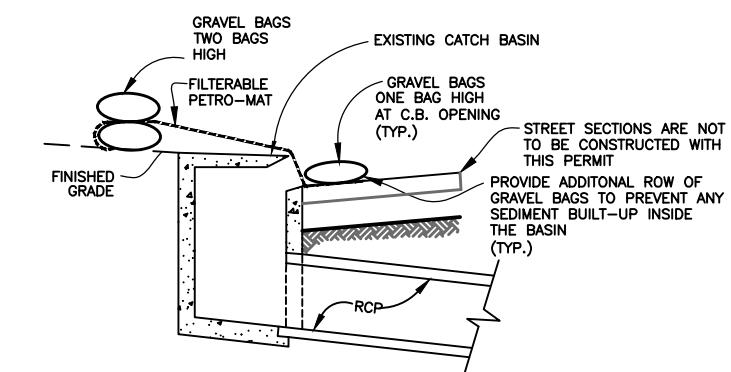
NOTES:

1. STABILIZE INLET, OUTLETS, AND SLOPES.
2. PROPERLY COMPACT THE SUBGRADE.



TYPICAL EARTH DIKE
NOT TO SCALE

NOTES:
1. STABILIZE INLET, OUTLETS, AND SLOPES.
2. PROPERLY COMPACT THE SUBGRADE.



TYPICAL CURB INLET PROTECTION

NOT TO SCALE

EARTH DIKES & DRAINAGE SWALES (EC-9)

NOT TO SCALE

Not to Scale
Exhibit Date: 8/25/22

SWPPP EXHIBIT
BMP DETAILS
4th AND MORTIMER
SANTA ANA, CA

WET SEASON REQUIREMENTS
(OCTOBER 1 THROUGH APRIL 30)

WET SEASON REQUIREMENTS IN ADDITION TO THE DRY SEASON REQUIREMENTS:	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. SEDIMENT CONTROL BMPs SHALL BE IMPLEMENTED AT THE SITE PERIMETER, AT ALL OPERATIONAL STORM DRAIN INLETS AND ALL NON-ACTIVE SLOPES, TO PROVIDE SUFFICIENT PROTECTION FOR STORMS LIKELY TO OCCUR DURING THE RAINY SEASON.	SE-5, SE-6, SE-7, SE-8, SE-9, SE-10
B. ADEQUATE PHYSICAL OR VEGETATION EROSION CONTROL BMPs (TEMPORARY OR PERMANENT) SHALL BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES PRIOR TO THE START OF THE RAINY SEASON. THESE BMPs MUST BE MAINTAINED THROUGHOUT THE RAINY SEASON. IF A SELECTED BMP FAILS, IT MUST BE REPAIRED AND IMPROVED OR REPLACED WITH AN ACCEPTABLE TEMPORARY BMP AS IS STATED IN 500. THE FAILURE OF A BMP MAY INDICATE THAT THE BMP, AS INSTALLED, WAS NOT ADEQUATE FOR THE CIRCUMSTANCES IN WHICH IT WAS USED. REPAIRS OR REPLACEMENTS MUST RESULT IN A MORE ROBUST BMP, OR ADDITIONAL BMPs SHOULD BE INSTALLED TO PROVIDE ADEQUATE PROTECTION.	EC-1, EC-5, EC-8
C. THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH IS ALREADY PROTECTED BY DEPLOYED REFERENCED STANDBY EROSION CONTROL AND SEDIMENT CONTROL BMPs PRIOR TO A PREDICTED RAINSTORM.	EC-5, SE-6, SE-7, SE-10
D. A DISTURBED AREA THAT IS NOT COMPLETED BUT THAT IS NOT ACTIVELY GRADED (NON-ACTIVE AREA) SHALL BE FULLY PROTECTED FROM EROSION WITH THE REFERENCED TEMPORARY AND/OR PERMANENT BMPs (EROSION AND SEDIMENT CONTROL). THE ABILITY TO DEPLOY STANDBY BMP MATERIALS IS NOT SUFFICIENT FOR THESE AREAS. EROSION AND SEDIMENT CONTROL BMPs MUST ACTUALLY BE DEPLOYED. THIS INCLUDES ALL BUILDING PADS, UNFINISHED ROADS, AND SLOPES.	EC-5, SE-6, SE-10
E. SUFFICIENT MATERIALS NEEDED TO INSTALL REFERENCED STANDBY EROSION AND SEDIMENT CONTROL BMPs NECESSARY TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGES SHALL BE STORED ON SITE. THE SITE SHALL BE FULLY PROTECTED FROM EROSION USING PERMANENT PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION. BMPs ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.	SE-5, SE-6, SE-7, SE-8, EC-5

NOTE: FOR RISK LEVEL 2 AND 3 SITES, THERE SHALL BE A "RAIN EVENT ACTION PLAN" AND THE ABILITY TO DEPLOY STANDBY EROSION AND SEDIMENT CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

DRY SEASON REQUIREMENTS
(MAY 1 THROUGH SEPTEMBER 30)

DRY SEASON REQUIREMENTS	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. WIND EROSION BMPs (DUST CONTROL) SHALL BE IMPLEMENTED.	WE-1
B. SEDIMENT CONTROL BMPs SHALL BE INSTALLED AND MAINTAINED AT ALL OPERATIONAL STORM DRAIN INLETS INTERNAL TO THE PROJECT.	SE-10
C. BMPs TO CONTROL OFF-SITE SEDIMENT TRACKING SHALL BE IMPLEMENTED AND MAINTAINED.	TC-1, TC-2, TC-3
D. APPROPRIATE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER BY WASTES AND CONSTRUCTION MATERIALS.	WM-1, WM-2, WM-3, WM-4, WM-5, WM-6, WM-7, WM-8, WM-9
E. APPROPRIATE NON-STORMWATER BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER FROM CONSTRUCTION ACTIVITIES.	NS-1, NS-3, NS-6, NS-8, NS-9, NS-10
F. DEPLOYMENT OF PERMANENT EROSION CONTROL BMPs (PHYSICAL OR VEGETATION) SHALL COMMENCE AS SOON AS PRACTICAL ON SLOPES THAT ARE COMPLETED FOR ANY PORTION OF THE SITE. STANDBY BMP MATERIALS SHALL NOT BE RELIED UPON TO PREVENT EROSION OF SLOPES THAT HAVE BEEN COMPLETED.	

NOTE 1: THERE SHALL BE A "WEATHER TRIGGERED" ACTION PLAN AND THE ABILITY TO DEPLOY STANDBY EROSION CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

NOTE 2: SUFFICIENT MATERIALS NEEDED TO INSTALL STANDBY SEDIMENT CONTROL BMPs (AT THE SITE PERIMETER, SITE SLOPES AND OPERATIONAL INLETS WITHIN THE SITE) NECESSARY TO PREVENT SEDIMENT DISCHARGES FROM EXPOSED PORTIONS OF THE SITE SHALL BE STORED IN SITES THAT ARE NOT EXPOSED FROM PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION BMPs AS DESCRIBED IN ITEM F ABOVE ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.

BMP TABLE:

SYMBOL	DESCRIPTION
ENTIRE SITE	WE-1 WIND EROSION CONTROLS
TC-1	STABILIZED CONSTRUCTION ENTRANCE
—x—	SE-1 SILT FENCE
—o—	SE-6 GRAVEL BAG BARRIER
□	SE-10 STORM DRAIN INLET PROTECTION

BMP DETAILS CAN BE OBTAINED IN THE SWPPP PREPARED FOR THIS PROJECT BY FUSCOE ENGINEERING OR
http://www.ocwatersheds.com/StormWater/documents_bmp_construction.asp



REVISIONS				APPROVED	REFERENCES
NUMBER	DATE	INITIALS	DESCRIPTION		

POLLUTION PREVENTION NOTES

IN ORDER TO MEET THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM FOR CONSTRUCTION, CONSTRUCTION CONTRACTORS SHALL INSTALL AND MAINTAIN APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN IN THE EROSION AND SEDIMENT CONTROL PLAN. ON ALL CONSTRUCTION PROJECTS, BMPs SHALL BE INSTALLED IN ACCORDANCE WITH INDUSTRY CONVENTIONAL STANDARDS AND IN ACCORDANCE WITH THE GENERAL CONSTRUCTION PERMIT ISSUED BY THE STATE FOR THE PROJECT TO PREVENT DISCHARGES FROM THE PROJECT SITE OR INTO ANY STORM DRAIN FACILITIES. ALL SEDIMENTS, CONSTRUCTION MATERIALS, DEBRIS AND WASTES, AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, WIND, OR VEHICLE TRACKING, UNDER DIRECTION OF THE ENGINEER OF RECORD, EROSION AND/OR SEDIMENT CONTROL DEVICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

NOTES TO CONTRACTOR:

STABILIZED CONSTRUCTION ENTRANCE AND RECYCLING STORAGE AREA SHALL BE DESIGNATED BY SITE SUPERVISOR AND INCLUDED ON THE SWPPP / EROSION CONTROL PLAN. AS SITE CONDITIONS CHANGE, THE SWPPP / EROSION CONTROL PLAN SHALL BE UPDATED TO REFLECT CURRENT CONDITIONS.

