Emporium Building - Logan Demolition Program



PREPARED FOR:

LOGAN CITY UNITED IN SERVICE
PUBLIC WORKS DEPARTMENT

DATE:

August 12, 2019

PREPARED BY:

CARTWRIGHT
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1.0 - INTRODUCTION

This conceptual decommissioning and demolition (D&D) plan pertains to the Emporium building block located in Logan Utah. Including the Demolition of existing buildings 41 through 67 North along Logan Main Street. Since its construction in the mid to late 1800's the various systems of these buildings including the plumbing, electrical, mechanical and structural systems have become obsolete and can no longer meet the demands or safety standards for their intended use. This conceptual decommissioning and demolition design plan has been created as an outline for addressing the structural related concerns and general guidelines for decommissioning the Emporium block of buildings.

The demolition process consists of four phases:

1 – Site Preparation/Pre-Demolition
2 – Abatement of Interior regulated materials.
3 – Abatement of Exterior regulated materials.
4 – Physical Demolition.
5 – Backfill/New construction/retaining walls

The information presented in this report is mainly relevant to the physical demolition phase of the demolition process.

1.1 - PURPOSE

The purpose of this D&D Plan is to present a basic description of the processes, methods, equipment and options that will be used to accomplish the D&D of the Emporium block as well as the preservation and rehabilitation of the surrounding structures, facilities and site. It is the intent to provide a description of the most economical, safe and practical methods that can be used for physical demolition of the Emporium block and associated structures. Issues that may arise due to federal, State of Utah and local specific safety and traffic control requirements are also addressed. This D&D Plan will be approved by Logan City as an acceptable guide that can be followed by all parties involved with the physical demolition of The Emporium block. The information presented will serve as a reference for the demolition contractor in establishing demolition techniques and processes and in creating a technical approach summary to be submitted to Logan City in the bidding stage of the project.

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1.2 - SCOPE

The scope of this portion of the demolition plan includes the complete removal of the Emporium block of buildings located at 41 through 67 North Main Street, as well as the rehabilitation of the building site. This includes pre-demolition building preparation, demolition equipment recommendations, demolition method recommendations, demolition sequence (in order to provide structural stability of the building during demolition) and the processing of debris. Removal or burial of sub-surface structures is also included as part of this plan.

Methods of protection and preservation of adjacent edifices, utilities, landscapes and pavements of concern are also included. Temporary barriers, security measures and traffic routes to be utilized during demolition in order to accomplish the tasks noted above in a safe and secure manner and minimize disruption of local operations have been provided by Logan City and are presented in this plan.

Plans have also been developed and presented for the reclamation of the building site with considerations given to storm water and final landscape schemes, but they are not part of this structural D&D plan.

1.3 - BRIEF DESCRIPTION AND HISTORY OF BUILDING AND SITE

The Emporium block of buildings listed above and adjacent associated areas (parking lots, landscaping, etc.) cover a footprint of approximately 1.25 acres. The footprint of the emporium block to be demolished is an approximately 26,500 square foot rectangular shaped conglomerate of 5 independent structures built directly adjacent one another with the emporium building at the center core. The building conglomerate fronts approximately 175 feet of Logan's Main Street(US 89/91). (See Figure S-1 and Sheet SS101)

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Figure S-1. Areal View of Emporium Block

The building conglomerate was constructed in the mid to late 1800's and has historically been utilized as mixed retail space. The primary use of the buildings has not notably changed since 1955. The area around the building is landscaped with trees and shrubs. To the north and south there are adjacent buildings that are to be protected. Main Street (US 89/91) fronts the building to the east. The majority of the area to the west of the building is parking lot space. (See Figure S-47 and Sheet SS101)

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Structural

S1.0 – DECOMISSIONING AND DEMOLITION OF THE EMPORIUM BLOCK:

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2120 N MAIN ST, NORTH LOGAN, UTAH 84341

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S1.1 - BUILDING DESCRIPTIONS:

BUILDING 41

Building 41 was originally constructed in the mid to late 1800's and is a 35 foot tall two-story unreinforced masonry building with rock foundation walls, wood floor and roof diaphragms, its south wall is built against building 37 and fronts 18 feet of main street on the east side and is surrounded by and shares walls with building 45 on the west and north sides. (See Figure S-1 and Sheet SS101).

Building 41 has a full width partial depth mezzanine level at the west end of the building that extends 23 feet toward the east.

Building 41 has a partial 8-foot-deep full width basement starting approximately 34 feet from the east wall and running 50 feet toward the west wall. The basement is segmented by rock and concrete walls.

The building contains utility and communication lines as well as 1 roof mounted mechanical units. The floor coverings are mainly carpet with finished concrete in the basement while the roof is covered with a built-up system with a roof membrane.



Figure S-2. East Elevation of Building 41

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Figure S-3 Building 41 Basement Looking East.



Figure S-4 Building 41 Basement Looking West.

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Figure S-5 Building 41 Main Floor.



Figure S-6 Building 41 2nd Floor Facing East.

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Figure S-7 Building 41 Roof Facing West.



Figure S-8 Building 41 Roof Facing East.

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BUILDING 45

Building 45 was originally constructed in the mid to late 1800's and is a 6680 square foot 50-foot-tall 3 story building originally constructed of unreinforced masonry on a rock foundation with wood floor and roof diaphragms. Building 45 underwent a major remodel and structural upgrade in early 2000's and was reinforced with large steel moment frame system that is present on all levels including the basement. The assumed rock foundations were buttressed with reinforced concrete. The building consists of two rectangular shaped sections. The front (east) section has a top of parapet height of 50 feet and fronts 28 feet of main street. The rear section has a parapet height of 47 feet and is 65 feet wide at the rear (west). (See Figure S-1 and Sheet SS101)

The building contains many utility and communication lines as well as an elevator with associated pumps and oil tanks and 9 roof mounted mechanical units. A number of miscellaneous steel items exist in the building such as railings, cabinets, mechanical units and structural bracing components. The floor coverings are mainly carpet with finished concrete in the basement while the roof is covered with a built-up system with a roof membrane.



Figure S-9 East Elevation of Building 45.

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Figure S-10 Building 45 Basement

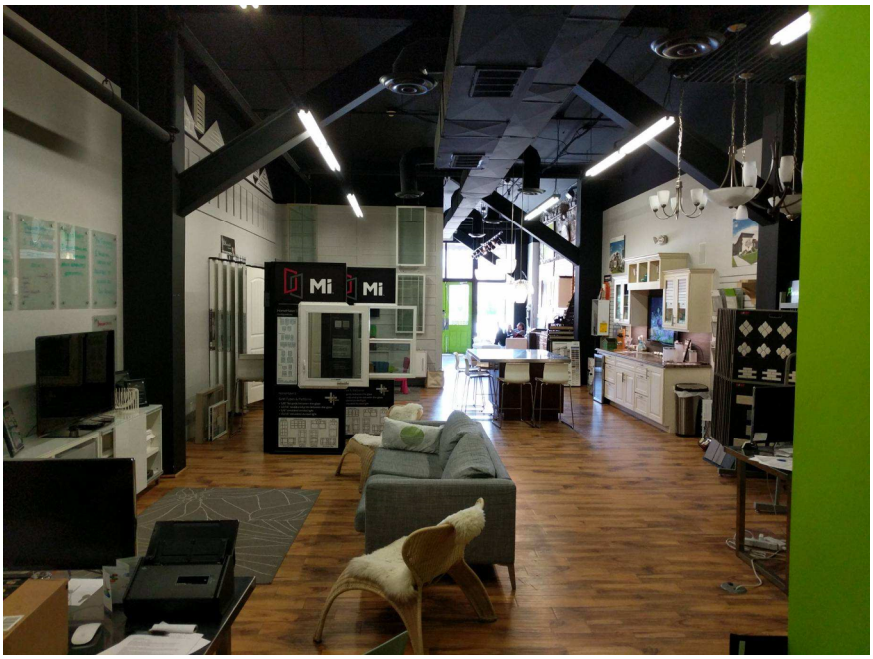


Figure S-11 Building 45 Main Floor.

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Figure S-12 Moment Frame Inside South West Wing of Building 45.



Figure S-13 Building 45 Stair.

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Figure S-13 Building 45 2nd Floor.



Figure S-14 Building 45 3rd Floor.

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Figure S-15 Building 45 Roof Facing West.



Figure S-16 Building 45 Roof Facing East.

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BUILDING 47

Building 47 was originally constructed in the mid to late 1800's and is a 35 foot tall two-story unreinforced masonry building with rock foundation walls, wood floor and roof diaphragms, its north wall is built against building 59 and fronts 18 feet of main street on the east side and is surrounded by and shares walls with building 45 on the west and south sides. (See Figure S-1 and Sheet SS101) Building 47 has a Partial 8 foot basement. See Sheet S101 of the structural drawings

The building contains utility and communication lines as well as 3 roof mounted mechanical units. The floor coverings are mainly carpet and vinyl tile with finished concrete in the basement while the roof is covered with a built-up system with a roof membrane.



Figure S-17 East Elevation of Building 47.

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Figure S-18 Building 47 Basement.



Figure S-4. Building 47 Roof Facing East.

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Figure S-21 Building 47 Roof Facing West.

BUILDING 59

Building 59 was originally constructed in the mid to late 1800's and is a 12,835 square foot 35 foot tall three-story building with a full 8 foot basement. The 2nd floor is a partial level at the west side of the building. Building 59 construction includes unreinforced masonry walls above grade with rock and concrete foundation walls, rock and concrete interior bearing walls, masonry, steel and wood columns, wood floor and roof diaphragms and has extensive nonbearing wood framed infill walls on all three levels. Building 59s south wall is built against building 45 and 47 and fronts 85 feet of main street. The north wall of building 59 is built against 67. (See Figure S-1 and Sheet SS101)

Building 59 was built in multiple phases with the final phase added on in the late 1990's, Figure S-35 Shows approximate building phases.

The building contains many utility and communication lines a 24'x14'x18.5'-tall penthouse above the elevator shaft with pumps and oil tank, and compressors in the basement, 5 roof mounted mechanical units. Several miscellaneous steel items exist in the building such as railings, cabinets and structural bracing components. There is also a sump well and pump in the southwest corner of the basement. The floor coverings are mainly carpet and hardwood, but also includes vinyl, porcelain and asbestos tile, while the roof is covered with a built-up system with a roof membrane.

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Figure S-22 East Elevation of Building 59



Figure S-23 Building 59 Basement.

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Figure S-24 Building 59 Sump Well in Southeast Corner.



Figure S-25 Building 59 Basement Rock Bearing Wall.

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Figure S-26 Building 59 Basement Masonry Column.



Figure S-27 Building 59 Elevator Pump and Oil Tank.

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Figure S-28 Building 59 Basement Boiler.



Figure S-29 Building 59 Main Level.

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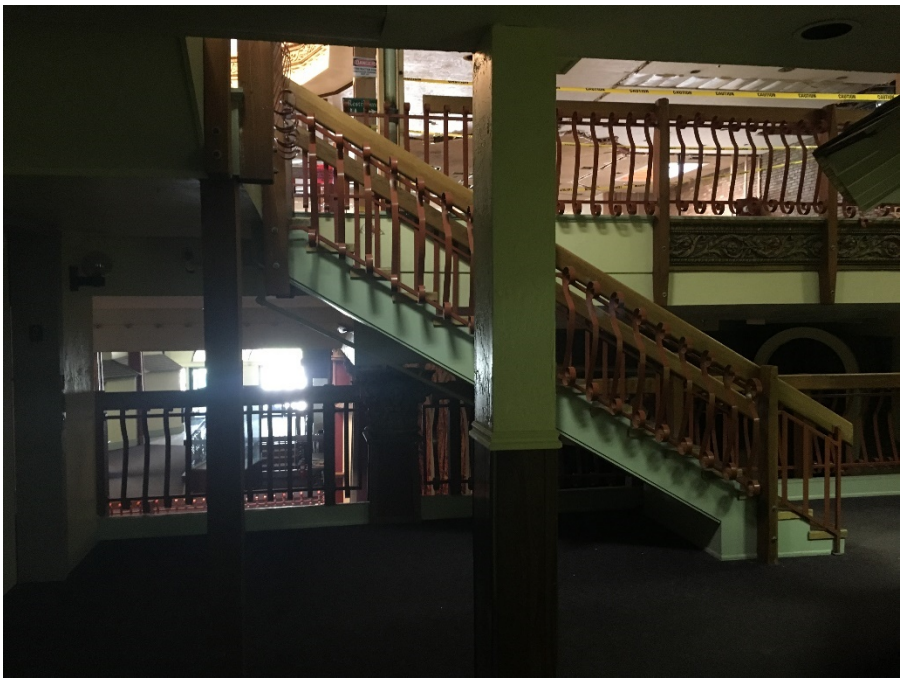


Figure S-30 Building 59 Partial 2nd Floor.



