

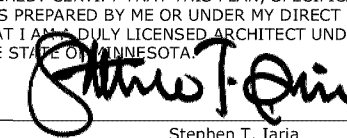
KOMA

ARCHITECTS | DESIGNERS | ENGINEERS

6115 CAHILL AVE, INVER GROVE HEIGHTS, MN 55076
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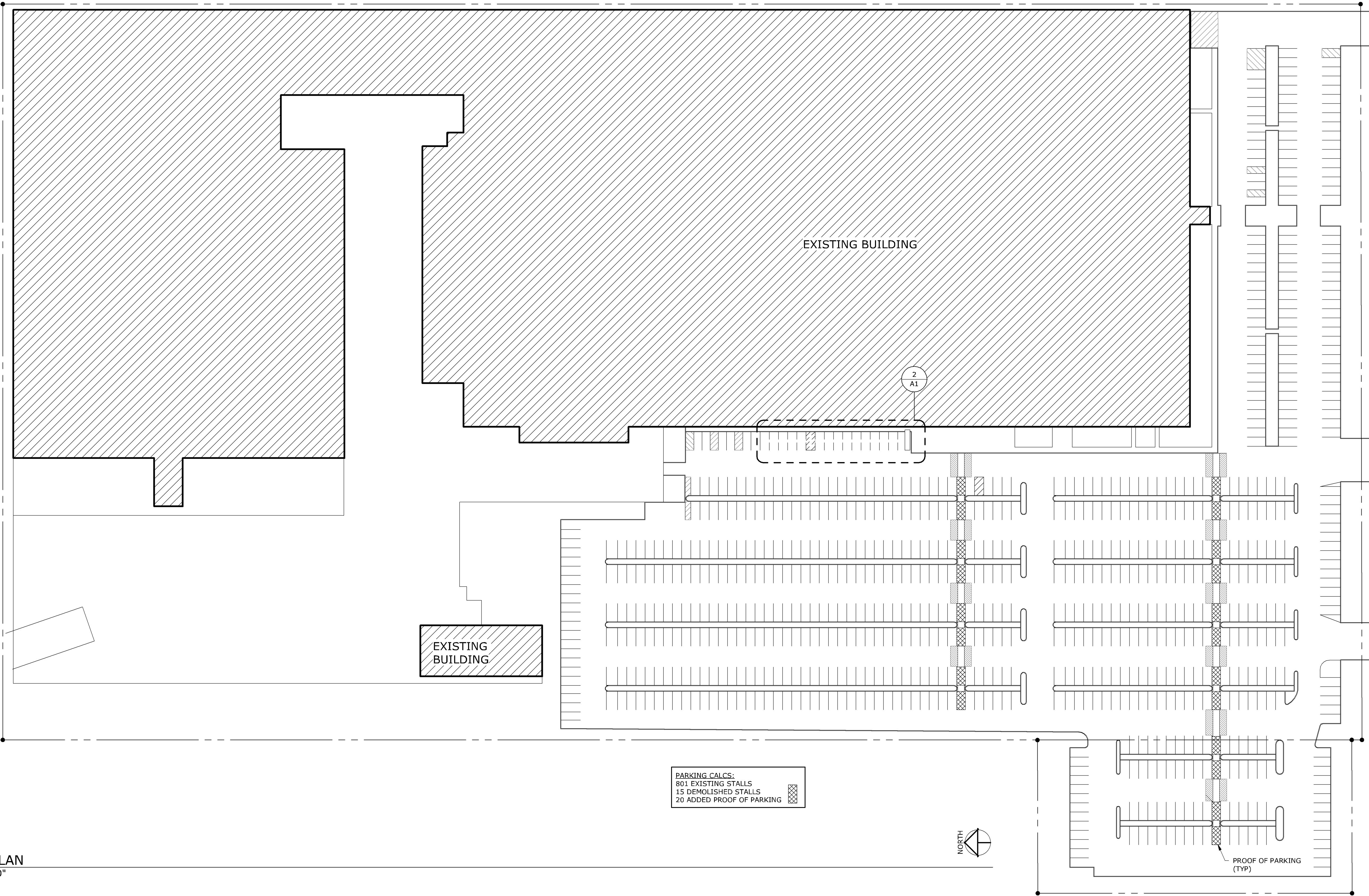
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.



