

## **Appendix H**

### **Land Disturbance Ordinance**



# LAND DISTURBANCE ORDINANCE

## CONCEPTUAL APPROVAL CHECKLIST

Project Name:		Map ID:	Zoning:
Gross Area (acres):			
Firm Name:		Engineer:	
Address:			
City:		State:	Zip:
Telephone No.:		Fax No.:	
E-mail Address:			
Property Owner:			
Address:			
City:		State:	Zip:
Planning Reviewed By:		Date Received:	
Engineering Reviewed By:		Date Received:	
General Services Reviewed By:		Date Received:	
Fire Reviewed By:		Date Received:	

### INITIAL REVIEW - CONCEPTUAL APPROVAL

OVERALL REQUIREMENTS – Whether the Developer’s submittal for the concept plan meets all the requirements of the Land Disturbance Ordinance and whether the submittal is complete.

Dev. Eng	Resp. City	Munic. City Code	<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u> <u>Section</u>	
<input type="checkbox"/>	<input type="checkbox"/>		Project Purpose – Project meets the purposes of the Land Disturbance Ordinance
<input type="checkbox"/>	<input type="checkbox"/>		Project meets the requirements for preliminary engineering disturbance
<input type="checkbox"/>	<input type="checkbox"/>		A development map
<input type="checkbox"/>	<input type="checkbox"/>		A development report

Comments: \_\_\_\_\_  
 \_\_\_\_\_

The Developer's submittal (meets) (does not meet) the requirements of the conceptual approval requirements.

\_\_\_\_\_  
 Executive Secretary Date

Date Returned to Developer: \_\_\_\_\_ Date Sent to Engineer Dept: \_\_\_\_\_

**DETAILED REVIEW - CONCEPTUAL APPROVAL**

DETAILED REQUIREMENTS – Whether the Developer's submittal for the concept plan meets all the requirements of the Land Disturbance Ordinance.

PURPOSE – The project meets the purposes of the Land Disturbance Ordinance as follows:

Dev. Eng	Resp. City	Munic. City	Code Code	Description
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>	
<input type="checkbox"/>	<input type="checkbox"/>			Preservation of natural vegetation, geologic features, wildlife habitat and open space.
<input type="checkbox"/>	<input type="checkbox"/>			Minimize the amount of grading
<input type="checkbox"/>	<input type="checkbox"/>			Retention of trees and other native vegetation
<input type="checkbox"/>	<input type="checkbox"/>			Addresses the design and construction of roads in the Land Disturbance Ordinance
<input type="checkbox"/>	<input type="checkbox"/>			Indicates requirements for placement of building sites within the Land Disturbance Ordinance
<input type="checkbox"/>	<input type="checkbox"/>			Provides for grading which will eliminate sharp angles at the top and toe of cut and fill slopes
<input type="checkbox"/>	<input type="checkbox"/>			Identifies street rights-of-way and grades, lot layouts, structure designs that will aid the objective of reducing excavation and natural topographic disturbance.
<input type="checkbox"/>	<input type="checkbox"/>			Provides for cluster type development or similar concepts that will minimize, as far as possible, disturbance of steep or sensitive terrain.
<input type="checkbox"/>	<input type="checkbox"/>			Encourage early temporary or permanent planting wherever appropriate to maintain necessary cut and fill slopes, stabilizing them by plant roots and concealing the raw soil from view.

Comments: \_\_\_\_\_

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SCOPE AND APPLICATION

Dev. Eng	City	Resp. City	Munic. Code		<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>		
<input type="checkbox"/>	<input type="checkbox"/>				Project lies within the Land Disturbance Ordinance
<input type="checkbox"/>	<input type="checkbox"/>				Requirements for preliminary engineering disturbance to hillside
<input type="checkbox"/>	<input type="checkbox"/>				Proposals for surveying, testing or other design-related activities are to be submitted to the Zoning Administrator for review and approval. Areas of proposed disturbance are to be staked and the City is to observe staking.
<input type="checkbox"/>	<input type="checkbox"/>				Thereafter the Zoning Administrator and City Engineer can issue a grading permit
<input type="checkbox"/>	<input type="checkbox"/>				All permanent work is to comply with requirements of Land Disturbance Ordinance