Figure S-31 Building 59 3rd Level Typical Office Space.

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Figure S-32 Building 59 3rd Floor.



Figure S-33 Building 59 Roof Facing Northwest.

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Figure S-34 Building 59 Roof Facing South.

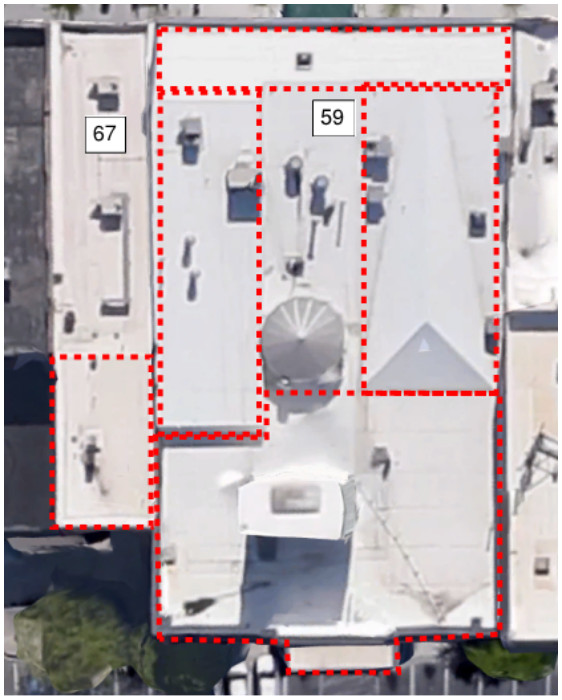


Figure S-35 Building 59 and 67 building phases.

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BUILDING 67

Building 67 was originally constructed in the mid to late 1800's and is a 32 foot tall two-story mixed construction building with concrete walls, shared unreinforced masonry walls and wood framed walls with rock foundation walls, wood floor and roof diaphragms, its south wall is built against building 59 and fronts 26 feet of main street on the east side and its north wall is built up against building 69 (Levans) The front(east) 61 feet of the building has concrete bearing walls along the north and south walls the building then shares its south wall with building 59 for approximately 20 feet. The north wall from 61 to 83 feet (east to west) is a shared unreinforced masonry wall with building 69 that is to remain in place (See Figure S-37 and Sheet S101). From 83 to 124 feet is a wood framed wall that was part of an addition in the early 2000's (See Figure S-35).

The building contains utility and communication lines as well as 5 roof mounted mechanical units. The floor coverings are mainly carpet with finished concrete in the basement while the roof is covered with a built-up system with a roof membrane.



Figure S-36 East Elevation of Building 67.

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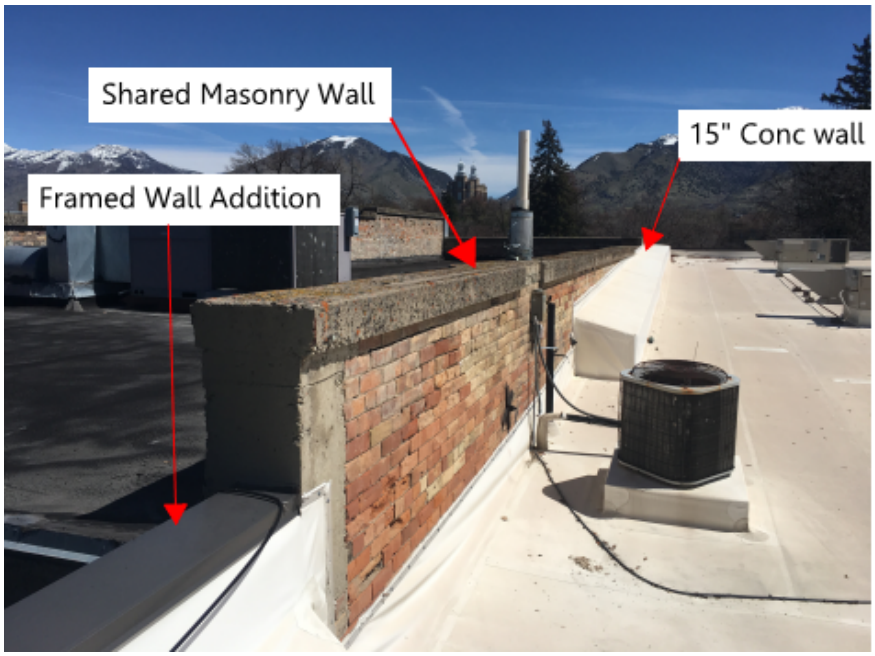


Figure S-37.



Figure S-38 Building 67 Basement Facing West.



Figure S-39 Building 67 Basement Facing East.



Figure S-40 Building 67 Basement Facing North.

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Figure S-41 Building 67 Main Floor Facing East.



Figure S-42 Building 67 Main Floor Facing West.



Figure S-43 Building 67 West End of 61 ft Concrete Wall.



Figure S-44 Building 67 2nd Floor.

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Figure S-45 Building 67 Roof Facing East.



Figure S-46 Building 67 Roof Facing West.

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S1.2 - PRE-DEMOLITION:

PERMITTING AND NOTIFICATIONS

The demolition contractor is responsible to obtain, and submittal of all permits and notifications required by Federal, State and local authorities. Information outlined below should not be considered a complete list of permitting and notification requirements. The demolition contractor shall submit a detailed schedule to Logan City outlining each phase of the project. The demolition contractor shall notify Logan City at least 2 weeks in advance of commencing demolition activities as well as of any changes to the submitted schedule. The demolition contractor shall provide weekly updates to the Logan City of progress throughout demolition and construction.

The Utah Department of Environmental Quality Division of Air Quality requires the contractor to fill out and submit a demolition notification form a-559-18 prior to the start of the building demolition. State and local pre-demolition inspections are also required before demolition can begin.

Utah Asbestos Demolition Pamphlet

https://deq.utah.gov/legacy/programs/air-quality/asbestos/docs/2010/08Aug/demo.pdf

Utah Final Demolition Pamphlet

https://deq.utah.gov/legacy/programs/air-quality/asbestos/docs/2010/08Aug/demo.pdf

Utah Demolition Notification Form a-559-18

https://deq.utah.gov/legacy/programs/air-quality/asbestos/docs/2010/08Aug/demo.pdf

PREPARATION AND COLD AND DARK REQUIREMENTS

Before building demolition begins all electrical and communication utilities running into or through the building will be disconnected and capped or relocated by Logan City personnel. This will be done according to State of Utah and local authorities approved disconnect and relocate design. The electrical and communications utilities will be marked by Logan City personnel.

UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

Existing Utilities to be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished. A building utility plan has been provided by Logan City, see Appendix B.

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If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.

Cut off pipe or conduit at property line of ROW a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.

Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

REMOVAL OF COMBUSTIBLES

Any remaining combustibles will also be removed from the building according to a project specific Fire Protection Plan. The Fire Protection Plan shall be prepared by the demolition contractor and submitted and approved by the Logan City Fire Marshal. Removal of targeted combustibles is one step in the process of converting the building to a “cold and dark” state, which will be completed before demolition begins.

Target combustibles do not include wood framed walls, flooring or other wood structural components which may be removed as part of the demolition process.

SALVAGEABLE MATERIALS

Logan City performed an inspection of the structure for the purpose of establishing value and risk of possible salvage opportunities. After the walk through, it was determined that Logan City did not see sufficient financial benefit to perform salvage operations themselves, nor to allow public access for salvage opportunities. Logan City will remove a few items that may have value and present minimal risk in removal. All remaining items that present risk in removal or significant modification to the structure for removal and the structures themselves will be left to the demolition contractor's discretion for salvage value and method. The demolition contractor shall retain rights to salvage items that may have value. Salvage may only be performed by the demolition contractor or its subcontractor(s). If salvage opportunities are subcontracted, the demolition contractor shall include all subcontractors as insureds under its policies or shall furnish certificates and endorsement for each contractor. Coverages for all subcontractors shall be subject to all of the requirements stated in the CITY OF LOGAN INSURANCE AND BOND REQUIREMENTS for the project.

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REGULATED MATERIALS REMOVAL

Any regulated materials such as PCB Ballasts, light bulbs, mercury switches, batteries, etc., will be removed by the subcontractor before demolition begins. Federal, State and local authorities-specific procedures must also be followed for disposal of oils prior to physical demolition of the Emporium block.

Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

REGULATED ASBESTOS CONTAINING MATERIAL REMOVAL

The demolition contactor is responsible for characterization and removal of all Regulated asbestos containing material (RACM). The contractor is required to follow all Federal, State and local requirements and guidelines related to RACM abatement.

RACM can be found in ceiling textures, vinyl floor coverings, mastic, boiler and pipe insulation, ceiling tile, roofing products, lath and plaster, gypsum, gypsum mud and many other building materials.

Prior to demolition the building must be inspected for asbestos by a Utah Certified Asbestos Inspector (UAC R307-801-9). An asbestos inspection report must be generated and available onsite during the demolition activities. The asbestos inspection report must be maintained by the demolition contractor or owner for one year after the completion of the project.

Logan City contracted with Environmental Health Services, Inc to perform a RACM survey to identify the type, quantity and location of RACM in the building. The results of this survey are in a report dated June 26, 2019 prepared by Environmental Health Services, Inc. Contact Logan City to request a copy of this report. It is the demolition contractor's responsibility to ensure this survey meets Federal and State RACM characterization requirements outlined above. If additional surveys are required, it will be the responsibility of the demolition contractor.

See the Utah Division of Air Quality (DAQ) website for Inspection Report information requirements and a current list of Asbestos Inspectors.

Demolition Contractor is subject to Federal Regulations 40 CFR 61,145(a) and/or State Rules UAC R307-801-9 even when there is **NO** asbestos found in the structure. RACM must be removed by the demolition subcontractor during the abatement phase which occurs prior to building demolition. RACM must be disposed of at an approved asbestos waste disposal site. If RACM is not removed before demolition, then all demolition debris must be disposed at an approved asbestos waste disposal site as asbestos containing waste material.

Asbestos Removal must be performed by a Utah Certified Asbestos Abatement Contractor.

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See the Utah Asbestos Demolition Pamphlet (link provided above) for more detailed information regarding Federal and State regulations related to RACM abatement.

PROTECTION OF EXISTING STRUCTURES, WALKWAYS AND ROADWAYS

Any protection devices or structures needed to ensure that falling debris from the buildings does not damage existing adjacent buildings, sidewalks and streets or other items that must be preserved per the State of Utah, local authorities and adjacent property owners' requirements must also be in place before building demolition begins. Proper protection must also be provided for utilities, pavements, etc., to be preserved from traffic loads and other demolition activities. The demolition contractor will be responsible for the repair of any damaged structures, utilities or pavements etc. The demolition contractor's engineer in coordination with Logan City personnel will be responsible for determining any weight limits that apply to underground facilities to be preserved and for the design of any protecting elements.

Measures to protect adjacent buildings from dust, vibrations, noise, falling debris, etc., will also need to be taken before building demolition begins. The demolition contractor is responsible to coordinate with adjacent property owners and prepare a plan for protection and preservation of structures, materials, utilities and contents of nearby buildings.

EXISTING FACILITIES:

Protect adjacent walkways, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.

TEMPORARY SHORING:

It may be necessary to provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of adjacent structures that are to remain and construction being demolished. The demolition contractor shall obtain an engineer registered in the state of Utah to design any temporary shoring. The temporary shoring plans must be submitted to and approved by Logan City officials. Strengthen or add new supports when required during progress of demolition under the direction of the demolition contractor's engineer.

TEMPORARY PROTECTION:

Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. A fencing plan prepared by the demolition contractor shall be submitted and approved by the Logan City Fire Marshal. The demolition contractor shall contact Logan City Fire Marshal to coordinate removal and relocation of building fire department

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access key box. The demolition contractor shall also coordinate gate locks/closures with Logan City Fire Marshal.

Protect adjacent buildings and facilities from damage due to demolition activities.

Protect existing site improvements, appurtenances, and landscaping to remain.

Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.

Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.

Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.

Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.

The demolition contractor is responsible to coordinate with adjacent property owners and prepare a plan for protection and preservation of structures, materials, utilities and contents of nearby buildings.

SITE FUGITIVE DUST CONTROL CONSIDERATIONS

The demolition contractor is required to follow Federal, State and local visibly dust control requirements for demolition activities. The contractor shall implement Best Management Practices for controlling dust related to all site activities including but not limited to the use of water cannons and mist cannons. Increased surveillance of adjacent building mechanical filter systems is also recommended during the physical demolition stage. Due to the proximity of the Emporium block to adjacent facilities, it will be critical for the D&D contractor to aggressively manage visible dust emissions during physical demolition and debris processing activities. If levels of dust or exhaust (from demolition equipment) are determined to be problematic, it may be necessary to place additional filtering material over any inadequately protected air intake vents in adjacent buildings or use scrubbers on equipment exhaust systems in order to keep pollutants from infiltrating these air systems. The demolition contractor must address and follow Federal, State and local standards for visible dust emission criteria in the demolition subcontract.

