Common Plan SWPPP for

Kenyon Residence

6645 E Clairetina Court

Huntsville, UT 84317

Owner Name: Tom Kenyon

Owner Street Address: 1210 N 3150 E

Owner City, State, Zip: Layton, UT 84040

Contractor Name: Kenyon Owner/Builder

Contractor Street Address: 1210 North 3150 East

Contractor City, State, Zip: Layton, UT 84040

Date

10-13-2016

1.0 Project Information

Project Name: Kenyon Residence
Address: 6645 E Clairetina Court
City: Huntsville **State:** UT **Zip:** 84317
Latitude: 41.243° North
Longitude: 111.790° West
UPDES Permit Tracking Number: UTRH78537

Owner: Tom Kenyon
Contact Person: Tom Kenyon
Address: 1210 N 3150 E
City: Layton **State:** UT **Zip:** 84040
Telephone Number: (801) 593-0823
Email Address: thomas.kenyon@comcast.net

General Contractor: Kenyon Owner/Builder
Contact Person: _____
Address: _____
City: _____ **State:** _____ **Zip:** _____
Telephone Number: _____
Email Address: _____

1.1

Unknown Features **(although this may be a law under another program, it's not a permit requirement). Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, or Human Remains**

A. Immediately suspend construction operations in the vicinity (100-foot minimum buffer) of the discovery.
B. Verbally notify the Public Works Department and provide them the exact location.
C. Protect the discovery and provide written confirmation of the discovery to the City and State Historic Departments within two calendar days.
D. Contractor and City follow State mitigation laws.

2. Best Management Practices

2.1 SWPPP Sign

A SWPPP Sign must be placed onsite, readable from a public right of way. It must contain at a minimum the UPDES Tracking Number, owner/contractor contact name/phone number/email address. See Common Plan of Development Permit UTRH00000 ("Permit") Part 1.10 and 4.2.11 for more specifics.

2.2 Sensitive Features Control

While sensitive areas are not readily apparent onsite, any sensitive areas found onsite should be clearly marked with environmental fencing and protected per requirements in Permit Part 2.2.

2.2.1 Wetlands

No wetlands occur on this site

2.2.2 Water Bodies within or 30' from Disturbance Boundary

There are not water bodies within 30' of the disturbance boundary.

2.3 Sediment Control

2.3.1 Trap/Filter Sediment at Property Boundary

Silt Fence

A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts. Utilize as a perimeter control on downslope of disturbance area. See BMP SF in Appendix K for more details.

2.3.2 Inlet Protection

Inlet Protection – Silt Bags or gravel bags are the recommended choices.

A sediment barrier erected either around storm drain inlet (gravel bags) or inserted into structures (silt bags). Utilize inlet protection at all storm water inlet boxes which receive runoff from the site. See BMPs IP-Silt Bags and IP-Gravel Bags in Appendix K for more details.

2.3.3 Steep Slopes

There are no steep slopes (greater than 70%) found onsite.

2.3.4 Street Maintenance

Street Sweeping

Prevent sediment from entering storm water by sweeping the streets near construction activities. Utilize equipment most appropriate for the conditions. Vacuum sweepers work more effectively when the area is dry. Brush sweepers work better when the sediment is wet or stuck to the surface. See BMP SS in Appendix K for more details.

Waste Disposal

Controlled storage and disposal of solid waste generated by construction activities. Remove waste daily. Use designated collection areas. Educate personnel regarding location of collection areas, and intended use (toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste). Arrange for periodic collection and disposal at an authorized location. See BMP WD in Appendix K for more details.

2.3.5 Top Soil Preservation

Stockpile Management

Locate stockpiles away from drainage courses. Utilize 6mm plastic or canvas tarp to prevent wind and rain erosion of stockpiled top soil. See BMP Stockpile Management in Appendix K for more details.

2.4 Dust Control and Non-Storm Water Discharges

Dust Control

Control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities. Utilize anywhere dust is generated. See BMP DC in Appendix K as well as Fugitive Dust Control Plan in Appendix D for more details.

Non-Storm Water Discharges

Non-Storm Water Discharges will be on site in the form of water used for dust control, as required by the Fugitive Dust Control Plan. This will be in addition to any other required non-storm water discharges such as any ground water encountered and emergency fire-fighting activities.

2.5 Egress Control

Stabilized Construction Entrance

A stabilized pad of crushed stone. To be located where construction traffic leaves the site to a paved surface. See BMP SCE in Appendix K for more details.

2.6 Waste Management Control

2.6.1 Solid Waste

Waste Disposal

Controlled storage and disposal of solid waste generated by construction activities. Remove waste daily. Use designated collection areas. Educate personnel regarding location of collection areas, and intended use (toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste). Arrange for periodic collection and disposal at an authorized location. See BMP WD in Appendix K for more details.

2.6.2 Construction Spoil

Stockpile Management

Locate stockpiles away from drainage courses. Utilize 6mm plastic or canvas tarp to prevent wind and rain erosion of stockpiled material. Spoil material should be removed from site frequently. See BMP Stockpile Management in Appendix K for more details.

2.6.3 Sanitary Waste

Portable Toilets

Temporary on-site sanitary facilities for construction personnel. Maintain in good working order by licensed service. Arrange for regular waste collection. See BMP PT in Appendix K for more details.

2.6.4 Cement Product Operations

Concrete Waste Management

Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors. Do not allow excess concrete to be dumped on-site, except in designated areas. See BMP CWM in Appendix K for more details.

2.6.5 Construction Wastewater

Vehicle and Equipment Cleaning

Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment washing and steam cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and training employees and subcontractors. Utilize off-site facilities as much as possible. If on-site washing must occur, use designated bermed areas to prevent wash water contact with storm water. See BMP VEC in Appendix K for more details.

2.6.6 Non Aqueous Waste

Management of Paint/Solvents/Stucco/dyes, etc.

All wash water for paints, solvents, oil, fuel, or any other non aqueous waste shall be contained in a leakproof pit or bin for containment and removal from site. Utilize BMP SCU Spill Clean Up in Appendix K for prevention and response procedures.

2.7 Management of Construction Materials Control

2.7.1 Storage of Construction Materials

Materials Storage

Controlled Storage of on-site materials. Designate a secured area with limited access. Ensure all on-site personnel utilize designated storage area. See BMP MS in Appendix K for more details.

2.7.2 Construction Staging and Spoils

Stockpile Management

Locate stockpiles away from drainage courses. Utilize 6mm plastic or canvas tarp to prevent wind and rain erosion of stockpiled material. Spoil material should be removed from site frequently. See BMP Stockpile Management in Appendix K for more details.

2.8 Final Stabilization

Seeding and Planting

Seeding of grass and plantings of trees, shrubs, vines and ground covers provide long-term stabilization of soil. Grasses can be planted for temporary stabilization. See BMP SP in Appendix K for more details.

3. Spill Prevention and Response Plan

Spill Clean-Up

Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters. Educate personnel on prevention and clean-up techniques. Clean up spills/leaks immediately and remediate cause. See BMP SCU in Appendix K for more details.

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittee. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Agency	Phone Number
National Response Center	(800) 424-8802
Division of Water Quality (DWQ) 24-Hr Reporting	(801) 538-6146; (801) 536-4123
Utah Department of Health Emergency Response	(801) 580-6681
Huntsville Fire Department	(801) 745-3420

Minimum spill quantities requiring reporting:

Material	Media Released To	Reportable Quantity
Engine oil, fuel, hydraulic & brake fluid	Land	25 gallons
Paints, solvents, thinners	Land	100 lbs (13 gallons)
Engine oil, fuel, hydraulic & brake fluid	Water	Visible Sheen
Refrigerant	Air	1 lb
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100 lbs (13 gallons)

Emphasis to:

1st Priority: Protect all people (including onsite staff)
2nd Priority: Protect equipment and property
3rd Priority: Protect the environment

1. Make sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.
2. Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave area and call 911. LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.
3. Stop the spill source and contain flowing spills immediately with spill kits, dirt or other material that will achieve containment.
4. Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers
5. If spilled material has entered a storm sewer, regardless of containment; contact the Municipal Storm Water Division.
6. Cleanup all spills (flowing or non-flowing) immediately following containment. Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials AND DO NOT FLUSH AREA WITH WATER.
7. Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.
8. Report the reportable quantity to the Municipal Storm Water Division.

Emergency Numbers

Utah Hazmat Response Officer 24 hrs	(801)-538-3745
City Police Department	(801)-778-6602
Municipal Storm Water Division	(801)-399-8374

4. Site Map(s) *(see permit part 4.2.3)*

A Sediment and Erosion Control Plan (SECP) is provided in Appendix B.

The SWPPP site maps shall include but not limited to:

1. *boundaries of project/property*
2. *boundaries of disturbance (including areas outside of property boundaries)*
3. *show slopes on site*
4. *location of structures/facilities*
5. *locations of :*
    a. *stockpiles for soils and materials*
    b. *construction supplies*
    c. *portable toilets*
    d. *garbage/trash containers*
    e. *egress points/track out pads*
    f. *concrete washout pits or containers*
6. *water bodies, wetlands, natural vegetative buffers*
7. *placement of all BMPs, perimeter, erosion control, sediment control, inlet, etc.*
8. *storm water inlets and storm water discharge points (where storm water drains off the site)*
9. *areas that will be temporarily or permanently stabilized on the site*

{Refer to the regulation for specific requirements}

5. Record Keeping

Update the SWPPP as required by Permit. Keep accurate logs of training, amendments, inspections/corrective actions, rainfall events and all other items required by the Permit and found throughout the appendices of this SWPPP.

SWPPP Inspections-Maintenance-Correction Report

Inspections are required every 7 calendar days. Repair or replace BMPs prior to need or by end of week whichever comes first. Update the Inspection-Maintenance-Correction Report weekly. Section 3.2.2 requires daily maintenance of pavements and site grounds. See the Inspection-Maintenance-Correction Reports in Appendix E.

Changes to the SWPPP

See the Amendment Log in Appendix F. Keep records of all amendments in this log.

Training

Training Logs and Documents are to be kept current and filled out in Appendix H.

6. Discharge Information

Receiving Waters

1. **Storm water from the site flows into a storm drain system in Innsbruck Drive, which subsequently drains into Smith Creek to the northwest. Smith Creek then flows northerly to Pine View Reservoir**

The site discharges into an MS4, which is Unincorporated Weber County

Impaired Waters (refer to http://wq.deq.utah.gov in the left hand column to determine status of receiving water body).

Surface Water	Is this surface water impaired?	Pollutant(s) causing the impairment	Has a TMDL been completed?	Pollutant(s) for which there is a TMDL
Smith Creek	☐ Yes X No	N/A	☐ Yes X No	N/A

7. Certification, Notification and Delegation(see permit part 4.2.9)

Owner Certification: See documents filed in Appendix G.
Operator Certification: See documents filed in Appendix G.
Delegation of Authority: Provided by Contractor as necessary – see Appendix G.
Subcontractor Certification: Provided by Contractor as necessary – see Appendix G.
Notice of Permit Transfer Requirements: Provided by Contractor as necessary – see App. G.

SWPPP Appendices

Appendix A: General Location Map

Appendix B: SWPPP Site Maps

Appendix C: UPDES Permit(UTRH00000)

Appendix D: Permits; NOI, MS4

Appendix E: Inspection-Maintenance-Correction Report

Appendix F: SWPPP Amendment Log

Appendix G: Certifications, Agreements, Delegation of Authority

Appendix H: Training Log

Appendix I: Construction Plans

Appendix J: Additional Information

Appendix K: BMP Specifications and Details

APPENDIX A

GENERAL LOCATION MAP

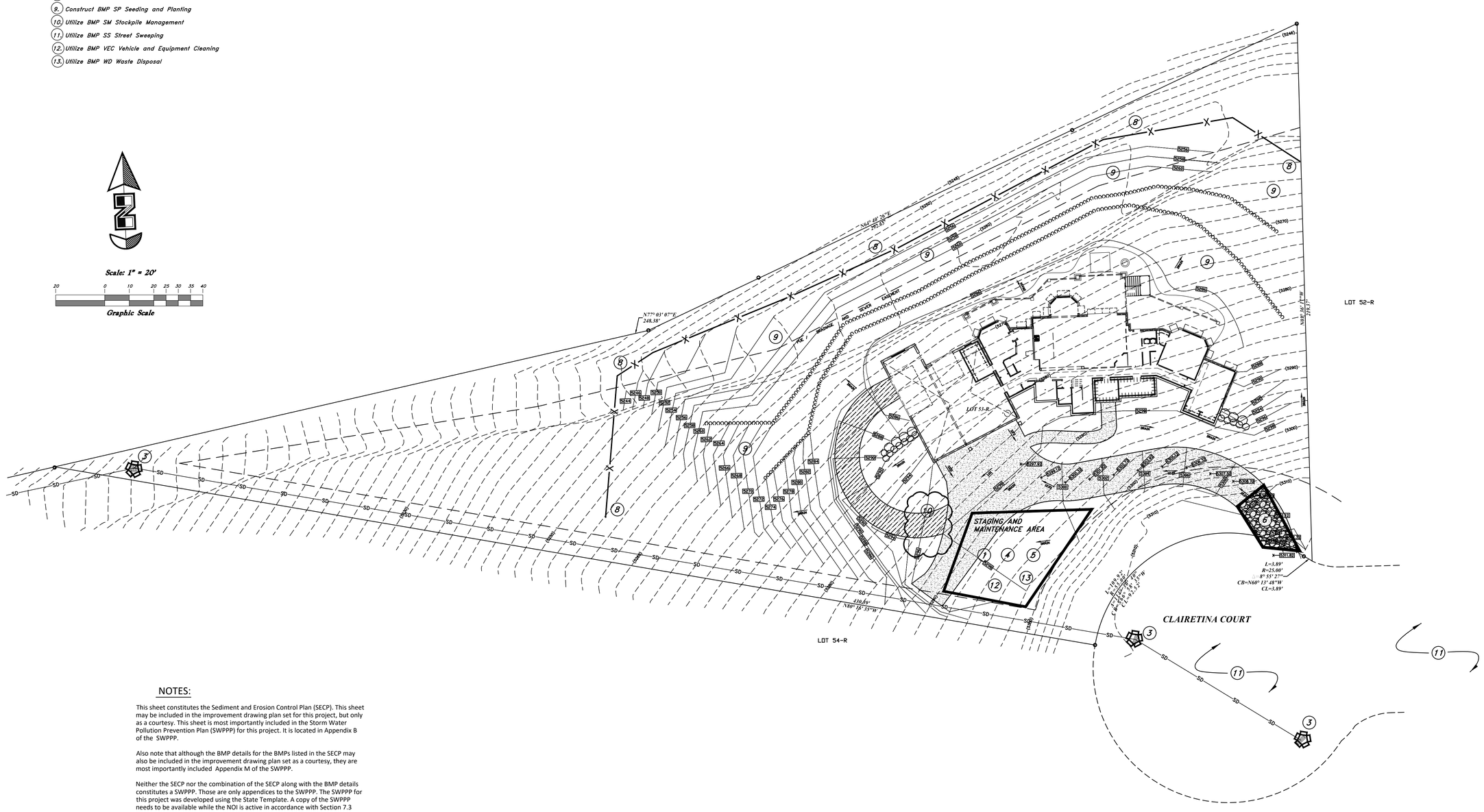
APPENDIX B

SWPPP SITE MAP

(SEDIMENT AND EROSION CONTROL PLAN – SECP)

SWPPP BMP's

1. Construct BMP CWM Concrete Waste Management
2. Utilize BMP DC Dust Control
3. Construct BMP IP Inlet Protection (Gravel Bags or Silt Bags are the recommended choices)
4. Utilize BMP MS Materials Storage
5. Utilize BMP PT Portable Toilets
6. Construct BMP SCE Stabilized Construction Entrance
7. Utilize BMP SCU Spill Clean-Up
8. Construct BMP SF Silt Fence
9. Construct BMP SP Seeding and Planting
10. Utilize BMP SM Stockpile Management
11. Utilize BMP SS Street Sweeping
12. Utilize BMP VEC Vehicle and Equipment Cleaning
13. Utilize BMP WD Waste Disposal



NOTES:

This sheet constitutes the Sediment and Erosion Control Plan (SECP). This sheet may be included in the improvement drawing plan set for this project, but only as a courtesy. This sheet is most importantly included in the Storm Water Pollution Prevention Plan (SWPPP) for this project. It is located in Appendix B of the SWPPP.

Also note that although the BMP details for the BMPs listed in the SECP may also be included in the improvement drawing plan set as a courtesy, they are most importantly included Appendix M of the SWPPP.

Neither the SECP nor the combination of the SECP along with the BMP details constitutes a SWPPP. Those are only appendices to the SWPPP. The SWPPP for this project was developed using the State Template. A copy of the SWPPP needs to be available while the NOI is active in accordance with Section 7.3 (Page 47) of the Utah Construction General Permit (UPDES Permit No. UTRC00000)

REV	DATE	DESCRIPTION

GREAT BASIN ENGINEERING
5746 SOUTH 1475 EAST OGDEN, UTAH 84403
MAIN(801)394-4515 SLC(801)521-0222 FAX(801)392-7544
WWW.GREATBASINENGINEERING.COM

Sediment and Erosion Control Plan

Kenyon Residence

A part of the Southwest 1/4 of Section 13, a part of the Northeast 1/4 of Section 23, and a part of the Northwest 1/4 of Section 24, T6N, R1E, SLB&M, U.S. Survey

Oct, 2016

SHEET NO.

SWPP

96N120 Waterline

APPENDIX C

UPDES PERMIT

(UTRH00000)

General Permit for Storm Water Discharges from Construction Activities

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY,
DIVISION OF WATER QUALITY

General Storm Water Permit for Construction Activity
Connected with Single Lot Housing Projects
Utah Pollution Discharge Elimination System Permit No. UTRH00000
(Common Plan Permit)

This Permit is issued in compliance with the provisions of the Utah Water Quality Act (Utah Code Annotated 19-5, as amended) the federal Water Pollution Control Act (33 United States 1251 et. seq., as amended by the Water Quality Act of 1987, Public Law 100-4), and the rules and Regulations made pursuant to those statutes.

This permit applies to "construction activity" for a single lot disturbing a total of one acre or less and for construction activities related to residential dwellings. A single lot covered by this permit is part of a common plan of development or sale (see definitions in Part 6).

Issuance of this permit does not authorize any permittee to violate water quality standards. The permittee shall develop best management practices (BMPs) and engage in activities that will protect water quality during the construction project.

This permit shall become effective on February 1, 2016.

This permit and the authorization to discharge expire at midnight on January 31, 2021.

Signed this 20 day of January, 2016

Walter L. Baker, P.E.
Director

DWQ-2016-002081

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General Storm Water Permit for Construction Activity Connected with Single Lot Housing Projects
UPDES Permit No. UTRH00000

1. COVERAGE UNDER THIS PERMIT. Conditions for coverage under this permit.

1.1. Coverage Limitations. A project site (see definition of a project site in Part 6) is eligible for this permit if it meets the following requirements:

1.1.1. It is found within the State of Utah but is not in Indian Country,

1.1.2. The construction activity is related to residential building on an individual lot or parcel.

1.1.3. It disturbs a total of one acre or less over the duration of the construction project,

1.1.4. *Multiple site coverage*:

1.1.4.a. This permit may apply to multiple lots with the contingency that each lot be covered under a different permit tracking number (separate permit coverage for each lot). Lots do not necessarily need to be located within the same sub-division.

1.1.4.b. If multiple lot coverage is desired under one permit, it may be obtained under the General Permit for Discharges from UPDES Permit No. UTRC00000. Multiple lots may be covered under one tracking number (one permit coverage) provided that UTRC00000 is the controlling permit, and all lots covered under that tracking number are within the same sub-division.

1.2. Discharges Allowed. This permit allows discharges of storm water from construction activity at a project site, provided the storm water discharge meets the requirements within this permit.

1.3. Non-Storm Water Discharges. Other non-storm water discharges that are allowed are:

1.3.1. Flushings from potable or irrigation water sources where they have not been used for a washing or cleaning activity;

1.3.2. Water used for dust control;

1.3.3. Spring water and groundwater that have not been soiled with sediment or other pollutants from construction activity;

1.3.4. Emergency fire-fighting activities, and;

1.3.5. Footing drains that have not been soiled from construction activity.

1.4. How to Obtain Permit Coverage. The permit may be obtained online at the Utah Department of Environmental Quality (DEQ) UPDES Permits website at http://www.waterquality.utah.gov/UPDES/stormwatercon.htm. Click on "Application for a Storm Water Permit". Create an account, or if an account has already been created, proceed with providing the information requested. **The notice of intent (NOI) for this permit is the same NOI that is used for the UTRC00000 permit.** To complete the application process the permittee must pay a permit fee. The NOI may be filled out electronically using the online permit application system. The NOI can also be submitted using a paper form obtained from the same website cited above along with the permit fee. The paper form and fee can either be hand delivered to Utah Division of Water Quality [DWQ], 195 North 1950 West, Salt Lake City, Utah, 3rd floor in the MASOB building, or mailed to DWQ, P.O. Box 144870, Salt Lake City, Utah 84114-4870. When a party receives coverage under the permit, they will receive a permit

tracking number and the opportunity to copy the NOI for "proof of coverage." A copy of this permit may be downloaded from the DEQ website at http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm.

1.5. Signature on the NOI. The owner and the general contractor, which in some cases could be the same party, must sign the paper copy of the NOI (see 5.16.1.a) and place it in the storm water pollution prevention plan (SWPPP) (see 4.2.8).

1.6. Permit Renewal. This permit must be renewed yearly on the anniversary date of the original permit application. This is done by logging onto the account created at the time of NOI application, refreshing the information on the NOI, and paying the yearly permit fee.

1.7. Start and end of Permit Coverage. Permit coverage begins immediately upon completion and submission of an NOI and the permit fee. If the NOI is submitted electronically on-line permit coverage begins on that day. If the NOI is submitted by mail permit coverage begins when the NOI is received and entered into the on-line data base by DWQ staff. For projects within the jurisdiction of a regulated MS4 (see definitions in Part 6; the list of regulated MS4's is found on http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm), the permittee must also notify and receive approval for the project from the regulated MS4 having jurisdiction before the project may commence (see 4.2.10.). The permit fee is an annual fee that must be paid yearly on the anniversary date of permit issuance. The permit will remain effective until or unless any of the following occurs:

1.7.1. The permittee completes the notice of termination (NOT) process, as outlined in section 1.8,

1.7.2. The permittee fails to submit the yearly permit fee,

1.7.3. Aside from permit coverage, which may be renewed annually by the permittee, as needed, this general permit expires every 5 years and normally is renewed through a public notice process by DWQ. In the event that the permit nears the end of its 5 year cycle, and the year of permit coverage for a construction site extends beyond the expiration date for the permit, the permittee must request continuing coverage through the permit renewal process. Otherwise permit coverage for a construction site will terminate when the general permit expires. Renewal of permit coverage can be done in the online electronic storm water data base up to 12 months prior to the expiration of the permit, or by letter received by DWQ before the expiration date of the specific permit coverage in question where concurrently all entries in the NOI can be updated as needed.

1.7.3.a. If a renewal permit has been issued and is in place at the expiration date of this permit, this permit will terminate and coverage under the renewed permit will begin on the expiration date unless 1.7.1 has been invoked by the permittee.

1.7.3.b. If a renewal permit has not been issued, this permit will be administratively extended until a renewal permit is issued or it is determined that this permit will not be continued. If a renewal permit is issued, and the permittee indicated a desire for continuing coverage under the new permit, coverage

will continue for the permittee under the new permit coverage unless 1.7.1 is invoked. If the permit is discontinued, the permittee must continue coverage under another general permit or an individual permit.

1.7.4. Coverage under this permit is rescinded or revoked for administrative reasons. In this case, the permittee will be notified in writing from the Director and will be required to apply for coverage under a different general or individual UPDES permit. This permit is terminated on the day coverage under another permit begins.

1.8. Notice of Termination. The permittee must terminate the permit by submitting an NOT when the project is completed. The NOT must be filed and retained for 3 years after the permit has been terminated (see 3.7). To terminate the permit, the permittee must comply with either 1.8.1 or 1.8.2, outlined below, and must comply with 1.8.3 if the project is within the jurisdiction of a regulated MS4 (see http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm for regulated MS4s):

1.8.1. The landscaping is completed and the site meets "final stabilization" requirements (see part 6, definitions, for final stabilization).

1.8.2. When a project (residential building) is completed but 'final stabilization' is not established, the building must be in process of being sold and ready for homeowners to take possession. If built by the homeowners, they must be in the process of moving in or already have moved in the house. The lot must have perimeter controls on downslope boundaries and surface stabilization controls on all surfaces that are 20 % (1 to 5 slope, or 11.3 derees) or greater to prevent erosion and soil migration offsite;

1.8.3. The permittee must submit a paper copy of a NOT form to the MS4 of jurisdiction and schedule a final inspection (with the MS4). Termination is complete upon approval of the final inspection from the local MS4, or from DWQ if outside the jurisdiction of a regulated MS4.

1.9. Water Quality: Through the design of appropriate BMPs, it is expected that the permittee will achieve compliance with water-quality standards. If additional information becomes available indicating a project site is causing or is contributing to a violation of water quality standards or an existing total maximum daily load (TMDL), coverage under this permit may be revoked or rescinded, and the permittee may be required to get coverage under an individual UPDES permit or another UPDES general permit. If this occurs, the owner and the general contractor will be notified in writing by the Director and given instructions on how they must proceed.

1.10. Requirement to Post a Notice of Permit Coverage. The permittee must post a sign at the project site that includes the UPDES Permit tracking number, owner or general contractor contact name, a phone number for the owner or general contractor, an email address for the owner or general contractor, and in the case of an electronic SWPPP, a web address or information on how to access the electronic SWPPP. The notice must be posted with lettering large enough to be readable from a public right-of-way.

2. POLLUTION PREVENTION REQUIREMENTS

2.1. Structural Controls. Minimize sediment transport off the site as follows:

2.1.1. *Stockpiled Material.* Stockpiled material must not be stored on an impervious surface, except a material that will not be transported with precipitation, such as two-inch graded and washed gravel, unless it will be permanently placed and the holding area will be swept clean the same day it is dropped. If stored temporarily for more than a day, it must be placed as far as feasibly possible from roads or other impervious surfaces, storm water inlets, or water bodies, and with stockpile perimeter runoff controls utilized.

2.1.2. *Perimeter Controls.* Perimeter controls such as silt fences, straw wattles, other filter berms, cut back curbs, vegetative buffers, etc., must be properly placed on the downslope sides of the project to prevent sediment from leaving the site during a storm event. As perimeter controls become loaded to 1/3 of capacity, they must be cleaned.

2.1.3. *Inlet Protection.* Storm-drain inlets on the project site and on adjacent roads immediately down gradient from the site must be protected if they receive drainage from the active constructionsite. Protection may be, but is not limited to, rock wattles, sand bags, proprietary devices, or other. Rock wattles and sand bags are not advised for use in winter because they can be destroyed or removed by snow plows.

2.2. Protection of Critical or Sensitive Areas: Critical or sensitive areas such as preservation of the drip line around trees, wetlands, buffer zones by water bodies, etc., must be separated and isolated by clearly marking the areas with environmental fencing.

2.3. Managing the Site to Minimize Sediment Transport Offsite.

2.3.1. The total area of soil disturbance at any one time must be minimized by disturbing only the area necessary to complete that stage of construction in the construction process.

2.3.2. Soil disturbances on steep slopes must be minimized. For purposes of this permit a steep slope is 70% (or 1 to 1.66, or 35 degrees), or greater. This means avoiding a disturbance of soils on steep slopes or if disturbing the soil surface is necessary providing a robust surface stabilizing cover (such as geomats, environmental blankets, or other robust slope stabilizing control) to prevent erosion.

2.3.3. Storm water volume and velocity must be controlled to minimize soil erosion and sediment transport by methods such as allowing or not obstructing infiltration and using velocity-control devices to reduce energy in runoff flowing on slopes.

2.3.4. Storm water discharges leaving the site, including both peak flowrates and total storm water volume, must be controlled to minimize channel and stream-bank erosion and scour in the immediate vicinity of discharge points. This may be accomplished using experience, estimates, and good judgement; unless unusual or extraordinary site conditions present a potential for excessive erosion, hillside/impoundment collapse, environmental/safety hazards, or other site problems; for which a professional engineer must be consulted.

2.3.5. *Thirty-Foot Vegetative Buffer*. If a waterbody is adjacent to, within 30 feet from, or passing through the project boundaries, a 30-foot natural buffer between the waterbody and construction activity must be provided. If a 30-foot natural buffer cannot be provided, a substitute control measure equivalent to the 30-foot buffer must be provided, or the SWPPP must contain an explanation why neither is feasible. If it is not feasible to maintain a 30-foot natural buffer, as much natural buffer as is possible must be preserved and coupled with placement of additional erosion and sediment controls designed, implemented, and maintained to substitute and be equivalent to the 30-foot natural buffer.

The requirement for a natural buffer or substitute controls does not apply to any area outside of the project boundaries, but if a waterbody is within, for example, 20 feet from the project boundary, there must be 10 feet of natural vegetative buffer or substitute controls, or if within 25feet from the project boundary, there must be 5 feet of natural vegetative buffer or substitute controls, and so forth.

2.3.5.a. Substitution for a natural buffer should be calculated with models such as USDA's RUSLE2 or WEPP, or by using SEDCAD, SEDIMOT, or other similar models. In lieu of using a model for calculation of a substitution buffer, the permittee shall deploy the following:

2.3.5.a.i. For every full 9 feet of natural buffer that is not provided on slopes up to 10 percent, one row of an effective perimeter control, such as a silt fence, staked straw wattle, proprietary or other filter berm, or other perimeter control, must be properly placed. For example, if only 15 feet of natural buffer can be provided, the permittee will substitute one row of a perimeter control in addition to the 15 feet of natural buffer to make up for the 15 feet of buffer that could not be preserved.

2.3.5.a.ii. In addition to the requirements above for substitutions in place of the 30-foot natural buffer, on slopes between 10 percent and 30 percent, five feet of surface stabilization must be placed down gradient of and between each perimeter control substituted. For slopes steeper than 30 percent, 6 feet of surface stabilization must be placed downgradient of and between each perimeter control substituted, such as mulch, hydromulch, wood chips, bark, compost, erosion mat, etc., but excluding tackifiers.

2.4. Good Housekeeping Measures. The permittee must address the following:

2.4.1. *Track Out*. Track-out pads (see definitions) and or rumble strips (see definitions) must be used to prevent dirt/mud tracked on streets as vehicles leave the site. If traffic onto and off the site is not frequent, a site operator may impose a blanket prohibition of vehicle traffic onto the site, allowing for the occasions to deliver and unload, but afterwards providing sweeping and/or cleaning of tracked out dirt (keep in mind that vehicles leaving a muddy site with no track out protection can track mud for several

blocks – the operator is liable for all track out from the site except for a dirt stain after sweeping -- see note after 3.2.2.). Dirt or mud tracked out on the street must not be washed or hosed into a storm drain. Tracked out mud or dirt on the street must be swept and/or scraped up as needed every day (see 3.2.2).

2.4.2. *Curb Ramps*: This permit prohibits the intentional placement of dirt and/or mud on paved streets or sidewalks. Curb ramps may be crushed rock, wood or steel ramps, or another material that does not wash away with storm water.

2.4.3. *Waste and Debris*. The site must be cleaned of waste and debris daily (see daily self-inspection 3.2.2). Waste and debris must be contained and secured adequately to prevent scattering from wind until it is removed from the site and disposed of properly.

2.4.4. *Portable Toilet*. Portable toilets must be tied down, staked down, or secured using other measures to prevent turn over, and they must be placed away from a road gutter, storm water inlet, or waterbody.

2.4.5. *Washing of Concrete, Stucco, and Paint Equipment*. A plastic film-lined pit or sealed container must be provided for washout of equipment used for concrete, stucco, and water-based paint. After completion of concrete, stucco, and paint tasks, the permittee must dispose of the waste by drying and sending solids to a landfill. Oil-based paint cleanout must be done in containers, taken off-site, and disposed of separately.

2.5. Soil Compaction/Top Soil. Topsoil must be preserved and placed on areas to be landscaped or areas planned for receiving vegetative cover, unless infeasible. Soil compaction must be minimized on areas that will not be used for support of structural elements such as roads, parking areas, structures, etc., unless infeasible.

2.6. Stabilization Requirement. Stabilization requirements are as follows:

2.6.1. *Stabilization requirements for areas that receive 20 inches of rainfall annually or greater*: Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site or have temporarily ceased on any portion of the site for greater than 14 calendar days. Stabilization can be sodding, planting, application of mulch (wood chips, rock, gravel, bark, compost, cat tracking on straw, hydromulch, etc.), application of geotextiles or erosion blankets, application of a tackifier, seeding (including preparation for germination and growth), a combination of these methods, or other method.

2.6.2. *Stabilization or equivalent requirements for arid and semi-arid areas (areas receiving less than 20 inches of rainfall annually)*: Stabilization for visually flat areas is not required (roughly up to 5 percent, 1 to 20 slope, or 2.3 degrees slope). Areas with slopes up to roughly 20 percent (1 to 5 slope or 11.3 degrees) must have, at minimum, velocity-control devices in every area where storm water collects and flows, spaced close enough across the flow to stop erosion (see also 2.3.3). Soil surface stabilization such as sodding, planting, hydromulch, compost, bark, cat tracking on straw, gravel,

geotextiles, erosion blankets, or other stabilization methods is required on all other sloped areas, increasing the robust nature of stabilizing cover commensurately with increasingly steeper slopes.

2.6.3. *Permanent Stabilization for Arid areas.*

2.6.3.a. In addition to requirements above (see 2.6.2), permanent stabilization requires seeding on all areas that are not covered with permanent stabilization elements or structural elements such as building structure or pavement, or that are engineered or intended for structural purposes like graveled parking or dirt roads.

2.6.3.b. Disturbed areas on projects located outside of populated and developed areas and where no irrigation water is available and where future periodic landscaping maintenance is not planned must be reclaimed with a seed mix of plants indigenous to the area or tolerant to the local climatic conditions that does not include invasive species. Velocity-control devices may be permanent or temporary. If velocity-control devices are intended for temporary use, they must be biodegradable and designed durable enough to withstand extreme weather.

2.7. Construction Dewatering. Construction dewatering can occur onsite without an additional UPDES permit if it is infiltrated or contained onsite and is not discharged offsite. Otherwise, construction dewatering discharges must be permitted under the General Permit for Construction Dewatering and Hydrostatic Testing UPDES Permit UTG070000, which can be obtained online through submittal of an NOI at https://secure.utah.gov/waterquality.

2.8. Pollution Prevention Measures. The permittee must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must address the following:

2.8.1. *Vehicle, Wheel, and Other Washing.* Minimize the discharge of pollutants from equipment and vehicle washing, wheel-wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge

2.8.2. *Exposure to Pollutants.* Minimize the exposure of building materials, building products, construction wastes, trash (see 2.4.3), landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste (see 2.4.4), and other materials present on the site to precipitation and to storm water. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of storm water contamination (e.g., final products and materials intended for outdoor use).

2.8.3. *Leaks and Spills.* Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

2.9. Prohibited Discharges. The following discharges are prohibited:

2.9.1. Wastewater from washout or cutting of concrete (see 2.4.5),

2.9.2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials (see 2.4.5),

2.9.3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance,

2.9.4. Soaps or solvents used in vehicle and equipment washing.

3. SELF-INSPECTION REQUIREMENTS.

3.1. Inspector Qualifications. Weekly inspections (see 3.2.1 below) must be done by a qualified person. A qualified person means a person knowledgeable in the principles and practices of erosion and sediment control that possesses the skills to:

3.1.1. Assess conditions at the construction site that could impact storm water quality,

3.1.2. Assess the effectiveness of a storm water control measure selected to control the quality of storm water discharges from the construction activity.

3.2. Self-Inspections.

3.2.1. *Weekly Self Inspections*: Self-inspections must occur every 7 days. A written report is required (see 3.4).

3.2.2. *Daily Site Check*: Each day of construction activity, the site must be inspected for dirt in the street and trash on the site. Streets must be swept clean (see note below), if soiled. Dirt must be removed off the street (not swept or washed into the storm drain system). Trash on the site must be picked up and disposed of into trash containers (see 2.4.3.) or disposed of off-site (e.g., municipal/private garbage collection service or construction waste landfill). Sub-contractors must be held responsible by the permit holder to perform these duties in accordance with this paragraph for the activities they are contracted to perform. A written report is not required, however the operator will keep a daily log (for the active construction days) listing the initials of the person doing the site check.

Note: Swept clean means sweeping and scraping. Scraping if there is dirt left behind that is crusted and that sweeping will not pick up. This does not mean removing the microscopic layer of dust or the minute amounts of dirt in the cracks and crevices of the surface left behind staining the pavement.

3.3. Weekly Self-Inspection Requirements.

3.3.1. *Areas to check include the following:*

3.3.1.a. Areas that have been cleared, graded, or excavated that are not stabilized,

3.3.1.b. All storm water control measures, including perimeter controls,

3.3.1.c. Material piles, waste-disposal containers, sanitary facilities, loose trash, litter, washout areas, portable toilets, track out pad, egress points (if any), etc.,

3.3.1.d. Storm water conveyances through the site, treatment areas, and drainages,

3.3.1.e. All storm water discharge points, street gutters, storm water inlets,

3.3.1.f. Areas that have been temporarily stabilized,

3.3.1.g. Areas that have been permanently stabilized and are completed do not need further inspections.

3.3.2. *Items to check include the following*:

3.3.2.a. All erosion and sediment controls and other pollution prevention controls

have been installed, are operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained.

3.3.2.b. Identify any locations where new or modified storm water controls are necessary.

3.3.2.c. Signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to discharges from your site,

3.4. Weekly Inspection Reports. The weekly self-inspection report must be written within 24 hours of inspection and must include:

3.4.1. The initials of the person doing the inspection,

3.4.2. The date of the inspection,

3.4.3. The weather during the inspection,

3.4.4. The problems that were found needing correction (as they pertain to 3.3.1 and 3.3.2 above),

3.4.5. The date when corrective action is completed,

3.4.6. All self-inspection reports must be filed with other permit records regarding the permit. Inspection reports must be available during an oversight inspection.

3.5. Corrective Action: Corrective action must be completed before the next weekly inspection.

3.6. Inspections by an Oversight Authority. A copy of an oversight inspection report must be filed and be available for review during other oversight inspections.

3.7. Record Keeping. Records regarding this permit, the NOI, the NOT, the SWPPP, inspection reports, other related information and documents must be preserved for 3 years after the submission of the NOT (see 5.10).

4. STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

4.1. SWPPP Requirement. The permittee must prepare a SWPPP before the NOI for the project is submitted. The SWPPP must address all the applicable requirements in Part 2.

4.1.1. *SWPPP Site Design.* The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation; the nature of resulting storm water runoff; and soil characteristics, including the range of soil particle sizes expected to be present onsite. These may be accomplished using experience, estimates, and good judgement, unless unusual or extraordinary site conditions create hazards for which a professional engineer must be consulted.

4.1.2. *Surface Outlets*: When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

4.2. Contents of a SWPPP. A SWPPP must contain the following:

4.2.1. *Contacts.* The contacts for the site with contact information (name, address, telephone, email) including owner, general contractor, and any other party that significantly affects the implementation of the SWPPP or has responsibilities over the SWPPP.

4.2.2. *Sequence and Estimated Dates of Construction Activities.* Listed in the sequence with estimated dates including the following:

4.2.2.a. Start and end of excavation activities, initial excavation, backfill excavation and final grading,

4.2.2.b. Any temporary or permanent cessation of earth-disturbing activities,

4.2.2.c. Start and end of landscaping if this is done as part of the construction activity before the home is sold.

4.2.3. *Site Map or Chart.* A site map may be hand drawn (as close to scale as possible) or may be a copy of an architect drawing including the following information:

4.2.3.a. Boundaries of the property,

4.2.3.b. Boundaries of soil surface disturbances, including any outside the boundaries of the property,

4.2.3.c. Slopes, including areas of steep slopes,

4.2.3.d. Locations of stockpiles of soils, storage of construction materials, portable toilets, trash containers, concrete washout pits or containers, egress points, and track out pads,

4.2.3.e. Waterbodies, wetlands, and natural buffer areas,

4.2.3.f. Locations and types of BMPs or storm water control measures for the control and/or treatment of storm water flowing onto, through, and/or offsite,

4.2.3.g. Locations of storm water inlets, storm water discharge points going off site,

4.2.3.h. Areas that will be temporarily or permanently stabilized during the construction period.

4.2.4. *Thirty-Foot Natural Buffer.* The SWPPP must show the dimensions and placement of the 30-foot natural buffer, the substitute control measures, or a detailed explanation of why a natural buffer or substitute control measure could not be applied.

4.2.5. *Pollutants.* A list of construction site pollutants including the pollutant-generating activity, and an inventory of pollutants for each pollutant generating activity (e.g., paints, solvents, form oil, fuels, and other chemicals; applications, materials, and liquids that if released could pollute storm water).