Comments: \_\_\_\_\_

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DEVELOPMENT MAP- Provide a Development Map which meets certain requirements (*CDD*)

Dev. Eng	City	Resp. City	Munic. Code		<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>		
<input type="checkbox"/>	<input type="checkbox"/>				A scale of 1" = 1' or
<input type="checkbox"/>	<input type="checkbox"/>				One or two foot contour intervals
<input type="checkbox"/>	<input type="checkbox"/>				Natural slopes of 30-percent or greater color shaded
<input type="checkbox"/>	<input type="checkbox"/>				The proposed development layout including details
<input type="checkbox"/>	<input type="checkbox"/>				Identify any roads that have grades in excess of 8-percent
<input type="checkbox"/>	<input type="checkbox"/>				Native vegetation, type and location shown

Comments: \_\_\_\_\_

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DEVELOPMENT REPORT – Provide a Development Report which meets certain requirements (*CDD*)

<u>Dev.</u> <u>Eng</u> <u>Check</u>	<u>City</u> <u>Check</u>	<u>Resp. City</u> <u>Dept.</u>	<u>Munic. Code</u> <u>Section</u>	<u>Description</u>
<input type="checkbox"/>	<input type="checkbox"/>			Shows the total development area
<input type="checkbox"/>	<input type="checkbox"/>			Indicates the number of lots or units
<input type="checkbox"/>	<input type="checkbox"/>			Indicates the proposed density
<input type="checkbox"/>	<input type="checkbox"/>			Shows the percentage of each use, such as residential, commercial, recreational, transportation, etc.
<input type="checkbox"/>	<input type="checkbox"/>			Provides a statement of justification for the project design
<input type="checkbox"/>	<input type="checkbox"/>			Indicates the Developer has taken the solar orientation of the project into account.

Comments: \_\_\_\_\_

DEVELOPMENT REQUIREMENTS – Meet the following requirements.

<u>Dev.</u> <u>Eng</u> <u>Check</u>	<u>City</u> <u>Check</u>	<u>Resp. City</u> <u>Dept.</u>	<u>Munic. Code</u> <u>Section</u>	<u>Description</u>
<input type="checkbox"/>	<input type="checkbox"/>			Development in General - Slope areas in excess of 30-percent may not be developed. No more than 30-percent of a development's slope areas in excess of 30-percent may be included in the area calculation to determine density. The Planning Commission may modify this requirement based upon specified findings.
<input type="checkbox"/>	<input type="checkbox"/>			Subdivision, Single Family Lots - Minimum lot size and yard requirements of the underlying zone apply except that every lot is to have at least 3,500 sq.ft. of buildable area. Buildable area is where the slope is 30-percent or less, is to be completely contiguous and have a minimum dimension of 50-feet. Dwelling structures are to be located within 250-feet of a public street. All main and accessory buildings are to be built within the buildable area.
<input type="checkbox"/>	<input type="checkbox"/>			PUD's and Dwelling Groups - The density limitations of the underlying zone are to apply except that all buildings are to be built upon the buildable area. Dwelling structures are to be located within 250-feet of a public street, or a private street that has been approved by the Planning Commission. The minimum requirement for common open space is to be 20-percent of the total project area.
<input type="checkbox"/>	<input type="checkbox"/>			Maximum Impervious Material Coverage - The total maximum allowable coverage by impervious material is to not exceed 35-percent of the total project area. Areas of roofs and driveways will be estimated and included in the total impervious surface area.





# LAND DISTURBANCE ORDINANCE

## PRELIMINARY APPROVAL CHECKLIST

Project Name:		Map ID:	Zoning:
Gross Area (acres):			
Firm Name:		Engineer:	
Address:			
City:		State:	Zip:
Telephone No.:		Fax No.:	
E-mail Address:			
Property Owner:			
Address:			
City:		State:	Zip:
Planning Reviewed By:		Date Received:	
Engineering Reviewed By:		Date Received:	
General Services Reviewed By:		Date Received:	
Fire Reviewed By:		Date Received:	

### INITIAL REVIEW - PRELIMINARY APPROVAL

OVERALL REQUIREMENTS – Whether the Developer’s submittal meets all the requirements of the Land Disturbance Ordinance and whether the submittal is complete.:

Dev.		Resp.	Munic.		
Eng	City	City	Code		
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>		

