

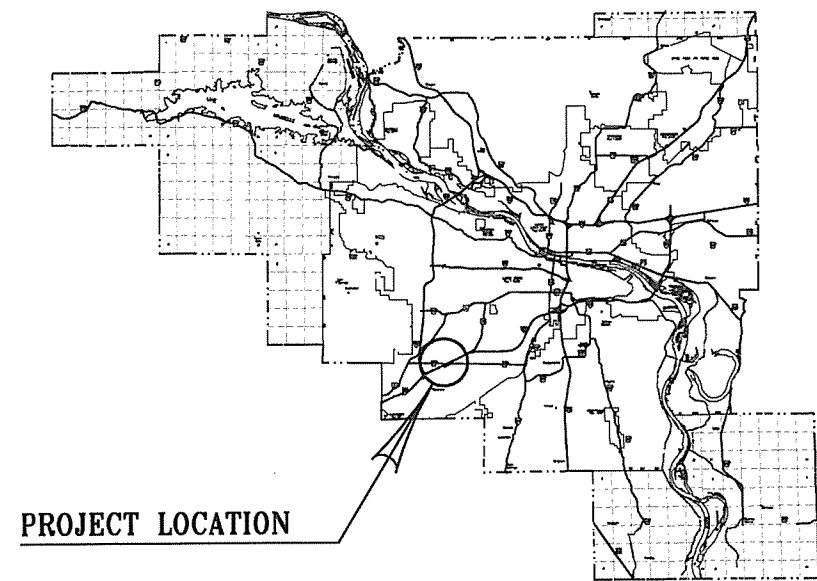
| DATE REVISED | DATE FILMED | DATE REVISED | DATE FILMED | FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | SHEET NO. | TOTAL SHEETS |
|--------------|-------------|--------------|-------------|---------------------|-------|--------------------|-----------|--------------|
| | | | | 6 | ARK. | | | |
| | | | | JOB NO. | | | | |

④ PUBLIC TRANSPORTATION PARKING LOT & DEMONSTRATION BUILDING (LR)(S)

ARKANSAS STATE HIGHWAY & TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR

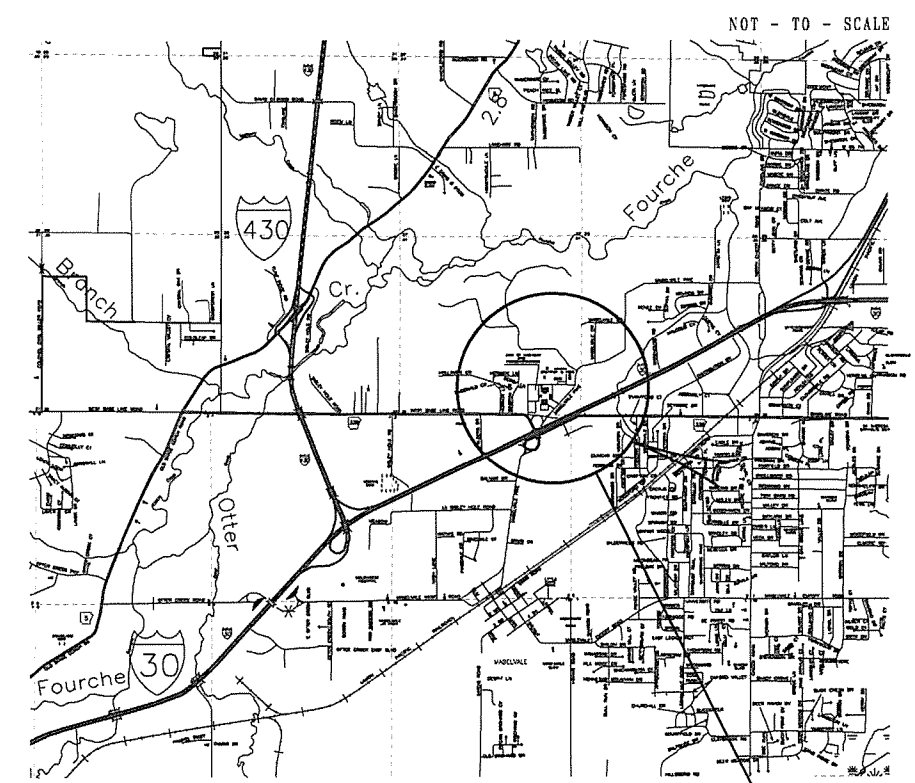
PUBLIC TRANSPORTATION PARKING LOT &
DEMONSTRATION BUILDING (LR)(S)

AHTD JOB NO. 061421
FTA JOB NO. F729
FTA GRANT NO. AR-18-X029
ROUTE 338 SECTION 1
PULASKI COUNTY



PROJECT LOCATION

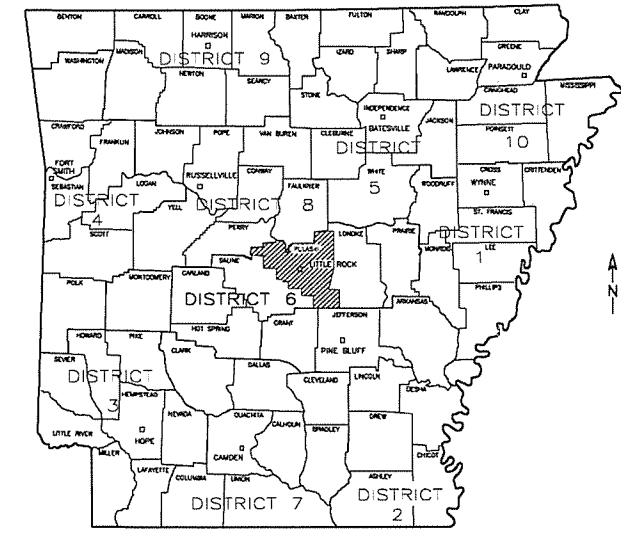
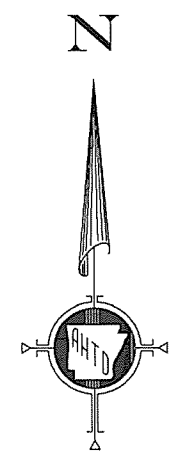
VICINITY MAP



