

**TOWN OF RIDGEFIELD
Director of Facilities**

RIDGEFIELD, CONNECTICUT

*Highway Department Concrete Slab Replacement
60 South Street, Ridgefield, Connecticut*

January, 2019

DETAILED SPECIFICATIONS:
BIDDING REQUIREMENTS
PROJECT DESCRIPTION, PLANS, AND
SPECIFICATIONS



RUDY MARCONI
FIRST SELECTMAN

CHARLES R. FISHER, P.E., L.S.
TOWN ENGINEER

JACOB MULLER
FACILITIES DIRECTOR

Bid Number 2019-08

LEGAL NOTICE

INVITATION to BID

The **Town of Ridgefield** invites all interested parties to submit sealed bids on the following:

BID DUE DATE: Thursday, March 21, 2019

BID DUE TIME: 11:00 AM

BID ITEM: Highway Department Concrete Slab
Replacement, 60 South Street, Ridgefield
CT

BID NUMBER: 2019-08

Terms and conditions as well as the description of items being bid are stated in the specifications. **Specifications may be obtained at the following address:**

**Town of Ridgefield
Jacob Muller
400 Main Street
Ridgefield, CT. 06877
203 - 431 – 2720**

The return bid envelope must be marked and addressed to the following:

**TOWN OF RIDGEFIELD
DIRECTOR OF PURCHASING
BID NUMBER: 2019-08
400 MAIN STREET
RIDGEFIELD, CT. 06877**

Bids must be received no later than the date and time stated above at the Purchasing Director's office on the second floor. **For further information,** please call **Jacob Muller** at (203) 431-2720 or E-Mail at **purchasing@ridgefieldct.org**

Bid Documents available at www.ridgefieldct.org in the Purchasing section under Departments

Results may be viewed at www.ridgefieldct.org in the Purchasing Section under Departments after the bid opening.



The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

Location Plan, Highway Department, 60 South Street

8/5/2016 11:58:50 AM



1:2400
1"=200'



TOWN OF RIDGEFIELD CONNECTICUT

BOARD OF SELECTMEN

INSTRUCTIONS TO BIDDERS

1. Submit proposals in a sealed envelope plainly marked with bid number to identify this particular proposal.
2. Withdrawals of or amendments to bids received later than the time and date specified for bid opening will not be considered.
3. The Board of Selectmen of the Town of Ridgefield reserves the right to accept or reject any or all options, bids or proposals; to waive any technicality in any bid or part thereof, and to accept any bid deemed to be in the best interest of the Town of Ridgefield, Connecticut.
4. Bidders may be present at the opening of bids.
5. Bids may be held by the Town of Ridgefield for a period not to exceed sixty (60) days from the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders prior to the awarding of the contract.
6. Insurance requirements, if any, must be submitted with the bid. This includes any Hold Harmless requirements as well as Certificates of Insurance for the full amounts specified. **Unauthorized changes** to these forms, i.e. adding, striking out and/or changing any words, language or limits **will cause the bidder to be disqualified.**

Please Note: Certificates of Insurance, if required, MUST name the Town of Ridgefield as **Additional Insured**. Failure to do so will mean disqualification from the Bid. There will no exceptions.

7. **Permits:** It is the Contractor's responsibility to obtain any necessary permits prior to the start of construction. All work shall be completed in compliance with the latest edition of the prevailing fire prevention and building codes in effect in the State of Connecticut, the latest edition of the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Town of

Ridgefield Road Construction Standards, or as set forth in these specifications.

8. **Emergency Work:** The Contractor shall file with the Engineer a telephone number of a person authorized by him who may be contacted regarding emergency work at the job site that may be required during non-working hours for reasons of public safety. The person shall be readily available and have full authority to deal with any emergency that may occur.
9. **Sales Tax:** In accordance with the provisions of Special Act No. 77-98, as amended, and Section 12-412(a) of the Connecticut General Statutes, sales of tangible personal property and services to the Town are not subject to the Connecticut Sales and Use Tax, and such tax shall not be included as part of the bid.
12. **Contractor's Qualification Statement:** The Contractor's Qualification Statement must be filled out as part of the bid package and the experience and references listed therein will be one to the determining factors in the awarding of the bid.
13. **Hold Harmless Agreement:** In order for the bid to be considered valid, the Contractor **must** sign the enclosed hold harmless agreement. Bids submitted without the signed hold harmless agreement will be rejected.
14. **Prevailing Wage Rates:** This project **is not** subject to the State of Connecticut prevailing wage rates.
15. **SBE/MBE and Contract Compliance Requirements:** This project **is not** subject to the State of Connecticut SBE/MBE set aside and contract compliance requirements.
16. **Time of Completion:** All work must be completed within sixty (60) days of the notice to proceed.
17. **Facility Inspection:** Requests for access to the site shall be directed to Brian Hubbard, Building Maintainer, at 203-994-0347 during normal business hours. General bidding questions may be directed to Jacob Muller, Purchasing Director at 203-431-2720.
18. **Bid Submissions:** The following items shall be submitted for a bid to be considered complete:
 - (a) Insurance certificates
 - (b) Hold Harmless Agreement
 - (c) Copy of Contractor's Home Improvement License
 - (d) Contractor's Qualification Statement

- (e) Contractor's List of Subcontractors
- (f) Contractor's Bid Proposal on his letterhead.
- (g) Project Schedule

Supplemental Information for Bidders and General Contract Provisions

1. PREPARATION OF PROPOSALS

Proposals must be made upon forms contained herein or as directed elsewhere. The blank spaces in the Proposal must be filled in correctly where indicated. The Bidder must state the prices for which he proposes to do each item of the work contemplated. In case of discrepancy where both words and the numerals are requested, the words shall govern. Ditto marks are not considered writing or printing and shall not be used. The Bidder shall sign his Proposal correctly. If the Proposal is made by an individual, his name, post office addresses and telephone number must be shown. If made by a firm, partnership, or corporation, the Proposal must be signed by an official of the firm, partnership, or corporation authorized to sign contracts, and must show the post office address and telephone number of the firm, partnership, or corporation. Failure to do so may disqualify the bid.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, post office address, bid number, and name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to: The Purchasing Agent, Town Hall, and 400 Main Street, Ridgefield, CT 06877.

All information shall be entered in ink or by typewriter. Mistakes may be crossed out and corrections inserted before submission of your bid. The person signing the bid shall initial corrections in ink.

Corrections and/or modifications received after the closing time specified will not be accepted.

2. SUBMISSION OF PROPOSALS

Descriptive literature containing complete specifications must accompany each bid. If a bidder wishes to furnish additional information, more sheets may be added.

3. INCURRING COSTS

The Town of Ridgefield is not liable for any cost incurred for the preparation of proposals or submission of samples by the firms submitting proposals for the work requested in this bid document or request for proposals.

4. FAMILIARITY WITH THE WORK

Each bidder is considered to have examined the work to fully acquaint him with the exact existing conditions relating to the work and has fully informed himself as to the work involved and the difficulties and restrictions attending the performance of this bid. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

5. CONSIDERATION OF PRIOR SERVICE

Previous performance, quality of service and merchandise will be considered.

6. ADDENDA AND INTERPRETATIONS & ALTERNATE PROPOSALS

At the time of the opening of bids each bidder will be presumed to have inspected the work and to have read and to be thoroughly familiar with all of the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instruction or document shall in no way relieve any bidder from any obligation in respect to his bid.

If any person contemplating submitting a proposal is in doubt as to the true meaning of any part of these specifications, he may submit a written request for an interpretation to the Purchasing Agent. No interpretations as to the meaning of the plans, specifications or other Contract Documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the Town of Ridgefield, Purchasing Agent, 400 Main Street, Ridgefield, Connecticut 06877, and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplementary instructions will be in the form of written Addenda to the Specifications which, if issued, will be mailed by Registered Mail with Return Receipt Requested to all prospective bidders at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such Addendum or interpretations shall not relieve any bidder from any obligations under his bid as submitted. All Addenda so issued shall become part of the Contract Documents. Oral explanations will not be binding on the Town.

The specifications listed are to be interpreted as meaning the minimum acceptable by the Town of Ridgefield. Bidders are requested to submit quotations on the basis of these specifications. Alternative bids providing a broader scope and/or services than requested in these specifications may receive consideration providing such equipment and/or service is clearly explained. Any exceptions to the specifications requested herein must be clearly noted in writing and are to be included as a part of your bid proposal. If none are included it will be assumed that there are none.

Definition of the word "complete" means that each unit of the equipment proposed shall include all appurtenances, fasteners, parts, accessories, and services ordinarily catalogued.

An item equal to that named or described in the specifications may be furnished by the Bidder, except where expressly noted as "no substitutions." The naming of any commercial name, trademark, or other identification shall not be construed to exclude any item of any manufacturer not mentioned by name, nor limit competition, but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if:

- a. It is at least equal in quality, durability, appearance, strength and design.
- b. It will perform at least equally the function imposed by the design for the work being contracted for or the material being purchased.
- c. It conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.

The Bidder shall hold the Town of Ridgefield, its officers, agents, servants, and employees, harmless from liability of any nature or kind because of use of any copyrighted or uncopyrighted compositions, secret process, patented or unpatented inventions, articles or appliances furnished or used under this bid, and agrees to defend, at his own expense, any and all actions brought against the Town of Ridgefield or himself because of the unauthorized use of such articles.

7. QUOTATION LIMITATION

Bidders shall offer only **ONE ITEM AND PRICE** for each line item bid. If an or-equal item is to be bid, the bidder is to select the brand and model that meets or exceeds the specified item, and submit his bid for that item.

8. ESTIMATE OF WORK

For bidding purposes, the work has been subdivided into unit price items. The quantities shown are to be considered as approximate only. The Purchasing Agent does not expressly or by implication agree that the actual quantity will correspond therewith, but reserves the right to increase or decrease the amount of any item or portion of the work as deemed necessary.

9. SAMPLES

Samples of articles, when required shall be furnished free of cost of any sort to the Town of Ridgefield. Samples received may be retained by the Town for future comparison. Samples which are not destroyed by testing, or which are not retained for future comparison will be returned upon request at the bidder's expense.

10. WITHDRAWAL OF BID

Bidders may withdraw their proposals at any time prior to the bid date. No agent/broker shall withdraw or cancel their proposal for a period of sixty (60) days after the bid closing date. The successful agent/broker shall not withdraw, cancel or modify their proposal.

11. POWER OF ATTORNEY

Attorneys-in-fact who sign contract bonds must file, with each bond, a certified and effectively dated copy of their power of attorney.

