General recommendations to the design engineer before preparing Erosion Control Materials for review.

A general understanding of EPA's Clean Water Act and specifically NPDES is helpful to understand where in the big picture erosion, sediment and pollution control come into play.

Review the State's Requirements and Guidance for Stormwater Management Plans as many of the requirements and guidance documents from the State's Construction Permit and MS4 permit are reflected by what is being called out in the City's Criteria.

There are many classes to better understand the overall goal of these materials taking these types of classes can help in the successful compilation of materials.

These Erosion Control Materials are intended to familiarize anyone with the characteristics of the project. Based upon the site and the anticipated activities of a project could contain various pollution sources. As a source many pollutants can be identified prior to a project. Each pollutant identified will need a proposed way of being controlled from leaving the project. These planning documents are prepared as an honest attempt to prevent and control these pollutants through the project completion and through full site stabilization to minimize impact of exposed pollutants.

Please contact or consult with others in your profession who might have already prepared erosion control materials of finding prior examples that may have been submitted already. These resources can help gain a better understanding as to what should be incorporated when designing Erosion Control Materials.

These documents should be prepared so that it is clear enough that contractor, engineer, or inspector alike would easily be able to follow materials.

Each control measure has a designed function and limitation. Knowing these controls, what are their limitations, how they are to be installed, maintained and removal when sequenced through a project can be the difference between successful plans and non-compliance for the field application. Selecting the best device or practice, or latest technology may be for nothing if not applied correctly or not a practical control measure in a specific application in the field. It is important to get feedback from an experienced contractor or erosion control installer about these types of devices and what has their experience been with the selected device in varying circumstances. Their experience will help shape the practicality of that control being used.

Always try to build off and improve upon the prior erosion control materials and use professional experience and successful contractor feedback from others in the field to improve the controls selected in designing erosion control materials.

The following is a Check Sheet designed to aid a design engineer to walk through the City of Fort Collin's Requirement as well as common questions to try and self-answer before the submittal of erosion control material to the City. Though this will not eliminate all comments or redlines on a project, using this sheet should significantly reduce the number of comments and catch frequently seen issues from submitted materials.

Submittal Check lists of Erosion Control Requirements

Please the following questions to determine what requirements are needed for erosion control review.

FCDCM Chapter 2 Section 6.1.1 and 6.1.2			
1) Is this project part of Emergency work less than 1 acre of disturbance?	☐ Yes	☐ No	☐ N/A
If question 1 is a "yes", stop and submit a simple email to erosionreview@fcgov.com stating that, *"The proposed Project A as designed does not require erosion control review as this is an emergency activity that is less than an acre"* and then stop further progression on the checklist. If "no", continue to question 2.			
2) Is this project >8,000 sq. ft.?	☐ Yes	☐ No	☐ N/A
3) Is this project steeper than 4:1 (14°) slope?	☐ Yes	☐ No	☐ N/A
4) Is the project closer than 75 ft. from sensitive area?	☐ Yes	☐ No	☐ N/A
5) Is this project required to pull a CDPHE General Stormwater Discharge permit associated with Construction Activity? *(Including any projects that are a result of a larger common development)*	☐ Yes	☐ No	☐ N/A
If questions 2, 3, 4, and 5 in this section are all "no", submit a simple email to erosionreview@fcgov.com stating that, *"The proposed Project A as designed does not require erosion control review based upon the design criteria thresholds are well below a level that would require a review"* and then stop further progression on the checklist. If any of the questions 2, 3, 4, or 5 is a "yes", continue to question 6.			
6) Is this project > 10,000 sq. ft.?	☐ Yes	☐ No	☐ N/A
7) Is the project steeper than 3:1 (18°) slope?	☐ Yes	☐ No	☐ N/A
8) Is the project 50ft or closer to a sensitive area?	☐ Yes	☐ No	☐ N/A
If questions 6, 7, and 8 are all "no", then clarification is needed to determine if a project requires a submittal of erosion control materials in accordance with FCDCM Chapter 2 Section 6.1.2 and skip to question 12 to ensure adequate information is provided. If question 6, 7, or 8 is a "yes" continue to question 9.			
9) Is this project >43,560 sq. ft. (1 acre)?	☐ Yes	☐ No	☐ N/A
If question 5 or 9 is a "yes", an erosion control report, plan, and escrow will be required of this project. If question 6, 7, or 8 is a "yes" an erosion control plan and escrow will be required for this project. Continue to question 10.			
10) Is the project <3 acres?	☐ Yes	☐ No	☐ N/A
If question 10 is a "yes" the erosion control plan will need to contain a sequence chart as part of the submittal. If question 10 is a "no" the erosion control plan will need to contain multiple sequence sheets as part of the submittal. See FCDCM Ch2 Sec 6.1.3.2 for those requirements and continue to question 11.			
11) Is the project > 5 acres?	☐ Yes	☐ No	☐ N/A
If question 11 is a "yes" the erosion control plan and report will need to include discussions about erosion control phasing and methods to break the project down into phases see FCDCM Ch2 Sec 6.1.5 for those requirements and move on to the next section. If "no" skip questions 12 – 18 and move on to the next section.			
12) Is the project name included on the submittal?	☐ Yes	☐ No	☐ N/A
13) Is the overall site location included in the submittal?	☐ Yes	☐ No	☐ N/A
14) Is contact information included in the submittal?	☐ Yes	☐ No	☐ N/A
15) Is a simple map provided?	☐ Yes	☐ No	☐ N/A
16) Is the area of disturbance clearly shown?	☐ Yes	☐ No	☐ N/A
17) Is the steepest slope delineated?	☐ Yes	☐ No	☐ N/A
18) Is the distance to the nearest sensitive area shown? *(if applicable)*	☐ Yes	☐ No	☐ N/A
Once questions 12-18 are all yes or N/A send those materials on to erosion@fcgov.com and then stop further progression on the checklist.			