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Cache County is listed as a Non-Attainment Area for PM 2.5 by the Utah DEQ. That being the case, demolition projects which fall within the County are subject the Utah Division of Air Quality Fugitive Dust Control Requirements for Non-Attainment Areas: Stationary Source Compliance

UTAH FUGITIVE DUST CONTROL REQUIREMENTS FOR NON-ATTAINMENT AREAS

VISIBLE EMISSIONS

Fugitive dust is limited to an opacity of 20% or less on site, and 10% or less at the property boundary. Opacity is a measurement of how much visibility is obscured by a plume of dust. For example, if a plume of dust obscures 20% of the view in the background, the visible emissions from the dust plume is 20% opacity.

FUGITIVE DUST CONTROL PLANS

In addition to opacity limits, any source 1/4 acre or greater in size is required to submit a Fugitive Dust Control Plan (FDCP) to the Utah Division of Air Quality (UDAQ). The FDCP is required to help sources minimize the amount of fugitive dust generated onsite.

A source is required to submit a FDCP prior to initial construction or operation and prior to any modifications made on site that effect fugitive dust emissions. The FDCP can be completed online. Plans are no cost and include instant approval for your project.

If completing the FDCP online is not an option, a hard copy may be completed and submitted by mail to the DAQ for electronic processing. To request a hard copy of the fugitive dust rules and form, contact DAQ by phone at (801) 536-4000. Please note: it may take up to 14 days from the date of request to receive this information or to receive an approval letter if a hard copy is submitted for processing.

RECORD KEEPING

Sources are required to maintain records indicating compliance with the conditions of a FDCP. For high wind events (winds over 25 miles per hour) additional records are required. These records shall be available for review by the UDAQ upon request.

LINKS TO INFORMATION ON STATE OF UTAH DUST EMISSIONS CONTROL REQUIREMENTS

The following links are provided for the convenience of the demolition contractor. The demolition contractor is responsible to ensure that all Federal, State and Local requirements are met as related to fugitive dust permitting and control.

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Utah Dust control Requirements

Website listing Utah Dust Control Requirements for non-attainment areas.

https://deq.utah.gov/air-quality/fugitive-dust-control-requirements-for-non-attainment-areas-stationary-source-compliance

Fugitive Dust Prevention Plan (FDCP) form

Access to the online Fugitive Dust Plan Permit Application.

https://secure.utah.gov/deq-dashboard/index.html

Fugitive Dust Control Plan Instructions

Information and instructions on completing a of the FDCP.

https://documents.deq.utah.gov/air-quality/compliance/DAQ-2018-012121.pdf

Utah Administrative Code

Fugitive dust regulations applicable to areas of the state not included in this document.

https://rules.utah.gov/publicat/code/r307/r307-205.htm

Utah Division of Administrative Rules

Fugitive dust regulations described in this document.

https://rules.utah.gov/publicat/code/r307/r307-309.htm

Utah Division of Air Quality

General air quality information, regulations, and contact information.

http://www.airquality.utah.gov/

VIBRATION LIMITATIONS

Demolition contractor is responsible to coordinate with adjacent property owners and prepare a plan for protection and preservation of structures, materials, utilities, and contents of nearby buildings.

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SITE SECURITY

The entire building site will be segregated with a security boundary fence. This fence will provide an adequate physical barrier to control access to the site. See figure S-47 and Sheet SS101 for an illustration of the safe area boundary location as determined by Logan City personnel. All access gates in this fence including emergency access openings will need to be clearly defined and posted. A safe egress route will be required along the east sidewalk. This route can be defined and maintained with scaffold, a construction fence and/or a custom covered sidewalk throughout the demolition process; however, pedestrian egress may be briefly terminated during certain demolition operations in this area (discussion provided in succeeding sections).

EXCAVATION PERMITTING

Any required excavation and Land disturbance permits must be secured by the demolition contractor and will be provided by Logan City at the time the excavation is to be done (prior to or during building demolition).

DEBRIS PROCESSING

A debris processing area shall also be established prior to commencement of demolition. Figure S-47 and Sheet SS101 shows a suggested processing area. In addition to the area shown in this figure, debris may also be processed in the area within the building footprint (but not near adjacent buildings). This area will be used to process non-hazardous materials such as steel, concrete and masonry. Some materials may be moved off site for processing in coordination with Logan City Engineering Department guidelines.

STORMWATER POLUTION PREVENTION PLAN (SWPPP)

The demolition contractor is responsible for preparation, submittal and maintenance of a site Sediment and Erosion Control Plan. This plan shall be submitted, reviewed and approved by Logan City Public Works Engineering Department.

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Figure S-47 Suggested Debris Processing Area.

S1.3 - DEMOLITION:

After the Emporium block and the building site are prepared as stated above, demolition of the buildings may begin. The demolition methods described in this section were selected based on criteria designed to maximize safety while minimizing uncontrolled conditions. Demolition methods in addition to the ones described in this section do exist and may be of lower cost and more innovative than those stated.

DEMOLITION, GENERAL

Demolition contractor shall prepare a pre-fire plan in accordance with section 3308.2 of the International Fire Code.

Demolish indicated buildings and site improvements completely. Use methods required to complete the work within limitations of governing regulations and as follows:

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Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.

Prior to open flame operations, seal off concealed areas. Maintain suppression/extinguishers and fire watch during and for at least 1 hour after flame-cutting operations.

Maintain adequate ventilation when using cutting torches.

Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.

EXPLOSIVES:

Use of explosives is not permitted.

DEMOLITION METHODS

Demolition contractor shall prepare a project specific demolition technical approach summary. The demolition technical approach summary shall address and include equipment which shall be used, demolition flow, shoring schemes and method of protection and preservation of structures, materials, utilities and contents of nearby buildings. See additional items below for further discussion. The demolition contractor is responsible to coordinate with adjacent/nearby property owners to ensure the use of the proposed equipment does not adversely affect adjacent/nearby structures, materials, utilities and contents.

Demolition methods must be approved by Logan City personnel before being implemented into the demolition contractor's technical approach summary.

Conventional demolition equipment and methods can be used in the demolition of the Emporium block. Standard demolition equipment may include tracked excavators with a variety of attached hydraulic tool heads (e.g., processors, shears and hammers). Large water hoses and water mist cannons are also typically used to control concrete/masonry dust during demolition. The main piece of equipment that we recommend be used in demolition of the building is an Ultra-High Demolition (UHD) tracked

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excavator with a processing tool attachment. The safe working height (pin height) of a CAT 345C UHD is 69'-7". The maximum height of the Emporium parapet is 50'-0" above main floor line. The basement depth is 8'-0" below main floor line. Larger excavators are available, but the CAT 345C or equipment of similar size and capabilities has been determined to be adequate for the physical demolition of the Emporium block. The reach compared to the height of the building can be further reduced by elevating the excavator with debris and/or soil spoils. The demolition contractor shall obtain an engineer registered in the state of Utah to design any shoring to support temporary loads imposed upon existing remaining structures from stacked debris and/or soil spoils. The demolition contractor is responsible for the protection and preservation of structures, materials, utilities and contents of nearby buildings.

Due to the age and construction methods used in adjacent buildings these buildings may be adversely affected by excess vibration resulting from heavy equipment operation and concrete and masonry hammering/breaking activities. It is the responsibility of the demolition contractor and the demolition contractor's engineer to propose and practice demolition methods that will protect and preserve structures, materials, utilities and contents of adjacent/nearby buildings. Of concern are the rock foundation walls and unreinforced masonry walls. Walls which will be demolished must be removed in small sections to reduce the chance that falling debris will damage adjacent walls. Extreme care must be used when removing walls that are built against walls that are to remain. It may be necessary to provide shoring for building walls that are to remain in place.

The demolition contractor shall prepare a plan to protect and preserve existing structures under consultation with a structural engineer licensed in the state of Utah. This protection plan must be approved by Logan City personnel before being implemented into the demolition contractor's technical approach summary.

If it is desired by the demolition contractor to place any equipment on the existing building floor or roof the demolition contractor's structural engineer must verify the design information and allowable loads. This shall also be included with the demolition contractor's technical approach summary.

To begin demolition of the building the tracked excavator described above (or one similar) would simply be positioned next to the building and starting at the roof of the building (or the penthouse) would then create a hole in the building which can be expanded in any direction. Although there are many possible demolition starting points, figure S-48 shows a demolition starting point and sequence that may be most practical. The illustrated sequence shown has been chosen based on minimizing risk of damage to adjacent structures as well as relevant safety concerns. The beginning point of demolition shown occurs in the middle part of building 59. This sequence would allow demolition activities to approach the more crucial areas of the building from what is believed to be the safest and most practical direction (from

within the building footprint). These crucial areas include the areas of buildings 41, 45 and 67 that are adjacent to buildings that are to be protected in place.



Suggested Demolition Sequence

Figure S-48.

There are two different methods outlined below which describes two different methods of maintaining structural stability of the remaining building sections during demolition and especially as the crucial areas (described above) are approached and demolished. If utilized as described, both of these methods allow demolition processes to progress without reducing the load carrying capacities of the remaining structural members. The concern of unpredictable collapse of building sections due to premature damage to these sections is also addressed.

Method 1:

Is a stepped demolition process where multiple buildings in the block are being removed simultaneously. By demolishing the building in this manner, stability of the end sections of the building

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is provided by the adjacent partially demolished sections. In this way, risk of a tall slender building section tipping over sideways is eliminated.

Method 2:

Has the building block being demolished one building block section at a time. Demolition would be performed by starting at the roof level and processing the building block section down. In this method, structural stability of the end sections of the building is provided by the adjacent building. Throughout most of the building demolition the block could be processed one bay at a time, but as the end of a building area is approached it would be necessary to remove multiple sections (as determined by the demolition contractor's engineer) at a time so that a tall, slender wall section is not left standing alone.

Demolition Debris Management:

Regardless of the demolition method chosen, debris should not be allowed to build up on the structure. After floor sections, column sections, masonry walls or pieces of any other types of debris are disconnected from the building they should be removed from the building and placed at ground level. Doing this will minimize falling debris and ensure that building columns below the level being demolished will withstand loads from collapsing floors above.

It should be noted that when the main floor of the building is removed there is some risk that the exterior basement walls that retain soil will cave in. This is not likely to happen over a short period of time unless the soils against the outside of these walls are saturated or heavy surcharge loads exist on the soil that is being retained by these walls. When this floor is removed the soil around the building footprint (within approximately 10 feet of the basement wall) may also become unstable. Therefore, any equipment or personnel located in the remaining building basement or within approximately 15 feet of a basement wall that is retaining soil, may be at risk of damage or injury due to soil sluffing around the exterior of the building or a basement wall collapsing into the basement area. In order to eliminate the risk of equipment damage or injury the subcontractor will need to use demolition equipment with adequate reach capabilities to remove this supporting floor slab and the other basement structures while keeping all personnel and equipment out of the basement area and at least 15 feet away from the building footprint while these items are being removed. Soil banks should be kept at a maximum slope of 1.5 horizontal to 1 vertical at all times. Before unstable soil banks can be sloped to meet this safety criteria, personnel and equipment should be kept at a safe distance. Temporary barriers should be utilized to keep personnel and equipment out of these hazardous areas until soil slopes and any remaining structures are stabilized.

The methods of eliminating risk of damage or injury due to unstable soil banks stated in the previous paragraph were selected based on criteria designed to maximize safety while minimizing uncontrolled

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conditions. Other methods do exist and may be of lower cost and more innovative than those stated. However, any alternate methods not stated in the concept plan must be evaluated by the demolition contractor's engineer and shall be reviewed and approved by Logan City personnel before being implemented into the demolition contractor's technical approach summary.

Removal of Underground Structures and Foundations

The demolition scope includes removal of all underground structures associated with the building block. This includes sub-grade walls, slabs, footings and utilities as per Logan City's approved disconnect and relocate design.

The only portion of the building that must be left in place is the shared foundation walls between buildings 39 and 41/45 and buildings 67 and 69.

Because of the age and construction methods used in adjacent structures removal of the Emporium block basement structures may have a negative effect on adjacent buildings foundation walls. The demolition contractor should use extreme caution while working to removing basement structures. Temporary retaining structures may need to be provided to support the foundation walls of adjacent buildings. It may even be necessary to leave and bury some sections of the basement wall in place in order to preserve adjacent building foundations. The decision to leave or remove these items will be made by Logan City personnel. Demolition contractor's engineer shall provide Logan City with detailed analysis and recommendations for Logan City review and consideration before issuing a decision. Demolition contractor shall include a price that addresses both scenarios.

Retaining Wall Construction

A permanent retaining wall will need to be constructed as shown on sheet S101 of the attached structural drawings before backfilling of the pit.