4.2.6. *Waste Management.* Waste management procedures including soil removal, clearing debris removal, demolition removal, trash disposal, construction-waste disposal, and sanitary-waste disposal.

4.2.7. *Training.* The permittee will ensure that each subcontractor or utility provider is aware of their responsibilities for keeping soil on the site and preventing pollution. The permittee must keep in mind that they are responsible for and may be issued fines for poor performances by their subcontractors and utility providers. Consideration will be given if the permittee can document when and what instructions were given to the subordinate party.

4.2.8. *NOI and Permit.* The SWPPP must contain a copy of this permit and a copy of the NOI for the project.

4.2.9. *SWPPP Signature and Certification.* The SWPPP must be signed and certified by both the Owner and the General Contractor in accordance with 5.16.1.a.

4.2.10. *MS4 Approval of Project.* For areas where projects are within a regulated MS4's jurisdiction (see definitions in Part 6; the list of regulated MS4's is found on http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm), the SWPPP must contain the signature and date of the MS4 reviewer who has approved the proposed project for construction (see 1.7.).

4.2.11. *Availability of the SWPPP.* The SWPPP must be available at the construction site covered under this permit during onsite construction activity, unless the SWPPP is available online. If the SWPPP is available online there must be a sign (see 1.10) that describes where the SWPPP can be accessed online. The SWPPP is a plan for the site, and workers must be able to refer to the SWPPP and update it as needed to manage the site (including SWPPPs found on the internet). The SWPPP is not required to be on the site when construction workers leave for the day or when there is no activity occurring on the site, but at all times there must be posted contact information where the SWPPP can be obtained (see Part 1.10). The SWPPP must be made available within 24 hours to DWQ representatives or other oversight inspectors, e.g., U.S. Environmental Protection Agency [EPA] or a local MS4, on request, or immediately during an inspection on the site when there are workers and activity at the site.

4.2.12. *Required Modifications of the SWPPP.* The SWPPP must be modified as follows:

4.2.12.a. During inspections when it is determined from observations of site conditions that storm water control measures are:

4.2.12.a.i. Not adequate or not shown in the SWPPP, or

4.2.12.a.ii. Changes in the SWPPP are necessary for compliance with this permit.

4.2.12.b. When an oversight authority determines that the SWPPP is not adequate based on missing a required SWPPP or permit item, not addressing pollutants properly, not being up to date and reflecting current site conditions, or not being clear, thorough, and understandable.

4.2.13. *SWPPP Modifications Deadline.* Modifications to the SWPPP from inspections or oversight authority direction must occur before or during the next weekly inspection.

5. STANDARD PERMIT CONDITIONS.

5.1. Duty to Comply.

5.1.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Utah Water Quality Act (the Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

5.1.2. *Penalties for Violations of Permit Conditions*

5.1.2.a. *Violations*. The Act provides that any person who violates the Act, Utah wastewater or storm water rules, or conditions of a permit issued under the Act, is subject to a fine of $10,000 per day.

5.1.2.b. *Willful or Gross Negligence*. The Act provides that any person who discharges a pollutant to waters of the State as a result of criminal negligence or who intentionally discharges is criminally liable and is subject to imprisonment and a fine of up to $50,000 per day (Utah Code Annotated 19-5-115).

5.1.2.c. *False Statements*. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act, the rules, or this permit, or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for 6 months, or by both (Utah Code Annotated 19-5-115(4)).

5.2. Duty to Reapply. If a permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit except as provided in 1.6 and 1.7 of this permit.

5.3. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5.4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

5.5. Duty to Provide Information. The permittee shall furnish to the Director or an authorized representative, within a reasonable time, any information that is requested to determine compliance with this permit. The permittee must also furnish to the Director or an authorized representative copies of records to be kept by this permit.

5.6. Other Information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Director, he or she shall promptly submit such facts or information.

5.7. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Act.

5.8. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

5.9. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

5.10. Record Retention. The permittee shall retain copies of SWPPPs and all reports required by this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the permit for the site is terminated (see 3.7). This period may be extended by request of the Director at any time.

5.11. Addresses. All written correspondence under this permit shall be directed to the DWQ at the following address:

Department of Environmental Quality
Division of Water Quality
195 North 1950 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

5.12. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Utah Code Annotated 19-5-117.

5.12.1. No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

5.13. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of SWPPPs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the condition of the permit.

5.14. Inspection and Entry. The permittee shall allow, upon presentation of credentials, the Director or an authorized representative to:

5.14.1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

5.14.2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit.

5.14.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

5.14.4. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by law, any substances or parameters at any location.

5.15. Reopener Clause.

5.15.1. *Reopener Due to Water Quality Impacts.* If there is evidence indicating that the storm water discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water-quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with 1.7.4 of this permit or the permit may be modified to include different limitations and/or requirements.

5.15.2. *Reopener Guidelines.* Permit modification or revocation will be conducted according to Utah Administrative Code R317-8-5.6 and UAC R317-8-6.2.

5.15.3. *Permit Actions.* This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification revocation and reissuance, termination, a modification of planned changes or anticipated noncompliance does not stay any permit condition.

5.16. Signatory Requirements.

5.16.1. All NOIs, SWPPPs, reports, certifications or information submitted to the Director, or that this permit requires be maintained by the permittee, shall be signed as follows:

5.16.1.a. All NOIs and SWPPPs shall be signed by both the owner or lessee of the project/property and the general contractor.

5.16.1.b. All reports required by the permit and other information requested by the Director or by an authorized representative of the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.16.1.b.i. The authorization is made in writing by a person described above and submitted to the Director; and

5.16.1.b.ii. The authorization specifies either an individual or a position having such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may therefore be either a named individual or any individual occupying a named position.

5.16.1.c. *Certification.* Any person signing documents under 5.16 shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

5.16.2. If a document is to be signed electronically, the Division's rules regarding electronic transactions govern, if applicable.

6. DEFINITIONS

Arid Areas: Areas with an average annual rainfall of 10 inches or less.

Common Plan of Development (or sale): A plan to subdivide a parcel of land into separate parts for separate sale. This can be for a residential, commercial, or industrial development. The plan originates as a single parcel that is separated into parts. This usually goes through an approval process by a local governmental unit, but in some cases, it may not require that process. The original plan is considered the "common plan of development or sale" whether phased or completed in steps.

Additional information related to *Common Plan of Development for Permit Purposes*:

For UPDES storm water permit purposes, a common plan must have been initiated after October, 1992. A common plan of development or sale remains so until each lot or section of the development has fulfilled its planned purposes (e.g. in a residential development as homes are completed, stabilized, and sold or occupied). As lots or separated sections of the development are completed, the lot or section is stabilized, and the plan purposes are fulfilled for that area, lot, or section, it is no longer part of the common plan of development or sale (e.g. if a home is sold in a development and the owner decides to add a garage somewhere on the lot, that garage project is not part of the common plan of development or sale.

In this process a common plan of development or sale may become reduced in size and/or separated by completed areas which are no longer part of the common plan of development or sale, but all unfinished lots remain part of the same common plan development or sale until they are completed, stabilized, and fulfilled according to the purposes of the plan.

Construction Activity: Earth-disturbing activities, such as the clearing, grading, and excavation of land.

Construction Waste: Discarded material such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and Styrofoam.

Corrective Action: For the purposes of the permit, any action taken to 1) repair, modify, or replace any storm water control used at the site; 2) clean up and dispose of spills, releases, or other deposits found on the site; and 3) remedy a permit violation.

Dewatering: The act of draining rainwater and/or groundwater from building foundations, vaults, and trenches (Note: if dewatering is occurring on a construction site and it causes a discharge to waters of the State, it must be permitted separately under the General Permit for Construction Dewatering and Hydrostatic Testing , UPDES Permit UTG070000).

Director: The director of the Division of Water Quality.

Discharge Point: For the purposes of this permit, the location where collected and concentrated storm water flows are discharged from the construction site.

Final Stabilization: All disturbed areas must be covered by permanent structures such as pavement, concrete slab, building, etc., or for areas not covered by permanent structures but that are receiving 20 inches or more of average annual precipitation, vegetation has been established with a uniform (e.g.,

evenly distributed, without large bare areas) perennial vegetative cover equivalent to 70 percent of the natural background vegetative cover. In the case of areas that are not covered by permanent structures, but that are receiving less than 20 inches of average annual precipitation (arid areas, 0-10 inches; semi-arid areas, 10-20 inches), final stabilization is equivalent to the requirements of 2.6.3 of this permit, including the provisions for permanent stabilization.

Impervious Surface: For the purpose of this permit, any land surface with a low or no capacity for water infiltration including, but not limited to, pavement, sidewalks, parking areas, driveways, or rooftops.

Indian Country: Defined at 40 CFR §122.2 as follows:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;

2. All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof; and

3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

Infeasible: Infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. DWQ notes that it is not intentional for permit storm water control efforts required in the permit to conflict with State water rights law.In the case of conflict, State water rights law supersedes.

Install or Installation: When used in connection with storm water controls, to connect or set in position storm water controls to make them operational.

Municipal Separate Storm Sewer System or MS4: A storm-sewer system owned and operated by a state, city, town, county, district, association, or other public body created by or pursuant to State law having jurisdiction over disposal of storm water that discharges to waters of the State (e.g., Sandy City owns and operates the MS4 within the jurisdiction of Sandy City, or essentially Sandy City is the MS4).

Natural Buffer: For the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists before earth-disturbing activities begin.

Oversight Authority: Oversight authorities for storm water permits are agents from the EPA, DWQ or the Municipality of jurisdiction, when they are addressing compliance of storm water permits.

Owner: For the purpose of this permit an owner has ownership of a property on which construction activity is taking place, but it also includes ownership of a project for which construction activity is occurring on property that is leased. An owner is the party that has ultimate control over construction plans and specifications, including the ability at the highest level to make modifications to those plans and specifications. "Owner" in this context is the party that has ultimate control over the destiny of a project.

Permittee: The owner and/or the general contractor (those that signed on the NOI), for the project.

Pollutant-Generating Activities: At construction sites, for the purposes of this permit, those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are as follows:

- Sediment
- Nutrients
- Heavy metals
- Pesticides and herbicides
- Oil and grease
- Bacteria and viruses
- Trash, debris, and solids
- Treatment polymers
- Any other toxic chemicals

Pollution Prevention Measures: Storm water controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

Project Site: A project site is not necessarily contained within the property boundaries designated for the final construction objective, or property owned by the owner of the project. The project site includes all areas affected by the construction process where disturbances, storage, or other construction activity occurs. If an area outside of property boundaries is used for the construction process, DWQ assumes the permittee has the right to access and use that area and the permittee must also meet permit requirements in that area.

Receiving Water: A "Water(s) of the State" is as defined in UAC R317-1-1, into which the regulated storm water discharges (see waters of the State listed below).

Rumble Strip: A rigid ramp/track (often made of steel) that vehicles drive over that causes tires to flex and shake for the removal of dirt.

Semi-Arid Areas: Areas with an average annual rainfall of between 10 and 20 inches.

Stabilization: The use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas of disturbed soil exposed from the construction process.

Storm water: Means storm water runoff, snowmelt runoff, and surface runoff and drainage.

Storm Water Control Measures: Refers to any storm water control, BMP, or other method used to prevent or reduce the discharge of pollutants to waters of the state.

Storm Water Inlet: An entrance or opening to a storm water conveyance system, generally placed below grade so as to receive storm water drainage from the surrounding area.

Storm Event: A precipitation event that results in a measurable amount of precipitation.

Track Out Pad: A track out pad is a pad normally made up of 4 to 6 inches of up to 6 inch cobble rocks or gravel of various size (the size is sometimes specified by a local MS4). Sometimes it is underlain with a fabric to keep dirt and mud separated from rock or gravel. It is wide enough to underlay the tires of any/all traffic leaving a construction site as vehicles exit the site. Its function is to flex and shake the tires to dislodge mud and dirt from the tires of vehicles leaving the construction site. Track out pads must be stirred or worked periodically so that mud or dirt collected is moved to the bottom and the rock/gravel on the pad is clean and effective dislodging more mud/dirt.

Waters of the State: All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, that are contained within, flow through, or border upon this state or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and that do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife, shall not be considered to be "Waters of the State" under this definition (see Utah Code Annotated, 19-5-102(23)(a) &(b), and UAC R317-1-1).

APPENDIX D

PERMITS; NOI, NOT, MS4

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
195 North 1950 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870 (801) 536-4300

NOI

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under the UPDES General Permit
UTRH78537
SEE REVERSE FOR INSTRUCTIONS

Submission of this Notice of Intent constitutes notice that the party(s) identified in Section I of this form intends to be authorized by UPDES General Permit No. UTRH78537 **issued for storm water discharges associated with construction activity in the State of Utah. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.**

PERMIT PERIOD — **Permit Start Date:** 01/10/2017 **Permit Expiration Date:** 01/10/2018

PERMIT TYPE
Construction General Permit (CGP, this permit covers any construction project**):** ..... ☐
Common Plan Permit (this only covers single lot residential construction disturbing less than an acre**):** ..... ☒

Is this NOI seeking continuation for previously expired permit coverage at the same site? Y ☐ N ☒

If yes, what is the number of the previous permit coverage?
Permit No. UTR

I. OWNER INFORMATION

Owner Name: Kenyon Owner/Builder
Address: 1210 North 3150 East
City: LAYTON
Contact Person: Tom or Michele Kenyon

Phone: 801-593-0823
Status of Owner: PRIVATE
State: UT **Zip:** 84040-3017
Phone: 801-505-1324

GENERAL CONTRACTOR: Kenyon Owner/Builder
Address: 1210 North 3150 East
City: LAYTON
Contact Person: Tom or Michele Kenyon

Phone: 801-593-0823
Status of General Contractor: PRIVATE
State: UT **Zip:** 84040-3017
Phone: 801-505-1324

II. FACILITY SITE / LOCATION INFORMATION

Is the facility located in Indian Country? Y ☐ N ☒

Name: Kenyon Residence
Project No. (if any): 16N232

Address: 6645 E. Clairetina Court
City: WEBER COUNTY (UNINCORPORATED AREA)
County: WEBER
State: UT **Zip:** 84317
Latitude: 41.243 **Longitude:** -111.789
Method (check one): ☐ USGS Topo Map, Scale ☐ EPA Web site ☐ GPS ☒ Other

III. SITE INFORMATION

Municipal Separate Storm Sewer System (MS4) Operator Name: Weber County
Receiving Water Body: Smith Creek known **this is known** ☒ **this is a guess** ☐ (see http://wq.deq.utah.gov/)
Estimate of distance to the nearest water body? 0.27 miles **ft.** ☐ **miles.** ☒
Is the receiving water an impaired or high quality water body (see http://wq.deq.utah.gov/)? Yes ☐ No ☒
List the Number of any other UPDES permits at the site: N/A

IV. THIS SECTION IS ONLY FOR PROJECTS INVOLVED IN DEVELOPMENT OF A SUBDIVISION.

List the lots proposed for the development (please add another sheet of paper if there is not enough room to list all lots).

INSTRUCTIONS

Notice Of Intent (NOI) For Permit Coverage Under the UPDES General Permit For Storm Water Discharges From Construction Activities

Who Must File A Notice Of Intent (NOI) Form State law at UAC R317-8-3.9 prohibits point source discharges of storm water from construction activities to a water body(ies) of the State without a Utah Pollutant Discharge Elimination System (UPDES) permit. The owner and the general contractor of a construction activity that has such a storm water discharge must submit a NOI to obtain coverage under the UPDES Storm Water General Permit. If you have questions about whether you need a permit under the UPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a state agency, contact the storm water coordinator at (801) 536-4300.

Where To File NOI Form The preferred method of submitting an NOI to apply for the construction general storm water permit (CGP) is electronically on-line at http://www.waterquality.utah.gov/UPDES/stormwatercon.htm. The fee can be submitted on line also. If on-line is not an option for you send a paper form of the NOI to the following address:

Department of Environmental Quality
Division of Water Quality
P.O. Box 144870
Salt Lake City, UT 84114-4870

Beginning of Coverage CGP coverages are issued immediately after submitting an NOI with the permit fee. The permittee should be aware that though you may not have a permit in hand, if you have submitted a completed NOI with the permit fee you are covered by the conditions in the permit and will be expected to comply with permit conditions. You can print a copy of the CGP from the DWQ web site.

Permit Fees. The permit fee is $150.00 per year. The fee is paid by Visa/Master Card on-line when an NOI is filed (by check if submitted with a paper NOI). If the project continues for more than one year the fee must be submitted again in a renewal process on-line. CGP coverage will not be issued until the fee is paid.

Length of Coverage: CGP coverage starts the day that the NOI and fee is received at DWQ and expires a year from issuance. All CGP coverages must be renewed within 60-days after the yearly expiration date, or be terminated with a notice of termination (NOT) before the expiration date. To terminate the permit the site must meet the permit conditions for final stabilization (see permit definitions), or must continue under a different permit holder. In most cases the DWQ or municipality of jurisdiction will perform a final inspection when a CGP coverage submits an NOT. If the site passes the final inspection the permit is terminated.

The Storm Water General Permit for Construction Activities UTRC00000 will expire on June 30, 2019 – UTRH00000 expires on September 30, 2020. The Clean Water Act requires that all UPDES permits be renewed every 5 years. If a project extends beyond the expiration date of the Permit it must renew the permit and continue coverage under the renewed permit that will subsequently be developed to continue the same or similar permit coverage for construction activity.

SECTION I - FACILITY OPERATOR INFORMATION Supply the legal name(s) of the person(s), firm(s), public organization(s), or any other entity(ies) that qualifies as the owner of the project (see permit definitions). Do the same for the general contractor that conducts the construction operation at the facility or site to be permitted. The owner and the general contractor of the project may be the same.

Enter the complete address and telephone number of the owner and general contractor and a contact person and number for each. Enter the appropriate letter to indicate the legal status of the operator of the facility.
F = Federal M = Public (other than Fed or State) S = State P = Private

SECTION II - FACILITY/SITE LOCATION INFORMATION Enter the facility name or legal name and project number (if any) of the site and complete street address, including city, state and ZIP code. The latitude and longitude of the facility must be included to the approximate centroid of the site, and the method of how the Lat/Long was obtained (USGS maps, GPS, Internet Map sites [such as Google Earth], or other).

Indicate whether the facility is located in Indian Country. If the facility is located in Indian Country, do not complete this NOI, instead submit an application for coverage under a storm water permit to EPA Region VIII except for facilities on the Navajo Reservation or on the Goshute Reservation which should submit an application to EPA Region IX.

SECTION III - SITE ACTIVITY INFORMATION If the storm water discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., the name of the City or County of jurisdiction) and the receiving water of the discharge from the MS4 if it is known (if it is not known look it up at http://wq.deq.utah.gov). (An MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, county, district, association or other public body which is designed or used for collecting or conveying storm water).

For Impaired Waters: Go to http://wq.deq.utah.gov and identify the water body that will receive the storm water discharge from the permitted site, on the map provided at the web site (zoom in for easier resolution). On the left hand side of the page you will see "**2010 Assessment**" or "**2013 Assessment**" depending on the year you refer to the web site (the assessment is done every 3 years). The **20XX Assessment** the will indicate if the water is impaired. If there is nothing after **20XX Assessment** or the narrative after does not include the word "impaired", your receiving water is not impaired.

For High Quality Waters: On the web page referred to in the paragraph above on the left hand side of the page you will see "**Anti-Degradation Category**". Under **Anti-Degradation Category** you will see the category of the water body. Only categories 1 and 2 are high quality water bodies. Some waters may be both categories 1 and 3. If your water body is both category 1 and 3 it means the headwaters of your water body is within Forest Service boundaries, and because it is within Forest Service boundaries it is category 1. If your project is within Forest Service boundaries then your water body is category 1 and it is "high quality". If your project is not within Forest Service boundaries then your water body is category 3 and is not "high quality". Again, category 1 waters are high quality waters, category 3 waters are not high quality waters.

SECTION IV – LISTING LOTS FOR SUBDIVISIONS For the sake of tracking lots that are sold (if a developer chooses to sell lots to another party before the building construction for the lot is completed), and permitted under a different owner (which requires a different permit), developers must list lot numbers.

SECTION V - TYPE OF CONSTRUCTION Check each type of construction that applies to this application.

SECTION VI - BEST MANAGEMENT PRACTICES Check each type of best management practice that will be used to control storm water runoff at the job site.

SECTION VII – GOOD HOUSEKEEPING PRACTICES Check each type of good housekeeping practice that you will use on the site any time during construction activities.

SECTION VIII – ADDITIONAL Provide an estimate of the total number of acres of the site on which soil will be disturbed (to the nearest hundredth of an acre). An email address is required of the best contact associated with the project for the communication needs.

SECTION IX – CERTIFICATION State statutes provide for severe penalties for submitting false information on this application form. State regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.

POLLUTION PREVENTION PLAN A storm water pollution prevention plan (SWP3) is required to be in hand before the NOI can be submitted. It is important to know SWPPP requirements (contained in the permit) even during the design portion of the project. A copy of the permit can be obtained from the Division of Water Quality's storm water construction web site. Guidance material for developing a SWPPP can be obtained from the Division of Water Quality's storm water construction web site.

V. TYPE OF CONSTRUCTION (Check all that apply)

1. ☒ Residential 2. ☐ Commercial 3. ☐ Industrial 4. ☐ Road 5. ☐ Bridge 6. ☐ Utility
7. ☐ Contouring, Landscaping 8. ☐ Pipeline 9. ☐ Other (Please list)

VI. BEST MANAGEMENT PRACTICES

Identify proposed Best Management Practices (BMPs) to reduce pollutants in storm water discharges (Check all that apply):

1. ☒ Silt Fence/Straw Wattle/Perimeter Controls 2. ☐ Sediment Pond 3. ☒ Seeding/Preservation of Vegetation
4. ☐ Mulching/Geotextiles 5. ☐ Check Dams 6. ☐ Structural Controls (Berms, Ditches, etc.)
7. ☒ Other (Please list) Swale at the rear of property.

VII. GOOD HOUSEKEEPING PRACTICES

Identify proposed Good Housekeeping Practices to reduce pollutants in storm water discharges (Check all that apply even if they apply only during a part of the construction time):

1. ☒ Sanitary/Portable Toilet 2. ☒ Washout Areas 3. ☒ Construction Chemicals/Building Supplies Storage Area
4. ☒ Garbage/Waste Disposal 5. ☒ Non-Storm Water 6. ☒ Track Out Controls 7. ☒ Spill Control Measures

VIII. ADDITIONAL

Estimated Area to be Disturbed (in Acres): 0.80 **Total Area of Plot (in Acres):** 1.31

A storm water pollution prevention plan has been prepared for this site and is to the best of my knowledge in Compliance with State and/or Local Sediment and Erosion Plans and Requirements. Y ☐ N ☒
(A pollution prevention plan is required to be on hand before submittal of the NOI.)

Project Start Date: 01/10/2017

Project End Date: 01/01/2019

Enter the best e-mail address to contact the permittee: thomas.kenyon@comcast.net

IX. CERTIFICATION: I certify under penalty of law that I have read and understand the Part 1 eligibility requirements for coverage under the general permit for storm water discharges from construction activities. I further certify that to the best of my knowledge, all discharges and BMPs that have been scheduled and detailed in a storm water pollution prevention plan will satisfy requirements of this permit. I understand that continued coverage under this storm water general permit is contingent upon maintaining eligibility as provided for in Part 1.

I also certify under penalty of law that this document and all attachments were prepared under the direction or supervision of those who have placed their signature(s) below, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner and Operator must sign below:

Print Name: Tom KENYON **Date:** 10 JAN 17

Kenyon Owner/Builder

Title: Owner / Builder

Signature: Tom

Print Name: Tom KENYON **Date:** 10 JAN 17

Kenyon Owner/Builder

Title: Owner / Builder

Signature: Tom

Amount of Permit Fee Enclosed: $ 150.00

Utah Department of
Environmental Quality

195 North 1950 West
Salt Lake City, Utah 84114-4820
Attn: DAQ, Fugitive Dust Control Plan

Fugitive Dust Control Plan Application

Applicants have the option to complete the online dust control plan on the DEQ Online Services webpage or to submit a hard copy application.

Activities regulated by R307-309 may not commence before obtaining approval of the fugitive dust control plan. Therefore, online filing is encouraged because it provides instant approval.

Blank spaces must be completed for the application to be processed. If not applicable, enter N/A.

1. Applicant Information

Name:	Kenyon Owner/Builder
Address:	1210 North 3150 East LAYTON, UT 84040-3017
Phone:	801-505-1324
Email:	thomas.kenyon@comcast.net
Applicant Type:	Property Owner

2. Project Information

Project Name:	Kenyon Residence
Address:	6645 E. Clairetina Court WEBER COUNTY (UNINCORPORATED AREA), UT 84317
County:	WEBER
Directions:	the new culdesac sits above/south of Via Courtina
Acreage:	1.31
Latitude:	41.243
Longitude:	-111.789

3. Point of Contact

Name: Tom & Michele Kenyon

Company Name: Kenyon Owner/Builder

Address: 1210 North 3150 East Layton, UT 84040

Phone: 8015930823

Fax:

Cell: 8015051324

4. On-site Superintendent/Supervisor/Foreman Contact

Name: Kenyon Owner/Builder

Company Name: Kenyon Owner/Builder

On-Site Phone: 8015051324

Cell: 8015051324

5. By signing this permit application I certify that:

A. I am authorized, on behalf of the individual or company listed in Section 1, as Applicant, to apply for a Fugitive Dust Control Plan and to commit to all of the terms and conditions of the requested plan.

B. Construction activities will be limited to lands that the applicant either owns or is authorized to use for construction activities.

C. The applicant accepts responsibility for assuring that all contractors, subcontractors, and all other persons on the construction site covered by this plan, comply with the terms and conditions of the Fugitive Dust Control Plan.

D. I understand that any false material statement, representation or certification made in this application may invalidate the plan or cause me to be subject to enforcement action pursuant to Utah Code Ann. 19-2-115.

E. Failure to comply with fugitive dust rules may result in compliance action and penalties up to $10,000 per violation/day.

Date: 01/10/2017
Printed Name: Kenyon Owner/Builder
Title: Property Owner
Company Name: Kenyon Owner/Builder
Dust Plan Number: 10865

Dust Suppressants

	Check All that Apply
	Clay additives.
	Calcium chloride.
	Lime (calcium oxide).
	Magnesium chloride.
	Organic non-petroleum products, (ligninsulfonate, tall (pine) oil, and vegetable derivatives).
	Synthetic polymers (for example; polyvinyl acetate and vinyl acrylic).

FUGITIVE DUST CONTROL PLAN

PROJECT ACTIVITIES CHECKLIST INSTRUCTIONS:

PLACE A CHECK MARK NEXT TO EVERY ACTIVITY THAT WILL BE CONDUCTED ON THIS SITE, FOR EACH CHECKED ACTIVITY, COMPLETE THE CORRESPONDING CONTROL MEASURES/BEST MANAGEMENT PRACTICE (BMP) SELECTION PAGE. WHEN COMPLETED, YOU WILL HAVE THE OPTION TO PRINT THE ENTIRE PLAN.

	Project Activity	Check All that Apply
01	Backfilling area previously excavated or trenched.	**X**
02	Blasting soil & rock - drilling and blasting.	
03	Clearing for site preparation and vacant land cleanup.	**X**
04	Clearing forms, foundations, slab clearing and cleaning of forms, foundations and slabs prior to pouring concrete.	**X**
05	Crushing of construction and demolition debris, rock and soil.	
06	Cut and fill soils for site grade preparation.	**X**
07	Demolition - Implosive demolition of a structure, using explosives.	
08	Demolition - mechanical/manual demolition of walls, stucco, concrete, freestanding structures, buildings and other structures.	
09	Disturbed soil throughout project including between structures. THIS ACTIVITY MUST BE SELECTED FOR ALL PROJECTS.	**X**
10	Disturbed land - long term stabilization and erosion control of large tracts of disturbed land that will not have continuing activity for more than 30 days.	**X**
11	Hauling materials.	**X**
12	Paving/subgrade preparation for paving streets, parking lots, etc.	**X**
13	Sawing/cutting material, concrete, asphalt, block or pipe.	**X**
14	Screening of rock, soil or construction debris.	
15	Staging areas, equipment storage, vehicle parking lots, and material storage areas.	**X**
16	Stockpiles materials (storage), other soils, rock or debris, for future use or export.	**X**
17	Tailings piles, ponds and erosion control.	

18	Trackout Prevention and Cleanup of mud, silt and soil tracked out onto paved roads.	**X**
19	Traffic - unpaved routes and parking, construction related traffic on unpaved interior and/or access roads and unpaved employee/worker parking areas.	**X**
20	Trenching with track or wheel mounted excavator, shovel, backhoe or trencher.	**X**
21	Truck loading with materials including construction and demolition debris, rock and soil.	**X**

Backfilling area previously excavated or trenched.	**BMP 01**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Stabilize backfill material when not actively handling.

_	01-01	Water backfill material to maintain moisture or to form crust.
_	01-02	Apply and maintain a chemical stabilizer to backfill material to form crust.
X	01-03	Cover (natural or synthetic) or enclose backfill material when not actively handling.

Stabilize backfill material during handling.

X	01-04	Empty loader bucket slowly and minimize drop height from loader bucket.
_	01-05	Dedicate water truck or large hose to backfilling equipment and apply water as needed.
_	01-06	Mix moist soil with dry soil until the optimum moisture is reached.
_	01-07	Apply and mix water into the backfill material until optimum moisture is reached.
_	01-08	Apply and mix water and chemical solution into the backfill material until optimum moisture is reached.

Stabilize soil at completion of backfilling activity.

X	01-09	Apply water and maintain disturbed soils in a stable condition.
_	01-10	Apply and maintain a chemical stabilizer on disturbed soils to form a crust.

Stabilize material while using pipe padder equipment.

_	01-11	Mix moist soil with dry soil until the optimum moisture is reached.
_	01-12	Dedicate water truck or large hose to equipment and apply water as needed.
X	01-13	Not Applicable

Clearing for site preparation and vacant land cleanup.	**BMP 03**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Stabilize surface soils where support equipment and vehicles will operate.

X	03-01	Pre-water and maintain surface soils in a stabilized condition.
_	03-02	Apply and maintain a chemical stabilizer on surface soils.

Stabilize disturbed soil immediately after clearing and grubbing activities.

X	03-03	Water disturbed soils to form crust.
_	03-04	Apply and maintain a chemical stabilizer on disturbed soils to form crust.

Stabilize slopes at completion of activity.

_	03-05	Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slope.
X	03-06	Apply water and maintain sloping surfaces/wind breaks in a crusted condition.

Clearing forms, foundations, slab clearing and cleaning of forms, foundations and slabs prior to pouring concrete.	**BMP 04**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION.

_	04-01	Use water spray to clear forms, foundations and slabs.
X	04-02	Use sweeping and water spray to clear forms, foundations and slabs.
_	04-03	Use industrial vacuum to clear forms, foundations and slabs prior to the use of high pressure air to blow soil and debris.
_	04-04	Use industrial vacuum to clear forms, foundations and slabs.

Cut and fill soils for site grade preparation.	**BMP 06**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Stabilize surface soils where support equipment and vehicles will operate.

X	06-01	Pre-water and maintain surface soils in a stabilized condition.
_	06-02	Apply and maintain a chemical stabilizer to surface soils.

Pre-water soils.

X	06-03	Dig a test hole to depth of cut or equipment penetration to determine if soils are moist at depth. Continue to pre-water if not moist to depth of cut.

Stabilize soil during cut activities.

X	06-04	Apply water to depth of cut prior to subsequent cuts.

Stabilize soil after cut and fill activities.

X	06-05	Water disturbed soils to maintain moisture.
_	06-06	Apply and maintain a chemical stabilizer on disturbed soils to form crust following fill and compaction.
_	06-07	Apply cover (natural or synthetic).

Disturbed soil throughout project including between structures. THIS ACTIVITY MUST BE SELECTED FOR ALL PROJECTS.	**BMP 09**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Limit disturbance of soils where possible.

_	09-01	Limit disturbance of soils with the use of fencing, barriers, barricades, and/or wind barriers.
X	09-02	Limit vehicle mileage and reduce speed.

Stabilize and maintain stability of all disturbed soil throughout construction site.

X	09-03	Apply water to stabilize disturbed soils. Soil moisture must be maintained such that soils can be worked without generating fugitive dust.
_	09-04	Apply and maintain a chemical stabilizer.
_	09-05	Use wind breaks.
_	09-06	Apply cover (natural or synthetic).

Disturbed land - long term stabilization and erosion control of large tracts of disturbed land that will not have continuing activity for more than 30 days.	**BMP 10**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Prevent access to limit soil disturbance.

X	10-01	Prevent access by fencing, ditches, vegetation, berms or other suitable barrier.

Stabilize soil.

_	10-02	Apply and maintain a chemical stabilizer on disturbed soils.
X	10-03	Stabilize disturbed soil with vegetation.
X	10-04	Pave or apply surface rock.
_	10-05	Use wind breaks.
_	10-06	Apply water and maintain soil moisture sufficient to avoid generating fugitive dust.

Hauling materials.	**BMP 11**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Limit visible dust opacity from vehicular operations.

_	11-01	Apply and maintain water/chemical suppressant to operational areas and haul routes.
X	11-02	Limit vehicle mileage and speed.

Stabilize materials during transport on site.

X	11-03	Use tarps or other suitable enclosures on haul trucks.
_	11-04	Apply water prior to transport.

Clean wheels and undercarriage of haul trucks prior to leaving construction site.

X	11-05	Clean wheels.
_	11-06	Sweep or water haul road.

Paving/subgrade preparation for paving streets, parking lots, etc.	**BMP 12**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION.

Stabilize adjacent disturbed soils following paving activities.

_	12-01	Apply and maintain water on disturbed soils.
_	12-02	Apply and maintain chemical stabilizer on disturbed soils.
X	12-03	Stabilize disturbed soils with vegetation or hydroseeding.
_	12-04	Apply synthetic cover to disturbed soils.
_	12-05	There are no soils adjacent to paving activities.

Sawing/cutting material, concrete, asphalt, block or pipe.	BMP 13

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION.

Limit visible emissions.

X	13-01	Use water control to dust.
_	13-02	Use a vacuum to collect dust.

Staging areas, equipment storage, vehicle parking lots, and material storage areas.	**BMP 15**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Limit visible dust opacity from vehicular operations.

X	15-01	Limit vehicle mileage and speed.
_	15-02	Apply water on all vehicle traffic areas in the staging areas and unpaved access routes.

Stabilize staging area soils during use.

X	15-03	Pre-water and maintain surface soils in a stabilized condition.
_	15-04	Apply and maintain a chemical stabilizer to surface soils.

Stabilize staging area soils at project completion.

_	15-05	Apply a chemical stabilizer.
_	15-06	Apply screened or washed aggregate.
_	15-07	Use wind breaks.
_	15-08	Pave.
X	15-09	Completed project will cover staging area with buildings, paving, and/or landscaping.
_	15-10	Apply water to form adequate crust and prevent access.

Stockpiles materials (storage), other soils, rock or debris, for future use or export.	**BMP 16**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Stabilize surface soils where support equipment and vehicles will operate.

X	16-01	Pre-water and maintain surface soils in a stabilized condition.
_	16-02	Apply and maintain a chemical stabilizer on surface soils.
_	16-03	Pave area.

Stabilize stockpile materials during handling.

X	16-04	Remove material from the downwind side of the stockpile, when safe to do so.
_	16-05	Reduce height.
_	16-06	Create wind screen

Stabilize stockpiles after handling.

_	16-07	Water stockpiles to form a crust immediately.
_	16-08	Apply and maintain a chemical stabilizer to all outer surfaces of the stockpiles.
_	16-09	Provide and maintain wind barriers on 3 sides of the pile.
X	16-10	Apply a cover (natural or synthetic)
_	16-11	Wind screen.
_	16-12	Avoid steep sides to prevent material sloughing.
_	16-13	Reduce height.

Trackout Prevention and Cleanup of mud, silt and soil tracked out onto paved roads.	**BMP 18**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Prevent dust from trackout.

_	18-01	Clean trackout at the end of the work shift from paved surfaces to maintain dust control
_	18-02	Maintain dust control during working hours and clean trackout from paved surfaces at the end of the work shift/day.
X	18-03	Install gravel pad(s), clean, well-graded gravel or crushed rock. Minimum dimensions must be 30 feet wide by 3 inches deep, and, at minimum, 50' or the length of the longest haul truck, whichever is greater. Re-screen, wash or apply additional rock in gravel pad to maintain effectiveness.
_	18-04	Install wheel shakers. Clean wheel shakers on a regular basis to maintain effectiveness.
_	18-05	Install wheel washers. Maintain wheel washers on a regular basis to maintain effectiveness.
_	18-06	Motorized vehicles will only operate on paved surfaces.
_	18-07	Install cattle guard before paved road entrance.

All exiting traffic must be routed over selected trackout control device(s).

X	18-08	Clearly establish and enforce traffic patterns to route traffic over selected trackout control device(s).
_	18-09	Limit site accessibility to routes with trackout control devices in place by installing effective barriers on unprotected routes.

Traffic - unpaved routes and parking, construction related traffic on unpaved interior and/or access roads and unpaved employee/worker parking areas.	**BMP 19**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION.

Stabilize surface soils where support equipment and vehicles will operate.

X	19-01	Limit vehicle mileage and speeds.
_	19-02	Apply and maintain water on surface soils.
_	19-03	Apply and maintain chemical stabilizers on surface soils.
_	19-04	Apply and maintain gravel on surface soils.
_	19-05	Supplement chemical stabilizers, water or aggregate applications as necessary.
_	19-06	Apply recycled asphalt (RAP) to surface soils.

Trenching with track or wheel mounted excavator, shovel, backhoe or trencher.	**BMP 20**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION FROM EACH SECTION.

Presoak soils prior to trenching activities.

X	20-01	Pre-water surface.

Stabilize surface soils where trenching equipment, support equipment and vehicles will operate.

_	20-02	Pre-water and maintain surface soils in a stabilized condition.
_	20-03	Apply and maintain a chemical stabilizer to surface soils.
X	20-04	Limit mileage and speed.

Stabilize soils after trenching.

X	20-05	Apply and maintain water on excavated soil.
_	20-06	Apply and maintain chemical stabilizer on excavated soil.

Truck loading with materials including construction and demolition debris, rock and soil.	**BMP 21**

GENERAL REQUIREMENT: ALL ACTIVITIES MUST MEET OPACITY REQUIREMENTS IN R307-309-5

MAKE AT LEAST ONE SELECTION.

_	21-01	Pre-water and maintain surface soils in a stabilized condition where loaders, support equipment and vehicles will operate.
_	21-02	Apply and maintain a chemical stabilizer on surface soils where loaders, support equipment and vehicles will operate.
X	21-03	Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.

APPENDIX E

INSPECTION-MAINTENANCE-CORRECTION REPORT

APPENDIX F

SWPPP AMENDMENT LOG

APPENDIX G

CERTIFICATIONS, AGREEMENTS, DELEGATION OF AUTHORITY

Owner/Operator Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Tom Kenyon Title: Owner/Operator

Signature: _____ Date: 10 JAN 17

APPENDIX H

TRAINING LOG

APPENDIX I

CONSTRUCTION PLANS

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DESIGN
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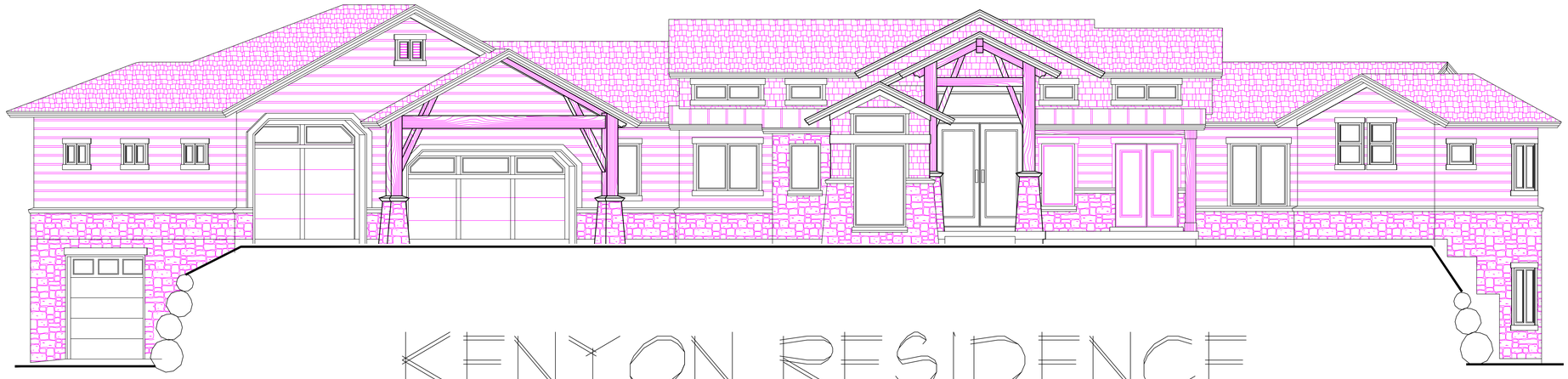

KENYON RESIDENCE

6645 EAST CLAIRETINA COURT
HUNTSVILLE UTAH

DEFERRED SUBMITTAL

ALL DEFERRED SUBMITTALS AND CHANGES TO PLANS MUST BE-

A. FIRST APPROVED BY THE DESIGNER OF RECORD PRIOR TO SUBMITTING TO BUILDING OFFICIAL

B. APPROVED BY THE STRUCTURAL ENGINEER OF RECORD FOR ANY STUCTURAL ITEMS FOR DEFERRED SUBMITTALS

-ITEMS-

1. -FIRE SPRINKLER PLANS (MOD. NFPA 13D)
2. -RADIANT HEAT DESIGN (LAYOUT PLANS, CALCS, & SPECS.
3. -GAS PIPING SCHEMATIC-PROVIDED BY MECH. CONTRACTOR
4. -TRUSS PLANS & CALCS. (IF APPLICABLE)
5. -STUCCO SYSTEM. (IF APPLICABLE)
6. -FIREPLACE PRODUCT INFO. (IF APPLICABLE)
7. -CONSTRUCTION MITIGATION PLAN.
8. -GEOTCH. SURVEY (IF APPLICABLE AS DETERMINED BY BUILDING OFFICIAL)
9. -LANDSCAPE PLAN (IF APPLICABLE)
10. -SPECIAL INSPECTIONS FOR WELDING ON THIS PROJECT (IF APPLICABLE)
11. -CONTRACTOR TO PROVIDE EXTERIOR LIGHTING SPECS. PRIOR TO FOUNDATION INSPECTION
12. -POOL DESIGN BY OTHERS (IF APPLICABLE)

SQUARE FOOTAGE

-LOCATION-	-SQUARE FOOTAGE-
MAIN LEVEL	2793 S.F.
LOWER LEVEL	2845 S.F.
COLD STORAGE	189 S.F.
STORAGE	1384 S.F.
-TOTAL LIVING-	7211 S.F.
GARAGES	1470 S.F.