12. SUBCONTRACTORS

Each bidder contemplating the use of any subcontractor shall submit a list of subcontractors as listed on the Bid Form. The apparent low bidder shall file with the Town of Ridgefield, within five (5) days after the date of bid opening, a complete list of the names and addresses of competent, responsible and qualified subcontractors who are actually to perform major portions of the work. This in no way restricts or limits the requirement that all subcontractors must be approved by the Town. Subcontractors listed on the Bid Form or those previously approved may not be changed without the approval of the Town of Ridgefield. Local subcontractors, material suppliers, and labor in the Town of Ridgefield should be considered and sought insofar, as is practical in the performance of this project.

13. QUALIFICATION OF BIDDER

In determining the qualifications of a bidder, the Town may consider his record in the performance of any contracts for similar work into which he may have previously entered; and the Town expressly reserves the right to reject the bid of such bidder if such record discloses that such bidder, in the opinion of the Town, has not properly performed such contracts or has habitually, and without just cause, neglected the payment of bills or has otherwise disregarded his obligations to subcontractors, suppliers, state or local codes, men or employees of subcontractors. The Town may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid if the evidence submitted by or the investigation of such bidder fails to satisfy the Town that such bidder is properly qualified, or that such bidder misrepresented material facts in the bid documents.

14. DISQUALIFICATION OF BIDDERS

More than one proposal from an individual, firm, partnership, corporation, or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested. Any or all proposals in which such Bidder is interested will be rejected if there is reason for believing that collusion exists among the Bidders and all participants in such collusion will not be considered in future proposals for the same work. Proposals in which the prices are obviously unbalanced may be rejected. No Contract will be awarded except to competent Bidders capable of performing the class of work contemplated.

15. DELIVERY

Inasmuch as this work concerns a needed public improvement, the provisions of this bid relating to the time of delivery, performance and completion of the work are of the essence of this bid. Accordingly, the successful bidder shall commence work **upon receipt of the signed Purchase Order** unless the Town shall authorize or direct a further

delay. Time of delivery shall be stated as the number of calendar days following receipt of the Purchase Order by the Bidder to receipt of the goods or services by the Town of Ridgefield. Prices quoted must include delivery to the Town of Ridgefield as specified on the Purchase Order. No charges will be allowed for parking, crating, freight, express or cartage unless specifically stated and included in this bid.

Time of delivery may be considered in the award.

16. PAYMENT

The Town, after inspection and acceptance of workmanship, and in consideration of the faithful performance by the Bidder of all and singular his covenants, promises, and agreements contained herein, agrees to pay the Bidder for the full completion by him of the work embraced in this Contract, within (30) Thirty Days of the receipt of the final invoice. When subcontractors or suppliers are utilized, the successful Bidder for this project shall be required to submit a Mechanics Lien Waiver, acceptable to the Town, with each progress payment and/or at time of final payment prior to any payment being made.

Time, in connection with any discount offered, will be computed from the date of delivery to the Town or from the date a correct invoice is received by the Town's Finance Department, if the latter date is later than the date of delivery. Prices will be considered as **NET**, if no cash or payment discount is shown.

The successful bidder shall submit invoices to the following address:

Town of Ridgefield
Director of Facilities
400 Main Street
Ridgefield, CT 06877

IT IS UNDERSTOOD AND AGREED THAT SHOULD A BID BE ACCEPTED, IT WILL AUTOMATICALLY BECOME THE CONTRACT OR AN ADDENDUM TO ANY CONTRACT AGREED UPON.

Notification of the bid award will be made by issuance of a purchase order. Bidders are to list their bids on the appropriate attached sheets. Bidders may attach a letter of explanation. A clear notification should be made on the standard bid sheets at the appropriate point of explanation that there is a letter of explanation attached. All bids must be NET prices.

The successful bidder shall submit an itemized invoice to the Town of Ridgefield for the work as described herein.

The bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Ridgefield, with each progress payment and at time of final payment prior to any

payment being made.

At the time of award, the successful bidder shall be required to supply the Town of Ridgefield a Certificate of Good Standing, certifying that the corporation is in fact a valid corporation and presently licensed to conduct business in the State of Connecticut.

17. SALES TAX

Certain materials and supplies incorporated in the work of this project are exempt from Connecticut Sales Tax. The Bidder shall familiarize himself with current regulations of the State Tax Department. The tax on materials or supplies exempted by such regulations shall not be included as part of the bid. The Town will furnish the successful Bidder sales tax exemption authorization.

18. CARE AND PROTECTION OF PROPERTY

The Bidder shall take particular care to avoid damages to all private and public property and to private or public improvements within the Town's right of way. He shall make good any damages to the satisfaction of the Town. There shall be no additional compensation for the repair or restoration of private or public property improvements.

19. COMPLIANCE WITH FEDERAL, STATE AND LOCAL CODES

The Bidder shall be responsible for full compliance with any Federal, State and/or Local codes, laws, regulations and standards, as applicable.

20. AWARD

The Town of Ridgefield reserves the right to accept or reject any bid to best serve its interests, or to hold the bids for sixty (60) days before decision.

The Town reserves the right to reject any and all bids (or any part thereof), to waive defects in proposals, or to accept any proposal deemed to be in its best interest.

Exceptions will be considered to the specification provided, providing they are listed and fully explained on a separate page entitled "EXCEPTIONS TO SPECIFICATIONS"

Each exception will be considered as to its degree of impact and total effect on the bid. The purchaser shall determine which (if any taken) exceptions are acceptable, and this determination shall be final.

The Town of Ridgefield reserves the right:

- a. To award bids received on the basis of individual items, or groups of items, or on the entire list of items.
- b. To reject any or all bids, or any part thereof.

- c. To waive any informality in the bids.
- d. To accept the bid that is in the best interest of the Town of Ridgefield. The Purchasing Agent's decision shall be final.

21. INSURANCE

Insurance requirements are detailed under the attached “Insurance Requirements.”

22. GUARANTEE

The bidder shall unconditionally guarantee for a period of one (1) year, except as specifically noted within these documents, from the date of acceptance, all materials, supplies, equipment, and services; including but not limited to its workmanship, delivery and installation. If within the guarantee period there are any defects or signs of deterioration the bidder shall repair, adjust or replace the item(s) to the complete satisfaction of the Town. These repairs, adjustments, or replacements are at the sole expense of the bidder and shall be made at such times that are agreeable to the Purchasing Agent so that it is least detrimental to instructional programs.

23. PERMITS

When required all licenses and permits for complying with any applicable Federal, State, and Municipal laws, codes, regulations in connection with the prosecution of the work shall be obtained by the Bidder, at no additional cost to the Town.

24. NONDISCRIMINATION IN EMPLOYMENT

The successful bidder shall agree and warrant that, in the performance of this contract, he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, sex, religion, or national origin in any manner prohibited by State, Federal, County, or Municipal law. A certification of Non-Segregated Facilities and a Certification Regarding Equal Employment Opportunity shall be considered a part of this contract.

25. MECHANICS LIEN WAIVERS

The successful Bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Ridgefield, with each progress payment, and/or at time of final payment, prior to any payment made.

HOLD HARMLESS AGREEMENT

The undersigned covenants and agrees to and shall at all times indemnify, protect and save harmless the Town of Ridgefield from and against all costs or expenses resulting from any and all losses, damages, detriments, claims, demands, cost and charges including attorneys fees the Town of Ridgefield may directly or indirectly suffer, sustain or be subjected to by reason or on account of the work to be performed pursuant to this Contract or any activities in connection with said Contract whether such losses and damages be suffered or sustained by the Town of Ridgefield directly or by its employees, licenses or invitees or be suffered or sustained by other persons or corporations who may seek to hold the Town of Ridgefield liable therefore.

The Contractor shall comply with the Provisions of the Immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987 which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The Contractor shall hold the Town of Ridgefield harmless for the failure of the Contractor to comply with the provisions of said Act.

IN WITNESS WHEREOF, the parties hereto have set their hand and seal this on the _____ day of _____

Signed, Sealed and Delivered in the
Presence of:

Signed:

Notary Public

CONTRACTOR'S QUALIFICATION STATEMENT

List below references for similar projects, including all information requested. This page must be completed and submitted with the bid.

1. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

2. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

3. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

4. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

Company: _____ *Bid Title:* _____

Street: _____ *Bid No.:* _____

City, State: _____ *Telephone No.:* _____

APPENDIX - INSURANCE REQUIREMENTS

Each bidder shall carry and maintain the following insurance coverage during the period of the contract: The Certificate of Insurance for the Limits of Liability stated below should be submitted with your bid to the Purchasing Department at Town Hall. **Bidders may not perform any work until all insurance requirements are met.**

1. **Comprehensive General Liability Insurance** as will protect him, the Town, and any subcontractor performing work covered by this Contract, from claims for damages for personal injury, including accidental or wrongful death, as well as claims for property damages, which may arise from operations under this Contract whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. Liability insurance shall include premises and operations, products, contractual, owners, and contractors protective. The minimum amounts of such insurance shall be as follows:
 - Bodily Injury Liability and Property Damage Liability:
\$1,000,000 each occurrence.
 - **The Town shall be named as an Additional Insured**
This **MUST** be stated explicitly on the Certificate or you will be **disqualified**
2. **Worker's Compensation Insurance and Employer's Liability** for all of his employees, employed at the site and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all employees of the later unless such employees are covered by the protection afforded by the Contractor.
 - Worker's Compensation and Employer Liability:
Statutory Limits
3. **Comprehensive Auto Liability Insurance:**
 - **Bodily Injury Insurance and Property Damage Insurance** covering the operation of all Motor Vehicles owned, hired and/or non-owned by the Contractor, or used by the Contractor in the Prosecution of the work under the Contract, shall be in the minimum of **\$1,000,000 each occurrence.**

All policies relating to this Contract shall be so written so that the Town shall be notified of cancellation or change at least thirty (30) days prior to the effective date for each policy and type of coverage except for nonpayment which shall be ten (10) days prior to the cancellation. Renewal certificate covering the renewal of all policies expiring during the life of the Contract shall be filed with the Town not less than ten (10) days before the expiration of such policies. Failure to do so will result in work stoppage and possible contract cancellation.

SPECIMEN CONTRACT

This Agreement made as of the _____ day of _____
the year _____ by and between the Town of Ridgefield, 400 Main Street,
Ridgefield, Connecticut, (herein after called the Owner), and
_____, doing business at
_____, (herein after called the
Contractor).

Witnesseth that the Owner and the Contractor in consideration of the mutual covenants
herein after set forth, agree as follows:

Article 1. Work:

The contractor will perform all work as shown in the Contract Documents for the
completion of the Project generally described as follows:

Highway Department Concrete Slab Replacement

The work to be done consists of the furnishing of all labor, materials, tools, and
equipment necessary to construct the project as shown on the plans and as described
in the specifications prepared by Charles R. Fisher, P.E., L.S. Town Engineer .