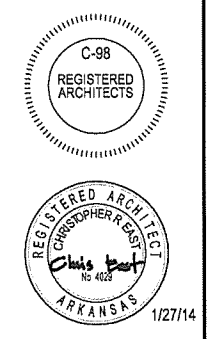
PROJECT LOCATION

MIDPOINT OF PROJECT

LONGITUDE 92° 23' 00"
LATITUDE 34° 40' 15"



PULASKI COUNTY



ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

I hereby certify that these plans and specifications have been prepared by me, or under my supervision. I further certify that to the best of my knowledge these plans and specifications are as required by law and in compliance with the Arkansas Fire Prevention Code for the State of Arkansas.
Chris East 01 / 27 / 2014 Date
Christopher East, AIA Architect
CROMWELL ARCHITECTS ENGINEERS, INC.
Architects Engineers
101 S. Spring Street
Little Rock, Arkansas



Issue Date 27-JANUARY-2014 Project Number 2012-102_20
Drawing Title
TITLE SHEET
Drawing Number
G-001
1 of 46



CONSTRUCTION DATA

PROJECT NAME: ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT PUBLIC TRANSIT OFFICE ADDITION

ADDRESS: I-30, LITTLE ROCK, AR

BUILDING AREA: NEW CONSTRUCTION : 1,024 SF

OCCUPANCY: BUSINESS (B)

CONSTRUCTION TYPE: 2B, NON SPRINKLERED

OWNER: STATE OF ARKANSAS

ALL REQUIRED TESTING AND INSPECTION WILL BE PAID FOR BY THE CONTRACTOR.

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

| NUMBER | TITLE |
|---------------|---|
| ERRATA ---- | ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS |
| JOB 061421 -- | BUILDER'S RISK INSURANCE |
| JOB 061421 -- | COMPETENCY OF BIDDERS |
| JOB 061421 -- | FTA CERTIFICATION AND ASSURANCES |
| JOB 061421 -- | GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION |
| JOB 061421 -- | INTERNET BIDDING |
| JOB 061421 -- | PROJECT MANUAL |
| JOB 061421 -- | STANDARD SPECIFICATIONS APPLICABILITY |
| SP 108-1 ---- | LIQUIDATED DAMAGES |

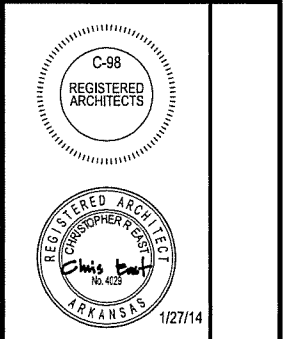
| SUMMARY OF QUANTITIES | | | |
|-----------------------|--|----------|------|
| ITEM NO. | TITLE | QUANTITY | UNIT |
| 1 | BUILDING, PARKING LOT AND SITE WORK COMPLETE | 1 | LS |
| 2 | MOBILIZATION | 1 | LS |
| | | | |

| REVISION BLOCK | |
|----------------|--|
| DATE | REVISION |
| 4/07/2014 | ADDENDA 001, CHANGING THE FOLLOWING SHEETS G-101, CS-101, CU-101, A-101, E-601 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| SHEET INDEX | | | | |
|-------------|-------------|--|--------------|-----------|
| NO. | DRAWING NO. | TITLE | REVISION NO. | DATE |
| 1 | G-001 | TITLE SHEET | | 1/27/2014 |
| 2 | G-101 | INDEX AND CODE ANALYSIS | ADD 001 | 4/07/2014 |
| | | | | |
| 3 | GI101 | LIFE SAFETY PLAN | | 1/27/2014 |
| | | | | |
| 4 | V-101 | SITE SURVEY | | 1/27/2014 |
| 5 | CS-101 | SITE LAYOUT PLAN | ADD 001 | 4/07/2014 |
| 6 | CS-501 | SITE DETAILS | | 1/27/2014 |
| 7 | CS-502 | SITE DETAILS | | 1/27/2014 |
| 8 | CG-101 | SITE GRADING AND DRAINAGE PLAN | | 1/27/2014 |
| 9 | CG-501 | SITE DETAILS | | 1/27/2014 |
| 10 | CG-701 | SITE EROSION AND SEDIMENTATION CONTROL PLAN | | 1/27/2014 |
| 11 | CG-702 | SITE EROSION AND SEDIMENTATION CONTROL DETAILS | | 1/27/2014 |
| 12 | CU-101 | SITE UTILITY PLAN | ADD 001 | 4/07/2014 |
| 13 | CU-501 | SITE DETAILS | | 1/27/2014 |
| | | | | |
| 14 | S-001 | STRUCTURAL QUALITY CONTROL | | 1/27/2014 |
| 15 | S-002 | STRUCTURAL QUALITY CONTROL | | 1/27/2014 |
| 16 | S-003 | GENERAL NOTES | | 1/27/2014 |
| 17 | S-101 | FOUNDATION PLAN | | 1/27/2014 |
| 18 | S-201 | FOUNDATION DETAILS | | 1/27/2014 |
| 19 | S-301 | BLOCK DETAILS | | 1/27/2014 |
| 20 | S-302 | BLOCK DETAILS | | 1/27/2014 |
| 21 | S-401 | FRAMING PLAN | | 1/27/2014 |
| 22 | S-501 | FRAMING DETAILS | | 1/27/2014 |
| | | | | |
| 23 | A-001 | MOUNTING HTS., ABBREVIATIONS AND SYMBOLS | | 1/27/2014 |
| 24 | A-002 | PARTITION SCHEDULE | | 1/27/2014 |
| | | | | |
| | | | | |
| | | | | |

