## **Construction Management Plan (CMP)**

#### For Construction Activities At:

56 Main Street Doug Clark Durham, NH (603)-312-3643

## **CMP Prepared For:**

Doug Clark 74 Main Street Durham, NH 03824 Phone: (603)- 312-3643

## **CMP** Prepared By:

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#### **CMP** Preparation Date:

#### 6/5/2019

**Estimated Project Dates:** 

Project Start Date: 07 / 01 / 2019 Project Completion Date: 11 / 30 /2019

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# Appendix A – Construction Staging Plan

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### SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

## 1.1 Project Management

#### **General Contractor:**

Company: Excel Construction Contact: Mike Todd Address: 69 Deertrees Lane City, State, Zip Code: Newfields, NH 03856 Telephone Number: 603- 770-7560 Fax/Email: Area of control (if more than one operator at site): N/A

## Subcontractor(s):

Company or Organization Name: Unknown Name: Address: City, State, Zip Code: Telephone Number: Fax/Email: Area of control (if more than one operator at site):

Company or Organization Name: Unknown Name: Address: City, State, Zip Code: Telephone Number: Fax/Email: Area of control (if more than one operator at site):

## 1.2 Civil Engineer of Record

Position: CER Name: Mike Sievert Telephone Number: 603-828-6655 Email: mikesievert@mjs-engineering.com

## **SECTION 2: INTRODUCTION**

This document outlines a Construction Management Plan for the construction of the Ciao Italia project and associated work. The contents of this document include a brief description of the project, construction sequencing and phasing, installation and management of stormwater best management practices and erosion controls, noise and vibration, air quality, and pedestrian and vehicle traffic management, and parking.

## SECTION 3: COMPLIANCE WITH OTHER LOCAL, STATE & FEDERAL REQUIREMENTS

This project requires permits from local, and state agencies. The following permits are required;

| Permitting Authority                   | Permit/Approval Type    | Permit Number/Approval Date |
|--|-------------------------|-----------------------------|
| NHDES Wastewater Engineering<br>Bureau | Sewer Connection Permit |                             |
| Town of Durham Planning Board          | Site Plan Approval      |                             |
| Town of Durham DPW                     | Sewer Connection Permit |                             |
|  |                         |                             |
|  |                         |                             |

All work completed for this project shall be in accordance with the CMP and all other permits and approvals. Any conflicts shall be brought to the attention of the General Contractor (GC) and Civil Engineer of Record (CER). For general purposes the more stringent regulation shall apply.

#### SECTION 4: CONSTRUCTION MANAGEMENT

#### 4.1 Storage and Loading Areas

There will be two storage/loading areas. Area 1 is on Main St and will encompass the first three parking spaces in front of the building at 56 – 60 Main St. This area will not be utilized during the entire construction period, but only as required. The area will be blocked off when necessary with fencing and/or barricades. A portion of this area will also be used as a loading/unloading area for downtown businesses while Jenkins Ct. is closed or partially closed. Area 2 is on Jenkins Ct. and encompasses the three parking spaces in front of 3 Jenkins Ct. This area will be used and closed off during the entire construction period. The area will be secured with fencing and used for deliveries and storage of construction materials.

#### 4.2 Traffic Management

<u>Sidewalk Closures</u>: The sidewalk on Main St. at the front of the building will be required to be partially and fully closed at different times during construction. Full closure will be required for interior demolition for access to the dumpster on Main St., for canopy reconstruction and for construction of the new ADA access at the front entrance. Partial closure will be required during construction of the front building façade. The sidewalk from the corner of Main St. along Jenkins Ct. to the alleyway between the buildings will be permanently closed for the duration of construction. All other sidewalks on Jenkins Ct. and Main St. will remain open and be accessible during construction with proper signage.

<u>Road Closures</u>: Jenkins Ct. will be fully closed during utility construction. Signage will be in place and alternative loading/unloading space for downtown business will be provided on Main St. in storage area 1. Pedestrian access will be allowed during closure. Jenkins Ct. will also be required lane closures in the demolition phase and during

the construction of the foundation and addition. The lane closures will be temporary and will not be required overnight. During a lane closure, the loading/unloading area for downtown business will be moved to Main St.