Demolition of Structures with Shared Walls

When demolishing structures that share walls with buildings that are to remain it will likely be necessary to shore structural components such as walls, floors and/or roof joists. Once the shoring is in place the shored components can be cut loose and removed. This process is likely to be the most successful approach demolishing sensitive areas of buildings that share walls with adjacent buildings. This shoring, cutting and removal should be planned and performed under the direction of the demolition contractors engineer.

Once the structure has been safely removed, the roof and/or floor joists should be cut flush and finished as directed by Logan City personnel. Demolition contractor's engineer shall provide Logan City with

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detailed analysis and recommendations for Logan City review and consideration before issuing a decision. The final finish shall be weather sealed.

S1.4 – BUILDING DEMOLITION DEBRIS REMOVAL:

All demolition debris will be hauled to the Logan landfill. Any diversion of demolition debris to recycling facilities owned or operated by any entity other than Logan City must be reviewed and approved by Logan City personnel. It is the intent of Logan City that once it has salvaged everything, the buildings are to be demolished.

S1.5 - BUILDING SITE RECLAMATION:

After the sub-grade portions of the buildings are removed, the hole left from the removal of the basement will be filled in with 3" minus A-1-a well graded granular borrow as noted in attached sketches. It is expected that approximately 8,000 cubic yards of compacted fill will need to be brought in from off site to bring existing grades up to the main level elevations. The demolition contractor is responsible to field verify backfill requirements. The rough final grades shall slope gradually towards the parking lot at the west side of the site and as directed by Logan City personal.

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APPENDIX A

STRUCTURAL DRAWINGS:

UTAH (435) 753-2850 • CALIFORNIA (916) 978-4001 • www.Cartwright-AEC.com
2120 N MAIN ST, NORTH LOGAN, UTAH 84341

DRAWINGS

1. THESE CONSTRUCTION DOCUMENTS HAVE BEEN PREPARED UNDER THE SUPERVISION OF A LICENSED ENGINEER TO MEET OR EXCEED INDUSTRY STANDARDS; HOWEVER, THESE CONSTRUCTION DOCUMENTS ARE BASED ON LIMITED INFORMATION, VARIABLE SITE CONDITIONS, ETC. ALL SITUATIONS, ELEMENTS AND CONDITIONS MAY NOT BE EXPLICITLY DEPICTED IN THESE DRAWINGS.
2. GIVEN THE LIMITED INFORMATION PROVIDED, VARIED CIRCUMSTANCES AND SITE CONDITIONS, IT IS NECESSARY THAT THE WORK DEPICTED BE PERFORMED BY A QUALIFIED AND EXPERIENCED CONTRACTOR, INCLUDING CONTRACTOR'S EMPLOYEES OR SUB-CONTRACTORS, WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE BUILDING CODE REQUIREMENTS, INDUSTRY-STANDARD PRACTICES, AND HIGH QUALITY OF WORKMANSHIP.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENT SHOULD BE FOLLOWED AS SPECIFICALLY DIRECTED BY THE ARCHITECT/ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
4. DRAWINGS AND DETAILS HAVE BEEN PREPARED WITH THE INTENT TO VISUALLY REPRESENT INFORMATION PROVIDED IN SCALED FORM; HOWEVER, CONTRACTOR/SUPPLIERS SHOULD NOT SCALE PLANS OR DETAILS FOR DIMENSIONAL INFORMATION.
5. DETAILS MAY SHOW ONLY ONE VIEW OF AN ELEMENT(S) AND/OR MAY OMIT INFORMATION/ITEMS FOR CLARITY.
6. WHERE REFERENCE IS MADE TO VARIOUS MATERIAL STANDARDS, SUCH STANDARDS SHALL BE THE EDITION REFERENCED IN THE GOVERNING BUILDING CODE.

CONTRACTOR RESPONSIBILITIES

1. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER / ARCHITECT PRIOR TO PROCEEDING WITH THE FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
2. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO MODIFY THE CONTRACT DOCUMENTS. CHANGES, MODIFICATIONS OR SUBSTITUTIONS MAY BE MADE ONLY BY AN AUTHORIZED REPRESENTATIVE OF CARTWRIGHT ENGINEERS. CARTWRIGHT ENGINEERS SHALL NOT BE LIABLE FOR ANY CLAIMS ARISING DIRECTLY OR INDIRECTLY FROM CHANGES MADE WITHOUT WRITTEN AUTHORIZATION BY AN AUTHORIZED REPRESENTATIVE OF CARTWRIGHT ENGINEERS. ANY SUCH WORK DONE BY THE CONTRACTOR BEFORE RECEIVING WRITTEN APPROVAL WILL BE AT THE CONTRACTOR'S RISK.
3. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER CONTROL OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS AS PRESCRIBED BY OSHA OR OTHER REGULATORY AGENCIES REGARDLESS OF INDICATIONS IN THESE DOCUMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND CONSTRUCTION SITE SAFETY IN ORDER TO COMPLY WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING AS REQUIRED FOR THE CHOSEN METHOD OF CONSTRUCTION AND FOR THE SAFETY OF LIFE AND PROPERTY. DESIGN OF ALL SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER.

STRUCTURAL OBSERVATIONS

1. STRUCTURAL OBSERVATIONS ARE NOT REQUIRED FOR THIS PROJECT PER 2018 IBC SECTION 1704.6.
2. A REPRESENTATIVE FROM CARTWRIGHT SHALL BE ON SITE DURING MAJOR STRUCTURAL DEMOLITION ACTIVITIES. THE DEMOLITION CONTRACTOR IS RESPONSIBLE TO COORDINATE SCHEDULING OF CARTWRIGHT PERSONNEL DURING THESE ACTIVITIES. THE DEMOLITION CONTRACTOR SHALL GIVE CARTWRIGHT AT LEAST 2 BUSINESS DAY NOTICE PRIOR TO COMMENCMENT OF THESE ACTIVIITIES.

SHOP DRAWINGS

1. SEE SPECIFICATIONS AND THIS SECTION FOR REQUIRED SUBMITTALS.
2. REVIEW OF SUBMITTALS BY CARTWRIGHT ENGINEERS IS FOR GENERAL COMPLIANCE WITH THE STRUCTURAL CONSTRUCTION DOCUMENTS ONLY AND IS NOT INTENDED AS DESIGN APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO CONSTRUCTION DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL ELEMENTS MAY REQUIRE INFORMATION NOT FOUND IN THE STRUCTURAL CONSTRUCTION DOCUMENTS. THE SHOP DRAWING REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF COMPLETING THE PROJECT ACCORDING TO THE CONSTRUCTION DOCUMENTS.
3. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTNESS AND COMPLETENESS OF SHOP DRAWINGS.
5. ANY DEVIATIONS ON THE SHOP DRAWINGS FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUDED ON THE SHOP DRAWINGS PRIOR TO REVIEW BY THE ENGINEER.
6. SHOP DRAWINGS MADE FROM REPRODUCTIONS OF THE STRUCTURAL CONSTRUCTION DOCUMENTS WILL BE REJECTED. STRUCTURAL PLANS MAY BE AVAILABLE FOR USE IN SHOP DRAWING PREPARATION (EITHER HARD COPY OR ELECTRONIC) AT THE DISCRETION OF THE STRUCTURAL ENGINEER WITH PRIOR CONSENT, SIGNED RELEASE AGREEMENT, ETC.
7. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 5 BUSINESS DAYS FOR REVIEW OF EACH SHOP DRAWING. THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL COPY OF THE SHOP DRAWING SUBMITTAL FOR THE ENGINEER OF RECORD.
8. IN ADDITION TO THE ITEMS LISTED AS DEFERRED SUBMITTALS (SEE DEFERRED SUBMITTAL NOTES, IF APPLICABLE), THE FOLLOWING ITEMS REQUIRE STRUCTURAL SHOP DRAWING SUBMITTALS:
   - A. CONCRETE MIX DESIGNS.
   - B. CONCRETE REINFORCING.
   - C. MECHANICAL STABILIZED EARTH.
   - D. WATERPROOFING AGAINST EXISTING ROCK FOUNDATION WALL

QUALITY ASSURANCE

1. QUALIFICATIONS PARAGRAPHS IN THIS SECTION ESTABLISH THE MINIMUM QUALIFICATION LEVELS REQUIRED; REFER TO CURRENT EDITION OF INDIVIDUAL BUILDING CODE FOR ADDITIONAL REQUIREMENTS OF INDIVIDUAL BUILDING MATERIAL QUALITY ASSURANCE. THESE CODES INCLUDE BUT NOT LIMITED TO AMERICAN CONCRETE INSTITUTE (ACI), AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) ETC.
2. MANUFACTURER QUALIFICATIONS: A FIRM EXPERIENCED IN MANUFACTURING PRODUCTS OR SYSTEMS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS. AS APPLICABLE, PROCURE PRODUCTS FROM MANUFACTURERS ABLE TO MEET QUALIFICATION REQUIREMENTS, WARRANTY REQUIREMENTS, AND TECHNICAL OR FACTORY-AUTHORIZED SERVICE REPRESENTATIVE REQUIREMENTS.
3. FABRICATOR QUALIFICATIONS: A FIRM EXPERIENCED IN PRODUCING PRODUCTS SIMILAR TO THOSE INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE, AS WELL AS SUFFICIENT PRODUCTION CAPACITY TO PRODUCE REQUIRED UNITS.
4. INSTALLER QUALIFICATIONS: A FIRM OR INDIVIDUAL EXPERIENCED IN INSTALLING, ERECTING, APPLYING, OR ASSEMBLING WORK SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT, WHOSE WORK HAS RESULTED IN CONSTRUCTION WITH A RECORD OF SUCCESSFUL IN-SERVICE PERFORMANCE.
5. PROFESSIONAL ENGINEER QUALIFICATIONS: A PROFESSIONAL ENGINEER WHO IS LEGALLY QUALIFIED TO PRACTICE IN JURISDICTION WHERE PROJECT IS LOCATED AND WHO IS EXPERIENCED IN PROVIDING ENGINEERING SERVICES OF THE KIND INDICATED. ENGINEERING SERVICES ARE DEFINED AS THOSE PERFORMED FOR INSTALLATIONS OF THE SYSTEM, ASSEMBLY, OR PRODUCT THAT IS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THOSE INDICATED FOR THIS PROJECT
6. TESTING AND INSPECTING AGENCY QUALIFICATIONS: AN NRTL, AN NVLAP, OR AN INDEPENDENT AGENCY WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT TESTING AND INSPECTION INDICATED, AS DOCUMENTED IN ACCORDANCE WITH ASTM E329 AND WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION.
7. CONTRACTOR RESPONSIBILITIES: TESTS AND INSPECTIONS NOT EXPLICITLY ASSIGNED TO OWNER ARE CONTRACTOR'S RESPONSIBILITY. PERFORM ADDITIONAL QUALITY-CONTROL ACTIVITIES, WHETHER SPECIFIED OR NOT, TO VERIFY AND DOCUMENT THAT THE WORK COMPLIES WITH REQUIREMENTS.
   - A. UNLESS OTHERWISE INDICATED, PROVIDE QUALITY-CONTROL SERVICES SPECIFIED AND THOSE REQUIRED BY AUTHORITIES HAVING JURISDICTION. PERFORM QUALITY-CONTROL SERVICES REQUIRED OF CONTRACTOR BY AUTHORITIES HAVING JURISDICTION, WHETHER SPECIFIED OR NOT.
   - B. ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM QUALITY-CONTROL SERVICES.
   - C. CONTRACTOR SHALL NOT EMPLOY SAME ENTITY ENGAGED BY OWNER, UNLESS AGREED TO IN WRITING BY OWNER.
   - D. NOTIFY TESTING AGENCIES AT LEAST 24 HOURS IN ADVANCE OF TIME WHEN WORK THAT REQUIRES TESTING OR INSPECTION WILL BE PERFORMED.
   - E. WHERE QUALITY-CONTROL SERVICES ARE INDICATED AS CONTRACTOR'S RESPONSIBILITY, SUBMIT A CERTIFIED WRITTEN REPORT, IN DUPLICATE, OF EACH QUALITY-CONTROL SERVICE.
   - F. TESTING AND INSPECTION REQUESTED BY CONTRACTOR AND NOT REQUIRED BY THE CONTRACT DOCUMENTS ARE CONTRACTOR'S RESPONSIBILITY.
   - G. SUBMIT ADDITIONAL COPIES OF EACH WRITTEN REPORT DIRECTLY TO AUTHORITIES HAVING JURISDICTION, WHEN THEY SO DIRECT.
8. RETESTING/REINSPECTING: REGARDLESS OF WHETHER ORIGINAL TESTS OR INSPECTIONS WERE CONTRACTOR'S RESPONSIBILITY, PROVIDE QUALITY-CONTROL SERVICES, INCLUDING RETESTING AND REINSPECTING, FOR CONSTRUCTION THAT REPLACED WORK THAT FAILED TO COMPLY WITH THE CONTRACT DOCUMENTS.
9. TESTING AGENCY RESPONSIBILITIES: COOPERATE WITH CONTRACTOR IN PERFORMANCE OF DUTIES. PROVIDE QUALIFIED PERSONNEL TO PERFORM REQUIRED TESTS AND INSPECTIONS.
   - A. NOTIFY COMMISSIONING AUTHORITY AND CONTRACTOR PROMPTLY OF IRREGULARITIES OR DEFICIENCIES OBSERVED IN THE WORK DURING PERFORMANCE OF ITS SERVICES.
   - B. DETERMINE THE LOCATIONS FROM WHICH TEST SAMPLES WILL BE TAKEN AND IN WHICH IN-SITU TESTS ARE CONDUCTED.
   - C. CONDUCT AND INTERPRET TESTS AND INSPECTIONS, AND STATE IN EACH REPORT WHETHER TESTED AND INSPECTED WORK COMPLIES WITH OR DEVIATES FROM REQUIREMENTS.
   - D. SUBMIT A CERTIFIED WRITTEN REPORT, IN DUPLICATE, OF EACH TEST, INSPECTION, AND SIMILAR QUALITY-CONTROL SERVICE THROUGH CONTRACTOR.
   - E. DO NOT RELEASE, REVOKE, ALTER, OR INCREASE THE CONTRACT DOCUMENT REQUIREMENTS OR APPROVE OR ACCEPT ANY PORTION OF THE WORK.
   - F. DO NOT PERFORM DUTIES OF CONTRACTOR.
10. CONTRACTOR'S ASSOCIATED REQUIREMENTS AND SERVICES: COOPERATE WITH AGENCIES AND REPRESENTATIVES PERFORMING REQUIRED TESTS, INSPECTIONS, AND SIMILAR QUALITY-CONTROL SERVICES, AND PROVIDE REASONABLE AUXILIARY SERVICES AS REQUESTED. NOTIFY AGENCY SUFFICIENTLY IN ADVANCE OF OPERATIONS TO PERMIT ASSIGNMENT OF PERSONNEL. PROVIDE THE FOLLOWING:
    - A. ACCESS TO THE WORK.
    - B. INCIDENTAL LABOR AND FACILITIES NECESSARY TO FACILITATE TESTS AND INSPECTIONS.
    - C. ADEQUATE QUANTITIES OF REPRESENTATIVE SAMPLES OF MATERIALS THAT REQUIRE TESTING AND INSPECTION. ASSIST AGENCY IN OBTAINING SAMPLES.
    - D. FACILITIES FOR STORAGE AND FIELD CURING OF TEST SAMPLES.
    - E. DELIVERY OF SAMPLES TO TESTING AGENCIES.
    - F. PRELIMINARY DESIGN MIX PROPOSED FOR USE FOR MATERIAL MIXES THAT REQUIRE CONTROL BY TESTING AGENCY.
    - G. SECURITY AND PROTECTION FOR SAMPLES AND FOR TESTING AND INSPECTION EQUIPMENT AT PROJECT SITE.
11. COORDINATION: COORDINATE SEQUENCE OF ACTIVITIES TO ACCOMMODATE REQUIRED QUALITY-ASSURANCE AND QUALITY-CONTROL SERVICES WITH A MINIMUM OF DELAY AND TO AVOID NECESSITY OF REMOVING AND REPLACING CONSTRUCTION TO ACCOMMODATE TESTING AND INSPECTION.
    - A. SCHEDULE TIMES FOR TESTS, INSPECTIONS, OBTAINING SAMPLES, AND SIMILAR ACTIVITIES.