CODE ANALYSIS

-UTAH STATE ADOPTED CODES AS OF JULY 1, 2013-

2015 IRC	2015 IPC	BUILDING OCCUPANCY R-3
2015 IBC	2015 IMC	TYPE 5 B-CONSTRUCTION
2011 NEC	2015 IFGC	2015 RES CHECK

CONSULTANT SCHEDULE

CONSULTANT	PHONE NUMBER	CONTACT INFO.
LANDFORMS DESIGNER/ DRAFTER	BLAIR/ MIKE	(801) 298-2240 mike@landforms.com
C.E.S. STRUCTUAL ENGINEER	LYNN	(801) 296-2784 lynn@calsonengineering.net
GHS ENGINEERING		

GENERAL NOTES

A. EXCAVATION, BACK FILL, GRADING & DAMPROOFING

1. All excavations for footings shall be to natural undisturbed soil.
2. All back filling shall be done with granular free draining material. Existing site material may be used so long as existing soils are free from clay soils and any construction debris. Compact all back fill material in 10" lifts to 95% of maximum soil density.
3. Finish grading shall be done so as to provide positive drainage away from all building foundations. A minimum slope of 6" per 10'-0" and shall be maintained with a 1% slope thereafter to approved drainage areas.
4. All raingutter downspouts shall be piped away from the home to an approved drainage area. No raingutters shall drain in window wells, or rock light wells.
5. If any ground water is encountered during excavation, a qualified soils Engineer shall be retained to make an on-site assesment of the situation.
6. Footing drains shall be placed around all exterior footings and gravity fed to an approved drainage area.

B. WINDOWS

1. All windows in rooms used for sleeping shall have sills not more than 44" above the floor with an operable opening of not less than 5.7 square feet. The height of the window shall not be less than 24" with a net clear width of not less than 20". Exception: grade floor openings shall have a min. net clear opening of 5.0 sq. ft.
2. Habitable rooms require 8% of floor area to be glazing with 1/2 of that glazing to be operable
3. All windows to be double pane insulated glazing of 3/16" double strength "B" grade glass minimun.

C. VENTILATION

1. Natural ventilation shall be provided to every habitable room with equal to 4% of floor area with operable windows which will provide (35) fresh air changes per hour.
2. No gas connections allowed in any rooms used for sleeping or in any corridors leading to or through any sleeping room.
3. Ventilation shall be provided into all crawl spaces by means of screened vents measuring not less than 1" x 14" spaced not more than 25' apart and placed so as to provided cross ventilation.
4. Provide (2) combustion air ducts to furnace rooms (1) placed at 18" above floor and (1) placed at 12" below the ceiling with an area of not less than (1) square inch per 1,000 BTUH input.
5. provide attic ventilation equal to 1/150 of the area of the space ventilated.
6. Mechanical ventilation may be provided in habitable rooms, where not required for emergency escape. System will be able to provide (35) fresh air changes per hour.

D. FIRE PROTECTION & WARNING

1. Provide 5/8" type "X" gyp. bd. on all supporting walls and ceilings of the garage adjacent to living areas. Nail all 5/8" type "X" gyp. bd. at 6" o.c. (One hour fire rated)
2. Provide 1/2" type "X" gyp. bd. on walls and under side of stairs under any stairway area used for storage. Fire block walls at all stair stringers.
3. Doors leading from the garage into the house shall be solid core wood or honeycomb metal doors not less than 1 3/8" thick.
4. Smoke detectors are required in all hallways leading to sleeping rooms, sleeping rooms, unfinished areas, with a minimun of (1) one each story. Wire all smoke detectors to sound simultaneously. Smoke detectors must have battery back-up.
5. A minimun of 30" shall be provided above all ranged, grills, or cook tops to combustibles.

E. HANDRAILS & GUARDRAILS

1. Handrails are required at all stairways having (2) or more risers.
2. Handrails shall be placed not less than 2'-10" above stair nosing and not more than
3. Handrail gasp size shall have a circular cross section of 1¼" minimun - 2⅝" max. Edges shall have a minimun radius of ⅛". Handrails may project 4½" into the stairway on both sides. Continuous handrails shall be permitted to be interrupted by a newel post at a turn and the use of a volute turn or starting easing shall be allowed on lowest tread.
4. Guardrails are required at all landings or decks or floor levels more than 30" apart.
5. Balusters for guardrails shall be spaced such that a 4" diameter sphere shall not pass through.
6. When a guardrail is combined with a handrail on al open side of stairs, guardrail

DRAWING SCHEDULE

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**
PLEASE NOTIFY LANDFORMS DESIGN OF ANY UNLAWFUL USE
STATE **UTAH** DATE **6-28-16**

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TITLE SHEET & DWG. SCHEDULE

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS date	Item
9-27-16	ROOF HEIGHT
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

T1

10 0 10 20 30

SCALE: 1" = 10'

LOT #53-R
THE SUMMIT AT SKI LAKE

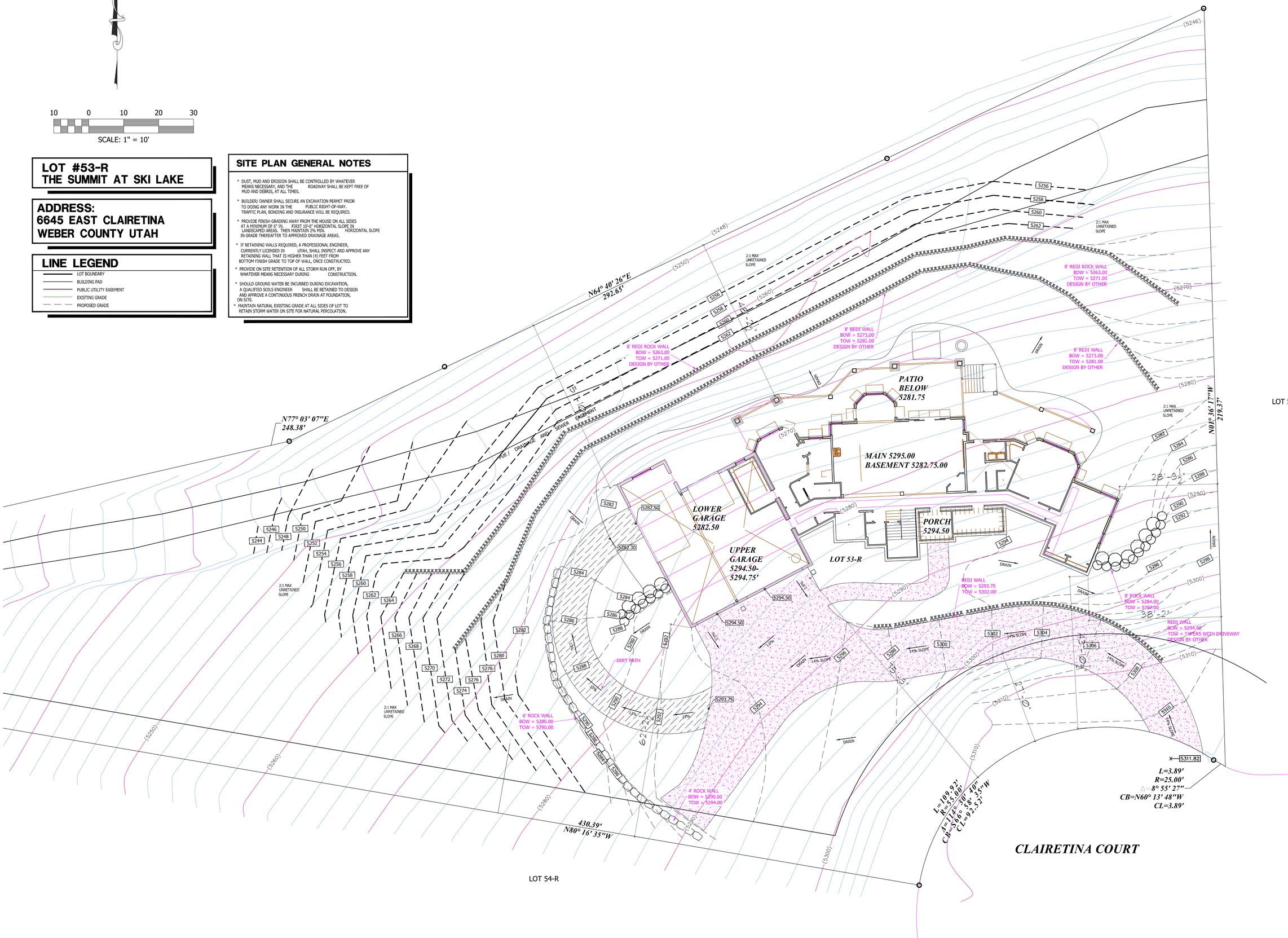
ADDRESS:
6645 EAST CLAIRETINA
WEBER COUNTY UTAH

LINE LEGEND

- LOT BOUNDARY
- BUILDING PAD
- PUBLIC UTILITY EASEMENT
- EXISTING GRADE
- PROPOSED GRADE

SITE PLAN GENERAL NOTES

* DUST, MUD AND EROSION SHALL BE CONTROLLED BY WHATEVER MEANS NECESSARY, AND THE ROADWAY SHALL BE KEPT FREE OF MUD AND DEBRIS, AT ALL TIMES.
* BUILDER/ OWNER SHALL SECURE AN EXCAVATION PERMIT PRIOR TO DOING ANY WORK IN THE PUBLIC RIGHT-OF-WAY. TRAFFIC PLAN, BONDING AND INSURANCE WILL BE REQUIRED.
* PROVIDE FINISH GRADING AWAY FROM THE HOUSE ON ALL SIDES AT A MINIMUM OF 6" IN. FIRST 10'-0" HORIZONTAL SLOPE IN LANDSCAPED AREAS. THEN MAINTAIN 2% MIN. HORIZONTAL SLOPE IN GRADE THEREAFTER TO APPROVED DRAINAGE AREAS.
* IF RETAINING WALLS REQUIRED, A PROFESSIONAL ENGINEER, CURRENTLY LICENSED IN UTAH, SHALL INSPECT AND APPROVE ANY RETAINING WALL THAT IS HIGHER THAN (4) FEET FROM BOTTOM FINISH GRADE TO TOP OF WALL, ONCE CONSTRUCTED.
* PROVIDE ON SITE RETENTION OF ALL STORM RUN OFF, BY WHATEVER MEANS NECESSARY DURING CONSTRUCTION.
* SHOULD GROUND WATER BE INCURRED DURING EXCAVATION, A QUALIFIED SOILS ENGINEER SHALL BE RETAINED TO DESIGN AND APPROVE A CONTINUOUS FRENCH DRAIN AT FOUNDATION, ON SITE.
* MAINTAIN NATURAL EXISTING GRADE AT ALL SIDES OF LOT TO RETAIN STORM WATER ON SITE FOR NATURAL PERCOLATION.



LOT **53-R** SUBDIVISION **THE SUMMIT AT SKI LAKE**
CITY **WEBER CO.** STATE **UTAH** DATE **6-28-16**
PLEASE NOTE: LANDFORMS DESIGN OF ANY UNLAWFUL USE.

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SITE PLAN, NOTES & DWG. SCHEDULE

KENYON RESIDENCE

CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEIGHT
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

S1

10 0 10 20 30

SCALE: 1" = 10'

LOT #53-R
THE SUMMIT AT SKI LAKE

ADDRESS:
6645 EAST CLAIRETINA
WEBER COUNTY UTAH

SWPP GENERAL NOTES

NOTE: ALL STORM WATER AND DIRT WILL BE KEPT ON SITE DURING CONSTRUCTION UNTIL FINAL LANDSCAPING IS DONE. GENERAL CONTRACTOR WILL BE HELD RESPONSIBLE FOR KEEPING DIRT/MUD ON SITE DURING BAD WEATHER AND FOR CLEANING UP AFTER SUBCONTRACTORS

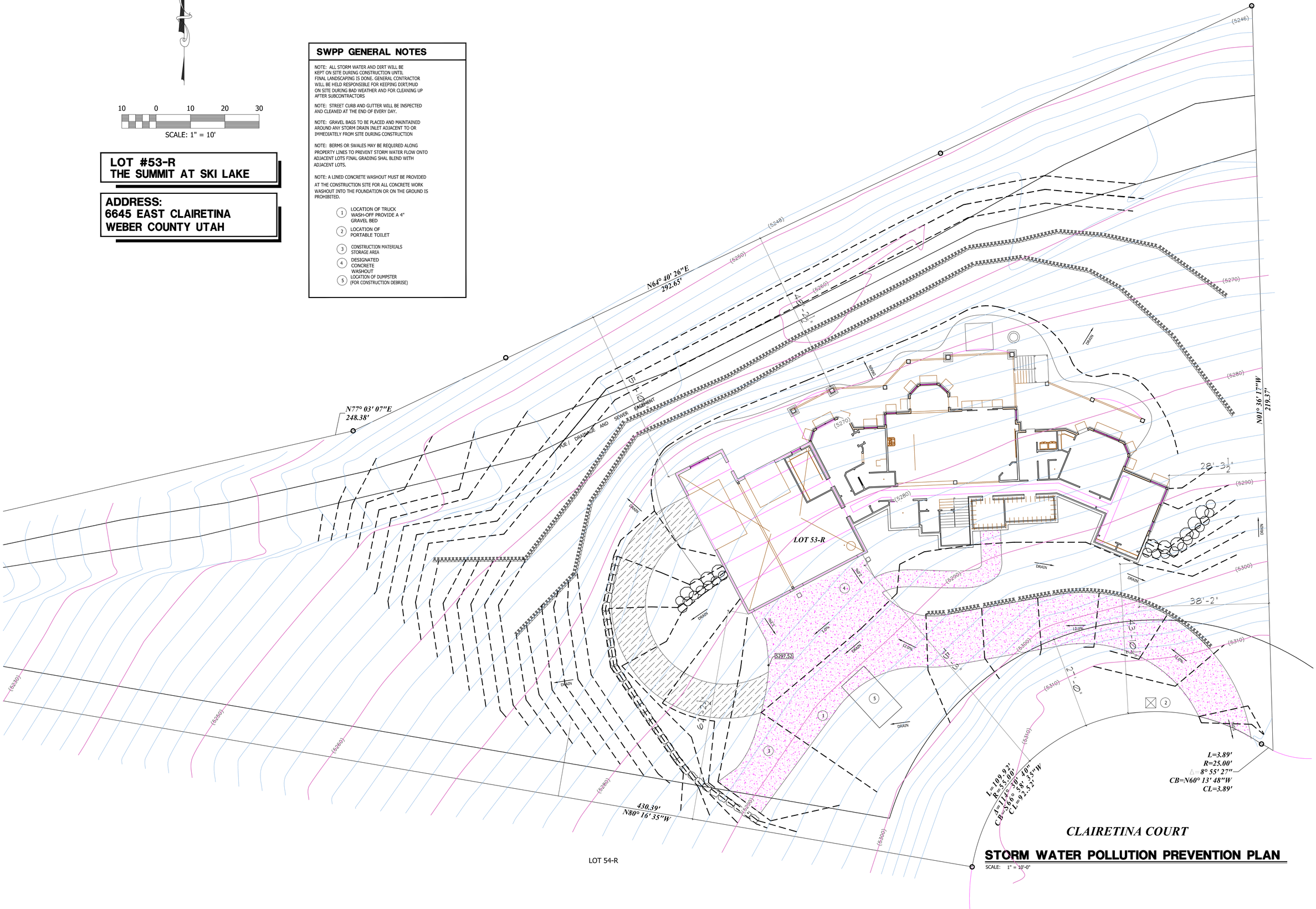
NOTE: STREET CURB AND GUTTER WILL BE INSPECTED AND CLEANED AT THE END OF EVERY DAY.

NOTE: GRAVEL BAGS TO BE PLACED AND MAINTAINED AROUND ANY STORM DRAIN INLET ADJACENT TO OR IMMEDIATELY FROM SITE DURING CONSTRUCTION

NOTE: BERMS OR SWALES MAY BE REQUIRED ALONG PROPERTY LINES TO PREVENT STORM WATER FLOW ONTO ADJACENT LOTS FINAL GRADING SHAL BLEND WITH ADJACENT LOTS.

NOTE: A LINED CONCRETE WASHOUT MUST BE PROVIDED AT THE CONSTRUCTION SITE FOR ALL CONCRETE WORK WASHOUT INTO THE FOUNDATION OR ON THE GROUND IS PROHIBITED.

1. LOCATION OF TRUCK WASH-OFF PROVIDE A 4" GRAVEL BED
2. LOCATION OF PORTABLE TOILET
3. CONSTRUCTION MATERIALS STORAGE AREA
4. DESIGNATED CONCRETE WASHOUT
5. LOCATION OF DUMPSTER (FOR CONSTRUCTION DEBRISE)



CLAIRETINA COURT

STORM WATER POLLUTION PREVENTION PLAN

SCALE: 1" = 10'-0"

ATTENTION:
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CITY **WEBER CO.** **AT SKI LAKE**
STREET ADDRESS **6645 E. CLAIRETINA**
STATE **UTAH** DATE **6-26-16**

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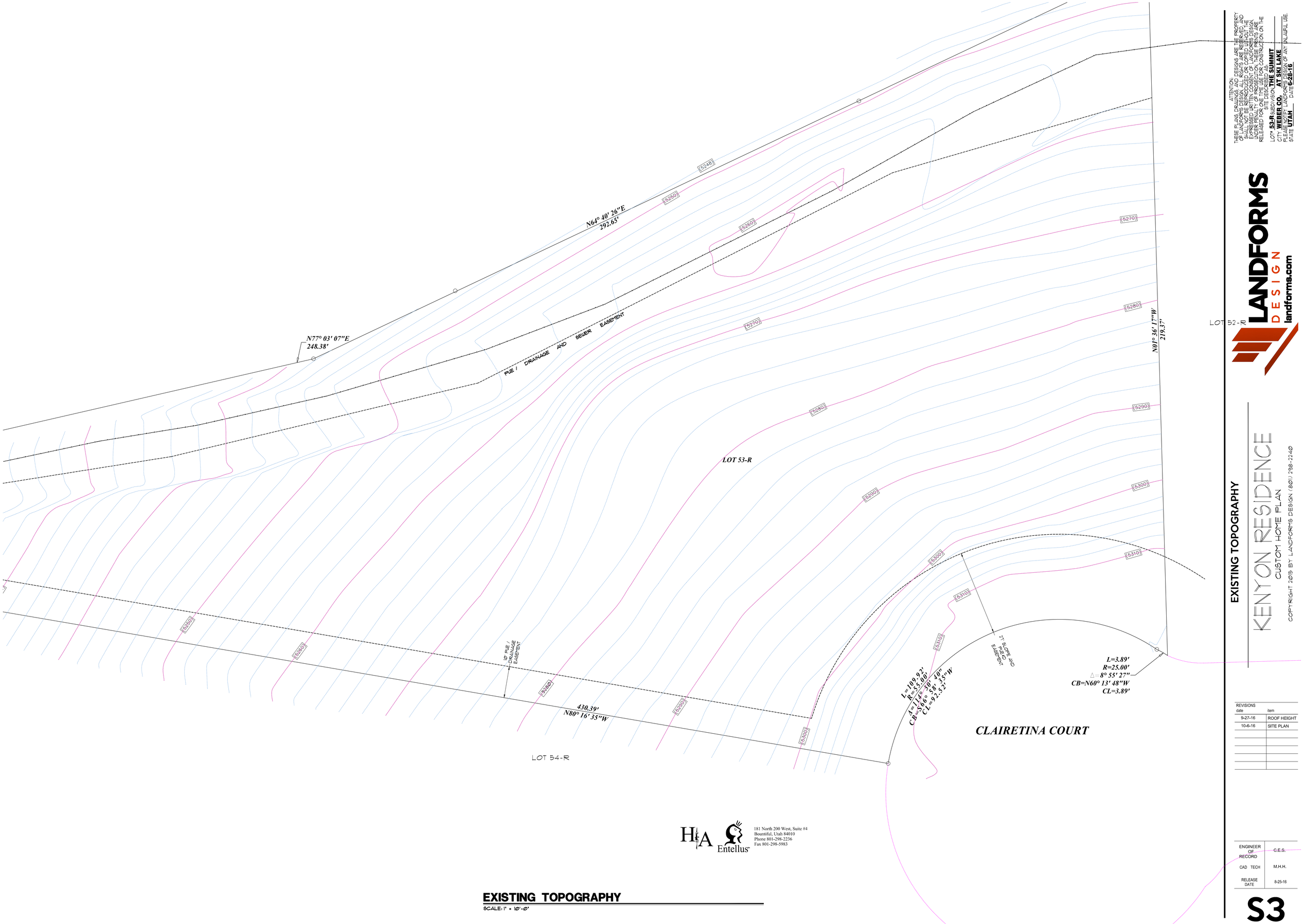
KENYON RESIDENCE
CUSTOM HOME PLAN

SWPP PLAN

REVISIONS date	item
9-27-16	ROOF HEIGHT
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

S2



H|A Entellus

181 North 200 West, Suite #4
Bountiful, Utah 84010
Phone 801-298-2236
Fax 801-298-5983

EXISTING TOPOGRAPHY

SCALE: 1" = 10'-0"

ATTENTION:

LOT: **53-R** REVISION: **THE SUMMIT**
SUBDIVISION: **AT SKI LAKE**
PLAT: **WEBER CO.**
STATE: **UTAH** DATE: **6-28-16**

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KENYON RESIDENCE

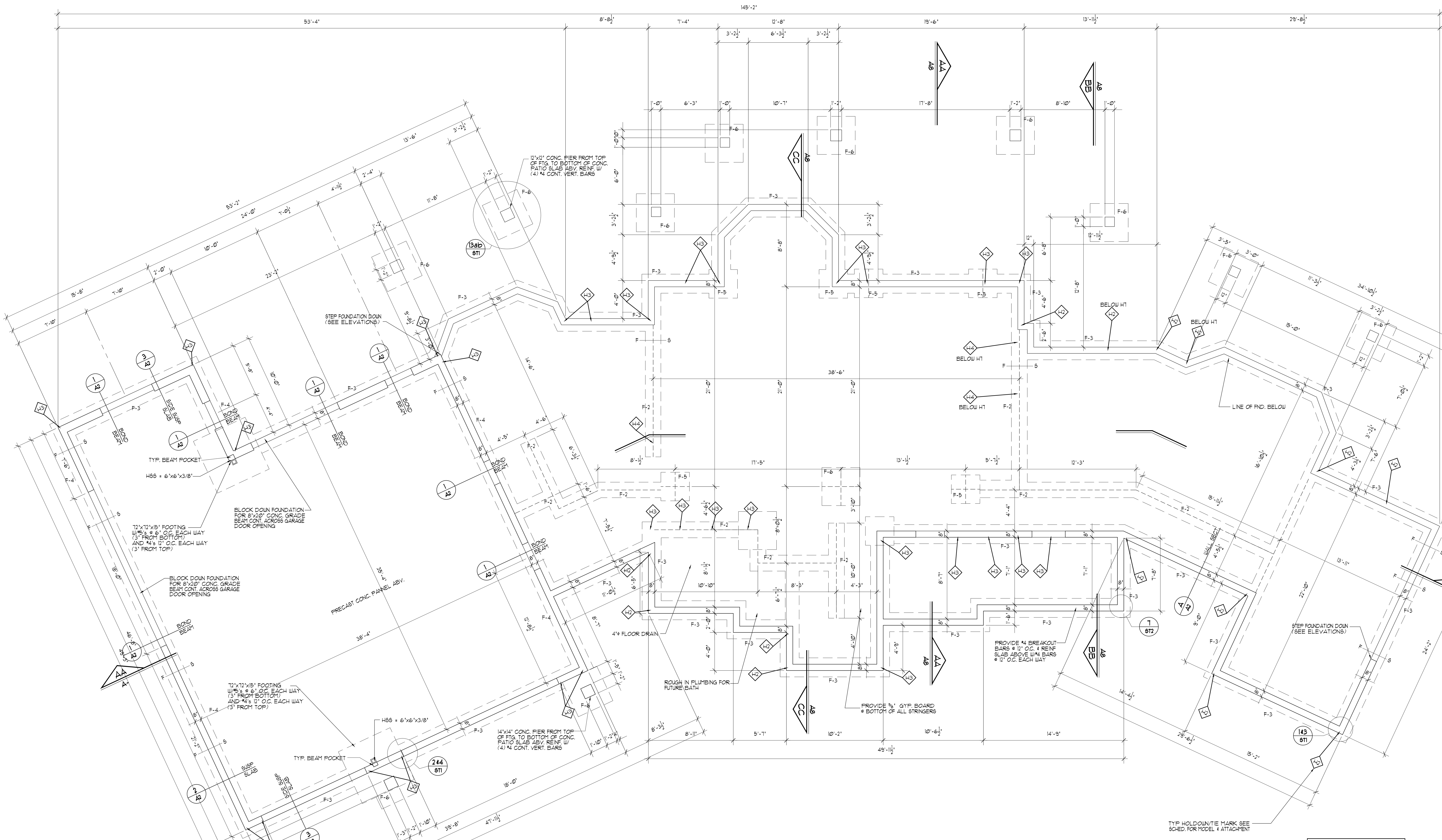
CUSTOM HOME PLAN

EXISTING TOPOGRAPHY

REVISIONS	
date	item
9-27-16	ROOF HEIGHT
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

S3



FOOTING AND FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

NOTE:
F-S INDICATES A STEP IN FOOTING & FOUNDATION SEE DETAIL 6:ST2

BASE MENT SQUARE FOOTAGE:	
FINISHED	2845 S.F.
STORAGE	1384 S.F.
COLD STORAGE	189 S.F.

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**

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FOOTING AND FOUNDATION PLAN

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HEI(
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A0

LOT: **53-R** SUBDIVISION: **THE SUMMIT**
CITY: **WEBER CO.** **AT SKI LAKE**
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BASEMENT FLOOR PLAN

KENT RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

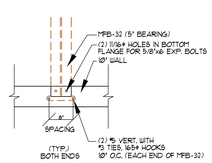
A1

FOOTING, FOUNDATION & BASEMENT FLOOR PLAN

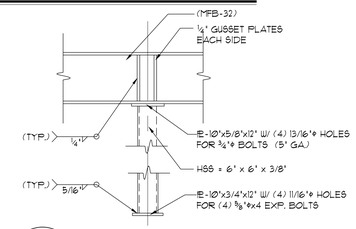
SCALE: 1/4" = 1'-0"

BASEMENT SQUARE FOOTAGE:	
FINISHED	2845 S.F.
STORAGE	1384 S.F.
COLD STORAGE	189 S.F.

NOTE:
F-5 INDICATES A STEP IN FOOTING & FOUNDATION SEE DETAIL 6/S12



1 / A2 **BEAM POCKET DTL**
SCALE: ½" = 1'-0"



1 / A2 **CONNECTION DTL.**
SCALE: 1" = 1'-0"

FOOTING AND FOUNDATION GENERAL NOTES

1. ALL EXTERIOR FLAT WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH EQUAL TO AT LEAST 3500 PSI WITHIN 28 DAYS AFTER PLACING. FOOTINGS AND FOUNDATION WALLS SHALL BE AT LEAST 3000 PSI.
2. ALL METAL REINFORCEMENT SHALL CONFORM TO A.S.T.M. A615-68 GRADE 60, WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.
3. ALL REINFORCING BARS SHALL BE DETAILED, BOLSTERED AND SUPPORTED IN ACCORDANCE WITH ACI 315.
4. ALL REINFORCEMENT BARS SHALL BE SECURELY ANCHORED TO THE FORMS AND SPACED FROM THEM AS FOLLOWS:
   (a) FOR CONCRETE NOT EXPOSED DIRECTLY TO THE GROUND OR WEATHER, 3/4 IN. IN SLABS AND WALLS.
   (b) FOR CONCRETE EXPOSED TO THE GROUND OR WEATHER, 2 IN. IN WALLS, 3 IN. ABOVE BOTTOM OF FOOTINGS.
5. ALL SPLICES IN CONTINUOUS REINFORCING BARS SHALL LAP 36 BAR DIAMETERS. ALL SUCH SPLICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS SHOWN OTHERWISE.
6. UNLESS OTHERWISE SHOWN, MAKE ALL CONCRETE SLABS ON EARTH AT LEAST 4 IN. THICK
7. PROVIDE 2 IN. X 4 IN. X CONT. KEY IN ALL WALL FOOTINGS WHERE GROUND WATER IS PRESENT.
8. LARGE AREAS OF SLAB ON GRADE SHALL BE PLACED IN STRIPS SUBDIVIDED BY CONTRACTION OR CONSTRUCTION JOINTS INTO ROUGHLY SQUARES WHOSE SIDES SHALL NOT EXCEED 25 FT. IN EITHER DIRECTION.
9. UNLESS OTHERWISE NOTED, REINFORCE ALL CONCRETE WALLS OVER 8'-0" BUT UNDER 10'-0" AS SPECIFIED BELOW. USE CITY SPECIFIED STEEL FOR FOUNDATION WALL LESS THAN 8'-0", WITH FOUNDATION STEPS LESS THAN 5'-0". IF FOUNDATION STEPS TOTAL 5'-0" OR MORE, REINFORCE AS SPECIFIED BELOW:

WALL HEIGHT	WALL THICKNESS	HORIZONTAL REINF.	VERTICAL REINF.
8'-0" - 10'-0"	8" WALL	#4's @ 12" O.C.	#4's @ 12" O.C.
8'-0" - 10'-0"	9" WALL	#4's @ 12" O.C.	#4's @ 12" O.C.
8'-0" MAX., 5'-0" OR MORE FOUNDATION STEP	8" OR 9" WALL	#4's @ 18" O.C. 6" MAX FROM T&B	#4's @ 18" O.C.

PLACE STEEL IN CENTER OF WALL AND DOWEL TO FOOTING OR TO STRUCTURE ABOVE AND BELOW WITH SAME DOWEL SIZE AND SPACING AS VERTICAL REINFORCEMENT. ALL DOWELS SHALL HAVE AT LEAST 30 DIAMETERS EMBEDMENT. PROVIDE CORNER BARS AT ALL INTERSECTING CORNERS. USE SAME SIZE BAR AND SPACING AS HORIZONTAL WALL REINFORCEMENT.

10. ADD 2-#5 BARS AROUND ALL OPENINGS AND EXTEND 24 IN. BEYOND THE CORNER OF THE OPENINGS, UP TO 6'-0" OPENINGS.
11. PLACE FOOTINGS AS TO PROVIDE 30" MIN. FROST PROTECTION

STEEL

1. ALL STRUCTURAL STEEL AND STRUCTURAL STEEL WORK SHALL COMPLY WITH "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS OF THE A.I.S.C."
2. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE A.S.T.M. A36.
3. ALL WELDS AND WELDING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS OF "THE AMERICAN WELDING SOCIETY," USING E70XX ELECTRODES.

FOOTING SCHEDULE

ALL FOOTINGS ON THIS SCHEDULE MAY NOT BE USED FOR THIS PLAN

MARK	WIDTH	LENGTH	THICK	CROSSWISE REINF. NO.	SIZE	LENGTH	SPACE	LENGTHWISE REINF. NO.	SIZE	LENGTH	SPACE	REMARKS
F-1	1'-8"	CONT.	10"	NONE				(2)	#4	CONT.	14"	PERIMETER FTG.
F-2	1'-8"	CONT.	10"	NONE				(2)	#4	CONT.	14"	INTERIOR FOOTING UNDER SLAB
F-3	2'-0"	CONT.	12"	NONE				(3)	#4	CONT.	9"	PERIMETER FTG.
F-4	2'-6"	CONT.	12"	NONE				(4)	#4	CONT.	8"	PERIMETER FTG.
F-5	3'-0"	3'-0"	12"	(4)	#4	2'-6"	10"	(3)	#4	2'-6"	15"	SPOT FTG.
F-6	4'-0"	4'-0"	12"	(5)	#4	3'-6"	10½"	(5)	#4	3'-6"	10½"	SPOT FTG.
F-7	5'-0"	5'-0"	12"	(5)	#4	4'-6"	13½"	(5)	#4	4'-6"	13½"	SPOT FTG.
F-8	4'-0"	CONT.	12"	NONE				(5)	#4	CONT.	10½"	PERIMETER FTG.

SHEARWALL SCHEDULE

ALL SHEARWALLS NOTED MAY NOT BE USED IN THIS PLAN

WALL NO.	PLYWOOD ONE SIDE	EDGE NAILING	BOLT SPACING	SILL PLATE NAILING	NOTES/ COMMENTS:
1	7/16"	8d @ 6"	32" O.C.	16d @ 6"	
2	7/16"	8d @ 4"	32" O.C.	16d @ 4"	
3	7/16"	8d @ 4"	24" O.C.	16d @ 4"	DOUBLE STUDS OR 3" NOMINAL MEMBER @ ALL PANEL EDGES & SEAMS
4	7/16"	8d @ 3"	18" O.C.	16d @ 3"	DOUBLE STUDS OR 3" NOMINAL MEMBER @ ALL PANEL EDGES & SEAMS
5	15/32"	10d @ 3"	16" O.C.	16d @ 2" STAGGERED	FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL (MIN)
6	15/32"	10d @ 2"	12" O.C.	16d @ 2" STAGGERED	FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL (MIN) AND NAILS TO BE STAGGERED

1. PLYWOOD SHALL BE STRUCTURAL II, CDX EXTERIOR GRADE. PLYWOOD PANEL EDGES SHALL BE BLOCKED. (PLYWOOD SHALL EXTEND TO FOUNDATION SILL PLATE. PLYWOOD SEAMS ARE TO BE MADE IN WALL AREA, NOT AT WALL TO FLOOR INTERFACE.)
2. ANCHOR BOLTS SHALL BE ASTM A307, 5/8"φ x 10" LONG, WITH A MINIMUM EMBEDMENT OF 7" INTO CONCRETE FOUNDATION. INSTALL 3"x3"x¼" PLATE WASHER @ EACH ANCHOR BOLT. (BOLT SPACING TO BE AT SPACING TO BE AT SPACING SHOWN UNLESS OTHERWISE SHOWN ON FOUNDATION DWG.)
3. MAXIMUM STUD SPACING 16" ON CENTER.
4. PROVIDE NAILS @ 12" ON CENTER AT INTERMEDIATE SUPPORTS, NAILS TO BE SAME SIZE AS EDGE NAILING
5. PANEL PORTIONS ABOVE AND/ OR BELOW OPENINGS IN SHEARWALLS SHOULD BE CONSTRUCTED AS SHEARWALL
6. 1 1/2" 16 GAGE (w/ 7/16" CROWN (MIN)) STAPLES INSTALLED w/ CROWN PARALLEL TO LONG DIMENSION OF FRAMING MEMBERS MAY BE USED IN LIEU OF 8d NAILS FOR SHEARWALLS 1, 2, & 3. SPACE STAPLES @ 4" O.C. FOR 1, @ 3" O.C. FOR 2, & @ 2" O.C. FOR 3. STAPLES ARE NOT PERMISSIBLE FOR SHEARWALLS 4, 5 & 6.
7. SILL PLATE NAILS MAY BE 16d SINKER NAILS OR 16d COMMON NAILS.
8. ALL INTERIOR BEARING NON-SHEAR WALLS TO HAVE ½"φ ANCHOR BOLTS SPACED AT 32" O.C.. BOLTS MAY BE ½"φx8" EXPANSION BOLTS.

FRAMING GENERAL NOTES 2015 I.R.C.

1. ALL BEARING HEADERS, JOISTS AND BEAMS SHALL BE fb-850 psi (DOUG FIR #2 OR BETTER). ALL BEARING COLUMNS SHALL BE fc-625 psi (DOUG FIR #2 OR BETTER). ALL BEARING STUDS & TRIMMERS SHALL BE fc-405 psi. (HEM FIR #2 OR BETTER) FOR MAX. HEIGHTS ALLOWED SEE STUD WALL HEIGHT SCHEDULE. GLU-LAMINATED TIMBER MEMBERS SHALL HAVE A MINIMUM ALL ALLOWABLE BENDING STRESS OF 2,400 psi (24F-V4) LAMINATED VENEER LUMBER SHALL HAVE A MINIMUM ALLOWABLE BENDING STRESS OF 2,800 psi
2. PROVIDE SOLID BLOCKING AT LEAST 2 IN. THICK AND FULL DEPTH OF JOIST @ ENDS AND AT EACH SUPPORT OF JOIST. PROVIDE SOLID BLOCKING @ BEARING ENDS OF TRUSSES.
3. LAMINATED BUILT-UP BEAMS OF 2X MEMBERS SHALL BE SPIKED TOGETHER WITH NOT LESS THAN (2) ROWS 16d SPIKES AT SIXTEEN-INCH (16 IN.) CENTERS, STAGGERED. USE (2) ROWS 16d COMMON NAILS AT 3" OFF TOP AND BOTTOM OF BUILT UP BEAM. STAGGER TOP AND BOTTOM ROWS OF NAILS.
4. ALL STRUCTURAL SHEATHING SHALL BE A.P.A. RATED AND SHALL NOT EXCEED MAXIMUM SPAN RATING. ROOF SHEATHING SHALL BE **5/8**" STRUC II WITH A SPAN RATING OF 24/16. ROOF SHEATHING SHALL BE FASTENED TO FRAMING WITH 8d @ 6" O.C. @ BOUNDARY AND EDGES, & W/ 8d @ 12" O.C. @ FIELD. FLOOR SHEATHING SHALL BE ¾" STRUCT II T&G WITH A SPAN RATING OF 48/24. FLOOR SHEATHING SHALL BE FASTENED TO FRAMING WITH 8d @ 6" O.C. @ BOUNDARY AND EDGES, & W/ 8d @ 12" O.C. @ FIELD.
5. TRUSSES TO BE DESIGNED & ENGINEERED BY MANUFACTURER AND GUARANTEED TO WITHSTAND LOADS AS SHOWN IN DESIGN BASIS BELOW. TRUSS MANUFACTURER TO DESIGN TRUSSES FOR ALL APPLICABLE SNOW LOADING CONDITIONS PER IRC 2015.
6. PROVIDE FIRE BLOCKING IN ANY STUD CAVITIES GREATER THAN 10'-0".
7. PROVIDE SIMPSON H1 ANCHORS @ EACH TRUSS ON BEARING ENDS OF ALL TRUSSES & RAFTERS.
8. PROVIDE JOIST HANGERS WHERE SHOWN, OR WHERE APPLICABLE.
9. PROVIDE TRIMMERS/STUDS UNDER BEARING ENDS OF GIRDER TRUSSES & BEAMS EQUIVALENT TO THE WIDTH OF THE MEMBER SUPPORTED, OR AS SPECIFIED ON FRAMING PLANS.
10. PROVIDE GABLE END TRUSSES AS REQUIRED.
11. ALL NONBEARING INTERIOR FRAMING @ 16" O.C.
12. FRAMING TO INCLUDE ALL FURR DOWNS, PLANT SHELVES & CEILING RAFTERS AS PER PLAN.
13. ALL WOOD BEAMS AND HEADERS SHALL BEAR ON MINIMUM OF (1) TRIMMER STUD AT EACH END UNLESS SHOWN OTHERWISE.
14. PROVIDE SOLID BLOCKING IN FLOORS TO TRANSFER COLUMN POINT LOADS THROUGH FLOOR (1¾" x 9½", 11⅞", AND 14" L.V.L.'s) TO MATCH FLOOR SYSTEM.
15. HOT TUBS OR OTHER OWNER INSTALLED ITEMS THAT IMPOSE HEAVY LOADS ON STRUCTURAL MEMBERS WILL REQUIRE ADDITIONAL ENGINEERING IF NOT SHOWN ON ORIGINAL PLANS USED FOR DESIGN. STRUCTURAL MEMBERS MAY NEED TO BE INCREASED FOR THE ADDITIONAL IMPOSED LOADING.

