# *APPENDIX*

RS Means Construction Cost Data 2005:

| | | 03110 Structural C.I.P. Forms | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 410 | 0010 | FORMS IN PLACE, COLUMNS | | | | | | | 410 |
| | 6650 | 4 use | SFCA | .80 | 4.35 | | 5.15 | 7.70 | |

| | | 03110 Structural C.I.P. Forms | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 420 | 0010 | FORMS IN PLACE, ELEVATED SLABS | | | | | | | 420 |
| | 2000 | Flat slab, drop panels, job-built plywood, to 15' high, 1 use | S.F. | 4.44 | 3.56 | | 8 | 10.45 | |

| | | 03110 Structural C.I.P. Forms | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 430 | 0010 | FORMS IN PLACE, FOOTINGS Continuous wall, plywood, 1 use | SFCA | 2.31 | 2.76 | | 5.07 | 6.85 | 430 |

| | | 03110 Structural C.I.P. Forms | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 430 | 0010 | FORMS IN PLACE, FOOTINGS Continuous wall, plywood, 1 use | SFCA | 2.31 | 2.76 | | 5.07 | 6.85 | 430 |
| | 5000 | Spread footings, job-built lumber, 1 use | SFCA | 1.66 | 3.40 | | 5.06 | 7.15 | |

| | | 03150 Concrete Accessories | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 600 | 0010 | SHORES Erect and strip, by hand, horizontal members | | | | | | | 600 |
| | 1500 | Reshoring | S.F. | .38 | .39 | | .77 | 1.02 | |

| | | 03210 Reinforcing Steel | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 600 | 0010 | REINFORCING IN PLACE A615 Grade 60, incl. access. labor | | | | | | | 600 |
| | 0400 | Elevated slabs, #4 to #7 | Ton | 850 | 420 | | 1,270 | 1,625 | |

| | | 03210 Reinforcing Steel | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 600 | 0010 | REINFORCING IN PLACE A615 Grade 60, incl. access. labor | | | | | | | 600 |
| | 0500 | Footings, #4 to #7 | Ton | 760 | 580 | | 1,340 | 1,800 | |

| | | 03210 Reinforcing Steel | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 600 | 0010 | REINFORCING IN PLACE A615 Grade 60, incl. access. labor | | | | | | | 600 |
| | 0200 | Columns, #3 to #7 | Ton | 800 | 810 | | 1,610 | 2,200 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 220 | 0010 | CONCRETE, READY MIX Normal weight | | | | | | | 220 |
| | 0400 | 5000 psi | C.Y. | 90 | | | 90 | 99 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 700 | 0010 | PLACING CONCRETE and vibrating, including labor & equipment | | | | | | | 700 |
| | 1900 | Footings, continuous, shallow, direct chute | C.Y. | | 11.20 | .40 | 11.60 | 17.70 | |
| | 1950 | Pumped | C.Y. | | 12.25 | 5 | 17.25 | 24.50 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 240 | 0010 | CONCRETE IN PLACE Including forms (4 uses), reinforcing | | | | | | | 240 |
| | 4650 | Slab on grade, not including finish, 4" thick | C.Y. | 104 | 48.50 | .39 | 152.89 | 192 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 700 | 0010 | PLACING CONCRETE and vibrating, including labor & equipment | | | | | | | 700 |
| | 4300 | Slab on grade, 4" thick, direct chute | C.Y. | | 12.25 | .44 | 12.69 | 19.35 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 700 | 0010 | PLACING CONCRETE and vibrating, including labor & equipment | | | | | | | 700 |
| | 5600 | Wheeled concrete dumping, add to placing costs above | | | | | | | |
| | 5610 | Walking cart, 50' haul, add | C.Y. | | 7.55 | 1.56 | 9.11 | 13.50 | |
| | 5620 | 150' haul, add | C.Y. | | 10.10 | 2.07 | 12.17 | 18 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 700 | 0010 | PLACING CONCRETE and vibrating, including labor & equipment | | | | | | | 700 |
| | 1400 | Elevated slabs, less than 6" thick, pumped | C.Y. | | 13.10 | 5.35 | 18.45 | 26 | |
| | 1450 | With crane and bucket | C.Y. | | 22 | 10.10 | 32.10 | 44.50 | |
| | 1500 | 6" to 10" thick, pumped | C.Y. | | 11.50 | 4.70 | 16.20 | 23 | |
| | 1550 | With crane and bucket | C.Y. | | 18.90 | 8.75 | 27.65 | 38.50 | |

| | | 03310 Structural Concrete | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 700 | 0010 | PLACING CONCRETE and vibrating, including labor & equipment | | | | | | | 700 |
| | 1400 | Elevated slabs, less than 6" thick, pumped | C.Y. | | 13.10 | 5.35 | 18.45 | 26 | |

| | | 03350 Concrete Finishing | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 300 | 0010 | FINISHING FLOORS Monolithic, screed finish | S.F. | | .29 | | .29 | .43 | 300 |
| | 0250 | Machine trowel | S.F. | | .48 | | .48 | .70 | |

| | | 04810 Unit Masonry Assemblies | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 186 | 0010 | CONCRETE BLOCK FOUNDATION WALL C90/C145 | | | | | | | 186 |
| | 0350 | 12" thick | S.F. | 2.51 | 4.97 | | 7.48 | 10.35 | |

| | | 05120 Structural Steel | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 680 | 0010 | STRUCTURAL STEEL PROJECTS | | | | | | | 680 |
| | 0700 | Offices, hospitals, etc., steel bearing, 1 to 2 stories | Ton | 1,750 | 291 | 137 | 2,178 | 2,575 | |
| | 0800 | 3 to 6 stories | Ton | 1,775 | 335 | 105 | 2,215 | 2,675 | |

| | | 05310 Steel Deck | Unit | Bare Mat. | Bare Labor | Bare Equip. | Bare Total | Total Incl. O&P | |
|---|---|---|---|---|---|---|---|---|---|
| 300 | 0010 | METAL DECKING Steel decking | | | | | | | 300 |
| | 5700 | 3" deep, galv., 22 gauge | S.F. | 1.53 | .39 | .03 | 1.95 | 2.40 | |
| | 5800 | 20 gauge | S.F. | 1.71 | .41 | .03 | 2.15 | 2.65 | |
| | 5900 | 18 gauge | S.F. | 2.10 | .43 | .03 | 2.56 | 3.12 | |
| | 6000 | 16 gauge | S.F. | 2.80 | .46 | .03 | 3.29 | 3.93 | |

RS Means Assemblies Cost Data 2005:

B2010 134 Brick Face Cavity Wall

| | FACE BRICK | BACKUP MASONRY | TOTAL THICKNESS (IN.) | CAVITY INSULATION | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1000 | Standard | 4"common brick | 10 | polystyrene | | S.F. | 6.80 | 20 | 26.80 |
| 1020 | | | | none | | S.F. | 6.60 | 19.60 | 26.20 |
| 1040 | | 6"SCR brick | 12 | polystyrene | | S.F. | 8.85 | 17.95 | 26.80 |

| | | | DESCRIPTION | | | UNIT | MAT. | INST. | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 8200 | | sliding entrance | 5' x 7' door | electric oper. | 12'-0" x 7'-6" | Opng. | 6,500 | 1,150 | 7,650 |
| 8250 | | sliding patio | temp. glass | economy | 6'-0" x 7'-0" | Opng. | 1,275 | 213 | 1,488 |
| 8300 | | | temp. glass | economy | 12'-0" x 7'-0" | Opng. | 2,225 | 285 | 2,510 |
| 8350 | | | | premium | 6'-0" x 7'-0" | Opng. | 1,925 | 320 | 2,245 |
| 8400 | | | | | 12'-0" x 7'-0" | Opng. | 3,350 | 430 | 3,780 |