Description

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Meets the requirements of the Conceptual Approval   |
| <input type="checkbox"/> | <input type="checkbox"/> | Meets the requirements of the Subdivision ordinance |
| <input type="checkbox"/> | <input type="checkbox"/> | A development model                                 |
| <input type="checkbox"/> | <input type="checkbox"/> | Soils investigation report                          |
| <input type="checkbox"/> | <input type="checkbox"/> | Vegetation report                                   |
| <input type="checkbox"/> | <input type="checkbox"/> | Geotechnical and geological report                  |
| <input type="checkbox"/> | <input type="checkbox"/> | Grading and drainage report                         |

Comments: \_\_\_\_\_

The Developer's submittal (meets) (does not meet) the requirements of the Preliminary Approval requirements.

\_\_\_\_\_  
Executive Secretary Date

Date Returned to Developer: \_\_\_\_\_ Date Sent to Engineering Dept: \_\_\_\_\_

**DETAILED REVIEW - PRELIMINARY APPROVAL**

DETAILED REQUIREMENTS – In addition to the information required as part of the subdivision or planned unit development process, additional requirements may be required as part of the Land Disturbance Ordinance ordinance. All reports submitted are to be prepared by persons licensed to practice their specialty or expertise in the State of Utah, if such license for practice is required. The City Engineer may obtain the advice of other experts on the adequacy of the reports submitted and the validity of the conclusions and recommendations reached in the reports. In such cases the City Engineer may consult with such experts, with the reasonable costs of these consultations to be borne by the developer. The Developer is to provide the following:

**SCOPE AND APPLICATION**

Dev. Resp. Munic.  
Eng City City Code  
Check Check Dept. Section

Description

Meets the requirements of the Subdivision ordinance

Comments: \_\_\_\_\_

PROCEDURE - Proposals for developments within the Land Disturbance Ordinance are to be reviewed and approved by the Zoning Administrator. Projects to be reviewed by the City Engineer, Public Works Department and Water Department.

Dev. Resp. Munic.

<u>Eng</u>	<u>City</u>	<u>City</u>	<u>Code</u>	<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>	
<input type="checkbox"/>	<input type="checkbox"/>			Project reviewed by the City Engineer
<input type="checkbox"/>	<input type="checkbox"/>			Project reviewed by the General Services Department
<input type="checkbox"/>	<input type="checkbox"/>			Project reviewed by Community Development Department

Comments: \_\_\_\_\_

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DEVELOPMENT STANDARDS – The Developer is to indicate that all of the items listed below have been taken into account in the project design.

<u>Dev.</u>	<u>Resp.</u>	<u>Munic.</u>	<u>Description</u>
<u>Eng</u>	<u>City</u>	<u>City</u>	<u>Code</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>
<input type="checkbox"/>	<input type="checkbox"/>		Cut and Fill Slopes - The Developer is to meet the following requirements in this area:
<input type="checkbox"/>	<input type="checkbox"/>		Cut and fill slopes subject to Chapter 70 of the Appendix to the UBC will also comply with the following, unless otherwise recommended in an approved soils and geology report:
<input type="checkbox"/>	<input type="checkbox"/>		Cut and fill slopes will not exceed 12-feet
<input type="checkbox"/>	<input type="checkbox"/>		Cut and fill slopes will not exceed a slope ration of 2 H: 1V, except for special conditions specified in the ordinance.
<input type="checkbox"/>	<input type="checkbox"/>		Fill slopes are to not be constructed on natural slopes steeper than 2 H: 1 V
<input type="checkbox"/>	<input type="checkbox"/>		Roadway cut and fill slopes, which are located outside the dedicated public right of way, are to be located within recorded easements providing for slope protection and preservation. The form of the easements is to be acceptable to the City.
<input type="checkbox"/>	<input type="checkbox"/>		Earthwork - The Developer is to meet the following requirements in this area:
<input type="checkbox"/>	<input type="checkbox"/>		Clearing and stripping: All surface areas to receive fill are to be stripped of any surface vegetation, topsoil and organics and cleared of any trash and debris.
<input type="checkbox"/>	<input type="checkbox"/>		Subgrade preparation: After the site has been cleared and stripped, the exposed subgrade soils in those areas to receive fill are to be scarified to a depth of 8-inches, moisture conditioned and compacted to the requirements of subparagraph d. (4) "Compaction".
<input type="checkbox"/>	<input type="checkbox"/>		Fill materials: All fill materials are to be earth materials free from organic material and other deleterious materials such as metal, concrete, asphalt and other construction debris. Imported fill material should be non-expansive, granular soils with a plasticity index of 12 or less. Fill material, imported and existing, should not

contain rocks or lumps over 6-inches, in the greatest dimension, and not more than 15-percent of the material larger than 2 ½-inches in size.