Article 2. Engineer:

Jacob Muller, Facilities Director will act as the Engineer in connection with completion
of the Project in accordance with the Contract Documents.

Article 3. Contract Time:

The work shall be completed within sixty (60) after the date which the Contractor is to
start the work as provided in the Contract Documents.

Article 4. Contract Price:

The Owner will pay the Contractor for performance of the Work and completion of the Project in accordance with the Contract Documents subject to adjustment by modifications as provided therein in current funds as follows:

Article 5. Progress and Final Payments:

The Owner will make progress payments on account of the Contract Price as provided in the General Conditions. Progress and final payments will be on the basis of the Contractor's application for payment as approved by the Engineer.

Article 6. Contract Documents:

The Contract Documents which comprise the contract between the Owner and the Contractor are attached hereto and made a part hereof and consist of the following:

- A. This agreement
- B. Exhibits to this Agreement
- C. Contractor's Bid and Bid Bonds
- D. Specifications
- E. Drawings as referenced by the Specifications or attached hereto
- F. Addenda numbers: _____
- G. Any modifications, including change orders, duly delivered after execution of this agreement.

Article 7. Miscellaneous:

- A. Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- B. Neither the Owner nor the Contractor shall, without the prior written consent of the other, assign or sublet in whole or in part his interest under any of the Contract Documents and, specifically, the Contractor shall not

assign any moneys due or to become due without the prior written consent of the Owner.

- C. The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto in respect of all covenants, agreements and obligations contained in the Contract Documents.
- D. The Contract Documents constitute the entire agreement between the Owner and the Contractor and may only be altered, amended or repealed by a duly executed written instrument.

In witness whereof, the said parties hereto have caused this instrument to be signed by their respective duly constituted officers, attested, and sealed pursuant to proper resolutions.

Signed and sealed in
the presence of:

Town of Ridgefield

By _____

Date _____

Contractor

By _____

Date _____

Town of Ridgefield
Director of Facilities

Highway Department Concrete Slab Replacement
60 South Street, Ridgefield, CT
January 2019

Bid 2019-08
Project Scope

The intent of the project is to replace and repair existing concrete slabs within the Highway Department's Garage 1 as shown on the plans and specified herein. The work is generally described below. It is the Contractor's responsibility to provide any additional labor, materials, tools, or equipment necessary to properly repair the slab and complete the incidental work as noted within these specifications, detail drawings, and building code requirements to meet the project's intent.

1. It is the Contractor's responsibility to determine and provide the amount of work and materials necessary to meet the project's intent.
2. Obtain all required building permits and pay all associated fees if required.
3. Submit all required material certifications, shop drawings, and procedures to the project's engineer for approval prior to the start of construction.
4. All work shall be in accordance with the 2003 International Building code (IBC) with 2005 CT Supplement with 2009, 2011, and 2013 amendments and further defined within the plan including ACI 301-05 and 318-02.
5. All contractors and subcontractors shall visit the project site and familiarize themselves with the building and working conditions.
6. It is the Contractor's sole responsibility to follow all applicable safety codes and regulations during all phases of construction.
7. The Contractor shall take all steps necessary to protect the public and employees during the course of the project. The Contractor shall provide and install all necessary barricades to keep the public away from the work area.
8. It is the Contractor's sole responsibility to determine construction procedures and sequences, and to ensure the safety of the existing building, its components, and its occupants during construction.
9. The Contractor shall verify all dimensions, elevations, angles, and existing conditions before proceeding with any work.
10. Where details are not indicated, they shall be considered typical and apply at same and similar conditions.
11. Coordinate all work with the Highway Department.
12. Move any equipment necessary to complete the project's intent.
13. Demolish all structural items necessary to complete the described project's intent. All demolished items are to be disposed of legally at the Contractor's expense. Waste concrete and asphalt for this project only may be disposed of at the Highway Department's work yard directly across the street. Waste concrete shall be broken down by the Contractor to facilitate crushing operations by the Town.

14. Portions of the project are located in an area of a former landfill over which fill had been placed for the construction of the facility. The Contractor shall excavate the subbase to a point 24" below the bottom of the existing slab and backfill with materials and in a manner as described under Section 1 of Foundations Notes of the plan. It is the Contractor's responsibility to legally disposed of such material at his expense.
15. Repair the concrete slabs as directed, noted, and specified within the attached plan "Slab on Grade Plan, drawing number S1. Supply all labor, materials, tools, and equipment necessary to meet the requirements of the attached plan.
16. Provide all other services, trades, and materials as necessary to complete the described project's intent.
17. The work area is to be cleaned on a daily basis.
18. Remove all construction materials, debris, tools, and unused equipment from the site upon completion of the project.
19. All work must be completed within sixty (60) calendar days.
20. All work shall be warrantied for a period of one year from the date of completion.

The Contractor is responsible to familiarize himself with all aspects of the existing conditions prior to submitting a bid. By submitting his bid, the Contractor acknowledges that he has visited the site and is aware of the conditions involved in meeting the project's intent. Requests for access to the site shall be directed to Brian Hubbard, Building Maintainer, at 203-994-0347 **during normal business hours (8:00 AM to 4:00 PM)**. Technical questions regarding the project's intent shall be directed to the project engineer, The DiSalvo Engineering Group, at 203-490-4140. Specific questions regarding bid procedures shall be directed to Jacob Muller, Purchasing Director, at 203-431-2720.

It is the Contractor's responsibility to determine the exact amount of effort required to meet the project's intent and reflect that effort in his submitted bid. **The Contractor shall submit on his letterhead the total lump sum cost for completing the project and any other costs necessary to meet the project's intent.** In addition to the lump sum cost, the contractor shall note his proposed work schedule, all work to be completed and any exceptions that the Contractor may have. The contract award will be based on the lowest total lump sum cost bid that meets the project's intent and the contractor's specific experience in municipal and commercial installations of this type and past work experience with the Town of Ridgefield.

The Town reserves the right to eliminate any item, quantity, or portion of the work that it deems to be in the best interest of the Town.

Any inconsistencies shall be reported to the Jacob Muller, Director of Facilities. The Director of Facilities shall make the final decision on any inconsistencies and their intent.

All work must be completed within 60 days from the date of contract award. The Contractor shall submit with his bid the following information:

- a. Insurance certificates

- b. Hold Harmless Agreement
- c. Copy of the Contractor's Home Improvement license.
- d. Contractor's Qualification Statement
- e. Contractor's List of Subcontractors
- f. The Contractor's Bid Proposal on his letterhead
- g. Project Schedule



Highway Department, Garage 1 Exterior



Highway Department, Garage 1 Interior



Excavated and Backfilled Floor Area

Appendix A

Concrete

A 1.1 Cement

Portland cement shall conform to the Standard Specifications of ASTM Designation C150, latest revision, Type I or Type II cement. A well-known, acceptable manufacturer shall make it and the product of more than one plant shall be used on the work. Cement shall be stored and handled in such a manner as to prevent deterioration or the intrusion of foreign matter. Any material which has deteriorated or which has been damaged shall not be used for concrete.

A 1.2 Aggregates

Aggregates shall conform to ASTM Designation C33, latest revision. Coarse aggregate shall be size No. 67, nominal three-quarter inch (3/4") ~~to~~ No. 4, unless permitted otherwise by the Engineer. The Contractor shall obtain the services of an approved commercial testing laboratory to sample and test the aggregates to insure compliance with the above specification and shall submit the test results to the Engineer for approval before beginning work. Acceptance of samples shall not be considered as a guarantee of acceptance of all materials from the source and it shall be understood that any aggregates, which do not meet with requirements of these specifications, may be rejected at any time.

A 1.3 Admixtures

Admixtures other than an air-entraining admixture shall not be used without the written approval of the Engineer. Air entraining admixtures shall be used and shall be Sika AER, or approved equal, conforming to ASTM Designation C260. The air content of the concrete with three-quarter inch (3/4") maximum size aggregate shall be six per cent (6%), plus or minus one per cent (1%) by volume. The Contractor shall provide the equipment and all necessary assistance for calculating the air content in conformity with the requirements of "Test for Air Content of Freshly Mixed Concrete by the Pressure Method", ASTM Designation C231.

A 1.4 Water

Water used in mixing concrete shall be clean and free from injurious amounts of oils, acids, alkalies, organic materials, salts, or other substances that may be deleterious to concrete or steel.

A 1.5 Storing and Handling Aggregates

All materials used for concrete must be kept clean and free from all foreign matter during transportation and handling and kept separate until measured and placed in the mixer. Bins or platforms having hard, clean surfaces shall be provided for storage. Suitable means shall be taken during hauling, piling, and handling to prevent segregation of the coarse and fine particles of the aggregate to such a degree as to disturb the grading.

A 1.6 Measuring Materials

The proportions of cement and fine and coarse aggregate for each batch of concrete shall be determined by weight. Equipment for measurement of the amount of water used in each mix shall be readily adjustable and capable of measuring water in variable amounts within a tolerance of one percent (1%).

All equipment for measuring and accurately controlling the quantities of materials shall be of approved design and shall be tested before they are used. Tests shall be made of moisture content of aggregates and allowance shall be made for the variations in moisture content as required.

A 1.7 Proportions

Proportions of materials in the concrete and strength of concrete shall be approved by the Engineer and shall be subject to the following limitations:

<u>Class</u>	<u>Minimum 28-day Compressive Strength psi</u>	<u>Maximum Net Water Content Gals. per Sacks Cement</u>	<u>Minimum Cement Contents Sacks Per Cubic Yard</u>
A	3,500	54	6.5

Prior to the beginning of concrete work, the Contractor shall submit a statement of the proportions of the cement, fine aggregate, coarse aggregate and water, and the gradations of the fine and coarse aggregates he proposes to use for approval. He shall have standard test cylinders made and tested by an approved testing laboratory. Laboratory test reports shall show sources of materials, proportions of each material, including water, used in the test mix, consistency, and the results of 7-day and 28-day compressive strength tests. The exact proportions of materials used in the work shall be subject to the approval of the Engineer and shall not be changed without his approval. Slump test shall be made from time to time during the progress of the work.

A 1.8 Slump Control

Class A concrete shall be furnished and placed at a slump of from two inches (2") to four inches (4") for slabs and walls respectively.

A 1.9 Slump Tests and Test Cylinders

The Contractor shall be responsible for and shall provide all labor, materials, tools, and equipment necessary for making slump tests and standard compression test cylinders as the work progresses, all at the direction of the Engineer, who shall be the sole judge of the number of tests and cylinders required.