B2020 106 Aluminum Windows

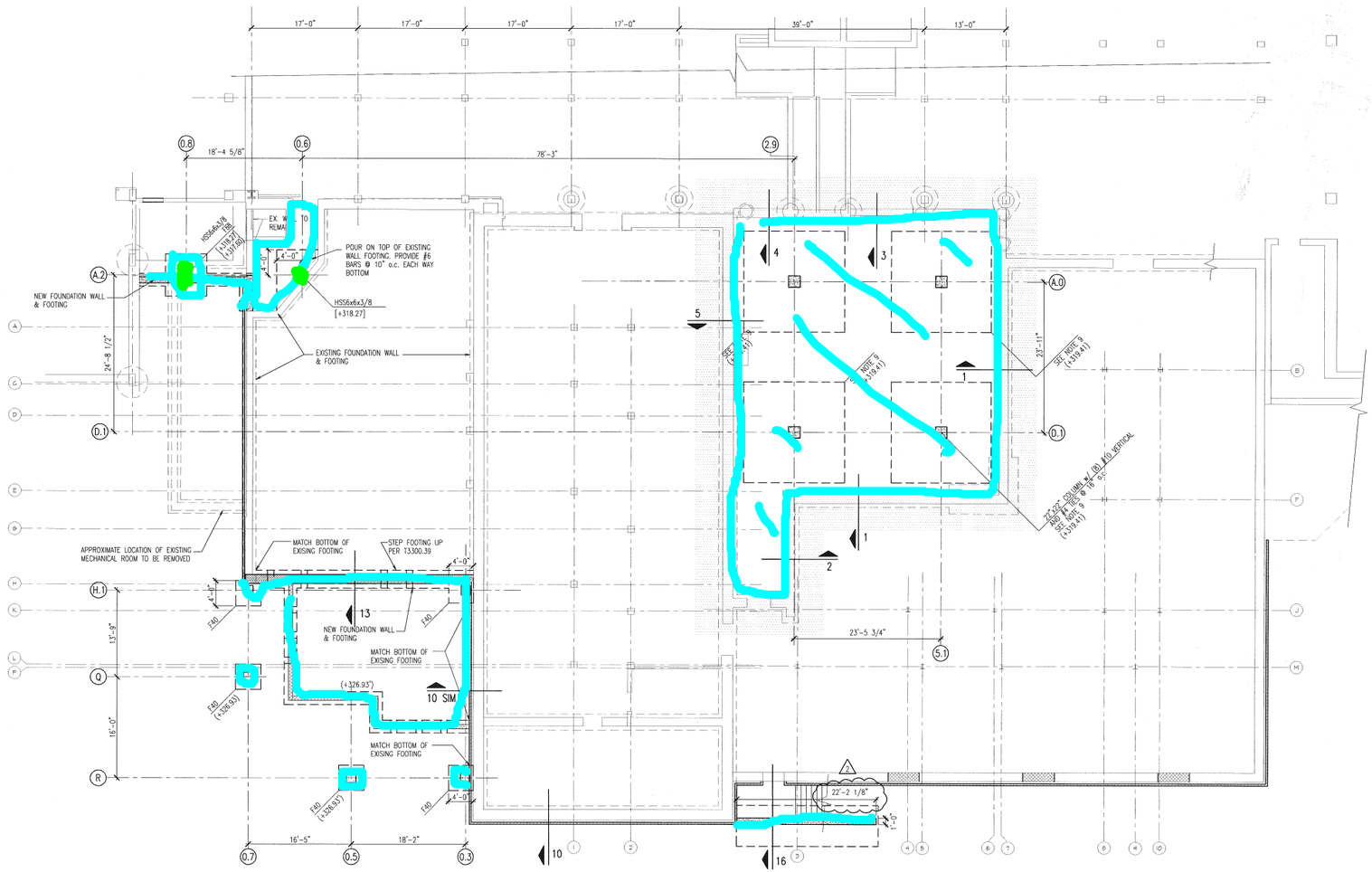
| | MATERIAL | TYPE | GLAZING | SIZE | DETAIL | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6400 | Aluminum | projecting | std. glass | 3'-1" x 3'-2" | | Ea. | 234 | 109 | 343 |
| 6450 | | | | 4'-5" x 5'-3" | | Ea. | 330 | 137 | 467 |
| 6500 | | | insul. glass | 3'-1" x 3'-2" | | Ea. | 281 | 131 | 412 |
| 6550 | | | | 4'-5" x 5'-3" | | Ea. | 395 | 164 | 559 |
| 6600 | | sliding | std. glass | 3' x 2' | | Ea. | 177 | 109 | 286 |
| 6650 | | | | 5' x 3' | | Ea. | 225 | 121 | 346 |
| 6700 | | | | 8' x 4' | | Ea. | 325 | 182 | 507 |
| 6750 | | | | 9' x 5' | | Ea. | 490 | 273 | 763 |
| 6800 | | | insul. glass | 3' x 2' | | Ea. | 197 | 109 | 306 |
| 6850 | | | | 5' x 3' | | Ea. | 315 | 121 | 436 |
| 6900 | | | | 8' x 4' | | Ea. | 520 | 182 | 702 |
| 6950 | | | | 9' x 5' | | Ea. | 785 | 273 | 1,058 |

The following pages contain the drawings used for the estimate takeoffs.

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




## PARTIAL FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION NOTES:

1. SLAB ON GRADE SHALL BE 5" NORMAL WEIGHT CONCRETE (F'C=3000 PSI, 145 PCF) WITH 6"X6"-W2.0xW2.0 WELDED WIRE FABRIC OVER VAPOR BARRIER OVER 6" OF COMPACTED WASHED GRAVEL.

2. TOP OF SLAB ELEVATIONS UNLESS NOTED OTHERWISE:
   COURTYARD INFILL: +320.74'
   CORRIDOR ADDITION: +331.60'

3. [+000.00'] DENOTES TOP OF PIER ELEVATION.

4. (+000.00') DENOTES TOP OF FOOTING ELEVATION. FOOTING ELEVATIONS ARE FOR BIDDING PURPOSES ONLY AND MAY HAVE TO BE ADJUSTED BASED ON FIELD CONDITIONS ENCOUNTERED DURING EXCAVATION.

5. ALL FOOTINGS SHALL BE LOWERED TO BEAR BELOW ANY UTILITIES. SEE TYPICAL DETAIL.

6. ALL SUBGRADE PREPARATION FOR THE SLAB ON GRADE, FOOTINGS, INSTALLATION OF CONTROLLED FILL, ETC SHALL BE IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

7. REFER TO THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL DRAWINGS FOR BELOW GRADE UTILITIES, BELOW GRADE CONDUITS, SLAB DEPRESSIONS, ETC.