DESIGN BASIS

GOVERNING BUILDING CODE .... I.R.C, I.B.C. 2015
SEISMIC DESIGN
SECTION .... 1613.5.6.2 (ASCE7) CAT. D
WIND DESIGN
BASIC WIND SPEED .... 115 M.P.H.
DESIGN SOIL BEARING PRESSURE .... 1500 P.S.F.
ROOF LIVE LOAD .... 70 P.S.F.
DEAD LOAD .... 17 P.S.F.
SUSPENDED FLOOR LIVE LOAD .... 40 P.S.F.
DEAD LOAD (RADIANT HEAT FLOORING) .... 25 P.S.F.
EXTERIOR BALCONY/DECK LIVE LOAD .... 40 P.S.F.
DEAD LOAD .... 10 P.S.F.

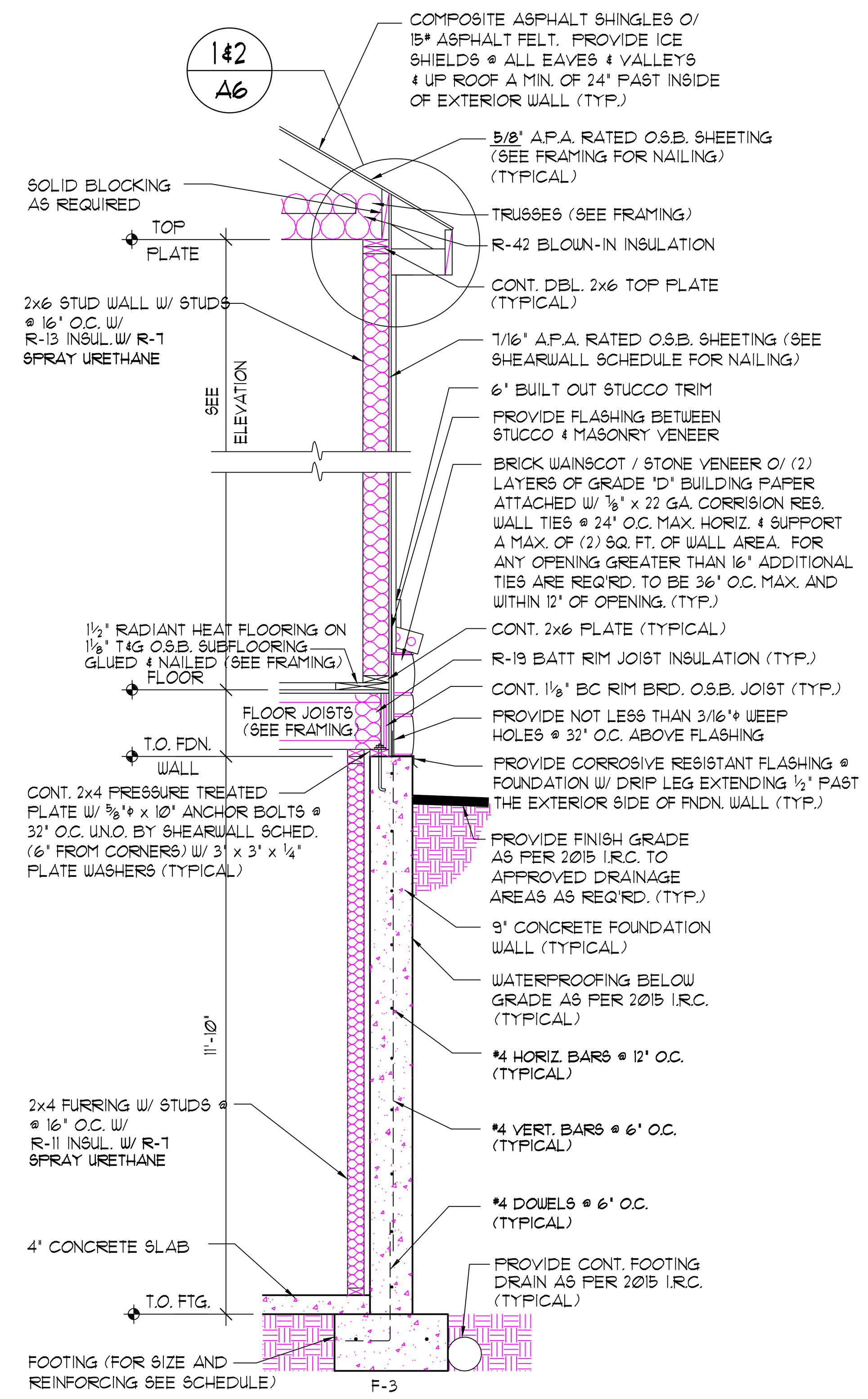
HOLDOWN SCHEDULE: 2015

	MARK	SIMPSON MODEL #	MIN. REQUIRED ATTACHMENT	NOTES/ COMMENTS:
SHEARWALL TO FOUNDATION HOLDOWNS	H1	STHD8/8RJ (2)	(24) 16d SINKERS	
	H2	STHD10/10RJ (2)	(28) 16d SINKERS	
	H3	STHD14/14RJ (2)	(38) 16d SINKERS	
	H4	HTT5	(26) 16d COMMON	5/8"φ THREADED ROD EPOXY INSTALLED IN A 3/4"φ x 12" DEEP HOLE
	H5	HDU11	(30) SDS 1/4" x 2 1/2" WOOD SCREW	1"φ THREADED ROD EPOXY INSTALLED IN A 1 1/8"φ x 18" DEEP HOLE
	H6	HDU14	(36) SDS 1/4" x 2 1/2" WOOD SCREW	1"φ THREADED ROD EPOXY INSTALLED IN A 1 1/8"φ x 24" DEEP HOLE
UPPER TO LOWER WALL TIE ANCHORS	H7	MST48	(34) 16d SINKERS	CENTER STRAP SO EQUAL LENGTHS ARE ON UPPER AND LOWER WALLS
	H8	MST72	(48) 16d SINKERS	CENTER STRAP SO EQUAL LENGTHS ARE ON UPPER AND LOWER WALLS
	H9	HDU8	(20) SDS 1/4 x 2 1/2" WOODSCREWS	7/8"φ THREADED ROD BETWEEN FLOORS INSTALL ON 4x (MIN) POST @ BOTH FLOORS

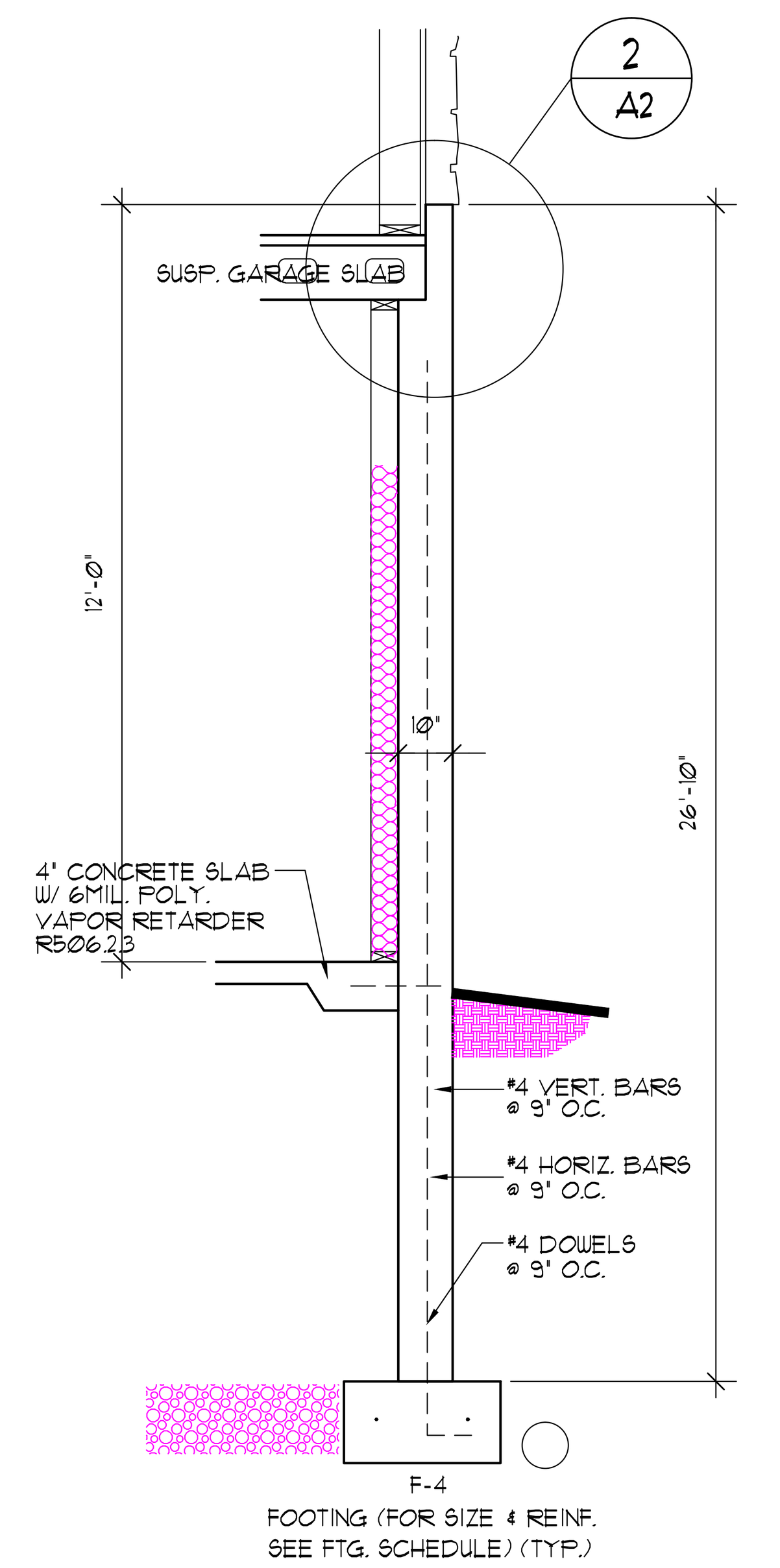
1. ALL FOUNDATION "HOLDOWNS" AND BETWEEN LEVEL TIES SHALL BE ATTACHED TO A MINIMUM OF (2) 2 x OR A 4 x MEMBER.
2. 'RJ' AFTER MODEL INDICATES STHD's FOR RIM JOIST APPLICATIONS. USE RJ MODELS @ ALL RIM JOIST APPLICATIONS
3. USE STANDARD WASHERS WHEN BOLTING HD's TO THE STUDS OPPOSITE THE "HOLDOWN". HD's MUST BE LOCATED ON THE STUDS TO PROVIDE A MINIMUM OF 7 BOLT DIAMETERS BETWEEN THE HOLE AND THE END OF THE STUDS.
4. FOUNDATION CONCRETE STRENGTH SHALL BE 2,500 PSI. INSTALL A MINIMUM OF (1) #4 HORIZONTAL REBAR IN SHEAR CONE ON ALL FOUNDATION "HOLDOWNS".
5. 16d SINKERS MAY BE REPLACED w/ 10d COMMON NAILS w/ NO REDUCTIONS (16d SINKERS = 0.148"φ x 3 1/4" LONG, 10d COMMON = 0.148"φ x 3"). 'GUN NAILS' MAY NOT BE USED UNLESS SPECIFICALLY NOTED.
6. REFER TO ATTACHED CONCRETE SECTIONS AND DETAILS SHEET OR TO SIMPSON CATALOG C-2015 FOR APPLICABLE DETAILS AND ADDITIONAL INSTALLATION INSTRUCTIONS.
7. ALL HOLDOWNS ON THIS SCHEDULE MAY NOT BE APPLICABLE TO THIS PLAN.

REScheck COMPLIANCE REQ. 2015

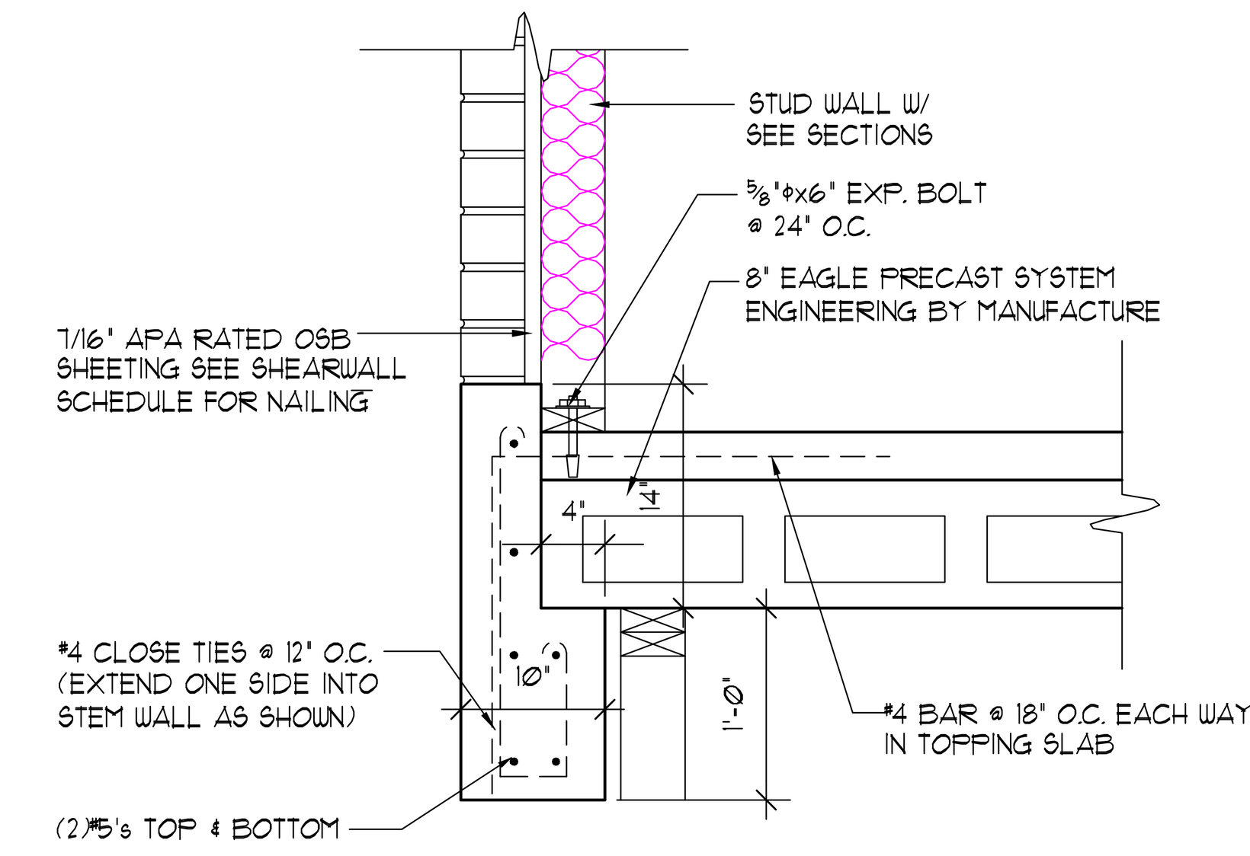
DESCRIPTION	INSULATION R-VALUE	DOOR/WINDOW U-VALUE
EXTERIOR OR FURRED BASEMENT WALLS 2x4 STUDS	R-11 W/ R-7 SPRAY URETHANE	R-18 TOTAL
EXTERIOR STUD WALLS 2x6 STUDS	R-13 W/ R-7 SPRAY URETHANE	R-20 TOTAL
BLOWN INSULATION OVER LIVING AREA	R-42	PROVIDE INSULATION DEPTH MARKERS EVERY 300 SQFT. OF ATTIC AREA
BATT INSULATION OVER LIVING AREA	R-38 HIGH DENSITY	
INSULATED FLOOR OVER GARAGE AREA & CANTILEVERS	R-30	
WINDOWS		U-0.320
EXTERIOR DOORS		U-0.250
CONC. STEM WALL (WALKOUT)	R-10	36" EACH WAY
FURNACE EFFICIENCY	BASEMENT, MAIN, UPPER FLOOR = 90%	



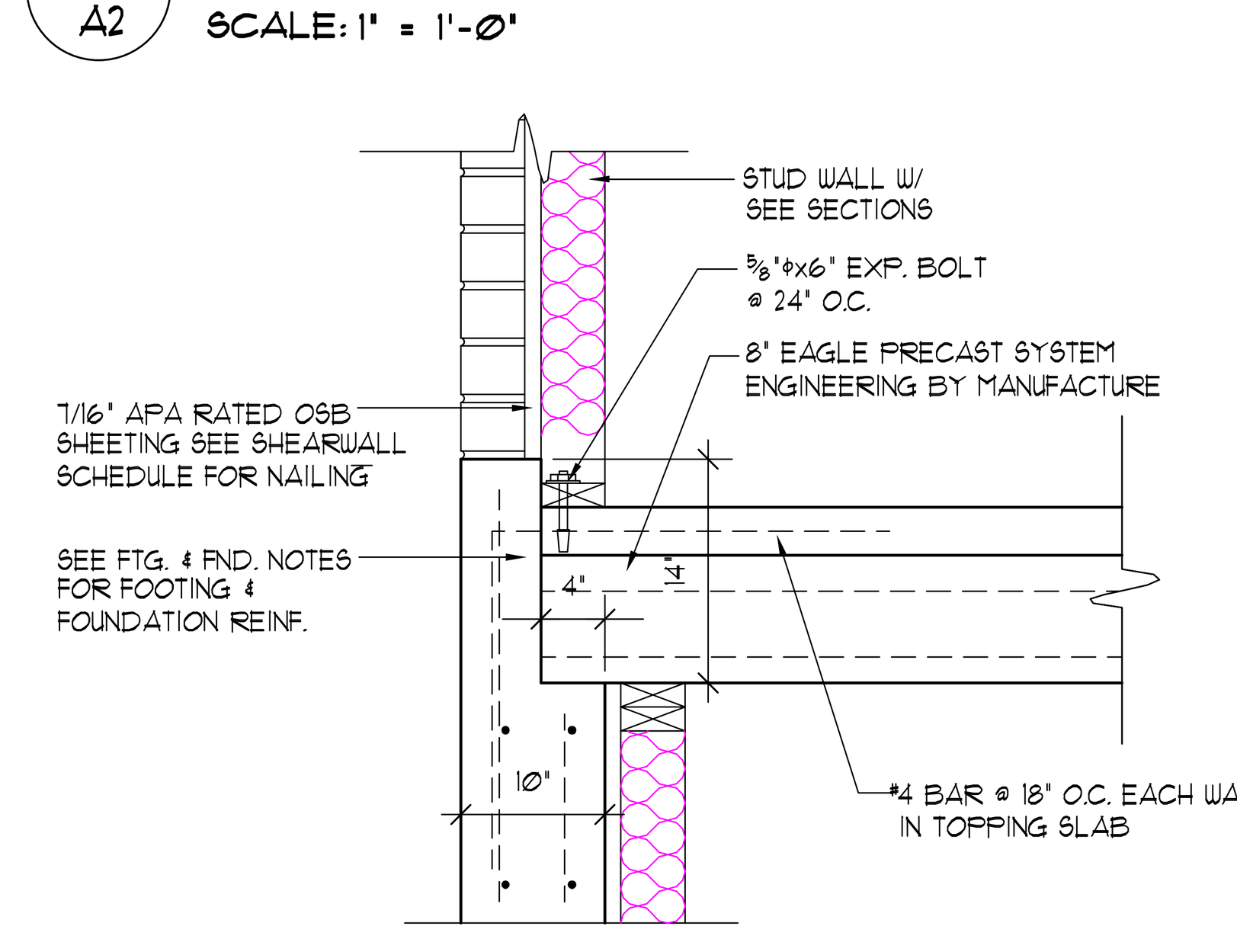
A / A2 **WALL SECTION**
SCALE: 1/2" = 1'-0"



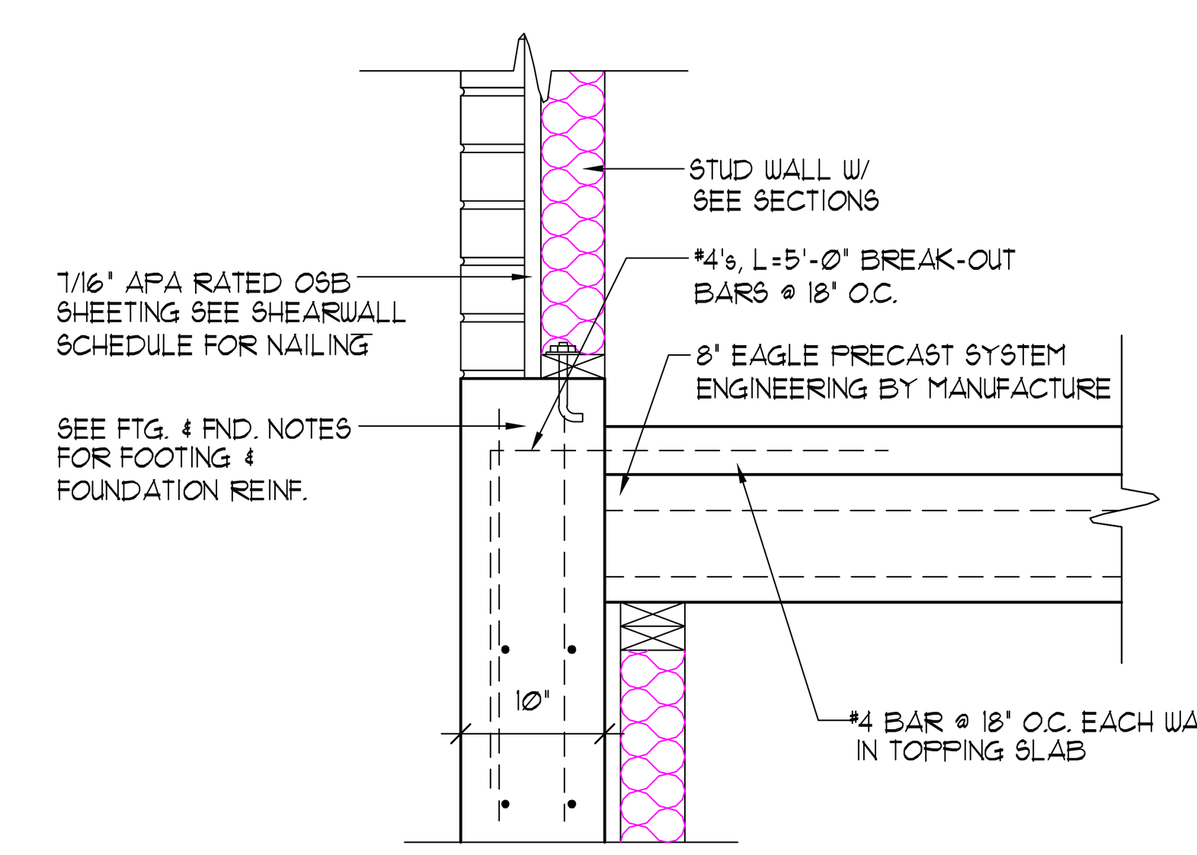
C / A2 **TALL WALL DET.**
SCALE: ½" = 1'-0"



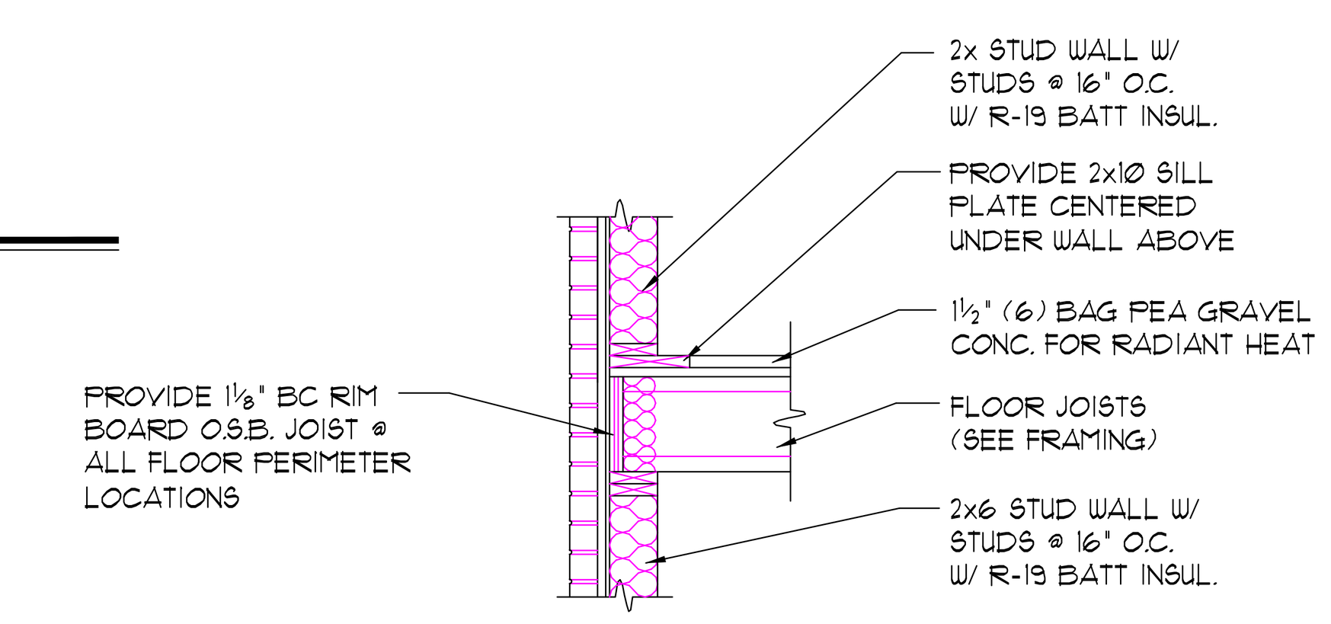
1 / A2 **BOND BEAM DETAIL**
SCALE: 1" = 1'-0"



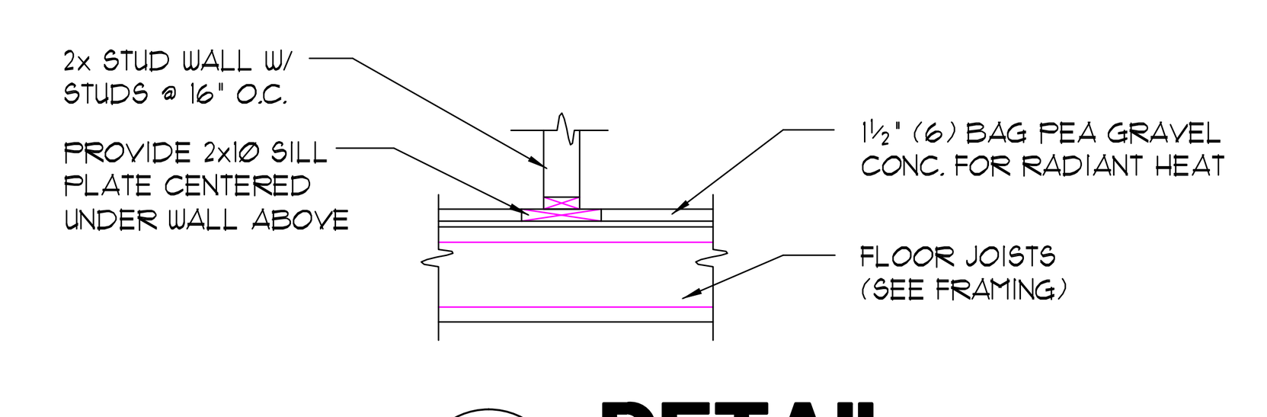
2 / A2 **PRE-CAST BLOCK-OUT**
SCALE: 1" = 1'-0"



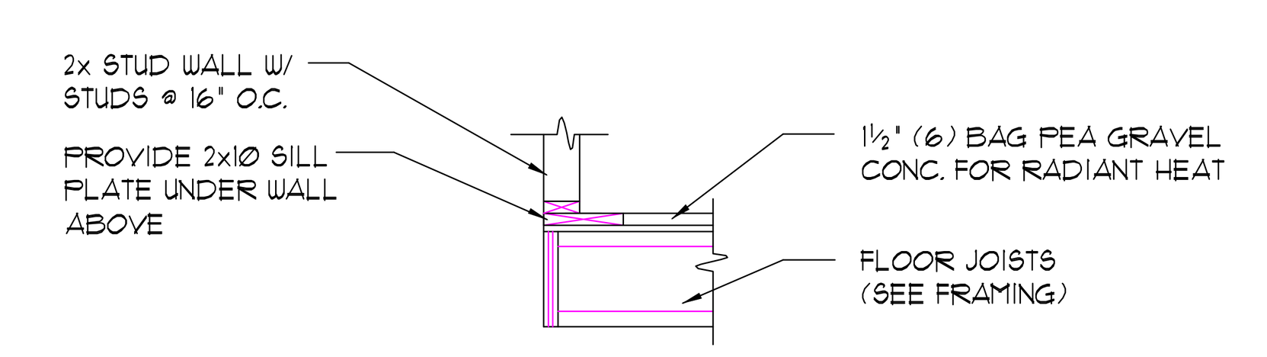
3 / A2 **PRE-CAST DETAIL**
SCALE: 1" = 1'-0"



4 / A2 **DETAIL**
SCALE: 1/2" = 1'-0"



5 / A2 **DETAIL**
SCALE: 1/2" = 1'-0"



6 / A2 **DETAIL**
SCALE: 1/2" = 1'-0"

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**
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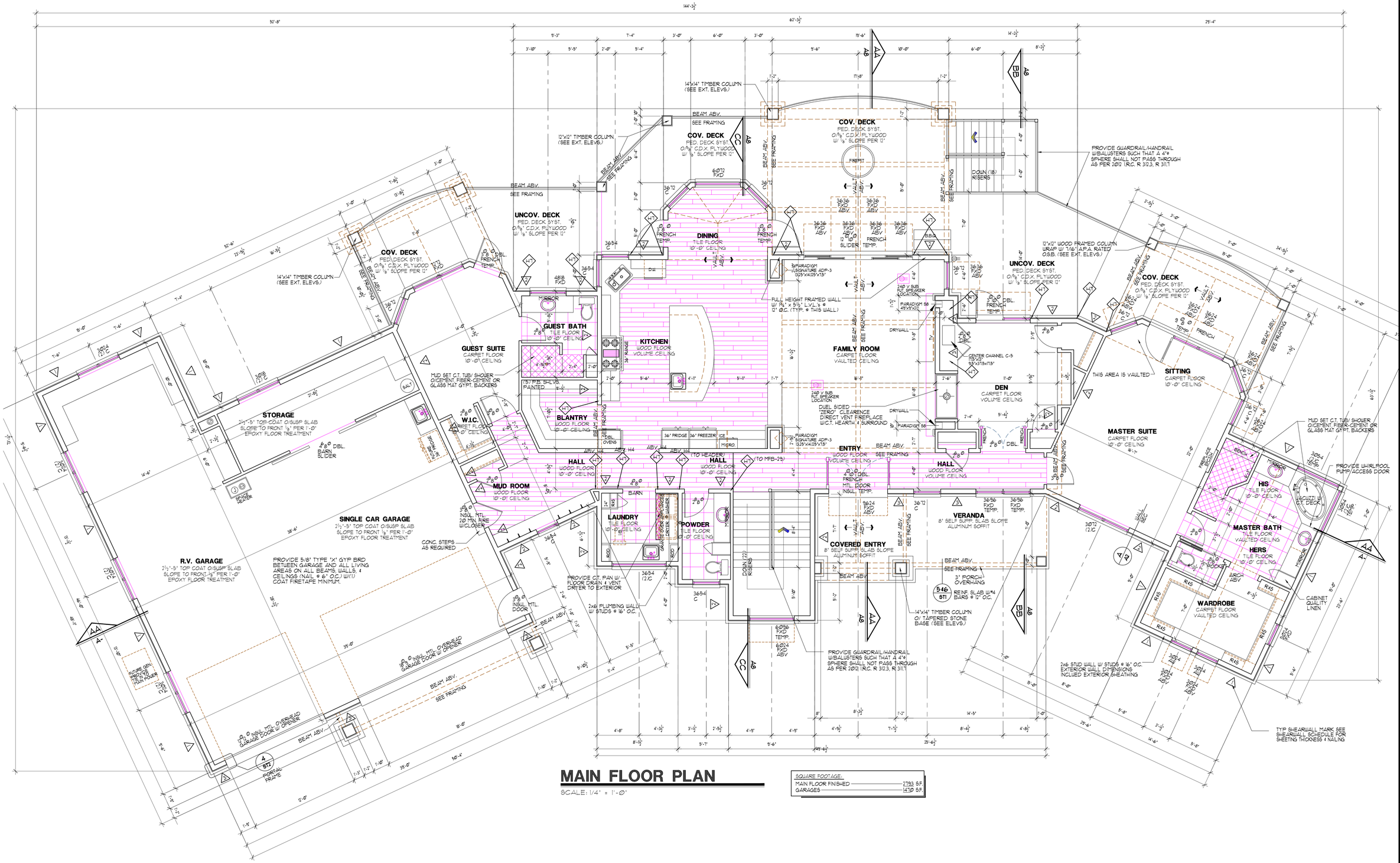
CONSTRUCTION NOTES AND DETAILS

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HE
10-6-16	SITE PLA

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A2



MAIN FLOOR PLAN

SCALE: 1/4" = 1'-0"

SQUARE FOOTAGE:	
MAIN FLOOR FINISHED	2793 S.F.
GARAGES	1410 S.F.

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**
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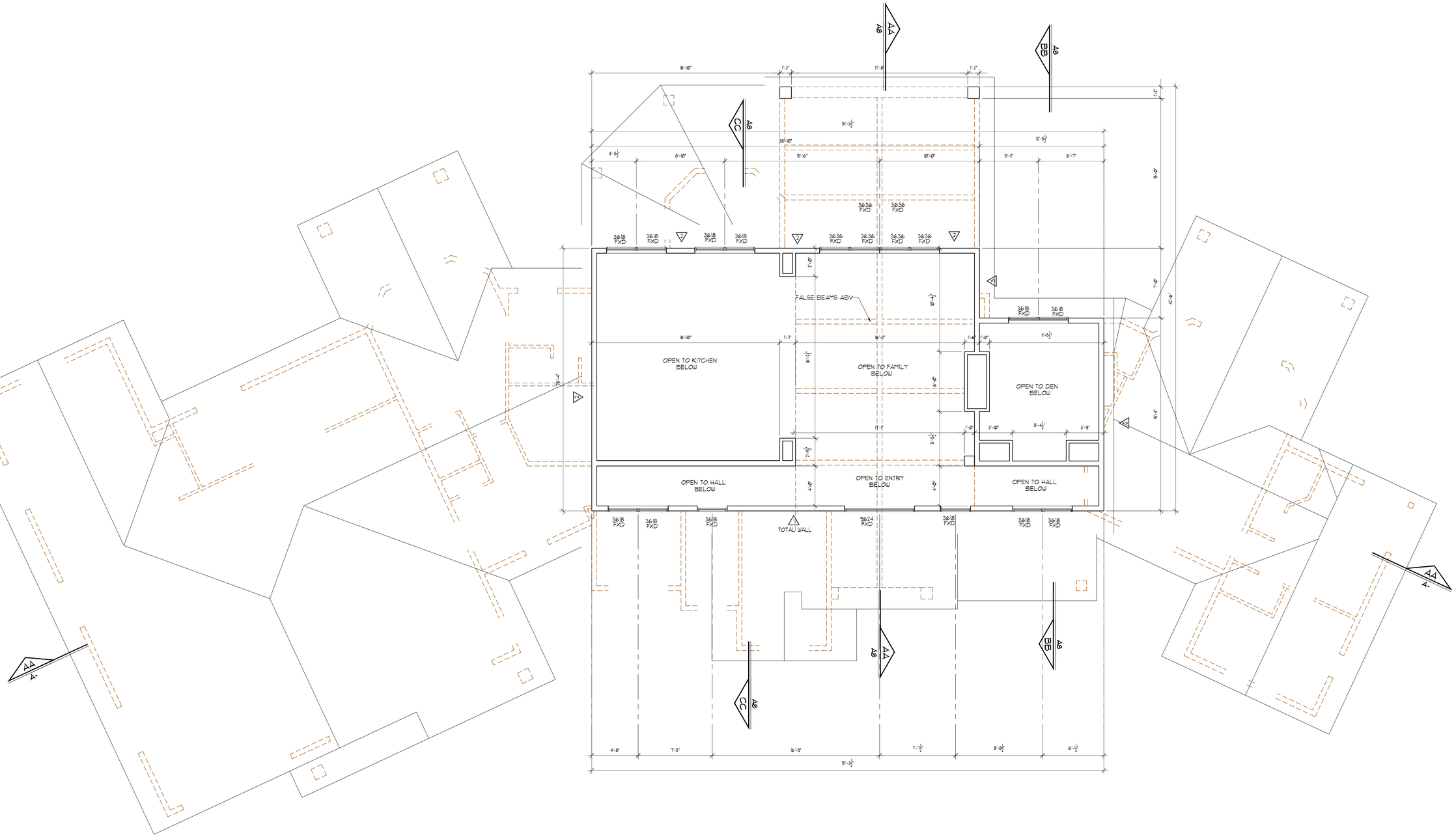
MAIN FLOOR PLAN

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEIG
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A3



CLERESTORY PLAN

SCALE: 1/4" = 1'-0"

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CITY: **WEBER CO.** **AT SKI LAKE**
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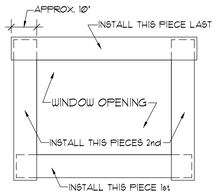
UPPER FLOOR PLAN

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

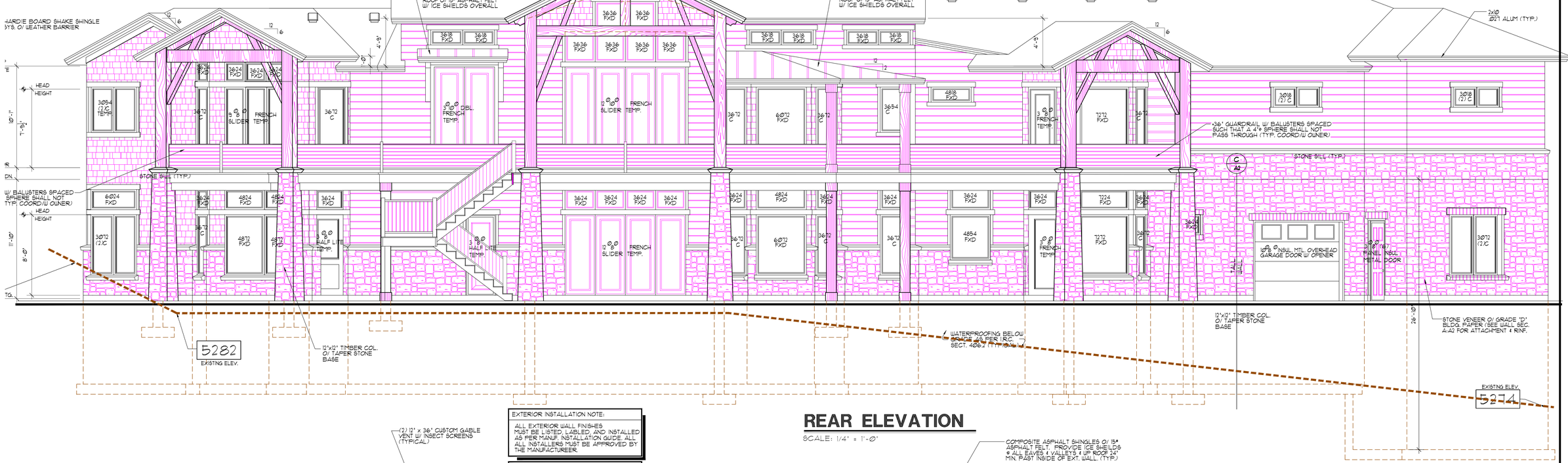
A4



A / A4 **WINDOW FLASHING**
SCALE: NO SCALE

FLASHING GENERAL NOTES

FLASHING SHALL BE INSTALLED IN SUCH A MANNER SO AS TO PREVENT MOISTURE FROM ENTERING A WALL, ROOF OR FLOOR AND REDIRECT IT TO THE EXTERIOR. FLASHING SHALL BE INSTALLED AT THE PERIMETERS OF EXTERIOR DOOR AND WINDOW ASSEMBLIES, PENETRATIONS AND TERMINATIONS OF EXTERIOR WALL ASSEMBLIES, EXTERIOR WALL ASSEMBLIES, EXTERIOR WALL INTERSECTIONS WITH ROOFS, CHIMNEYS, PORCHES, DECKS, BALCONIES AND SIMILAR PROJECTIONS AND AT BUILT-IN GUTTERS AND SIMILAR LOCATIONS WHERE MOISTURE COULD ENTER THE WALL. FLASHING WITH PROJECTED FLANGES SHALL BE INSTALLED ON BOTH SIDES AND THE ENDS OF COPINGS, UNDER SILLS AND CONTINUOUSLY ABOVE PROJECTED TRIM. A FLASHING SHALL BE INSTALLED AT THE INTERSECTION OF THE FOUNDATION TO STUCCO, MASONRY, SIDING OR BRICK VENEER. THE FLASHING SHALL BE AN APPROVED CORROSION-RESISTANT FLASHING. R703.7.5, R703.8, R903.2, R905



REAR ELEVATION

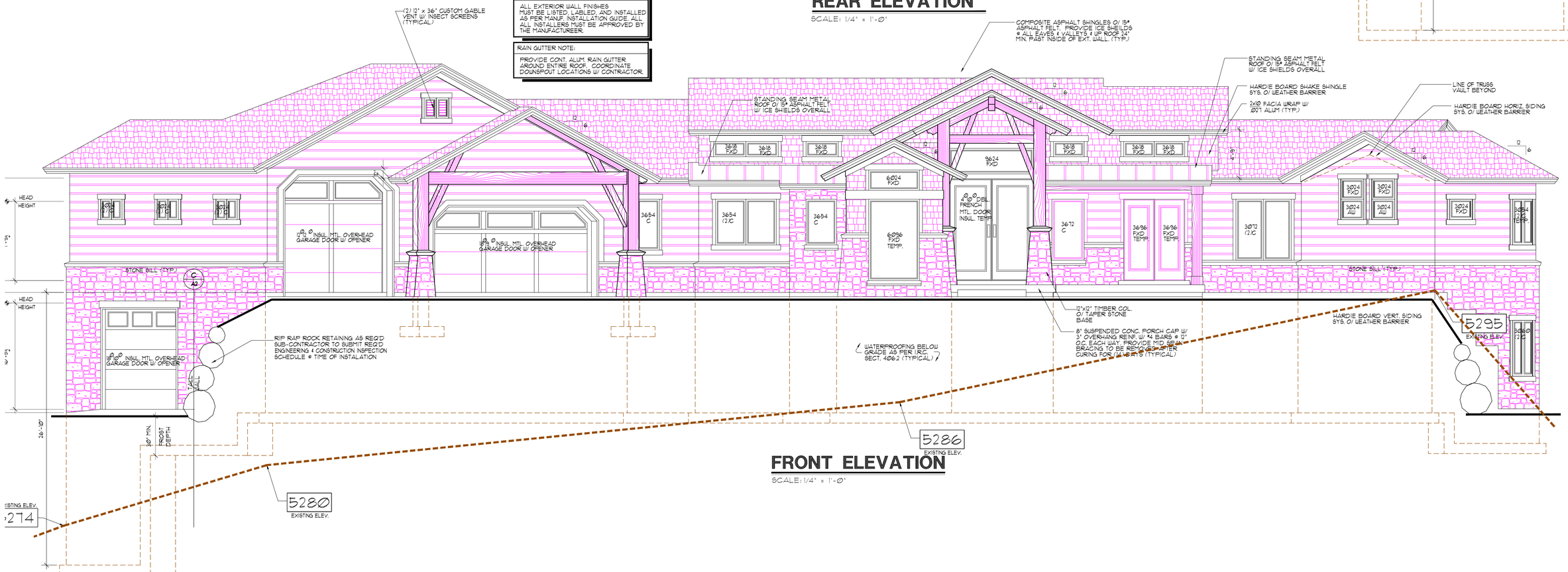
SCALE: 1/4" = 1'-0"

EXTERIOR INSTALLATION NOTE:

ALL EXTERIOR WALL FINISHES MUST BE LISTED, LABLED, AND INSTALLED AS PER MANUF. INSTALLATION GUIDE. ALL ALL INSTALLERS MUST BE APPROVED BY THE MANUFACTURER.

