

STRUCTURAL STEEL NOTES

UNLESS NOTED OTHERWISE, THE FOLLOWING MATERIAL SPECIFICATIONS SHALL BE USED:

STRUCTURAL STEEL FRAMING (SHAPES):
MISC. STRUCTURAL STEEL (PLATES 4 ANGLES):
HSS TUBING:
BOLTS:
WELDS:
ANCHOR BOLTS:
GROUT UNDER BASE PLATES:

ASTM A992 GRADE 50 (Fy=50 KSI) U.N.O.

ASTM A36 U.N.O.
ASTM A-500 GRADE B OR C (Fy=46 KSI MIN.)
34" ASTM A-325-N U.N.O.
10 KSI TENSILE STRENGTH (MIN.)
ASTM FI554-GR. 55
"SHRINKAGE COMPENSATING" WITH f'c=6,000 PSI

GROUT UNDER BASE PLATES: "SHRINKAGE COMPENSATING" WITH 1'c=4,000 PSI SHOP AND FIELD CONNECTIONS: HIGH STRENGTH BOLTED OR WELDED WITH ETOXX ELECTRODES. MINIMUM FILLET WELDS PER TABLE J2.4 AISC (ASD). WELDING SHALL MEET AISC (ASD) SECTION J2.

TABLE J2.4 AISC	
MATERIAL THICKNESS THICKER PART JOINED (INCHES)	MINIMUM SIZE OF FILLET WELD (INCHES)
TO ¼ INCLUSIVE OVER ¼ TO ½ OVER ½ TO ¾ OVER ¾ TO ½	1/8 3/4 1/4 5/6

WELDING SHALL CONFORM TO THE AISC REQUIREMENTS AS SUPPLEMENTED BY THE LATEST EDITION OF THE AWS STANDARD DII. ALL MANUAL SHIELDED METAL ARC WELDING ELECTRODES TO BE ETOIX: THE ELECTRODES SHALL BE OF THE LOW HYDROGEN CLASSIFICATION. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS, AWS CERTIFIED FOR THE SPECIFIC WELD.

ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE "AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS".

THE STRUCTURAL STEEL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL STEEL STAIRS AND RAILINGS, INCLUDING ALL ACCESSORIES AND CONNECTIONS. THE CONTRACTOR SHALL HAVE ALL STAIR AND RAILING MEMBERS, ACCESSORIES AND CONNECTIONS DESIGNED BY A STRUCTURAL ENGINEER (LICENSED IN THE STATE OF ILLINOIS) FOR ALL LOADING CONDITIONS REQUIRED BY THE GOVERNING BUILDING CODES. THE DESIGN, MANUFACTURE AND INSTALLATION OF ALL STEEL STAIRS SHALL BE IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS HEREIN INCLUDING AISC'S LATEST EDITION. SHOP DRAWINGS (CERTIFIED BY THE STRUCTURAL ENGINEER) SHALL BE SUBMITTED FOR REVIEW PRIOR TO ANY FABRICATION. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO ANY FABRICATION. SHOP DRAWINGS SHALL SPECIFY LOADS IMPOSED ON THE SUPPORTING STRUCTURE. (REVIEW OF SAID DRAWINGS BY THE ENGINEER OF RECORD SHALL BE SOLELY FOR COORDINATION AND SHALL NOT CONSTITUTE A RE-CERTIFICATION OR APPROVAL THAT THE DESIGN MEETS THE PROJECT DESIGN REQUIREMENTS.)

CONCRETE NOTES

ALL STRUCTURAL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS AND RECOMMENDATIONS/SUGGESTIONS OF THE LATEST EDITIONS OF THE FOLLOWING, "AMERICAN CONCRETE INSTITUTE" (ACI) SPECIFICATIONS/STANDARDS: "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), "SPECIFICATIONS FOR STRUCTURAL CONCRETE" (ACI 301), AND OTHER PERTINENT "ACI" SPECIFICATIONS/STANDARDS (GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE - ACI 304, GUIDE TO FORMWORK FOR CONCRETE - ACI 341, EC.).

ALL REINFORCING AND ACCESSORIES SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE "AMERICAN CONCRETE INSTITUTE" STANDARDS: "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315) AND "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" (ACI 315R).

COLD WEATHER AND HOT WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 306 AND ACI 305. IN GENERAL, CONCRETE CONTRACTOR SHALL NOT POUR CONCRETE WHEN THE TEMPERATURE FORECAST DURING THE NEXT 24 HOURS I TO BE LESS THAN 20 DEGREES FAHRENHEIT. BETWEEN 20 AND 30 DEGREE FAHRENHEIT, CONCRETE MAY BE PLACED IF UNIFORM HEATING IS MAINTAINED FOR AT LEAST 24 HOURS AFTER POURING OF CONCRETE.