8. ALL EXTERIOR MASONRY WALLS SHALL BE REINFORCED WITH #5 BARS AT 48" ON CENTER LOCATED IN THE CENTER OF THE CMU BACKUP UNLESS NOTED OTHERWISE. REFER TO THE REINFORCED MASONRY TYPICAL DETAILS AND SECTIONS. PROVIDE THE FOLLOWING FULL HEIGHT REINFORCED MASONRY PIERS AT EACH SIDE OF EACH OPENING IN THE EXTERIOR WALLS.

| WALL TYPE | PIER |
|---|---|
| 4" BRICK+ 2" CAVITY+ 8" BLOCK | 8"X16" WITH 1-#5 BARS EACH FACE |

9. SEE COURTYARD FOOTING SCHEDULE FOR VARYING SIZES BASED ON THE ACTUAL BEARING PRESSURE AS VERIFIED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION.

**FOOTING SCHEDULE**
(ALLOWABLE BEARING PRESSURE =2000 PSF)

| MARK | SIZE (LENGTH x WIDTH x THICKNESS) | REINFORCEMENT (EACH WAY BOTTOM) |
|---|---|---|
| F40 | 4'-0"x4'-0"x12" | 5-#4 |
| F68 | 6'-8"x6'-8"x14" | 7-#6 |

FOOTINGS SHALL BE CENTERED ON COLUMNS UNLESS OTHERWISE NOTED.

**COURTYARD FOOTING SCHEDULE - SEE NOTE 9**
(BASED ON ACTUAL BEARING PRESSURE)

| BEARING PRESSURE | SIZE (LENGTH x WIDTH x THICKNESS) | REINFORCEMENT (EACH WAY BOTTOM) |
|---|---|---|
| 2000 | 16'-6"x16'-6"x26" | 19-#8 |
| 2500 | 14'-8"x14'-8"x24" | 15-#9 |
| 3000 | 13'-0"x13'-0"x24" | 16-#8 |
| 3500 | 12'-0"x12'-0"x24" | 14-#8 |
| 4000 | 11'-0"x11'-0"x24" | 12-#8 |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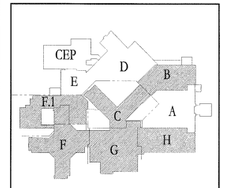
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|




KEYPLAN

FOUNDATION PLAN

STATE OF MARYLAND
BRIAN ROBERT HULL
21965
REGISTERED
PROFESSIONAL ENGINEER

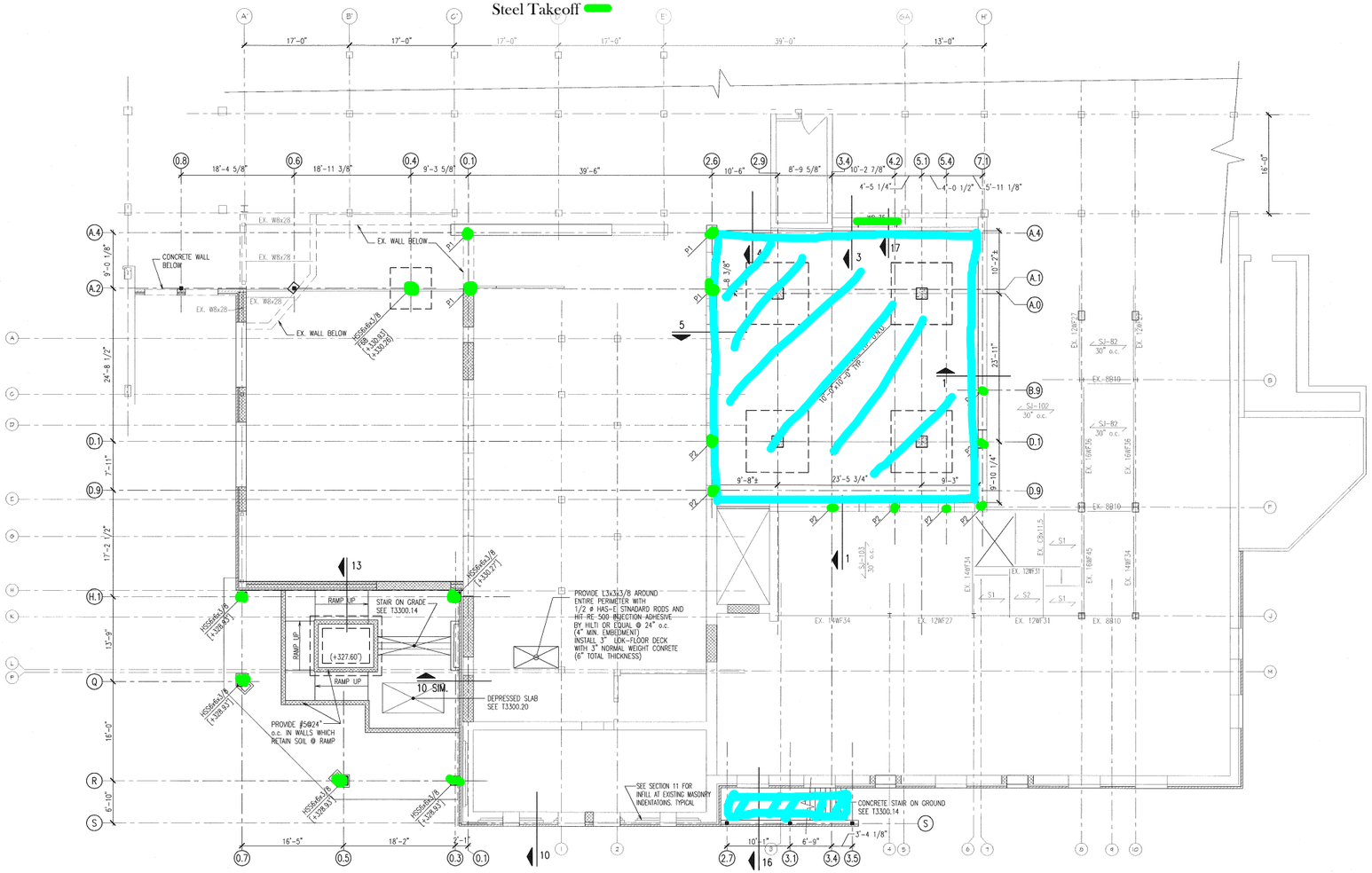
| | |
|---|---|
| ☐ PRELIMINARY NOT FOR CONSTRUCTION | DATE. 15 JULY 2005 |
| ☐ ISSUED FOR BUILDING PERMIT | JOB NUMBER. 04167 |
| ☐ PRICING | COMMISSION. |
| ☐ PACKAGE 1 | |
| X PACKAGE 2 | SCALE. |

S1.1

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




## PARTIAL FOUNDATION / FIRST FLOOR FRAMING PLAN

1/8" = 1'-0"

SEE S1.1 FOR FOUNDATION NOTES

CONCRETE SLAB FLOOR NOTES:

1. TOP OF SLAB ELEVATION MEASURED FROM TOP OF SLAB ELEVATION BELOW @ COURTYARD INFILL:

| | |
|---|---|
| 1ST FLOOR: | +10'-10 3/8" |
| 2ND FLOOR: | +11'-1 3/8" |
| 3RD FLOOR: | +9'-5 5/8" |
| ROOF: | +11'-11 1/2" |
| @ CORRIDOR: | |
| 1ST FLOOR: | SLAB ON GRADE |
| 2ND FLOOR: | +11'-1 3/8" |
| 3RD FLOOR: | +10-9 3/8" |
| 4TH FLOOR: | +10'-9 3/8" |

2. STRUCTURAL SLAB SHALL BE 9" CONCRETE (f'c=5000psi) UNLESS OTHERWISE NOTED. SLAB SHALL BE REINFORCED WITH THE FOLLOWING BARS, UNLESS OTHERWISE NOTED:

| LOCATION | BARS |
|---|---|
| TOP OF SLAB | #5 @ 9"o.c. EACH WAY |
| BOTTOM OF SLAB | #4 @ 8"o.c. EACH WAY |

SLAB REINFORCING SHALL BE PLACED IN THE FOLLOWING ORDER.