IT IS THE CONTRACTOR/SUPERVISOR'S RESPONSIBILITY TO KEEP THE SWPPP MAP CURRENT. BMPs SHOULD BE ADDED, MOVED OR REMOVED BASED ON SITE CONDITIONS. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE AN ACCEPTABLE FORM OF ALTERATION. THE CONTRACTOR MAY BE ASKED AT ANY TIME TO PRODUCE THE SWPPP MAP. FAILURE TO KEEP THE MAP CURRENT COULD RESULT IN A NOTICE OF VIOLATION AND/OR FINE.

EROSION CONTROL NOTES:

GRAVEL BAGS

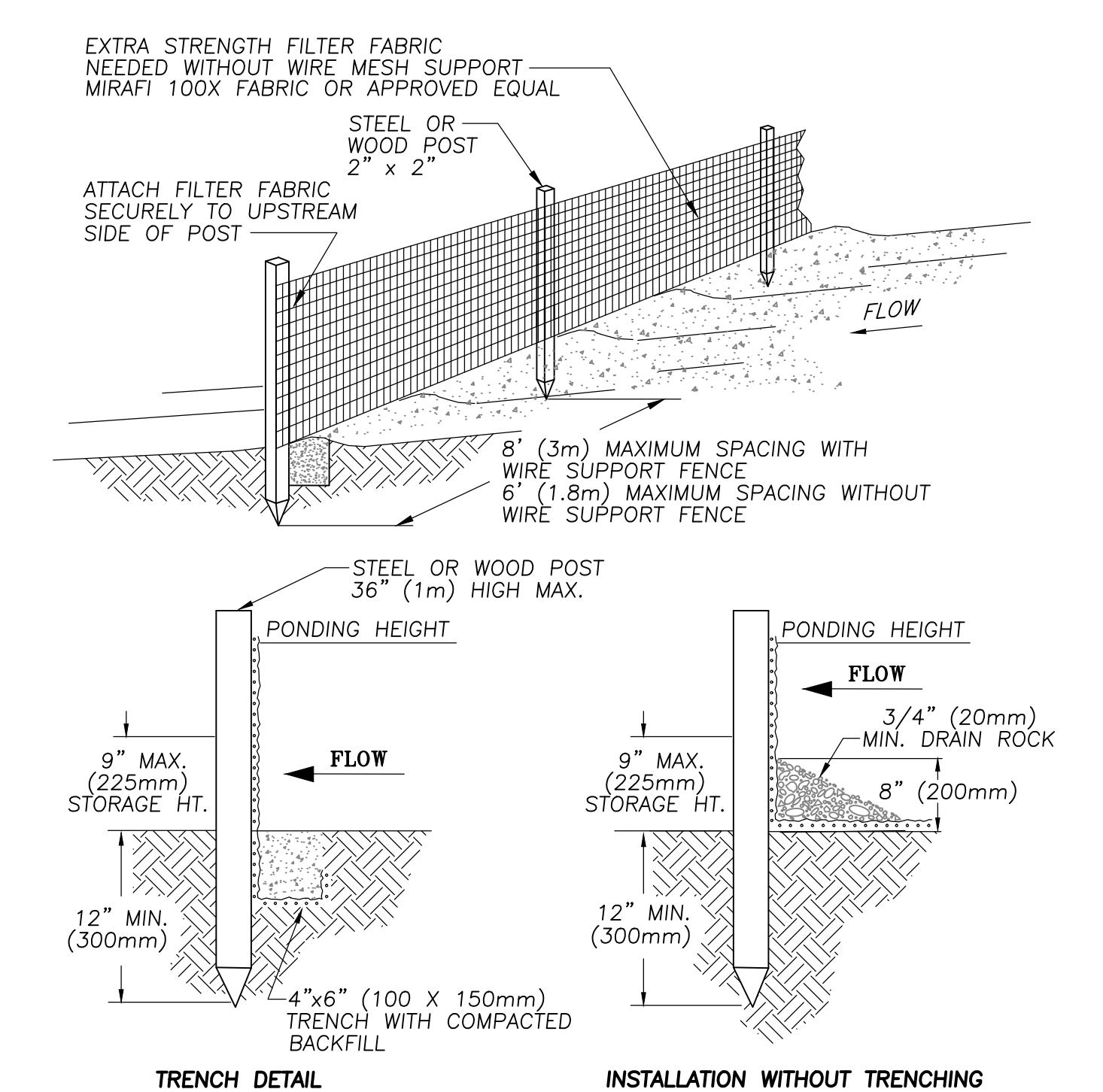
1. GENERAL: GRAVEL BAG SHALL INCLUDE PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT TO FABRICATE AND INSTALL GRAVEL BAGS AS REQUIRED TO FACILITATE THE CONTROL OF EROSION.

2. LOCATION: GRAVEL BAGS SHALL BE PLACED PER PLAN, AND IN LOCATIONS SPECIFIED BY THE CITY, AND IN LOCATIONS DEEMED NECESSARY BY THE CONTRACTOR.

3. FABRICATION: GRAVEL BAGS SHALL BE FABRICATED USING FACTORY SEWN OR SEALED BAGS OF WOVEN POLYPROPYLENE, TREATED TO RESIST DEGRADATION BY ULTRAVIOLET LIGHT AND HAVING SUFFICIENT RESISTANCE TO TEARING TO ALLOW RELOCATION OF BAGS WITHIN SIX MONTHS OF INITIAL PLACEMENT WITH A LOSS OF NOT MORE THAN FIVE PERCENT OF THE BAGS. THE BAGS SHALL BE FILLED WITH SUB-ROUNDED TO ROUNDED GRAVEL LESS THAN 3/4-INCH IN DIAMETER, WITH LESS THAN FIVE PERCENT OF MATERIAL PASSING A NO. 30 SIEVE. THE FILLED BAGS SHALL HAVE THE OPEN ENDS SECURELY FASTENED PRIOR TO DELIVERY TO THE SITE.

4. INSTALLATION: GRAVEL BAGS SHALL BE INSTALLED IN A MANNER TO ENTRAP SILT AND MUD, AND TO DIVERT THE FLOW OF WATER, NOTWITHSTANDING THE OTHER REQUIREMENTS OF THIS SPECIFICATION. FAILURE OF THE BAGS TO PERFORM THIS FUNCTION SHALL BE REASON REJECTION FOR INSTALLATION. GRAVEL BAGS SHALL BE INSTALLED WITH THE OPEN FACE AGAINST THE GROUND SURFACE OR THE UNDERLYING COURSE OF BAGS, AND PRESSED IN PLACE TO CONFORM TO THE UNDERLYING SURFACE. THE BAGS SHALL BE PLACED WITH THE TIED ENDS OF THE "UPHILL" OR "UPSTREAM" DIRECTION, BEGINNING AT THE LOWEST OR MOST DOWNSTREAM BAG. TIED ENDS WILL BE TUCKED UNDER BAG. SUBSEQUENT BAGS WITHIN ONE COURSE OF BAGS SHALL BE PLACED SO AS TO REST UPON THE TIED END OF THE PREVIOUS BAG, AND NOT LESS THAN 20 FEET IN PITCH. THE BAG IN CONTACT WITH THE PREVIOUS BAG, AND NOT MORE THAN 20 PERCENT IN CONTACT, SUBSEQUENT COURSES OF BAGS SHALL BE PLACED AS DESCRIBED PREVIOUSLY, WITH THE MID-POINT OF THE BAGS STRADDLING THE JOINTS. CONSTRUCTION OF A GRAVEL BAG BERM PERPENDICULAR TO THE DIRECTION OF FLOW SHALL INCORPORATE BAGS PLACED IN A "PYRAMID" CONFIGURATION, WITH ALL INDIVIDUAL BAGS ORIENTED PERPENDICULAR TO THE DIRECTION OF FLOW. THE BERM SHALL BE CONSTRUCTED WITH A SPECIFIED NUMBER OF ROWS AT THE BOTTOM (IN CONTACT WITH THE GROUND SURFACE) AND EACH ROW INCREASING THE UPSTREAM AND DOWNSTREAM FACES OF THE BERM SHALL BE NO STEEPER THAN 1 1/2 FEET HORIZONTAL TO 1 VERTICAL. DAMAGE WHICH COULD FORSEEABLY BE PREVENTED BY PROPER GRAVEL BAG INSTALLATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

5. COMPENSATION: THE PERFORMANCE OF THE REQUIREMENTS OF THIS SECTION SHALL BE COMPENSATED AT THE CONTRACT UNIT PRICES FOR GRAVEL BAGS.