RAIN GUTTER NOTE:

PROVIDE CONT. ALUM. RAIN GUTTER AROUND ENTIRE ROOF. COORDINATE DOWNSPOUT LOCATIONS W/ CONTRACTOR.



FRONT ELEVATION

SCALE: 1/4" = 1'-0"

LOT: **53-R** SUBDIVISION: **THE SUMMIT**
CITY: **WEBER COUNTY** STATE: **UT** ZIP: **AT SKI LAKE**
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LANDFORMS DESIGN

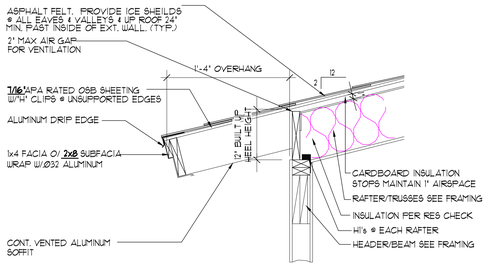
EXTERIOR ELEVATIONS

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HE
10-6-16	SITE PLA

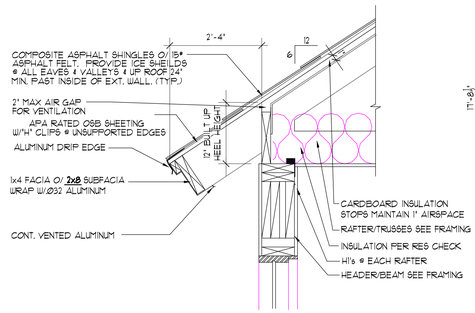
ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A5



1 / A6 **EAVE DETAIL**

SCALE: 1" = 1'-0"



2 / A6 **EAVE DETAIL**

SCALE: 1½" = 1'-0"

EXTERIOR INSTALLATION NOTE:

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RAIN GUTTER NOTE:

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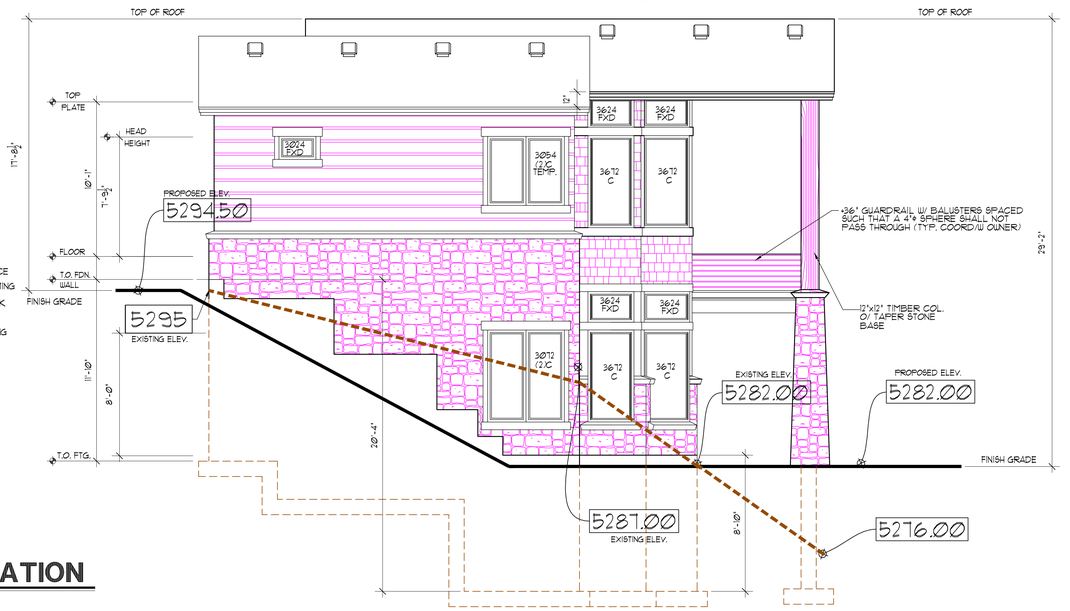
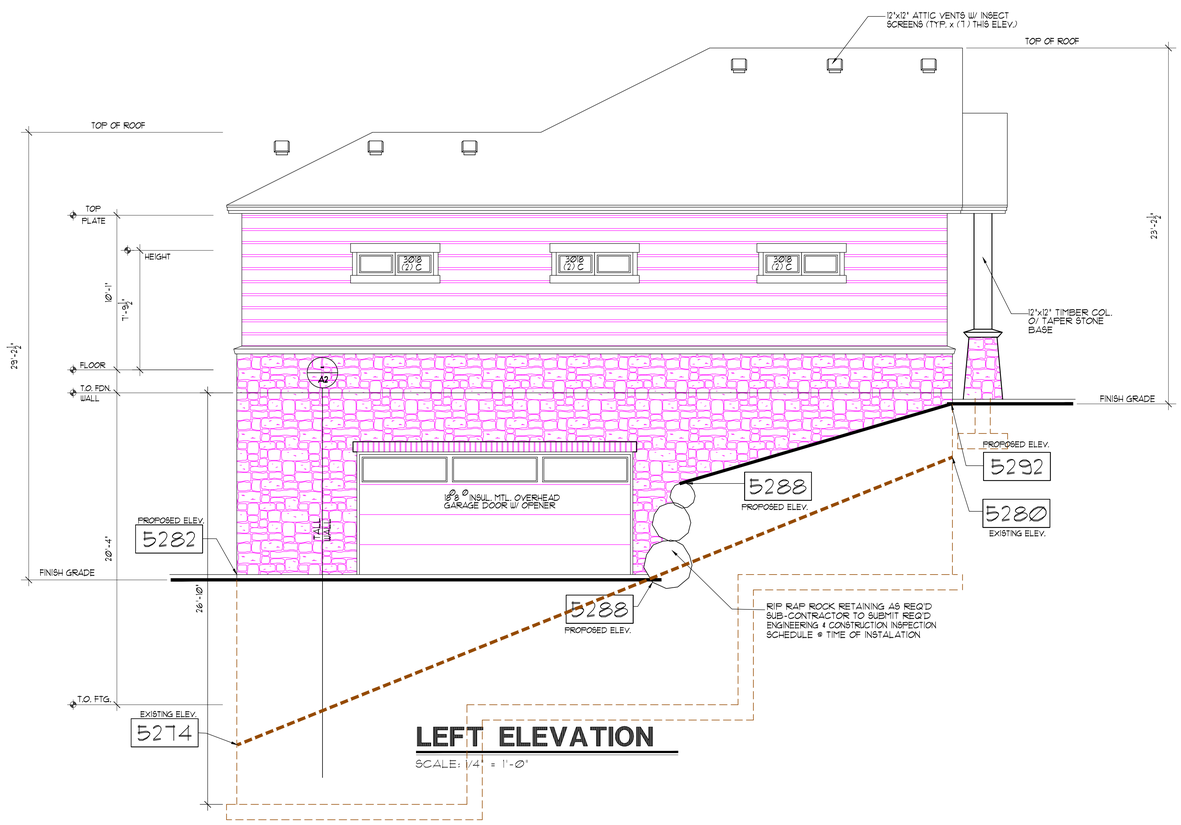


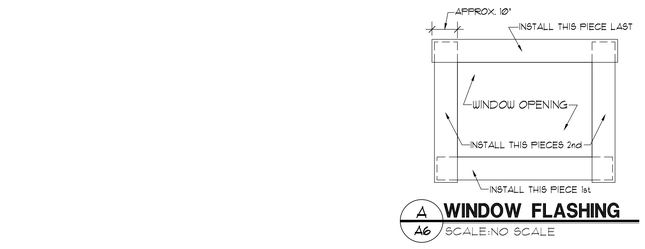
RIGHT ELEVATION

SCALE: 1/4" = 1'-0"



LEFT ELEVATION

SCALE: 1/4" = 1'-0"



A / A6 **WINDOW FLASHING**

SCALE: NO SCALE

FLASHING GENERAL NOTES

FLASHING SHALL BE INSTALLED IN SUCH A MANNER SO AS TO PREVENT MOISTURE FROM ENTERING A WALL, ROOF OR FLOOR AND REDIRECT IT TO THE EXTERIOR. FLASHING SHALL BE INSTALLED AT THE PERIMETERS OF EXTERIOR DOOR AND WINDOW ASSEMBLIES, PENETRATIONS AND TERMINATIONS OF EXTERIOR WALL ASSEMBLIES, EXTERIOR WALL ASSEMBLIES, EXTERIOR WALL INTERSECTIONS WITH ROOFS, CHIMNEYS, PORCHES, DECKS, BALCONIES AND SIMILAR PROJECTIONS AND AT BUILT-IN GUTTERS AND SIMILAR LOCATIONS WHERE MOISTURE COULD ENTER THE WALL. FLASHING WITH PROJECTED FLANGES SHALL BE INSTALLED ON BOTH SIDES AND THE ENDS OF COPINGS, UNDER SILLS AND CONTINUOUSLY ABOVE PROJECTED TRIM. A FLASHING SHALL BE INSTALLED AT THE INTERSECTION OF THE FOUNDATION TO STUCCO, MASONRY, SIDING OR BRICK VENEER. THE FLASHING SHALL BE AN APPROVED CORROSION-RESISTANT FLASHING. R703.7.5, R703.8, R903.2, R905

LOT **53-R-1** IN BLOCK 1 OF **THE SUMMIT**
CITY **WEBER CO.** STATE **AT SKI LAKE**
PLEASE NOTIFY LANDFORMS OFFICE OF ANY DISCREPANCIES

LANDFORMS DESIGN

EXTERIOR ELEVATIONS

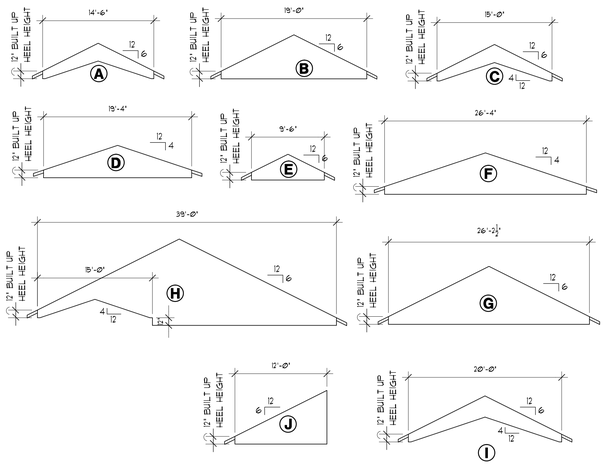
KENYON RESIDENCE

CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HE
10-6-16	SITE PLA

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A6



TRUSS NOTE:
IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL TRUSS TYPES, SHAPES, SIZES, LAYOUT & PITCH, AND TO COORDINATE W/ ELEVATIONS AND SECTIONS PRIOR TO ORDERING FROM MANUFACTURER. SUBMIT COPY OF TRUSS SPECS. TO LANDFORMS PRIOR TO ASSEMBLY. NOTIFY LANDFORMS OF ANY DISCREPANCIES

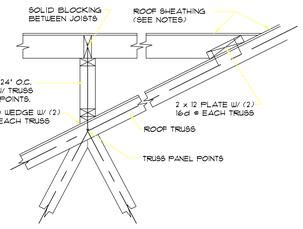
TRUSS TYPES

SCALE: 1/8" = 1'-0"

OVERFRAMING SCHEDULE

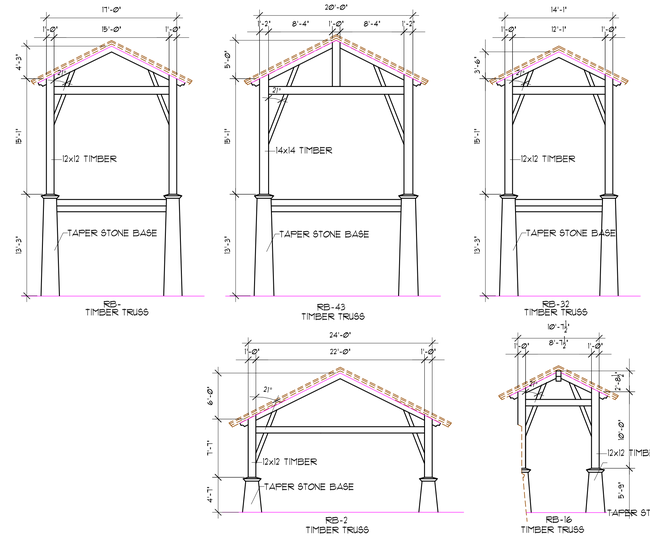
SPAN	FRAMING MEMBERS	70 LB SNOW LOAD
0' TO 8'	2 x 6's @ 24" O.C.	
8' TO 10'	2 x 8's @ 24" O.C.	
10' TO 12'	2 x 10's @ 24" O.C.	
12' TO 14'	2 x 12's @ 24" O.C.	

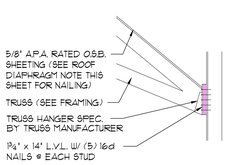
FOR RIDGE & HIP BEAMS USE (1) MEMBER ONE SIZE LARGER THAN MEMBER USED FOR RAFTERS. (I.E. FOR A 2 x 8 RAFTER, USE A 2 x 8 FOR RIDGE & HIP BEAMS)



2/A7 **OVERBUILD DETAIL**

SCALE: 3/4" = 1'-0"





1/A7 **DETAIL**

SCALE: 1/2" = 1'-0"

COMMON STEEL BEAMS

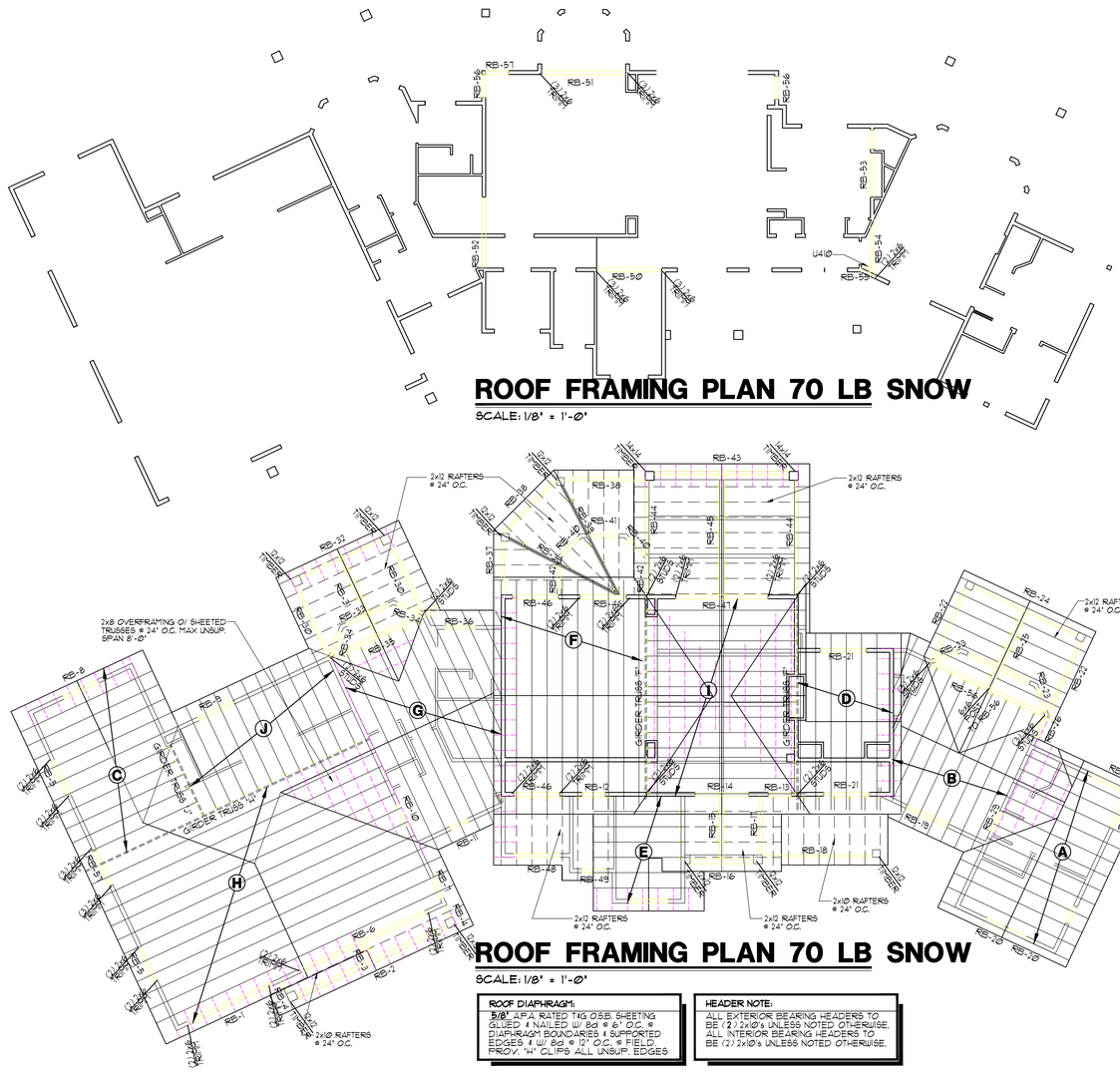
"I" BEAM DESIGNATION	WIDTH	DEPTH	EXAMPLE
W10x 22	5¾"	10⅛"	TYPE OF BEAM SIZE DESIGNATION (APPROX. DEPTH, SEE CHART) W10x 22 LBs PER LINEAR FOOT
26	5¾"	10⅜"	
30	5¾"	10½"	
33	8"	9¾"	
45	8"	10⅛"	
54	10"	10⅛"	
68	10⅜"	10⅛"	
77	10⅜"	10¼"	
W12x 22	4"	12¼"	
26	4"	12¼"	
30	6½"	12⅜"	
35	6½"	12½"	
40	8"	12"	
W14x 22	5"	13¾"	SOME STEEL BEAMS MUST BE ORDERED PRIOR TO CONSTUCTION TO ALLOW FOR CUSTOM FABRICATION AND DELIVERY
26	5"	13⅜"	
30	6¾"	13⅜"	
34	6¾"	14"	
43	8"	13⅜"	

ROOF BEAM SCHEDULE

MARK	TYPE	SIZE	NOTES
RB-1	LVL	(2) 1¾"x11⅞"	HEADER
RB-2	DIM.	TIMBER TRUSS	SEE TRUSS TYPS
RB-3	DIM.	6x14	RIDGE BEAM
RB-4	DIM.	6x12	TOP OF BEAM = BOTTOM OF RAFTERS
RB-5	LVL	(2) 1¾"x9½"	HEADER
RB-6	LVL	(2) 1¾"x14"	HEADER
RB-7	DIM.	(2) 2x10's	HEADER
RB-8	DIM.	(2) 2x10's	HEADER
RB-9	DIM.	(2) 2x10's	HEADER
RB-10	DIM.	(2) 2x10's	HEADER
RB-11	DIM.	(2) 2x10's	HEADER
RB-12	DIM.	(2) 2x10's	HEADER
RB-13	DIM.	(2) 2x10's	HEADER
RB-14	LVL	(2) 1¾"x9½"	HEADER
RB-15	DIM.	6x14	RIDGE BEAM
RB-16	DIM.	TIMBER TRUSS	SEE TRUSS TYPS
RB-17	DIM.	6x12	TOP OF BEAM = BOTTOM OF RAFTERS
RB-18	DIM.	6x14	TOP OF BEAM = BOTTOM OF RAFTERS
RB-19	LVL	(2) 1¾"x9½"	HEADER
RB-20	DIM.	(2) 2x10's	HEADER
RB-21	DIM.	(3) 2x10's	HEADER
RB-22	LVL	(2) 1¾"x11⅞"	HEADER
RB-23	DIM.	(2) 2x10's	HEADER
RB-24	DIM.	TIMBER TRUSS	SEE TRUSS TYPES
RB-25	LVL	(2) 1¾"x14"	BOTTOM OF BEAM = BOTTOM OF TRUSSES
RB-26	DIM.	(2) 2x10's	HEADER
RB-27	DIM.	(2) 2x10's	HEADER
RB-28	DIM.	(2) 2x10's	HEADER
RB-29	DIM.	(2) 2x10's	HEADER
RB-30	DIM.	6x12	TOP OF BEAM = BOTTOM OF RAFTERS
RB-31	DIM.	6x14	RIDGE BEAM
RB-32	DIM.	TIMBER TRUSS	SEE TRUSS TYPS
RB-33	LVL	(2) 1¾"x9½"	HEADER
RB-34	DIM.	(2) 2x10's	HEADER
RB-35	LVL	(3) 1¾"x14"	BOTTOM OF BEAM = BOTTOM OF TRUSSES
RB-36	DIM.	(2) 2x10's	HEADER
RB-37	DIM.	6x12	TOP OF BEAM = BOTTOM OF RAFTERS
RB-38	DIM.	6x12	TOP OF BEAM = BOTTOM OF RAFTERS
RB-39	LVL	(2) 1¾"x11⅞"	HIP RAFTER
RB-40	DIM.	(2) 2x10's	HEADER
RB-41	DIM.	(2) 2x10's	HEADER
RB-42	DIM.	(2) 2x10's	HEADER
RB-43	DIM.	TIMBER TRUSS	SEE TRUSS TYPS
RB-44	DIM.	6x14	TOP OF BEAM = BOTTOM OF RAFTERS
RB-45	DIM.	6x16	RIDGE BEAM
RB-46	LVL	(2) 1¾"x9½"	HEADER
RB-47	LVL	(3) 1¾"x14"	HEADER
RB-48	DIM.	(2) 2x10's	HEADER
RB-49	DIM.	(2) 2x10's	HEADER
RB-50	LVL	(3) 1¾"x14"	HEADER
RB-51	LVL	(3) 1¾"x14"	HEADER
RB-52	LVL	(3) 1¾"x9½"	HEADER
RB-53	LVL	(3) 1¾"x11⅞"	HEADER
RB-54	LVL	(2) 1¾"x11⅞"	
RB-55	LVL	(2) 1¾"x11⅞"	
RB-56	LVL	(3) 1¾"x18"	OR W10x22
RB-57	LVL	(3) 1¾"x14"	

MAIN FLOOR BEAM SCHEDULE

MARK			
MFB-1	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-2	G.L.B.	3⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-3	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-4	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-5	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-6	G.L.B.	5⅛" X 15"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-7	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-8	LVL	(2) 1¾"x9½"	HEADER
MFB-9	DIM.	(2) 2x10's	HEADER
MFB-10	DIM.	(2) 2x10's	HEADER
MFB-11	DIM.	(2) 2x10's	HEADER
MFB-12	LVL	(2) 1¾"x11⅞"	TOP OF BEAM = BOTTOM OF JOISTS
MFB-13	LVL	(3) 1¾"x14"	TOP OF BEAM = BOTTOM OF JOISTS
MFB-14	G.L.B.	5⅛" X 15"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-15	G.L.B.	3⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE OPT. (3) 2x12's
MFB-16	G.L.B.	5⅛" X 12"	TOP OF BEAM = BOTTOM OF DECK JOISTS EXT. GRADE
MFB-17	LVL	(2) 1¾"x9½"	
MFB-18	DIM.	(2) 2x10's	HEADER
MFB-19	DIM.	(2) 2x10's	HEADER
MFB-20	G.L.B.	5⅛" X 12"	HEADER
MFB-21	DIM.	(2) 2x10's	HEADER
MFB-22	DIM.	(2) 2x10's	HEADER
MFB-23	LVL	(2) 1¾"x9½"	HEADER
MFB-24	DIM.	(2) 2x10's	TOP OF BEAM = BOTTOM OF JOISTS
MFB-25	STEEL	W10x22	TOP OF BEAM = 1½" BELOW BOTTOM OF JOISTS
MFB-26	LVL	(3) 1¾"x11⅞"	TOP OF BEAM = BOTTOM OF JOISTS
MFB-27	LVL	(2) 1¾"x11⅞"	
MFB-28	LVL	(2) 1¾"x11⅞"	TOP OF BEAM = BOTTOM OF JOISTS
MFB-29	LVL	(3) 1¾"x16"	OR W10x22 STEEL
MFB-30	DIM.	(2) 2x10's	HEADER
MFB-31	LVL	(2) 1¾"x9½"	HEADER
MFB-32	STEEL	W24x103	TOP OF BEAM = BOTTOM OF SUS. SLAB
MFB-33	STEEL	W16x36	



ROOF FRAMING PLAN 70 LB SNOW

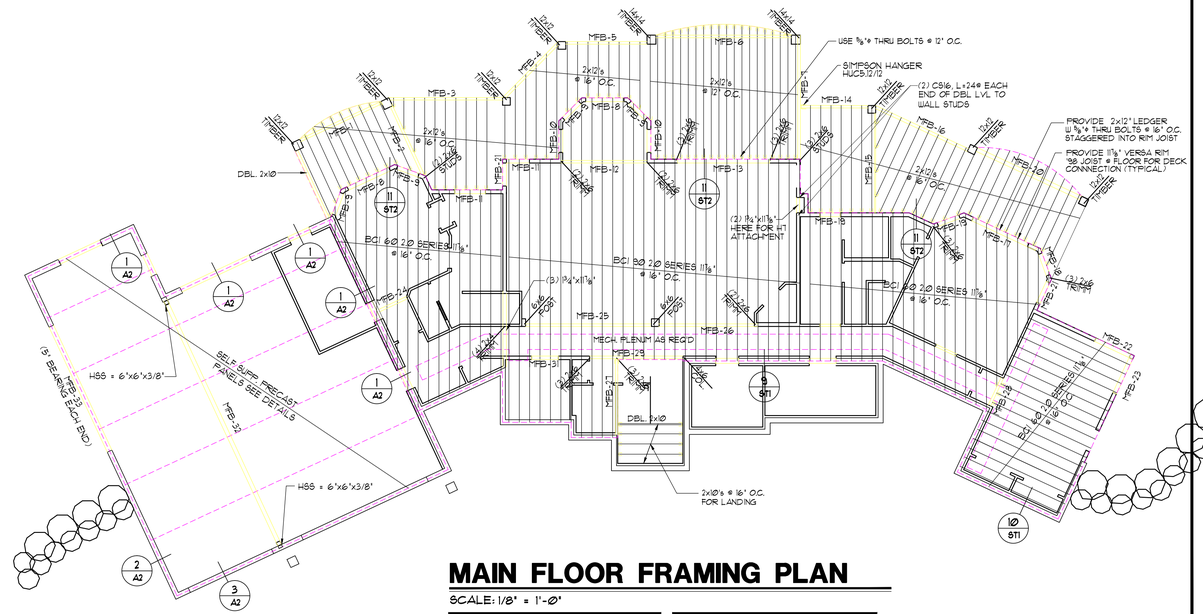
SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN 70 LB SNOW

SCALE: 1/8" = 1'-0"

ROOF DIAPHRAGM:
5/8" A.P.A. RATED 1 4G O.S.B. SHEETING GLUED & NAILED W/ 8d @ 6" O.C. @ DIAPHRAGM BOUNDARIES & SUPPORTED EDGES & W/ 8d @ 12" O.C. @ FIELD. PROV. "H" CLIPS ALL UNSUP. EDGES

HEADER NOTE:
ALL EXTERIOR BEARING HEADERS TO BE (2) 2x10's UNLESS NOTED OTHERWISE. ALL INTERIOR BEARING HEADERS TO BE (2) 2x10's UNLESS NOTED OTHERWISE.



MAIN FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"

FLOOR DIAPHRAGM:
3/4" A.P.A. RATED T&G O.S.B. SHEETING GLUED & NAILED W/ 8d @ 6" O.C. @ DIAPHRAGM BOUNDARIES & SUPPORTED EDGES & W/ 8d @ 12" O.C. @ FIELD.

HEADER NOTE:
ALL EXTERIOR BEARING HEADERS TO BE (2) 2x10's UNLESS NOTED OTHERWISE. ALL INTERIOR BEARING HEADERS TO BE (2) 2x10's UNLESS NOTED OTHERWISE.

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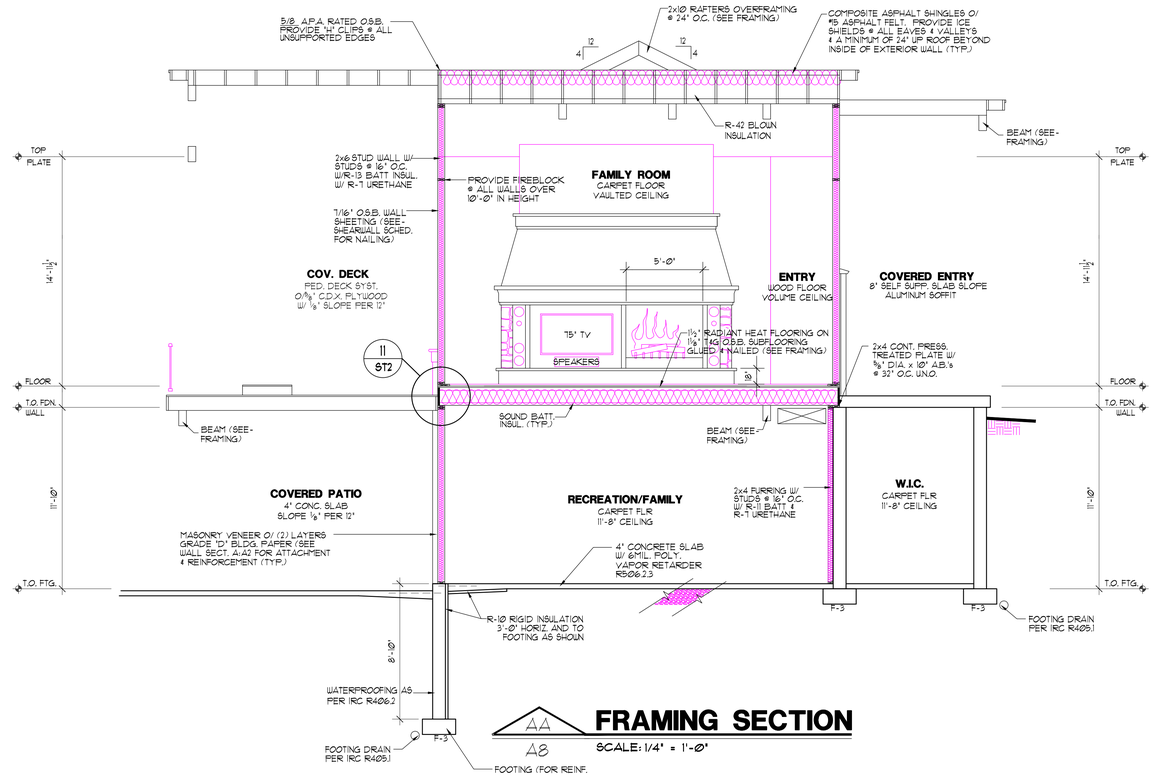
FRAMING PLANS, TRUSSES & BM. SCHED.