↕ BOTTOM/TOP MAT AND ADDED BARS (1ST LAYER-OUTERMOST)

⟷ BOTTOM/TOP MAT AND ADDED BARS (2ND LAYER)

↘ BOTTOM/TOP MAT AND ADDED BARS (3RD LAYER)

SEE TYPICAL DETAIL T3300.84 FOR ADDITIONAL BAR PLACEMENT INFORMATION.

3. ALL SLAB OPENING LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. A SLEEVING PLAN SHALL BE SUBMITTED FOR REVIEW PRIOR TO POURING CONCRETE SLABS. THE PLAN SHALL SHOW ALL OPENING THROUGH SLAB WITH SIZES AND DIMENSIONS FROM COLUMN CENTERLINES

4. EX DENOTES EXISTING.

5. CORES IN EXISTING SLABS ARE NOT PERMITTED UNLESS SPECIFICALLY REVIEWED BY ABEL CONSULTING ENGINEERS. EACH CORE SHOULD BE LOCATED ON A PLAN w/ SIZE AND DIMENSIONS. USE EXISTING SLEEVES WHERE POSSIBLE.

6. P1 DENOTES W8x35 POST UP FROM FOUNDATION WALL OR SPLICE w/ P1 BELOW (SEE T5120.07 FOR COLUMN SPLICE). P2 DENOTES HSS6x6x3/8 POST UP FROM FOUNDATION WALL. PROVIDE 12"x12"x3/4" BASE PLATE WITH (4) 3/4"ø x 12" LONG ANCHOR BOLTS INTO MASONRY WALL BELOW. PROVIDE 24"x24"xWALL THICKNESS BOLSTER BELOW PLATE. GROUT CELLS 100% SOLID WITH f'c=2500 PSI GROUT.

EXISTING BUILDING INFORMATION SHOWN IS AS INDICATED ON DESIGN DRAWINGS OF THE EXISTING BUILDING (BY OTHERS). CONTRACTOR SHALL VERIFY ALL THE EXISTING INFORMATION NECESSARY FOR CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. SCHEDULE EVENTS TO ALLOW THE ARCHITECT A MINIMUM OF TWO WEEKS TIME FOR COORDINATION OF DISCREPANCIES.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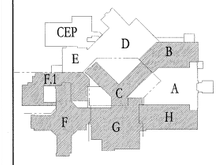
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|




KEYPLAN

# FOUNDATION PLAN
# FIRST FLOOR FRAMING PLAN

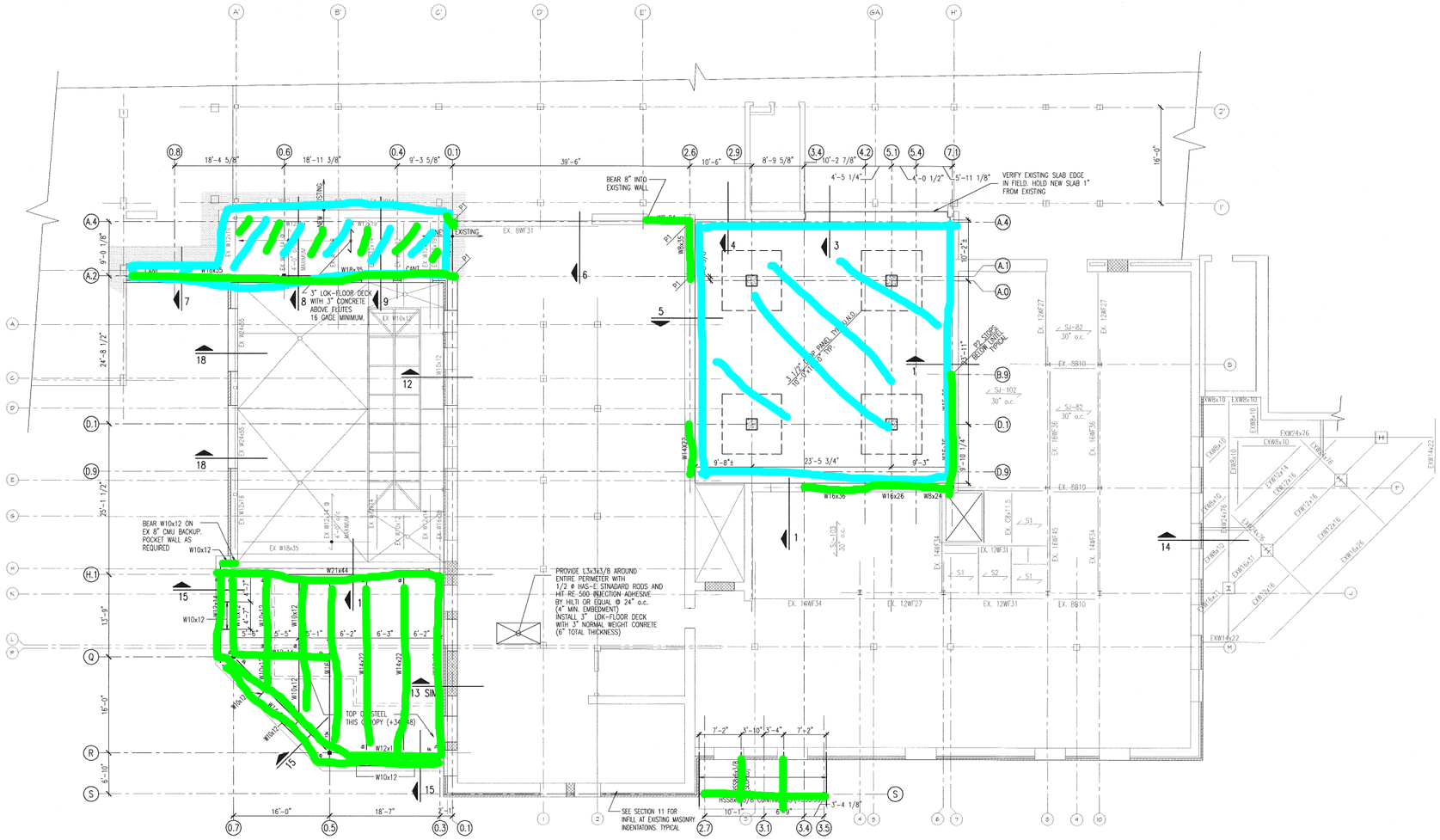
| | |
|---|---|
| ☐ PRELIMINARY NOT FOR CONSTRUCTION | DATE. 15 JULY 2005 |
| ☐ ISSUED FOR BUILDING PERMIT | JOB NUMBER. 04167 |
| ☐ PRICING | COMMISSION. |
| ☐ PACKAGE 1 | |
| X PACKAGE 2 | SCALE. |

S1.2

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




## SECOND FLOOR FRAMING PLAN 1/8" = 1'-0"

SEE S1.2 FOR CONCRETE FLOOR FRAMING NOTES

NOTES FOR ROOF FRAMING.