ALL CONCRETE SHALL REACH AN ULTIMATE 28 DAY COMPRESSIVE STRENGTH (F'c) AS FOLLOWS:

SLABS AND FOUNDATIONS:
WALKS:

3000 PSI
4000 PSI

REINFORCING STEEL: ASTM A615, GRADE 60 WELDED WIRE FABRIC: ASTM A185, Fy=60 KSI

CONTINUOUS BARS SHALL LAP 44 BAR DIAMETERS WHERE SPLICED, BUT NOT LESS THAN 2'-O". NOT MORE THAN 1/2 THE BARS SHALL BE SPLICED AT ANY ONE LOCATION. PROVIDE "CORNER BARS" AT ALL CORNERS - LAP 2'-4" MINIMUM

INDEX OF SHEETS

- T1 PROJECT TITLE, LOCATION, INDEX OF SHEETS, STRUCTURAL STEEL AND CONCRETE NOTES
- D1 PARTIAL DEMO STAIR FLOOR PLAN BOILER HOUSE, BUILDING "S"
- A1 PARTIAL FOUNDATION/FRAMING PLAN AND SITE PLAN
 BOILER HOUSE ,STAIR SECTION AND DETAIL
- A2 PARTIAL SITE PLAN BUILDING "S", STAIR SECTION AND NOTES

EXTERIOR STAIR REPLACEMENT

JOLIET JUNIOR COLLEGE BOILER HOUSE AND BUILDING S 1215 HOUBOLT ROAD JOLIET, ILLINOIS

> STROMSLAND + DE YOUNG + PRYBYS ARCHITECTURE GROUP

> > 20620 BURL COURT JOLIET, IL 60433 PHONE: 815-727-1311 FAX: 815-727-5210

NUMBER

REPLACEMENT E

JOLIET JUNIOR COLLEGE
BOILER HOUSE AND BUILDING
1215 HOUBOLT ROAD

DATE: 3/23/2018 REVISED:

PROJECT NO.

T1

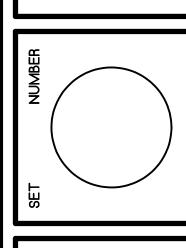
1 CHEETO

DEMO GENERAL NOTES

- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS AND EXTENT OF THE WORK. ANY ITEMS NOT SPECIFICALLY INDICATED THAT ARE IN CONFLICT WITH CONTRACT WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BID FOR CLARIFICATION.
- B. PROVIDE PROTECTION TO ADJACENT MATERIAL TO REMAIN DURING CONSTRUCTION.
- PROVIDE TEMPORARY PROTECTION TO THE ADJACENT LANDSCAPING. LANDSCAPING TO BE RESTORED AT END OF CONSTRUCTION TO MATCH EXISTING CONDITION.