#### 4.3 General Construction Sequencing

<u>Demolition</u>: The demolition will be completed in two phases. The first phase is the interior building demolition and this work is anticipated to begin around June 24, 2019. A roll-off dumpster will be required for this phase and will be located on Main Street, in storage/loading area #1. The sidewalk on Main St. in front of the building will have to be closed temporarily for this work. The second phase includes demolition and removal of the rear one-story portion of the building. This work will require closure of the sidewalk, adjacent to the building, from Main St. to the alley on Jenkins Ct. and will also require a partial temporary lane closure at the south end of Jenkins Ct. During the lane closure the loading area will be used as the travel way and loading/unloading will be moved to Main St. storage area #1. This phase and the full construction phase are anticipated to begin July 1, 2019.

<u>Construction</u>: Construction of the addition will follow the demolition with excavation and foundation construction. This work will also require some temporary lane closures, but not every day. The closures will mostly be during excavation and removal of excess material. Renovation of the exterior of the existing building façade will also proceed during this time and will require temporary sidewalk closures, however, it is anticipated that the sidewalk at the south end of Jenkins Ct. from Main St. to the alley way will be closed permanently for the duration of the construction. Utility construction in Jenkins Ct. will begin after demolition and be coincident with the construction of the addition. The utility construction includes sewer main and service, water service, gas and drainage structures and pipe. The sewer main will be closed for the entire construction of the sewer main. Construction of the remaining utilities will be approximately 2-5 days and will require both road closure, and temporary lane closures. The road will only be closed for 1 day each for the gas and water service installation. The utility and will be scheduled to be completed prior to the end of August when UNH begins the fall semester. The remainder of the construction will be interior renovation.

The following is the general construction timing: Initial interior demolition June 24 – July 7, 2019

The estimated start of construction is July 01, 2019 and the estimated end of construction is November 30, 2019.

| • | Exterior demolition:                     | July 1 – July 3.  |
|---|--|-------------------|
| • | Addition construction:                   | July 8 – Aug 9    |
| • | Utility construction:                    | July 15 – Aug 14  |
|   | <ul> <li>Sewer Main:</li> </ul>          | July 15 – July 26 |
|   | <ul> <li>Services:</li> </ul>            | July 29 – Aug 2   |
|   | <ul> <li>Drainage structures:</li> </ul> | Aug 5 – Aug 7     |
| • | Site construction:                       | Aug 8 – Aug 16    |
| • | Complete building Construction:          | July 8 – Nov 30   |

Temporary lane closures on Jenkins Ct. will be required between July 1 – July 12. Full road closure of Jenkins Ct. will be required July 15 – July 26. Additional road closures may be required for one day the week of July 29 – Aug 2. The Construction Staging Plan Appendix A, and Demolition Plan in Appendix B gives a visual indication of the overall construction sequence and timing of work.

## SECTION 5: STORMWATER SYSTEMS & EROSION AND SEDIMENT CONTROLS

## 5.1 Temporary Best Management Practices

## 5.1.1 Perimeter Control

Temporary sediment control materials will be maintained on-site throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies. This includes implementation requirements for active areas and non-active areas before the onset of rain.

Locations of temporary sediment control BMPs are shown on the Construction Plans in Attachment A. Silt sock will be used as the perimeter control during construction.

Silt sock shall be installed prior to earth moving operations for perimeter sediment control along those perimeter areas of the site that will receive stormwater from earth-disturbing activities. These locations are depicted on the Construction Plans. The silt sock shall be in a functional condition at all times and it shall be routinely inspected. If the silt sock has been damaged, it shall be repaired, or replaced if beyond repair. Remove sediment before it has accumulated to one-half of the above ground height of the silt sock.

#### 5.1.2 Sediment Track-Out

The contractor must remove the sediment from public ways by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. At a minimum, sweeping shall take place at the end of each workday during construction. The contractor is prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

#### 5.1.3 Stockpiled Sediment or Soil

No soil shall be stockpiled on site. All soil shall be removed from the site during construction by placement into a truck and removed from the site. Soil delivered to the site may be temporarily dumped in the fenced area if space is available, and then used immediately but shall not be stockpiled for more than a day's use. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water. During construction, repair damage silt sock as necessary and remove sediment before it has accumulated to one-half of the above ground height of the silt sock.