The Contractor shall furnish all necessary materials for the tests, including standard slump cones and molds for concrete test cylinders in conformance with ASTM Standard C470, latest revision. The Contractor shall provide proper storage for the cylinders.

Standard test cylinders shall be made, stored, and cured in accordance with "Standard Method of Making and Curing Concrete Compression and Flexure Test Specimens in the Field", ASTM Designation C31, latest revision. A standard sample shall consist of six (6) test cylinders, three (3) of which normally shall be broken at seven (7) days and three (3) of which shall be broken at 28 days. Not less than one (1) standard sample shall be made for each fifty (50) cubic yards, or fraction thereof, of concrete placed in any one (1) day.

The Contractor shall provide the services of an approved testing laboratory to test the cylinders.

The Contractor in accordance with ASTM Designation C143, latest revision, shall make slump tests.

If tests do not show satisfactory results, the mix shall be adjusted as directed. Concrete which does not meet the strength requirements is subject to rejection and removal from the work or to such other corrective measures as are directed by the Engineer to make the work acceptable, all at the expense of the Contractor.

A 1.10 Tests by Approved Laboratory

Compression strength tests of cylinders shall conform to "Test for Compressive Strength of Molded Concrete Cylinders", ASTM Designation C39, latest revision.

The cost of all testing work shall be borne by the Contractor. The testing laboratory shall submit certified copies of the test results in duplicate directly to the Engineer and the Contractor within twenty-four (24) hours after tests are made.

A 1.11 Mixing

An approved rotation type batch machine shall mix concrete except where hand mixing of very small quantities may be permitted. The arrangements shall provide for the correct weight of each ingredient before placing in the mixer and the introduction of a measured

quantity of water at any stage in the process. The quantity of ingredients to be mixed in each batch shall be governed by the size of the concrete mixer and shall not exceed the rated capacity specified for the mixer by the manufacturer. Unless otherwise permitted, the quantities shall be such as to require a whole number of bags of cement.

Mixing shall be thorough and all materials for each batch shall be mixed together at least two (2) minutes while the drum revolves at the proper speed.

A 1.12 Transporting Concrete

The concrete shall be transported and placed in the work not more than forty-five (45) minutes after the water is added to the dry ingredients. Care shall be taken to avoid spilling and separation of the mixture. No concrete in which ingredients have become separated shall be placed in the work. Retempering of partially set concrete will not be permitted. Suitable and approved equipment for transporting of concrete from mixer to forms shall be used.

A 1.13 Transit Mixed Concrete

If the Contractor desires to use transit mixed concrete, he shall submit full information as to the physical capability of the mixing plant and trucking facilities which are available and the estimated average amount which can be produced and delivered to the job site during a normal eight (8) hour day, excluding the output to other customers, for approval. The number of yards of concrete placed daily' will depend on the ability of the plant to deliver concrete to the site and is subject to the approval of the Engineer. The concrete shall be in accordance with the "Specification for Ready Mix Concrete", ASTM Designation C94, as amended, and all applicable requirements of this Item.

The Engineer shall have access to the mixing plant at all times. The concrete shall be mixed in revolving drum-type truck mixers, which are in good condition and which produce thoroughly mixed concrete of the specified consistency and strength. Loads shall not exceed the proper capacity of the mixer.

Concrete shall be mixed for a minimum of one and one-half (1-1/2) minutes after it arrives at the job site, or as recommended by the mixer manufacturer. The drum shall not mix while in transit. Mixing shall be continuous at proper speed until the concrete is discharged. Concrete shall be discharged from the mixer within one (1) hour after water is added to the mix and shall have a maximum slump from two inches (2") to four inches (4").

Adequate facilities shall be available for continuous delivery of concrete at the required rates. Concrete which does not meet the requirements of this specification will be rejected.

A 1.14 Placing Concrete

Immediately before placing concrete, the forms shall be thoroughly cleaned and wet and the space to be occupied by concrete shall be free from all dirt, chips, and foreign material. The concrete shall be carried up level along the whole length of the section under construction and shall be so placed so as to avoid rehandling within the forms. Concrete shall be compacted by means of approved internal vibrators to produce dense, homogeneous concrete without pockets or voids. Vibrators shall not be used to move the concrete along the form.

When fresh and previously placed concrete masonry are jointed, immediately before placing fresh concrete, the contact surface of the old concrete shall be thoroughly cleaned using a stiff brush or other tools and a stream of water under pressure. The surface shall be clean and wet but free from pools of water at the moment the fresh concrete is placed. Any laitance, waste mortar, or other substance, which will prevent complete adhesion, will be removed. A one-inch (1") thick coat of mortar of similar proportions to the mortar in the concrete shall be placed over the contact surface of the old concrete and the fresh concrete shall be placed before the mortar has attained its initial set. No concrete shall be placed when the Engineer is not present.

A 1.15 Weather Conditions and at Night

Concrete placement during the cold and hot weather and at night shall conform to the following requirements.

Cold Weather: All methods and materials used for winter concreting shall be in accordance with the requirements of "Recommended Practice for Winter Concreting", ACI 306, latest revision, and shall be subject to the approval of the Engineer. Plans to protect fresh concrete from freezing and to maintain temperatures not less than the permissible minimum during the first seven (7) days after placing shall be made before the first frosts are to occur. The temperature of the concrete placed shall not be less than 55°F, nor greater than 85 F and a temperature of between 50°F and 70°F shall be maintained for at least seven (7) days after placing. Means shall be provided, if necessary, to insure that the ambient temperature shall not fall more than 300F in the twenty-four (24) hours following the seven (7) day period. Admixtures, except those approved by the engineer, shall not be used. The cost of all material furnished or required to protect against freezing shall be at the sole expense of the Contractor without extra charge therefore.

Hot Weather: All methods and materials used for hot weather concreting shall be in accordance with the requirements of "Recommended Practice for Hot Weather Concreting", ACI 305, latest revision, and shall be subject to the approval of the Engineer. Concrete deposited in hot weather shall have a placing temperature, which will not cause difficulty from loss of slump, flash set, or cold joints.

At Night: No concrete shall be placed at night without permission of the Engineer, and the Contractor shall give at least twelve (12) hours notice to the engineer if he wishes to place concrete at night.

A 1.16 Quality of Concrete Work

Concrete shall be placed solidly against the forms and elsewhere so as to leave no voids. Every precaution shall be taken to make all masonry solid, compact, watertight, and smooth and to prevent the formation of laitance and to avoid cold joints. If for any reason the surfaces have voids or are unduly rough, or are in any way defective, such masonry shall be cut out to the extent ordered or permitted and shall be repaired to the satisfaction of the Engineer. The cost of all repairs shall be borne by the Contractor. No thin patches or plastering will be accepted.

Any concrete that is defective, which, in the opinion of the Engineer, cannot be properly repaired as described above, shall be removed and replaced at the expense of the Contractor.

- GENERAL NOTES:**
- 1 THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE STRUCTURAL WORK ASSOCIATED WITH THE REPLACEMENT OF A PORTION OF THE CONCRETE SLAB ON GRADE IN THE RIDGEFIELD HIGHWAY DEPARTMENT BUILDING NO. 1, 60 SOUTH ST., RIDGEFIELD, CT.
 - 2 THE WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 2005 CONNECTICUT STATE BUILDING CODE WHICH IS THE 2003 INTERNATIONAL BUILDING CODE AS AMENDED, ALTERED OR DELETED BY THE PROVISIONS OF THE 2005 CONNECTICUT SUPPLEMENT AND THE 2009 AMENDMENTS.
 - 3 THE STRUCTURAL COMPONENTS HAVE BEEN DESIGNED FOR THE FOLLOWING LOADS:
FLOOR LIVE LOAD: 125 PSF
VEHICLE STORAGE BAYS
OTHER LOADS:
CONCENTRATED (WHEEL) LOADS: AXLE LOAD = 32,000 LBS.
 - 4 THIS STRUCTURE HAS BEEN DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE WORK SHOWN ON THESE DRAWINGS HAS BEEN COMPLETED. THE STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS RESPONSIBILITY EXTENDS TO ALL RELATED ASPECTS OF THE CONSTRUCTION ACTIVITY INCLUDING, BUT NOT LIMITED TO, ERECTION METHODS, ERECTION SEQUENCE, TEMPORARY BRACING, FORMS, SHORING, USE OF EQUIPMENT, AND SIMILAR CONSTRUCTION PROCEDURES. REVIEW OF THE CONSTRUCTION BY THE ENGINEER IS FOR CONFORMANCE WITH DESIGN ASPECTS ONLY, NOT TO REVIEW THE CONTRACTOR'S CONSTRUCTION PROCEDURES. LACK OF COMMENT ON THE PART OF THE ENGINEER WITH REGARD TO CONSTRUCTION PROCEDURES IS NOT TO BE INTERPRETED AS APPROVAL OF THOSE PROCEDURES.
 - 5 JOBSITE SAFETY AND CONSTRUCTION PROCEDURES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. REVIEW OF THE CONSTRUCTION BY THE ENGINEER IS FOR CONFORMANCE WITH DESIGN ASPECTS ONLY, NOT TO REVIEW THE CONTRACTOR'S PROVISIONS FOR JOB SITE SAFETY. LACK OF COMMENT BY THE ENGINEER IS NOT TO BE INTERPRETED AS APPROVAL OF THOSE ASPECTS OF WORK.
 - 6 TESTING AND INSPECTION OF CONCRETE AND STEEL REINFORCING BARS ARE DESCRIBED IN THE QUALITY CONTROL SECTION OF THESE NOTES. THE CONTRACTOR SHALL REVIEW THE QUALITY CONTROL SECTION AND COORDINATE THE SCHEDULING OF INSPECTIONS WITH THE TESTING AND INSPECTIONS AGENCY AND THE ENGINEER. UNSPECTED WORK THAT REQUIRED INSPECTIONS MAY BE REJECTED SOLELY ON THAT BASIS.
 - 7 THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.
 - 8 DO NOT SCALE DRAWINGS.