DEMO KEY NOTES

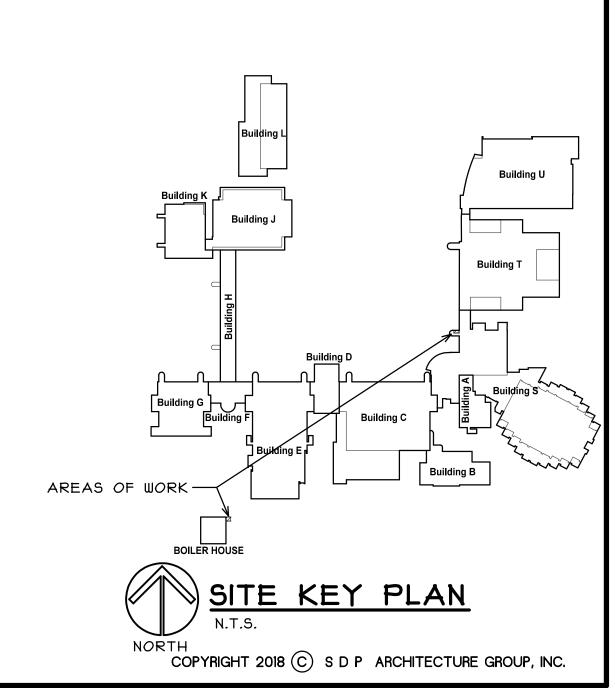
- EXISTING CONCRETE STAIRS, DECK, WALLS AND STRUCTURE TO BE COMPLETELY REMOVED. (V.I.F.)
- 2 EXISTING CONCRETE STAIR SUPPORT WALL ,COLUMN AND FOOTING TO BE COMPLETELY REMOVED. (V.I.F.)
- REMOVE EXISTING CAULK EXPANSION JOINT AND CLEAN SURFACE. (V.I.F.)
- EXISTING CONCRETE HAUNCH BELOW DECK TO REMAIN. EXISTING EMBEDDED METAL WELDING PLATE TO REMAIN AND BE CLEANED AND PROTECTED FROM RUST. (V.I.F.)
- SAWCUT AND REMOVE PORTION OF EXISTING CONCRETE SIDEWALK. (V.I.F.)
- REMOVE ONLY EXISTING LANDSCAPING AS REQUIRED TO REMOVE AND INSTALL NEW WORK. EXISTING PLANTINGS THAT MAY HAVE TO BE REMOVED FOR CONSTRUCTION TO BE SALVAGED TO OWNERS STAFF FOR REUSE. EXISTING LANDSCAPE TO REMAIN TO BE PROTECTED DURING CONSTRUCTION. (V.I.F.)
- EXISTING CONCRETE WALK TO REMAIN. PROVIDE PROTECTION DURING CONSTRUCTION. (V.I.F.)
- 8 REMOVE PORTION OF EXISTING BRICK PAVERS AS REQUIRED FOR NEW WORK AND SALVAGE FOR REUSE. (V.I.F.)
- EXISTING BRICK PAVERS TO REMAIN. PROVIDE PROTECTION DURING CONSTRUCTION. (V.I.F.)
- EXISTING CONCRETE WALL TO REMAIN. (V.I.F.)
- EXISTING CONCRETE STAIRS, LANDING AND FOOTING TO BE COMPLETELY REMOVED. EXISTING DOWELS INTO EXISTING CONCRETE WALL TO BE CUT FLUSH WITH WALL(V.I.F.)
- REMOVE EXISTING CONCRETE STAIRS AND LANDING FROM EXISTING CONCRETE WALL RECESS. (V.I.F.)