Stephen T. Jara

DATE: 10/3/2018 REG. NO.: 46705

② ENLARGED PLAN @ DEMOLISHED PARKING
1" = 10'-0"



① SITE PLAN
1" = 50'-0"

SITE PLAN

THERMAL KING CHILLER PROJECT
THERMO KING CORPORATION
314 WEST 90TH STREET
BLOOMINGTON, MN 55420

PROJECT: 18157

DRAWN BY: CKL

CHECKED BY: STI

DATE: 10/3/2018

REVISIONS:

ISSUED FOR PERMIT

A1

BUILDING CODE

2012 INTERNATIONAL BUILDING CODE (WITH STATE OF MINNESOTA AMENDMENTS).

SPECIAL INSPECTIONS AS REQUIRED BY THE IBC 2012 CHAPTER 17 WITH STATE OF MINNESOTA AMENDMENTS AND LOCAL BUILDING CODE OFFICIAL.

DESIGN LOADS:

WIND LOAD: BASIC WIND SPEED: V = 115 MPH
EXPOSURE GROUP: B

DESIGN MATERIAL:

REINFORCING STEEL: DEFORMED BARS ASTM A615 GRADE 60

CONCRETE: f'c = 3000 PSI @ 28 DAYS (FOOTINGS), f'c = 4000 PSI (ALL OTHER)

MASONRY GROUT (COREFILL): COMPLYING WITH ASTM C476, 8" – 11" SLUMP WITH 3/8" PEAGRAVEL AGGREGATE

FUTURE EXPANSION:

THIS PROJECT IS NOT DESIGNED FOR FUTURE EXPANSION.

CONTRACTOR NOTES:

THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE PLANS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, SPECIFICATIONS OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

THE CONTRACTOR MUST CHECK ALL DIMENSIONS, FRAMING CONDITIONS, AND SITE CONDITIONS BEFORE STARTING WORK. ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR POSSIBLE DEFICIENCIES.

MATERIALS, EQUIPMENT AND PRODUCTS OTHER THAN THOSE DESCRIBED BELOW OR INDICATED ON THE DRAWINGS MAY BE CONSIDERED FOR USE, PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE OWNER, ENGINEER AND THE GOVERNING AUTHORITY.

TYPICAL DETAILS SHALL APPLY WHERE NO SPECIFIC DETAILS OR SECTIONS ARE GIVEN.

STRUCTURAL MEMBERS INCLUDING TRUSSES, BEAMS, COLUMNS AND WALLS ARE DESIGNED FOR "IN PLACE" LOADS. CONTRACTOR IS RESPONSIBLE FOR BRACING ALL STRUCTURAL ELEMENTS (AS REQUIRED AT ANY STAGE OF CONSTRUCTION) UNTIL COMPLETION OF THIS PROJECT.

OBSERVATION VISITS TO THE JOB SITE BY THE ENGINEER DO NOT INCLUDE INSPECTION OF CONSTRUCTION METHODS OR SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSIDERED AS CONTINUOUS AND DETAILED INSPECTIONS.

VERIFY ALL OPENINGS THROUGH CONSTRUCTION WITH HEATING AND VENTILATION CONTRACTOR, PLUMBING CONTRACTOR, AND ELECTRICAL CONTRACTOR FOR SIZE AND LOCATION.

SITE WORK:

EXCAVATE TOPSOIL, ORGANIC MATERIAL, AND DEBRIS FROM THE CONSTRUCTION AREA.

FOOTINGS SHALL BEAR ON COMPETENT NATURAL UNDISTURBED SOIL OR ENGINEERED FILL.

ALL FILL SHALL BE A GRANULAR MATERIAL AND COMPACTED TO 98 PERCENT OF STANDARD PROCTOR DENSITY (ASTM 698).

FOOTINGS HAVE BEEN DESIGNED FOR A MAXIMUM SOIL BEARING PRESSURE OF 2000 PSF. IN LIEU OF A SOILS REPORT, IT WILL BE THE RESPONSIBILITY OF OTHERS TO VERIFY THIS VALUE.

IF SOIL AT BOTTOM OF FOOTING IS OF QUESTIONABLE BEARING VALUE, NOTIFY THE ARCHITECT / ENGINEERS OFFICE AT ONCE.

ALL OPEN AIR AND UNHEATED FOUNDATIONS SHALL HAVE A MINIMUM OF 5'-0" OF FROST PROTECTION.

CONCRETE:

CODE FOR REINFORCED CONCRETE IS THE ACI 318-11.