- ED    Trenches: Trenches are to be contained within approved rights-of-way, except when OSHA requirements make it necessary to make the trench width wider.
  
- ED    Compaction - Fill material is to be spread and compacted in uniform lifts not exceeding 8-inches in uncompacted thickness. Before compaction begins, the fill material is to be brought to within 2-percent of the optimum moisture content. Each lift should be thoroughly mixed before compaction to ensure a uniform distribution of moisture.
  
- ED    Subgrade – 95 percent
- ED    Structural fill – 98 percent
- ED    Trench backfill – 95 percent
- ED    Trench backfill, top 12-inches under pavement & concrete – 98 percent
  
- CCD    Basement wall backfill – 90 percent
- CCD    Excavation for structures: All structures are to bear on well-compacted fill material, or firm, undisturbed natural soil.
  
- ED    Written report: The developer is to submit to the City Engineer for his approval, a written summary report of the completed compaction. The report is to show location and depth of tests, materials used, moisture-density curves, moisture contents and relative density, if appropriate. A Civil Engineer, Geotechnical Engineer, is to prepare the report or Soils Engineer licensed by the State of Utah.
  
- ED    The City Engineer may require additional tests or information, if, in his opinion, the conditions or materials require such information or tests.
  
- CCD    Setbacks - The Developer is to meet the following requirements in this area:
  
- CCD    Setbacks and other restrictions indicated in this Chapter are minimum and may be increased by the City is deemed necessary for erosion, drainage, access, etc. Retaining walls may be used to reduce setbacks when approved by the City.
- CCD    Setbacks from property lines: comply with the UBC
- CCD    Setbacks from structures: setbacks between graded slopes (cut or fill) and structures are to comply with the UBC
- CCD    Setbacks from faults: No structure is to be located over a fault. Minimum setback is 10-feet but recommendations are required in the geological report.
  
- ED    Vegetation and Revegetation - The Developer is to meet the following requirements in this area:
  
- ED    All sites cleared of natural vegetation in the course of construction of offsite improvements are to be replanted with vegetation, which has good erosion control characteristics.

- ED New plantings are to be protected with mulch material, fertilized and watered in accordance with the planting and watering schedule.
- ED The planning and installation of revegetation cover for the total development site is to be supervised by persons/firms, having expertise in the practice of revegetation. This includes landscape architects, nurserymen and certified erosion control specialists.
- ED Vegetation is to be removed only when absolutely necessary, e.g. for the construction of buildings, roads and filled areas, as approved by the City Engineer.
- ED Storm water inlets are to be protected to prevent sediment-laden water from entering the storm water system.
- ED Geology - The Developer is to meet the following requirements in this area:
- CCD No structures are to be built on or within 10-feet of any identified faults.
- CCD No structures or improvements are to be allowed on any area known to be within an active landslide area
- CCD Problems related to perched or shallow ground water are to be identified and mitigated.
- CCD Structures are not allowed within rockfall zones.
- ED Fire Protection - The Developer is to meet the following requirements in this area:
- ED Footing and foundation permits will not be issued until work on the water system has commenced. A full building permit will be issued only when the water system is completed and operational to provide fire protection.
- FD The Fire Department is to review each development site proposal and each building permit application to determine whether it complies with the UBC.
- CCD Restrictive covenants are to not require the use of wood shakes or wood exterior siding in the Land Disturbance Ordinance.
- ED Streets and Right of Ways - The Developer is to meet the following requirements in this area:
- ED The City's design and construction standards apply except for the items listed below.
- ED Design requirements:
 

<u>Normal</u>		<u>Permissible Exception</u>
Road grade	10% max.	No exceptions
Road grade at street intersections	5% max.	As determined by the Planning Commission
- ED Streets, roadways and private access ways are to follow the natural terrain, as nearly as possible.
- ED The maximum amount of impervious surface area for streets is to be 20-percent of the entire development site.
- ED Access points are to be provided to all developed and non-developed areas for emergency and fire fighting equipment.