| SHEET INDEX | | | | |
|-------------|-------------|---|--------------|-----------|
| NO. | DRAWING NO. | TITLE | REVISION NO. | DATE |
| 25 | A-101 | FLOOR PLANS AND INTERIOR ELEVATIONS | ADD 001 | 4/07/2014 |
| 26 | A-102 | ROOF PLANS AND DETAILS | | 1/27/2014 |
| 27 | A-201 | EXTERIOR ELEVATIONS | | 1/27/2014 |
| 28 | A-301 | BUILDING SECTIONS / INTERIOR ELEVATIONS | | 1/27/2014 |
| 29 | A-401 | WALL SECTIONS | | 1/27/2014 |
| 30 | A-402 | WALL SECTIONS | | 1/27/2014 |
| 31 | A-501 | EXTERIOR DETAILS | | 1/27/2014 |
| 32 | A-502 | EXTERIOR DETAILS | | 1/27/2014 |
| 33 | A-503 | ROOF DETAILS | | 1/27/2014 |
| 34 | A-504 | EXTERIOR DETAILS | | 1/27/2014 |
| 35 | A-601 | INTERIOR ELEVATIONS AND SCHEDULES | | 1/27/2014 |
| | | | | |
| 36 | P-001 | PLUMBING LEGEND AND GENERAL NOTES | | 1/27/2014 |
| 37 | P-101 | PLUMBING PLAN AND RISER | | 1/27/2014 |
| 38 | P-501 | PLUMBING DETAILS | | 1/27/2014 |
| 39 | P-601 | PLUMBING SCHEDULES | | 1/27/2014 |
| | | | | |
| 40 | M-001 | MECH. ABBREVS, LEGENDS AND GEN. NOTES | | 1/27/2014 |
| 41 | M-101 | MECHANICAL PLAN | | 1/27/2014 |
| 42 | M-501 | MECHANICAL DETAILS | | 1/27/2014 |
| | | | | |
| 43 | E-001 | ELECTRICAL LEGEND | | 1/27/2014 |
| 44 | E-101 | ELECTRICAL PLANS | | 1/27/2014 |
| 45 | E-501 | ELECTRICAL DETAILS | | 1/27/2014 |
| 46 | E-601 | SINGLELINE DIAGRAM AND SCHEDULES | ADD 001 | 4/07/2014 |
| | | | | |
| 47 | | | | |
| 48 | | | | |
| 49 | | | | |
| 50 | | | | |

| No. | Date | Description |
|-----|------------|--------------|
| 1 | 04-07-2014 | ADDENDUM 001 |



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

| | | | |
|----------------|-------------------------|----------------|-------------|
| Issue Date | 27-JANUARY-2014 | Project Number | 2012-102_20 |
| Drawing Title | INDEX AND CODE ANALYSIS | | |
| Drawing Number | G-101 | | |
| | 2 of 46 | | |

APPLICABLE CODES

- Current Arkansas Building Codes:
 Arkansas Fire Prevention Code 2007
 Volume I International Fire Code 2006
 Volume II International Building Code 2006
 Arkansas Plumbing Code 2007
 International Plumbing Code 2006
 Arkansas Mechanical Code 2010
 International Mechanical Code 2009
 Arkansas Electric Code 2012
 National Electric Code 2011
 Arkansas Energy Code 2011
 ASHRE 90.1 2001 (Changes to 2007 edition on January 2013)
 ADA Accessibility Guidelines / ANSI A117.1

OCCUPANCY: (Chapter 3)

- B Business per Section 304
 S Storage per Section 304 (less than 100 SF)

HEIGHT AND AREA: (Chapter 5)

CONSTRUCTION CLASSIFICATION: Type IIB Non Sprinkled

TABULAR HEIGHT & AREA (TABLE 503):

23,000 sf Per Floor
 4 stories
 55 ft.

ACTUAL HEIGHT & AREA (TABLE 503):

1,024 sf (New Building)
 1 story
 16'-0"

The Training Room is an Accessory Assembly area, but is not considered a separate occupancy because it is less than 750 s.f. per 508.3.1, Exception 1

The Storage Room is being considered as an incidental use area to the Business occupancy. It is over 100 s.f. and must have 1 hour separation per Table 508.2

TYPE OF CONSTRUCTION (Chapter 6)

| BUILDING ELEMENT (from Table 601 & 602) | REQUIRED RATING |
|--|--------------------|
| Structural Frame Including columns, girders, trusses | Type IIB 0 hour |
| Bearing Walls | 0 hour |
| Exterior | 0 hour |
| Interior | 0 hour |
| NonBearing Walls and Partitions | 0 hour |
| Exterior | 0 hour |
| Interior | 0 hour |
| Floor Construction Including support beams & joists | 0 hour |
| Roof Construction Including support beams & joists | 0 hour |

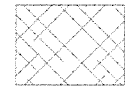
Exterior wall adjacent to existing building is separated by greater than 10', so no fire rating is required per Table 602

FIRE PROTECTION (Chapter 7)

OPENING PROTECTIVE FIRE PROTECTION RATINGS (Per Table 714.2)

One Hour Fire Barriers require ¾ hr. opening protection assembly at incidental use separation per Table 715.4

FIRE ALARM SYSTEM IS NOT REQUIRED BY CODE, HOWEVER IT IS BEING INSTALLED BASED ON OWNER'S REQUEST

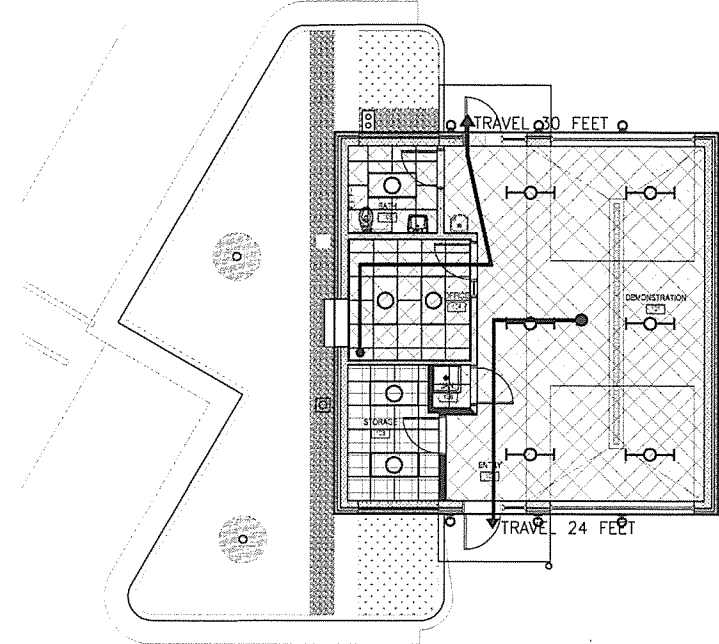


B - BUSINESS



S-1 - STORAGE

NO RATED WALL ASSEMBLIES REQUIRED



NEW PARKING LOT & DEMONSTRATION BUILDING



1 LIFE SAFETY PLAN
 GH101 1/8" = 1'-0"

MEANS OF EGRESS (Chapter 10)

ALLOWABLE EXIT TRAVEL DISTANCE (Per Table 1016.1) 200 Feet

OCCUPANT LOAD (Section 1004)

| ROOM | AREA | SQ. FT. PER OCCUPANT | OCCUPANT LOAD |
|--------------------|----------|----------------------|---------------|
| Business Occupancy | 798 s.f. | 100 gross | 8 |
| Storage | 84 s.f. | 300 gross | 1 |
| | | | 9 |

ACCESSIBILITY (CHAPTER 11)

All provisions of the Americans with Disabilities Act shall be complied with whether or not they are incorporated into The Arkansas Fire Code and IBC 2006 with Arkansas Amendments.