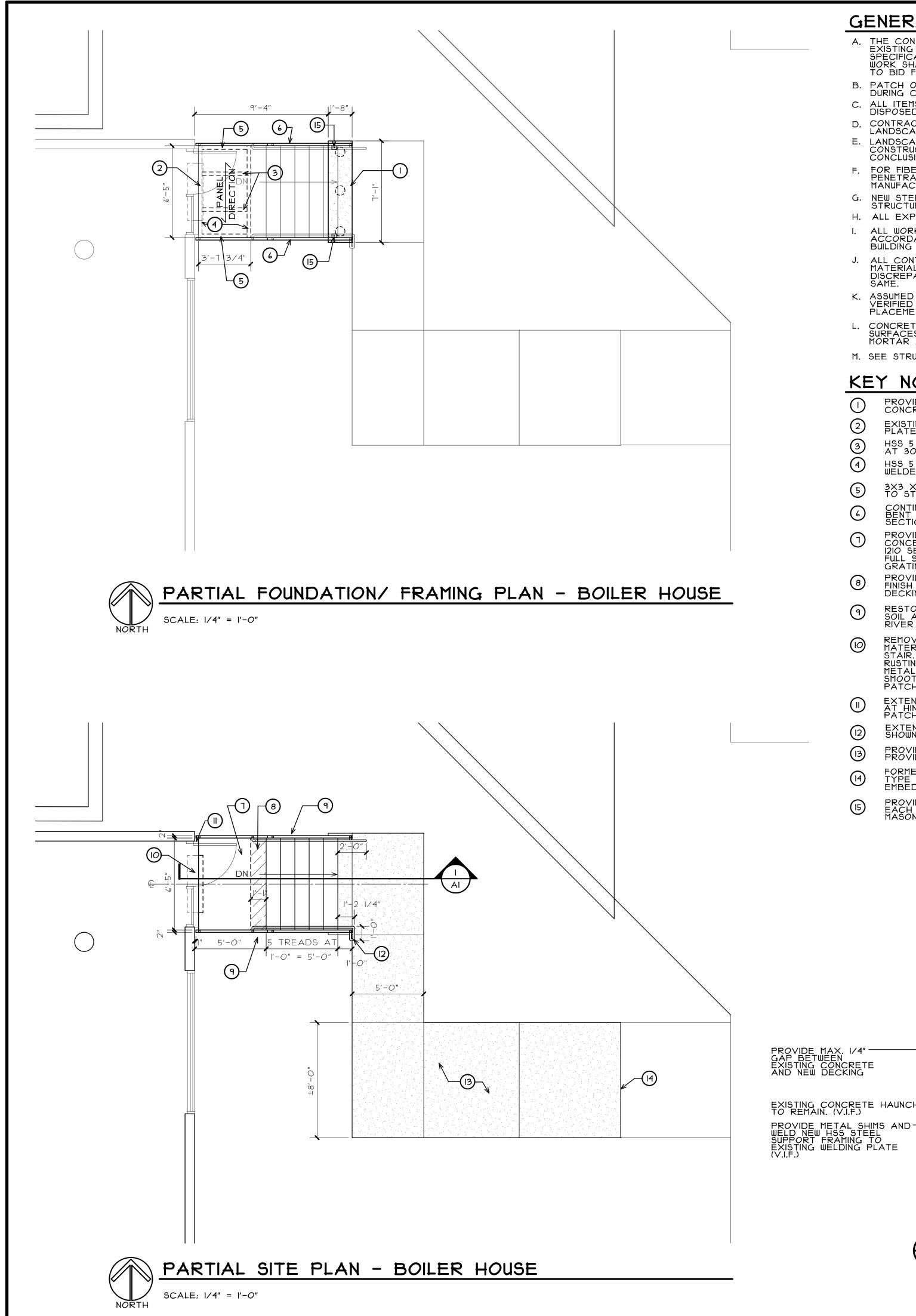


3/23/2018

SHEET NUMBER

OF 1 SHEETS





GENERAL NOTES THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS AND EXTENT OF THE WORK. ANY ITEMS NOT SPECIFICALLY INDICATED THAT ARE IN CONFLICT WITH CONTRACT WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BID FOR CLARIFICATION.

B. PATCH OR REPAIR DAMAGED SURFACES CAUSED TO ADJACENT AREAS DURING CONSTRUCTION OPERATIONS.

C. ALL ITEMS REMOVED AND NOT SALVAGED SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR.

D. CONTRACTOR TO PROVIDE PROTECTION TO THE ADJACENT EXISTING LANDSCAPING. DISTRUBANCE TO BE KEPT TO A MINIMUM

E. LANDSCAPE THAT HAS BEEN DISTURBED AT PROJECT AREA DURING CONSTRUCTION TO BE RESTORED TO EXISTING CONDITION AT CONCLUSION OF CONSTRUCTION. (U.N.O.)

F. FOR FIBERGLASS PULTRUDED GRATE DECKING ALL CUT EDGES AND PENETRATIONS TO BE COATED WITH EPOXY RESIN COATING PER MANUFACTURERS RECOMMENDATIONS.

G. NEW STEEL STAIRS TO BE DESIGNED AND DRAWINGS STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS.

H. ALL EXPOSED STRUCTURAL STEEL TO BE GALVANIZED. (TYPICAL)

ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER IN STRICT ACCORDANCE WITH LOCAL BUILDING CODES, CURRENT INTERNATIONAL BUILDING CODE (IBC) AND ALL AUTHORITIES HAVING JURISDICTION.

ALL CONTRACTORS SHALL VERIFY ALL CONDITIONS, DIMENSIONS & MATERIALS BEFORE PROCEEDING WITH WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNERS AND SHALL BE RESPONSIBLE FOR

K. ASSUMED DESIGN SOIL BEARING PRESSURE = 3,000 PSF; TO BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.

. CONCRETE PATCHING MORTAR TO BE ARDEX "CP". PREPARE EXISTING SURFACES, MIX (AS INDICATED FOR PATCHING) AND INSTALL PATCHING MORTAR AS PER MANUFACTURER'S RECOMMENDATIONS.

M. SEE STRUCTURAL STEEL NOTES ON SHEET TI.

KEY NOTES

PROVIDE NEW I'-8" \times 1'-1" \times 1'-0" THICK CONCRETE PAD WITH (3) 8" CONCRETE FILLED "SONOTUBES" DOWN TO 4'-0" MIN. BELOW GRADE.

EXISTING CONCRETE STAIR SUPPORT HAUNCH WITH METAL WELDING PLATE TO REMAIN. (V.I.F.)

HSS 5 X 3 X 3/16 DECKING SUPPORT FRAMING (GALVANIZED) AT 30" O.C. MAX. WELDED TO HSS STAIRWAY SUPPORTS.

HSS 5 \times 3 \times 3/16 STAIRWAY SUPPORT FRAMING (GALVANIZED) WELDED TO STRINGERS.

3X3 X 3/16" STEEL ANGLE DECK SUPPORT (GALVANIZED) WELDED TO STRINGERS.

CONTINUOUS HSS 12 X 2 STAIR STRINGERS (GALVANIZED) WITH BENT METAL STAIR TREADS WITH NON SLIP SURFACE. SEE STAIR SECTION.