Table 6.1-1 Simplified Erosion Control Materials Submittal Table

Project Area of Disturbance and Other Factors	Follow §26-498 to prevent pollution	Meet Exemption Requirements (Section 6.1.1)	Request for Project Clarification (Section 6.1.2)	Erosion Control Plan -Map Set (Complete 2.1.3)		Erosion Control Report (Complete 6.1.4)	Erosion Control Escrow (Complete 6.1.5)	Phase Materials are required***	State Permit****
				w/ Sequence Chart (Section 6.1.3.2)	w/ Individual Sequence Sheet (Section 6.1.3.2)				
Emergency work <1 acre	X	X							
0 - <8,000 sq. ft.	X	X							
8,000 - 10,000 sq. ft.	X	~	X						
(>4):1 (Horizontal : Vertical)*	X	X							
4:1 to 3:1 (Horizontal : Vertical)*	X	~	X						
≥75 ft. away from Sensitive Areas. *	X	X							
50 - 75 ft. away from Sensitive Areas.*	X	~	X						
Demo work*	X		X						
Larger common plan or development or sale**	X			X		X	X ∞		X
10,000 - 43,559 sq. ft.	X			X			X ∞		
1 -3 acre(s)	X			X		X	X ∞		X
3 - 5 acres	X				X	X	X ∞		X
5+ Acres	X				X	X	X ∞	X	X

* These are assumed to be less than 10,000 sq. ft. and not a part of a larger common plan or development or sale, otherwise follow the process for the most applicable area of disturbance, or the Larger common plan or development or sale line item.

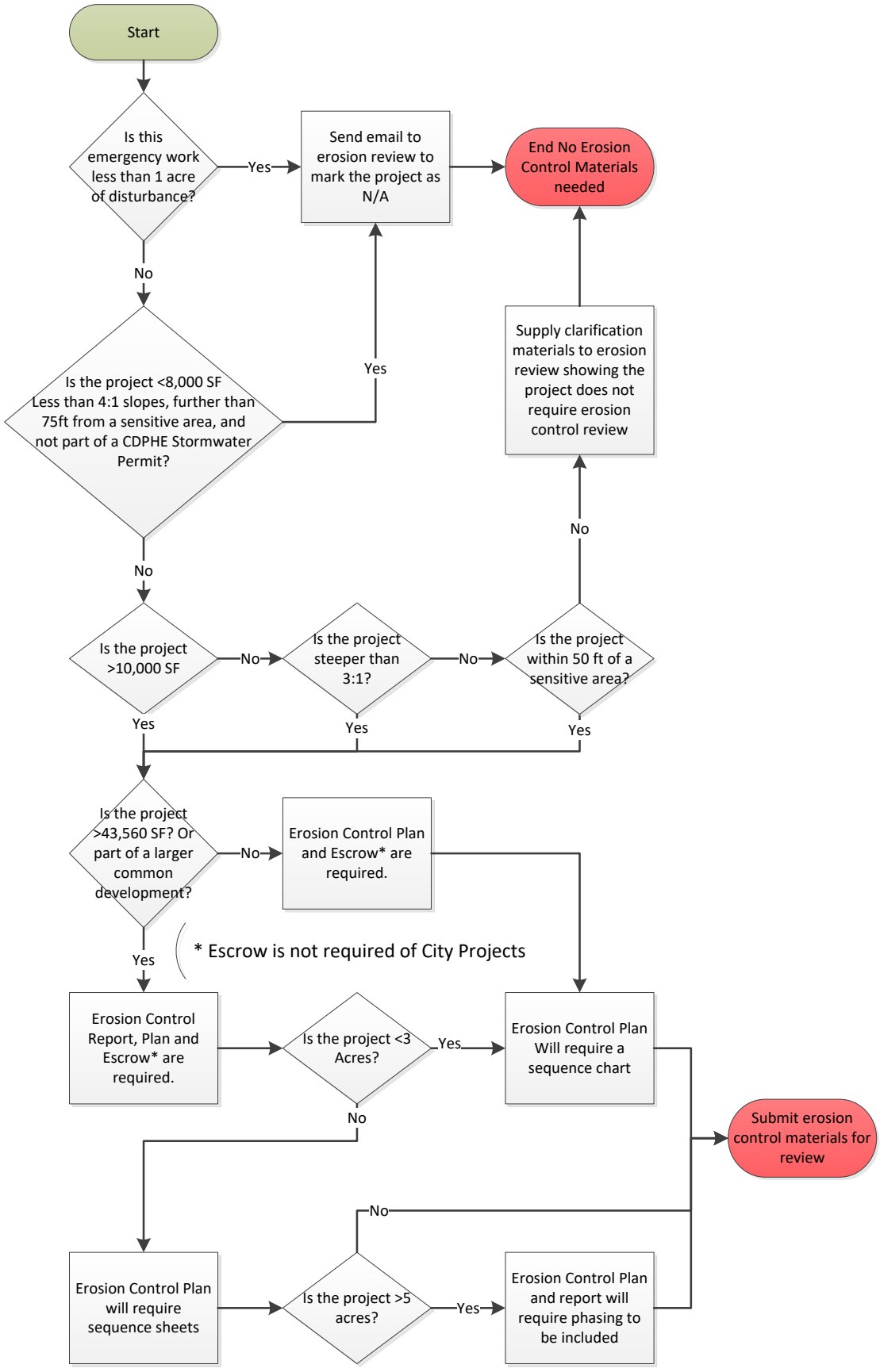
** These projects are assumed to be less than 43,560 sq. ft.

***The phasing requirements are found in Sections 6.1.3, 6.1.4 and 6.1.5 of this Chapter)

****While the CDPS General Permit Stormwater Discharges Associated with Construction Activity is not a City issued permit, this requirement is identified in this table as a reminder to Developers.

∞ This requirement is not needed for municipal projects.

~ These projects may meet the Exemption Requirements in 6.1.1 however further information should be provided to verify that is the case.


Start
Is this emergency work less than 1 acre of disturbance?
Yes
Send email to erosion review to mark the project as N/A
End No Erosion Control Materials needed
No
Is the project <8,000 SF Less than 4:1 slopes, further than 75ft from a sensitive area, and not part of a CDPHE Stormwater Permit?
Yes
Supply clarification materials to erosion review showing the project does not require erosion control review
No
No
Is the project >10,000 SF
No
Is the project steeper than 3:1?
No
Is the project within 50 ft of a sensitive area?
Yes
Yes
Yes
Is the project >43,560 SF? Or part of a larger common development?
No
Erosion Control Plan and Escrow* are required.
Yes
* Escrow is not required of City Projects
Erosion Control Report, Plan and Escrow* are required.
Is the project <3 Acres?
Yes
Erosion Control Plan Will require a sequence chart
No
Submit erosion control materials for review
No
Erosion Control Plan will require sequence sheets
Is the project >5 acres?
Yes
Erosion Control Plan and report will require phasing to be included

Submitted Erosion Control Materials

Based upon the materials above what Erosion control materials are required of this project?