SPECIAL NOTES TO THE CONTRACTOR

- 1 CONTRACTORS MUST REVIEW THE WORK AREA PRIOR TO SUBMITTING CONSTRUCTION PROPOSALS TO DETERMINE THE FULL SCOPE OF WORK INVOLVED. THE DRAWINGS MAY NOT SHOW ALL PIPING, CONDUTITS, EQUIPMENT, AND FIXTURES THAT MAY HAVE TO BE RE-ROUTED OR TEMPORARILY DISLOCATED TO PERFORM THE STRUCTURAL WORK SHOWN.
- 2 THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND ELEVATIONS OF THE EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.
- 3 THE SCHEDULING OF ALL PHASES OF THE WORK, INCLUDING ANY TEMPORARY SERVICE OUTAGES, SHALL BE COORDINATED WITH THE OWNER'S DESIGNATED ON-SITE REPRESENTATIVE.
- 4 BEFORE ANY WORK IS STARTED, THE WORK AREA MUST BE SECURELY DUST-PROOFED.
- 5 ALL FINISHES OR MATERIALS DAMAGED IN THE PERFORMANCE OF THE WORK SHALL BE RESTORED TO ORIGINAL CONDITION. TEMPORARILY RELOCATED UTILITIES OR EQUIPMENT SHALL BE PUT BACK IN PROPER POSITION.
- 6 AT THE COMPLETION OF THE WORK, ALL TEMPORARY DUST-PROOFING AND CONSTRUCTION DEBRIS IS TO BE REMOVED, AND THE AREA LEFT IN A CLEAN AND NEAT MANNER.]

DEMOLITION NOTES

- 1 CONDUCT DEMOLITION AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- 2 DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER.
- 3 CONDUCT DEMOLITION TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA.
- 4 PROVIDE AND MAINTAIN SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION TO REMAIN.
- 5 REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- 6 CLEAN ADJACENT AREAS OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF DEMOLITION.

FOUNDATION NOTES:

- 1 IN AREAS REQUIRING FILL, THE FILL MATERIAL SHALL BE A UNIFORMLY GRADED MIXTURE OF SAND AND GRAVEL WEIGHING NO LESS THAN 120 PCF DRY DENSITY AFTER COMPACTION IN PLACE. THIS MIXTURE SHALL BE UNIFORMLY GRADED HAVING NO STONE GREATER THAN 3 INCHES IN ANY ONE DIMENSION, WITH NO MORE THAN 90 PERCENT BY WEIGHT PASSING A 1-1/2-INCH SIEVE, AND WITH LESS THAN 12 PERCENT BY WEIGHT, PASSING A NO. 200 SIEVE. A SOILS TESTING LAB, HIRED BY THE OWNER, SHALL TEST EACH ON-SITE OR BORROW SOIL MATERIAL PROPOSED FOR BACKFILL FOR CLASSIFICATION ACCORDING TO ASTM D 2487 AND FOR LABORATORY COMPACTION CURVE ACCORDING TO ASTM D 1557. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH BACKFILL LAYER BEFORE COMPACTION TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT. THE FILL MATERIAL SHALL BE PLACED IN MAXIMUM LIFTS OF 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND IN MAXIMUM LIFTS OF 4 INCHES LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. EACH LIFT SHALL BE COMPACTED WITH APPROPRIATE EQUIPMENT TO A MINIMUM OF 95 PERCENT OF ITS MAXIMUM DENSITY AT OR NEAR OPTIMUM MOISTURE. NO LIFTS SHALL BE PLACED WHEN WEATHER CONDITIONS ARE SUCH THAT THE MOISTURE CONTENT OF THE FILL CANNOT BE PROPERLY CONTROLLED. IN PLACING AND COMPACTING FILL AND BACKFILL MATERIAL, DO NOT DAMAGE NOR DISPLACE CONCRETE WORK ALREADY IN PLACE BY CONTACT FROM COMPACTION MACHINERY, BY SUBJECTING IT TO OVERTURNING FROM HEAVY COMPACTION LOADINGS, OR ANY OTHER CAUSE. PLACE FILL AGAINST SUCH CONCRETE AT THE SAME RATE AS THE REMAINDER OF FILL, COMPACTING UNIFORMLY ON BOTH SIDES USING HAND-OPERATED TAMPERS. A SOILS TESTING LAB, HIRED BY THE OWNER, SHALL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 2922, AND ASTM D 2937 AS APPLICABLE. WHEN TEST REPORTS INDICATE THAT BACKFILLS HAVE NOT ACHIEVED THE DEGREE OF COMPACTION SPECIFIED, RECOMPACT AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
- 2 THE SLAB-ON-GRADE SUB-BASE SHALL BE A CRUSHER RUN STONE FREE FROM SOFT DISINTEGRATED PIECES, MUD, DIRT, OR OTHER INJURIOUS MATERIAL. THE MATERIAL SHALL HAVE NO STONE GREATER THAN 2 INCHES IN ANY ONE DIMENSION AND WITH LESS THAN 10 PERCENT BY WEIGHT PASSING A NO. 100 SIEVE.
- 3 SUBMITTALS TO THE ENGINEER ARE REQUIRED FOR STRUCTURAL FILL, AND SLAB SUB-BASE.

CONCRETE NOTES:

- 1 ALL CONCRETE WORK SHALL CONFORM TO ALL THE REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE IN BUILDINGS" AND ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", AS SPECIFIED IN THE CODE REFERENCE SECTION OF THESE GENERAL NOTES.
- 2 CONCRETE FOR SLABS-ON-GRADE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 3/4", A MINIMUM CEMENT CONTENT OF 560 LBS/CU YD., AND A MAXIMUM SLUMP OF 4 INCHES.
- 3 ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE LATEST ACI CODE AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".
- 4 CONCRETE DESIGN MIX WILL BE SUBMITTED TO THE ENGINEER FOR REVIEW, TOGETHER WITH LABORATORY REPORTS ATTESTING THAT THE MIXES CAN ATTAIN THE MINIMUM STRENGTH REQUIRED IN ACCORDANCE WITH ACI 301 INDICATED ABOVE.
- 5 PORTLAND CEMENT SHALL BE TYPE I OR TYPE II AND CONFORM TO ASTM C150.

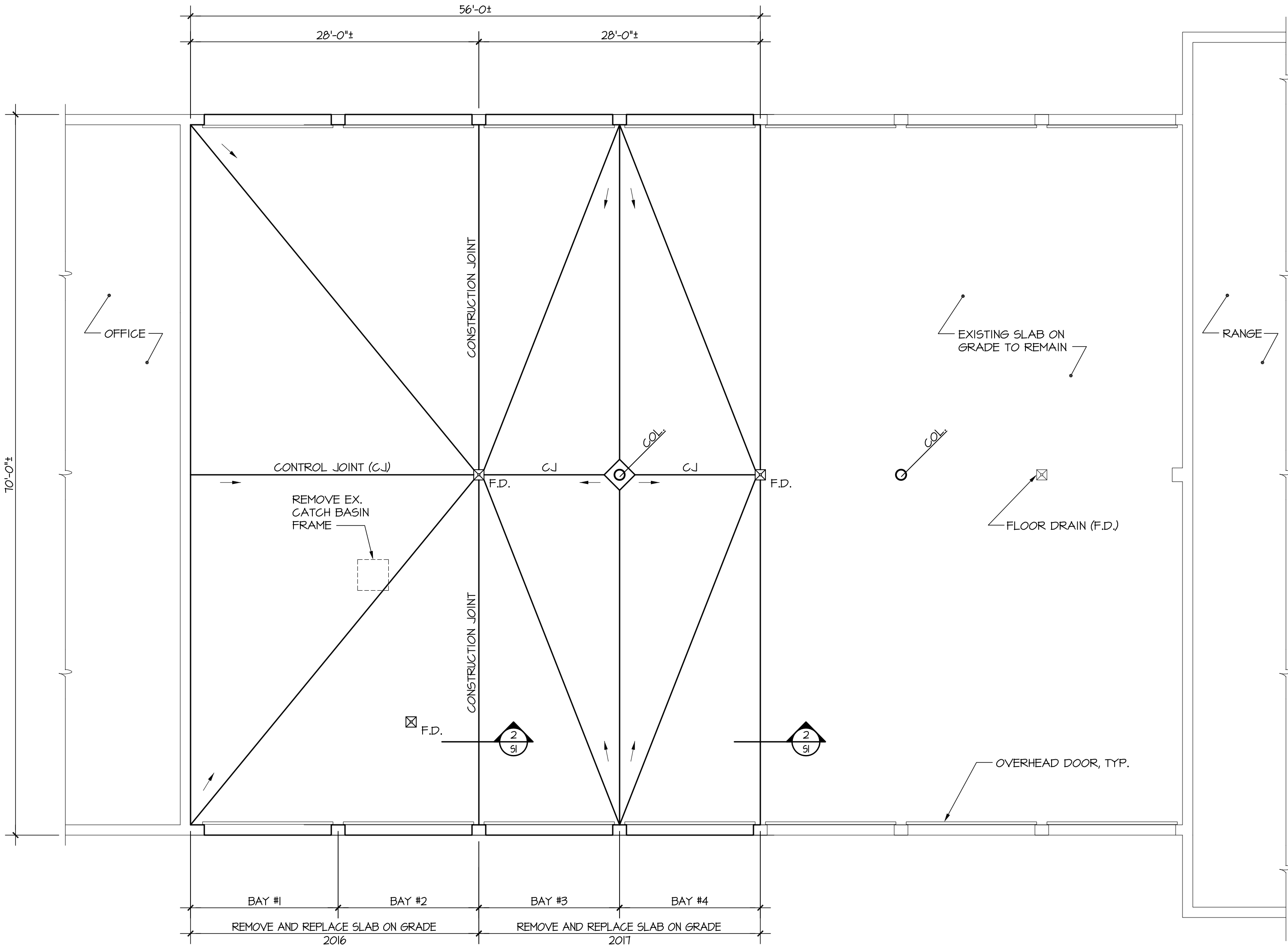
- 6 OTHER CEMENTITIOUS MATERIAL SUCH AS FLYASH OR GROUND GRANULATED BLAST- FURNACE SLAG MAY BE BLENDED WITH CEMENT FOR USE IN THE CONCRETE MIX. FLYASH SHALL CONFORM TO ASTM C618 AND MAY REPLACE CEMENT IF THE FOLLOWING RANGES FOR THE 2 CLASSES OF FLYASH; CLASS C, 20 TO 35%; CLASS F, 15 TO 25%. GROUND GRANULATED BLAST- FURNACE SLAG SHALL CONFORM TO ASTM C989 AND MAY NOT EXCEED 50% OF TOTAL WEIGHT OF CEMENTITIOUS MATERIALS.
- 7 COARSE AGGREGATE SHALL BE 3/4" AND CONFORM TO ASTM C33.
- 8 NO ADMIXTURES ARE PERMITTED WITHOUT THE ENGINEERS WRITTEN PERMISSION OTHER THAN ENTRAINED AIR. CONCRETE EXPOSED TO THE WEATHER, SUCH AS THAT USED IN FOUNDATION WALLS, SHALL CONTAIN 5% + 1% ENTRAINED AIR. DO NOT USE AIR ENTRAINMENT ADMIXTURE FOR INTERIOR NORMALWEIGHT CONCRETE SLABS.
- 9 LIMIT WATER-SOLUBLE, CHLORIDE-ION CONTENT IN HARDENED CONCRETE TO 0.15 PERCENT BY WEIGHT OF CEMENT.
- 10 REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60.
- 11 WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WITH A MINIMUM YIELD STRENGTH OF 75 KSI. LAP ONE MESH SIZE AT SIDES AND ENDS, AND WIRE TOGETHER.
- 12 VAPOR BARRIER SHALL BE STEGO WRAP (15 MIL) VAPOR BARRIER BY STEGO INDUSTRIES LLC AND SHALL HAVE A WATER VAPOR PERMEANCE AFTER CONDITIONING (ASTM E 1745, PARAGRAPHS 7.1.2 - 7.1.5) THAT IS LESS THAN 0.01 PERMS AND MEETS THE REQUIREMENTS OF CLASS A. PLACE AS PER ASTM E 1843 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 13 THE INSTALLATION OF SLABS SHALL CONFORM TO THE REQUIREMENTS OF ACI 302.1R, "GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION". INTERIOR FINISH SLAB SURFACES ARE TO HAVE A STEEL TROWEL FINISH.
- 14 EXPANSION AND ISOLATION-JOINTS:
FILLER STRIPS: ASTM D 1751, ASPHALT-SATURATED CELLULOSE FIBER OR ASTM D 1752, CORK OR SELF EXPANDING CORK
SEALANT AT TOP OF JOINT: SIKAFLEX 2C SL POLY URETHANE ELASTOMERIC SEALANT. PROVIDE CAP TO SEPARATE SEALANT FROM FILLER
SEALANT AT CONTROL JOINTS: SIKADUR 51 SL FLEXIBLE EPOXY CONTROL JOINT RESIN.
- 15 THE CURING AND PROTECTION OF CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318 AND ACI 308R, "GUIDE TO CURING CONCRETE". CONCRETE, SLABS SHALL BE PROTECTED FROM LOSS OF SURFACE MOISTURE FOR NOT LESS THAN 7 DAYS USING A CURING COMPOUND CONFORMING TO ASTM C309 OR CONSTANTLY WETTED BURLAP. CURING COMPOUNDS SHALL BE COMPATIBLE WITH ANY INTENDED FLOORING OVERLAY. DO NOT INSTALL FINISH FLOORING UNTIL SLAB HAS ADEQUATELY DRIED PER THE FLOORING MANUFACTURER'S SPECIFICATIONS.
- 16 CONCRETE SLABS SHALL BE TREATED WITH A CLEAR WATER REPELLANT PENETRATING SEALER SUCH AS HYDROZO ENVIROSEAL 40 AFTER THE CONCRETE HAS BEEN ALLOWED TO CURE FOR A MINIMUM OF 28 DAYS BUT BEFORE THE FIRST WINTER SEASON AND/OR THE EXPOSURE TO DE-ICING CHEMICALS, WHICHEVER COMES FIRST.
- 17 COLD WEATHER CONCRETE PLACEMENT: IF COLD WEATHER CONCRETING CONDITIONS EXIST AS DEFINED BY A PERIOD OF MORE THAN THREE DAYS WHEN THE AVERAGE OUTDOOR TEMPERATURE, (HIGH + LOW)/2, IS LESS THAN 40 DEG. F. THE PROCEDURES OUTLINED IN ACI 306.1, "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING" AND ACI 306R, "GUIDE TO COLD WEATHER CONCRETING" SHALL BE UTILIZED.
- 18 HOT WEATHER CONCRETE PLACEMENT: MAINTAIN CONCRETE TEMPERATURE BELOW 90 DEG. F. AT TIME OF PLACEMENT AND COMPLY WITH ACI 301 AND ACI 305R, "GUIDE TO HOT WEATHER CONCRETING".
- 19 ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. LOCATE AND SUPPORT REINFORCEMENT WITH BAR SUPPORTS TO MAINTAIN MINIMUM CONCRETE COVER. DO NOT TACK WELD CROSSING REINFORCING BARS. PROVIDE BAR SUPPORTS AS FOLLOWS:
BOLSTERS, CHAIRS, SPACERS, AND OTHER DEVICES FOR SPACING, SUPPORTING, AND FASTENING REINFORCING BARS AND WELDED WIRE REINFORCEMENT IN PLACE. MANUFACTURE BAR SUPPORTS FROM STEEL WIRE, PLASTIC, OR PRECAST CONCRETE ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE," OF GREATER COMPRESSIVE STRENGTH THAN CONCRETE
- 20 SUBMITTALS TO THE ENGINEER ARE REQUIRED FOR CONCRETE MIX DESIGNS, CEMENT, REINFORCING BARS, ADMIXTURES, AND AGGREGATES.