1. ROOF SYSTEM SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS ON 1.5"-20 GAGE TYPE "B" GALVANIZED METAL ROOF DECK BY UNITED STEEL DECK OR EQUIVALENT (3 SPAN MINIMUM) UNLESS NOTED OTHERWISE ON PLAN. ATTACH ROOF DECK TO STEEL SUPPORTS USING A 36/7 PATTERN (EVERY FLUTE WELDED TO STEEL SUPPORT).

2. TOP OF STEEL IS INDICATED THUS (+000.00").

3. COORDINATE OPENINGS THROUGH THE ROOF WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. FRAME ALL OPENINGS THROUGH THE ROOF DECK, GREATER THAN 6", THROUGH THE ROOF AND ROOF DRAINS WITH 5"X5"X3/8" ANGLES (LONG LEG VERTICAL) ON ALL SIDES.

4. NET UPLIFT FORCES ON THE FRAMED ROOF ARE AS NOTED BELOW. THE JOIST AND METAL DECK SUPPLIERS SHALL SUBMIT CALCULATIONS TO DEMONSTRATE THAT THE JOISTS AND METAL DECK AND THEIR RESPECTIVE CONNECTIONS MEET THE FOLLOWING NET UPLIFTS.

A. FOR A 10.00' WIDE STRIP AROUND THE PERIMETER OF THE FRAMED ROOF AREA, THE METAL DECK AND JOISTS SHALL BE DESIGNED FOR A 20 PSF NET UPLIFT LOAD.

B. ALL REMAINING FRAMED ROOF AREA SHALL BE DESIGNED FOR A 10 PSF NET UPLIFT LOAD.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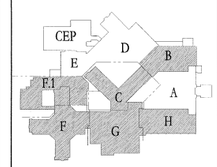
# PHASE 4
## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|




KEYPLAN

# SECOND FLOOR FRAMING PLAN

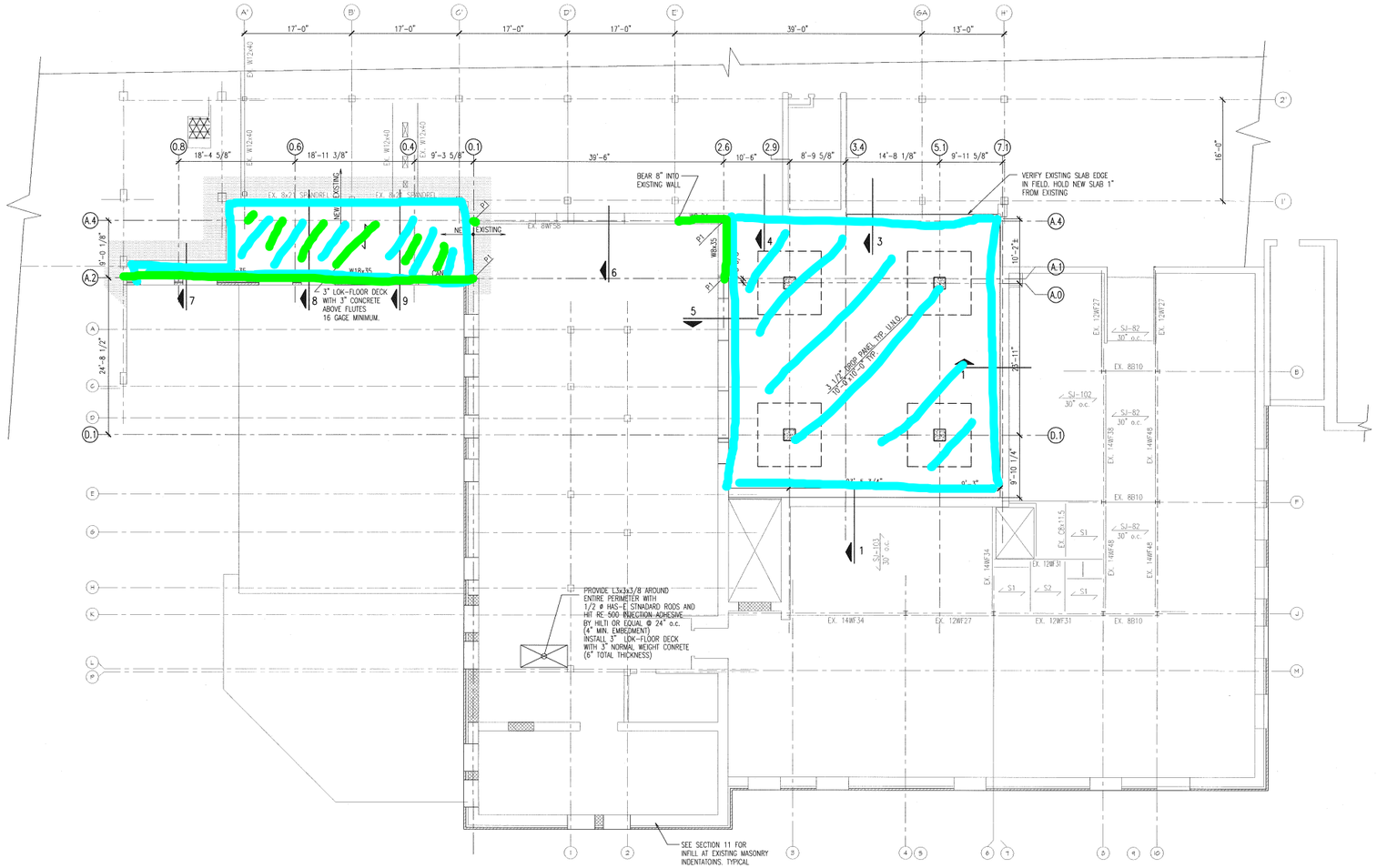
| | |
|---|---|
| ☐ PRELIMINARY NOT FOR CONSTRUCTION | DATE. 15 JULY 2005 |
| ☐ ISSUED FOR BUILDING PERMIT | JOB NUMBER. 04167 |
| ☐ PRICING | COMMISSION. |
| ☐ PACKAGE 1 | |
| X PACKAGE 2 | SCALE. |

S2.1

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




THIRD FLOOR FRAMING PLAN 1/8" = 1'-0"

SEE S1.2 FOR CONCRETE FLOOR FRAMING NOTES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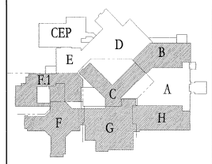
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|
| | | |