- ⭘ Erosion Control Report is required and is supplied
  - ⭘ w/ Phasing
  - ⭘ w/out Phasing
- ⭘ Erosion Control Report is not required
  this is not part of a larger common development or disturbing greater than 43,560 Sq. Ft. (1 Acre)

- ☐ Erosion Control Plan is required and is supplied
  - ⭘ w/ Sequence Chart
  - ⭘ w/ Sequence Sheets no Phasing
  - ⭘ w/ Sequence Sheets and Phasing

- ☐ Erosion Control Escrow Calculation is required and is supplied
  - ⭘ w/ Phasing
  - ⭘ w/out Phasing

If no Erosion Control Report, Plan, or Escrow were supplied, why was it missing?

Reason for missing materials

For projects in the formal Development Review Process, Erosion Control Materials may be submitted at any time prior to FP in the Development Review Process for review and comments. Erosion Control Materials shall be submitted no later than FP (FDP) in the formal construction Development Review Process to meet the Erosion Control Criteria.

For projects, not in the formal Development Review Process, Erosion Control Materials may be submitted at any time prior to the final acceptance or approval of a project.

For all projects, it is recommended that materials be provided at 75-100% design. Early submission is encouraged as it allows comments to get resolved in earlier rounds of review and does not delay the approval process.

Any of these materials that are required and were not submitted or were submitted yet were incomplete enough for an in-depth review comments, may be required to undergo additional rounds of review and may delay final approvals.

Full review of the Erosion Control Plan

Erosion control plans are required on all projects that are larger than 10,000 square feet, contain steep slopes *(steeper than 3:1 or 18°)*, part of a larger common development, or are located near (*50 ft or closer to a sensitive area)* a sensitive area.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"			
1) Have all redlined comments on the erosion control plan been answered or corrected from the prior submittal?	☐ Yes	☐ No	☐ N/A
2) Is the plan set stamped by a P.E. Licensed in Colorado? *Sec. 6.1.3*	☐ Yes	☐ No	☐ N/A
3) Are the erosion control plan requirements easily found within one or more of the following locations; Title Sheet, Maps Sheets, Notes Sheet, and/or Details Sheet? *Sec. 6.1.3*	☐ Yes	☐ No	☐ N/A
4) Is the information clearly shown and legible and not cluttered? *Sec. 6.1.3*	☐ Yes	☐ No	☐ N/A
5) Is there a table of calculations or calculations chart? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
a. Is the total Disturbed Project Area included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
b. Is the total On-site Disturbed Area included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
c. Is the total Off-site Disturbed Area included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
d. Is the total Staging/Storage Area included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
e. Is the total area of Haul Road Area included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
f. Is the total Construction Vehicle Traffic Areas included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
g. Is the Estimated Percent of Project Exposed included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
h. Is the Estimated Percent Vegetative Cover included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
i. Is/Are the Existing Soil Type(s) Included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
j. Is the groundwater depth included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
k. Is the number of Phases shown? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
l. Is the total Volume of Import/Export Materials included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
m. Is the steepest slope given? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
n. Is the distance from sensitive areas included? *Sec. 6.1.3.1*	☐ Yes	☐ No	☐ N/A
6) Is there a legend? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
a. Is every symbol included on the map found in the legend? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
b. Are all symbols not to scale labeled as such? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
7) Is the plan in a 24 x 36-inch format?	☐ Yes	☐ No	☐ N/A
8) Is north shown on the map?	☐ Yes	☐ No	☐ N/A
9) Are the map units Imperial/English/Standard?	☐ Yes	☐ No	☐ N/A
10) Does the Map contain Stormwater Flow Arrows? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
a. Are slopes steeper than 3:1 marked and labeled? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
b. Are the arrows going the correct direction? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
c. Are curb and gutter locations marked with flow arrows? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
d. Are concentrated flows running onto a project? *Sec. 6.1.3.3* (Includes rates for 2yr and 100yr)	☐ Yes	☐ No	☐ N/A
11) Are the property lines and lot lines included in the erosion control sheets? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
a. Are the property lines keyed in the legend? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
b. Is the owner's information marked on the sheet? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
12) Are the limits of construction or limits of disturbance included? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
a. Are the limits labeled? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A