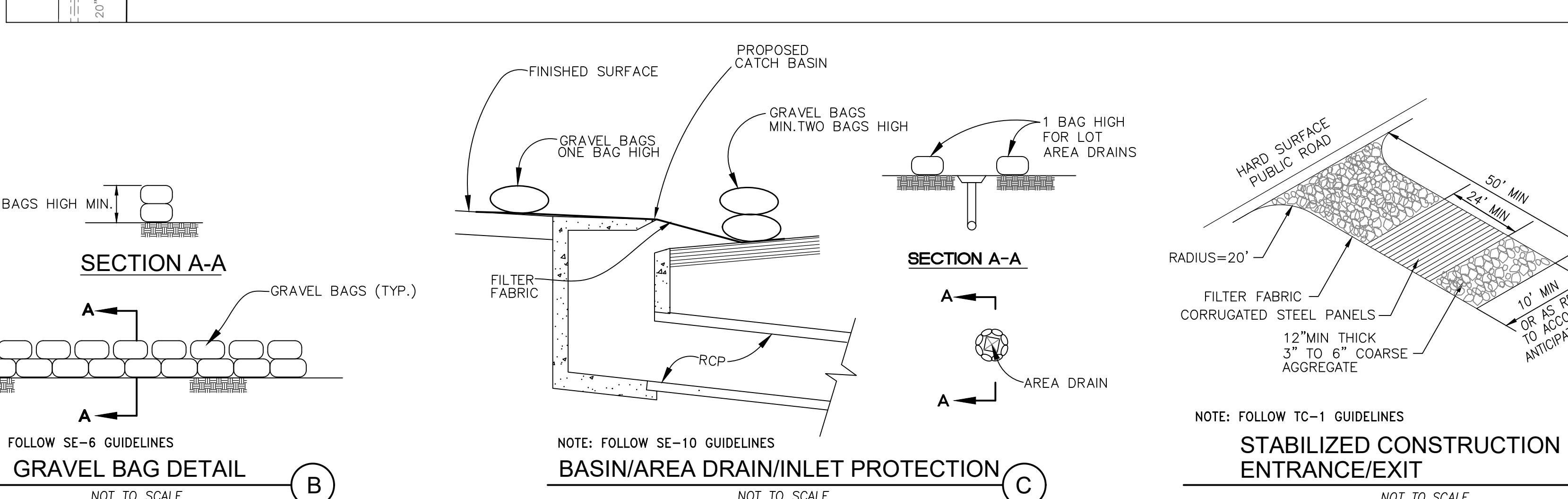
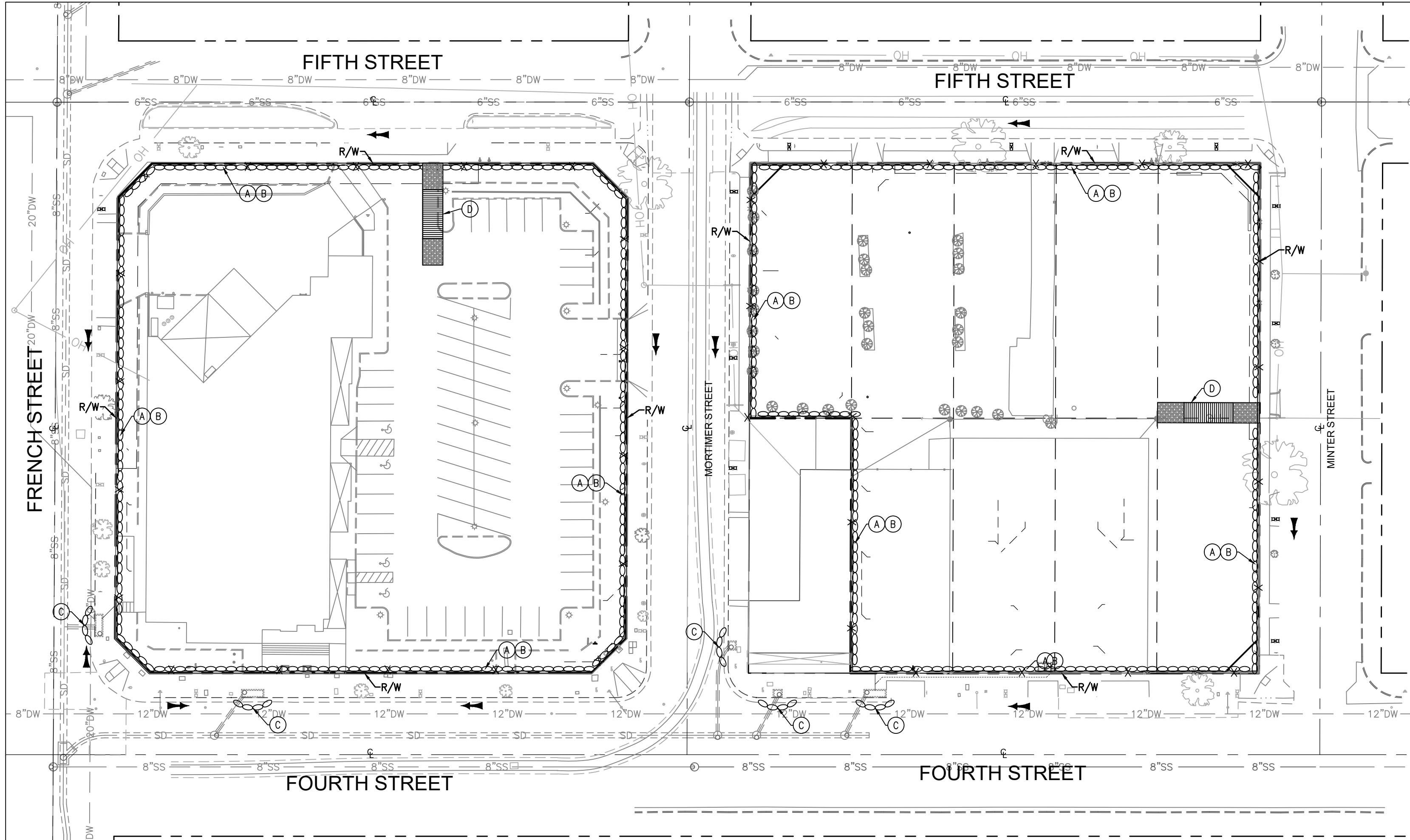
NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY. THE LAST 8' OF FENCE SHALL BE TURNED UP SLOPE.
2. STAKES SHALL BE SPACED 8'-0" MAXIMUM AND SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE. STAKES TO OVERLAP AND FENCE FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN. SECURE FABRIC TO STAKE WITH 4 STAPLES.
3. FOR END STAKE, FENCE FABRIC SHALL BE FOLDED AROUND TWO STAKES ONE FULL TURN AND SECURED WITH 4 STAPLES.
4. CROSS BARRIERS SHALL BE A MINIMUM OF 1/3 AND A MAXIMUM OF 1/2 THE HEIGHT OF THE LINEAR BARRIER.
5. ADD 3-4 GRAVEL BAGS TO CROSS BARRIERS ON DOWN-GRADIENT SIDE OF SILT FENCE AS NEEDED TO PREVENT BYPASS OR UNEVENING AND AS ALLOWABLE BASED ON SITE LIMITS OF DISTURBANCE. BAGS MAY REQUIRE PINNING AT DIRECTION OF ENGINEER.
6. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
7. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