PROVIDE PULTRUDED FIBERGLASS GRATE DECKING WITH CONCEALED FASTENERS ("DURAGRID" PULTRUDED GRATING MS-T 1210 SERIES BY MCNICHOLS COMPANY OR APPROVED EQUAL). USE FULL SIZE WIDTH PANELS. (INSTALL CONCEALED FASTENERS PER GRATING MANUFACTURERS RECOMMENDATIONS).

PROVIDE ADDITIONAL BENT METAL STAIR TREAD WITH NON SLIP FINISH AT LANDING. (WALKING SURFACE TO BE FLUSH WITH

RESTORE LANDSCAPE AT BASE OF NEW STAIRS. BY RE-GRADING SOIL AS NEEDED AND PROVIDE WEED BARRIER AND LAYER OF RIVER ROCK TO MATCH EXISTING.

REMOVE LOOSE OR DETERIORATED CONCRETE DOWN TO SOLID MATERIAL AT EDGE OF EXISTING CONCRETE FLOOR SLAB AT STAIR. (IF EXISTING REINFORCEMENT IS EXPOSED AND FOUND TO BE RUSTING THEN REINFORCING TO BE CLEANED DOWN TO WHITE METAL AND APPLY ANTI CORROSION AGENT) PATCH CONCRETE SMOOTH AND LEVEL WITH ADJACENT AREAS WITH CONCRETE PATCH MORTAR. (V.I.F.)

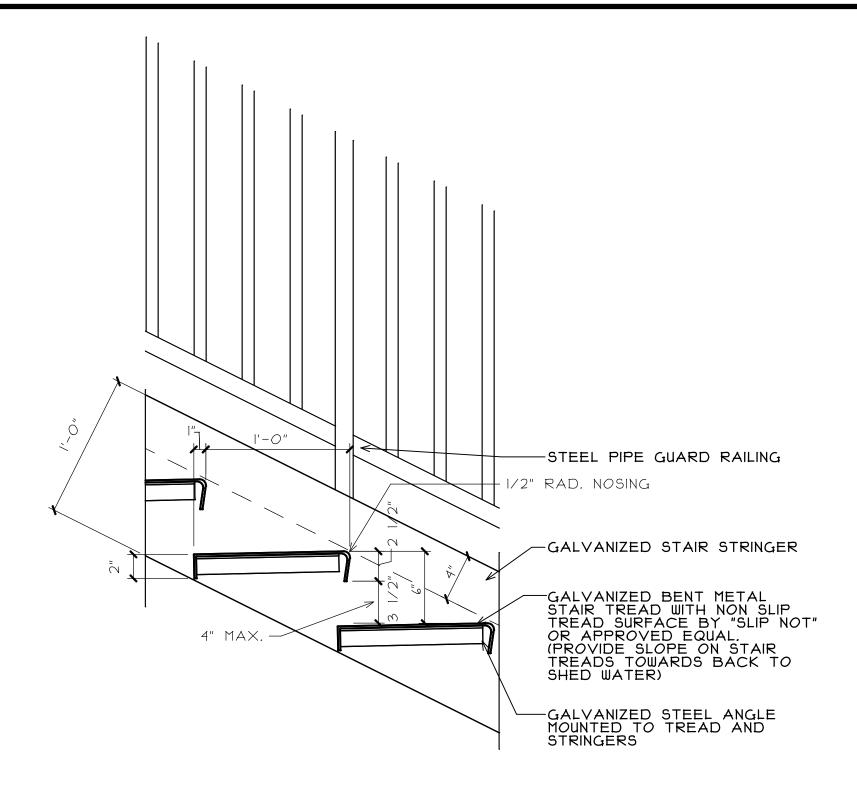
EXTEND EDGE OF EXISTING CONCRETE FLOOR SLAB BUMP OUT AT HINGE SIDE OF DOOR TO EDGE OF FRAME WITH CONCRETE PATCH MORTAR DOWEL INTO EXISTING. (V.I.F.)

EXTEND HANDRAIL DOWN I'-O" AND EXTEND HORIZONTAL I'-O" AS SHOWN AND BACK TO POST.

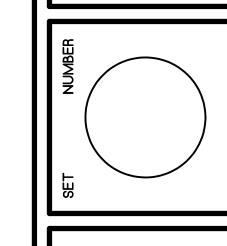
PROVIDE NEW 5" CONCRETE SIDEWALK W/6X6 - WI.4 X WI.4 W.W.F. PROVIDE TOOLED CONTROL JOINTS AS INDICATED.