ARKANSAS PLUMBING CODE

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (Table 403.1)

Occupancy B

Water closets and urinals (REQUIRED):
 1 per 25 (first 50); 1 per 50 (remainder)
 Required: 1 TOTAL

Lavatories (REQUIRED):
 1 per 40 (first 80); 1 per 80 (remainder)
 Required: 1 TOTAL

Drinking Fountains (REQUIRED):
 1 per 100 [(9 / 100) = 1 total, and it must be wheelchair accessible]

Drinking Fountains (PROVIDED):
 1 - HC accessible

Other:
 1 service sink

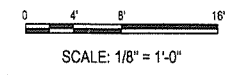
| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |

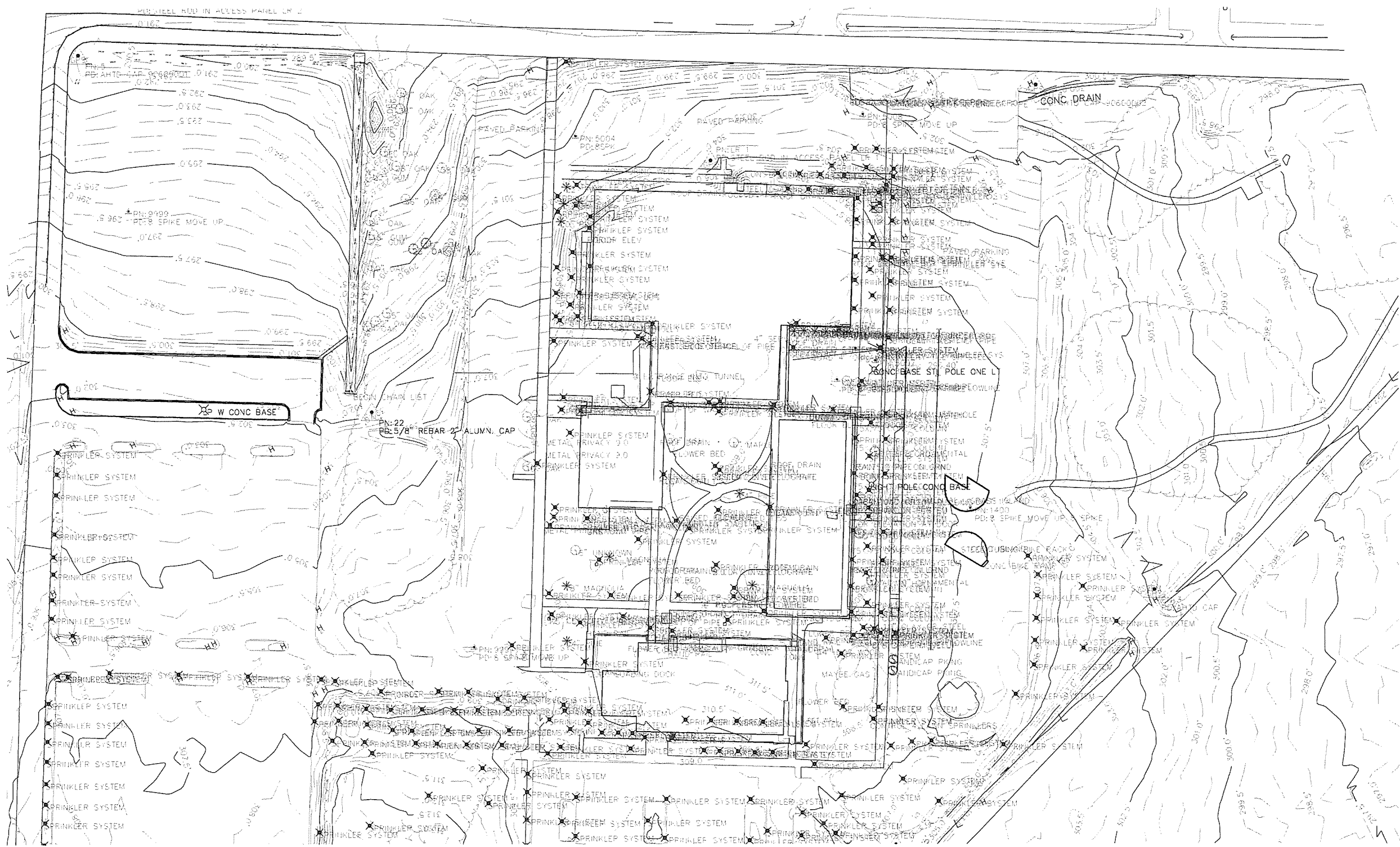
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20
 Drawing Title: **LIFE SAFETY PLAN**
 Drawing Number: **GI101**
 3 of 46