NOTE: FOLLOW SE-1 GUIDELINES

SILT FENCE

NOT TO SCALE



CONSTRUCTION NOTES

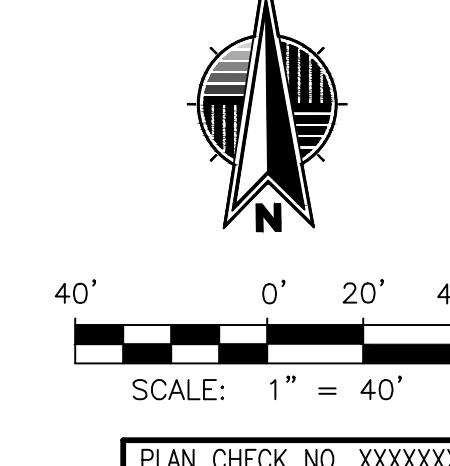
- (A) INSTALL PERIMETER CONTROL USING SILT FENCE PER BMP SE-1 AND DETAIL HEREON
- (B) INSTALL PERIMETER CONTROL GRAVEL BAGS (2 BAGS HIGH) PER BMP SE-6 AND DETAIL HEREON
- (C) INSTALL STORM DRAIN INLET PROTECTION PER BMP SE-10 AND DETAIL HEREON
- (D) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE/EXIT PER BMP TC-1 AND DETAIL HEREON

LEGEND:

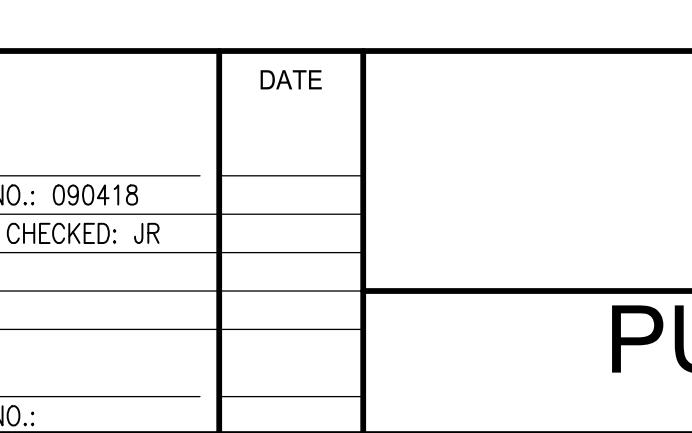
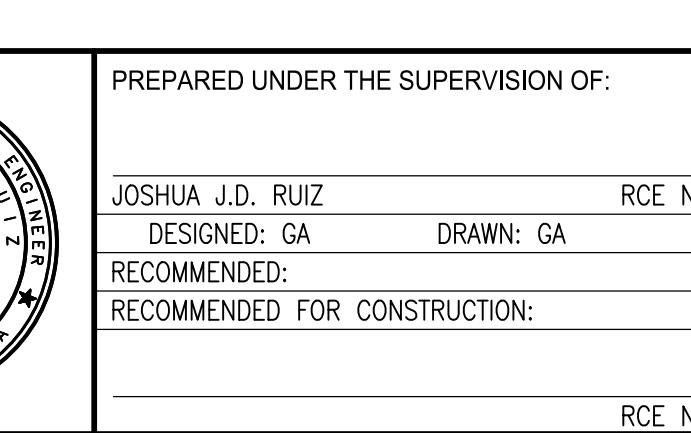
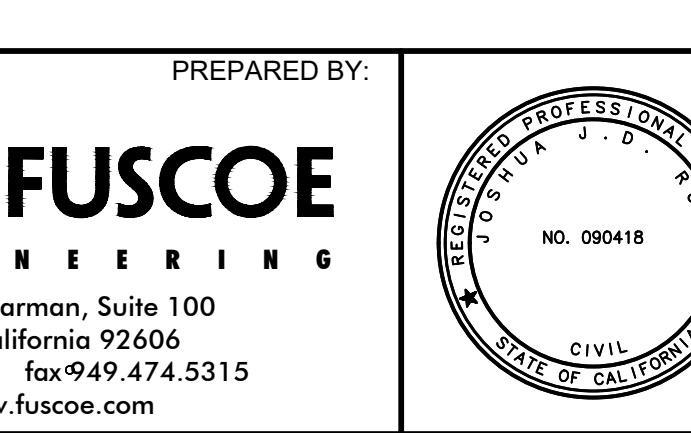
—o— GRAVEL BAG BARRIER

—x— STORM DRAIN INLET PROTECTION

—> FLOW DIRECTION



DEMOLITION PLAN 4TH AND MORTIMER EROSION CONTROL PLAN			PROJECT NO. 774-009
PUBLIC WORKS AGENCY CITY OF SANTA ANA			SHEET 3 OF X
REVISIONS	REFERENCES		
NUMBER	DATE	INITIALS	DESCRIPTION
			APPROVED



WET SEASON REQUIREMENTS (OCTOBER 1 THROUGH APRIL 30)

WET SEASON REQUIREMENTS IN ADDITION TO THE DRY SEASON REQUIREMENTS:	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. SEDIMENT CONTROL BMPs SHALL BE IMPLEMENTED AT THE SITE INTERIOR, AT ALL OPERATIONAL STORM DRAIN INLETS AND AT ALL OTHER ACTIVE SLOPES. THIS IS THE PRIMARY PROTECTION FOR STORMS LIKELY TO OCCUR DURING THE RAINY SEASON.	SE-5, SE-6, SE-7, SE-8, SE-9, SE-10
B. ADEQUATE PHYSICAL OR VEGETATION EROSION CONTROL BMPs (STABILIZATION OR PERMANENT) SHALL BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES PRIOR TO THE START OF THE RAINY SEASON. THESE BMPs MUST BE MAINTAINED THROUGHOUT THE RAINY SEASON. IF THE BMP FAILS, IT MUST BE REPAIRED AND IMPROVED OR REPLACED WITH AN ACCEPTABLE ALTERNATE AS SOON AS IT IS SAFE TO DO SO. THE BMP MUST BE REPAIRED AND IMPROVED IF IT WAS INSTALLED, WAS NOT ADEQUATE FOR THE CIRCUMSTANCES IN WHICH IT WAS USED. REPAIRS OR REPLACEMENTS MUST RESULT IN A BMP THAT IS AS EROSION RESISTANT AS THE ONE THAT WAS INSTALLED TO PROVIDE THE ADEQUATE PROTECTION.	EC-1, EC-5, EC-8
C. THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY DEDICATED STABILIZATION OR PERMANENT PHYSICAL AND SEDIMENT CONTROL BMPs PRIOR TO A PREDICTED RAINSTORM.	EC-5, SE-6, SE-7, SE-10
D. A DISTURBED AREA THAT IS NOT COMPLETED (NON-ACTIVE AREA) SHALL BE FULLY PROTECTED BY STABILIZATION OR PERMANENT PHYSICAL AND/OR PERMANENT BMPs (EROSION AND SEDIMENT CONTROL). THE ABILITY TO DEPLOY STANDBY BMP MATERIALS IS NOT SUFFICIENT TO PROVIDE PROTECTION. STABILIZATION CONTROL BMPs MUST ACTUALLY BE DEPLOYED. THIS INCLUDES ALL BUILDING PADS, UNFINISHED ROADS AND SLOPES.	EC-5, SE-6, SE-10
E. SUFFICIENT MATERIALS NEEDED TO INSTALL REFERENCED STABILIZATION OR PERMANENT BMPs SHALL BE NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGES SHALL BE STORED ON SITE AREAS THAT HAVE ALREADY BEEN PROTECTED FROM EROSION USING PERMANENT PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION BMPs. BAGS NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.	EC-5

NOTE: FOR RISK LEVEL 2 AND 3 SITES, THERE SHALL BE A "RAIN EVENT ACTION PLAN" AND THE ABILITY TO DEPLOY STANDBY EROSION AND SEDIMENT CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

DRY SEASON REQUIREMENTS (MAY 1 THROUGH SEPTEMBER 30)

DRY SEASON REQUIREMENTS	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. WIND EROSION BMPs (DUST CONTROL) SHALL BE IMPLEMENTED.	WE-1
B. SEDIMENT CONTROL BMPs SHALL BE INSTALLED AND MAINTAINED AT ALL OPERATIONAL STORM DRAIN INLETS INTERNAL TO THE PROJECT.	SE-10
C. THE ABILITY TO CONTROL OFF-SITE SEDIMENT TRACKING SHALL BE IMPLEMENTED AND MAINTAINED.	TC-1, TC-2, TC-3
D. APPROPRIATE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER BY WASTES AND CONSTRUCTION MATERIALS.	WM-1, WM-2, WM-3, WM-4, WM-5, WM-6, WM-8, WM-9
E. APPROPRIATE NON-STORMWATER BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER FROM CONSTRUCTION ACTIVITIES.	NS-1, NS-3, NS-6, NS-8, NS-9, NS-10
F. DEPLOYMENT OF PERMANENT EROSION CONTROL BMPs (PHYSICAL OR VEGETATION) SHALL COMMENCE AS SOON AS PRACTICAL ON SLOPES THAT ARE COMPLETED FOR ANY PORTION OF THE SITE. SITES ARE CONSIDERED AS COMPLETED FOR A SLOPE IF IT IS SHOT TO PREVENT EROSION OF SLOPES THAT HAVE BEEN COMPLETED.	