FORMED EXPANSION JOINT, 1/4" JOINT FILLER WITH CAP BEAD OF TYPE "T" SEALANT, #4 BAR DOWELS AT 16" O.C. WITH 6" MIN. EMBED INTO EXISTING CONCRETE.

PROVIDE 3X3 X3/16" STEEL ANGLE (GALVANIZED) WELDED TO EACH STRINGER AND ATTACHED TO CONCRETE PAD WITH MASONRY ANCHORS.







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DATE: 3/23/2018 **REVISED:**

PROJECT NO.

1802-01

NUMBER SHEET OF 2 SHEETS

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5'-0" - I I/4" GALVANIZED STEEL PIPE GUARD RAILING AND POSTS WITH I" SQUARE VERTICAL PICKETS (PICKET SPACING TO NOT ALLOW A 4" SPHERE TO PASS THROUGH) CONTINUOUS | 1/4" STAINLESS STEEL PIPE HANDRAIL, ENDS TO RETURN TO POSTS **Building T** -CONCRETE SUPPORT PAD (SEE PLAN) NEW CONCRETE SIDEWALK (SEE PLAN) Building G GALVANIZED STEEL ANGLE Building B AREA OF WORK STAIR SECTION

SCALE: 1/2" = 1'-0" SITE KEY PLAN

PARTIAL SITE PLAN - BUILDING S

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

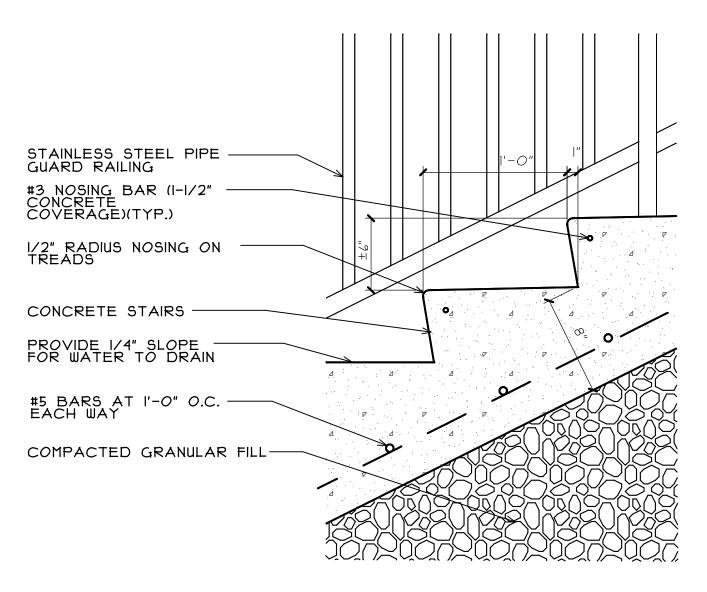
GENERAL NOTES

- A. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS AND EXTENT OF THE WORK. ANY ITEMS NOT SPECIFICALLY INDICATED THAT ARE IN CONFLICT WITH CONTRACT WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER PRIOR TO BID FOR CLARIFICATION.
- B. PATCH OR REPAIR DAMAGED SURFACES CAUSED TO ADJACENT AREAS DURING CONSTRUCTION OPERATIONS.
- C. ALL ITEMS REMOVED AND NOT SALVAGED SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
- D. CONTRACTOR TO PROVIDE PROTECTION TO THE ADJACENT EXISTING LANDSCAPING. DISTURBANCE TO BE KEPT TO A
- E. LANDSCAPE THAT HAS BEEN DISTURBED AT PROJECT AREA DURING CONSTRUCTION TO BE RESTORED TO EXISTING CONDITION AT CONCLUSION OF CONSTRUCTION. (U.N.O.)
- F. ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER IN STRICT ACCORDANCE WITH LOCAL BUILDING CODES, CURRENT INTERNATIONAL BUILDING CODE (IBC) AND ALL AUTHORITIES HAVING JURISDICTION.
- G. ALL CONTRACTORS SHALL VERIFY ALL CONDITIONS, DIMENSIONS & MATERIALS BEFORE PROCEEDING WITH WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNERS AND SHALL BE RESPONSIBLE FOR SAME.
- H. ASSUMED DESIGN SOIL BEARING PRESSURE = 3,000 PSF; TO BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOUNDATIONS.