SHEET LIST

SHEET NUMBER	SHEET NAME
S001	GENERAL NOTES
S002	GENERAL NOTES
S003	SPECIAL INSPECTIONS
SS101	SITE PLAN
SD101	BASEMENT DEMOLITION PLAN
SD102	ROOF DEMOLITION PLAN
S101	BASEMENT FOUNDATION PLAN
S501	DETAILS
S502	DETAILS

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EMPORIUM DEMOLITION PLAN

41, 45, 47, 59, & 67 NORTH MAIN STREET
LOGAN, UT 84321

CARTWRIGHT PROJECT #	119009
DATE:	8/12/2019
DRAWN BY:	BFL
CHECKED BY:	JP
APPROVED BY:	JP

GENERAL NOTES

S001

7/25/2019 11:32:35 AM

CONCRETE

1. MATERIALS, UNLESS NOTED OTHERWISE:
   - A. NORMAL WEIGHT AGGREGATES — ASTM C 33
   - B. FLY ASH, CLASS F POZZOLAN — ASTM C618
   - C. REINFORCING STEEL — ASTM 615 GRADE 60 (FY = 60 KSI)
   - D. ADMIXTURES: AIR-ENTRAINING ADMIXTURES SHALL COMPLY WITH ASTM C 260 (WHEN USED). CALCIUM CHLORIDE SHALL NOT BE ADDED TO THE CONCRETE MIX. UNREINFORCED CONCRETE SLABS ON GRADE MAY HAVE CALCIUM CHLORIDE NOT EXCEEDING ONE PERCENT.
   - E. TYPE I/II CEMENT COMPLYING WITH ASTM C-150 SHALL BE USED FOR ALL CONCRETE.
   - F. THE WATER/CEMENT RATIO FOR CONCRETE 4000 PSI AND GREATER SHALL NOT EXCEED 0.50.
   - G. THE SLUMP OF ALL CONCRETE SHALL BE LIMITED TO 4" UNLESS PLASTICIZERS ARE USED.
   - H. PROVIDE AIR ENTRAINING AS RECOMMENDED BY ACI 318.
   - I. AIR ENTRAINMENT SHALL BE ADJUSTED FOR THE USE OF ADMIXTURES AND FLY ASH.
   - J. FLY ASH SHALL BE A MAXIMUM OF 20% OF THE CEMENTITIOUS MATERIAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, CARE, PLACEMENT AND REMOVAL OF ALL FORM WORK AND SHORES.
   - A. SUPPORTING FORMS AND SHORING SHALL NOT BE REMOVED UNTIL STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY CONSTRUCTION LOAD TO WHICH THEY MAY BE SUBJECTED. IN NO CASE, HOWEVER, SHALL FORMS AND SHORING BE REMOVED IN LESS THAN 24 HOURS AFTER CONCRETE PLACEMENT.
3. REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVER.

	CLEAR COVER
A. CAST-IN-PLACE CONCRETE:	
1. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
B. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:	
1. #6 THRU #18 BARS	2"
2. #5 AND SMALLER BARS	1-1/2"
A. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
1. WALLS	3/4"

1. CONSTRUCTION JOINTS AND CONTROL JOINTS:
   - A. PROVIDE A BEVELED 2 X 4 INTERMEDIATE KEYWAY THAT SHALL BE INSTALLED IN ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS INCLUDING BETWEEN TOP OF FOOTING AND FOUNDATION WALLS. IN ADDITION, ALL JOINTS SHALL BE INTENTIONALLY ROUGHENED TO FULL AMPLITUDE OF APPROXIMATELY ¼ INCH.
2. CONSTRUCTION
   - A. USE CHAIRS OR OTHER SUPPORT DEVICES RECOMMENDED BY THE CRSI TO SUPPORT REINFORCEMENT BARS PRIOR TO PLACING CONCRETE.
   - B. REINFORCING BARS SHALL NOT BE WELDED.
3. DETAILING:
   - A. LAP LENGTHS SHALL BE 28" FOR #4 BARS AND 36" FOR #5 BARS.
   - B. ALL VERTICAL REINFORCING SHALL BE DOWELED TO FOOTINGS WITH THE SAME SIZE AND SPACING AS THE VERTICAL REINFORCING FOR THE ELEMENT ABOVE. DOWELS EXTENDING INTO FOOTINGS SHALL TERMINATE WITH A 90 DEGREE STANDARD HOOK AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING U.N.O. FOOTING DOWELS (#8 BARS AND SMALLER) WITH HOOKS NEED NOT EXTEND MORE THAN 20" INTO FOOTINGS U.N.O.

CONCRETE COMPRESSION STRENGTHS

COMPRESSIVE STRENGTHS OF CONCRETE AT 28 DAYS SHALL BE AS FOLLOWS:
- FOOTINGS .....3000 PSI
- FOUNDATION WALLS.....3000 PSI
- EXTERIOR SLABS ON GRADE.....4000 PSI

JOINT SEALANT

1. SILICONE JOINT SEALANT SHALL BE NONTRAFFIC-USE, NEUTRAL-CURING: ASTM C920, TYPE S, GRADE NS, CLASS 50, USE NT. OR APPROVED EQUAL
2. THE SEALANT SHALL BE NONSTAINING, SINGLE-COMPONENT, NONSAG, PLUS 50 PERCENT AND MINUS 50 PERCENT MOVEMENT CAPABILITY.

DEFERRED SUBMITTALS

1. A DEFERRED SUBMITTAL IS A PART OR PORTION OF THE PROJECT THAT WAS NOT DESIGNED OR ENGINEERED BY THE PROJECT ENGINEER OF RECORD. IT HAS BEEN DELEGATED TO THE CONTRACTOR TO COORDINATE THE DESIGN ELEMENTS WITH THE SPECIFIC MANUFACTURERS AND SUPPLIERS USED. ON ALL DEFERRED ITEMS, AN INDEPENDENT DESIGN MUST BE COMPLETED AND COORDINATED WITH THE ORIGINAL CONSTRUCTION DRAWINGS. THE COMPLETE SUBMITTAL MUST BE REVIEWED BY THE E.O.R. PRIOR TO ANY CONSTRUCTION OR FABRICATION OF ANY PORTION OF THE DEFERRED ITEM (SEE SHOP DRAWING NOTES AND SPECIFICATIONS (IF APPLICABLE) FOR ADDITIONAL CLARIFICATIONS AND REQUIREMENTS ON DEFERRED SUBMITTALS.
2. ANY ENGINEERED DRAWINGS OR STRUCTURAL CALCULATIONS ON DEFERRED STRUCTURAL ITEMS SUBMITTED TO CARTWRIGHT ENGINEERS FOR REVIEW SHALL BE STAMPED AND SIGNED BY A STRUCTURAL ENGINEER (OR PROFESSIONAL ENGINEER, IF APPLICABLE) LICENSED IN THE APPLICABLE STATE. CARTWRIGHT ENGINEERS SHALL NOT BE HELD RESPONSIBLE FOR THE CORRECTNESS OR COMPLETENESS OF ENGINEERED DRAWINGS OR STRUCTURAL CALCULATIONS PERFORMED BY OTHERS.
3. ALL ITEMS LISTED AS DEFERRED STRUCTURAL SUBMITTALS REQUIRE SHOP DRAWING SUBMITTALS. REQUIRED DEFERRED STRUCTURAL SUBMITTALS SPECIFICALLY INCLUDE THE FOLLOWING:
   - A. SHORING.
   - B. MECHANICALLY STABILIZED EARTH.

EARTH WORK

1. COMPACTED STRUCTURAL FILL: ALL FILL MATERIAL SHALL BE A WELL-GRADED GRANULAR BORROW WITH A MAXIMUM SIZE LESS THAN 3 INCH GRADE A-1-a AND WITH NOT MORE THAN 15 PERCENT PASSING A NO. 200 SIEVE. IT SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM LABORATORY DENSITY AS DETERMINED BY ASTM D 1557. ALL FILL SHALL BE TESTED. COMPACTED STRUCTURAL FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN UNCOMPACTED THICKNESS. FILL SHOULD NOT BE PLACED UNDER WATER. PLACEMENT OF FILL SHALL BE PERFORMED WITH NON-VIBRATORY EQUIPMENT TO REDUCE IMPACT OF ADJACENT REMAINING STRUCTURES.

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EMPORIUM DEMOLITION PLAN

41, 45, 47, 59, & 67 NORTH MAIN STREET
LOGAN, UT 84321

CARTWRIGHT PROJECT #	119009
DATE:	8/12/2019
DRAWN BY:	BFL
CHECKED BY:	JP
APPROVED BY:	JP

GENERAL NOTES

S002

7/25/2019 9:59:22 AM

REQUIRED VERIFICATION & INSPECTION OF SOILS

VERIFICATION & INSPECTION	CONT.	PERIODIC	COMMENTS
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	●	
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	●	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	●	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	●	—	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	●	

NOTES:
1. SPECIAL INSPECTIONS FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT AND LOAD-BEARING REQUIREMENTS SHALL BE AS REQUIRED BY IBC 1705.6 AND TABLE 1705.6. THE CONSTRUCTION DOCUMENTS SHALL BE USED TO DETERMINE COMPLIANCE. DURING FILL PLACEMENT, THE SPECIAL INSPECTOR SHALL DETERMINE THAT PROPER MATERIALS AND PROCEDURES ARE USED IN ACCORDANCE WITH THE PROVISIONS OF THE CONTRACT DOCUMENTS.
2. WHERE IBC SECTION 1803 DOES NOT REQUIRE REPORTING OF MATERIALS AND PROCEDURES FOR FILL PLACEMENT, OR WHERE A GEOTECHNICAL REPOT IS NOT AVAILABLE, THE SPECIAL INSPECTOR SHALL VERIFY THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL IS NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH ASTM D 1557.