NOTE 1: THERE SHALL BE A "WEATHER TRIGGERED" ACTION PLAN AND THE ABILITY TO DEPLOY STANDBY SEDIMENT CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

NOTE 2: SUFFICIENT MATERIALS NEEDED TO INST. STANDBY SEDIMENT CONTROL BMPs TO THE EXPOSED PORTIONS OF SLOPED AND OPERATIONAL INLETS WITHIN THE SITE NECESSARY TO PREVENT SEDIMENT DISCHARGES FROM EXPOSED PORTIONS OF THE SITE SHALL BE STORED ON SITE AREAS THAT HAVE ALREADY BEEN PROTECTED FROM EROSION USING PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION BMPs AS DESCRIBED IN ITEM F ABOVE ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.

BMP TABLE:

SYMBOL	DESCRIPTION
ENTIRE SITE	WE-1 WIND EROSION CONTROLS
TC-1	STABILIZED CONSTRUCTION ENTRANCE
—x—	SE-1 SILT FENCE
—o—	SE-6 GRAVEL BAG BARRIER
—□—	SE-10 STORM DRAIN INLET PROTECTION

BMP DETAILS CAN BE OBTAINED IN THE SWPPP PREPARED FOR THIS PROJECT BY FUSCOE ENGINEERING OR http://www.cwatersheds.com/StormWater/documents_bmp_construction.asp

POLLUTION PREVENTION NOTES

IN ORDER TO MEET THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM FOR CONSTRUCTION, CONSTRUCTION CONTRACTORS SHALL INSTALL AND MAINTAIN APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs), AS SHOWN IN THE EROSION AND SEDIMENT CONTROL APPENDIX OF THE SWPPP. THE CONTRACTOR SHALL FOLLOW THE BMPS AS STATED IN THE APPENDIX, RECOMMENDED STANDARD, AND/OR IN ACCORDANCE WITH ANY GENERAL CONSTRUCTION PERMIT ISSUED BY THE STATE FOR THE PROJECT TO PREVENT ANY DISCHARGES FROM THE PROJECT SITE OR INTO ANY STORM DRAINS. THE SEPARATE SEDIMENT CONTROL BMPs ARE DEEMED APPROPRIATE AND ARE TO BE USED. SEDIMENT MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, REA DRAINS, NATURAL DRAINAGE COURSES, WIND, OR VEHICLE TRACKING. UNDER DIRECTION OF THE ENGINEER OF RECORD, EROSION AND/OR SEDIMENT CONTROL DEVICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

NOTES TO CONTRACTOR:

STABILIZED CONSTRUCTION ENTRANCE AND RECYCLING STORAGE AREA SHALL BE DESIGNATED BY SITE SUPERVISOR AND INDICATED ON THE SWPPP / EROSION CONTROL PLAN. AS SITE CONDITIONS CHANGE, THE SWPPP / EROSION CONTROL PLAN SHALL BE UPDATED TO REFLECT CURRENT CONDITIONS.

IT IS THE CONTRACTOR/SUPERVISOR'S RESPONSIBILITY TO KEEP THE SWPPP MAP CURRENT. BMPs SHOULD BE ADDED, MOVED OR REMOVED BASED ON SITE CONDITIONS. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE AN ACCEPTABLE FORM OF ALTERATION. THE CONTRACTOR MAY BE ASKED AT ANY TIME TO UPDATE THE SWPPP MAP. FAILURE TO KEEP THE MAP CURRENT COULD RESULT IN A NOTICE OF VIOLATION AND/OR FINE.

EROSION CONTROL NOTES:

GRAVEL BAGS:

- GENERAL: GRAVEL BAG SHALL INCLUDE PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT TO FABRICATE AND INSTALL GRAVEL BAGS AS REQUIRED TO FACILITATE THE CONTROL OF EROSION.
- LOCATION: GRAVEL BAGS SHALL BE PLACED PER PLAN, AND IN LOCATIONS SPECIFIED BY THE CITY, AND IN LOCATIONS DEEMED NECESSARY BY THE CONTRACTOR.
- FABRICATION: GRAVEL BAGS SHALL BE FABRICATED USING FACTORY SEWN OR SEALED BAGS OF WOVEN POLYPROPYLENE, TREATED TO RESIST DEGRADATION BY ULTRAVIOLET LIGHT AND HAVING SUFFICIENT RESISTANCE TO TEARING TO ALLOW RELOCATION OF BAGS WITHIN SIX MONTHS OF INITIAL PLACEMENT WITH A SUB-ROUNDED TO ROUNDED GRAVEL, LESS THAN 3/4-INCH IN DIAMETER, WITH LESS THAN FIVE PERCENT OF MATERIAL PASSING A NO. 30 SIEVE. THE FILLED BAGS SHALL HAVE THE OPEN ENDS SECURELY FASTENED PRIOR TO DELIVERY TO THE SITE.
- INSTALLATION: GRAVEL BAGS SHALL BE INSTALLED IN A MANNER TO ENTRAP SILT AND MUD, AND TO ALLOW FOR FLOW OF WATER. NOTWITHSTANDING THE OTHER REQUIREMENTS OF THE SPECIFICATION, FAILURE OF THE BAGS TO PERFORM THIS FUNCTION SHALL BE REASON TO REJECT THEIR INSTALLATION. GRAVEL BAGS SHALL BE INSTALLED WITH THE WIDEST FACE AGAINST THE GROUND SURFACE OR THE UNDERLYING SLOPES. GRAVEL BAGS SHALL BE PLACED IN A CONFLUENT MANNER, AND THE ENDS SHALL BE PLACED WITH THE TIED ENDS IN THE UPSTREAM OR "UPSTREAM" DIRECTION. BEGINNING AT THE LOWEST OR MOST DOWNSTREAM BAG, TIED ENDS WILL BE TUCKED UNDER BAG. SUBSEQUENT BAGS WITH TIED ENDS WILL BE PLACED OVER THE TUCKED ENDS, AND THE TIED ENDS OF THE PREVIOUSLY PLACED BAG, NOT WITH LESS THAN 10 PERCENT OF THE BAG IN CONTACT WITH THE PREVIOUS BAG, AND NOT MORE THAN 20 PERCENT IN CONTACT. SUBSEQUENT COURSES OF BAGS SHALL BE PLACED IN A DESIGNED "PYRAMID" CONFIGURATION. THE PYRAMID PATTERN OF BAGS ACCORDING TO THE JONAS CONSTRUCTION OF A GRAVEL BAG BARRIER PERPENDICULAR TO THE DIRECTION OF FLOW SHALL INCORPORATE BAGS PLACED IN A "PYRAMID" CONFIGURATION, WITH ALL INDIVIDUAL BAGS ORIENTED PERPENDICULAR TO THE DIRECTION OF FLOW. THE BERM SHALL BE CONSTRUCTED WITH A SLOPE OF 1:1.5 (VERTICAL TO HORIZONTAL) IN CONTACT WITH THE GROUND. THERE SHALL BE SUCCESSIVE ROWS OF BAGS IN EACH PYRAMID COURSE, AND UPSTREAM AND DOWNSTREAM FACES OF THE BERM SHALL NOT BE STEEPER THAN 1 1/2 FEET HORIZONTAL TO VERTICAL, DAMAGE WHICH COULD FORSEEABLY BE PREVENTED BY PROPER GRAVEL BAG INSTALLATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- COMPENSATION: THE PERFORMANCE OF THE REQUIREMENTS OF THIS SECTION SHALL BE COMPENSATED AT THE CONTRACT UNIT PRICES FOR GRAVEL BAGS.