## 5.1.4 Minimize Dust

Dust shall be controlled on site during construction by implementing various dust control measures to prevent blowing and movement of dust from exposed soil surfaces. The following dust control measures shall be implemented as necessary on-site during construction;

- Use mechanical sweepers on paved surfaces.
- Use fine water sprays. Fine water sprays are intended to dampen the surface of bare soils in order to
  reduce airborne dust associated with earth moving or demolition operations. It is important to establish an
  application rate suitable for each site that provides adequate dampening of the soils but does not generate
  runoff. The weather conditions will dictate the frequency of site watering needs.
- Cover surfaces with crushed stone or coarse gravel.

## 5.1.5 Storm Drain Inlets

The purpose of inlet protection is to collect and contain the majority of soil particles conveyed in storm water runoff prior to the runoff entering a drainage structure inlet (catch basin, manhole opening, culvert, etc.). This project employs the Siltsack<sup>™</sup> which is to be installed at all catch basin frame/grate openings receiving runoff from the site. The Siltsack<sup>™</sup> is placed in the opening of the catch basin and functions as a filter. Maintenance of this shall be in compliance with the manufacturer's requirements. The Siltsack<sup>™</sup> shall be emptied once filled to 2/3 capacity, rinsed to release all fines, and reinstalled back in the catch basin. Care shall be taken to prevent puncture of the filter. A Siltsack<sup>™</sup> showing signs of any tears, rips, or punctures shall be immediately repaired or replaced with a new Siltsack<sup>™</sup>.

#### 5.1.6 Dewatering Practices

If during construction, site conditions dictate the need for dewatering, water will be pumped to a tank or tank truck and removed from the site. Alternate systems must be approved by the CER.

#### 5.1.7 Concrete Washout/Boom

Concrete washout or boom cleaning shall not be completed on site, unless the washout waste is collected in a tank or bin and removed from the site. Any washout shall be completed off site.

#### 5.1.8 Site Stabilization

Site Stabilization Practice
Uegetative Non-Vegetative
Temporary Permanent

**Description of Practice** 

 In areas to be paved, placement of base course gravels meeting the gradation requirements of NHDOT Standard Specification for Road and Bridge Construction, 2006, item no. 304.1 or 304.2 have been installed. These areas will comprise all proposed areas to be paved.

Installation

Base course gravels will be placed, graded and compacted prior to final paving.

Site Stabilization Practice

Vegetative Non-Vegetative

Temporary Permanent

Description of Practice

A minimum of 3" of pavement has been installed.

Installation

• All disturbed areas shall be paved or receive concrete as the final finished surface.

## SECTION 6: POLLUTION PREVENTION STANDARDS

## 6.1 Spill Prevention and Response

The GM is responsible for the proper clean up of any accidental spills or leaks on site during construction. The necessary equipment and materials needed in the event of a spill or leak shall be kept on site. Do not clean surfaces or spills by hosing the area down. Containment, removal, and reporting of the spill shall be in conformance with all local, state and federal regulations. All spills shall be reported to the Town of Durham.

## 6.2 Fueling and Maintenance of Equipment or Vehicles

Fueling of construction equipment will occur on paved surfaces. A spill kit will be available during the refueling process. Fueling shall not be performed adjacent to surface water or stormwater collection BMP's.

## 6.3 Washing of Equipment and Vehicles

Vehicles shall not be washed on this site.

## 6.4 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes

## 6.4.1 Building Products

Building products, which include but are not limited to asphalt sealants, adhesives, flashing, roofing materials and concrete admixtures shall be covered with plastic sheeting to prevent contact with rainwater.

#### 6.4.2 Establish Proper Building Material Staging Area

Construction equipment and maintenance materials will be stored at storage and loading area #2. Silt sock will be installed around the perimeter to designate the loading and materials storage area. A watertight container will be used to store hand tools, small parts, and other construction materials.

Nonhazardous building material such as packaging material (wood, glass, plastic) and construction scrap material (brick, wood, steel, metal scraps, and pipe cuttings) will be temporarily stored in the storage area and covered if required. All hazardous waste materials such as oil filters, petroleum products, paint and equipment fluids will be stored in structurally sound and sealed containers under cover or within the building for proper removal. Very large items, such as framing materials and stockpiled lumber, will be stored in the open in the material storage area. Such material shall be elevated on wood blocks to minimize contact with runoff. The storage area will be inspected weekly and after storm events. The storage areas will be kept clean and organized with proper functioning containment controls.