KEYPLAN

# THIRD FLOOR FRAMING PLAN

- ☐ PRELIMINARY NOT FOR CONSTRUCTION
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ PRICING
- ☐ PACKAGE 1
- X PACKAGE 2

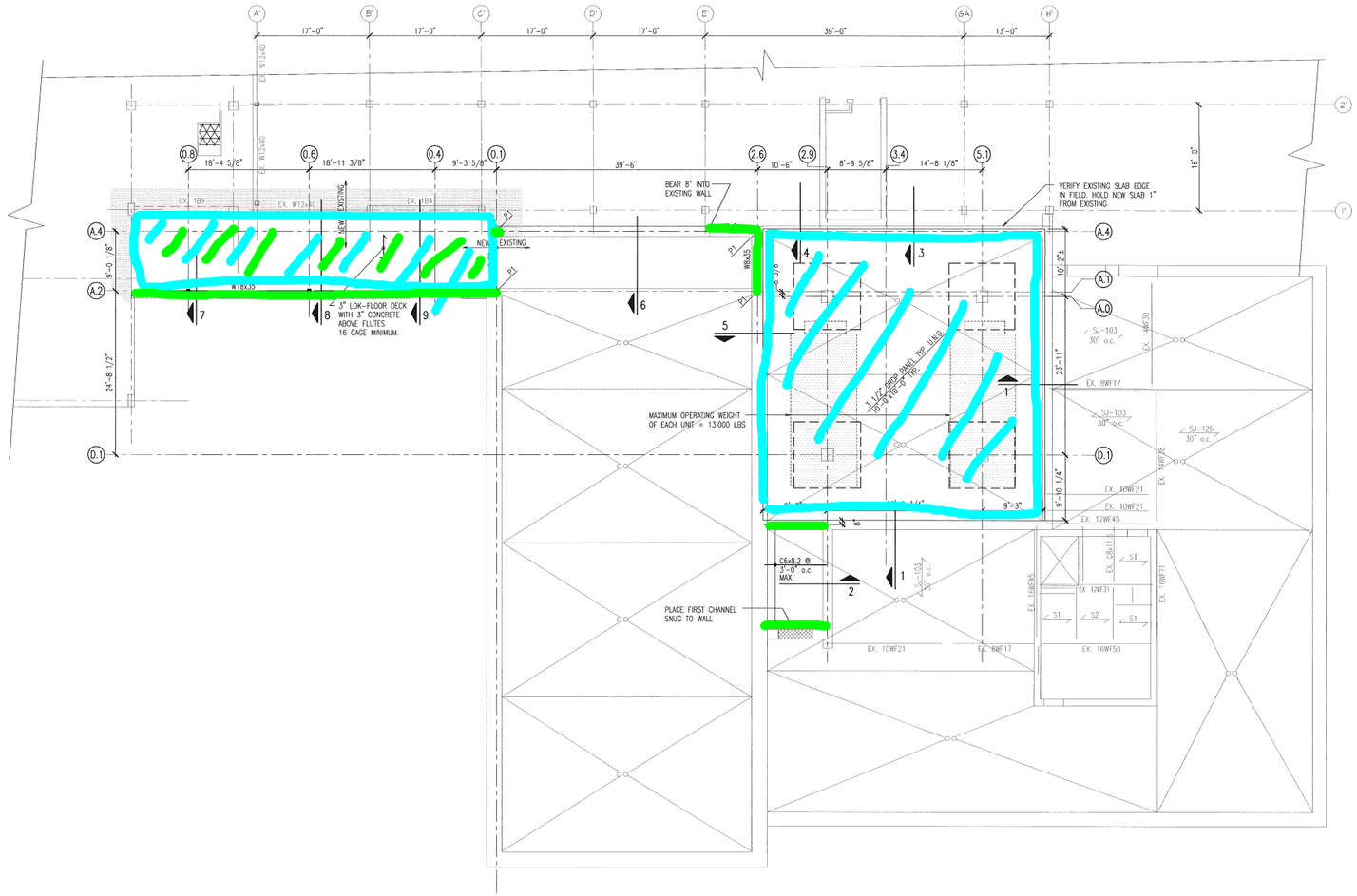
DATE. 15 JULY 2005
JOB NUMBER. 04167
COMMISSION.
SCALE.

S2.2

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




FOURTH FLOOR / ROOF FRAMING PLAN 1/8" = 1'-0"

SEE S1.2 FOR CONCRETE FLOOR FRAMING NOTES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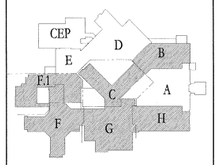
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|




KEYPLAN

## FOURTH FLOOR / ROOF FRAMING PLAN

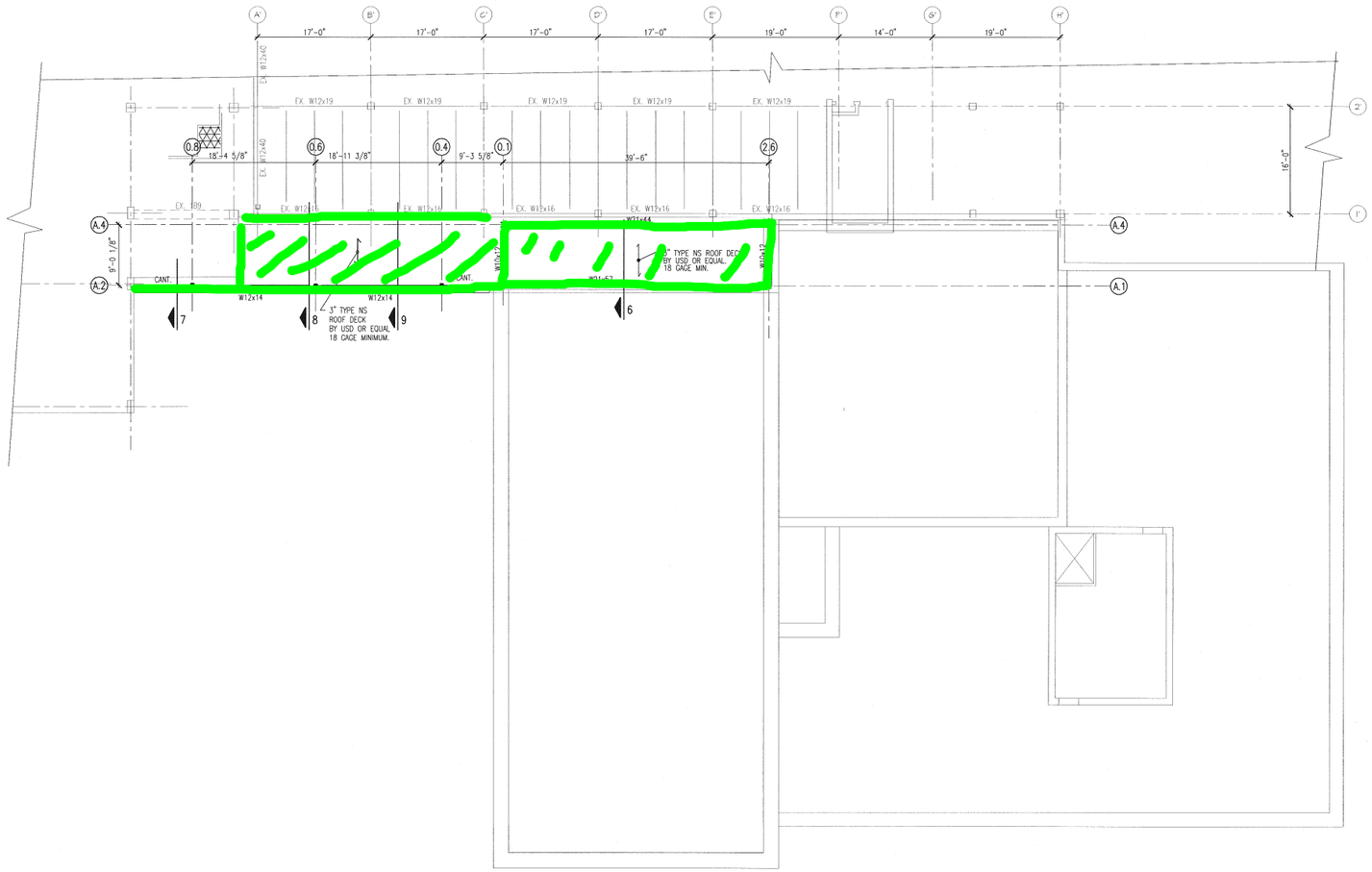
| | |
|---|---|
| ☐ PRELIMINARY NOT FOR CONSTRUCTION | DATE. 15 JULY 2005 |
| ☐ ISSUED FOR BUILDING PERMIT | JOB NUMBER. 04167 |
| ☐ PRICING | COMMISSION. |
| ☐ PACKAGE 1 | |
| X PACKAGE 2 | SCALE. |