- CCD Trail access is to be provided from development sites, which are located near well-established canyon trails.
- ED All fill slopes must be contained within the right-of-way, even for roadways whose right-of-way width has been reduced to the minimum 45-foot width.
- ED Appropriate sight triangles are to be observed, except as waived by the Planning Commission.
- ED Variations to the City’s design and construction standards may be developed to solve special hillside visual and functional problems but must be approved by the Planning Commission.
- ED The maximum street grades or rights-of-way is to be 12-percent, except as provided hereafter.
- ED The provisions of this Chapter are to not apply to streets or rights-of-way already constructed or which the City has already approved.
- ED Roads are to be designed to meet the City’s Road and Bridge Design and Construction Standards.
- Trails - The Developer is to meet the following requirements in this area:
- CCD Trails – a system of public recreational pathways located within the City for use by the public.
- CCD The developer is to dedicate and improve trails necessary to provide public access to public lands and other trails shown on the City or Counties’ master plans or required by the Planning Commission. Trails are to be located so that the route is feasible for both construction and long-term maintenance. Side slopes are to not exceed 70-percent and rock cliffs and other insurmountable physical obstructions are to be avoided. The specific location of the trail is to be field verified before approval of the subdivision. The amount of land required for trail dedication is to not exceed 5-percent of the land within the subdivision excluding trails located within the standard street right-of-way. The developer is to not be compensated for land required for trail dedication. *(CDD – Planner, ED – Engineer)*
- CCD Corner Canyon – Is the project in Corner Canyon. If it is the Developer is to meet the following requirements in this area: The City recognizes the Corner Canyon area to be a unique resource that should be acquired and preserved for the community. Special considerations may be required for any development within the canyon area. Once a development application is submitted to the City for property involved in this area, the City has 90-days from the date of the application to determine whether the City wishes to acquire property under this subparagraph.
- CCD Architectural Design – The Developer is to meet the following requirements in this area: The design of buildings in the Land Disturbance Ordinance is encouraged to be visually compatible with the natural beauty of the foothills and canyon areas.

- |                          |                          |     |   |
|--------------------------|--------------------------|-----|---|
| <input type="checkbox"/> | <input type="checkbox"/> | CCD | Materials for buildings and fences are to blend with the natural beauty of the natural setting.   |
| <input type="checkbox"/> | <input type="checkbox"/> | CCD | The Planning Commission may review the design and comment on the specified exterior materials and colors for all structures other than single-family dwellings.                                       |
| <input type="checkbox"/> | <input type="checkbox"/> | BD  | Exposed foundation walls are to not exceed 4-feet above finished grade at any point.  |
| <input type="checkbox"/> | <input type="checkbox"/> | BD  | On Site Development - The property owner is to be fully responsible for making all improvements in accordance with the development site approval, e.g. drainage, erosion and vegetation requirements. |

Comments: \_\_\_\_\_

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DEVELOPMENT MODEL – Provide a development model

Dev. Eng	City Check	Resp. City	Munic. Code Section	Description
<input type="checkbox"/>	<input type="checkbox"/>	CCD		To a scale as determined by City staff
<input type="checkbox"/>	<input type="checkbox"/>	CCD		With two-foot contour intervals
<input type="checkbox"/>	<input type="checkbox"/>	CCD		Shows natural slope of 30-percent or greater, color shaded
<input type="checkbox"/>	<input type="checkbox"/>	CCD		Indicates the proposed development layout showing details

Comments: \_\_\_\_\_

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SOILS INVESTIGATION REPORT - The Developer is to provide a separate report for review by City staff. This report is to contain the following:

Dev. Eng	City Check	Resp. City	Munic. Code Section	Description
<input type="checkbox"/>	<input type="checkbox"/>	ED		The stamp and signature of a Soils Engineer, registered in the State of Utah, on the first interior page of the report.