## 6.4.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

Chemicals shall be stored in water-tight containers and covered with plastic sheeting to prevent these containers from coming into contact with rainwater. Spill kits shall be available in the event of a spill. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

## 6.4.4 Hazardous or Toxic Waste

Hazardous or toxic waste including but not limited to solvents, paints, and petroleum based products shall be stored in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements. Containers shall be stored in a covered area and a spill kit shall be available on site. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

## 6.4.5 Construction and Domestic Waste

Provide dumpsters of sufficient size and number to contain construction and domestic wastes. On workdays, clean up and dispose of waste in designated waste containers and clean up immediately if containers overflow.

#### 6.4.6 Sanitary Waste

Provide sufficient number of portable toilets and position portable toilets so that they are secure and will not be tipped or knocked over.

#### 6.4.7 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

Concrete equipment shall not be washed on site. Paint and other materials shall not be cleaned without directing waste into a proper sewer or container. Do not dump liquid wastes in storm sewers.

## SECTION 7: CONSTRUCTION TRAFFIC/ ROAD CLOSURE MANAGEMENT PLAN

#### 7.1 Objectives

To address traffic issues arising from construction of the project and to establish general guidelines and standards for road, lane and sidewalk closures. This section will also address notification of the public.

#### 7.2 Management Issues

Construction will result in a workforce which will require off-site parking. The location of the site, consultation with the appropriate local enforcement personnel and careful management will ensure that conflicts between construction and local traffic and activities in the area will be avoided. Construction traffic at the project site is subject to constraints imposed by site conditions and public traffic movements. There will be no workforce parking at the site

The primary issues that affect construction projects include:

- General site access and egress;
- Interaction with existing facilities and operations;
- The timing and extent of material deliveries;
- Traffic conflicts with both existing vehicles and other construction traffic;
- Traffic congestion and conflicts on external roads; and
- Signage and directions;

It is therefore proposed to manage the impact of construction traffic through the provision of two storage/loading areas and lane and road closure management. These will be carefully coordinated to minimize conflicts with other activities.

#### 7.3 Management of Parking

There is minimal parking at the site, and it will be limited to use by the GC or his designee. All other parking for construction workers will be offsite and will be coordinated through the police department via a parking pass purchase system. Deliveries will be made it the designated loading/storage areas as noted on the construction staging plan.

Construction vehicles will load and unload within the alley, designated storage/loading area #2 or the partial lane closure on the south end of Jenkins Ct.

### 7.4 Management of Lane and Road Closures

Traffic management will be critical to maintain adequate access to existing businesses. Coordination with the Town staff including police, fire and DPW and the business owners will be required. A 24 - hour notification for lane and road closures will be required. Signage shall be in place as shown on the construction and staging plan when sidewalks or roads are to be closed. Loading and unloading areas will be provided on Main St. in area #1 as shown on the construction staging plan.

## 7.5 Materials Handling

Materials handling will be predominantly by hand, lulls or an excavator. Should any out of hours deliveries be required this will be handled within the Jenkins Ct. loading/storage area and be coordinated with the proper authorities prior to the delivery.

## 7.6 Pedestrian Movements

Pedestrian movement diversions will be necessary during the site construction. These diversions are detailed on the attached Construction Staging Plan contained in Appendix 1. Appropriate directional signage will be provided to ensure pedestrians are diverted from areas of construction activity. It is not anticipated that any type of overhead protective scaffolding will be required for this project. The Main St. sidewalk and Jenkins Ct. sidewalks will remain open at all other times, except the sidewalk adjacent to the building on Jenkins Ct. from Main St. to the alley way will be permanently closed during construction. An alternate pedestrian route will be maintained as shown on the Construction Staging Plan.

## 7.7 Signage

The General contractor will be responsible for providing the external directional signage regarding pedestrian and vehicle traffic management and the updating and maintenance of the signs as required. The signage shall be provided as required by the MUTCD and as shown on the Construction Staging Plan or as directed by the Town.

# **CMP APPENDICES**

Appendix A – Construction Staging Plan

Appendix B – Demolition Plan

Appendix A – Construction Staging Plan

Appendix B – Demolition Plan