SURVEY CONTROL COORDINATES

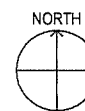
Project Name: s061045
 Date: 11/21/2012
 Coordinate System: ARKANSAS STATE PLANE -SOUTH ZONE BASED ON GPS CONTROL,
 PROJECTED TO GROUND.
 Units: U.S. SURVEY FOOT

| Point Name | Northing | Easting | Elev | Feature | Description |
|------------|--------------|--------------|--------|---------|--------------------------------|
| LR 1 | 2042602.2213 | 1197363.9755 | 304.58 | GPS | STEEL ROD IN ACCESS PANEL LR 1 |
| LR 2 | 2042759.5809 | 1196826.2803 | 290.35 | GPS | STEEL ROD IN ACCESS PANEL LR 2 |
| 3 | 2042202.3323 | 1197773.8930 | 301.92 | GPS | AHTD CAP |
| 5 | 2042700.4640 | 1196778.3026 | 291.55 | GPS | AHTD CAP 90600001 |
| 6 | 2042672.2586 | 1197665.1758 | 300.89 | GPS | AHTD CAP 90600002 |
| 7 | 2042097.8373 | 1198521.5786 | 286.82 | GPS | AHTD CAP GPS 90600003 |
| 20 | 2042596.8060 | 1198120.5495 | 295.46 | CTL | 5/8" REBAR 2" ALUMN. CAP |
| 21 | 2041964.0439 | 1197534.2856 | 306.57 | CTL | 5/8" REBAR 2" ALUMN. CAP |
| 22 | 2042368.3532 | 1197049.9345 | 302.24 | CTL | 3/8" REBAR 2" ALUMN. CAP |

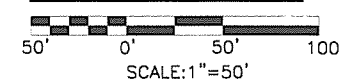
*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped
 *(standard markings common to all caps), or as indicated
 (other markings indicated in the point description of the individual point).
 ALL DISTANCES ARE GROUND.
 USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
 A PROJECT CAF OF 0.99995239 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
 THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
 GRID DISTANCE = GROUND DISTANCE X CAF.
 GRID COORDINATES ARE STORED UNDER FILE NAME s061045gi.ctb
 HORIZONTAL DATUM: NAD 83 (1997)
 VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE AT A SPECIFIC POINT.

REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL
 IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.
 REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARING:
 ARKANSAS STATE PLANE GRID BEARINGS -0302-SOUTH ZONE
 DETERMINED FROM GPS CONTROL POINTS: LR-1 & LR-2
 CONVERGENCE ANGLE: 0-12-50.8 LEFT/RIGHT AT LT:34-40-21.4 LG:092-22-57.2
 GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.



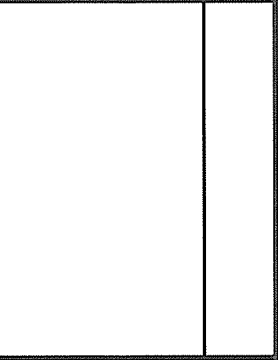
SITE SURVEY



NOTE:
 SURVEY PROVIDED BY THE
 ARKANSAS STATE HIGHWAY AND
 TRANSPORTATION DEPARTMENT.

ALL DATA THAT COULD BE REPRODUCED FROM THE ARCHIVED FILES WAS PROCESSED
 ON THE NEW HARN COORDINATES ESTABLISHED BY 5/100 11/2012. ALL PREVIOUS
 DATA WAS ARCHIVED IN FILE S061045_OLD.ZIP ON EDM.DTM HAD TO HAVE THE X & Y
 COORDINATES ROTATED AND TRANSLATED BEFORE BEING IMPORTED INTO THE .DTM FILE.
 DATA PROCESSED BY LLC 11/2012. ORTHO WILL NOT LINE UP DUE TO THE WAY IT WAS
 CONSTRUCTED.