QUALIFICATION OF SPECIAL INSPECTOR

1. THE INSPECTION AGENCY SHALL SUBMIT QUALIFICATIONS AND / OR CERTIFICATIONS TO THE BUILDING OFFICIAL, OWNER, AND/OR OWNERS REPRESENTATIVE TO DETERMINE THAT THE AGENCY MEETS THE APPLICABLE REQUIREMENTS AND IS QUALIFIED TO PERFORM THE TESTS AND INSPECTIONS.
   - A. THE AGENCY SHALL BE OBJECTIVE AND COMPETENT.
   - B. THE AGENCY SHALL ALSO DISCLOSE POSSIBLE CONFLICTS OF INTEREST SO THAT OBJECTIVITY CAN BE CONFIRMED AND SHALL BE INDEPENDENT OF THE CONTRACTOR.
   - C. THE AGENCY SHALL HAVE ADEQUATE EQUIPMENT TO PERFORM REQUIRED TESTS.
   - D. THE EQUIPMENT SHALL BE PERIODICALLY CALIBRATED.
   - E. THE AGENCY SHALL EMPLOY EXPERIENCED PERSONNEL EDUCATED IN CONDUCTING, SUPERVISING AND EVALUATING TESTS AND INSPECTIONS.
   - F. THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF INSPECTIONS.
   - G. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE ARCHITECT, ENGINEER, CONTRACTOR AND BUILDING OFFICIAL. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT, ENGINEER, CONTRACTOR AND BUILDING OFFICIAL PRIOR TO THE COMPLETION OF THAT PHASE OF WORK.

GENERAL STATEMENT OF SPECIAL INSPECTIONS

1. WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER IBC 2018 SECTION 1704. THESE INSPECTIONS ARE IN ADDITION TO THOSE IDENTIFIED IN SECTION 110.
2. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING HIS OR HER COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING. EXPERIENCE OR TRAINING SHALL BE CONSIDERED RELEVANT WHEN THE DOCUMENTED EXPERIENCE OR TRAINING IS RELATED IN COMPLEXITY TO THE SAME TYPE OF SPECIAL INSPECTION ACTIVITIES FOR PROJECTS OF SIMILAR COMPLEXITY AND MATERIAL QUALITIES. THE SPECIAL INSPECTION AGENCY SHALL ALSO COMPLY WITH IBC 1703.1.
3. ALL MATERIALS INSPECTIONS & TESTS IDENTIFIED IN THE SPECIAL INSPECTION TABLES AND GENERAL STRUCTURAL NOTES ARE TO COMPLY WITH THE REFERENCES AND STANDARDS LISTED IN THE TABLES IN IBC 2015, CHAPTERS 17, 35 & ELSEWHERE IN THIS CODE.
4. THE TYPE AND EXTENT OF SPECIAL INSPECTIONS ARE AS SPECIFIED IN THE INDIVIDUAL SPECIAL INSPECTION TABLES AND PROJECT SPECIFICATIONS.
5. REPORTS OF FINDINGS OR DISCREPANCIES SHALL BE NOTED AND FORWARDED TO THE CONTRACTOR, ARCHITECT, ENGINEERS, AND BUILDING OFFICIAL IN A TIMELY MANNER.
6. STRUCTURAL OBSERVATION VISITS SHALL BE PERFORMED BY A REPRESENTATIVE OF CARTWRIGHT ENGINEERS IN ACCORDANCE WITH THE CONTRACT AS NEEDED TO OBSERVE THE CONSTRUCTION OF CRITICAL BUILDING ELEMENTS (I.E. FOOTINGS, BRACED FRAMES, MOMENT FRAMES, DRAG STRUTS AND THEIR CONNECTIONS, COLLECTORS, AND ROOF AND FLOOR DIAPHRAGMS, ETC.). STRUCTURAL OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT OR DISTRIBUTED TO THE CONTRACTOR AND BUILDING OFFICIAL. STRUCTURAL OBSERVATION VISITS ARE TO VERIFY THAT WORK IS IN GENERAL CONFORMANCE WITH CONTRACT DOCUMENTS AND SHALL NEITHER BE CONSTRUED AS SPECIAL INSPECTION, INSPECTION BY A BUILDING OFFICIAL, NOR APPROVAL OF COMPLETED CONSTRUCTION.
7. INSPECTION OF LABELED MATERIALS SHALL BE PER IBC 2018 SECTION 1703.

REQUIRED VERIFICATION & INSPECTION OF STEEL CONSTRUCTION

VERIFICATION & INSPECTION	CONT.	PERIODIC	COMMENTS
1. REINFORCING STEEL:	—	●	

REQUIRED VERIFICATION & INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION & INSPECTION	CONT.	PERIODIC	COMMENTS
1. INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	—	●	
2. INSPECT ANCHORS CAST IN CONCRETE	—	●	
3. VERIFYING USE OF REQUIRED DESIGN MIX.	—	●	
4. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	●	—	
5. INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	●	—	
6. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	—	●	
7. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	—	●	

NOTES:
THE SPECIAL INSPECTIONS AND VERIFICATIONS FOR CONCRETE CONSTRUCTION SHALL BE AS REQUIRED BY SECTION 1705.3 AND TABLE 1705.3.

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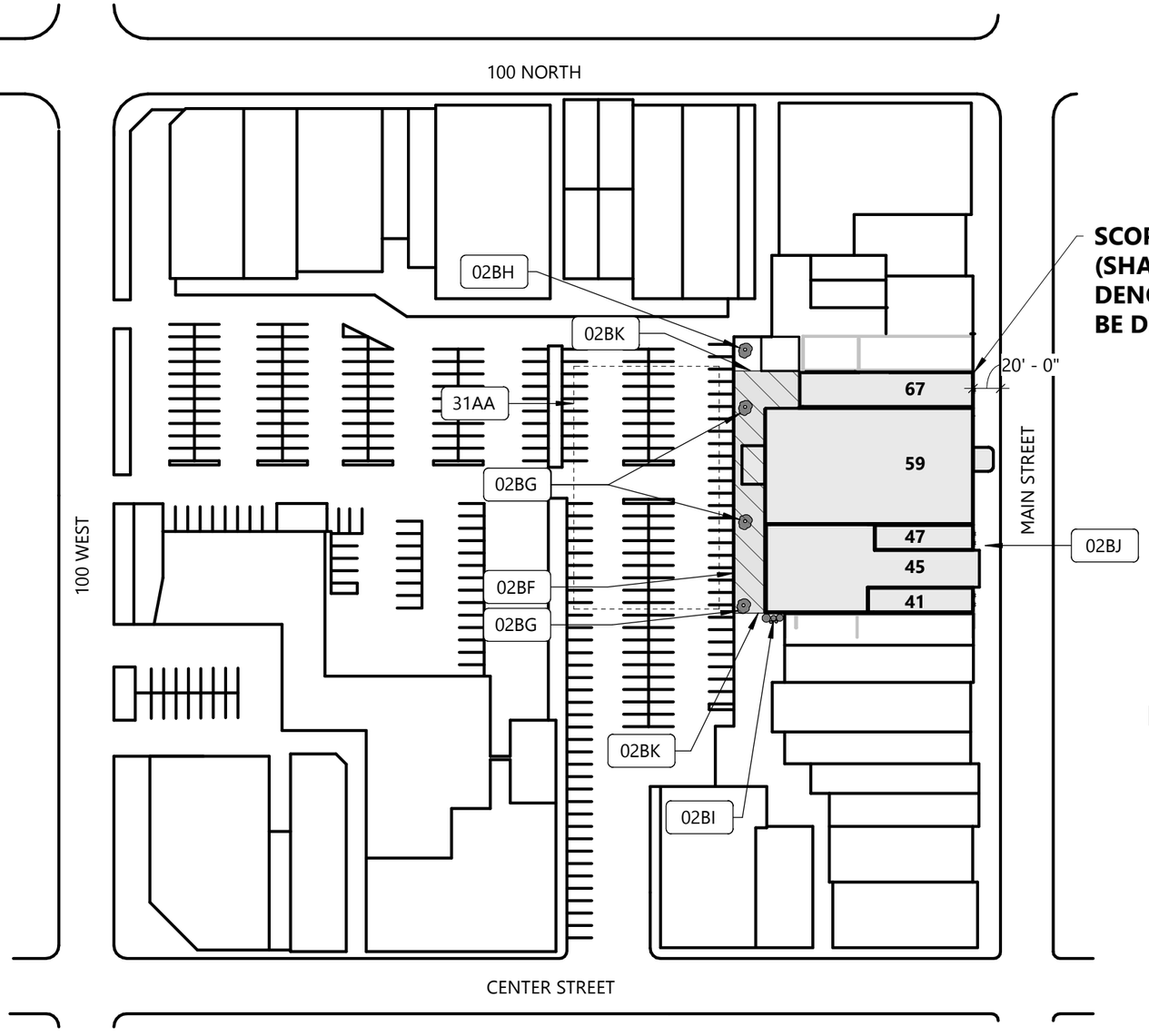
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SPECIAL INSPECTIONS

S003

7/25/2019 11:32:35 AM



1 SITE PLAN
SCALE: 1" = 100'-0"

TRUE NORTH

KEYNOTES

#	DESCRIPTION
02BF	CONCRETE SLAB ON GRADE SIDEWALK TO BE REMOVED
02BG	TREE TO BE REMOVED
02BH	TREE TO REMAIN
02BI	SHRUBS TO BE REMOVED
02BJ	CONCRETE SLAB ON GRADE SIDEWALK TO REMAIN
02BK	EXISTING EMBEDDED RAIN GUTTER IN CONCRETE SIDEWALK TO REMAIN
31AA	FENCED AREA FOR CONSTRUCTION STAGING AND PROCESSING



SITE LOCATION

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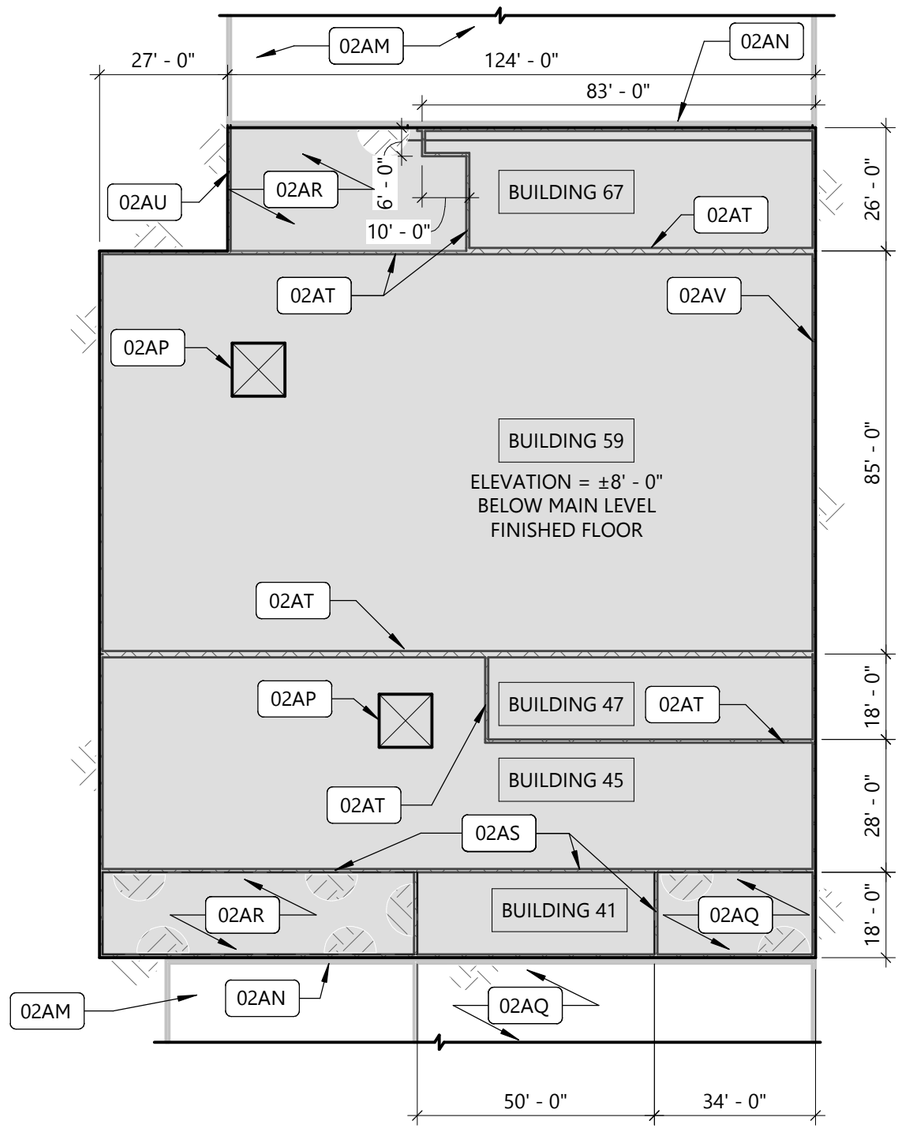
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SITE PLAN