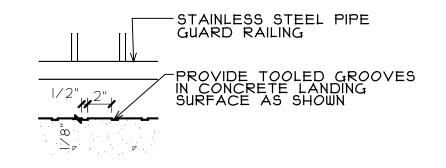
KEY NOTES

I. SEE CONCRETE NOTES ON SHEET TI

- PROVIDE WALL MOUNTED I 1/4" STAINLESS STEEL PIPE HANDRAIL.
 MOUNTED AT 36" TO GRIP SURFACE MEASURED VERTICALLY
 FROM STAIR NOSING. (PROVIDE HANDRAIL EXTENSIONS AT TOP
 AND BOTTOM AS SHOWN).
- NEW CONCRETE STAIRS AND LANDING, SEE SECTIONS.
- PROVIDE I 1/4" STAINLESS STEEL PIPE GUARDRAIL, POST WITH 1/2" PICKETS AND I 1/4" STAINLESS STEEL PIPE HANDRAIL.
- PATCH BACK IN EXISTING WALK WITH SALVAGED PAVERS TO NEW STEPS. (V.I.F.) MATCH EXISTING PATTERN.
- PROVIDE NEW FLOOR MOUNTED DOOR STOP. (FS444 (US26D) BY IVES OR APPROVED EQUAL).
- RESTORE LANDSCAPE AT BASE OF NEW STAIRS. BY RE-GRADING SOIL AS NEEDED AND PROVIDE WEED BARRIER AND LAYER OF MULCH TO MATCH EXISTING. COORDINATE WITH OWNER FOR INSTALLATION OF EXISTING SALVAGED PLANTINGS.
- PROVIDE 3'-O" ADA COMPLIANT DETECTABLE WARNING AREA AT STAIR EDGE. (RUN FULL WIDTH OF LANDING)



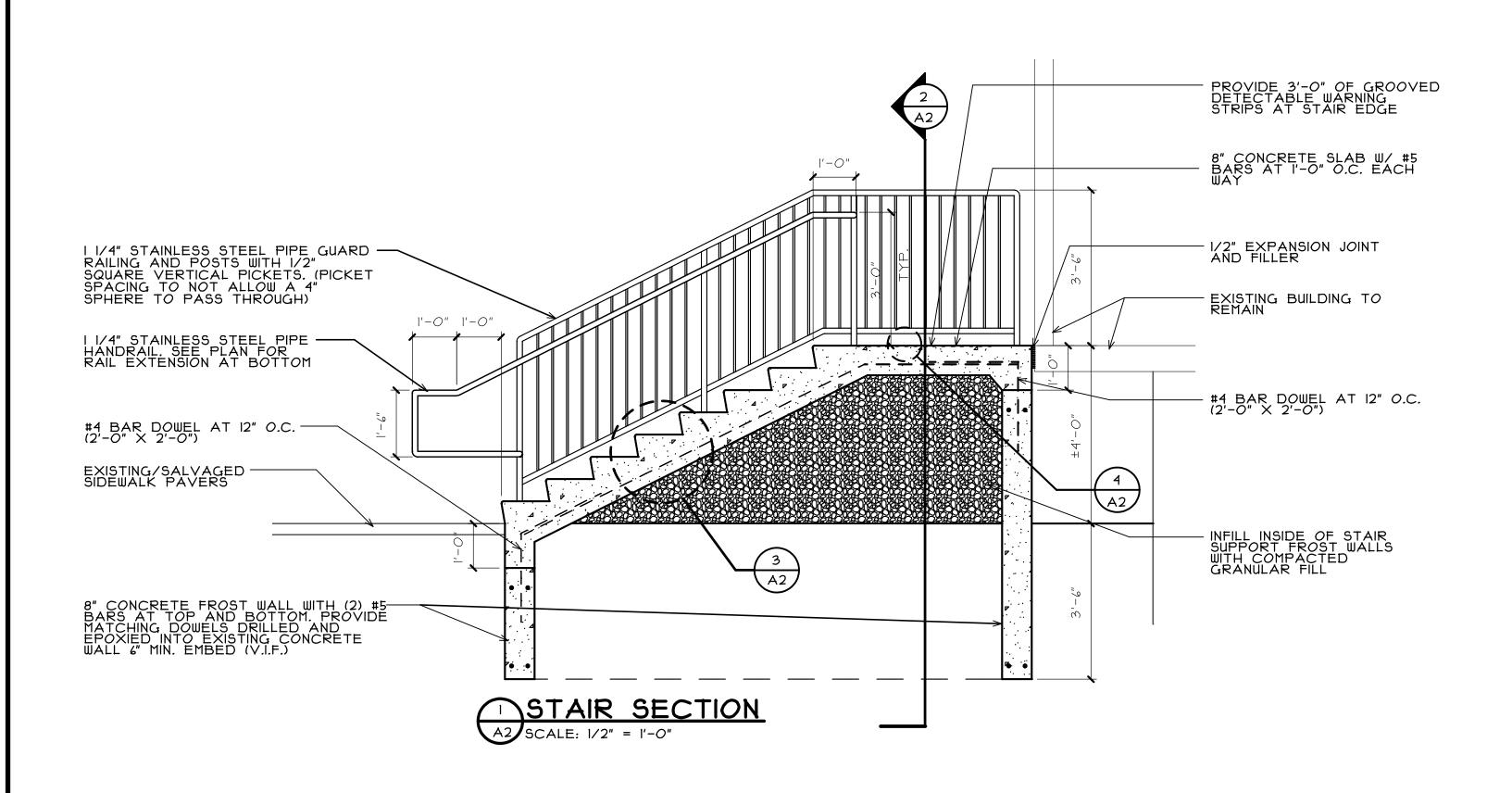
3 DETAIL AT STAIR TREAD
A2 SCALE: 1 1/2" = 1'-0"