	b. Boundary lines darkened, boldened, shaded or hatched to easily identify that boundary? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
13)	Are water features identified? (existing drainage, wetland, natural habitat buffer zones, streams, springs, stream corridors, creeks, lakes, or other surface water features)	☐ Yes	☐ No	☐ N/A
14)	Are any temporary channel diversions and crossings designed? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
	a. Does the crossing include routes, pipe sizing and linings to be used? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
15)	Are Stormwater features identified? (detention basins, LID facilities, water quality structures, inlets, pipes, culverts, storm sewers, drainage swale, concrete pans, aprons, paved areas, retaining walls, cribbing, irrigation ditches, reservoirs and other facilities, and other permanent features or outfalls) *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
16)	Are permanent erosion control features shown? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
17)	Are permanent drainage features including a bold line at the 100-yr. storm event water surface elevation? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
18)	Are contours lines included? (typically, 1' to 2' intervals)	☐ Yes	☐ No	☐ N/A
	a. Do the contour lines extend 50-100 ft around the disturbed area?	☐ Yes	☐ No	☐ N/A
	b. Are the Existing contour lines dashed or in a light grey?	☐ Yes	☐ No	☐ N/A
	c. Are the Proposed contour lines solid, bolded or black?	☐ Yes	☐ No	☐ N/A
19)	Are all locations shown for buildings, roads (named and labelled), paths ramps medians and sidewalks? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
20)	Are all off-site materials import of export and haul roads included as part of the plans? (Excluding landscaper's or builder's storage yards) *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
	a. Are all off site stockpile storage locations labelled with the note to have a stockpile pulled? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
	b. Are all locations protected from erosion using control measures? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
21)	Are control measures shown on the plan? *Sec. 6.1.3.3*	☐ Yes	☐ No	☐ N/A
22)	Are all services that will require "tie-in" from off-site marked and labeled?	☐ Yes	☐ No	☐ N/A
23)	Are the standard erosion control notes included and not changed in any form in the plan set? *Sec. 6.1.3.4*	☐ Yes	☐ No	☐ N/A
24)	Are all site-specific Erosion Control notes that are special to this site included in the erosion control plan or a sheet within the Utility Plan Set? *Sec. 6.1.3.4*	☐ Yes	☐ No	☐ N/A
25)	Are details included for every unique type of control measure as called out on the plan sheet? *Sec. 6.1.3.5*	☐ Yes	☐ No	☐ N/A
26)	Are all details shown ones accepted by the City either as a standard detail or through the accepted proprietary control detail or accepted alternative control method? *Sec. 6.1.3.5*	☐ Yes	☐ No	☐ N/A
27)	Are the details provided going to structurally work as designed in shown locations and will it function properly as proposed based off sound engineering principals? *(think about the sediment laden flows and volumes that will be directed to these control measures and are they sized appropriately to contain pollutants and are they designed to prevent flooding at the same time)*	☐ Yes	☐ No	☐ N/A
Control Measure specific questions for plan evaluation				
Perimeter Protection				
1)	Do all down gradient perimeters of the site have an adequate form of sediment control? *(i.e. Silt Fence, Straw Wattle, Compact Berm, etc.)*	☐ Yes	☐ No	☐ N/A
2)	Do all perimeters have adequate site control (typically construction fence or other diversion) to prevent contractors, subs, builders, etc. from leaving the site in non-designated entrances and to redirect them to use the entrance protection?	☐ Yes	☐ No	☐ N/A

3)	Verify that only appropriate sediment controls are used on hardscape areas? *(i.e. not calling out silt fence or wattle to be installed on asphalt or concrete as they will not function as a control in those locations and using rock socks or other controls that will work on hard surfaces)*	☐ Yes	☐ No	☐ N/A
4)	Do wattles have some form of construction fence or physical barrier to protect the wattles from being driven over or parked on by equipment and causing the control measure to fail?	☐ Yes	☐ No	☐ N/A
5)	Once internal streets are installed, are there interior perimeter controls planned for? *(Either the sediment controls for lots or blocks that would run off onto the newly installed streets or construction fences to limit access from driving off these individual lots at any given location of the internal streets)*	☐ Yes	☐ No	☐ N/A
6)	Are all the utility installations shown coming on to a site and if so, are the areas that the utilities breech the perimeter, are there control installed down gradient?	☐ Yes	☐ No	☐ N/A
Curb Sock (Rock Socks installed in the curb line)				
7)	Are the curb socks facing the correct direction of flow? *(i.e. where the flow meets the wedge portion of the control* _Rocksock_ / ←Flow)	☐ Yes	☐ No	☐ N/A
8)	Are the curb socks roughly at the correct spacing?	☐ Yes	☐ No	☐ N/A
Inlet protection				
9)	Are all of the interior inlet devices showing some form of control measure?	☐ Yes	☐ No	☐ N/A
10)	Are all roof drains and subdrains showing some form of control measure at any openings?	☐ Yes	☐ No	☐ N/A
11)	Are there any existing inlets that might be affected by construction activities? *(i.e. down gradient inlets near entrances and perimeters of a project)*	☐ Yes	☐ No	☐ N/A
12)	Are provided details allowing for overflows in flooding conditions?	☐ Yes	☐ No	☐ N/A
13)	Are they designed in a way to make sure they are not overly restricting flows and becoming a flooding source?	☐ Yes	☐ No	☐ N/A
Concrete Work				
14)	Is there a concrete washout area called out on the erosion control plans?	☐ Yes	☐ No	☐ N/A
15)	Is the location of the concrete washout area >50 ft from an inlet or drainage path?	☐ Yes	☐ No	☐ N/A
16)	Is there access to the washout areas from a stabilized surface or vehicle tracking control?	☐ Yes	☐ No	☐ N/A
Entrances				
17)	Are all shown entrances protected or to be barricaded or fenced off to limit/prevent traffic from leaving the site uncontrolled?	☐ Yes	☐ No	☐ N/A
18)	Are all entrances calling out for sweeping activities?	☐ Yes	☐ No	☐ N/A
Steep Slopes (greater than 3:1)				
19)	Do slopes show surface roughening as a temporary control measure at a minimum?	☐ Yes	☐ No	☐ N/A
20)	Do the notes or a callout identify hydromulch or tackifier to be used if riling is occurring?	☐ Yes	☐ No	☐ N/A
21)	Is Blanket and/or tackifier called out for the final slope stabilization?	☐ Yes	☐ No	☐ N/A
22)	Are the blankets going to be installed in a snake prone area? *(If so, specific blankets need to be used to prevent entanglement or entrapment of wildlife on the netting used on erosion control blankets)*	☐ Yes	☐ No	☐ N/A
23)	Is the slope steep enough or takes run-on that additional uphill controls or diversions to slope drains are needed as an option?	☐ Yes	☐ No	☐ N/A
Stabilized Storage Area				
24)	Are all storage or laydown areas marked on the map?	☐ Yes	☐ No	☐ N/A
Concentrate flows through or directly adjacent to the site (Stream work)				