CODES REFERENCES

- 1 CONCRETE:
CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF:
ACI 301-05, "SPECIFICATIONS FOR STRUCTURAL CONCRETE IN BUILDINGS" AND
ACI 318-02, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

QUALITY CONTROL

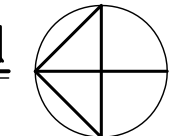
- 1 GENERAL:
A THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING AND INSPECTION AGENCY TO PERFORM THE TESTS AND INSPECTIONS INDICATED UNDER THIS QUALITY CONTROL SECTION. REPORTS SHALL BE SUBMITTED TO THE ARCHITECT, ENGINEER AND OWNER IN A TIMELY MANNER.
B THE CONTRACTOR SHALL NOTIFY IN A TIMELY MANNER THE TESTING AND INSPECTION AGENCY AND THE ENGINEER TO SCHEDULE FIELD INSPECTIONS.
- 2 SOILS:
A PRIOR TO PLACEMENT OF THE PREPARED FILL, the testing agency's professional geotechnical engineer SHALL DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. INSPECT SOILS CONSISTENCY WITH THE CONTRACT DOCUMENTS.
B DURING PLACEMENT AND COMPACTION OF THE FILL MATERIAL, the testing agency's professional geotechnical engineer SHALL DETERMINE THAT THE MATERIAL BEING USED AND THE MAXIMUM LIFT THICKNESS COMPLY WITH THE CONTRACT DOCUMENTS. VERIFY EXTENT AND SLOPE OF FILL PLACEMENT.
C PERFORM SIEVE TESTS AND MODIFIED PROCTOR TESTS OF EACH SOURCE OF FILL MATERIAL. THROUGH TESTING, VERIFY THAT THE COMPACTED FILL TO BE USED UNDER FOOTINGS AND UNDER SLABS COMPLIES WITH THE CONTRACT DOCUMENTS.
D REVIEW THAT THE IN-PLACE DENSITY OF THE COMPACTED FILL COMPLIES WITH CONTRACT DOCUMENTS.
- 3 CONCRETE:
A REINFORCING: INSPECT 50% OF INSTALLED REINFORCING BARS.
B CONDUCT STRENGTH TESTS IN ACCORDANCE WITH THE FOLLOWING PROCEDURES: (A STRENGTH TEST CONSISTS OF FOUR CONCRETE CYLINDERS)
I MAKE ONE STRENGTH TEST FOR EACH 50 CUBIC YARDS OR FRACTION THEREOF FROM EACH MIX DESIGN OF CONCRETE PLACED IN ANY ONE DAY, EXCEPT THAT IN NO CASE SHALL A GIVEN MIX DESIGN BE REPRESENTED BY LESS THAN FIVE TESTS
II SECURE COMPOSITE SAMPLES IN ACCORDANCE WITH "METHOD OF SAMPLING FRESH CONCRETE" (ASTM C 172). EACH STRENGTH TEST SHALL BE OBTAINED FROM A DIFFERENT BATCH OF CONCRETE ON A REPRESENTATIVE, TRULY RANDOM BASIS. WHEN PUMPING OR PNEUMATIC EQUIPMENT IS USED, SAMPLES SHALL BE TAKEN AT THE DISCHARGE END.
III MOLD FOUR SPECIMENS FROM EACH SAMPLE IN ACCORDANCE WITH "METHOD OF MAKING AND CURING CONCRETE COMPRESSION AND FLEXURE SPECIMENS IN THE FIELD" (ASTM C 31), AND CURE UNDER STANDARD MOISTURE AND TEMPERATURE CONDITIONS, IN ACCORDANCE WITH SECTION 7(A) AND 7(B) OF THE ABOVE ASTM METHOD.
IV DETERMINE SLUMP OF THE CONCRETE SAMPLE FOR EACH STRENGTH TEST AND WHENEVER CONSISTENCY OF CONCRETE APPEARS TO VARY USING "METHOD OF TEST OF SLUMP OF PORTLAND CEMENT CONCRETE" (ASTM C 143).
V DETERMINE AIR CONTENT OF NORMAL WEIGHT CONCRETE SAMPLE FOR EACH STRENGTH TEST IN ACCORDANCE WITH EITHER "METHOD OF TEST FOR AIR CONTENT OF FRESHLY MIXED CONCRETE BY PRESSURE METHOD " (ASTM C 231), "METHOD OF TEST FOR AIR CONTENT OF FRESHLY MIXED CONCRETE BY THE VOLUMETRIC METHOD" (ASTM C 173).
VI TEST THREE SPECIMENS: ONE AT SEVEN DAYS, AND TWO AT 28 DAYS IN ACCORDANCE WITH "METHOD OF TEST FOR COMPRESSIVE STRENGTH OF MOLDED CONCRETE CYLINDERS" (ASTM C 39). THE 28 DAY TEST RESULT SHALL BE THE AVERAGE OF THE TWO SPECIMENS. IF THE AVERAGE OF THE TWO SPECIMENS IS LESS THAN THE REQUIRED STRENGTH, TEST THE FOURTH SPECIMEN AT 45 DAYS. WHEN HIGH EARLY STRENGTH IS REQUIRED, TWO SPECIMENS SHALL BE TESTED AT SEVEN DAYS.
C CURING AND PROTECTION: PERIODICALLY REVIEW CURING TEMPERATURES AND PROTECTION TECHNIQUES, ALSO INSPECT HOT AND COLD WEATHER PROCEDURES AS APPLICABLE TO BE IN ACCORDANCE WITH ACI 305R (HOT WEATHER) AND ACI 306.1 (COLD WEATHER).