S2.3

KEY:

Concrete/Reinforcing/Formwork Takeoff

Steel Takeoff




## ROOF FRAMING PLAN 1/8" = 1'-0"

NOTES FOR ROOF FRAMING.

1. ROOF SYSTEM SHALL BE AS INDICATED ON THE ARCHITECTURAL DRAWINGS ON 3"-18 GAGE TYPE "NS" GALVANIZED METAL ROOF DECK BY UNITED STEEL DECK OR EQUIVALENT. ATTACH ROOF DECK TO STEEL SUPPORTS USING A 36/7 PATTERN (EVERY FLUTE WELDED TO STEEL SUPPORT).

2. TOP OF STEEL IS MEASURED FROM TOP OF FLOOR SLAB BELOW AND IS INDICATED THUS (+0'-0").

3. COORDINATE OPENINGS THROUGH THE ROOF WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. FRAME ALL OPENINGS THROUGH THE ROOF DECK, GREATER THAN 6", THROUGH THE ROOF AND ROOF DRAINS WITH 5"X5"X3/8" ANGLES (LONG LEG VERTICAL) ON ALL SIDES.

4. NET UPLIFT FORCES ON THE FRAMED ROOF ARE AS NOTED BELOW. THE JOIST AND METAL DECK SUPPLIERS SHALL SUBMIT CALCULATIONS TO DEMONSTRATE THAT THE JOISTS AND METAL DECK AND THEIR RESPECTIVE CONNECTIONS MEET THE FOLLOWING NET UPLIFTS.

A. FOR A 10.00' WIDE STRIP AROUND THE PERIMETER OF THE FRAMED ROOF AREA, THE METAL DECK AND JOISTS SHALL BE DESIGNED FOR A 20 PSF NET UPLIFT LOAD.

B. ALL REMAINING FRAMED ROOF AREA SHALL BE DESIGNED FOR A 10 PSF NET UPLIFT LOAD.

STATE OF MARYLAND BRIAN ROBERT ABEL 21645 REGISTERED PROFESSIONAL ENGINEER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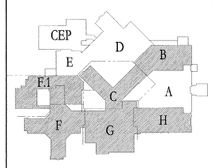
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLDGS

| No | Revisions / Submissions | Date |
|---|---|---|
| | | |




KEYPLAN

ROOF FRAMING PLAN

- ☐ PRELIMINARY NOT FOR CONSTRUCTION
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ PRICING
- ☐ PACKAGE 1
- X PACKAGE 2

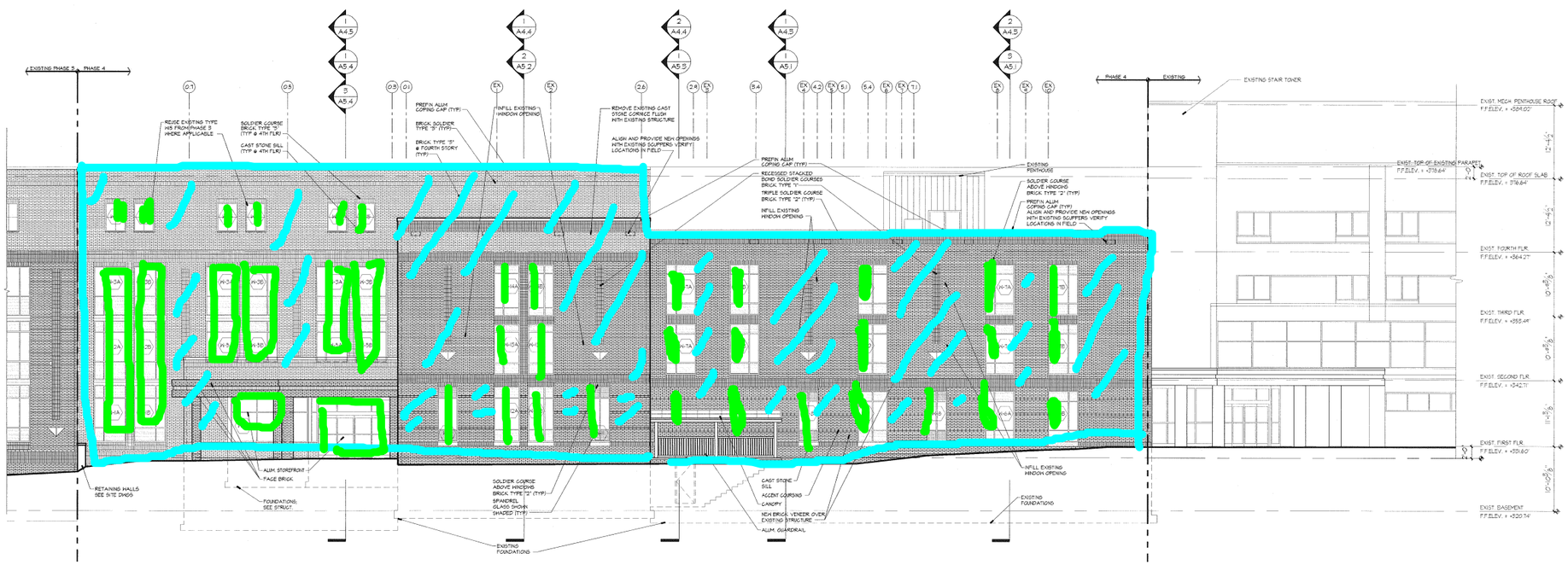
DATE. 15 JULY 2005
JOB NUMBER. 04167
COMMISSION.
SCALE.