25) Are diversion around the project planned and shown on the plans?	☐ Yes	☐ No	☐ N/A
26) Are dewatering permits pulled for flows across the banks?	☐ Yes	☐ No	☐ N/A
27) Are the control measures adequate to handle the flow velocities on the banks?	☐ Yes	☐ No	☐ N/A
Water Quality Structures and LIDs			
28) Are to control measures adequate size to handle the anticipated amount of flow to the structure? *(Rock socks and 8" wattles are not typically sufficient to protect these type of structures)*	☐ Yes	☐ No	☐ N/A
29) Are there controls or notes addressing how to prevent rain gardens, bioswales, and other LIDs from heavy sediment loading during construction to prevent failure before they can be fully vegetated?	☐ Yes	☐ No	☐ N/A
Grading Activities			
30) Are controls installed prior to grading activities? *(Typically all the perimeter controls and existing inlets, entrance controls, site access controls, etc.)*	☐ Yes	☐ No	☐ N/A
31) Are controls called out for use during grading activities? *(Grade differential, compact berms, limiting disturbed areas, terracing, surface roughening, etc.)*	☐ Yes	☐ No	☐ N/A
32) Are controls called out for after grading? *(temporary seeding, permanent seeding, limiting access)*	☐ Yes	☐ No	☐ N/A
Vegetation			
33) Are there areas identified to be seeded and mulched? (These are included in the landscape plan if permanent seeding is planned, however these areas should be identified if temporary seeding is need) (on larger project temporary seeding should be planned for and shown in later phases of construction after site grading is finalized)	☐ Yes	☐ No	☐ N/A
34) Follow Flow arrows on the plan and make sure there are enough sediment controls to reducing the migration of sediment across the site? Look for issues at low points.	☐ Yes	☐ No	☐ N/A
35) Look at bare areas that are intending to be seeded and determine if those large areas could use some erosion controls to prevent sediment suspension to begin with?	☐ Yes	☐ No	☐ N/A

Sequence Chart

For projects that are required to supply erosion control plans and are less than 3 acres sequence charts are required to be submitted on the plans in accordance with 6.1.3.2.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"			
1) Is there a sequence chart included in the erosion control plans? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
2) Are all the control measures shown on the erosion control plans included in the sequence chart? Are there ones missing? Are there ones that are not applicable? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
3) Are all the appropriate sequences selected for the designed project? Are there ones missing? Are there ones that are not applicable? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
4) Are all the correct control measures to be installed, maintained, and removed across the appropriate sequences of construction? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A

Sequence Sheets

For projects that are required to supply erosion control plans and are greater than 3 acres sequence sheets are required to be submitted on the plans in accordance with 6.1.3.2.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"				
1)	Are there at least 3 sequence sheets for the major activities during construction? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
2)	Does each individual sequence sheet meet the Erosion Control Plan Check sheet section above? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
3)	Does the title page label each of the sequence sheets? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
4)	Does the page label match each sequence? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A
5)	Is each control measure shown on each sequence sheet needed for those construction activities? *Sec 6.1.3.2*	☐ Yes	☐ No	☐ N/A

Full Review of the Erosion Control Report

Erosion control reports are required on all projects that are larger than 43,560 square feet or are part of a larger common development.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"			
1) Have all redlined comments on the erosion control report been answered or corrected from the prior submittal?	☐ Yes	☐ No	☐ N/A
2) Is an erosion control report located in an acceptable location upon submittal? (typically, a stand-alone document or as part of the drainage report)	☐ Yes	☐ No	☐ N/A
3) Is the material stamped by a P.E. Licensed in Colorado? *See 6.1.4*	☐ Yes	☐ No	☐ N/A
4) Is the material typed? *See 6.1.4*	☐ Yes	☐ No	☐ N/A
5) Does the Erosion Control Report Contain all of the key elements? *See 6.1.4*	☐ Yes	☐ No	☐ N/A
6) Is a Title Page, Cover Letter and Notification of Responsibility section included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
a. Is the Name of the Project included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
b. Does the name match the one on the erosion control plan?	☐ Yes	☐ No	☐ N/A
c. Is the Date Submitted included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
d. Is the Landowner's contact info included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
e. Is the Developer's contact info included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
f. Is the Contractor's contact info included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
g. Is the Engineer's contact info included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
h. Is the Erosion Control Administrator's contact info included? *See 6.1.4.1*	☐ Yes	☐ No	☐ N/A
A fully signed and dated copy submitted before beginning construction activities and initial inspection request			
7) Is the Table of Contents included? *See 6.1.4.2*	☐ Yes	☐ No	☐ N/A
8) Is the Project Description and Nature of Construction Included? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
a. Does it describe the existing site condition and proposed condition? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
b. Does the description include Project Location? *See 6.1.4.3 (typically including 2 of the follow methods: Written description, legal description, parcel number, address, GPS Coordinates in decimal degrees)*	☐ Yes	☐ No	☐ N/A
c. Does the existing site condition describe physical soil properties, hydraulic soil properties, and soil features? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
d. Does the existing site condition describe the pathway to the nearest receiving water? *See 6.1.4.3 (i.e. the drainage path from the outfall to either the Poudre River or Fossil Creek Reservoir)*	☐ Yes	☐ No	☐ N/A
e. Does the existing site condition describe the existing vegetated areas to impervious areas? *See 6.1.4.3* (typically, a ratio)	☐ Yes	☐ No	☐ N/A
f. Does the existing site condition describe the estimated percent vegetative ground cover? *See 6.1.4.3* (estimate of density of vegetation)	☐ Yes	☐ No	☐ N/A
g. Does the existing site condition describe the existing groundwater depth? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
h. Does the existing site condition describe identified non-stormwater discharges? *See 6.1.4.3 (Springs, irrigation return flows, etc.)*	☐ Yes	☐ No	☐ N/A
i. Are those non-stormwater discharges included on the erosion control plans?	☐ Yes	☐ No	☐ N/A
j. Does the existing site condition describe steepness of slopes on site? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
k. Does the existing site condition describe existing structures? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A