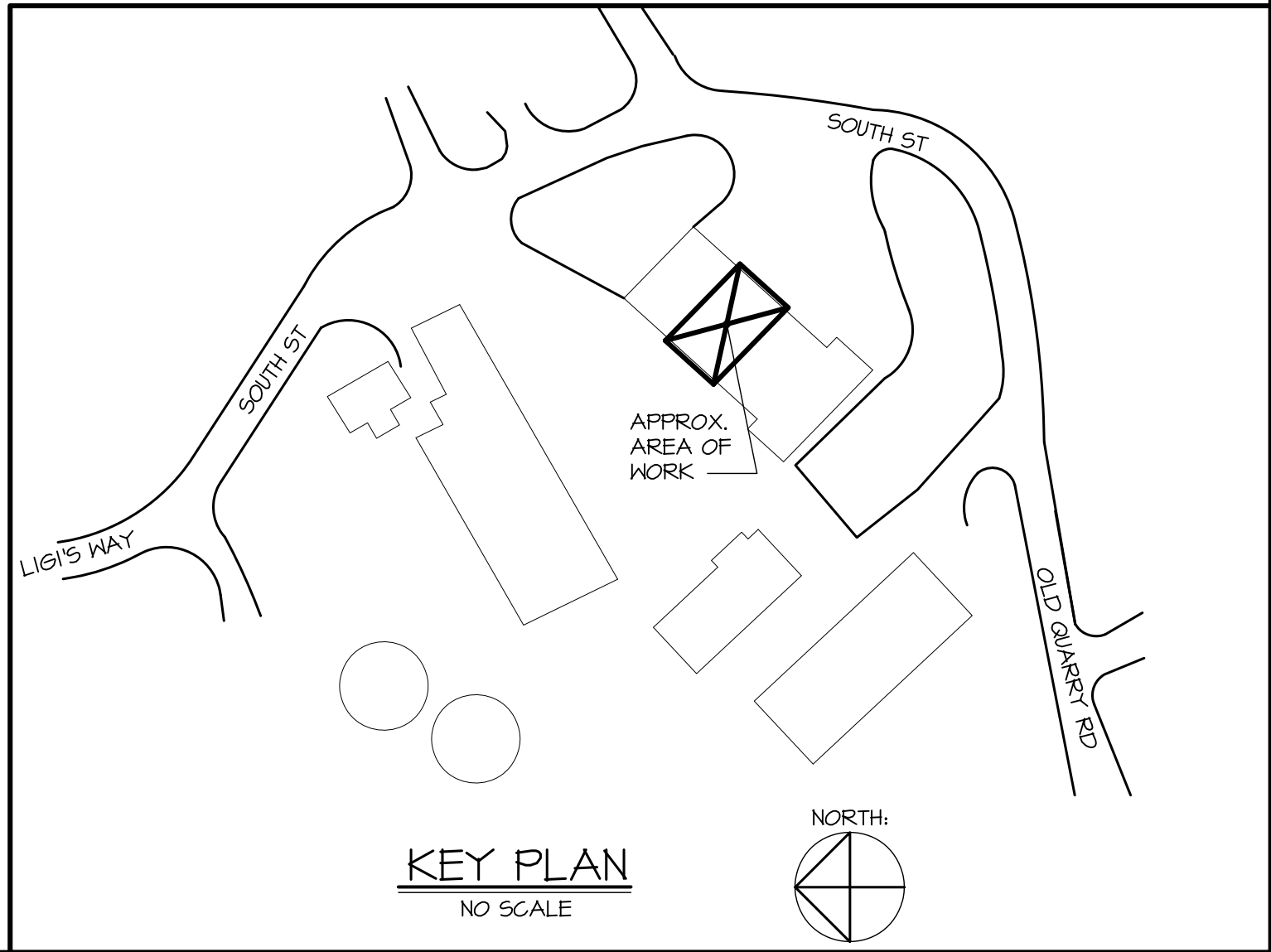
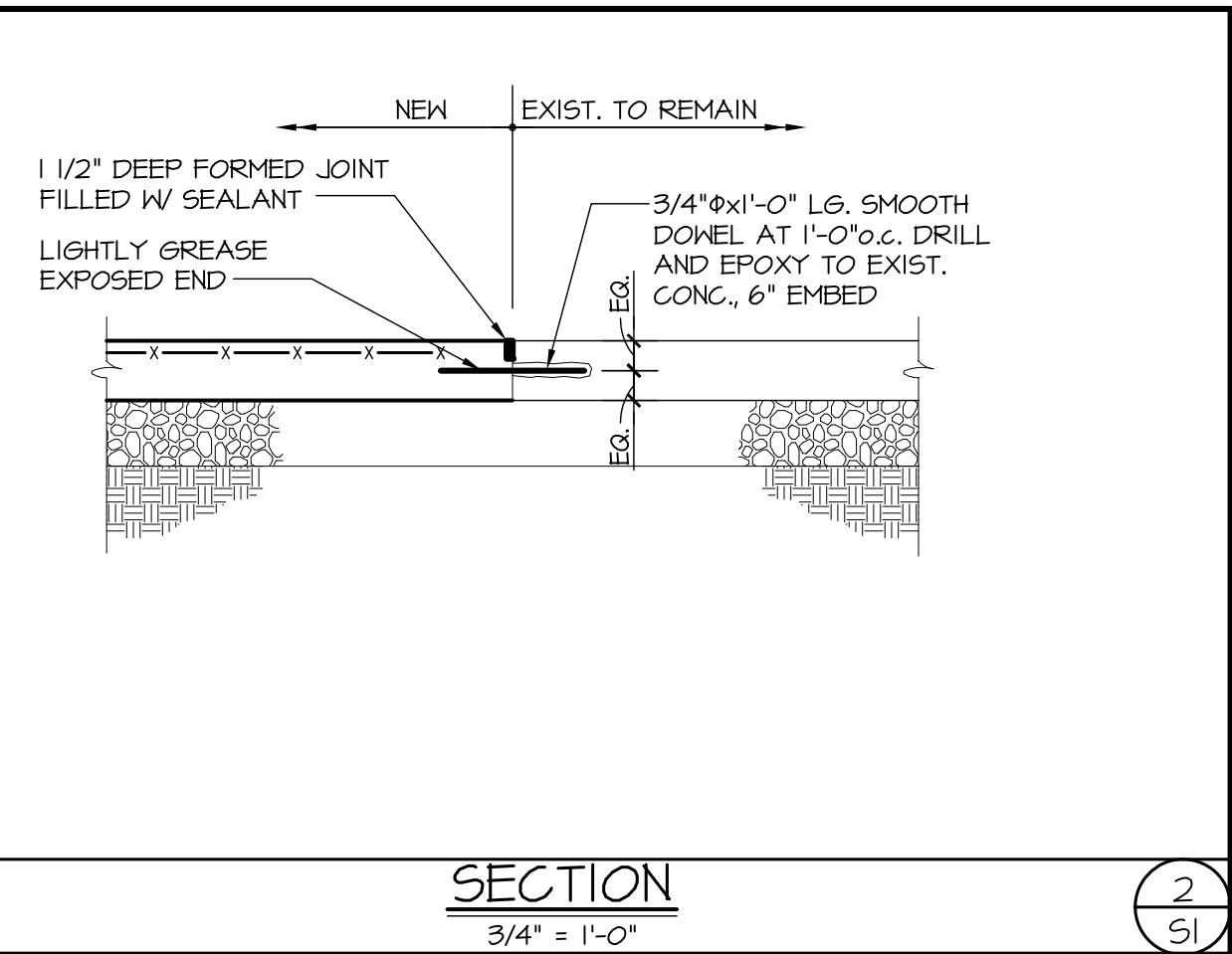
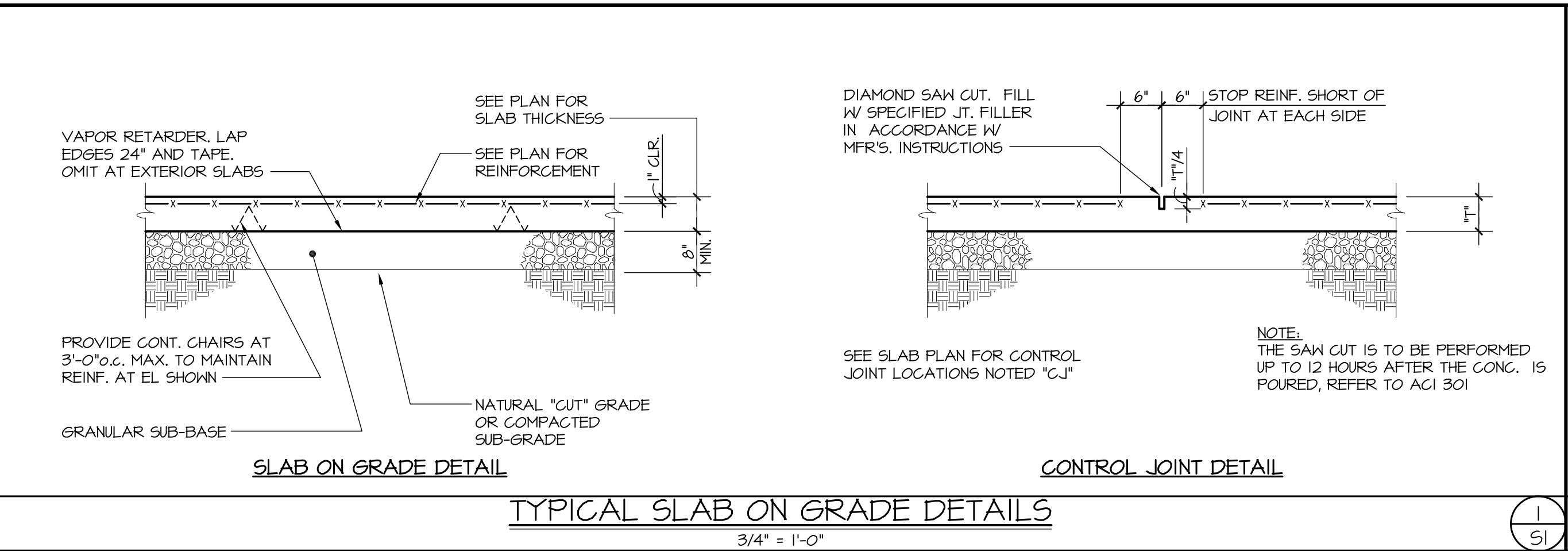
SLAB ON GRADE PLAN

1/8" = 1'-0"

PLAN NORTH:



- TOP OF CONCRETE SLAB ON GRADE ELEVATION SHALL MATCH SLAB ELEVATION AT EXISTING ADJACENT SLABS TO REMAIN AND EXTERIOR GRADES, UNLESS OTHERWISE NOTED. FIELD VERIFY EXISTING ELEVATIONS BEFORE PROCEEDING WITH ANY WORK.
- SLOPE NEW SLAB DOWN TO THE EXISTING FLOOR DRAINS, MAINTAIN THE FULL SLAB THICKNESS AT SLOPED AREAS.
- FLOOR CONSTRUCTION: 8" CONCRETE SLAB ON GRADE, REINFORCED WITH 6x6 - W2.9xW2.9 WELDED WIRE FABRIC. SEE "TYPICAL SLAB ON GRADE DETAILS".
- THE SUB-GRADE PREPARATION WITHIN THE PERIMETER OF THE NEW SLAB ON GRADE SHALL INCLUDE THE COMPLETE REMOVAL OF ALL UNSUITABLE FILL MATERIALS. PROOF COMPACT THE TOP OF THE REMAINING EXCAVATED SURFACE AND REPLACE THE REMOVED SOIL WITH COMPACTED GRANULAR FILL.
- SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.