REVISIONS				APPROVED
NUMBER	DATE	INITIALS	DESCRIPTION	

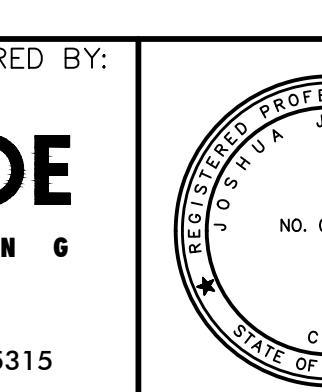
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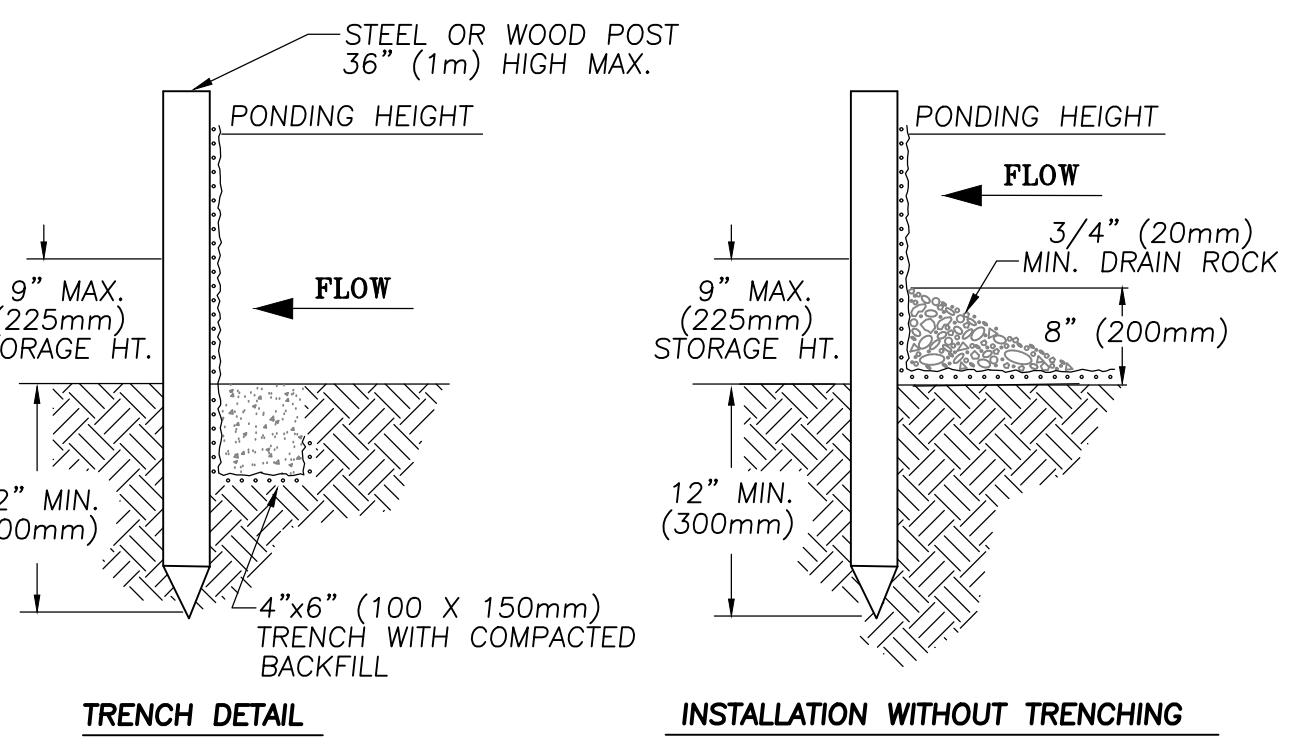
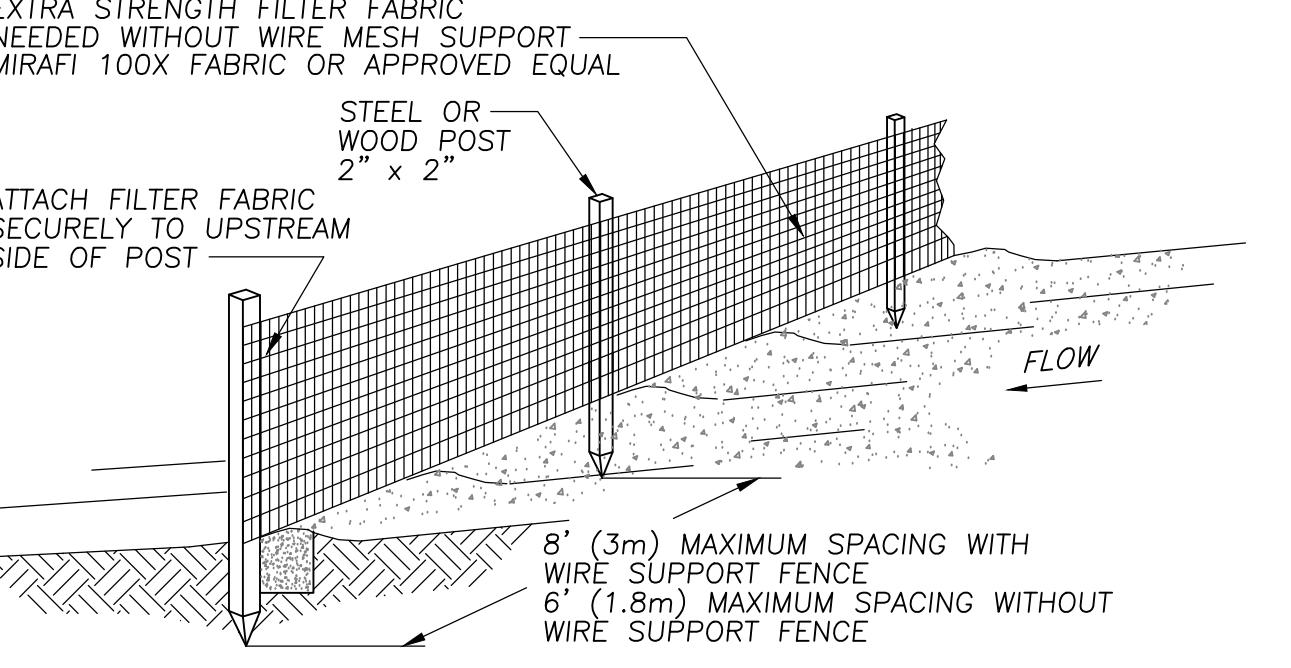
GRAVEL BAG BARRIER
STORM DRAIN INLET PROTECTION
FLOW DIRECTION

CONSTRUCTION NOTES

- INSTALL PERIMETER CONTROL USING SILT FENCE PER BMP SE-1 AND DETAIL HEREON
- INSTALL PERIMETER CONTROL GRAVEL BAGS (2 BAGS HIGH) PER BMP SE-6 AND DETAIL HEREON
- INSTALL STORM DRAIN INLET PROTECTION PER BMP SE-10 AND DETAIL HEREON
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE/EXIT PER BMP TC-1 AND DETAIL HEREON