	l.	Does the existing site condition describe distance from riparian or sensitive areas? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	m.	Does the existing site condition describe a summary of ground contamination? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	n.	Does the existing site condition describe rainfall and wind erodibility? *See 6.1.4.3* (*Be sure to summarize the soil erosion potential and the possible impacts of those soils to impact water quality. Typically, the soil type is described with no mention as to what that means for erosion and its impact as a potential to discharge from a site)*	☐ Yes	☐ No	☐ N/A
	o.	Does the existing site condition contain any other relevant site data for erosion control?	☐ Yes	☐ No	☐ N/A
	p.	Does the proposed condition contain a description of the construction activities from the beginning until the final stabilization of the project? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	q.	Does the Proposed Construction Activities Section include the Total Area of the Project? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	r.	Does the Proposed Construction Activities Section include a description of where the size was limited to reduce soil exposure? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	s.	Does the Proposed Construction Activities Section include the Total Area of Disturbance? *(both on-site and off-site) See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	t.	Does the Proposed Construction Activities Section include the Total Areas of Staging and Storage? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	u.	Does the Proposed Construction Activities Section include the Total Areas for Hauling? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	v.	Does the Proposed Construction Activities Section include the Total Volumes of imported and Exported Material? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
	w.	Does the description identify any possible environmental impacts? *See 6.1.4.3 (wetlands, streams, and endangered species identified, etc.)*	☐ Yes	☐ No	☐ N/A
	x.	Does the description identify any State or Federal Permits that needed to be pulled? *See 6.1.4.3 (State Dewatering Permit, ACOE 404 Permit, 401 Water Quality Cert, State Stormwater Construction Permit, etc.)*	☐ Yes	☐ No	☐ N/A
9)		Is a section called Potential Pollutant Sources included? *See 6.1.4.4*	☐ Yes	☐ No	☐ N/A
10)		Are at a minimum all 16 commonly identified potential pollutant sources included? *See 6.1.4.4*	☐ Yes	☐ No	☐ N/A
11)		Are each of 16 sources labeled with <u>Presence</u> on site? *See 6.1.4.4* (i.e. "Yes" present on site or a "No" not anticipated on site)	☐ Yes	☐ No	☐ N/A
12)		Have each of the 16 sources <u>Identified and Described</u> the pollutant source? *See 6.1.4.4*	☐ Yes	☐ No	☐ N/A
13)		Has each of the 16 sources <u>Evaluated</u> the source's pollutant potential to contribute to site discharge? *See 6.1.4.4*	☐ Yes	☐ No	☐ N/A
14)		Have each of the 16 sources <u>Prescribed</u> control measures to prevent pollutants from contributing to site discharges? *See 6.1.4.4*	☐ Yes	☐ No	☐ N/A
	i.	All disturbed and stored soils	☐ Included		
	ii.	Vehicle tracking of sediments	☐ Included		
	iii.	Management of contaminated soils	☐ Included		
	iv.	Loading and unloading operations	☐ Included		
	v.	Outdoor storage of construction materials, building materials, fertilizers, and chemicals	☐ Included		
	vi.	Bulk storage of materials	☐ Included		
	vii.	Vehicle and equipment maintenance and fueling	☐ Included		

viii.	Significant dust or particulate generating processes	☐ Included			
ix.	Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, and oils	☐ Included			
x.	On-site waste management practices	☐ Included			
xi.	Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment	☐ Included			
xii.	Dedicated asphalt and concrete batch plants	☐ Included			
xiii.	Non-industrial waste sources such as worker trash and portable toilets	☐ Included			
xiv.	Saw Cutting and Grinding	☐ Included			
xv.	Other non-stormwater discharges including construction dewatering not covered under the Construction Dewatering Discharges general permit and wash water that may potentially contribute pollutants to the MS4	☐ Included			
xvi.	Other areas or operations where spills can occur	☐ Included			
15)	Is a section called Control Measures included? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
a.	Are all the Prescribed Controls from the pollutant sources section included in this section? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
b.	Are all the controls measures in this section included on the erosion control plans? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
c.	Are all the controls measures in erosion control plans included in this section? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
d.	Does each control measure have a description? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
e.	Does each control measure have how it is to be implemented? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
f.	Does each control measure have a corresponding detail? *See 6.1.4.5*	☐ Yes	☐ No	☐ N/A	
16)	Is a section called Installation and Removal Sequence of Control Measures included or incorporated into the section called Control Measure? *See 6.1.4.6*	☐ Yes	☐ No	☐ N/A	
a.	Does the section convey the estimated Installation and Removal of Control Measures based upon the sequence of the construction activities? *See 6.1.4.6*	☐ Yes	☐ No	☐ N/A	
b.	Is the section Installation and Removal Sequence of Control Measures simple to follow, clear, and concise?	☐ Yes	☐ No	☐ N/A	
17)	Is a section called Maintenance and Inspection Requirements? *See 6.1.4.8*	☐ Yes	☐ No	☐ N/A	
a.	Does the section include how to maintain each control? *See 6.1.4.8 (when it is needed, how to clean it out or repair it)*	☐ Yes	☐ No	☐ N/A	
b.	Does the section identify the frequency of inspections? *See 6.1.4.8*	☐ Yes	☐ No	☐ N/A	
18)	Is a section called Final Vegetation and Stabilization? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
a.	Does the section Final Vegetation and Stabilization include the means to return the exposed dirt from construction activities to a stabilized state? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
b.	Areas for immediate vegetation and stabilization (i.e. traditional landscaping) *See 6.1.4.9*				
i.	Is there a discussion of soil preparation in accordance with Municipal Code §12-132? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
ii.	Is there a planting method described? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
iii.	Is there an anticipated planting schedule? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
iv.	Is how and when these areas are considered stabilized described? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
v.	Reference to using the approved landscape plans and following City Landscape Standards (LUC 3.2.1 (3)) *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	
c.	Areas that will require seeding (either temporary or permanent) *See 6.1.4.9*				
i.	Is there a description of soil preparation in accordance with Municipal Code §12-132? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A	

ii.	Is a selected seed mix used? Or states it can be found in the approved landscape plans? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
	a. Is Species Name and common name included? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
	b. Is the Seed application Rate in (lbs. of PLS/acre) included? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
	c. Is the Drill Depth included? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
iii.	Is there an explanation of the seeding method and schedule? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
iv.	Is there an explanation of the crimping and mulching method being applied 24 hours after seeding has occurred? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
v.	Is there description of how to determine and when such areas will be considered stabilized? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
d.	Is the estimated timeline for stabilization of the exposed area included? *(immediate, seasons, years, etc.) See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
e.	Is there a description to remove all accumulated sediment in the pipes after the site has been stabilized and how any remaining controls should be removed after cleaning the infrastructure? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
19)	Is there a section called Appendix? *See 6.1.4.10*	☐ Yes	☐ No	☐ N/A
20)	Does the section called Appendix contain at a minimum all referenced material from any previous section of the erosion control report? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A
21)	Does the section called Appendix contain a copy of all control measure details to be used on the project? *See 6.1.4.9*	☐ Yes	☐ No	☐ N/A