No.	Date	Description

No.	Date	Description

The DiSalvo Engineering Group
Structural Engineers

83 Wooster Heights Road | Suite 200
Lee Farm Corporate Park | Danbury, CT 06810
(203) 490-4140 | www.tdeg.com

Seal

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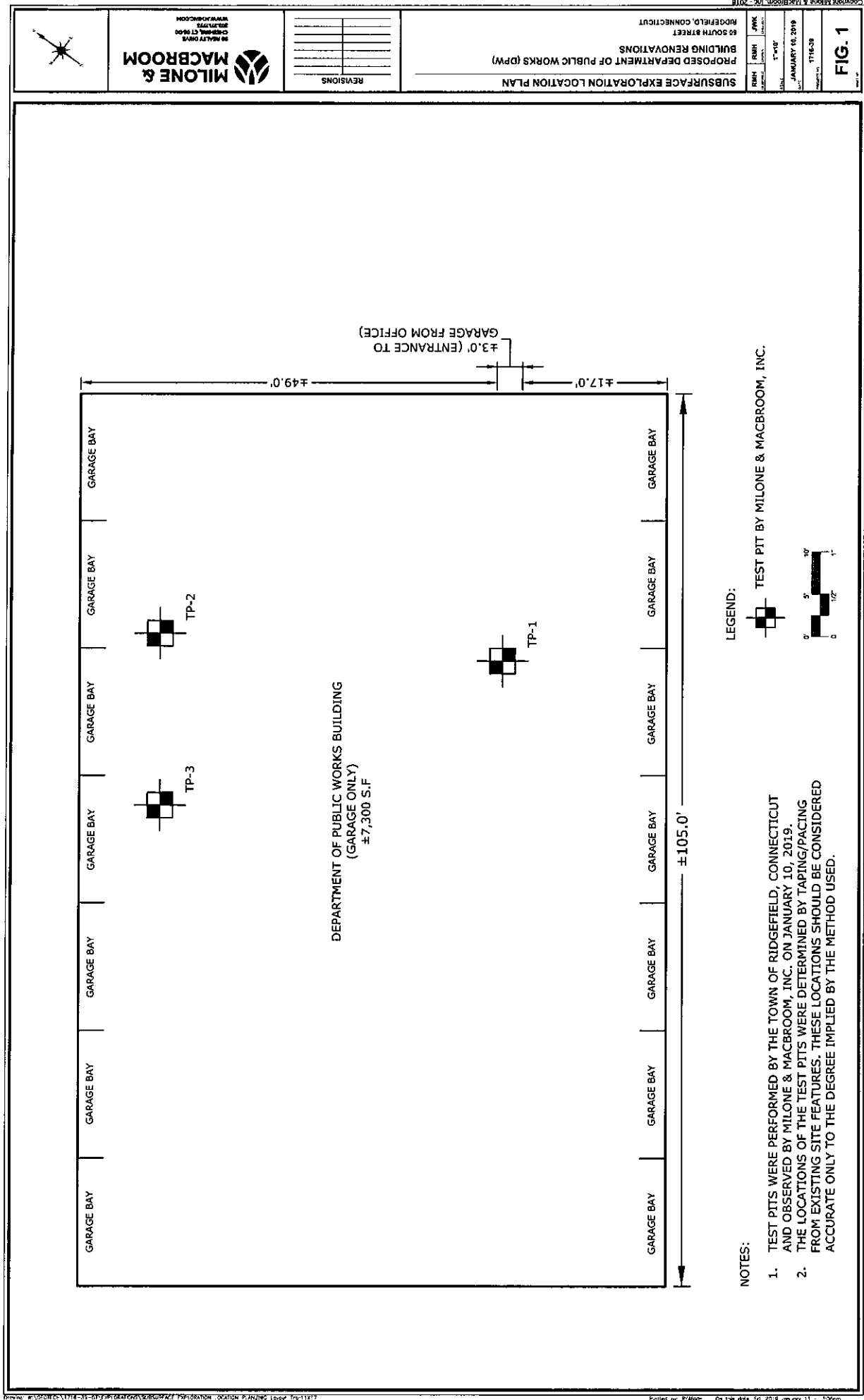
Slab on Grade Replacement Ridgefield Highway Dept. Building No. 1

60 South Street
Ridgefield, Connecticut


Drawing Title	Slab on Grade Plan
Scale	AS NOTED
Date	07/14/2016
Drawn By	JM
Checked By	BDR
Job Number	15243

Drawing Number

S1



TEST PIT LOG

 MILONE & MACBROOM 99 Realty Drive Cheshire, CT 06410 (203) 271-1773		PROJECT PROPOSED DEPARTMENT OF PUBLIC WORKS (DPW) BUILDING RENOVATIONS 60 SOUTH STREET, RIDGEFIELD, CONNECTICUT		Test Pit No: TP-1 Sheet: 1 of 1 MMI File No: 1716-39 Checked By: JWK																	
MMI Rep.: R. HENDERSON Exc. Contractor: TOWN OF RIDGEFIELD, CT Exc. Operator: D. FORD Weather: N/A		Make: JOHN DEERE Model: 85D Capacity: 0.5 CY Reach: ±15 FT.		Ground Elev: N/A Datum: N/A Date: JANUARY 10, 2019 Time Start: 8:00 A.M																	
Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Notes																
1	CONCRETE	Top 6": CONCRETE.	D		1																
2	FILL WITH ORGANICS	Brown-dark brown, fine to coarse SAND, some Silt, some Debris (brick, wooden logs, stumps, roots, plastic, etc.), little fine to coarse Gravel.	E	1B																	
3			E																		
4			E																		
5			E																		
6	SILTY SAND (SUBSOIL)	Brown, fine to coarse SAND, some Silt, little fine to coarse Gravel, trace Roots.	E	1A																	
7			E																		
8		Bottom of Exploration ±7.0'			2																
9					3																
10																					
11																					
12																					
13																					
14																					
15																					
16																					
Notes: 1. Separation fabric observed directly below concrete floor slab. 2. Refusal of excavation equipment due to the dimensions of the test pit. 3. Groundwater not encountered.			<u>Water Symbols</u>  = Groundwater																		
Test Pit Dimensions & Orientation 		<u>BOULDER COUNT</u> <table style="margin: auto;"> <tr> <th>Boulder</th> <th>Class</th> </tr> <tr> <td>12"-24"</td> <td>A</td> </tr> <tr> <td>24"-36"</td> <td>B</td> </tr> <tr> <td>>36"</td> <td>C</td> </tr> </table>	Boulder	Class	12"-24"	A	24"-36"	B	>36"	C	<u>PROPORTIONS USED</u> <table style="margin: auto;"> <tr> <td>< 10%</td> <td>Trace</td> </tr> <tr> <td>10-20%</td> <td>Little</td> </tr> <tr> <td>20-35%</td> <td>Some</td> </tr> <tr> <td>35-50%</td> <td>And</td> </tr> </table>	< 10%	Trace	10-20%	Little	20-35%	Some	35-50%	And	<u>EXCAVATION EFFORT</u> E = Easy M = Moderate D = Difficult	
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TEST PIT LOG



**MILONE &
MACBROOM**

99 Realty Drive
Cheshire, CT 06410
(203) 271-1773

PROJECT

PROPOSED DEPARTMENT OF PUBLIC WORKS (DPW) BUILDING
RENOVATIONS
60 SOUTH STREET, RIDGEFIELD, CONNECTICUT

Test Pit No: TP-2

Sheet: 1 of 1

MMI File No: 1716-39

Checked By: JWK

MMI Rep.: R. HENDERSON

Exc. Contractor: TOWN OF RIDGEFIELD, CT

Exc. Operator: D. FORD

Weather: N/A

Make: JOHN DEERE

Model: 85D

Capacity: 0.5 CY

Reach: ±15 FT.

Ground Elev: N/A

Datum: N/A

Date: JANUARY 10, 2019

Time Start: 9:50 AM

Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Notes
1	CONCRETE	Top 6": CONCRETE.	D		1
2	FILL	Brown, fine to coarse SAND, little Silt, little fine to coarse Gravel, little Debris (brick, plastic, roots, etc.).	E		
3			E		
4	FILL WITH ORGANICS	Dark brown, fine to medium SAND, some Silt, some Organics (Wooden logs, stumps, branches, roots, etc.), trace fine to coarse Gravel.	E		
5			E		
6	SILTY SAND (SUBSOIL)	Brown, fine to medium SAND, some Silt, trace fine Gravel, trace Roots.	E		
7			E		2
8					3
9					
10					
11					
12					
13					
14					
15					
16					

Notes: 1. Separation fabric observed directly below concrete floor slab.

2. Refusal of excavation equipment due to the dimensions of the test pit.

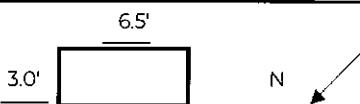
3. Groundwater not encountered.

Water Symbols



= Groundwater

Test Pit Dimensions
& Orientation



BOULDER COUNT

Boulder	Class
12"-24"	A
24"-36"	B
>36"	C

PROPORTIONS USED

< 10%	Trace
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20-35%	Some
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EXCAVATION EFFORT

E = Easy
M = Moderate
D = Difficult

TEST PIT LOG

MILONE & MACBROOM 99 Realty Drive Cheshire, CT 06410 (203) 271-1773		PROJECT PROPOSED DEPARTMENT OF PUBLIC WORKS (DPW) BUILDING RENOVATIONS 60 SOUTH STREET, RIDGEFIELD, CONNECTICUT		Test Pit No: TP-3 Sheet: 1 of 1 MMI File No: 1716-39 Checked By: JWK																	
MMI Rep.: R. HENDERSON Exc. Contractor: TOWN OF RIDGEFIELD, CT Exc. Operator: D. FORD Weather: N/A		Make: JOHN DEERE Model: 85D Capacity: 0.5 CY Reach: ±15 FT.		Ground Elev: N/A Datum: N/A Date: JANUARY 10, 2019 Time Start: 11:00 AM																	
Depth Below Grade (ft)	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Notes																
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