- ED The nature, distribution and classification (Unified Soil Classification) of existing soils to the appropriate depth of influence by the proposed development, but not less than ten feet deeper than the proposed excavations or to bedrock.
- ED The strength of existing soils, bearing capacity of supporting soils, settlement estimates, lateral pressures and trench excavation limitations
- ED An indication of ground water levels that may affect development and the estimated elevation of high ground water levels.
- ED Appropriate laboratory testing for classification, consistency, strength and consolidation conditions.
- ED Indicates the slope stability
- ED Provides information about potential frost action based on material type and groundwater level
- ED Indicates the frost depth
- ED Includes a discussion of geologic and hydraulic hazards, unless described in paragraph (4) and (5) below entitled Geotechnical and Geological Report and Grading and Drainage Report.
- ED Includes a verified written statement by the persons or firm preparing the soils report describing the general suitability of the site for the Owner's intended use. Identify the soil constraints to development and further stating in his professional opinion, the ability of the proposed development plan to mitigate and/or eliminate said constraints in a manner as to prevent hazards. The report is to include: critically expansive soils, high water table, organic soils, liquefiable soils, collapsible soils, or other soil problems. The City may require a soils investigation of each lot in the subdivision.

Comments: \_\_\_\_\_

VEGETATION REPORT – The Developer is to provide a separate report for review by City staff. This report is to contain the following:

<u>Dev.</u>	<u>Resp. Munic.</u>	<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept. Section</u>
<input type="checkbox"/>	<input type="checkbox"/> ED	The stamp and signature of a certified erosion control specialist or registered landscape architect on the first interior page of the report. The Landscape Architect is to have a minimum of 5 years

experience in erosion and revegetation related work. The Developer is to obtain City approval of the professional to be used for this effort and reserves the right to approve or reject individuals submitted.

- |                          |                          |    |  |
|--------------------------|--------------------------|----|--|
| <input type="checkbox"/> | <input type="checkbox"/> | ED | A map showing the location and identification of existing vegetation   |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | A map indicating the vegetation to be removed and a description of the method of disposal  |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | The vegetation to be planted to replace the amount and type being removed.   |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | The slope stabilization measures to be installed   |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | An analysis of the environmental effects of such operations including effects on slope stability, soil erosion, water quality, wildlife and fire hazard. |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | The topsoil stockpile areas for restoration of topsoil following completion of construction will be designated.  |

Comments: \_\_\_\_\_

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GEOTECHNICAL AND GEOLOGICAL REPORT - The Developer is to provide a separate report for review by City staff. This report is to be prepared whenever a proposed development:

- (a) Lies within 1,000 feet of an identified fault, or
- (b) Is located above the Bonneville level of ancient Lake Bonneville or elevation 5,200 feet, or
- (c) Is located on slopes greater than 25-percent, or
- (d) Is determined to have potential hazards by the City Engineer, County Geologist or State Geologist.

The Geotechnical and Geological Report is to be prepared by a geotechnical engineer licensed in the State of Utah and licensed professional geologist and is to include:

<u>Dev.</u>	<u>Resp.</u>	<u>Munic.</u>	<u>Description</u>
<u>Eng</u>	<u>City</u>	<u>City</u>	
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>
<input type="checkbox"/>	<input type="checkbox"/>	ED	The stamp and signature of the registered geotechnical engineer and geologist who prepared the report. These stamps and signatures are to be on attached to the first interior sheet of the report.
<input type="checkbox"/>	<input type="checkbox"/>	ED	A geologic map showing topography, surface and subsurface geologic features and any geologic limitations to the proposed use.
<input type="checkbox"/>	<input type="checkbox"/>	ED	Depth to bedrock
<input type="checkbox"/>	<input type="checkbox"/>	ED	Geologic hazards
<input type="checkbox"/>	<input type="checkbox"/>	ED	Ability for mitigation or elimination of geologic problems
<input type="checkbox"/>	<input type="checkbox"/>	ED	Subsurface investigative logs and reports

Comments: \_\_\_\_\_

GRADING AND DRAINAGE REPORT – The application for preliminary approval is to include storm water management, erosion, and grading plans describing the methods by which surface water, natural drainages, flooding, erosion and sedimentation loss, and hydrologic hazards will be controlled during and after construction. The plan is to include:

<u>Dev.</u>	<u>Eng</u>	<u>City</u>	<u>City</u>	<u>Code</u>	<u>Description</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>		
<input type="checkbox"/>	<input type="checkbox"/>	ED			Stamps and Signatures of Licensed Professionals – The report prepared is to include the stamps and signatures of the registered professionals who have prepared the report. Their stamps and signatures are to be affixed to the first interior page of the report. The professionals preparing this report is to be licensed professionals in the State of Utah for their respective professions. Those preparing the report are to include: a licensed civil engineer for the grading and drainage portions of the project, a certified erosion control specialist for the erosion and sedimentation loss portions of the work. The City may accept other professionals who have had at least 5 years experience with erosion and sedimentation loss for this portion of the report including landscape architects and civil engineers. The City reserves the right to accept or reject personnel submitted to the City for approval
<input type="checkbox"/>	<input type="checkbox"/>	ED			Grading Plan – The report is to include a grading plan for the project. This plan is to show present topography to include elevations, lines and grades including the location and depth of all proposed fills and cuts of the finished earth surfaces using a contour interval of one or two feet
<input type="checkbox"/>	<input type="checkbox"/>	ED			Graded Area – The report is to include the proposed area to be graded, which is to be clearly delineated on the plan
<input type="checkbox"/>	<input type="checkbox"/>	ED			Drainage and Erosion Calculations and Details; Hydrologic Hazards – The report is to include all assumptions, information, calculations and proposed details used for design and construction of debris basins, impoundments, diversions, dikes, waterways, drains, culverts and other water management or soil erosion control measures are to be shown. Drainage calculations are to determine runoff volume and peak discharge using the “Rational Method”, “SCS Curve Number Method”, or appropriate equivalent. Data provided is to include
<input type="checkbox"/>	<input type="checkbox"/>	ED			Rainfall depth, duration and distribution
<input type="checkbox"/>	<input type="checkbox"/>	ED			Watershed slope and drainage area delineation

- ED Land condition or watershed surface
- ED Topography of drainage area
- ED Description of soil conditions of watershed. Erosion calculations are to employ predictions of soil loss sheet erosion using the Universal Soil Loss Equation or appropriate equivalent. Data to be provided should include factors of:
  - ED Rainfall intensity and duration
  - ED Soil erodibility
  - ED Land slope and length of slope or topography
  - ED Condition of the soil surface and land management practices in use
  - ED Surface cover, grass, woodland, crops, pavements, etc
  - ED Erosion Control During Construction – The grading and drainage report will be prepared by the developer in which he will describe the methods intended to be employed to control the erosion increase while in construction.
- ED Interim Stabilization during Construction - The developer/builder is responsible for interim stabilization of all disturbed areas during the period of construction to prevent erosion offsite effects, and for final stabilization once construction is completed. The report prepared will address these issues
- ED Limit of Watershed/100-Year Flood Plain Maps – The report is to include maps of the development site (1"=200'), which define the boundaries of any 100-year flood plain and the limits of the watershed
- ED Existing Drainage Channels/Permits – The report is to a separate map, which indicates the historic drainage channels associated with the project. Existing drainage channels are to remain as historically located except that roads and utilities may be installed across such channels as approved by the Planning Commission and the City Council. Where these channels must be modified, permits must be obtained from the Utah Division of Water Rights and the US Corps of Engineers, as applicable. The developer is to provide proof of such applications to the City. Structures and or lots are to be arranged so as to insure adequate setbacks from all drainage channels based upon the 100-year storm.
- ED Storm Water Collection Facilities – The report is to show any existing and proposed storm water collection facilities associated with the project. Storm water collection facilities are to be required to be constructed on development sites in accordance with the following:
  - ED Such facilities are to be the first improvements or facilities constructed on the development site
  - ED Such facilities are to be designed to detain the flows of a 10-year storm, while allowing offsite discharge not to exceed 0.1 cubic feet per second per acre
  - ED Such facilities are to be so designed as to divert surface water away from cut faces or sloping surfaces of a fill