SS101

7/25/2019 9:59:23 AM



1 BASEMENT DEMOLITION PLAN
SCALE: 1/32" = 1'-0"

KEYNOTES

#	DESCRIPTION
02AM	EXISTING CONCRETE SLAB ON GRADE
02AN	EXISTING ROCK BASEMENT WALL / FOUNDATION
02AP	ELEVATOR SHAFT
02AQ	EXISTING CRAWL SPACE
02AR	CONCRETE SLAB ON GRADE ABOVE
02AS	INTERIOR CONCRETE / MASONRY / ROCK WALL TYP. (NOT ALL WALLS SHOWN) CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS
02AT	ROCK FOUNDATION WALL SEPERATING BUILDINGS - DOUBLE WALL AS NOTED
02AU	CONCRETE FOUNDATION WALL AND FOOTING ABOVE
02AV	EXISTING ROCK WALL FOUNDATION

NOTE:
CONTRACTOR SHALL FIELD VERIFY **ALL** DIMENSIONS. FOR ESTIMATING PURPOSES, THE BASEMENT PLANS ARE SHOWN IN LINE WITH ROOF PLAN. THERE MAY BE OFFSETS / TRANSITIONS AT FLOOR AND ROOF FRAMING. CONTRACTOR SHALL FIELD VERIFY THESE OFFSETS / TRANSITIONS. BID PRICING SHALL INCLUDE ANY COST ASSOCIATED WITH OFFSETS / TRANSITIONS

DENOTES EXTENT OF STRUCTURE TO BE DEMOLISHED

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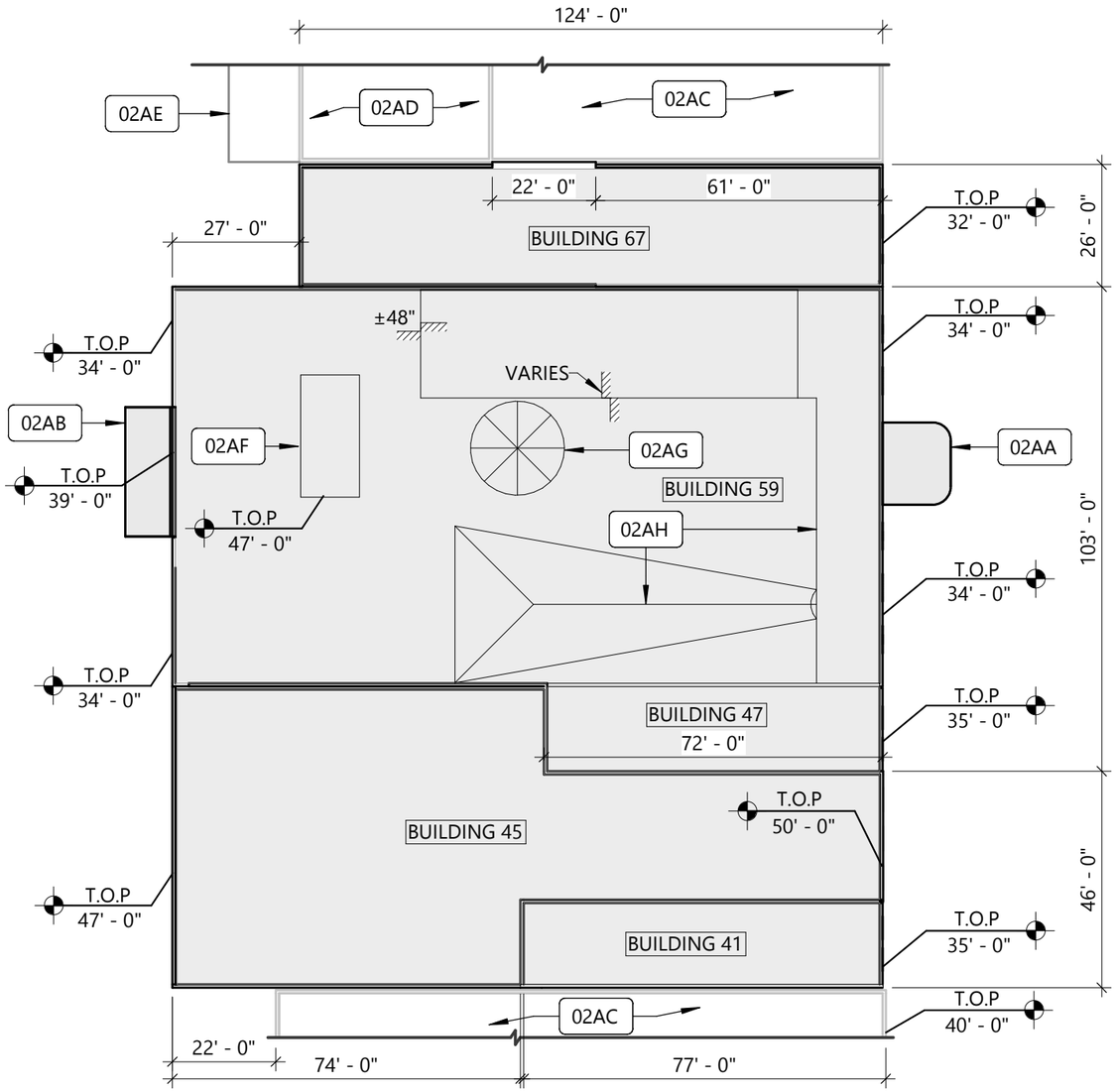
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BASEMENT DEMOLITION PLAN

SD101

7/25/2019 9:59:23 AM



1 ROOF DEMOLITION PLAN
SCALE: 1/32" = 1'-0"

TRUE PLAN

KEYNOTES

#	DESCRIPTION
02AA	FABRIC AWNING BELOW
02AB	CANTILEVERED COVERED ENTRY BELOW
02AC	TWO STORY BUILDING TO REMAIN
02AD	ONE STORY BUILDING TO REMAIN
02AE	LOW ENTRY ROOF FRAMING TO REMAIN
02AF	PENTHOUSE FRAMING
02AG	CIRCULAR SKYLIGHTS
02AH	ROOF RIDGELINES

NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. DIMENSIONS NOTED HAVE BEEN ROUNDED FOR BID PURPOSE.
2. T.O.P. INDICATES TOP OF PARAPET. THESE ELEVATIONS ARE BASED UPON THE MAIN FLOOR LEVEL FINISHED FLOOR (i.e. SIDEWALK). ELEVATIONS PROVIDED HAVE BEEN ROUNDED FOR BIO PURPOSES. CONTRACTOR SHALL FIELD VERIFY EXACT ELEVATIONS.
3. DENOTES AREA OF DEMOLITION

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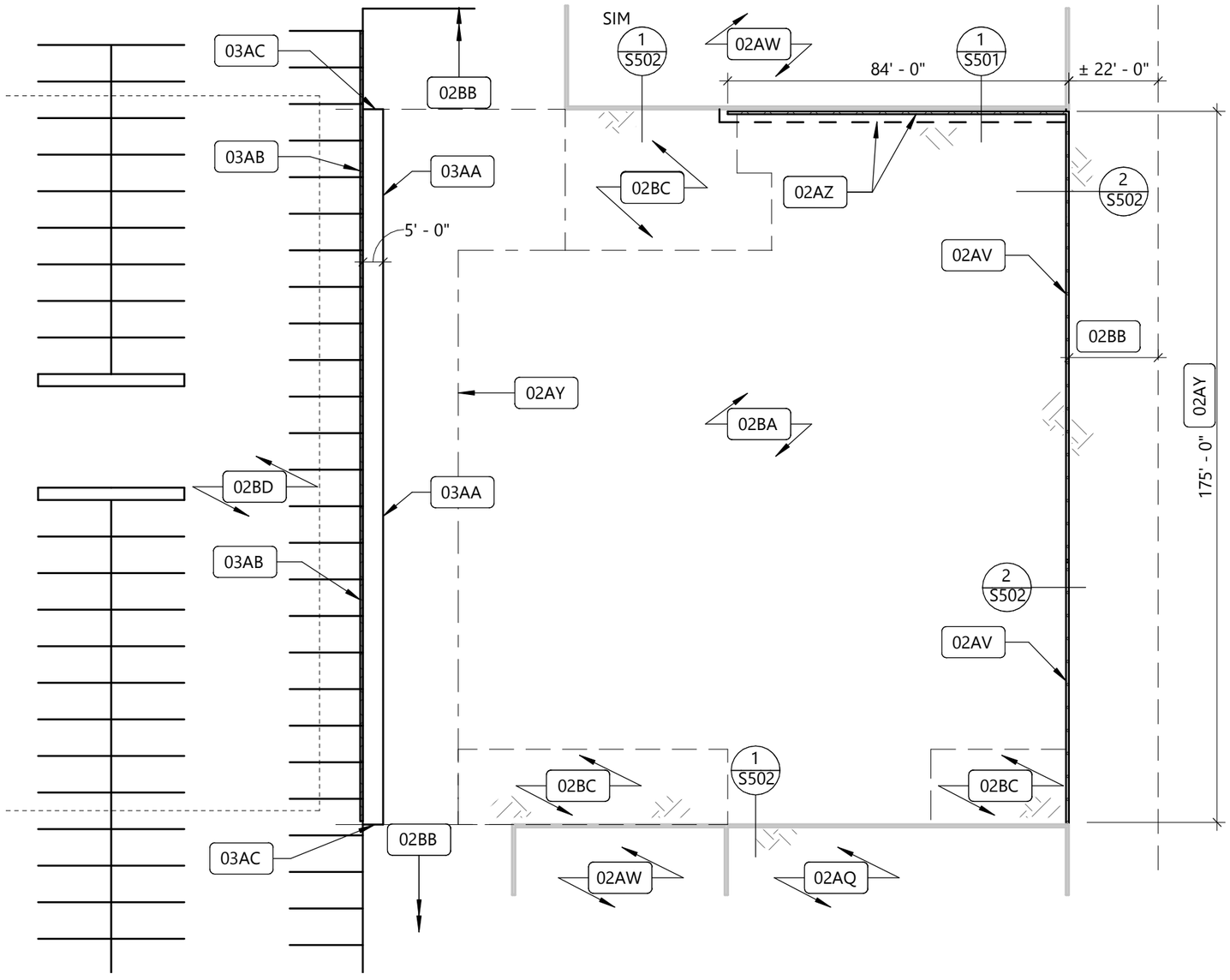
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ROOF DEMOLITION PLAN

SD102

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1 BASEMENT FOUNDATION PLAN

SCALE: 1/32" = 1'-0"

KEYNOTES

#	DESCRIPTION
02AQ	EXISTING CRAWL SPACE
02AV	EXISTING ROCK WALL FOUNDATION
02AW	EXISTING CONCRETE SLAB ON GRADE AT EXISTING BASEMENT
02AY	EXISTING BUILDING TO BE REMOVED
02AZ	CONCRETE WALL AND FOOTING RE: 1/S501
02BA	BACKFILL EXISTING BASEMENT WITH COMPACTED STRUCTURAL FILL. PROVIDE FINISH GRADE TO ± EXISTING CONCRETE SIDEWALK ON EAST SIDE. SLOPE TO WEST PARKING LOT OR AS DIRECTED BY OWNER
02BB	EXISTING CONCRETE SLAB ON GRADE SIDWALK ABOVE
02BC	EXISTING CRAWL SPACE AND SLAB ON GRADE AREA. EXTEND OR REMOVE BACKFILL TO MATCH GRADING REQUIREMENTS
02BD	EXISTING ASPHALT PARKING LOT ABOVE
03AA	NEW CONCRETE SLAB ON GRADE SIDEWALK ABOVE TO MATCH EXISTING CONDITION OR CURRENT LOGAN CITY STANDARDS
03AB	PROVIDE CONCRETE CURB AT PARKING LOT ABOVE TO MATCH EXISTING OR PER CURRENT LOGAN CITY STANDARD
03AC	TIE NEW CONCRETE SIDEWALK TO EXISTING EMBEDDED GUTTER TO MATCH EXISTING CONDITIONS