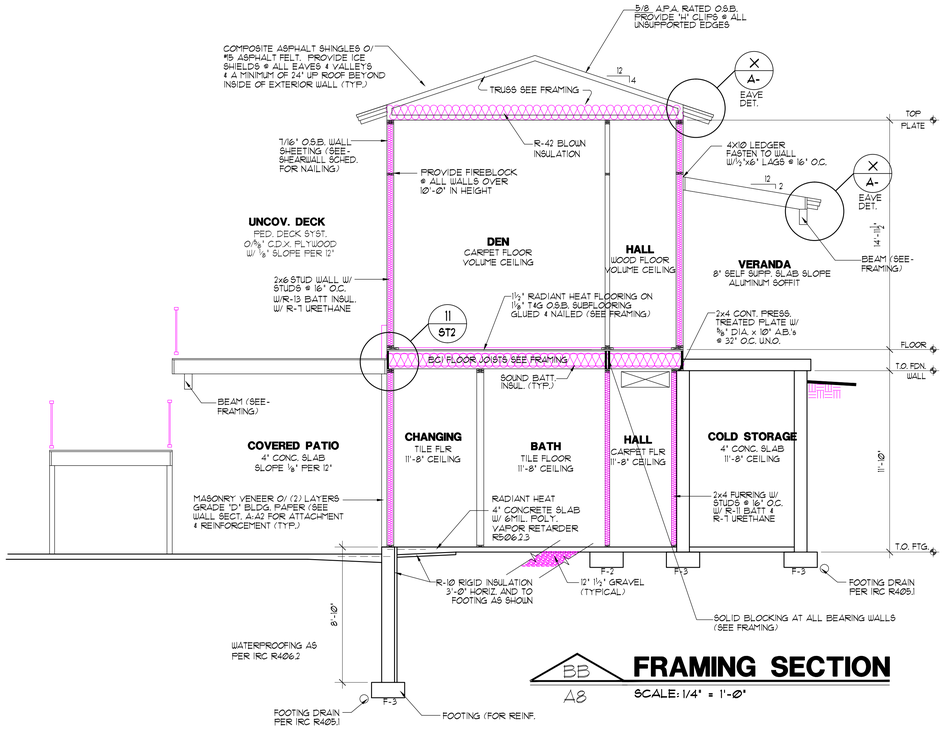
KENYON RESIDENCE
CUSTOM HOME PLAN

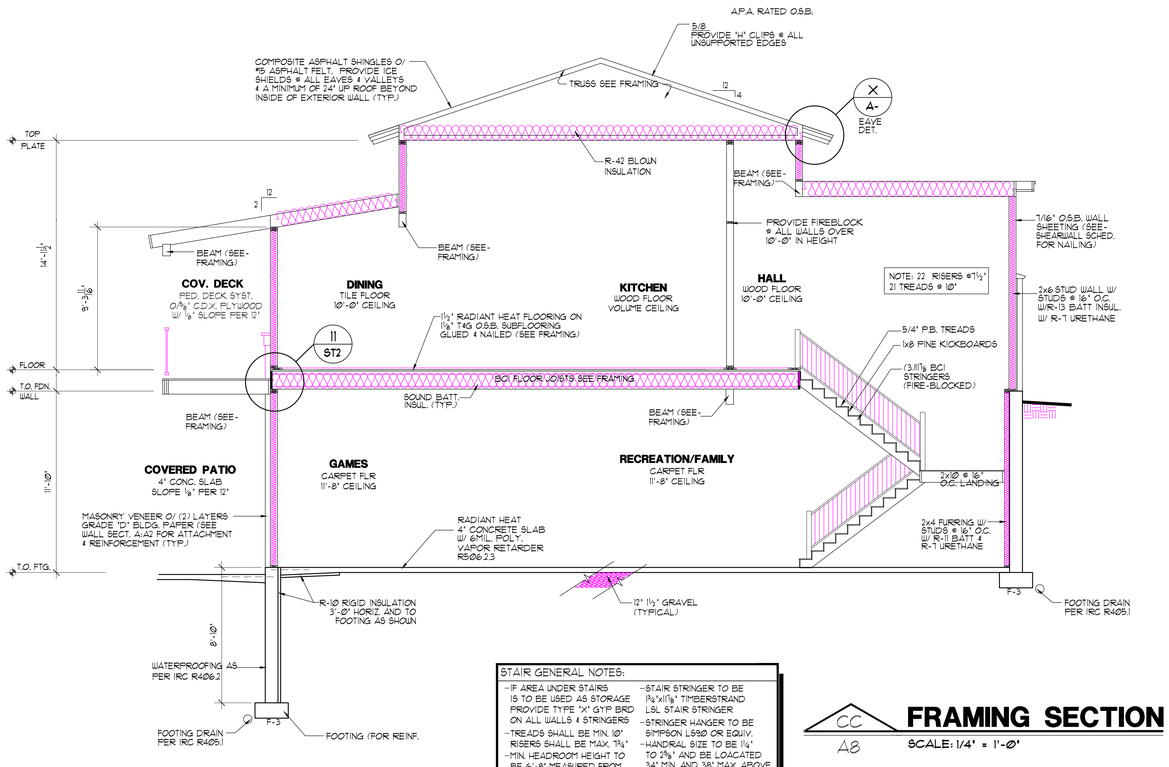
REVISIONS date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A7







STAIR GENERAL NOTES:

- IF AREA UNDER STAIRS IS TO BE USED AS STORAGE PROVIDE TYPE 'X' GYP BRD ON ALL WALLS & STRINGERS
- TREADS SHALL BE MIN. 10" RISERS SHALL BE MAX. 7¾"
- MIN. HEADROOM HEIGHT TO BE 6'-8" MEASURED FROM STAIR TREAD TANGENT LINE
- STAIR STRINGER TO BE 1¾"x11⅞" TIMBERSTRAND LSL STAIR STRINGER
- STRINGER HANGER TO BE SIMPSON LSSU OR EQUIV.
- HANDRAIL SIZE TO BE 1¼" TO 2⅜" AND BE LOACATED 34" MIN. AND 38" MAX. ABOVE STAIR TREAD TANGENT LINE

LOT: **53-R** SUBDIVISION: **THE SUMMIT**
CITY: **WEBER CO.** **AT SKI LAKE**
PLEASE NOTIFY LANDFORMS DESIGN OF ANY UNLAWFUL USE

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FRAMING SECTIONS

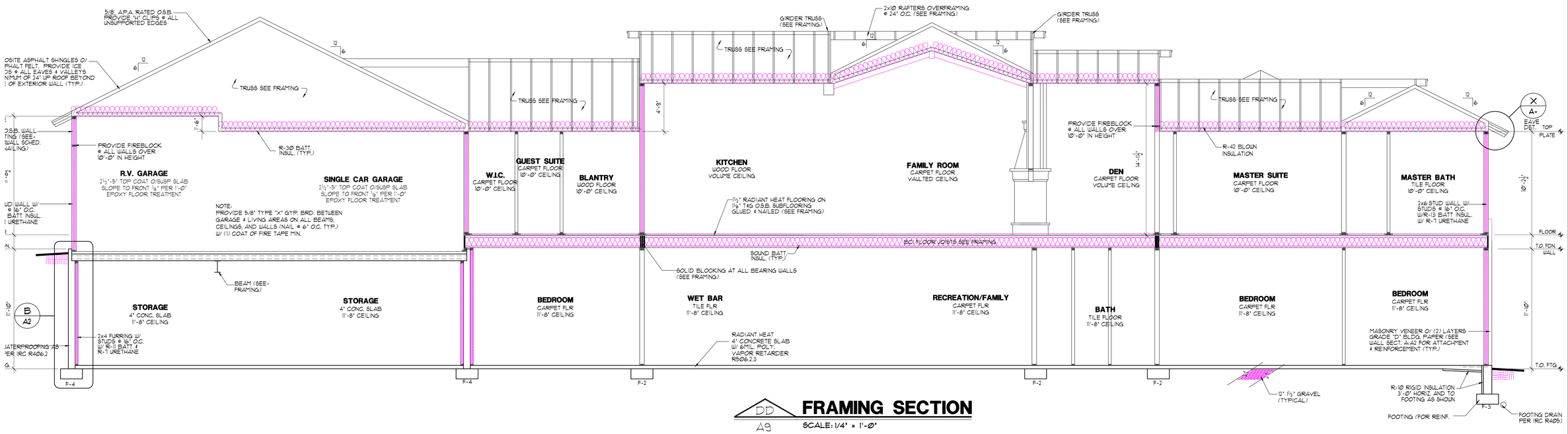
KENYON RESIDENCE

CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

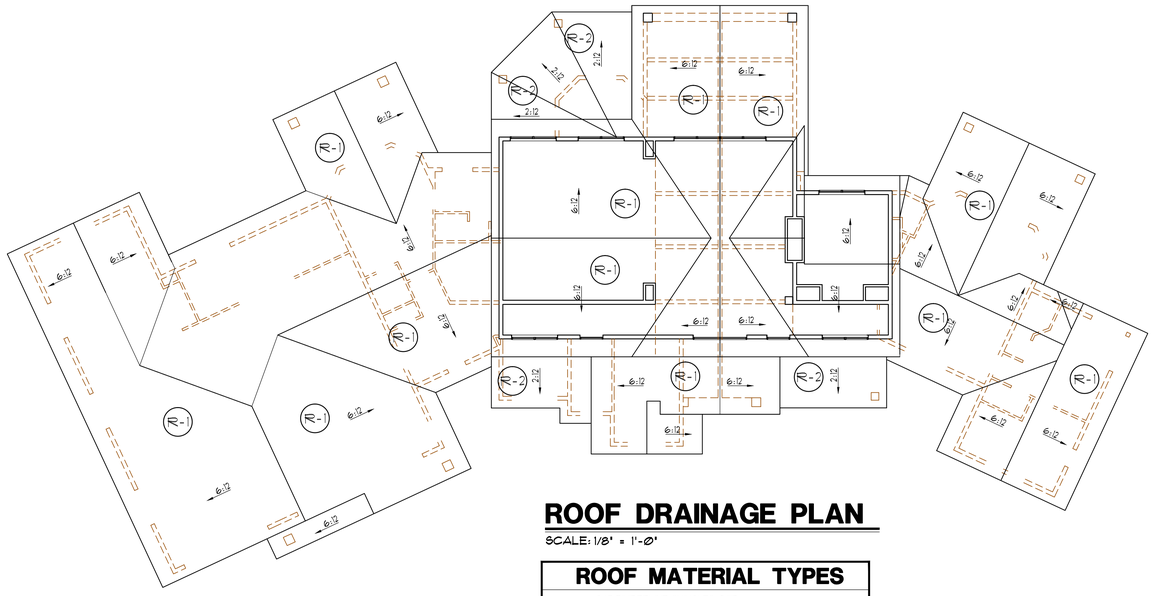
ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A8



DD / A9 **FRAMING SECTION**

SCALE: 1/4" = 1'-0"



ROOF DRAINAGE PLAN

SCALE: 1/8" = 1'-0"

ROOF MATERIAL TYPES

R-1 GAF TIMBERLINE SHINGLES O/ASPHALT FELT PROVIDE ICE SHIELD @ ALL VALLEYS & A MINIMUM OF 24" BEYOND INSIDE OF WALL UP ROOF @ ALL EAVES

R-2 STANDING SEAM MTL ROOF W/ ICE SHIELD UNDER ENTIRE ROOF

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**
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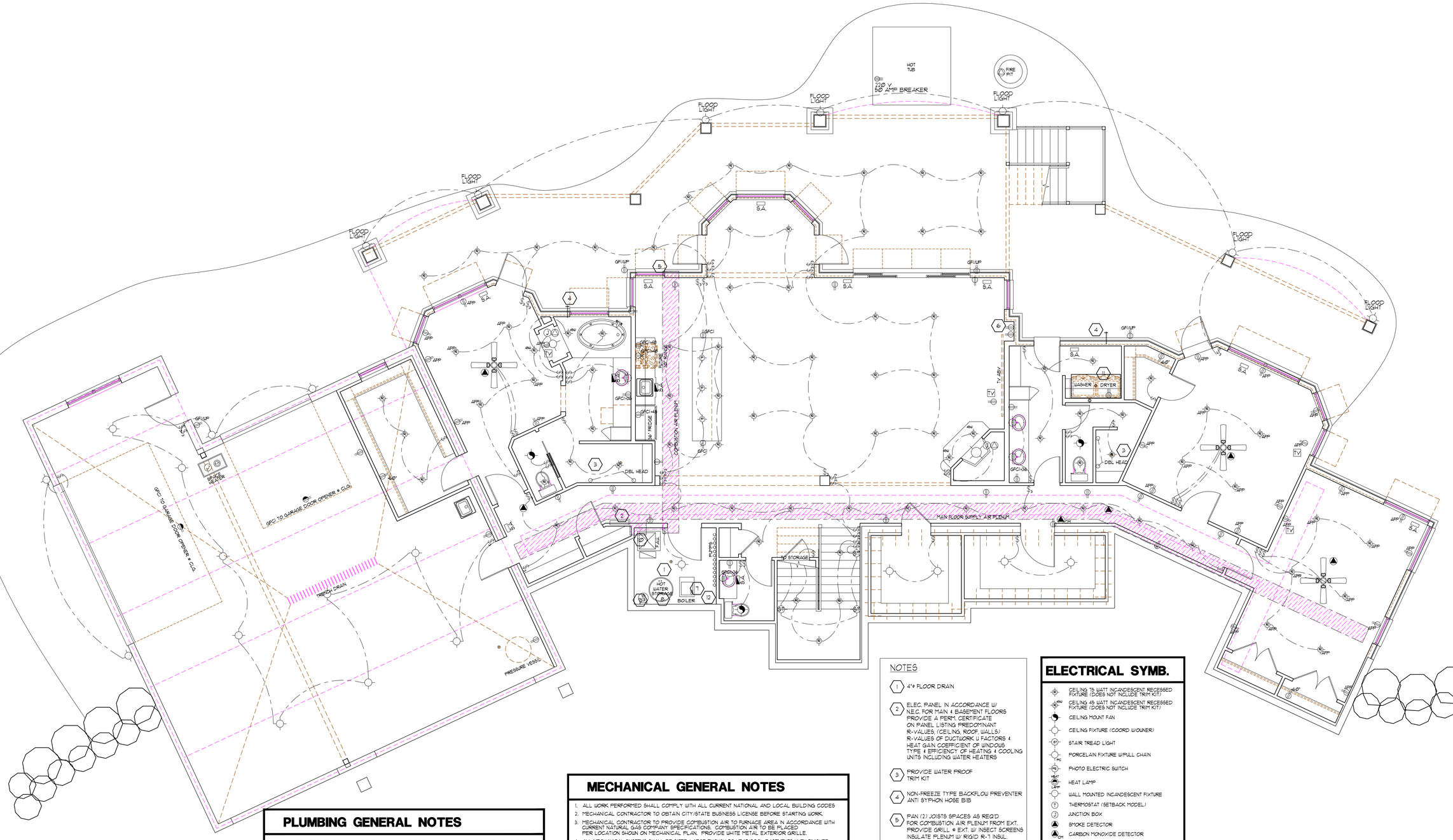
FRAMING SECTIONS

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A9



PLUMBING GENERAL NOTES

1. ALL WORK PERFORMED SHALL COMPLY WITH ALL CURRENT NATIONAL AND LOCAL BUILDING CODES
2. PLUMBING CONTRACTOR TO OBTAIN CITY/STATE BUSINESS LICENSE BEFORE STARTING WORK.
3. PLUMBING CONTRACTOR SHALL PROVIDE 1¼" COPPER SUPPLY LINE FROM WATER METER TO FURNACE ROOM. WATER LINE TO BE PLACED UNDER SLAB WHERE APPLICABLE.
4. PLUMBING CONTRACTOR SHALL VERIFY SIZE & LOCATIONS OF UNDERGROUND UTILITIES. COORDINATE WITH ALL OTHER TRADES PRIOR TO MAKING FINAL CONNECTIONS.
5. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION OF ALL FIXTURES.
6. INTERIOR WASTE AND VENT LINES TO BE ABS.
7. INTERIOR COPPER TO BE TYPE 'M' INSTALLED WITH PLASTIC ISOLATORS.
8. NO SUBSTITUTIONS FROM FIXTURE SCHEDULE ARE ALLOWED, EXCEPT BY OWNERS APPROVAL
9. PROVIDE C.P. ESCUTCHEONS AT PIPE SLEEVES FOR EXPOSED BARE PIPE. PACK ANNULUS AT 1 HOUR FIRE WALLS. PLUMBING LINES through GARAGE FIRE WALLS MUST BE METAL PIPING. THIS INCLUDES WASTE LINES, VACUUM LINES, AND SUPPLY LINES. AN APPROVED FIRE STOP MATERIAL MUST BE USED.
10. PROVIDE A PRESSURE REGULATOR AND SHUTOFF VALVE, FOR LOCATION SEE PLUMBING PLAN.
11. OFFSET ALL VENT STACKS IN ATTIC SPACE TO REAR OF ROOF WHERE POSSIBLE.
12. PROVIDE 1.6 GALLON PER FLUSH TOILETS & 2.5 GALLON PER MINUTE SHOWER HEADS.
13. PROVIDE EXPANSION TANKS FOR WATER HEATERS AS PER LOCAL JURISDICTION.
14. NO SLIP JOINT PLUMBING CONNECTIONS IN CONCEALED CONSTRUCTION AREAS (BATH TUBS).
15. INDIVIDUALLY INSULATE ALL PLUMBING, SUPPLY AND DRAIN LINES IN AREAS SUBJECT TO FREEZING (EXTERIOR WALLS, ATTICS, CRAWL SPACES, GARAGES AND EXTERIOR WALLS). SPRAY IN URETHANE HAS BEEN SHOWN TO PREVENT FREEZING PROBLEMS.
16. PLUMBING PENETRATIONS THROUGH GARAGE FIRE WALLS MUST BE METAL PIPING OR HAVE AN APPROVED THROUGH PENETRATION FIRE STOP INSTALLED
17. PROVIDE ANTI-SCALD SHOWER VALVES ON ALL SHOWER AND TUB COMBINATION INSTALLATIONS.
18. PROVIDE 21" CLEARENCE IN FRONT OF SINKS, WATER CLOSETS, AND TUBS. PROVIDE 24" CLEARANCE IN FRONT OF SHOWER DOORS. SHOWER DOORS TO BE A MIN. OF 22" WIDE.
19. IF PLUMBING MANIFOLD SYSTEM IS BEING USED, SYSTEM MUST BE ACCESSIBLE BYH LOCAL OFFICALS
20. BATHTUBS & WHIRLPOOL TUB VALVES SHALL LIMIT THE TEMP. TO A MAX. OF 120° F.
21. ALL BASEMENT FIXTURES MUST PASS THROUGH A BACKWATER VALVE UNLESS IT IS EST. THAT A FIXTURE IN THE BASEMENT OR LOWEST LEVEL OF THE HOME IS NOT BELOW THE ELEVATION OF THE UPSTREAM MANHOLE COVER. THIS WILL REQIRE BASEMENTS TO BE PLUMBED INDEPENDANTLY FOM UPPER FLOORS. BACKWATER VALVES MUST BE ACCESSIBLE.

MECHANICAL GENERAL NOTES

1. ALL WORK PERFORMED SHALL COMPLY WITH ALL CURRENT NATIONAL AND LOCAL BUILDING CODES
2. MECHANICAL CONTRACTOR TO OBTAIN CITY/STATE BUSINESS LICENSE BEFORE STARTING WORK.
3. MECHANICAL CONTRACTOR TO PROVIDE COMBUSTION AIR TO FURNACE AREA IN ACCORDANCE WITH CURRENT NATURAL GAS COMPANY SPECIFICATIONS. COMBUSTION AIR TO BE PLACED PER LOCATION SHOWN ON MECHANICAL PLAN. PROVIDE WHITE METAL EXTERIOR GRILLE.
4. ALL MECHANICAL SYSTEMS SHALL BE SIZED LARGE ENOUGH TO HEAT/COOL BASEMENTS WHEN FINISHED
5. ALL SUPPLY AND RETURN AIR PLENUMS ARE SHOWN IN APPROXIMATE LOCATIONS. MECH. CONTRACTOR TO PROVIDE EXPERTISE IN ACTUAL LOCATIONS OF PLENUMS TO MINIMIZE FURR-DOWNS IN FUTURE BASEMENT AREA
6. MECHANICAL CONTRACTOR TO PROVIDE 4" METAL DUCTING FROM REST ROOM FANS TO EXTERIOR. METAL EXTERIOR TERMINATION CAP. EXHAUST FANS NOT TO BE DISCHARGED INTO VENTED SOFFITS.
7. FOR CONDENSER LOCATIONS SEE MECHANICAL PLANS.
8. VERIFY "FIT" OF DUCTS AND PIPING PRIOR TO FABRICATION.
9. OFFSET FLU STACKS IN ATTIC SPACE TO REAR OF ROOF WHERE POSSIBLE. PAINT ALL FLU STACKS TO MATCH SHINGLE COLOR.
10. MECHANICAL CONTRACTOR TO PROVIDE 4" DIA. METAL DUCTING FROM DRYER LOCATION TO EXTERIOR WITH WHITE TERMINATION CAP. DUCTS TO BE METAL W/SMOOTH INTERIOR SURFACES EQUIPPED W/BACK DRAFT DAMPERS, TERMINATE AT THE EXTERIOR OF THE BUILDING, AND NOT BE INSTALLED WITH SHEET METAL SCREWS. MAX. DRYER DUCT LENGTH 14'-0" W/(2) 90 DEGREE ELBOWS
11. ALL GAS LINES MUST BE PRESSURE TESTED AT ROUGH INSPECTION. QUESTAR GAS NO LONGER PROVIDES THIS SERVICE AND IS THEREFORE REQUIRED BY THE HVAC CONTRACTOR AT ROUGH INSPECTION
12. GAS LOG APPLIANCES WITHOUT A FLAME SAFEGUARD DEVICE (AUTO LIGHTING DEVICE OR PILOT) SHALL NOT BE PERMITTED
13. FIREPLACE FLUES SHALL BE SEPARATED FROM ATTIC SPACES BY A SHAFT OF ⅝" SHEET ROCK OR ¾" STRAND BOARD OR PLYWOOD.
14. CSST STAINLESS STEEL GAS LINE MAY BE USED BUT MUST BE SIZED AND APPROVED BEFORE INSTALLATION. ANY CSST INSTALLED MUST BE VISUALLY INSPECTED AND PRESSURE TESTED BEFORE BEING CONCEALED WITHIN CONSTRUCTION.
15. NO CLOTH TYPE DUCT TAPE IS ALLOWED. METALLIC OR FOIL TAPE MUST BE USED.
16. ALL JOINTS, TRANSVERSE AND LONGITUDINAL SEAMS AND CONNECTIONS MUST BE PROPERLY SEALED WITH TAPE OR MASTIC.
17. GAS LINES SHALL NOT PASS THROUGH OR PENETRATE ANY DUCT OR PLENUM
18. GAS PIPING SHALL NOT PENETRATE A BUILDING FOUNDATION BELOW GRADE.
19. VENTS FOR FURNACES AND WATER HEATERS SHALL BE SIZED IN ACCORDANCE WITH THE GAMMA VENT TABLES AS LISTED IN THE UP TO DATE IRC. CODE.
20. IF FORCED AIR UNIT IS LOCATED WHERE CONDENSATION MAY DAMAGE BUILDING COMPONENTS, A WATER DETECTION DEVICE MUST BE INSTALLED OR RUN SECONDARY LINE TO OBSERVABLE LOCATION

NOTES

1. 4"ø FLOOR DRAIN
2. ELEC. PANEL IN ACCORDANCE W/ N.E.C. FOR MAIN & BASEMENT FLOORS PROVIDE A PERM. CERTIFICATE ON PANEL LISTING PREDOMINANT R-VALUES, (CEILING, ROOF, WALLS) R-VALUES OF DUCTWORK U FACTORS & HEAT GAIN COEFFICIENT OF WINDOWS TYPE & EFFICIENCY OF HEATING & COOLING UNITS INCLUDING WATER HEATERS
3. PROVIDE WATER PROOF TRIM KIT
4. NON-FREEZE TYPE BACKFLOW PREVENTER ANTI SYPHON HOSE BIB
5. FAN (2) JOISTS SPACES AS REQ'D FOR COMBUSTION AIR PLENUM FROM EXT. PROVIDE GRILL @ EXT. W/ INSECT SCREENS INSULATE PLENUM W/ RIGID R-7 INSUL.
6. RUN ALL ELECTRONICS (T.V., CABLE, PHONE, SECURITY) TO THIS LOCATION
7. (2) 50 GALLON 34,000 BTU WATER HEATERS W/ EXPANSION TANK AS REQ'D & PROVIDE SEISMIC STRAPS, ONE IN THE UPPER THIRD AND ONE IN THE LOWER THIRD PORTION OF THE UNIT. •P180.1 (STATE AMENDMENT)
8. 60,000 GRAIN WATER SOFTENER (SALT STORAGE TANK LOCATED IN GARAGE ABOVE) CONNECT THRU AIR GAP
9. 80,000 B.T.U. 90 PLUS GAS FORCED AIR UNIT W/ SPACE GUARD AIR CLEANER AND HUMIDIFIER PROVIDE UNDERSLAB P.V.C. COATED DUCTWORK FOR BASEMENT AS REQUIRED
10. 100,000 BTU 90% F.A.U. W/SPACE GUARD AIR CLEANER & HUMIDIFIER FOR MAIN FLOOR
11. PROVIDE C.T. FAN W/ 4'ø FLOOR DRAIN & VENT DRYER TO EXTERIOR W/ BACK DRAFT DAMPER (DUCT LENGTH DETERMINED BY IRC M1502.4.4.2)
12. FLUE RISER

ELECTRICAL SYMB.

- CEILING 75 WATT INCANDESCENT RECESSED FIXTURE (DOES NOT INCLUDE TRIM KIT)
- CEILING 45 WATT INCANDESCENT RECESSED FIXTURE (DOES NOT INCLUDE TRIM KIT)
- CEILING MOUNT FAN
- CEILING FIXTURE (COORD W/OWNER)
- STAIR TREAD LIGHT
- PC — PORCELAIN FIXTURE W/PULL CHAIN
- PHOTO ELECTRIC SWITCH
- HEAT LAMP
- WALL MOUNTED INCANDESCENT FIXTURE
- THERMOSTAT (SETBACK MODEL)
- JUNCTION BOX
- SMOKE DETECTOR
- CO — CARBON MONOXIDE DETECTOR
- GAS HOOKUPS
- FLUORESCENT FIXTURE (XX) TUBES
- DUPLEX OUTLET
- SWITCHED DUPLEX OUTLET
- RANGE/DRYER OUTLET
- GFI — GROUND FAULT CIRCUIT INTERRUPT
- USB — DUPLEX OUTLET WITH (2) USB PORTS
- GFI — GROUND FAULT CIRCUIT INTERRUPT (WATERPROOF W/ BUBBLE COVER)
- $ — SWITCH
- $3 — 3-WAY SWITCH
- $VS — VARIABLE SPEED SWITCH
- $D — DIMMER SWITCH
- PUSH BUTTON
- TELEPHONE OUTLET
- TV — TELEVISION OUTLET FOR SATELLITE/CABLE
- ELECTRICAL DISCONNECT
- SPK — SPEAKER WIRE (COORD. W/OWNER)
- FLOOR DUPLEX OUTLET
- UNDERCOUNTER LIGHTING (COORD. W/OWNER)

NOTE:
ALL ELECTRICAL FIXTURES MARKED A.F.P. TO BE ARC FAULT PROTECTED

LOT# **52-R** SUBDIVISION **THE SUMMIT**
LOT'S **WEBER CO.** **AT SKI LAKE**
CITY, COUNTY & STATE OF BUILDING

LANDFORMS DESIGN

KENT RESIDENCE

CUSTOM HOME PLAN

EXTERIOR ELEVATIONS

REVISIONS	
date	item
9-27-16	ROOF HE
10-6-16	SITE PLA

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

A1

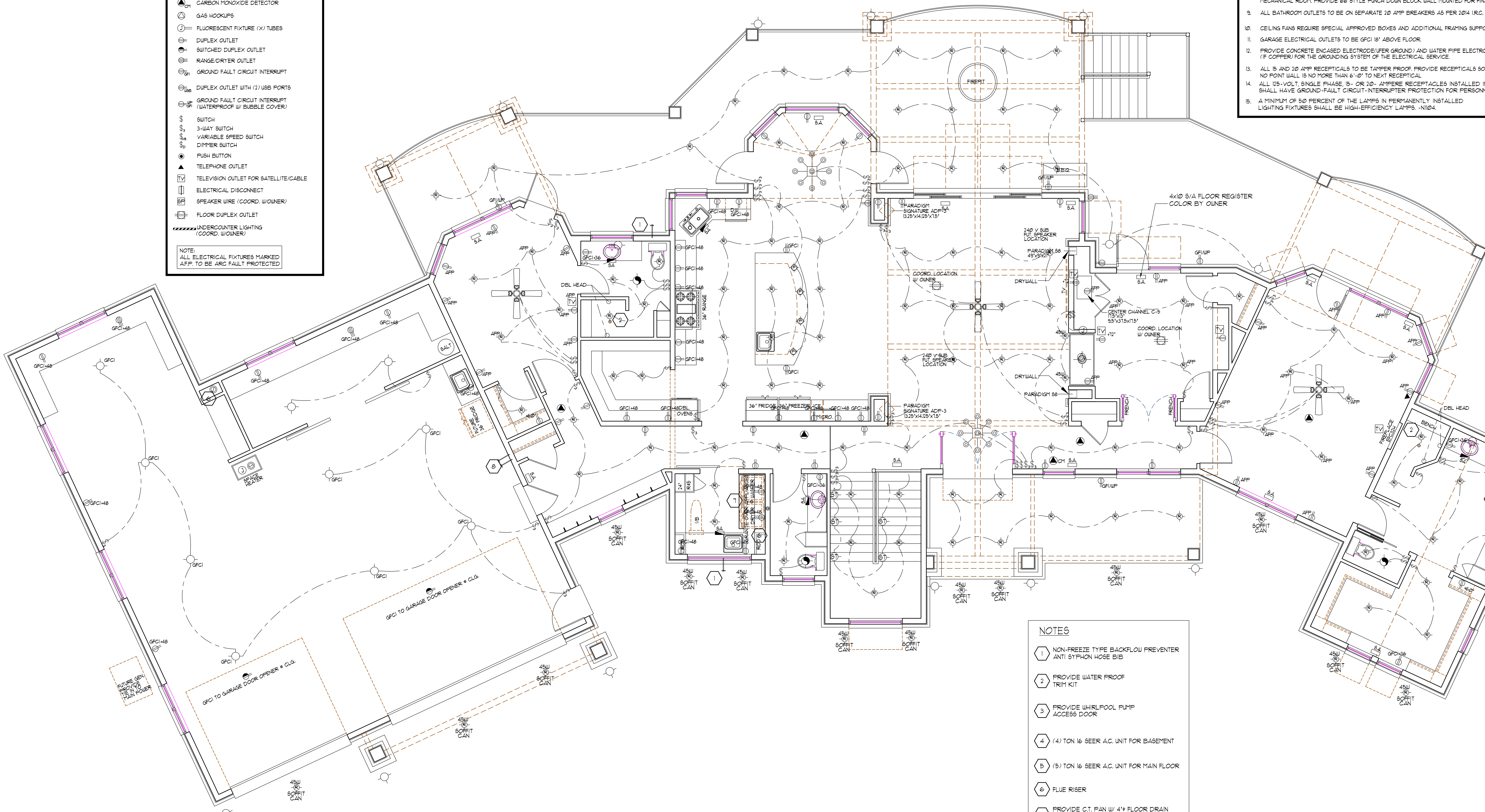
ELECTRICAL SYMB.

(R)	CEILING 75 WATT INCANDESCENT RECESSED FIXTURE (DOES NOT INCLUDE TRIM KIT)
(R) 45W	CEILING 45 WATT INCANDESCENT RECESSED FIXTURE (DOES NOT INCLUDE TRIM KIT)
	CEILING MOUNT FAN
	CEILING FIXTURE (COORD W/OWNER)
(ST)	STAIR TREAD LIGHT
PC	PORCELAIN FIXTURE W/PULL CHAIN
(PE)	PHOTO ELECTRIC SWITCH
	HEAT LAMP
	WALL MOUNTED INCANDESCENT FIXTURE
(T)	THERMOSTAT (SETBACK MODEL)
(J)	JUNCTION BOX
	SMOKE DETECTOR
CM	CARBON MONOXIDE DETECTOR
	GAS HOOKUPS
(J)	FLUORESCENT FIXTURE (X) TUBES
	DUPLEX OUTLET
	SWITCHED DUPLEX OUTLET
	RANGE/DRYER OUTLET
GFI	GROUND FAULT CIRCUIT INTERRUPT
USB	DUPLEX OUTLET WITH (2) USB PORTS
WP GFI	GROUND FAULT CIRCUIT INTERRUPT (WATERPROOF W/ BUBBLE COVER)
$	SWITCH
$3	3-WAY SWITCH
$VS	VARIABLE SPEED SWITCH
$D	DIMMER SWITCH
	PUSH BUTTON
	TELEPHONE OUTLET
TV	TELEVISION OUTLET FOR SATELLITE/CABLE
	ELECTRICAL DISCONNECT
SP	SPEAKER WIRE (COORD. W/OWNER)
	FLOOR DUPLEX OUTLET
	UNDERCOUNTER LIGHTING (COORD. W/OWNER)

NOTE:
ALL ELECTRICAL FIXTURES MARKED A.F.P. TO BE ARC FAULT PROTECTED

ELECTRICAL GENERAL NOTES

1. ALL WORK PERFORMED SHALL COMPLY WITH ALL NATIONAL AND LOCAL BUILDING CODES.
2. ELECTRICAL CONTRACTOR TO OBTAIN CITY/STATE BUSINESS LICENSE BEFORE STARTING WORK.
3. ALL TELEVISION OUTLETS ARE TO BE INSTALLED WITH A SEPARATE COAXIAL CABLE TO MECHANICAL ROOM. PROVIDE ANTENNA IN ATTIC WITH SINGLE COAXIAL CABLE TO MECH. ROOM. PROVIDE COAXIAL CABLE FROM MECHANICAL ROOM TO EXTERIOR FOR FUTURE CABLE TELEVISION HOOKUP. HOOK UP TELEVISION CABLES IN MECHANICAL ROOM TO DESIRED (ANTENNA, CABLE) CHOICE. PROVIDE T.V. CONNECTION PANEL ON WALL IN MECHANICAL ROOM
4. ELECTRICAL CONTRACTOR TO PROVIDE A MINIMUM OF 200 AMP SERVICE TO HOME.
5. ALL EXHAUST FANS SHALL BE VENTED TO EXTERIOR WITH METAL DUCT. PROVIDE WHITE METAL EXTERIOR TERMINATION CAP. EXHAUST FANS NOT TO BE DISCHARGED INTO VENTED SOFFITS
6. ALL SMOKE DETECTORS SHALL BE WIRED TOGETHER FOR SIMULTANEOUS ALERT SOUNDING. DETECTORS SHALL ALSO BE WIRED TO BUILDING PRIMARY POWER WITH BATTERY BACKUP. ALL SLEEPING ROOMS AT ALL LEVELS TO HAVE SMOKE DETECTORS.
7. SIZE ELECTRICAL PANEL SUFFICIENTLY LARGE ENOUGH TO HANDLE FUTURE BREAKERS WHEN BASEMENT IS FINISHED.
8. PROVIDE (4) PAIR CABLE TO ALL TELEPHONE OUTLETS. HOME RUN ALL TELEPHONE LINES TO MECHANICAL ROOM. PROVIDE 66 STYLE PUNCH DOWN BLOCK WALL MOUNTED FOR FINAL CONNECTIONS
9. ALL BATHROOM OUTLETS TO BE ON SEPARATE 20 AMP BREAKERS AS PER 2014 I.R.C. REQUIREMENTS.
10. CEILING FANS REQUIRE SPECIAL APPROVED BOXES AND ADDITIONAL FRAMING SUPPORT.
11. GARAGE ELECTRICAL OUTLETS TO BE GFCI 18" ABOVE FLOOR.
12. PROVIDE CONCRETE ENCASED ELECTRODE(UFER GROUND) AND WATER PIPE ELECTRODE (IF COPPER) FOR THE GROUNDING SYSTEM OF THE ELECTRICAL SERVICE.
13. ALL 15 AND 20 AMP RECEPTICALS TO BE TAMPER PROOF. PROVIDE RECEPTICALS SO NO POINT WALL IS NO MORE THAN 6'-0" TO NEXT RECEPTICAL
14. ALL 125-VOLT, SINGLE PHASE, 15- OR 20- AMPERE RECEPTACLES INSTALLED IN GARAGES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. -E3902.2
15. A MINIMUM OF 50 PERCENT OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICIENCY LAMPS. -N1104.



NOTES

1. NON-FREEZE TYPE BACKFLOW PREVENTER ANTI SYPHON HOSE BIB
2. PROVIDE WATER PROOF TRIM KIT
3. PROVIDE WHIRLPOOL PUMP ACCESS DOOR
4. (4) TON 16 SEER A.C. UNIT FOR BASEMENT
5. (5) TON 16 SEER A.C. UNIT FOR MAIN FLOOR
6. FLUE RISER
7. PROVIDE C.T. PAN W/ 4"ϕ FLOOR DRAIN & VENT DRYER TO EXTERIOR W/ BACK DRAFT DAMPER (DUCT LENGTH DETERMINED BY IRC M1502.4.4.2)
8. HOT & COLD HOSE BIBB W/ FIRE RATED ASSEMBLY FOR ALL PENETRATIONS

MAIN FLOOR ELECTRICAL, MECHANICAL, AND PLUMBING PLAN

LOT# 53-R SUBDIVISION THE SUMMIT
CITY WEBER CO. AT SKI LAKE
STATE UTAH DATE 6-28-16

LANDFORMS DESIGN
landforms.com

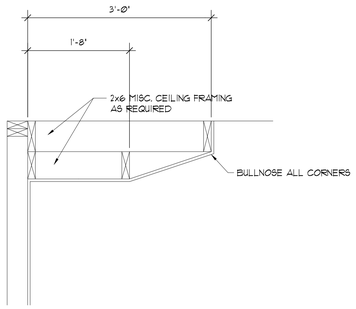
ELECTRICAL, MECH., AND PLUMBING PLAN

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HEIG
10-6-16	SITE PLAN

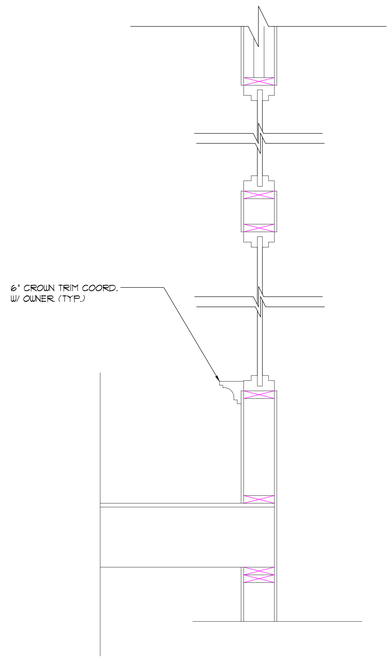
ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

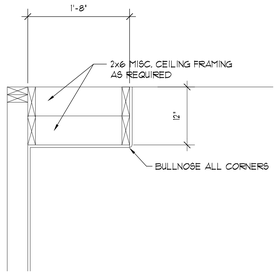
A11



2 A12 CEILING DETAIL

SCALE: 1" = 1'-Ø"



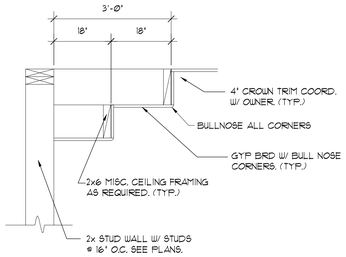


3 A12 CEILING DETAIL

SCALE: 1" = 1'-Ø"

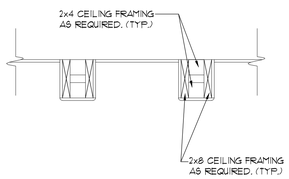
5 A12 DETAIL

SCALE: 1" = 1'-Ø"



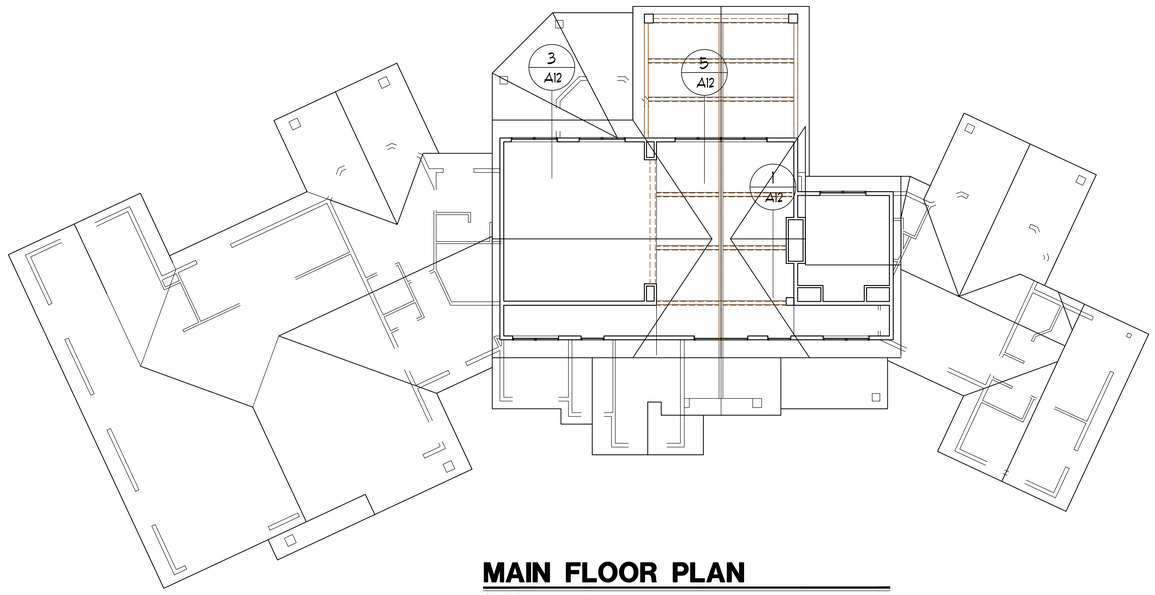
1 A12 CEILING DETAIL

SCALE: 1" = 1'-Ø"



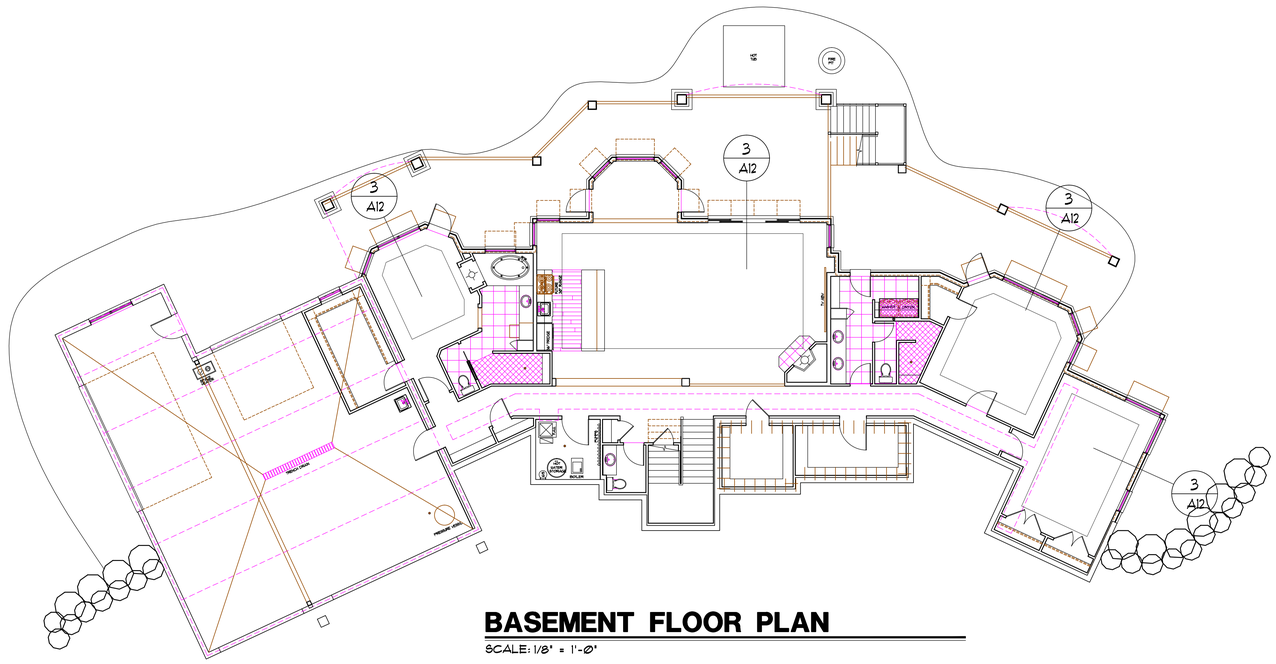
1 A12 FALSE BEAM DETAIL

SCALE: 1" = 1'-Ø"



MAIN FLOOR PLAN

SCALE: 1/8" = 1'-Ø"



BASEMENT FLOOR PLAN

SCALE: 1/8" = 1'-Ø"

LOT# **53-R** SUBDIVISION **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**

LANDFORMS DESIGN
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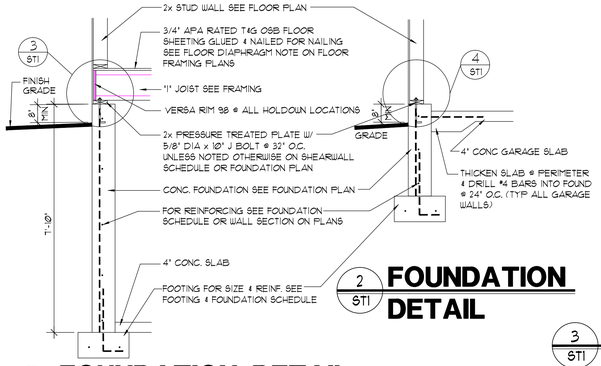
REFLECTED CEILING PLAN

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS	
date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

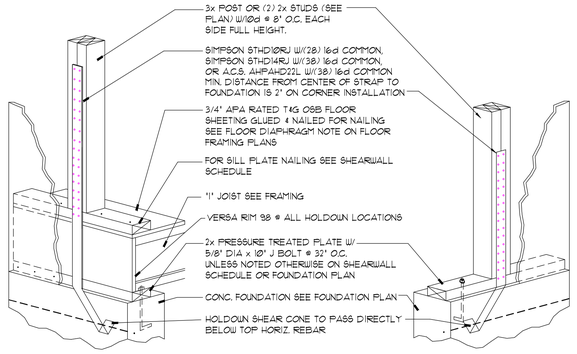
A12



2 STI FOUNDATION DETAIL

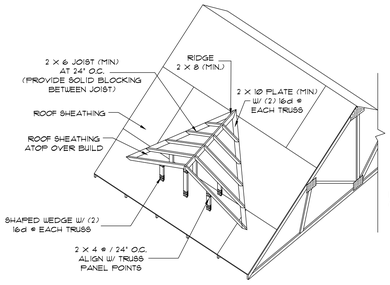
1 STI FOUNDATION DETAIL

SCALE: NOT TO SCALE



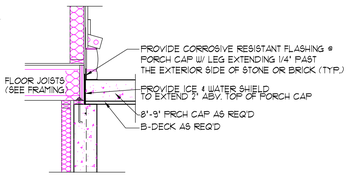
3 STI HOLDOWN DETAIL

SCALE: NOT TO SCALE



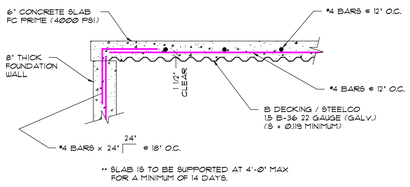
7 STI ROOF OVERBUILD

SCALE: NOT TO SCALE



5 STI PORCH CAP FLASHING

SCALE: 1/2" = 1'-0"

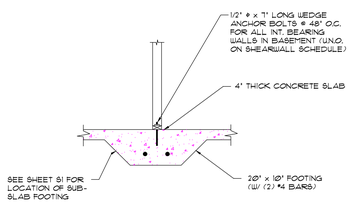


6 STI PORCH CAP DETAIL

SCALE: NOT TO SCALE

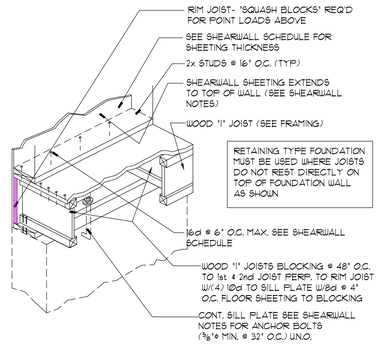
FOOTING & FOUNDATION NOTES:

1. F- -5 INDICATES STEP IN FOOTING. SEE FTG STEP-DOWN DETAIL. ACTUAL LOCATIONS TO BE DETERMINED BY CONTRACTOR. FTG STEP-DOWN DETAIL MAY BE USED WHERE SHALLOWER FOOTING IS DOWELED AND KEYED TO LOWER FOUNDATION WHERE APPLICABLE.
2. FOUNDATION WALLS SHALL BE LATERALLY SUPPORTED UNTIL SUPPORT MEMBERS (FLOOR FRAMING AND SLABS) HAVE BEEN INSTALLED.
3. SEE TYPICAL DETAILS AND GENERAL NOTES.
4. FOOTINGS TO BE A MINIMUM OF 12" BELOW NATURAL GRADE FOR GRUBBING PURPOSES.