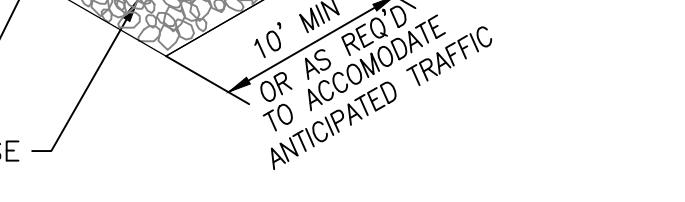
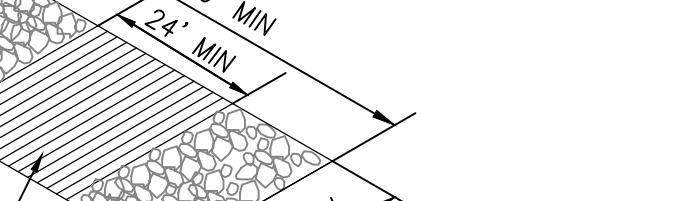
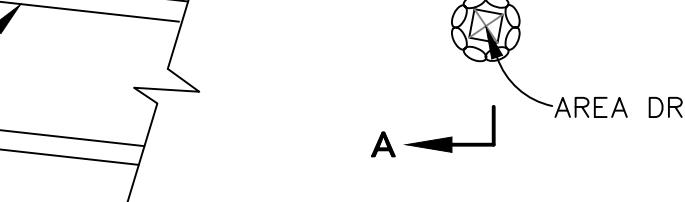
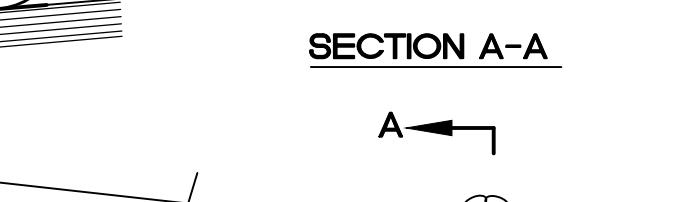
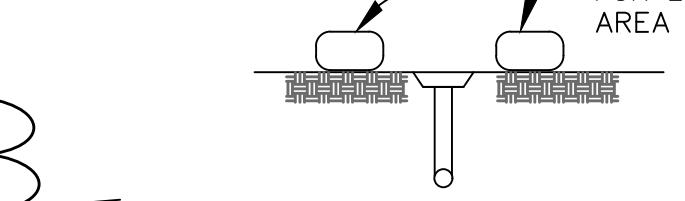
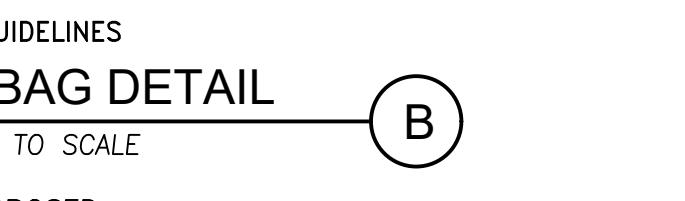
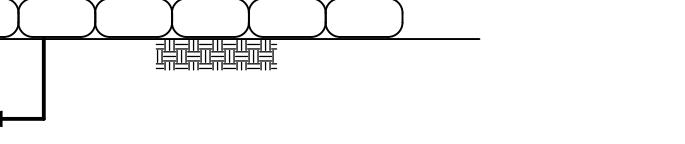
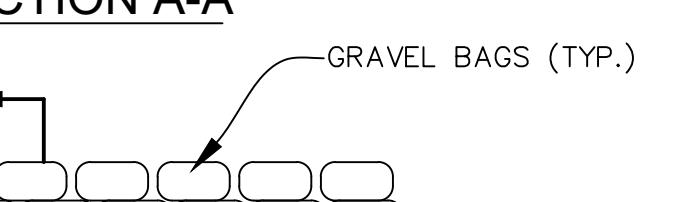
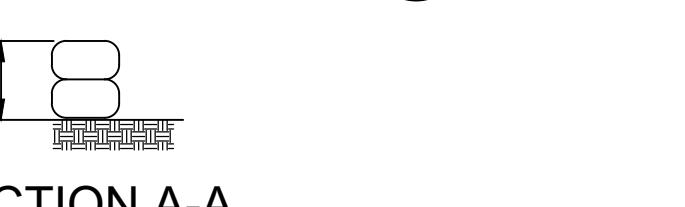
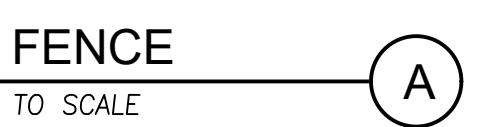
PREPARED BY:	PREPARED UNDER THE SUPERVISION OF:	DATE:
JOSHUA J.D. RUIZ RCE NO.: 090418		
DESIGNED: GA DRAWN: GA CHECKED: JR		
RECOMMENDED:		
RECOMMENDED FOR CONSTRUCTION:		
RCE NO.:		



INSTALLATION WITHOUT TRENCHING

NOTES:
1. FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY. THE LAST 8' OF FENCE SHALL BE TURNED UP SLOPE.
2. STAKES SHALL BE SPACED 8'-0" MAXIMUM AND SHALL BE POSITIONED ON DOWNSTREAM SIDE OF FENCE. STAKES TO OVERLAP AND FENCE FABRIC TO FOLD AROUND EACH STAKE ONE FULL TURN.
3. FOR END STAKE, FENCE FABRIC SHALL BE FOLDED AROUND TWO STAKES ON FULL TURN AND SECURED WITH 4 STAPLES.
4. CROSS BARRIERS SHALL BE A MINIMUM OF 1/3 AND A MAXIMUM OF 1/2 THE HEIGHT OF THE UPLAND BARRIER.
5. ADD GRAVEL BAGS TO CROSS BARRIER ON DOWN-GRADIENT SIDE OF SILT FENCE AS NEEDED TO PREVENT BYPASS OR UNDERMINING AND AS ALLOWABLE BASED ON SITE LIMITS OF DISTURBANCE. BAGS MAY REQUIRE PINNING AT DIRECTION OF ENGINEER.
6. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
7. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

NOTE: FOLLOW SE-1 GUIDELINES



ROUGH GRADING PLAN - BLOCK B	
4TH & MORTIMER EROSION CONTROL PLAN	
PUBLIC WORKS AGENCY CITY OF SANTA ANA	

PROJECT NO. 774-009	SCALE: 1" = 20'
DP NO.	
3	OF 3

WET SEASON REQUIREMENTS
(OCTOBER 1 THROUGH APRIL 30)

WET SEASON REQUIREMENTS IN ADDITION TO THE DRY SEASON REQUIREMENTS:	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. SEDIMENT CONTROL BMPs SHALL BE IMPLEMENTED AT THE SITE PERIMETER, AT ALL OPERATIONAL STORM DRAIN INLETS AND ALL NON-ACTIVE SLOPES, TO PROVIDE SUFFICIENT PROTECTION FOR STORMS LIKELY TO OCCUR DURING THE RAINY SEASON.	SE-5, SE-6, SE-7, SE-8, SE-9, SE-10
B. INADEQUATE PHYSICAL OR VEGETATION EROSION CONTROL BMPs (TEMPORARY OR PERMANENT) SHALL BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES PRIOR TO THE START OF THE RAINY SEASON. THESE BMPs MUST BE MAINTAINED THROUGHOUT THE RAINY SEASON. IF A SELECTED BMP FAILS, IT MUST BE REPAIRED OR IMPROVED OR REPLACED WITH AN ACCEPTABLE TEMPORARY BMP AS IS REASONABLE. THE FAILURE OF A BMP MAY INDICATE THAT THE BMP, AS INSTALLED, WAS NOT ADEQUATE FOR THE CIRCUMSTANCES IN WHICH IT WAS USED. REPAIRS OR REPLACEMENTS MUST RESULT IN A MORE ROBUST BMP, OR ADDITIONAL BMPs SHOULD BE INSTALLED TO PROVIDE ADEQUATE PROTECTION.	EC-1, EC-5, EC-8
C. THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE PROTECTED BY DEPLOYING THE REFERENCED STANDBY EROSION CONTROL AND SEDIMENT CONTROL BMPs PRIOR TO A PREDICTED RAINSTORM.	EC-5, SE-6, SE-7, SE-10
D. A DISTURBED AREA THAT IS NOT COMPLETED BUT THAT IS NOT BEING ACTIVELY GRADED (NON-ACTIVE AREA) SHALL BE FULLY PROTECTED FROM EROSION WITH THE REFERENCED TEMPORARY AND/OR PERMANENT BMPs (EROSION AND SEDIMENT CONTROL). THE ABILITY TO DEPLOY STANDBY BMP MATERIALS IS NOT SUFFICIENT FOR THESE AREAS. EROSION AND SEDIMENT CONTROL BMPs MUST ACTUALLY BE DEPLOYED. THIS INCLUDES ALL BUILDING PADS, UNFINISHED ROADS, AND SLOPES.	EC-5, SE-6, SE-10
E. SUFFICIENT MATERIALS NEEDED TO INSTALL REFERENCED STANDBY EROSION AND SEDIMENT CONTROL BMPs NECESSARY TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO PREVENT SEDIMENT DISCHARGE SHALL BE STORED ON SITE. THE SITE SHALL BE FULLY PROTECTED FROM EROSION USING PERMANENT PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION. BMPs ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.	SE-5, SE-6, SE-7, SE-8, EC-5

NOTE: FOR RISK LEVEL 2 AND 3 SITES, THERE SHALL BE A "RAIN EVENT ACTION PLAN" AND THE ABILITY TO DEPLOY STANDBY EROSION AND SEDIMENT CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

DRY SEASON REQUIREMENTS
(MAY 1 THROUGH SEPTEMBER 30)