Full Review of the Erosion Control Escrow Calculation

Erosion control escrow calculations are required on all non-City projects that are larger than 10,000 square feet, contain steep slopes *(steeper than 3:1 or 18°)*, part of a larger common development, or are located near (*closer than 50 ft from a sensitive area)* a sensitive area.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"			
1) Have all redlined comments on the erosion control report been answered or corrected from the prior submittal? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
2) Is an erosion control escrow calculation sheet completed and in an appropriate location? *(Stand- alone sheet or part of the erosion control or drainage report) Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
3) Is the name the same as what is shown on the Erosion Control Plan? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
4) Are each of the control measures shown on the erosion control plan included in the calculation sheet? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
5) Are the quantities of each control measure shown on the plan included in the calculation sheet? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
6) Is the total disturbed area used for the entire site? (*this area is not just the areas to be reseeded but any of the areas that would be disturbed) Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
7) Are the prices realistic and based upon recent prior estimates? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
8) Is the calculation based upon one and a half times the cost to install the approved control measures as shown on the erosion control plan? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
9) Is the calculation based upon one and a half times the cost to re-vegetate the disturbed land with dry land seeding? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
10) Is the calculation based upon the minimum escrow? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
11) Is the security based upon the highest of 8, 9, and 10? *(Controls, Reseeding, and Minimum) Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
12) Are all prior redline comments corrected from prior submittal? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
13) If quoted in the Report, does the amounts match in both places? *Sec. 6.1.5*	☐ Yes	☐ No	☐ N/A
14) Would this escrow be better served by having phased escrows? *(Landscaped areas that generally are finished early vs Native seed areas which can take several years before completion)* *(Splitting these escrows up is recommended to return some escrow prior to full site stabilization)*	☐ Yes	☐ No	☐ N/A

Phased Materials

When phased materials are planned this section is to be reviewed in addition to the full review checklists for erosion control; plans, reports and escrows. Phased materials are required when a project is over 5 acres and highly recommended for any projects that require native seeding.

All sections referenced are mandatory requirements from FCDCM Chapter 2 "Development Submittal Requirements"			
1) Are the erosion control plans clearly delineating the various phases of a project? *See 6.1.3.6*	☐ Yes	☐ No	☐ N/A
a. Where scale and detail require, is an index map sheet or key map included and affixed to a corner of the erosion control plan map sheets? *See 6.1.3.6*	☐ Yes	☐ No	☐ N/A
b. Are all the control measures in the various phases included in the erosion control plans?	☐ Yes	☐ No	☐ N/A
2) Is there a section in the erosion control report dedicated to the discussion of phases? *See 6.1.4.7*	☐ Yes	☐ No	☐ N/A
a. Does the Phasing section describe an estimated schedule for when each phase will begin and be stabilized? *See 6.1.4.7*	☐ Yes	☐ No	☐ N/A
b. Does the Phasing section describe how the site will be broken into phases? *See 6.1.4.7*	☐ Yes	☐ No	☐ N/A
c. Does the Proposed Construction Activities Section of the erosion control report include the Total Area of Each Phase? *See 6.1.4.3*	☐ Yes	☐ No	☐ N/A
3) Is there a simple map to attach with the escrow calculation sheets clearly showing the boundaries of each phase of the erosion control escrow? *See 6.1.5*	☐ Yes	☐ No	☐ N/A
4) Are there any individual security calculation sheets for each phase shown on the map? *See 6.1.5*	☐ Yes	☐ No	☐ N/A
5) Is there a need for Native Seed areas to be a separate phase so that funds can be returned on the rest of the project after completion and only hold escrow for those area that are still left waiting for seed to grow?	☐ Yes	☐ No	☐ N/A

Evaluation of Materials

Unique Conditions To evaluate			
Prior Site Contamination			
Are there known environmental issues or prior site contamination with the site that will need to be mitigated for? *(Asbestos in the soil, superfund sites, beet tailings, old landfills, industrial area, old gas station, old dry cleaners, or other legacy structures that could have produced chemical contaminations)*	☐ Yes	☐ No	☐ N/A
If this is a "yes" please ensure this information is included in the erosion control report as this is an addition pollutant source beyond the 16 standard pollutant sources. Please include how to control the contaminated soils and appropriate methods to handle such materials, if no report is required please include a length page note stating how to handle the materials. The areas of concern should also be marked on the plans to have a guess as to where they are located within the disturbed area.			
Demo Activities			
Are the approximate areas to be exposed from the building and structure removal easily identified on the plans?	☐ Yes	☐ No	☐ N/A
Is the estimated length of interim time called out between demo work and site grading?	☐ Yes	☐ No	☐ N/A
Will the starting of construction really be immediate? (Asked because only about 5% of the projects start within a month of demo, in all reality and most can take 3-8 months before final approval and permitted construction can begin this is time that exposed dirt areas are typically not looked after or managed by demo contractors)	☐ Yes	☐ No	☐ N/A
Are temporary controls called out to be used in the interim to prevent run-off of the exposed soil between demo and site work?	☐ Yes	☐ No	☐ N/A
Will site access be limited to prevent vehicles from driving through the exposed soils?	☐ Yes	☐ No	☐ N/A
Will temporary seeding and mulching need to happen as the area is exposed for months?	☐ Yes	☐ No	☐ N/A
Will the materials remain on site for any length of time?	☐ Yes	☐ No	☐ N/A
Will the structures be fully mitigated for asbestos before any demolition begins?	☐ Yes	☐ No	☐ N/A
Will the materials remain on site for any length of time?	☐ Yes	☐ No	☐ N/A
Will the structures be fully mitigated for asbestos before any demolition begins?	☐ Yes	☐ No	☐ N/A
Will water be used to prevent dust to be suspended during demolition?	☐ Yes	☐ No	☐ N/A
High Ground Water			
Does the plan call out for a liner in the concrete wash out? (if a mobile unit is not being implemented) This liner is needed as there is a significant nexus between ground water and wash water that could negatively impact and become a source of contamination to the groundwater.	☐ Yes	☐ No	☐ N/A
Is there anticipated trenching of subgrade in the high ground water area? This work will typically encounter water and will need a plan to address the water in the trench and usually require dewatering activities. (See dewatering for further questions)	☐ Yes	☐ No	☐ N/A
Are there areas that will require seeding that may have water inundate for a long period of time? This might require planning for the optimum time to seed where the ground water will not choke out the seed and/or selecting the appropriate seed type that will be able to handle highly saturated ground that serves as a source to promote seed growth.	☐ Yes	☐ No	☐ N/A
If no dewatering is anticipated with a project with high water, are their notes about how handle dewatering if high water is encountered?	☐ Yes	☐ No	☐ N/A
Dewatering and Pumping Activities			