| No | Date | Description |
|----|------|-------------|
| | | |
| | | |
| | | |

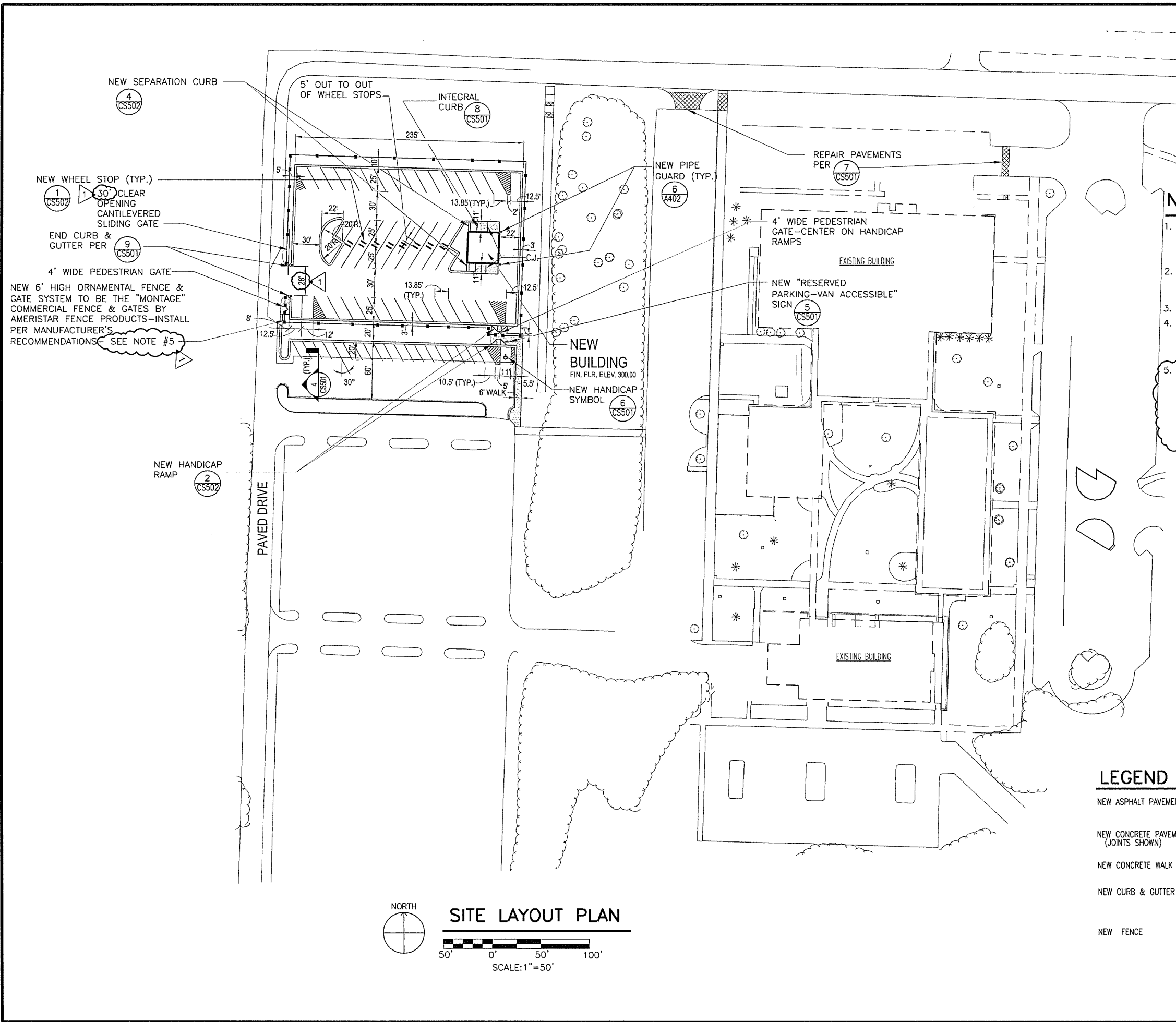


**ARKANSAS STATE HIGHWAY AND
 TRANSPORTATION DEPARTMENT
 PARKING LOT &
 DEMONSTRATION BUILDING**



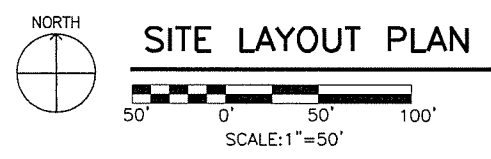
ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20
 Drawing Title: **SITE SURVEY**
 Drawing Number: **V-101**
 4 of 46

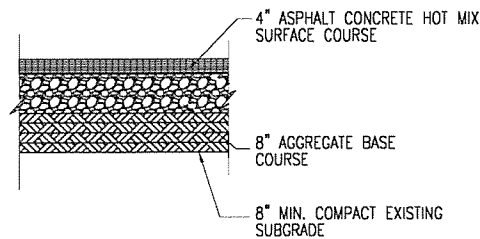


- NOTES:**
1. PARKING LOT STRIPING SHALL BE 4" WIDE, WHITE, NON-REFLECTIVE TRAFFIC PAINT. ZONE STRIPING SHALL BE @ 2' CENTERS AND AT 45° TO LINE OF TRAFFIC.
 2. DIMENSIONS TO CURBS ARE TO BACK OF CURB. DIMENSIONS TO BUILDINGS ARE TO OUTSIDE FACE OF BUILDING WALL.
 3. MINIMUM CURB RADIUS SHALL BE 2'.
 4. CONTRACTOR SHALL SAW CUT EXISTING IMPROVEMENTS @ REMOVAL LINES & REMOVE EXISTING IMPROVEMENTS AS NECESSARY TO ALLOW FOR NEW CONSTRUCTION.
 5. FENCE SHALL BE AMERISTAR MONTAGE PLUS 6" TALL W/ 14 GA. PICKETS, 3 RAIL, MAJESTIC STYLE. FENCE POSTS SHALL BE 2.5" SQUARE, 14 GA. IN MIN. 10" DIA. X 3' DEEP CONCRETE FILLED POST HOLES. GATE POSTS SHALL BE 4" SQUARE, 11 GA. IN MIN. 16" DIA. X 4' DEEP CONCRETE FILLES POST HOLES.

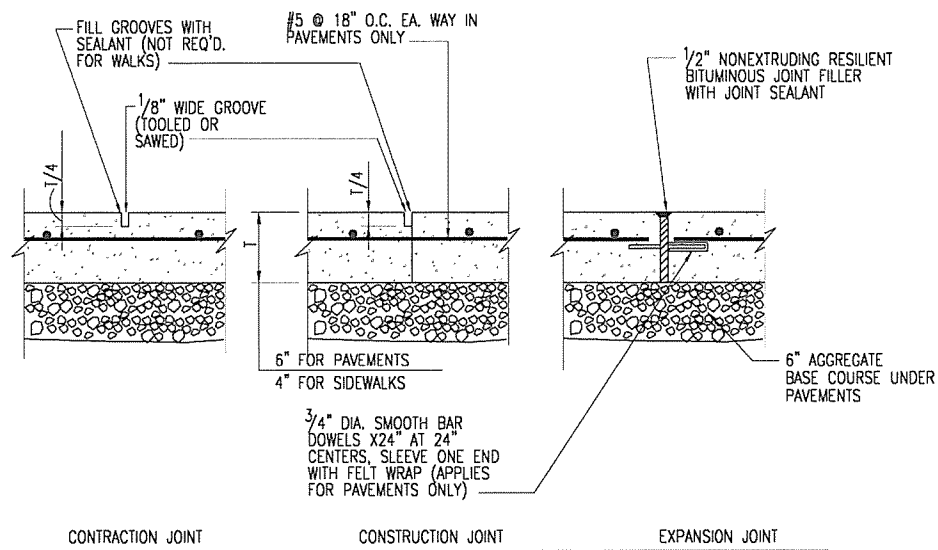
| LEGEND | DETAIL REFERENCE |
|--------------------------------------|------------------|
| NEW ASPHALT PAVEMENT | (1) CS501 |
| NEW CONCRETE PAVEMENT (JOINTS SHOWN) | (2) CS501 |
| NEW CONCRETE WALK | (2) CS501 |
| NEW CURB & GUTTER | (3) CS501 |
| NEW FENCE | |



| | |
|---|--|
| | <p>AR 04-03-2014 1 04-03-2014 1 No. Description ADDERDAM 001</p> |
| <p>ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING</p> | |
| <p>ARCHITECT OF RECORD</p> <p>101 south spring street little rock, ar 72201 501.372.2900 cromwell.com</p> | |
| <p>Issue Date: 27-JANUARY-2014 Project Number: 2012-102-20</p> <p>Drawing Title: SITE LAYOUT PLAN</p> | |
| <p>Drawing Number: CS101</p> <p>5 of 46</p> | |