DRY SEASON REQUIREMENTS	SPECIFIED BMPs BMP Detail(s)/Sheet Number
A. WIND EROSION BMPs (DUST CONTROL) SHALL BE IMPLEMENTED.	WE-1
B. SEDIMENT CONTROL BMPs SHALL BE INSTALLED AND MAINTAINED AT ALL OPERATIONAL STORM DRAIN INLETS INTERNAL TO THE PROJECT.	SE-10
C. BMPs TO CONTROL OFF-SITE SEDIMENT TRACKING SHALL BE IMPLEMENTED AND MAINTAINED.	TC-1, TC-2, TC-3
D. APPROPRIATE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER BY WASTES AND CONSTRUCTION MATERIALS.	WM-1, WM-2, WM-3, WM-4, WM-5, WM-6, WM-7, WM-8, WM-9
E. APPROPRIATE NON-STORMWATER BMPs SHALL BE IMPLEMENTED TO PREVENT THE CONTAMINATION OF STORMWATER FROM CONSTRUCTION ACTIVITIES.	NS-1, NS-3, NS-6, NS-8, NS-9, NS-10
F. DEPLOYMENT OF PERMANENT EROSION CONTROL BMPs (PHYSICAL OR VEGETATION) SHALL COMMENCE AS SOON AS PRACTICAL ON SLOPES THAT ARE COMPLETED FOR ANY PORTION OF THE SITE. STANDBY BMP MATERIALS SHALL NOT BE RELIED UPON TO PREVENT EROSION OF SLOPES THAT HAVE BEEN COMPLETED.	

NOTE 1: THERE SHALL BE A "WEATHER TRIGGERED" ACTION PLAN AND THE ABILITY TO DEPLOY SEDIMENT CONTROL BMPs AS NEEDED TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED 50% CHANCE OF RAIN).

NOTE 2: SUFFICIENT MATERIALS NEEDED TO INSTALL STANDBY SEDIMENT CONTROL BMPs (AT THE SITE PERIMETER, SITE SLOPES AND OPERATIONAL INLETS WITHIN THE SITE) NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM EXPOSED PORTIONS OF THE SITE SHALL BE STORED ON SITE. THE SITE SHALL BE FULLY PROTECTED FROM EROSION USING PERMANENT PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION BMPs AS DESCRIBED IN ITEM F ABOVE ARE NOT CONSIDERED "EXPOSED" FOR PURPOSES OF THIS REQUIREMENT.

BMP TABLE:

SYMBOL	DESCRIPTION
ENTIRE SITE	WE-1 WIND EROSION CONTROLS
TC-1	STABILIZED CONSTRUCTION ENTRANCE
—x—	SE-1 SILT FENCE
—o—o—	SE-6 GRAVEL BAG BARRIER
—o—	SE-10 STORM DRAIN INLET PROTECTION

BMP DETAILS CAN BE OBTAINED IN THE SWPPP PREPARED FOR THIS PROJECT BY FUSCOE ENGINEERING OR
http://www.ocwatersheds.com/StormWater/documents_bmp_construction.asp



RIVISIONS

NUMBER	DATE	INITIALS	DESCRIPTION	APPROVED
				XXX

REFERENCES



PREPARED BY:

JOSHUA J.D. RUIZ

RCE NO.: 090418

DESIGNED: XX

DRAWN: XX

CHECKED: JR

RECOMMENDED:

RECOMMENDED FOR CONSTRUCTION:

PREPARED UNDER THE SUPERVISION OF:

JOSHUA J.D. RUIZ

RCE NO.: 090418

DESIGNED: XX

DRAWN: XX

CHECKED: JR

RECOMMENDED:

RECOMMENDED FOR CONSTRUCTION:

RCE NO.:

DATE

PRECISE GRADING PLAN - BLOCK B

4TH & MORTIMER

EROSION CONTROL PLAN

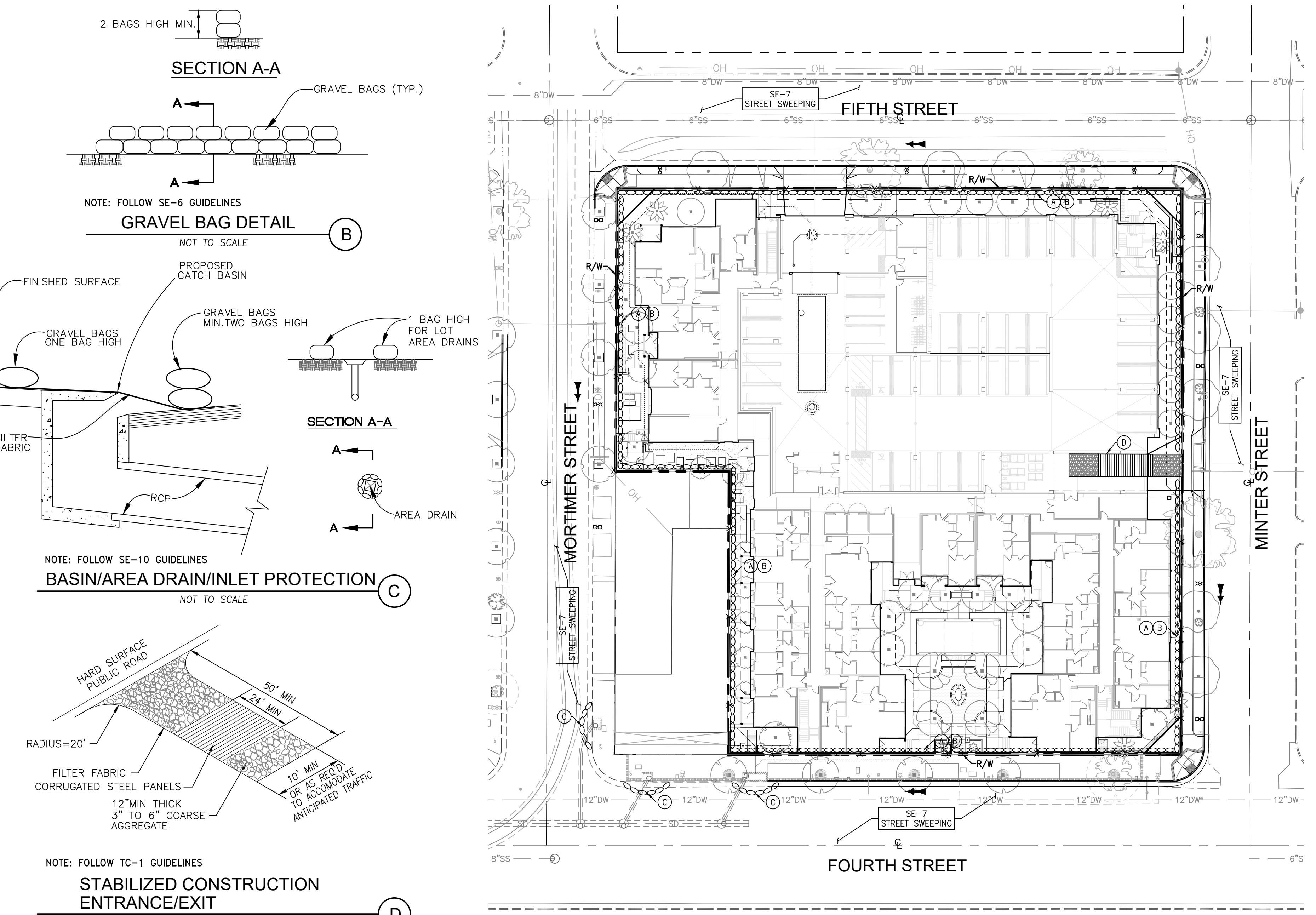
PUBLIC WORKS AGENCY

CITY OF SANTA ANA

PROJECT NO.
774-009

SHEET
9

OF
10



CONSTRUCTION NOTES

- (A) INSTALL PERIMETER CONTROL USING SILT FENCE PER BMP SE-1 AND DETAIL HEREON
- (B) INSTALL PERIMETER CONTROL GRAVEL BAGS (2 BAGS HIGH) PER BMP SE-6
- (C) INSTALL STORM DRAIN INLET PROTECTION PER BMP SE-10 AND DETAIL HEREON
- (D) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE/EXIT PER BMP TC-1 AND DETAIL HEREON

LEGEND:

GRAVEL BAG BARRIER

STORM DRAIN INLET PROTECTION

FLOW DIRECTION