Do the plans identify where the dewatering activity will pump the water to?	☐ Yes	☐ No	☐ N/A
Do the plans anticipate how much water is expected to be pumped?	☐ Yes	☐ No	☐ N/A
Will this be able to have some form of energy dissipation to not become an erosion source when pumped?	☐ Yes	☐ No	☐ N/A
Will it be a small enough volume of water that it will not discharged off site? If not able to contain to site, a State Dewatering permit will be needed.	☐ Yes	☐ No	☐ N/A
Are the pumps adequately sized to handle the appropriate volumes of water and enough power to divert flows the anticipated pumping distance?	☐ Yes	☐ No	☐ N/A
Does the erosion control plan have a note explaining that a dewatering permit is needed if water is to be discharged off site?	☐ Yes	☐ No	☐ N/A
Has the dewatering permit already been applied for? (permit needs to be approved before dewatering activities are to occur this can be a 45-day lead time at the State) (Conditions of the dewatering activities should be kept with the erosion control materials on site, there should also be some description of what frequency samples are being taken and what the samples are being tested for)	☐ Yes	☐ No	☐ N/A
Is the dewatering activity near a contaminated location? (if contaminated soils are present, dewatering activities may require the pulling of a remediation permit) (Conditions of those remediation activities should be kept with the erosion control materials on site)	☐ Yes	☐ No	☐ N/A
Is there a copy of the Dewatering permit? A copy should be placed with the erosion control materials when that has been approved.	☐ Yes	☐ No	☐ N/A
Run on Flows			
Are the flows identified on the erosion control plans?	☐ Yes	☐ No	☐ N/A
Do those flows identify if they are concentrated of distributed surface flows?	☐ Yes	☐ No	☐ N/A
Do the plans identify how much water will inundate the site?	☐ Yes	☐ No	☐ N/A
How much area will be impacted by these flows?	☐ Yes	☐ No	☐ N/A
Will some, or all, of the work expect to continue if inundated?	☐ Yes	☐ No	☐ N/A
Are there additional structures or pumping activities that will be used and shown on the plans to divert the flows from encountering the dirt on site, i.e. pump around the disturbed area?	☐ Yes	☐ No	☐ N/A
Are there means to control and treat the additional flow once it has encountered the dirt on site?	☐ Yes	☐ No	☐ N/A
Is there time delays built into the project due to weather constraints or when work areas are inundated?	☐ Yes	☐ No	☐ N/A
Are the stored materials and hazardous materials shown on the plans located away from the run on flow?	☐ Yes	☐ No	☐ N/A
Are there notes or directions on what to do if run on flows cause an upset condition?	☐ Yes	☐ No	☐ N/A
Is there a list of contractors who could help restore the project if impacted by an upset condition?	☐ Yes	☐ No	☐ N/A
Working in water way			
Have a 404 Permit been issued by the Army Corps of Engineers?	☐ Yes	☐ No	☐ N/A
Have a 401 Water Quality Certification been pulled from the State?	☐ Yes	☐ No	☐ N/A
Have surface flows that would encounter construction soils (such as a bank repair location, coffer dam installation, or stream crossing) been included in the project design? If so, the water moving across a property by State definition is considered a dewatering activity and would require a dewatering permit to be pulled	☐ Yes	☐ No	☐ N/A
As anticipated surface flows encounter those construction soils, is there an anticipated water volume that will interact with exposed soils planned for?	☐ Yes	☐ No	☐ N/A

	Are controls selected based upon those volume?	☐ Yes	☐ No	☐ N/A
	Will there be hard armoring along the bank for permanent stabilization? (i.e. riprap)	☐ Yes	☐ No	☐ N/A
	Will there be areas that will have grass or vegetation for permanent stabilization?	☐ Yes	☐ No	☐ N/A
	Will those vegetated areas be blanketed or hydro-mulched?	☐ Yes	☐ No	☐ N/A
	Will more aggressive control measures be needed for stabilization due to steep slopes, run on flows, or concentrated flows?	☐ Yes	☐ No	☐ N/A
	Is the seeding a realistic expectation based upon river flows and the seasonal constraints?	☐ Yes	☐ No	☐ N/A
	Are the activities going to be conducted in the wintertime to minimize flow contact with dirt?	☐ Yes	☐ No	☐ N/A
	Will coffer dams be used? If so, is there a liner or impermeable layer to prevent mixing flowing water from scouring out the coffer dam and making that material become a pollutant source?	☐ Yes	☐ No	☐ N/A
	Will there be above or in river crossings? Is it adequately sized and armored to prevent washing out and away of the pipes and materials? Is there a detail showing how the crossing will be designed and sized? Is the crossing shown on the erosion control Plan?	☐ Yes	☐ No	☐ N/A

Minor Amendment Specific Items

Key thing here is that these types of reviews build upon the designs of old plans that were approved prior. On these projects, it is important to first identify if the proposed changes significantly alter the scope of work in a way that may require additional Control Measures. Many times, these minor amendments are facades or elevation changes and do not affect the erosion control or will not disturb enough new area to trigger erosion control requirements. When the submitted materials for a minor amendment significantly change the area of disturbance, location of site or the scope of work it may require a reevaluation of the materials and potentially trigger a full review of the erosion control materials. It is also important to note that if the materials were approved under prior stormwater criteria, the old project planning materials will need to be brought up and held to the current standards which many times requires the applicant to (re)produce reports, plans, or escrow calculations (see those requirements under the full review process) that meet our current standard.

1)	Are all the existing site conditions clearly different than the proposed changes?	☐ Yes	☐ No	☐ N/A
2)	If these amendments are of an older project, have those previous materials been updated to fulfill current drainage criteria?	☐ Yes	☐ No	☐ N/A