WHERE REINFORCING BARS ARE SHOWN CONTINUOUS, LAP SPLICE BARS 48 BAR DIAMETERS.

PROVIDE SUITABLE SUPPORT OF ALL REINFORCING TO PREVENT DISPLACEMENT DURING THE POURING OF CONCRETE.

ALUMINUM CONDUIT, ALUMINUM PIPING, OR ALUMINUM ACCESSORIES ARE NOT PERMITTED IN CONCRETE SLABS OR CONCRETE WALLS.

CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES F. AND IN A MOIST CONDITION FOR AT LEAST 7 DAYS.

ALL EXTERIOR CONCRETE TO HAVE 5 - 6% ENTRAINED AIR BY VOLUME.

ALL EXPANSION BOLTS PLACED IN EXISTING CONCRETE ARE TO BE ¾" DIA. HILTI KWIK BOLT 3 WITH 5" EMBEDMENT UNO AND ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

ALL DOWELS PLACED IN EXISTING CONCRETE ARE TO BE SET IN HILTI HIT HY-200 EPOXY. ALL EPOXY IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS INCLUDING SPECIAL INSPECTION.

UNIT MASONRY ASSEMBLIES:

PROVIDE NORMAL WEIGHT CONCRETE MASONRY UNITS COMPLYING WITH ASTM C90.

ALL MORTAR IN BEARING WALLS TO BE TYPE S COMPLYING WITH ASTM C270 BY PROPORTION

ALL MASONRY WALLS SHALL HAVE 9 GAUGE (TRUSS TYPE) HORIZONTAL REINFORCING AT EVERY 2nd COURSE IN RUNNING BOND WALLS AND AT EVERY COURSE IN STACK BOND WALLS (UNO). HORIZONTAL REINFORCING NOT REQUIRED IN BASEMENT WALLS OR FOUNDATION WALLS WITH EARTH ON BOTH SIDES. SEE PLANS FOR VERTICAL REINFORCEMENT REQUIREMENT.

ALL VERTICAL REINFORCING SHALL BE HELD IN PLACE BY TYING TO EVERY OTHER LAYER OF HORIZONTAL REINFORCEMENT.

PROVIDE DOWELS FROM FOUNDATION TO MATCH VERTICAL REINFORCING. EMBED DOWELS 9" INTO FOUNDATION (UNO).

ALL SPLICES IN REINFORCED MASONRY WALLS SHALL BE LAPPED AS FOLLOWS:
VERTICAL REINFORCING: 48 BAR DIAMETERS OR AS INDICATED ON THE PLANS
HORIZONTAL REINFORCING: 6 INCHES

MAINTAIN AN AIR TEMPERATURE ABOVE 40 DEGREES F. ON BOTH SIDES OF THE MASONRY FOR AT LEAST 48 HOURS AFTER THE MASONRY WORK IS COMPLETED.

MAXIMUM SPACING FOR VERTICAL CONTROL JOINTS IN BLOCK WALLS SHALL NOT EXCEED 24 FT. O.C. TERMINATE HORIZONTAL JOINT REINFORCEMENT EACH SIDE OF CONTROL JOINT. REINFORCING STEEL AND GROUT TO BE CONTINUOUS AT PERIMETER BOND BEAM. RAKE JOINT AND APPLY BACKER ROD AND SEALANT.

ALL EXPANSION BOLTS PLACED IN EXISTING MASONRY ARE TO BE HILTI KWIK BOLTS AND ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

ALL DOWELS PLACED IN EXISTING MASONRY ARE TO BE SET IN HILTI HIT HY-70 EPOXY. ALL EPOXY IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS INCLUDING SPECIAL INSPECTION.

NEW WORK IN CONJUNCTION WITH EXISTING CONSTRUCTION:

THE CONTRACTOR SHALL FIELD VERIFY ALL SIZES, DIMENSIONS, ELEVATIONS, LOCATIONS, ETC. OF ELEMENTS OF THE EXISTING CONSTRUCTION WHICH ARE RELATIVE TO THE NEW CONSTRUCTION.

ALL DIMENSIONS INVOLVING NEW WORK TYING INTO OR GOVERNED BY EXISTING CONSTRUCTION SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND FURNISHED TO THE SUBCONTRACTOR PRIOR TO FABRICATION OF ANY WORK.