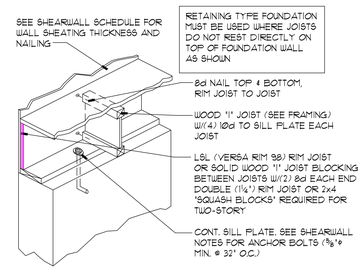
8 STI INT. BEARING WALL

SCALE: NOT TO SCALE



9 STI WOOD I-JOIST FRAMING

SCALE: 3/4" = 1'-0" (PARALLEL TO RIM JOIST)

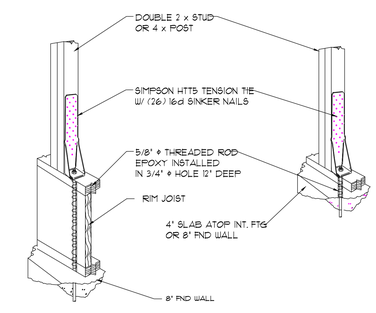


10 STI WOOD "I" JOIST FRAMING

SCALE: 3/4" = 1'-0" (PERP. TO RIM JOIST)

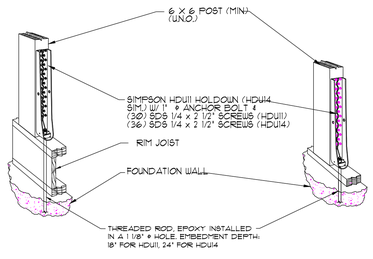
NOTE:
TIES MAY BE INSTALLED O/ EXTERIOR SHEAT'G

NOTE:
ONLY DETAILS REFERENCED SPECIFIC TO THIS SET OF DRAWINGS ARE APPLICABLE. SEE DRAWINGS FOR FLAGGED DETAIL LOCATIONS. ANY DETAILS NOT FLAGGED ON DRAWINGS ARE NOT APPLICABLE



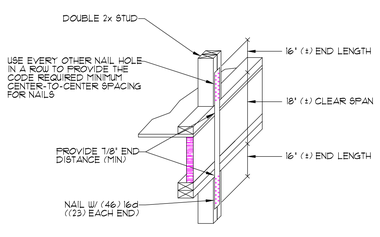
11 STI STRAP TIE DETAIL ◇4-6

SCALE: NOT TO SCALE



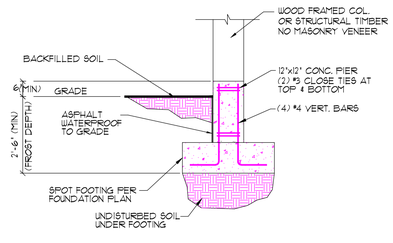
12 STI HOLDOWN DETAIL ◇4-5 ◇4-6

SCALE: NOT TO SCALE (NOT USED THESE DRAWINGS)



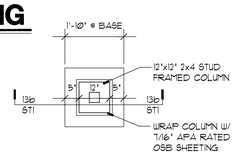
14 STI HOLDOWN DETAIL ◇4-7

SCALE: NOT TO SCALE



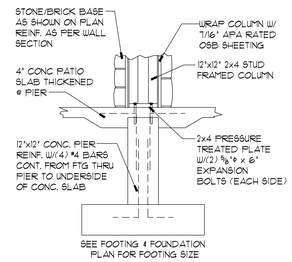
15 STI COLUMN DETAIL

SCALE: NOT TO SCALE



13a STI COLUMN DETAIL

SCALE: 1" = 1'-0" PLAN VIEW



13b STI COLUMN DETAIL

SCALE: 1/2" = 1'-0" SECTION

LANDFORMS DESIGN

STRUCTURAL DETAILS

KENYON RESIDENCE

CUSTOM HOME PLAN

LOT **53-R** SUB/DIV **THE SUMMIT**
CITY **WEBER CO.** **AT SKI LAKE**

REVISIONS	
date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

ST1

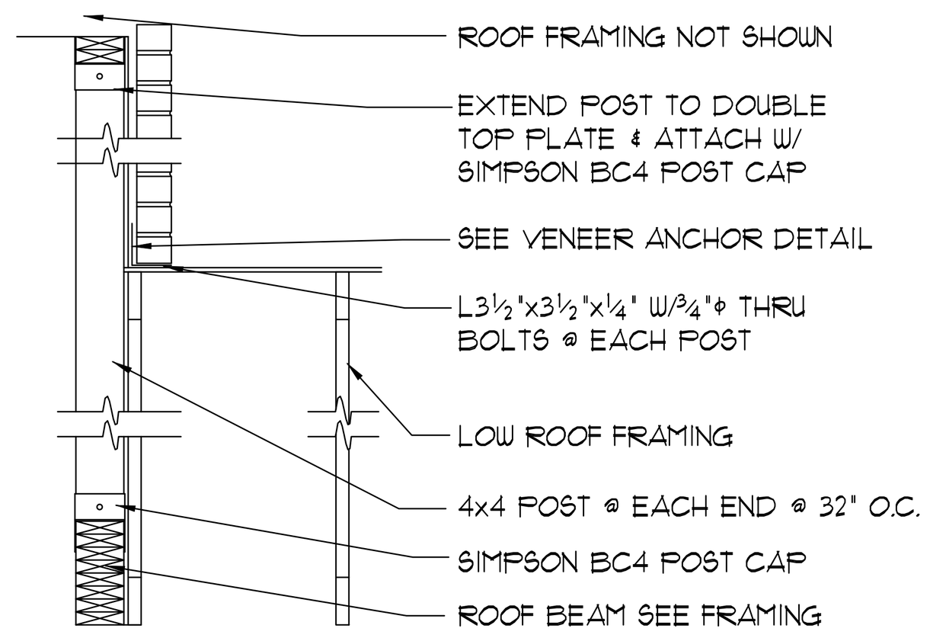
NAILING SCHEDULE (TABLE 204.9.1 IBC)

	CONNECTION	NAILING
1.	JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2.	BRIDGING TO JOIST, TOENAIL EACH END	2-8d
3.	1"x 6"(25mm x 152mm) SUBFLOOR OR LESS TO EACH JOIST FACE NAIL	2-8d
4.	WIDER THAN 1"x 6" (25mm x 152mm) SUBFLOOR TO EACH JOIST FACE NAIL	3-8d
5.	2" (51mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
6.	SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	16d AT 16" (406mm) O.C. 3-16d PER 16" (406mm)
7.	TOP PLATE TO STUD, END NAIL	2-16d
8.	STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d, END NAIL
9.	DOUBLE STUDS, FACE NAIL	16d @ 24" (610mm) O.C.
10.	DOUBLED TOP PLATES, TYPICAL FACE NAIL DOUBLE TOP PLATES, LAP SPLICE	16d @ 16" (406mm) O.C. 8-16d
11.	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12.	RIM JOIST TO TOP PLATE, TOENAIL	8d @ 6" (152mm) O.C.
13.	TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
14.	CONTINUOUS HEADER, TWO PIECES	16d @ 16" (406mm) O.C. ALONG EACH EDGE
15.	CEILING JOISTS TO PLATE, TOENAIL	3-8d
16.	CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17.	CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18.	CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
19.	RAFTER TO PLATE, TOENAIL	3-8d
20.	1"(25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21.	1"x 8" (25mm x 203mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
22.	WIDER THAN 1"x 8" (25mm x 203mm) SHEATHING TO EACH BEARING, FACE NAIL	3-8d
23.	BUILT-UP CORNER STUDS	16d @ 24" (610mm) O.C.
24.	BUILT UP GIRDER AND BEAMS	20d @ 32" (813mm) O.C. @ TOP & BOTTOM & STAGGERED 2-20d @ ENDS AND @ EACH SPLICE
25.	2"(51mm) PLANKS	2-16d @ EACH BEARING
26.	WOOD STRUCTURAL PANELS AND PARTICLEBOARD[2]: SUBFLOOR, ROOF & WALL SHEATHING (TO FRAMING): 1/2" (12.7 mm) AND LESS 19/32" - 3/4" (15mm -19mm) 7/8" - 1" (22mm - 25mm) 1 1/8" - 1 1/4 (29mm - 32mm COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING): 3/4" (19mm) AND LESS 7/8" - 1" (22mm - 25mm) 1 1/8" - 1 1/4 (29mm - 32mm	 6d[3] 8d[4] OR 6d[5] 8d[3] 10d[4] OR 8d[5] 6d[5] 8d[5] 10d[4] OR 8d[5]
27.	PANEL SIDING (TO FRAMING)[2]: 1/2" (12.7mm) OR LESS 5/8" (16mm)	 6d[6] 8d[6]
28.	FIBERBOARD SHEATHING[7]: 1/2" (12.7mm) 25/32" (20mm)	No. 11 Ga. [8] 6d[4] No. 16 Ga.[9] No. 11 Ga. [8] 8d[4] No. 16 Ga.[9]
29.	INTERIOR PANELING 1/4" (6.4mm) 3/8" (9.5mm)	 4d[10] 6d[11]

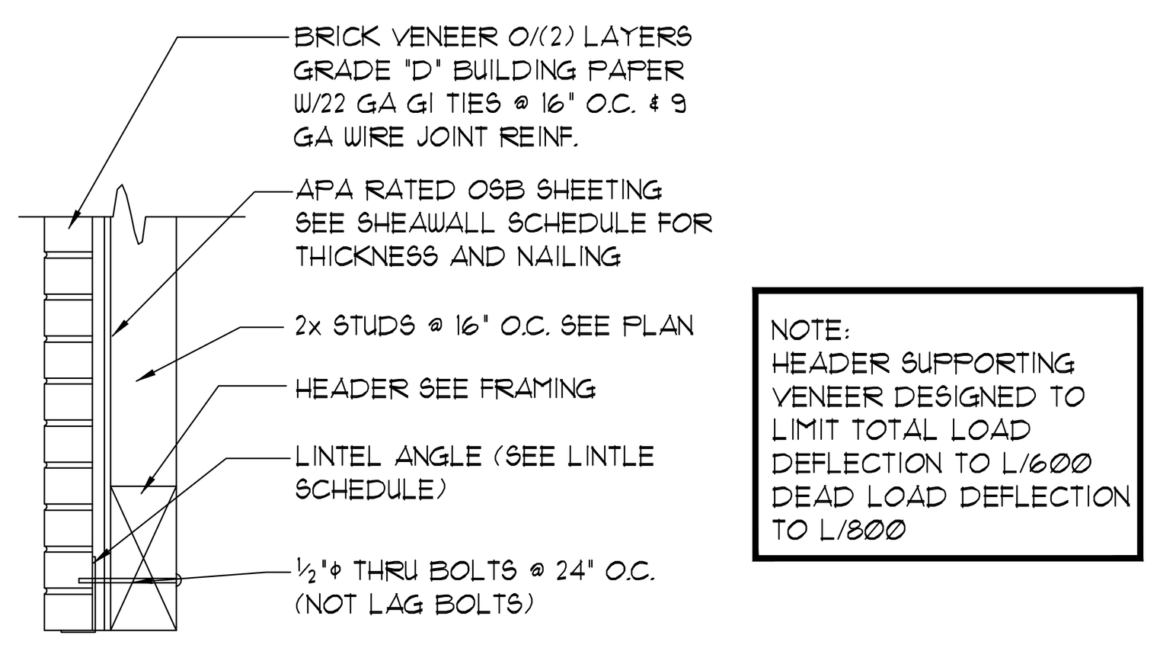
1 COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE STATED
2 NAILS SPACED AT 6" INCHES (152mm) ON CENTER AT EDGES, 12" (305mm) AT INTERMEDIATE SUPPORTS EXCEPT 6" (152mm) AT ALL SUPPORTS WHERE SPANS ARE 48" (1219mm) OR MORE, for NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2315.3.3 AND 2315.4 NAILS FOR WALL SHEATHING MAY BE COMMON, BOX OR CASING.
3 COMMON OR DEFORMED SHANK
4 COMMON
5 DEFORMED SHANK
6 CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF SECTION 2304.3
7 FASTENERS SPACED 3" (76mm) ON CENTER AT EXTERIOR EDGES AND 6" (152mm) ON CENTER AT INTERMEDIATE SUPPORTS
8 CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER (11mm) HEAD AND 1 1/2" (38mm) LENGTH FOR 1/2" (12.7mm) SHEATHING AND 1 3/4" (44mm) LENGTH FOR 25/32" (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF SECTION 2304.3
9 CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" (11mm) CROWN AND 1 1/8" (29mm) LENGTH FOR 1/2" (12.7mm) SHEATHING AND 1 1/2" (38mm) LENGTH FOR 25/32" (20mm) SHEATHING CONFORMING TO THE REQUIREMENTS OF SECTION 2304.3
10 PANEL SUPPORTS AT 16" (406mm) (20" (508mm) IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED). CASING OR FINISH NAILS SPACED 6" (152mm) ON PANEL EDGES, 12" (305mm) AT INTERMEDIATE SUPPORTS.
11 PANEL SUPPORTS AT 24" (610mm). CASING OR FINISH NAILS SPACED 6" (152mm) ON PANEL EDGES, 12" (305mm) AT INTERMEDIATE SUPPORTS.

NOTE:
TIES MAY BE INSTALLED O/ EXTERIOR SHEAT'G

NOTE:
ONLY DETAILS REFERENCED SPECIFIC TO THIS SET OF DRAWINGS ARE APPLICABLE SEE DRAWINGS FOR DETAIL FLAG LOCATIONS ANY DETAILS NOT FLAGGED ON DRAWINGS ARE NOT APPLICABLE

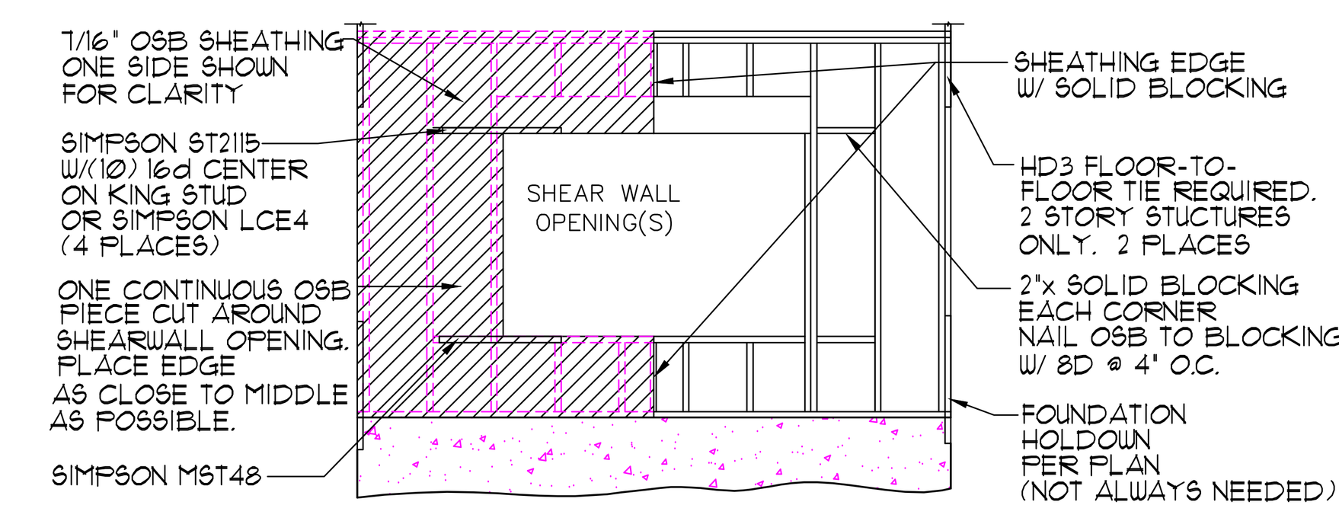


1 ST2 **VENEER O/ LOW ROOF**
SCALE: NTS

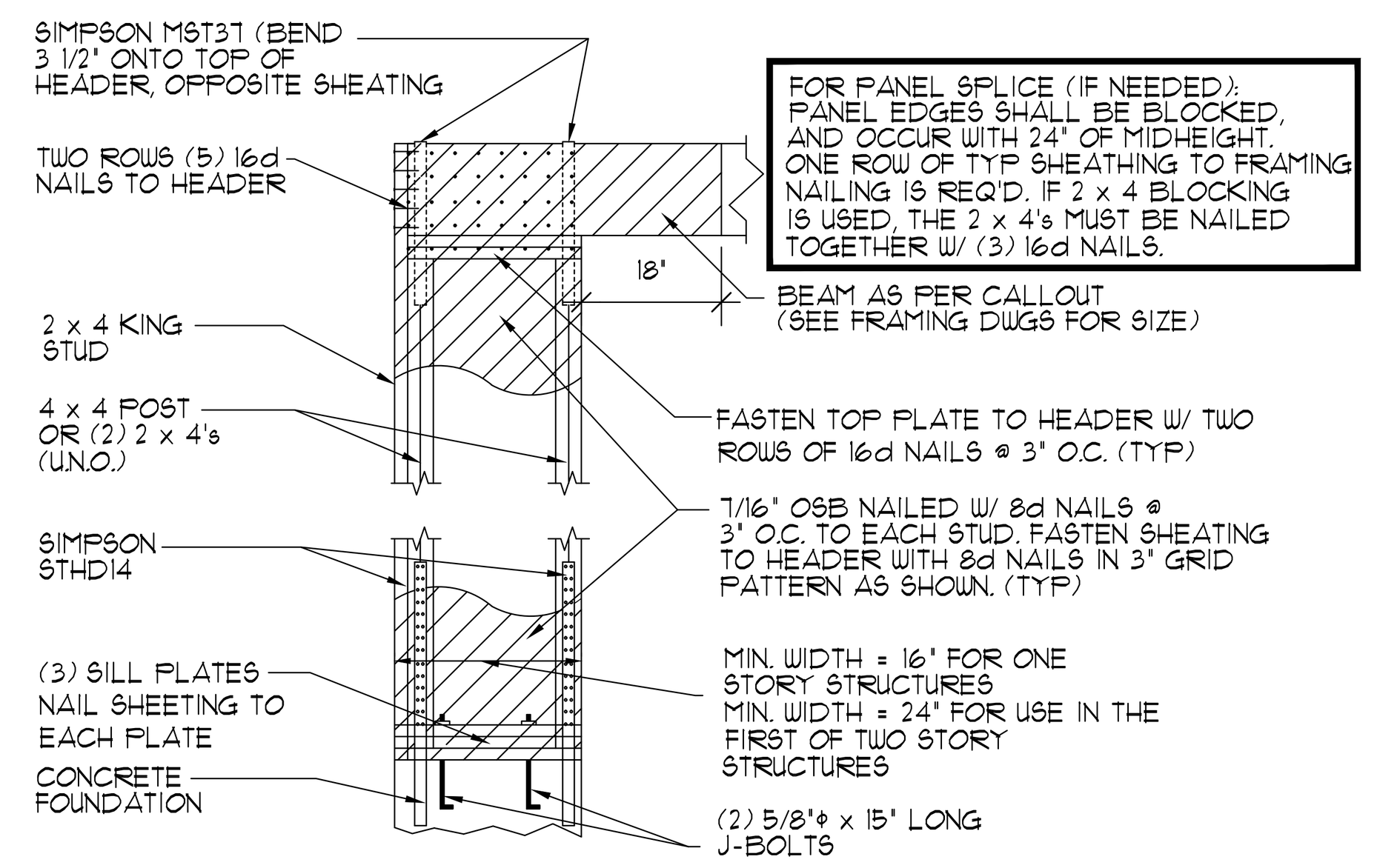


NOTE:
HEADER SUPPORTING VENEER DESIGNED TO LIMIT TOTAL LOAD DEFLECTION TO L/600 DEAD LOAD DEFLECTION TO L/800

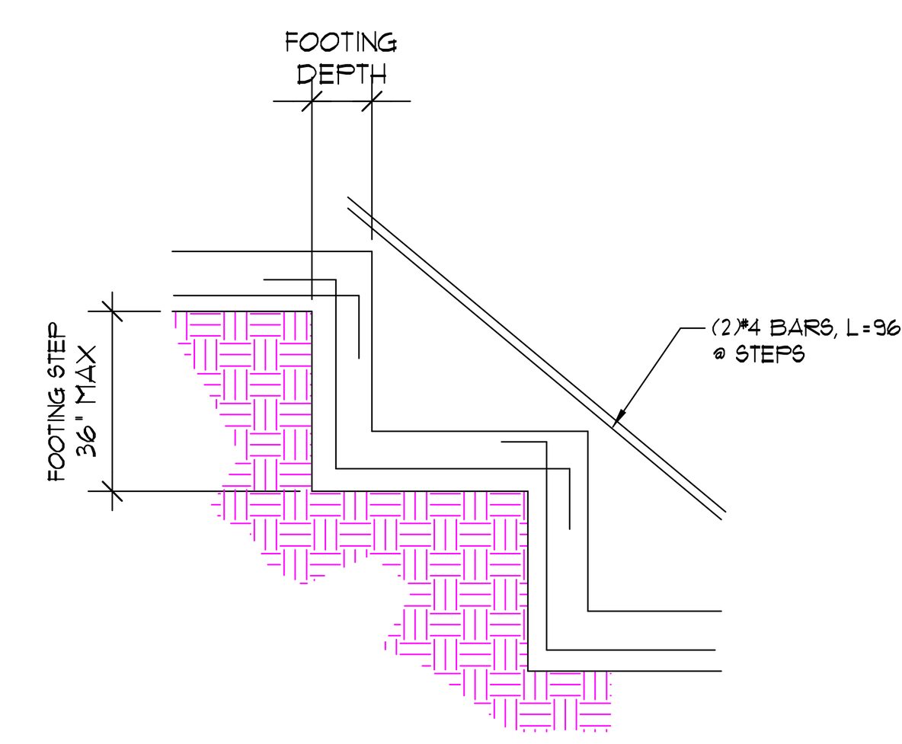
2 ST2 **GARAGE HEADER DETAIL**
SCALE: NTS



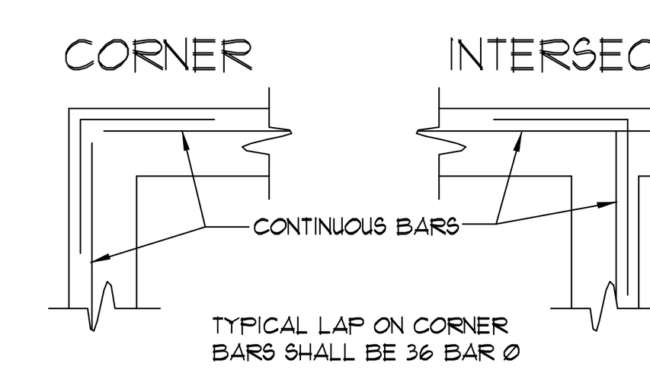
3 ST2 **SHEARWALL REINF.**
SCALE: ¾" = 1'-0"



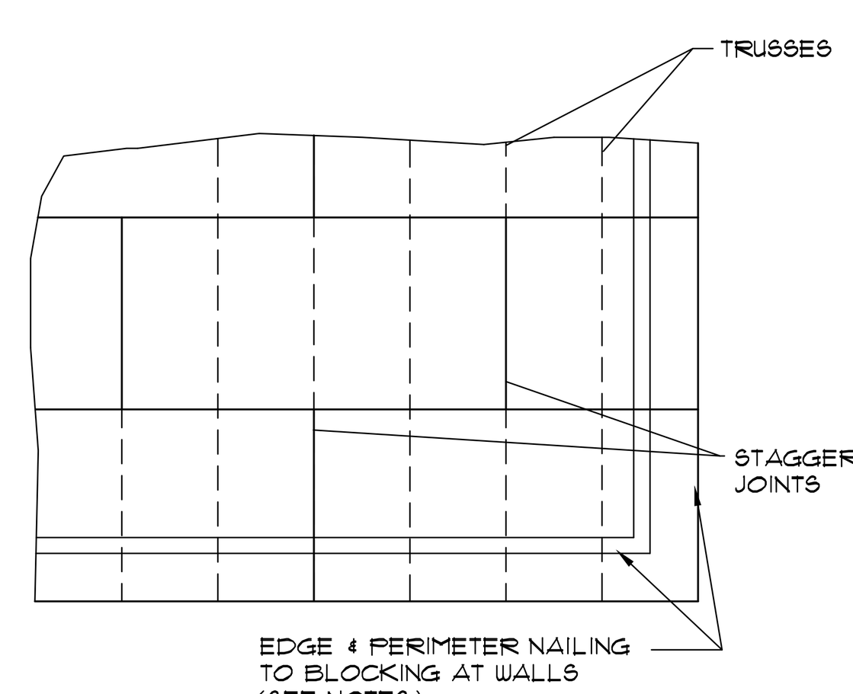
4 ST2 **PORTAL FRAME DETAIL**
SCALE: NTS



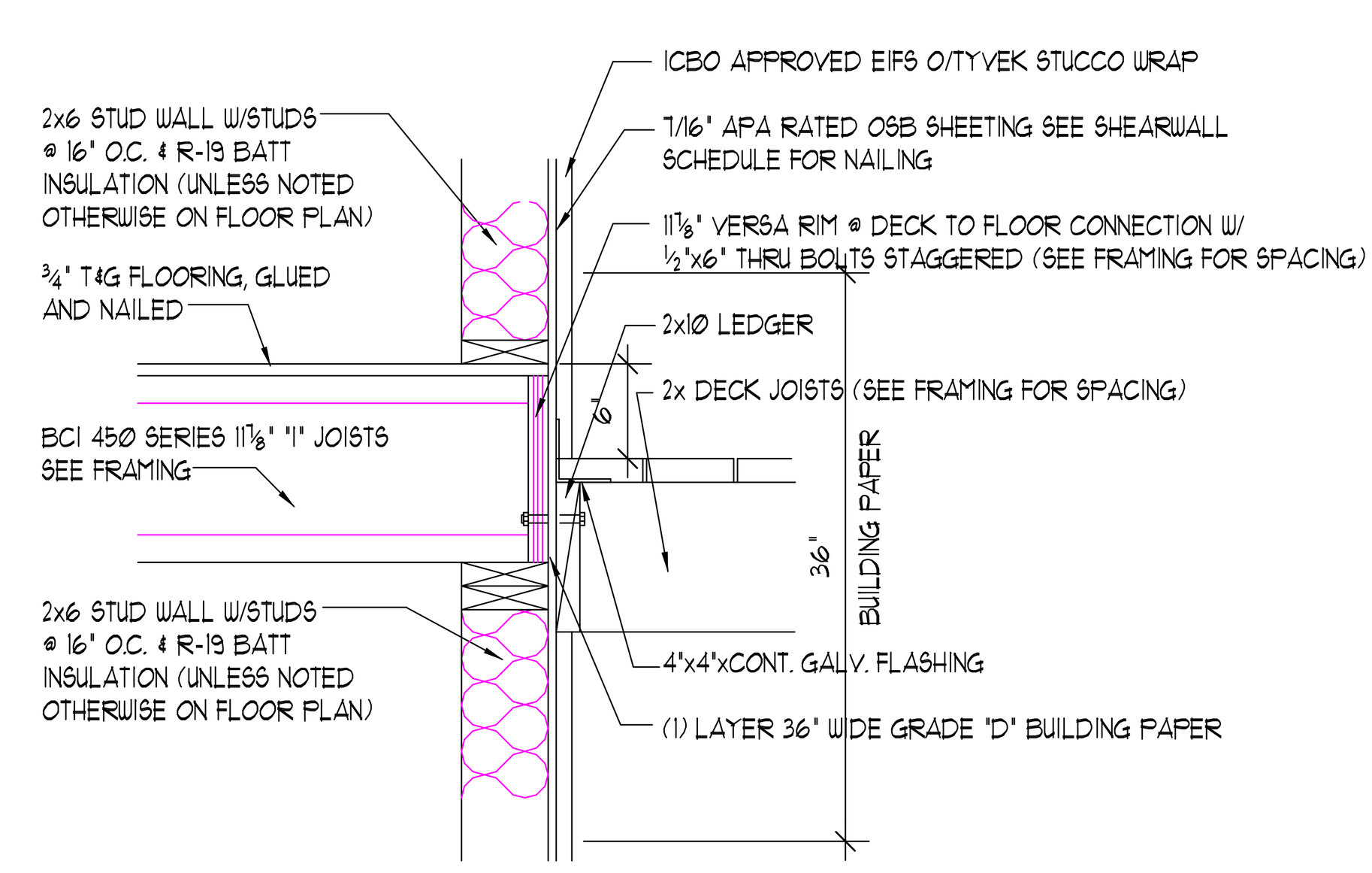
6 ST2 **STEP FTG. DETAIL**
SCALE: NOT TO SCALE



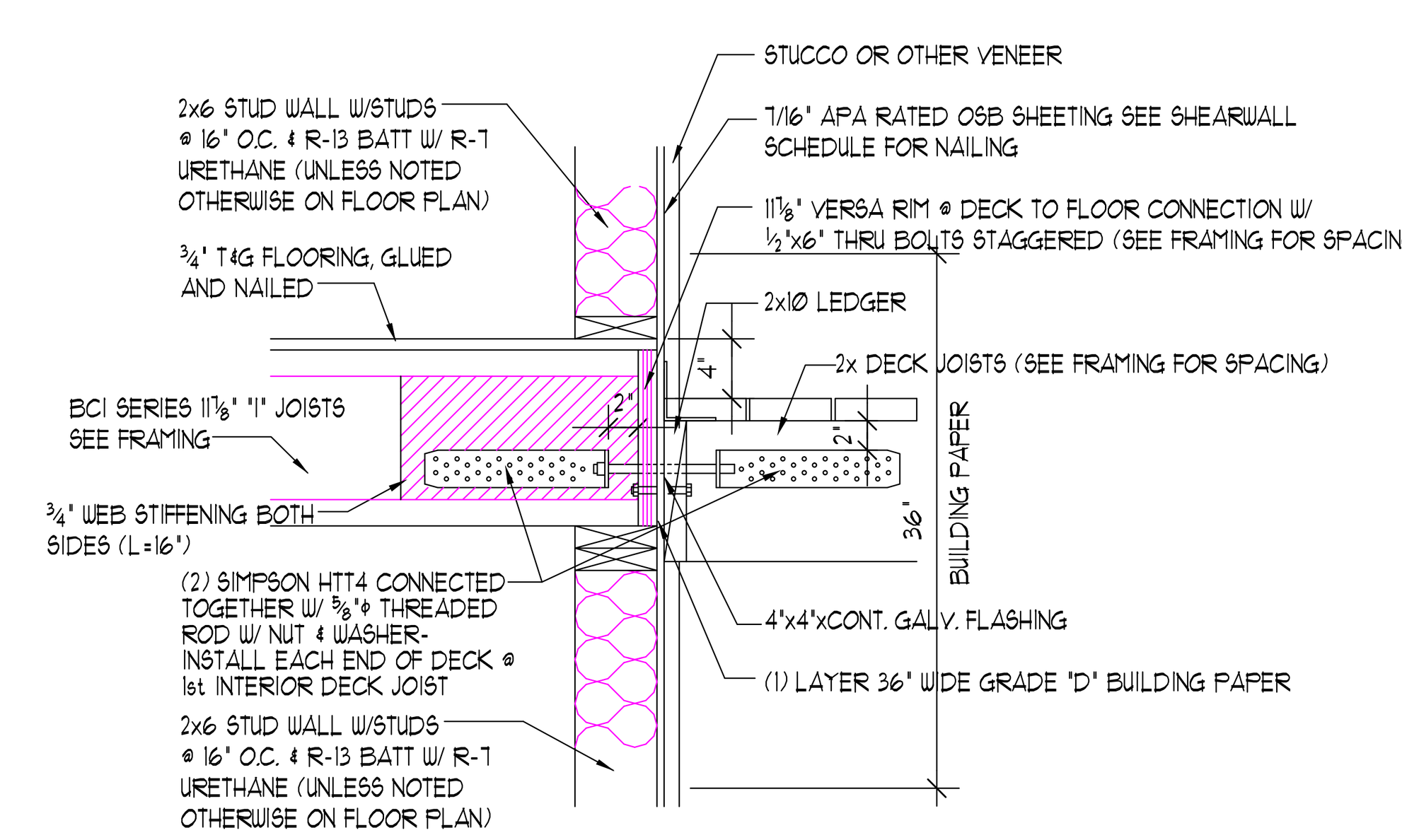
7 ST2 **CONC. CORNER DETAIL**
SCALE: NOT TO SCALE



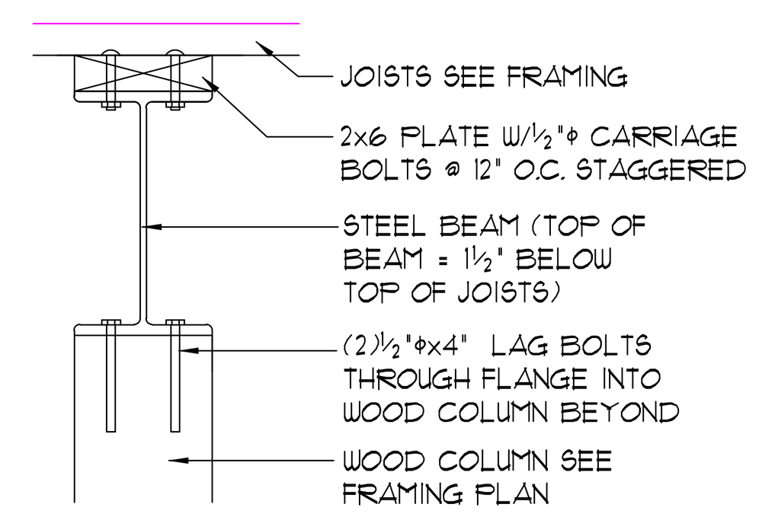
8 ST2 **ROOF SHEATHING**
SCALE: NTS



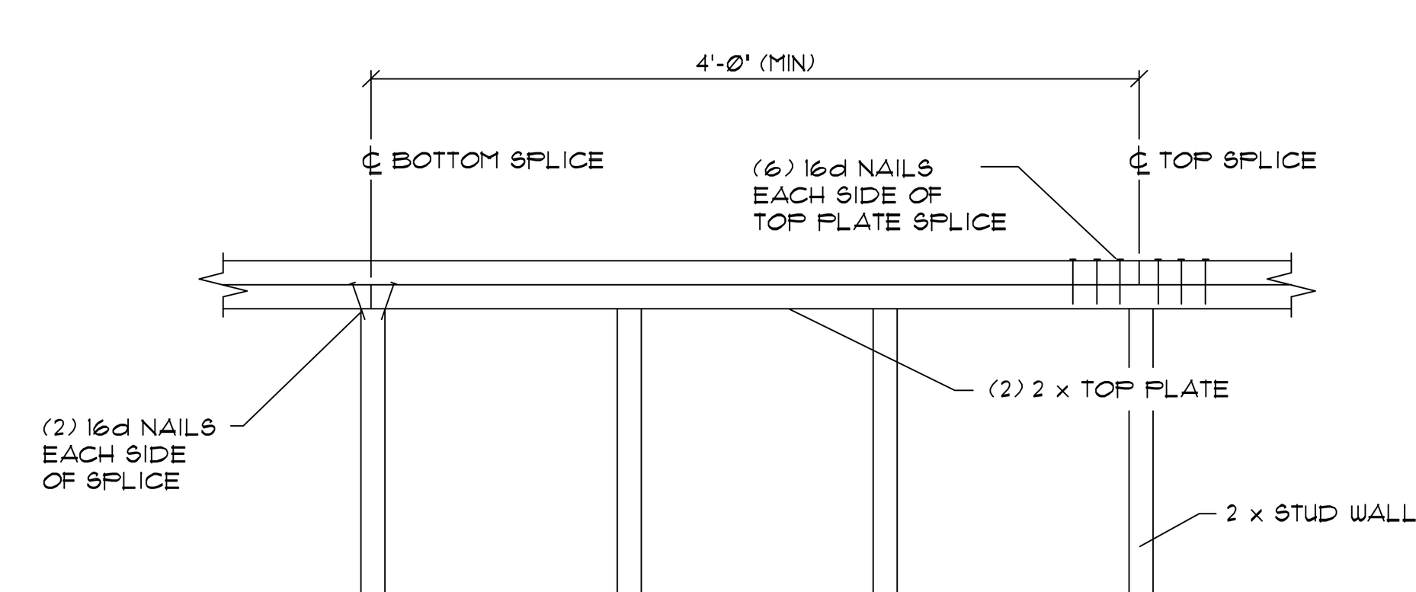
11 ST2 **DECK TO FLOOR DETAIL**
SCALE: 1" = 1'-0"



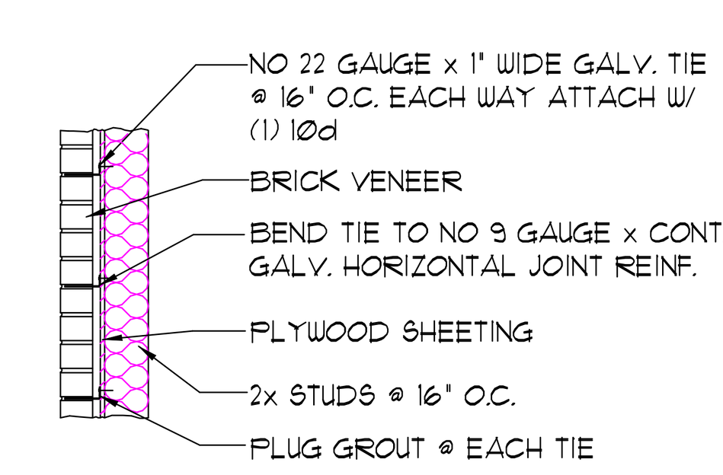
14 ST2 **HTT4 DETAIL**
SCALE: 1" = 1'-0" (NOT USED)



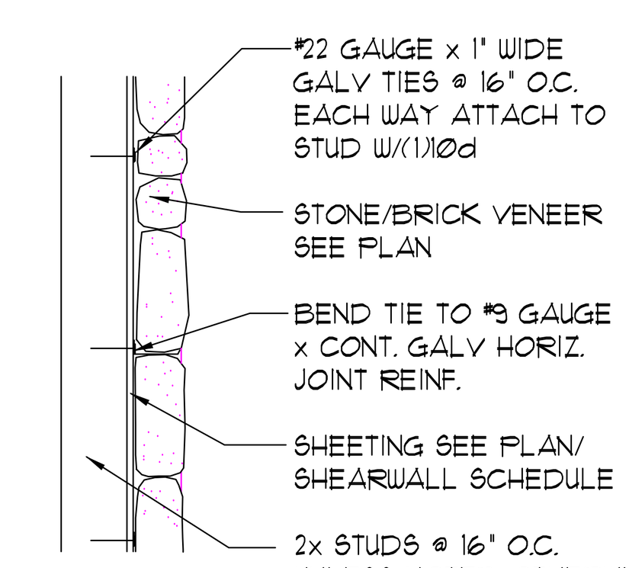
9 ST2 **STEEL BEAM TO WOOD COL.**
SCALE: NTS



10 ST2 **TOP PLATE SPLICE**
SCALE: NTS



12 ST2 **BRICK VENEER VENEER DETAIL**
SCALE: 1/2" = 1'-0"



13 ST2 **STONE VENEER ANCHOR DETAIL**
SCALE: NTS

LOT# 53-R SUBDIVISION THE SUMMIT
CITY WEBER CO. AT SKI LAKE

LANDFORMS DESIGN
landforms.com

STRUCTURAL DETAILS

KENYON RESIDENCE
CUSTOM HOME PLAN

REVISIONS date	item
9-27-16	ROOF HEI
10-6-16	SITE PLAN

ENGINEER OF RECORD	C.E.S.
CAD TECH	M.H.H.
RELEASE DATE	8-25-16

ST2

APPENDIX J

ADDITIONAL INFORMATION

(e.g. Support documents and out of date SWPPP documents, etc.)