- ED Such facilities are to be so designed as to divert surface water away from cut faces or sloping surfaces of a fill
- ED Where drainage channels are required, wide shallow swales lined with appropriate vegetation, rock, or other approved material is to be used instead of cutting narrow, deep drainage ditches.
- ED Flow retarding devices, such as detention ponds, check dams and recharge berms are to be used where practical to minimize increases in runoff volumes and peak flow rates due to development.
- ED Minimize Disturbance of Vegetation Cover – The Developer is to indicate in the report how he intends to minimize the disturbance of vegetative cover within the project. Construction of the development is to be such that it minimizes the disturbance of vegetation cover.
- ED Erosion Control Measures to Reduce Suspended Solids – The report to be prepared is to indicate the erosion control measures, which will be employed at the site, during construction and for the long-term. Erosion control measures on the development site are to be required to minimize the increased suspended solids loading in runoff from such areas. A drainage system is to be designed to control storm water erosion during and after construction.
- ED The report is to indicate that no grading or stripping is to be permitted except as part of a development plan approved by the Planning Commission.
- ED Hydrologic Hazards - A description of any hydrologic hazards associated with the proposed site and adjacent area is required and is to be discussed in the report. Hydrologic hazards might include high water table, surface water impoundments, gradient of the property, flood plains, etc.

Comments: \_\_\_\_\_

The Developer's submittal (meets) (does not meet) the requirements of the detailed preliminary approval requirements.

\_\_\_\_\_  
City Review Engineer

\_\_\_\_\_  
Date

Date Returned to Developer: \_\_\_\_\_



# LAND DISTURBANCE ORDINANCE

## FINAL APPROVAL CHECKLIST

Project Name:		Map ID:	Zoning:
Gross Area (acres):			
Firm Name:		Engineer:	
Address:			
City:		State:	Zip:
Telephone No.:		Fax No.:	
E-mail Address:			
Property Owner:			
Address:			
City:		State:	Zip:
Planning Reviewed By:		Date Received:	
Engineering Reviewed By:		Date Received:	
General Services Reviewed By:		Date Received:	
Fire Reviewed By:		Date Received:	

### INITIAL REVIEW – FINAL APPROVAL

OVERALL REQUIREMENTS – Whether the Developer’s submittal for the final plan meets all the requirements of the Land Disturbance Ordinance and whether the submittal is complete.

Dev.		Resp.	Munic.
Eng	City	City	Code
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>

Description

- |                          |                          |    |  |
|--------------------------|--------------------------|----|--|
| <input type="checkbox"/> | <input type="checkbox"/> | ED | Project complies with all requirements of the Preliminary Approval (Preliminary Plat).                   |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | Project complies with all requirements for the final plan approval as outlined in the City’s ordinances. |
| <input type="checkbox"/> | <input type="checkbox"/> | ED | A revegetation bond has been submitted.  |

Comments: \_\_\_\_\_

The Developer's submittal (meets) (does not meet) the requirements of the final approval requirements.

\_\_\_\_\_  
Executive Secretary Date

Date Returned to Developer: \_\_\_\_\_ Date Sent to Engineering Dept: \_\_\_\_\_

**DETAILED REVIEW – FINAL APPROVAL**

DETAILED REQUIREMENTS – Whether the Developer's submittal for the final plan meets all the requirements of the Land Disturbance Ordinance.

<u>Dev.</u>	<u>Resp.</u>	<u>Munic.</u>	<u>Description</u>
<u>Eng</u>	<u>City</u>	<u>City</u>	<u>Code</u>
<u>Check</u>	<u>Check</u>	<u>Dept.</u>	<u>Section</u>
<input type="checkbox"/>	<input type="checkbox"/>	ED	Project complies with all requirements of the Preliminary Approval (Preliminary Plat).
<input type="checkbox"/>	<input type="checkbox"/>	ED	Project complies with all requirements for the final plan approval as outlined in the City's ordinances.
<input type="checkbox"/>	<input type="checkbox"/>	ED	Revegetation Bond - A Revegetation Bond is required for projects in the Land Disturbance Ordinance in addition to the other bonding requirements set forth in the Draper Subdivision Ordinance. The revegetation bond is used to guarantee the completion of revegetation projects, the stabilization of grading sites, cuts and fills and construction of storm water runoff facilities and the construction of recreation space as required in this Section. This bond is to be in an amount equal to 110-percent of the cost of construction of such work and is to continue for 18 months after the completion date of such projects, improvements or facilities.

Comments: \_\_\_\_\_

The Developer's submittal (meets) (does not meet) the requirements of the detailed final approval requirements.

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City Review Engineer

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Date

Date Returned to Developer: \_\_\_\_\_

c:\CWJ Development Processing Manual\Manual\Checklist\Checklist-LDO-Final Approval 10-21-2004