THE ENGINEER HAS MADE ASSUMPTIONS CONCERNING THE SOUNDNESS OF THE EXISTING BUILDING. THESE ASSUMPTIONS INCLUDE THAT THE BUILDING WAS DESIGNED AND CONSTRUCTED IN CONFORMANCE WITH SOUND DESIGN AND CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTION CONCERNING THE PRESERVATION OF THE EXISTING BUILDING DURING DEMOLITION AND NEW CONSTRUCTION WORK.

THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND ACTUAL FIELD CONDITIONS.

SHOP DRAWINGS:

SHOP DRAWINGS, DESIGN CRITERIA AND DESIGN CALCULATIONS (IF REQUIRED) SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERCEDED BY THE STRUCTURAL DRAWINGS. ANY REVIEW OF THE SHOP DRAWINGS BY THIS OFFICE IS ONLY FOR GENERAL CONFORMANCE TO THE STRUCTURAL REQUIREMENTS AND IN NO WAY GUARANTEES THE ACCURACY OR COMPLETENESS OF THE INFORMATION THEREON. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL THE CONSTRUCTION IS IN FULL COMPLIANCE WITH THE LATEST SET OF STRUCTURAL DRAWINGS.

PRIOR TO SUBMITTAL, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE CONTRACTOR SHALL STAMP AND SIGN THE DRAWINGS AS EVIDENCE THAT HE HAS REVIEWED THEM.

SPECIAL STRUCTURAL TESTING & INSPECTION SCHEDULE			
VERIFICATION & INSPECTION	TYPE OF INSPECTOR	REPORT FREQUENCY	ASSIGNED FIRM
CONCRETE CONSTRUCTION (SECTION 1705.3)			
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	TECHNICAL	PERIODIC	TA
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED	TECHNICAL	PERIODIC	TA
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	TECHNICAL	PERIODIC	TA
5. VERIFYING USE OF REQUIRED DESIGN MIX	TECHNICAL	PERIODIC	TA
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	TECHNICAL	CONTINUOUS	TA
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	TECHNICAL	CONTINUOUS	TA
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	TECHNICAL	PERIODIC	TA
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	TECHNICAL	PERIODIC	TA
SOILS (SECTION 1705.6)			
1. VERIFY MATERIALS BELOW SHALLOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	TECHNICAL	PERIODIC	TA
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	TECHNICAL	PERIODIC	TA
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	TECHNICAL	PERIODIC	TA
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	TECHNICAL	CONTINUOUS	TA
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT THE SITE HAS BEEN PREPARED PROPERLY	TECHNICAL	PERIODIC	TA
LEGEND : SER = STRUCTURAL ENGINEER OF RECORD TA = TESTING AGENCY SI-T = SPECIAL INSPECTOR-TECHNICAL SI-S = SPECIAL INSPECTOR-STRUCTURAL F = FABRICATOR			
NOTE: THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL INSPECTIONS BY THE LOCAL BUILDING DEPARTMENT, SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS. ARRANGEMENTS FOR THESE SITE VISITS ARE TO BE MADE WITH ADEQUATE ADVANCE NOTICE TO ENSURE THAT ALL INSPECTIONS AND OBSERVATIONS ARE PERFORMED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS.			