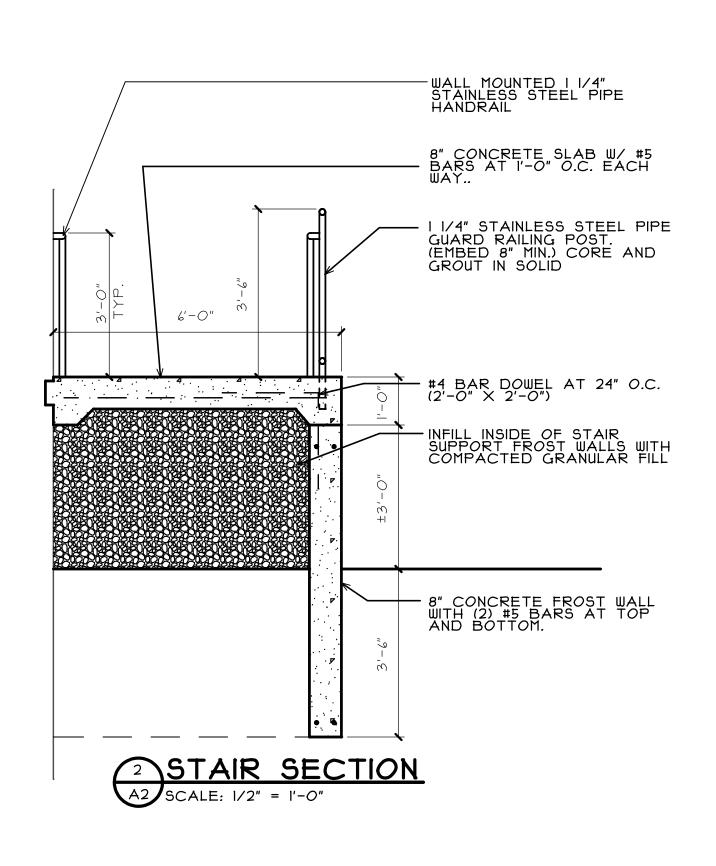


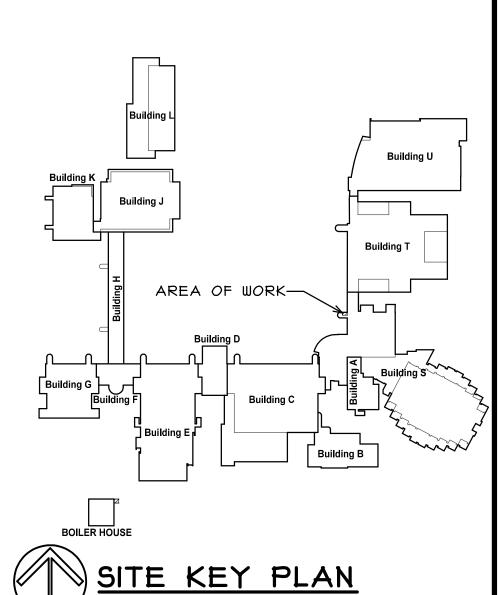
DETAIL AT LANDING

DETECTABLE WARNING

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







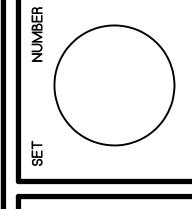
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ARCHITECTURE

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EXTERIOR STAIR REPLACEMENT
JOLIET JUNIOR COLLEGE
BOILER HOUSE AND BUILDING S
1215 HOUBOLT ROAD
JOLIET, ILLINOIS

DATE: 3/23/2018 REVISED:

PROJECT NO. 1802-01

A2

OF 2 SHEETS