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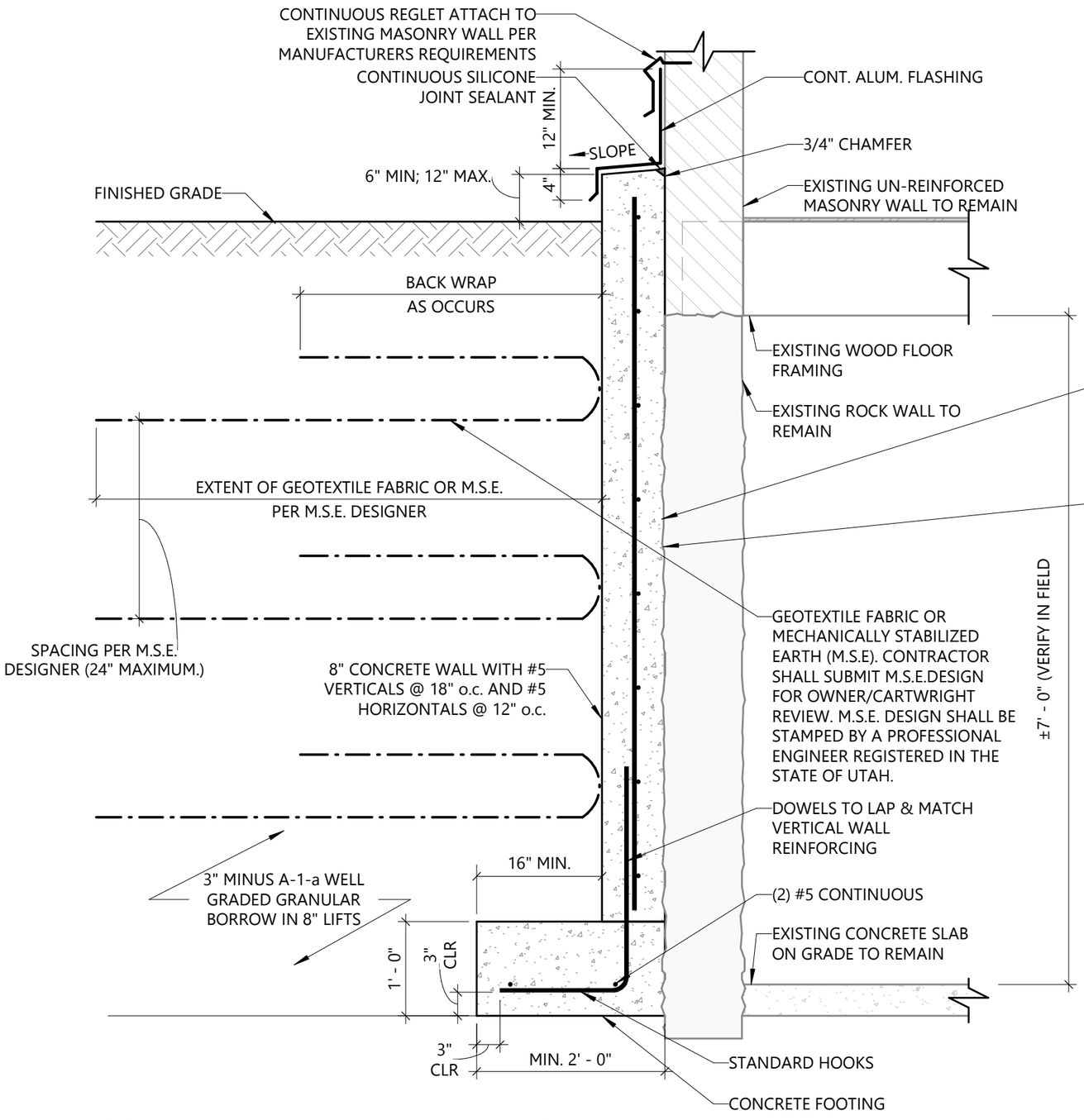
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BASEMENT FOUNDATION PLAN

S101

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1 CONCRETE WALL AT EXISTING WALL

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

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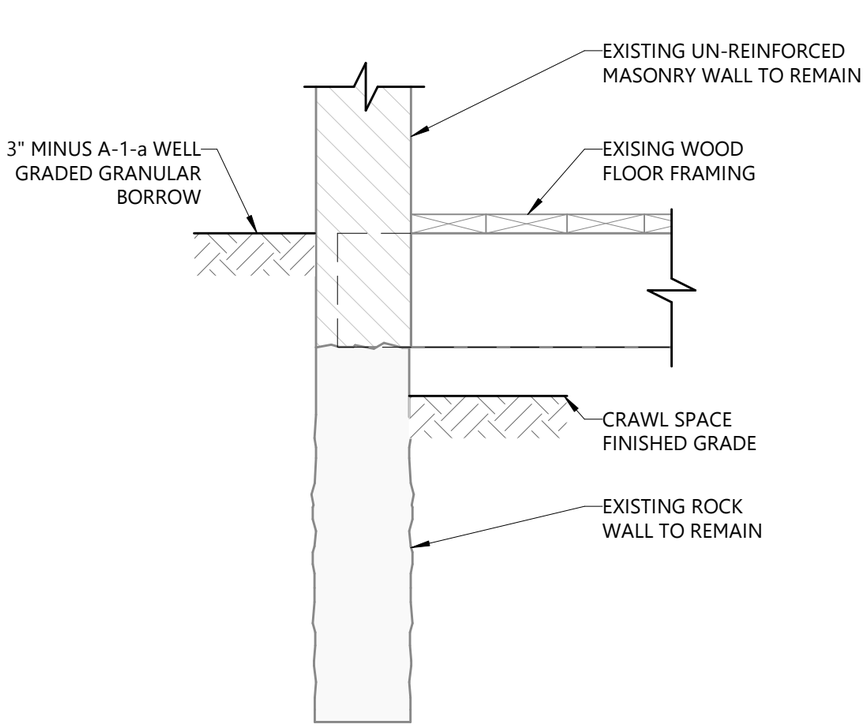
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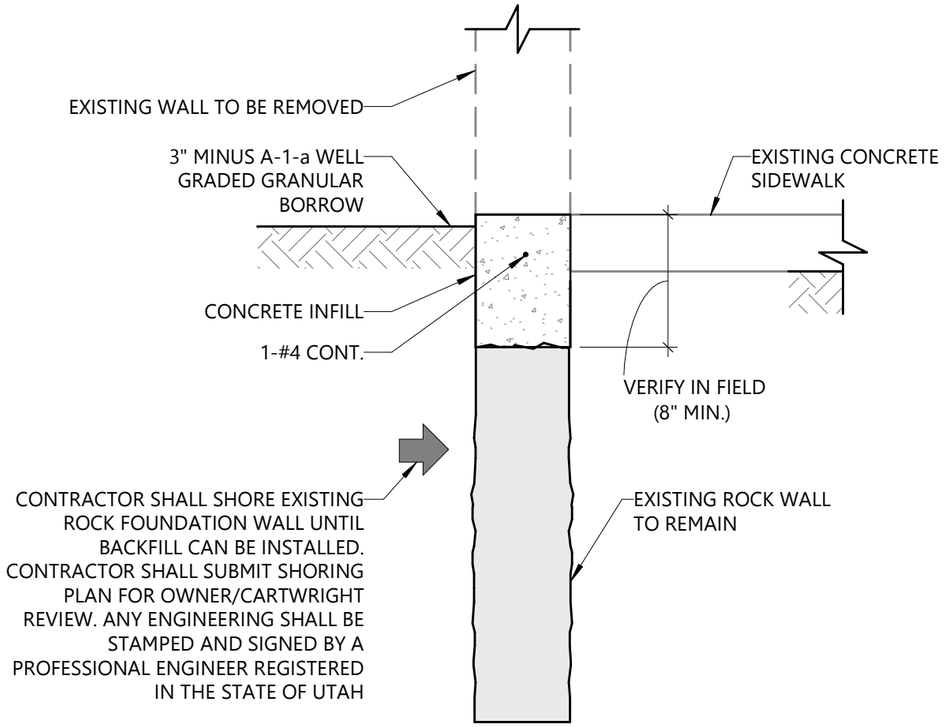
DETAILS

S501

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1 BACKFILL AT EXISTING ROCK FOUNDATION
SCALE: 3/4" = 1'-0"



2 BACKFILL AT EXISTING CONCRETE SLAB
SCALE: 3/4" = 1'-0"

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DETAILS

S502

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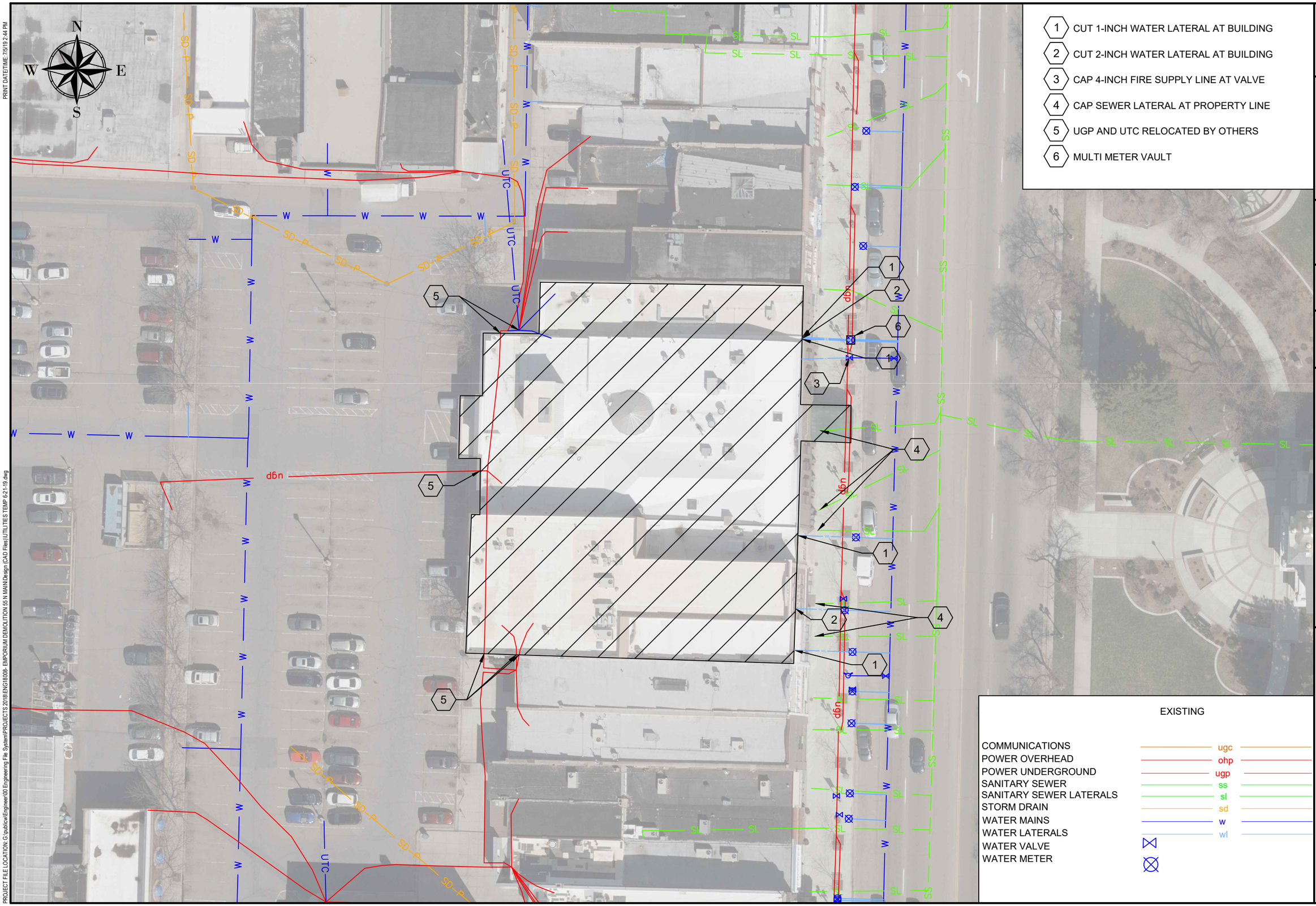
APPENDIX B

Logan City Emporium Building Utility Plan:

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SHEET NO: UT-01

0' 15' 40'
1" = 40'
SCALE

REVISION BLOCK:
BIDDING

DATE: 5-Jul-19
ENG.#: ENG18008

DESIGNED: --
DRAFTED: TD/CK/NSON
CHECKED: --

EMPORIUM BUILDING DEMOLITION

UTILITY SHEET

LOGAN CITY ENGINEERING
290 NORTH 100 WEST
LOGAN, UTAH 84321

LOGAN CITY UNITED IN SERVICE
PUBLIC WORKS DEPARTMENT