PL201800346 PL2018-346

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Michael J. Lisowski

Michael J. Lisowski

DATE: 10/3/2018 REG. NO.: 25071

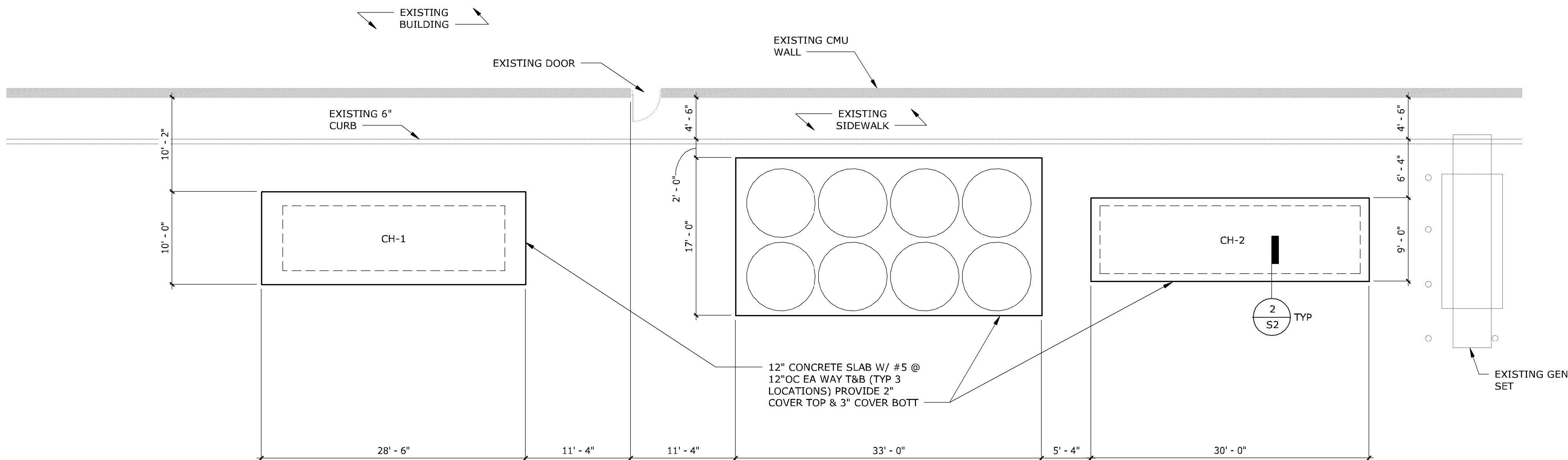
GENERAL STRUCTURAL NOTES

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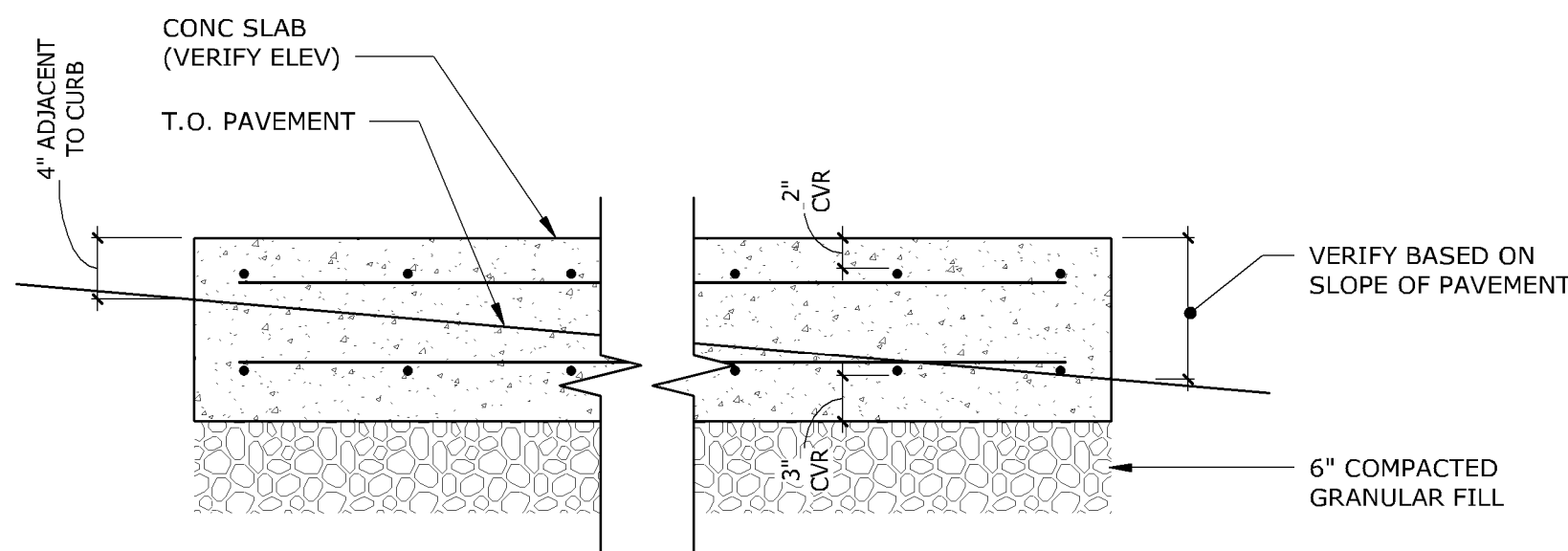
PROJECT:	18157
DRAWN BY:	KX
CHECKED BY:	MJL
DATE:	10/3/2018
REVISIONS:	

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S1



1 FOUNDATION PLAN
1/8" = 1'-0"



2 SLAB DETAIL
1" = 1'-0"

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FOUNDATION PLAN

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THERMO KING CORPORATION
314 WEST 90TH STREET
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S2