Weber County Stormwater Construction Activity Permit

Application submittals will be accepted by appointment only. (801) 399-8374. 2380 Washington Blvd. Suite 240, Ogden, UT 84401

Date Submitted	*Fees (Office Use)*	*Receipt Number (Office Use)*	*Priority Site (Office Use)*	*Permit Number (Office Use)*
11/08/2016			◯Yes ◉No	

Property Owner/Authorized Representative Contact Information

Name of Property Owner(s)/Authorized Representative(s)
Tom & Michele Kenyon

Phone	Fax
(801) 593-0823	

Email Address
thomas.kenyon@comcast.net

Mailing Address of Property Owner(s)/Authorized Representative(s)
1210 N 3150 E
Layton, UT 84040

Project Information

Project Name
Kenyon Residence

Project Address
6645 E Clairetina Court
Huntsville, UT 84130

Estimated Project Length (mo)	Previous Permit No. (if applicable)
12 months	
Estimated Start Date	**Actual Start Date**
11/14/2016	

Submittal Checklist

☑ The application shall include a Storm Water Pollution Prevention Plan which meets the criteria set forth in Section 33-3-4 of the county ordinances.

The applicant shall file the application on or before the following dates:

Subdivision: The date that the applicant submits the preliminary subdivision development plat application.
Site Plan: The date that the applicant submits a site plan application or amended site plan.
Building Permit: The date that the applicant submits a building permit application if the applicant proposes to construct a building on an existing lot or parcel.
Land Use Permit: The date that the applicant submits a land use permit application.
Other: At least two (2) weeks before the developer intends to perform any type of work not listed above that would require a Storm Water Construction Activity Permit pursuant to this Chapter.

Failure to acquire a required Storm Water Construction Activity Permit is grounds for tabling a related subdivision application, site plan application, conditional use permit application, or building permit application. It is unlawful to commence work (move dirt) on a development site before obtaining a required Storm Water Construction Activity Permit.

Note: A pre-costruction meeting is required before preforming any on-site earth work, unless waived by the county engineer.

Applicant Narrative

Please explain your request.
Construction of a home/site features on Lot 53-R of the Summit at Ski Lake Subdivision.

Authorization

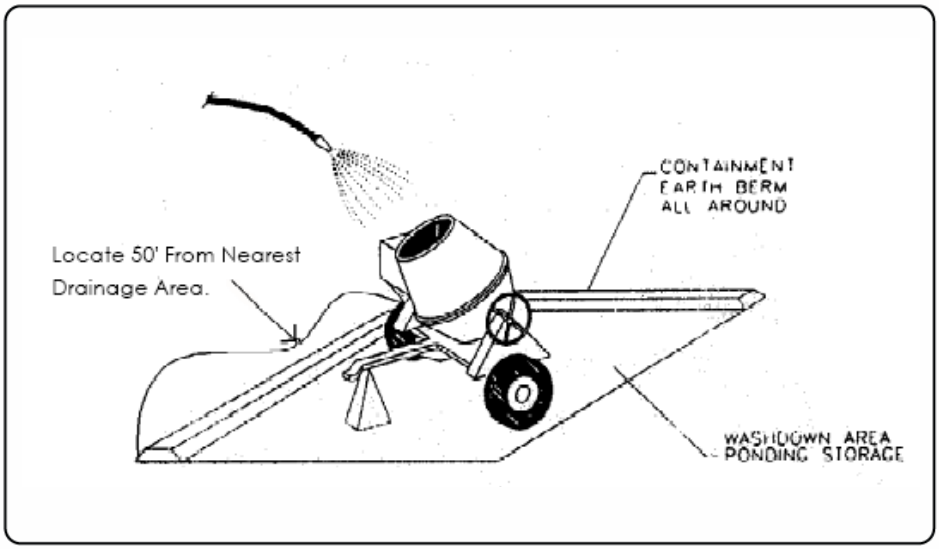
By signing below the Owner / Representative authorizes the county to enter the property to perform inspections.

Owner or Authorized Representative Signature	Date
	11/08/2016
Signature of Approval	**Date**

APPENDIX K

BMP SPECIFICATIONS AND DETAILS

BMP: Concrete Waste Management CWM



OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

APPLICATIONS:

- ► This technique is applicable to all types of sites.

INSTALLATION/APPLICATION CRITERIA:

- ► Store dry and wet materials under cover, away from drainage areas.
- ► Avoid mixing excess amounts of fresh concrete or cement on-site.
- ► Perform washout of concrete trucks off-site or in designated areas only.
- ► Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- ► Do not allow excess concrete to be dumped on-site, except in designated areas.
- ► When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet.)
- ► Train employees and subcontractors in proper concrete waste management.

LIMITATIONS:

- ► Off-site washout of concrete wastes may not always be possible.

MAINTENANCE:

- ► Inspect subcontractors to ensure that concrete wastes are being properly managed.
- ► If using a temporary pit, dispose hardened concrete on a regular basis.

WEBER COUNTY

ENGINEERING DEPARTMENT

2380 Washington Blvd., Suite 240
Ogden, UT 84401
(801) 399-8374

TARGETED POLLUTANTS

- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Construction Waste

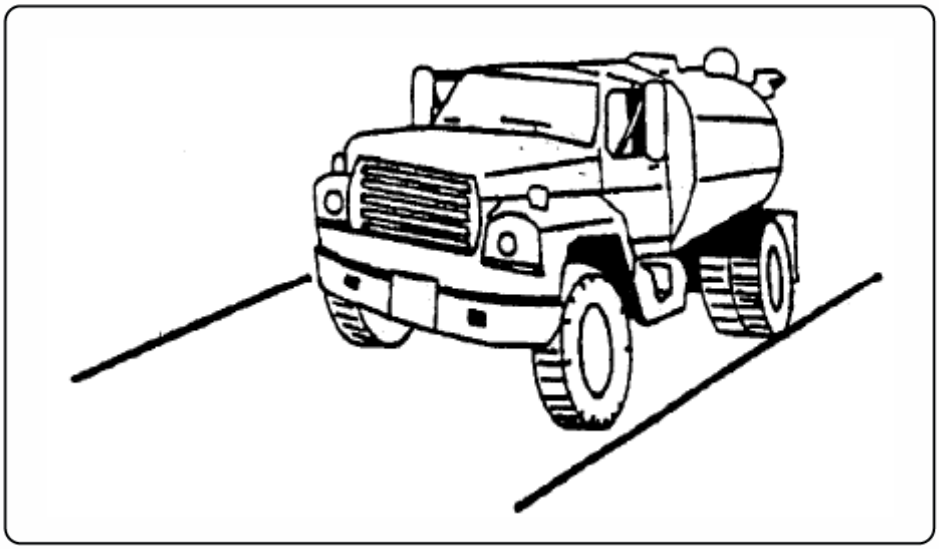
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☐ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☒ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Dust Control DC



OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☒ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

Dust control measures are used to stabilize soil from wind erosion, and reduce dust by construction activities.

APPLICATION:

- ► Dust control is useful in any process area, loading and unloading area, material handling areas, and transfer areas where dust is generated. Street sweeping is limited to areas that are paved.

INSTALLATION/APPLICATION CRITERIA:

- ► Mechanical dust collection systems are designed according to the size of dust particles and the amount of air to be processed. Manufacturers' recommendations should be followed for installation (as well as the design of the equipment).
- ► Two kinds of street weepers are common: brush and vacuum. Vacuum sweepers are more efficient and work best when the area is dry.
- ► Mechanical equipment should be operated according to the manufacturers' recommendations and should be inspected regularly.

LIMITATIONS:

- ► Is generally more expensive than manual systems.
- ► May be impossible to maintain by plant personnel (the more elaborate equipment).
- ► Is labor and equipment intensive and may not be effective for all pollutants (street sweepers).

MAINTENANCE:

- ► If water sprayers are used, dust-contaminated waters should be collected and taken
- ► for treatment. Areas will probably need to be resprayed to keep dust from
- ► spreading.

WEBER COUNTY

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(801) 399-8374

TARGETED POLLUTANTS

- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

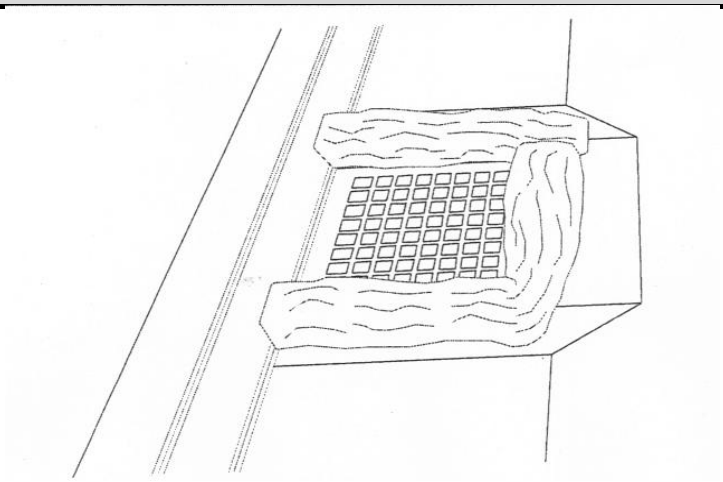
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☐ O&M Costs
- ☒ Maintenance
- ☒ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Inlet Protection - Gravel Bags IP-GB



DESCRIPTION:

Sediment barrier erected around storm drain inlet.

APPLICATION:

Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction

INSTALLATION / APPLICATION CRITERIA:

- Provide up-gradient sediment controls, such as silt fence during construction of inlet
- When construction of curb and gutter and roadway is complete, install gravel filled bags around perimeter of inlet
- Fill to recommended levels to reduce splitting of bags

LIMITATIONS:

- Recommended maximum contributing drainage area of one acre
- Requires shallow sloped adjacent to inlet.

MAINTENANCE:

- Inspect inlet protection following storm event and at a minimum of once every 14 days.
- Remove accumulated sediment when it reaches half the height of the bag.
- Look for bypassing or undercutting and repair or realign as needed.
- Replace and clean up spilled gravel when bags split.

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

TARGETED POLLUTANTS

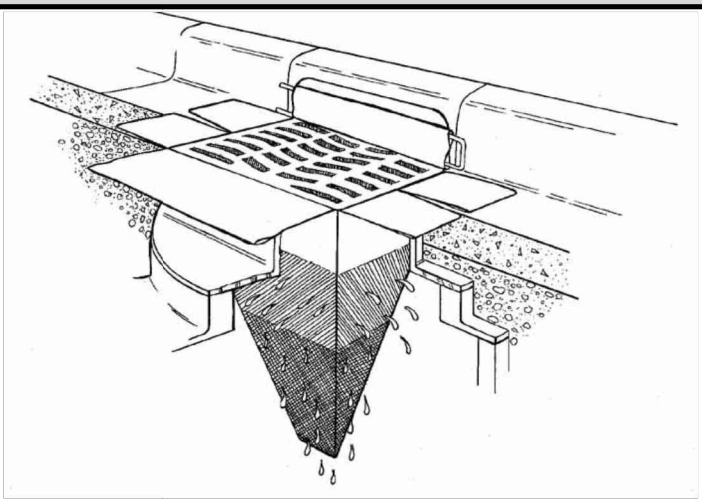
H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☒	☐	☐	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☒	☐	☐	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☐	☒	O&M Costs
☐	☒	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High **M =** Medium **L =** Low

BMP: Inlet Protection- Silt Bags IP-SB



DESCRIPTION:

Collect and trap sediment and debris entering catch basins from either grated or curb inlets. Insert is made of fabric and is placed in the drain inlet around the perimeter of the grate. Runoff passes through the bag before discharging into the drain outlet pipe. Overflow holes are usually provided to pass larger flows without causing a backwater at the grate. Certain manufactured products include polymers intended to increase pollutant removal effectiveness.

APPLICATIONS:

- Storm drain inlet boxes

INSTALLATION / APPLICATION CRITERIA:

- Regular Maintenance is necessary
- Evaluation of the device chosen should be balanced with cost
- Hydraulic capacity controls effectiveness
- Most useful in small drainage areas (< 1 Acre)
- Ideal in combination with other BMP's

LIMITATIONS:

- Cost
- Maintenance required to prevent plugging and remain effective

MAINTENANCE:

Inspection after all storm events and as required between events

OBJECTIVES

- ☐ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

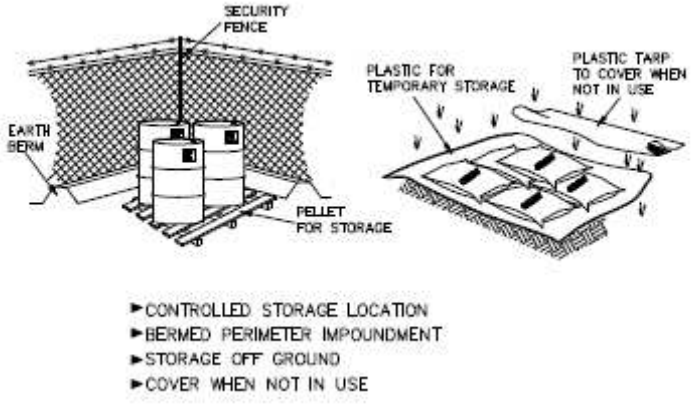
H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☒	☐	☐	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☒	☐	Capital Costs
☐	☒	☐	O&M Costs
☒	☐	☐	Maintenance
☐	☒	☐	Training
☐	☐	☒	Staffing
☒	☒	☒	Administrative

H = High **M =** Medium **L =** Low

BMP: Materials Storage MS



OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

Controlled storage of on-site materials.

APPLICATION:

- ► Storage of hazardous, toxic, and all chemical substances.
- ► Any construction site with outside storage of materials.

INSTALLATION/APPLICATION CRITERIA:

- ► Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- ► Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- ► Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.
- ► For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

LIMITATIONS:

- ► Does not prevent contamination due to mishandling of products.
- ► Spill Prevention and Response Plan still required.
- ► Only effective if materials are actively stored in controlled location.

MAINTENANCE:

- ► Inspect daily and repair any damage to perimeter impoundment or security fencing.
- ► Check materials are being correctly stored (i.e. standing upright, in labeled containers, tightly capped) and that no materials are being stored away from the designated location.

WEBER COUNTY

ENGINEERING DEPARTMENT

2380 Washington Blvd., Suite 240
Ogden, UT 84401
(801) 399-8374

TARGETED POLLUTANTS

- ☐ Sediment
- ☐ Nutrients
- ■ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☒ Other Construction Waste

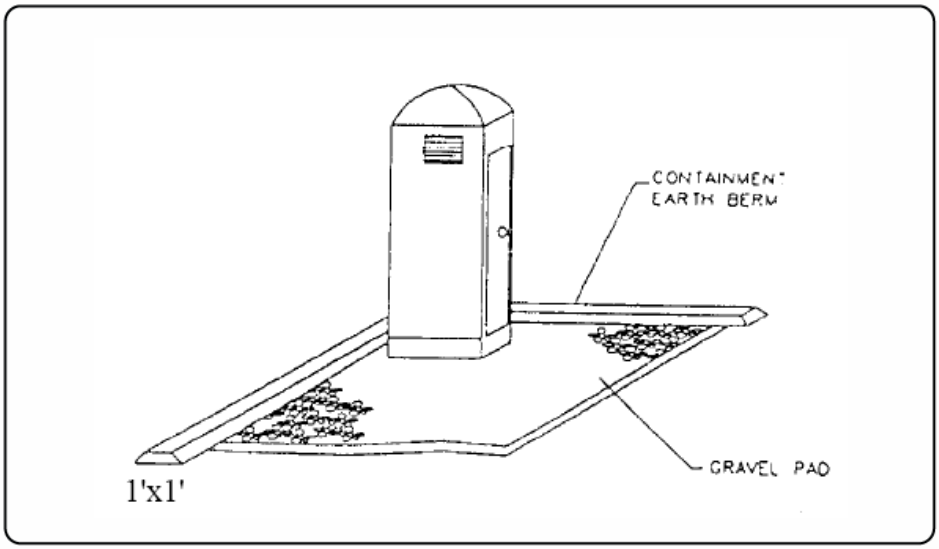
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ■ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Portable Toilets PT



OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

Temporary on-site sanitary facilities for construction personnel.

APPLICATION:

- ► All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION/APPLICATION CRITERIA:

- ► Locate portable toilets in convenient locations throughout the site.
- ► Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- ► Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS:

No limitations.

MAINTENANCE:

- ► Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- ► Regular waste collection should be arranged with licensed service.
- ► All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

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TARGETED POLLUTANTS

- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Other Construction Waste

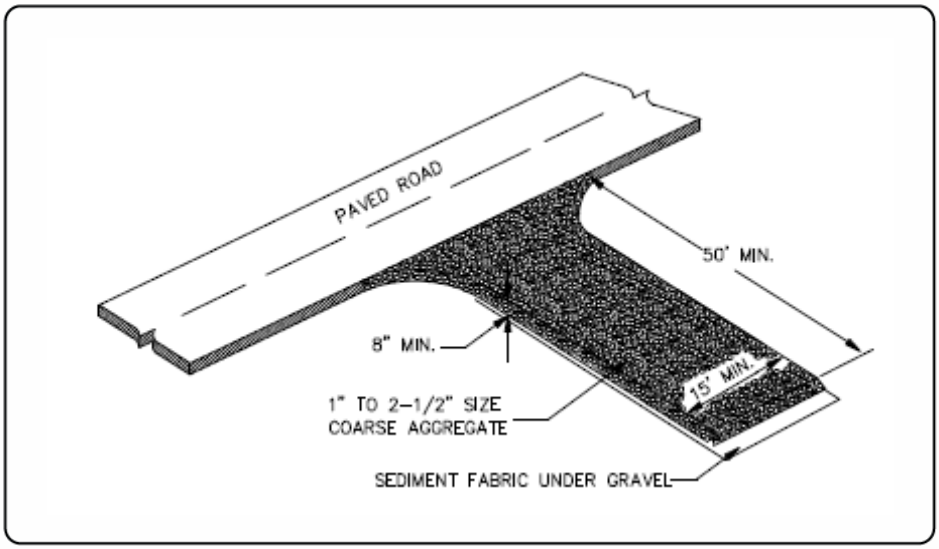
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Stabilized Construction Entrance SCE



OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

APPLICATIONS:

- ► At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

INSTALLATION/APPLICATION CRITERIA:

- ► Clear and grub area and grade to provide maximum slope of 2%.
- ► Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months.
- ► Place coarse aggregate, 1 to 2-1/2 inches in size, to a minimum depth of 8 inches.

LIMITATIONS:

- ► Requires periodic top dressing with additional stones.
- ► Should be used in conjunction with street sweeping on adjacent public right-of-way.

MAINTENANCE:

- ► Inspect daily for loss of gravel or sediment buildup.
- ► Inspect adjacent roadway for sediment deposit and clean by sweeping or shoveling.
- ► Repair entrance and replace gravel as required to maintain control in good working condition.
- ► Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.

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TARGETED POLLUTANTS

- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

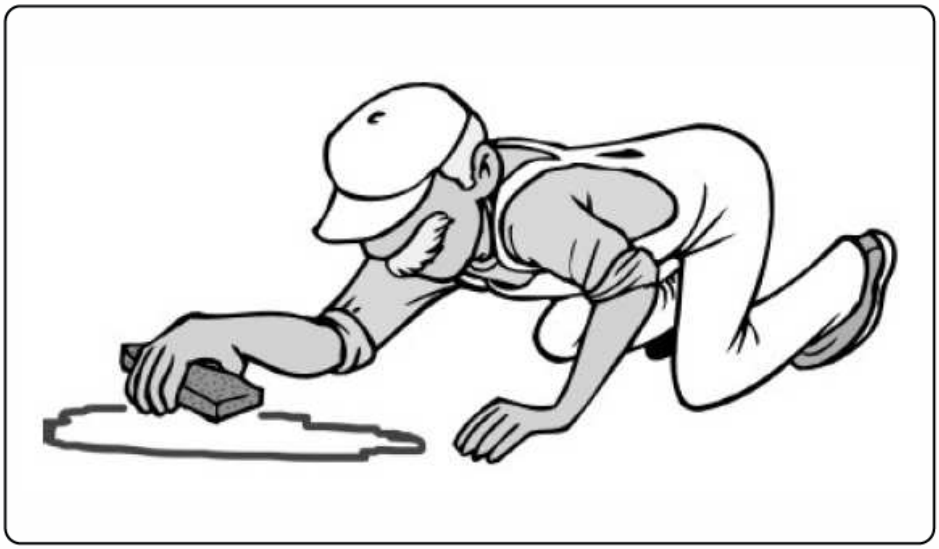
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ■ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Spill Clean-Up SCU



OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

APPLICATION:

- ► All sites

GENERAL:

- ► Store controlled materials within a storage area.
- ► Educate personnel on prevention and clean-up techniques.
- ► Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- ► Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

METHODS:

- ► Clean-up spills/leaks immediately and remediate cause.
- ► Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL CONTAMINATED MATERIAL.
- ► Use rags or absorbent material for clean-up. Excavate contaminated soils. Dispose of clean-up material and soil as hazardous waste.
- ► Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- ► Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #536-4100) for any spill of reportable quantity.

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TARGETED POLLUTANTS

- ☐ Sediment
- ☐ Nutrients
- ■ Toxic Materials
- ☒ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Construction Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

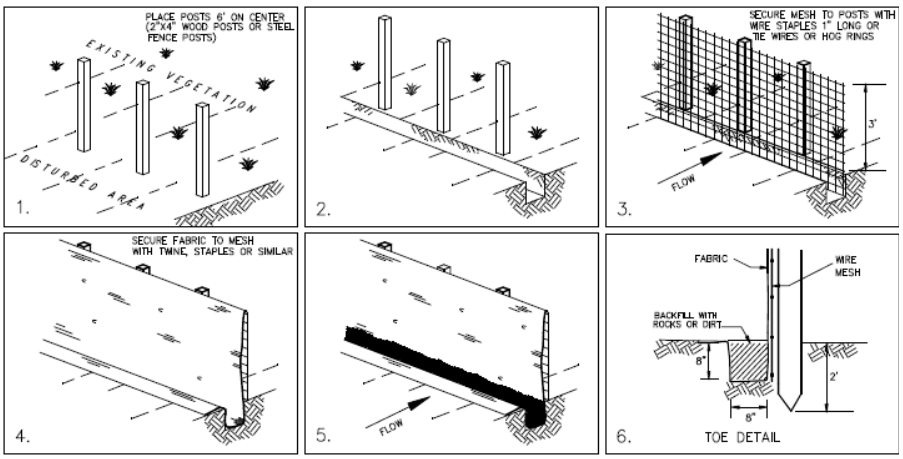
IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☐ O&M Costs
- ☐ Maintenance
- ■ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Silt Fence

SF



OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☒ Control Internal Erosion

DESCRIPTION:

- ► A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

APPLICATION:

- ► Perimeter control: place barrier at downgradient limits of disturbance
- ► Sediment barrier: place barrier at toe of slope or soil stockpile
- ► Protection of existing waterways: place barrier at top of stream bank
- ► Inlet protection: place fence surrounding catchbasins

INSTALLATION/APPLICATION CRITERIA:

- ► Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
- ► Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
- ► Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
- ► Backfill trench over filter fabric to anchor.

LIMITATIONS:

- ► Recommended maximum drainage area of 0.5 acre per 100 feet of fence
- ► Recommended maximum upgradient slope length of 150 feet
- ► Recommended maximum uphill grade of 2:1 (50%)
- ► Recommended maximum flow rate of 0.5 cfs
- ► Ponding should not be allowed behind fence

MAINTENANCE:

- ► Inspect immediately after any rainfall and at least daily during prolonged rainfall.
- ► Look for runoff bypassing ends of barriers or undercutting barriers.
- ► Repair or replace damaged areas of the barrier and remove accumulated sediment.
- ► Reanchor fence as necessary to prevent shortcutting.
- ► Remove accumulated sediment when it reaches ½ the height of the fence.

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TARGETED POLLUTANTS

- ■ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

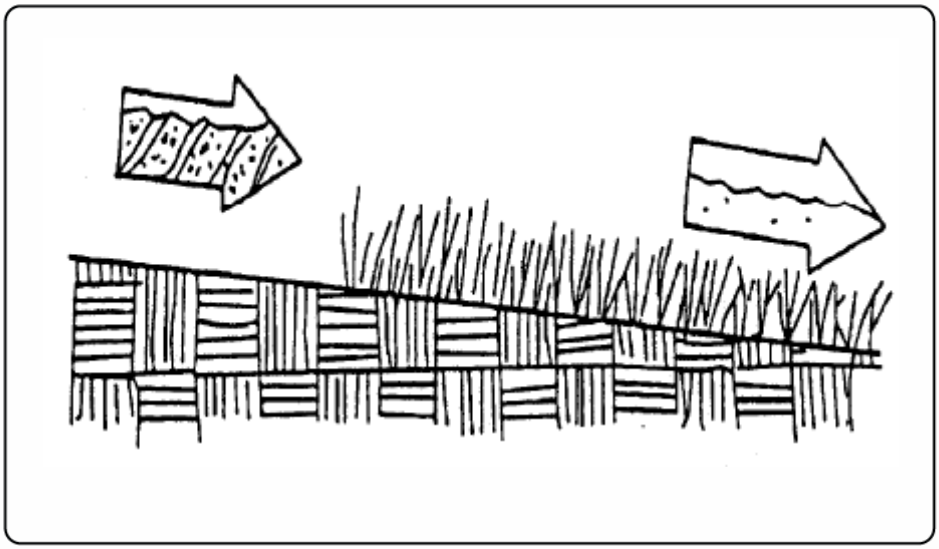
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Seeding and Planting SP



OBJECTIVES

- ☐ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☒ Stabilize Disturbed Areas
- ☒ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

DESCRIPTION:

► Seeding of grass and plantings of trees, shrubs, vines and ground covers provide long-term stabilization of soil. In some areas, with suitable climates, grasses can be planted for temporary stabilization.

APPLICATION:

- ► Appropriate for site stabilization both during and after construction
- ► Any graded/cleared areas where construction activities have ceased.
- ► Open space cut and fill areas.
- ► Steep slopes, spoil piles, vegetated swales, landscape corridors, stream banks.

INSTALLATION/APPLICATION CRITERIA:

Type of vegetation, site and seedbed preparation, planting time, fertilization and water requirements should be considered for each application. Grasses:

- ► Ground preparation: fertilize and mechanically stabilize the soil.
- ► Tolerant of short-term temperature extremes and waterlogged soil composition.
- ► Appropriate soil conditions: shallow soil base, good drainage, slope 2:1 or flatter.
- ► Mowing, irrigating, and fertilizing are vital for promoting vigorous grass growth.

Trees and Shrubs:

- ► Selection criteria: vigor, species, size, shape & wildlife food source.
- ► Soil conditions: select species appropriate for soil, drainage & acidity.
- ► Other factors: wind/exposure, temperature extremes, and irrigation needs.

Vines and Ground Covers:

- ► Ground preparation: lime and fertilizer preparation.
- ► Use proper seeding rates.
- ► Appropriate soil conditions: drainage, acidity and slopes.
- ► Generally avoid species requiring irrigation.

LIMITATIONS:

- ► Permanent and temporary vegetation may not be appropriate in dry periods without irrigation.
- ► Fertilizer requirements may have potential to create stormwater pollution.

MAINTENANCE:

- ► Shrubs and trees must be adequately watered and fertilized and if needed pruned.
- ► Grasses may need to be watered and mowed.

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TARGETED POLLUTANTS

- ■ Sediment
- ☒ Nutrients
- ☒ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ☐ Other Waste

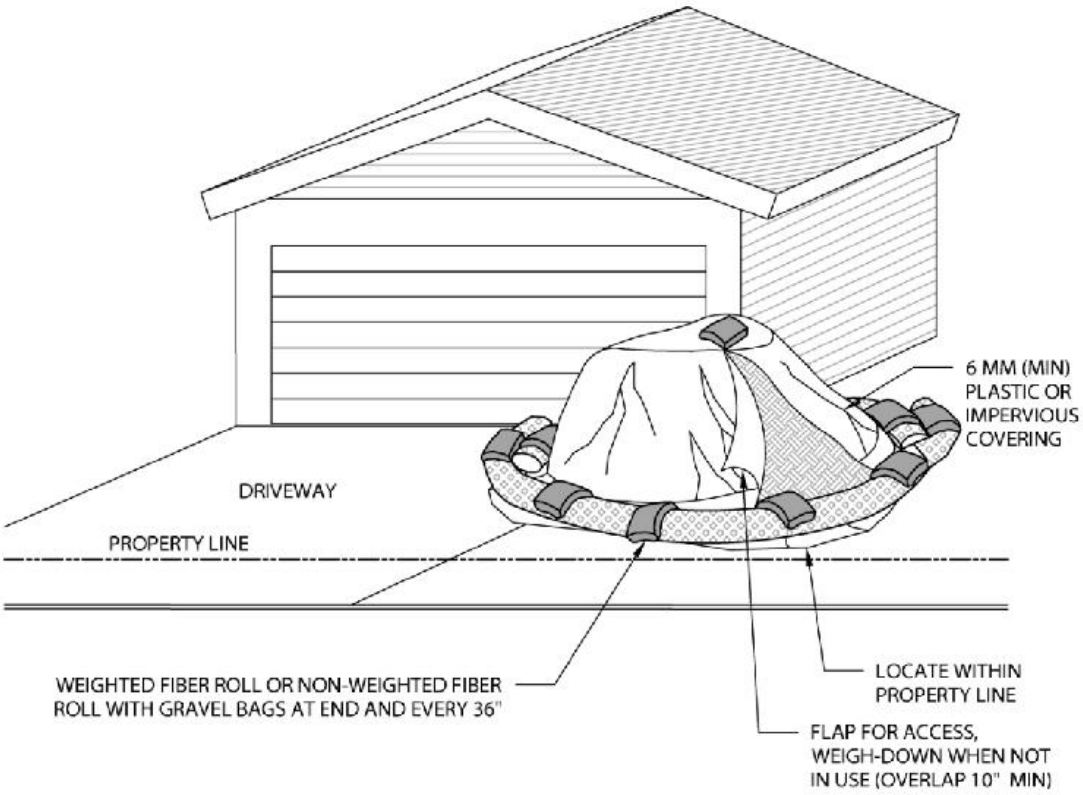
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

- ■ High
- ☒ Medium
- ☐ Low

Stockpile Management Figure



NOTES:

1. LOCATE STOCK AND/OR SPOIL PILES AWAY FROM DRAINAGE COURSES, DRAIN INLETS OR CONCENTRATED FLOWS OF STORMWATER.
2. ALL STOCK AND/OR SPOIL PILE PERIMETERS SHALL BE PROTECTED WITH TEMPORARY LINEAR SEDIMENT BARRIERS.
3. COVER ALL STOCK AND/OR SPOIL PILES WITH 6 MM PLASTIC, CANVAS TARP OR IMPERVIOUS COVER TO PREVENT WIND AND RAIN EROSION. EVENLY SPACE WEIGHTS (GRAVEL BAGS) ON COVER TO KEEP IN PLACE DURING WIND.
4. CONDUCT REGULAR INSPECTIONS OF STOCK AND/OR SPOIL PILES DURING AND AFTER RAIN EVENTS
5. VERY LARGE STOCK AND/OR SPOIL PILES MAY REQUIRE SILT FENCE IN LIEU OF FIBER ROLLS.
6. REMOVE SPOIL PILES FROM CONSTRUCTION SITE AS SOON AS POSSIBLE.
7. STOCK/SPOIL PILES MUST BE STORED WITHIN THE APPROVED STAGING AREA.

BMP: Street Sweeping SS

DESCRIPTION:

Prevent sediment from entering storm water by sweeping the streets near construction activities.

APPLICATION:

- Useful for any paved streets near construction sites where sediment is blown, tracked, or spilled onto the streets.

INSTALLATION / APPLICATION CRITERIA:

- The equipment used should be appropriate for the conditions. Vacuum sweepers work more effectively when the area is dry. Brush sweepers work better when the sediment is wet or stuck to the surface.
- Mechanical equipment should be operated and maintained according to the manufacturer's recommendations

LIMITATIONS:

- Is labor and equipment intensive
- May cause dust

MAINTENANCE:

- The street should be checked daily for any sediment deposits. Street sweeping should be implemented whenever sediment from construction activity is found on the streets

OBJECTIVES

- ☒ Housekeeping Practices
- ☐ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☒ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

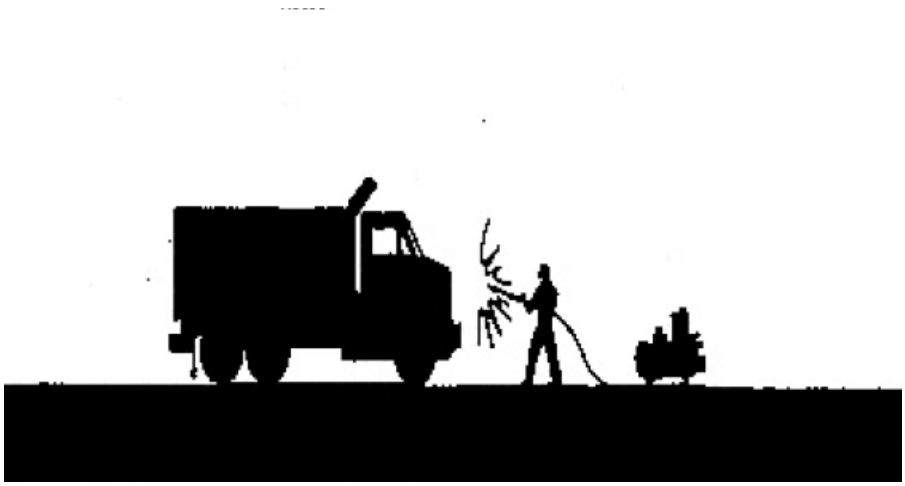
H	M	L	
☒	☐	☐	Sediment
☐	☐	☒	Nutrients
☐	☐	☒	Heavy Metals
☐	☐	☒	Toxic Materials
☐	☐	☒	Oil & Grease
☐	☐	☒	Floatable Materials
☐	☐	☒	Bacteria & Viruses
☐	☐	☒	Other Waste

IMPLEMENTATION REQUIREMENTS

H	M	L	
☐	☐	☒	Capital Costs
☐	☒	☐	O&M Costs
☒	☐	☐	Maintenance
☐	☐	☒	Training
☐	☐	☒	Staffing
☐	☐	☒	Administrative

H = High **M =** Medium **L =** Low

BMP: Vehicle and Equipment Cleaning VEC



OBJECTIVES

- ☐ Manufacturing
- ☐ Material Handling
- ☒ Vehicle Maintenance
- ☒ Construction
- ☒ Commercial Activities
- ☐ Roadways
- ☐ Waste Containment
- ☒ Housekeeping Practices

DESCRIPTION:

Prevent or reduce the discharge of pollutants to stormwater from vehicle and equipment washing and steam cleaning by using off-site facilities, washing in designated, contained areas only, eliminating discharges to the storm drain by infiltrating or recycling the wash water, and training employees and subcontractors.

APPROACH:

- ► Use off-site commercial washing and steam cleaning businesses as much as possible. Washing vehicles and equipment outdoors or in areas where wash water flows onto paved surfaces or into drainage pathways can pollute stormwater. If you wash a large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business. These businesses are better equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.
- ► If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with stormwater, creeks, rivers, and other water bodies. The wash area can be sloped for wash water collection and subsequent infiltration into the ground.
- ► Use as little water as possible to avoid having to install erosion and sediment controls for the wash area. Use phosphate-free biodegradable soaps. Educate employees and subcontractors on pollution prevention measures. Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations.

LIMITATIONS:

- ► Even phosphate-free, biodegradable soaps have been shown to be toxic to fish before the soap degrades.
- ► Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance. (See BMP in the Construction Section).
- ► The measures outlined in this fact sheet are insufficient to address all the environmental impacts and compliance issues related to steam cleaning.

MAINTENANCE:

- ► Minimal, some berm repair may be necessary.

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TARGETED POLLUTANTS

- ■ Sediment
- ■ Nutrients
- ■ Heavy Metals
- ■ Toxic Materials
- ■ Oxygen Demanding Substance
- ■ Oil & Grease
- ☐ Floatable Materials
- ☐ Bacteria & Viruses

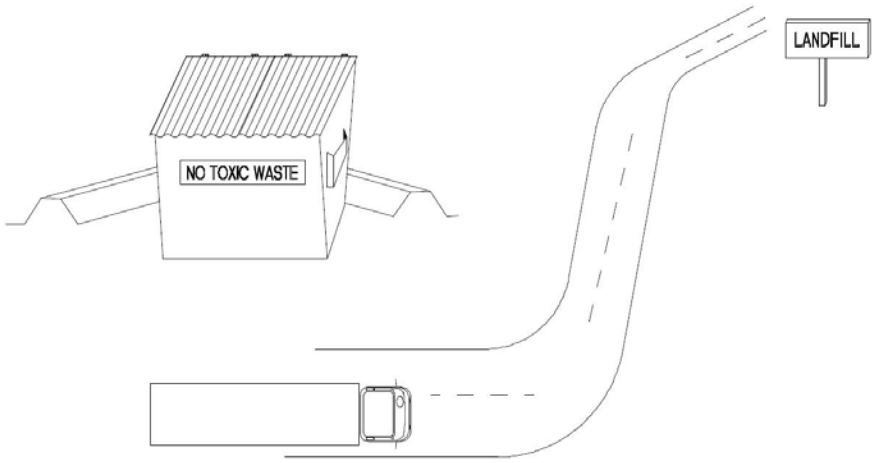
- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- ☒ Capital Costs
- ☐ O&M Costs
- ☐ Maintenance
- ☒ Training

- ■ High
- ☒ Medium
- ☐ Low

BMP: Waste Disposal WD



DESCRIPTION:

Controlled storage and disposal of solid waste generated by construction activities.

APPLICATION:

All construction sites

INSTALLATION / APPLICATION CRITERIA:

- Designate one or several waste collection areas with easy access for construction vehicles and personnel. Ensure no waterways or storm drainage inlets are located near the waste collection areas.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around collection area for impoundment in the case of spills.
- Ensure all on site personnel are aware of and utilize designated waste collection area properly and for intended use only (e.g. all toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste).
- Arrange for periodic pickup, transfer and disposal of collected waste at an authorized disposal location. Include regular Porto-potty service in waste management activities.

LIMITATIONS:

- On-site personnel are responsible for correct disposal of waste

MAINTENANCE:

- Discuss waste management procedures at progress meetings
- Collect site trash daily and deposit in containers at designated collection areas
- Randomly check disposed materials for any unauthorized waste (e.g. toxic materials).

OBJECTIVES

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

TARGETED POLLUTANTS

	H	M	L
Sediment	☐	☐	☐
Nutrients	☐	☐	☐
Heavy Metals	☐	☐	☐
Toxic Materials	☒	☐	☐
Oil & Grease	☐	☒	☐
Floatable Materials	☒	☐	☐
Bacteria & Viruses	☐	☐	☐
Other Waste	☒	☐	☐

IMPLEMENTATION REQUIREMENTS

	H	M	L
Capital Costs	☒	☐	☐
O&M Costs	☒	☐	☐
Maintenance	☐	☒	☐
Training	☒	☐	☐
Staffing	☐	☐	☒
Administrative	☐	☐	☒

H = High **M =** Medium **L =** Low