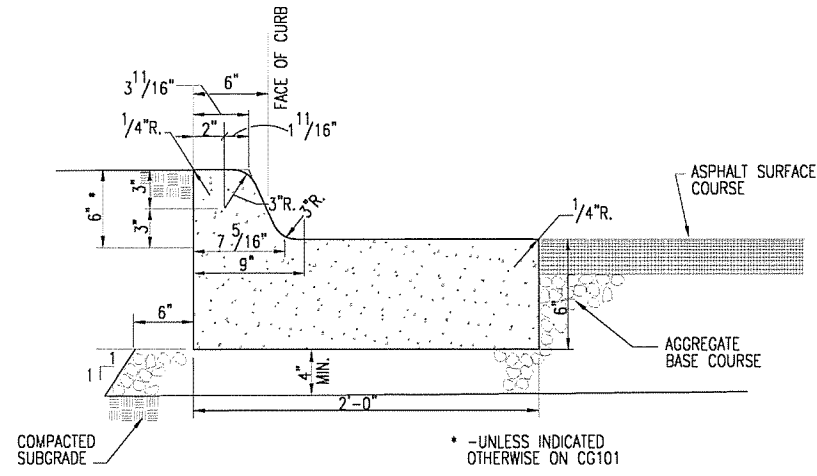


1 ASPHALT PAVING DESIGN SECTION
NOT TO SCALE



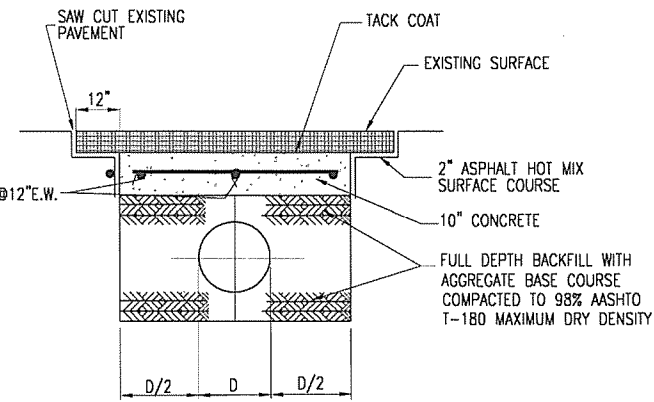
- NOTES:
1. FOR WALK CONSTRUCTION, SPACE JOINTS AT WALK WIDTH TO 8'
 2. FOR WALKS 8' AND WIDER, SPACE JOINTS AT 1/2 WALK WIDTH AND USE C. C. JOINT ENTIRE LENGTH OF WALK.
 3. FOR PAVEMENT CONSTRUCTION, SEE PLAN FOR JOINTING.
 4. SPACE E.J.'S FOR WALKS AT ALL ABUTTING CONSTRUCTION, AT CORNER RETURNS, AND AT EVERY 10TH. C.J.

2 CONCRETE JOINT DETAILS
NOT TO SCALE

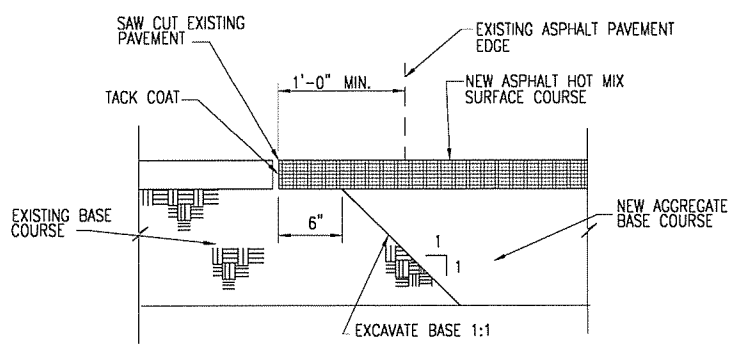


3 CURB & GUTTER DETAIL
NOT TO SCALE

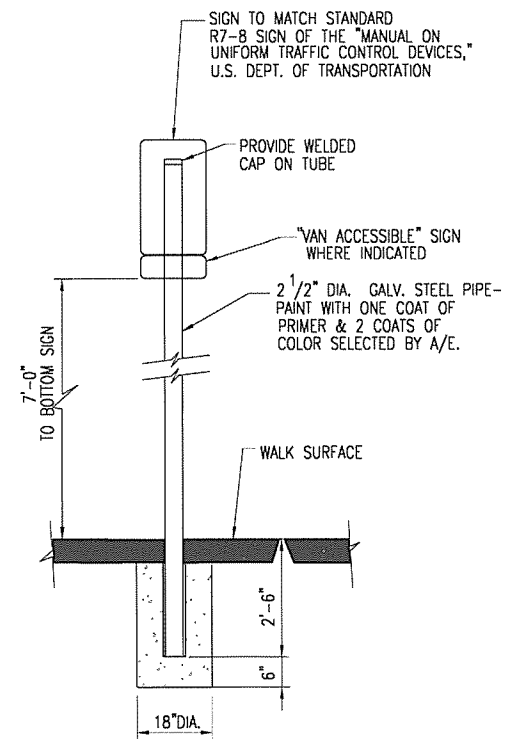
NOTE: CURB & GUTTER DETAILED IS THE AHTD TYPE A COMBINATION CURB & GUTTER



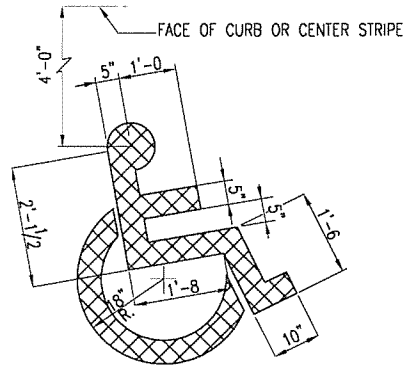
7 STREET REPAIR DETAIL
NOT TO SCALE



4 ASPHALT PAVEMENT JUNCTURE DETAIL
NOT TO SCALE

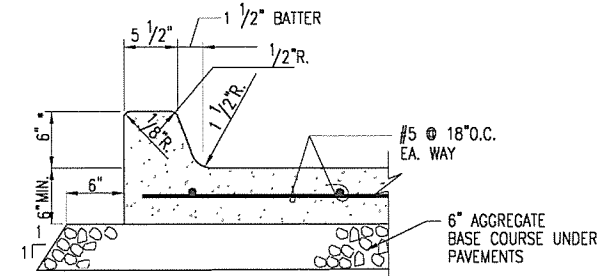


5 HANDICAPPED PARKING SIGN DETAIL
NOT TO SCALE

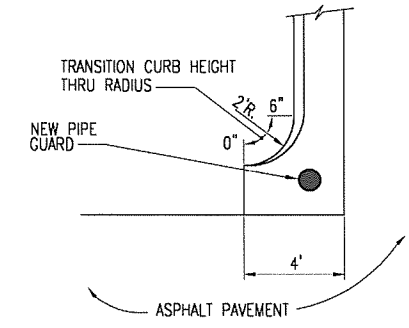


6 HANDICAP SYMBOL DETAIL
NOT TO SCALE

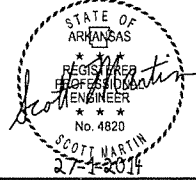
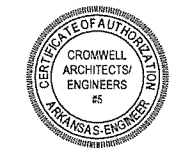
NOTE: SYMBOL TO BE PAINTED WITH WHITE NON-REFLECTIVE TRAFFIC PAINT