S2.4

KEY:

Brick Veneer Takeoff

Window & Door Takeoff




1 / A4.1 EXTERIOR ELEVATION
SCALE: 1/8" = 1'-0"

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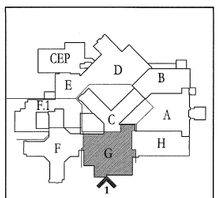
# PHASE 4
## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° BLOCKS

ARCHITECTURAL REGISTRATION BOARD 7561-R MICHAEL GLOSSWALL AIA STATE OF MARYLAND

| No | Revisions / Submissions | Date |
|---|---|---|
| SK-149 | ELEVATION REVISIONS | 2/18/04 |




KEYPLAN

BUILDING ELEVATIONS

- ☐ PRELIMINARY NOT FOR CONSTRUCTION
- ☐ ISSUED FOR BUILDING PERMIT
- ☐ PRICING
- ☐ PACKAGE 1
- ☒ PACKAGE 2

DATE: 15 JULY 2005
JOB NUMBER: 04167
COMMISSION:
SCALE: 1/8" = 1'-0"

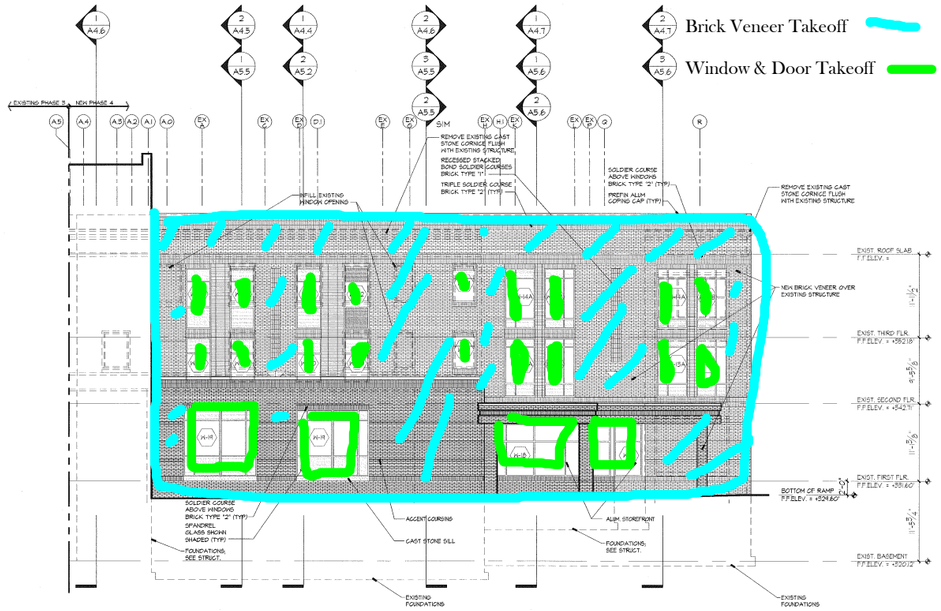
A4.1

Jul 21, 2005 - 11:35am

KEY:

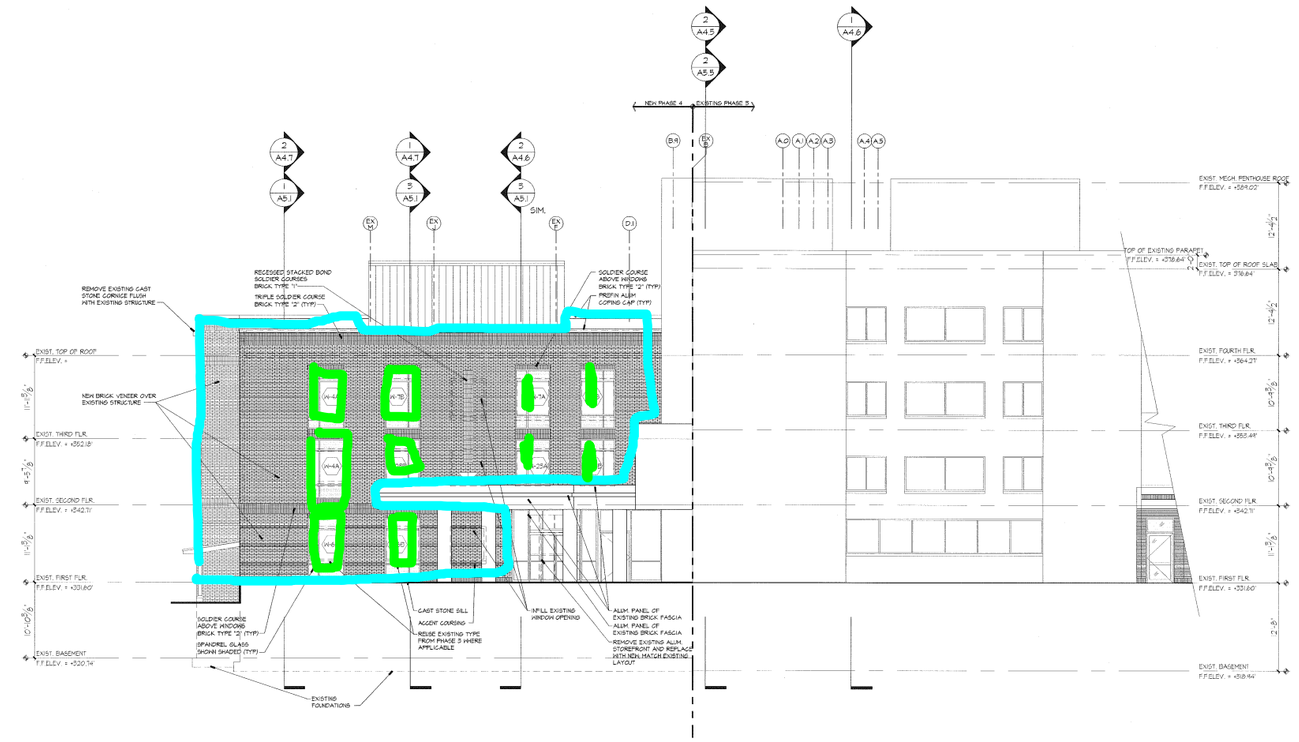
Brick Veneer Takeoff

Window & Door Takeoff




1 / A4.2 EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"




2 / A4.2 EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"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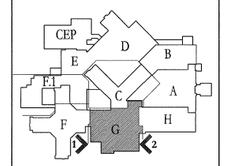
# PHASE 4

## ADDITIONS & RENOVATIONS

PLAN NORTH @ 45° FLICKS

ARCHITECTURAL REGISTRATION BOARD 7561-R MICHAEL GLENN HULL STATE OF MARYLAND

| No | Revisions / Submissions | Date |
|---|---|---|
| SK-149 | ELEVATION REVISIONS | 2/13/06 |




KEYPLAN

## BUILDING ELEVATIONS

| | |
|---|---|
| ☐ PRELIMINARY NOT FOR CONSTRUCTION | DATE: 15 JULY 2005 |
| ☐ ISSUED FOR BUILDING PERMIT: | JOB NUMBER: 04167 |
| ☐ PRICING: | COMMISSION: |
| ☐ PACKAGE 1 | SCALE: 1/8" = 1'-0" |
| ☒ PACKAGE 2 | |

A4.2

Jul 21, 2005 - 11:34am