8 INTEGRAL CURB DETAIL
NOT TO SCALE



9 END CURB & GUTTER DETAIL
NOT TO SCALE



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

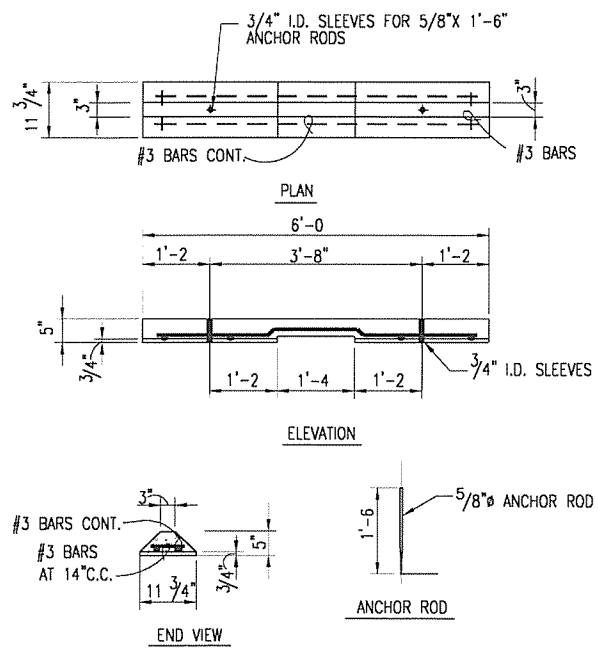


ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102-20
Drawing Title

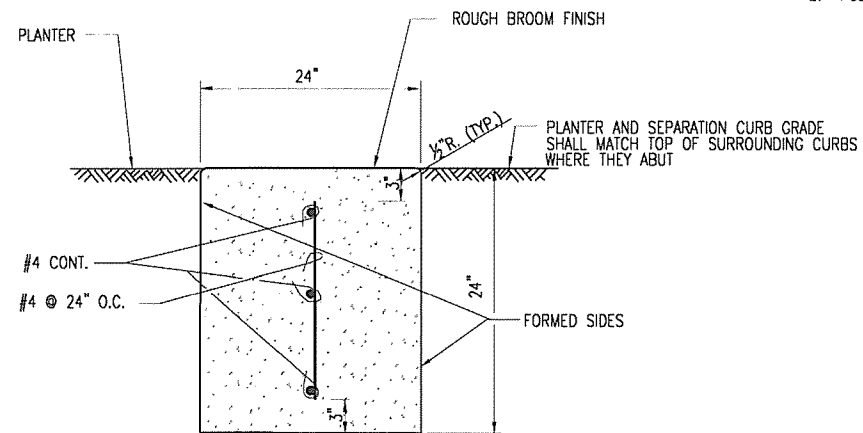
SITE DETAILS

Drawing Number
CS501
6 of 46



NOTE: APPROVED STANDARD MANUFACTURED WHEEL STOP MAY BE USED

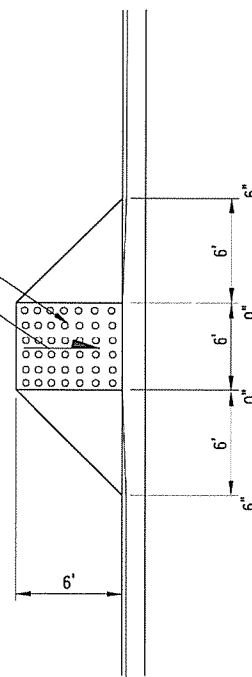
1 WHEEL STOP DETAILS
NOT TO SCALE



4 SEPARATION CURB DETAIL
NOT TO SCALE

ADA APPROVED TRUNCATED DOME DETECTABLE WARNING SURFACE TREATMENT - SEE ACCEPTABLE SURFACE TYPE & METHODS

1:12 SLOPE (MAX.)

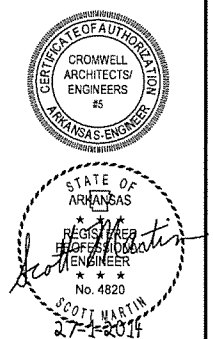


ACCEPTABLE SURFACE TYPES AND METHODS

1. PATTERNED "STAMPED" CONCRETE:
TRUNCATED DOME PATTERNED CONCRETE FORMED BY USING "STAMPCRETE" OR APPROVED EQUAL CONCRETE PATTERNING STAMP.
2. POLYURETHANE MAT AND ADHESIVE:
POLYURETHANE TRUNCATED DOME WARNING MAT APPLIED WITH 2-PART ADHESIVE AS MANUF. BY/OR EQUAL:
DETECTABLE WARNING SYSTEMS, INC.
PMB 232
17853 SANTIAGO BLVD., #107
VILLA PARK, CA 92861
3. RUBBER DOMES WITH POLYURETHANE COATING:
"SAFTI-TRAX" DETECTABLE WARNING SYSTEM - RESILIENT RUBBER TRUNCATED DOMES BY COTE-L INDUSTRIES WITH NON-SLIP POLYURETHANE SAFETY COAT (OVERCOATING) AS MANUF. BY/OR EQUAL:
THE DURBAK COMPANY
AURORA, CO 80014
PH. 303-690-7190

2 HANDICAP RAMP DETAIL
NOT TO SCALE

| No. | Date | Description |
|-----|------|-------------|
| | | |

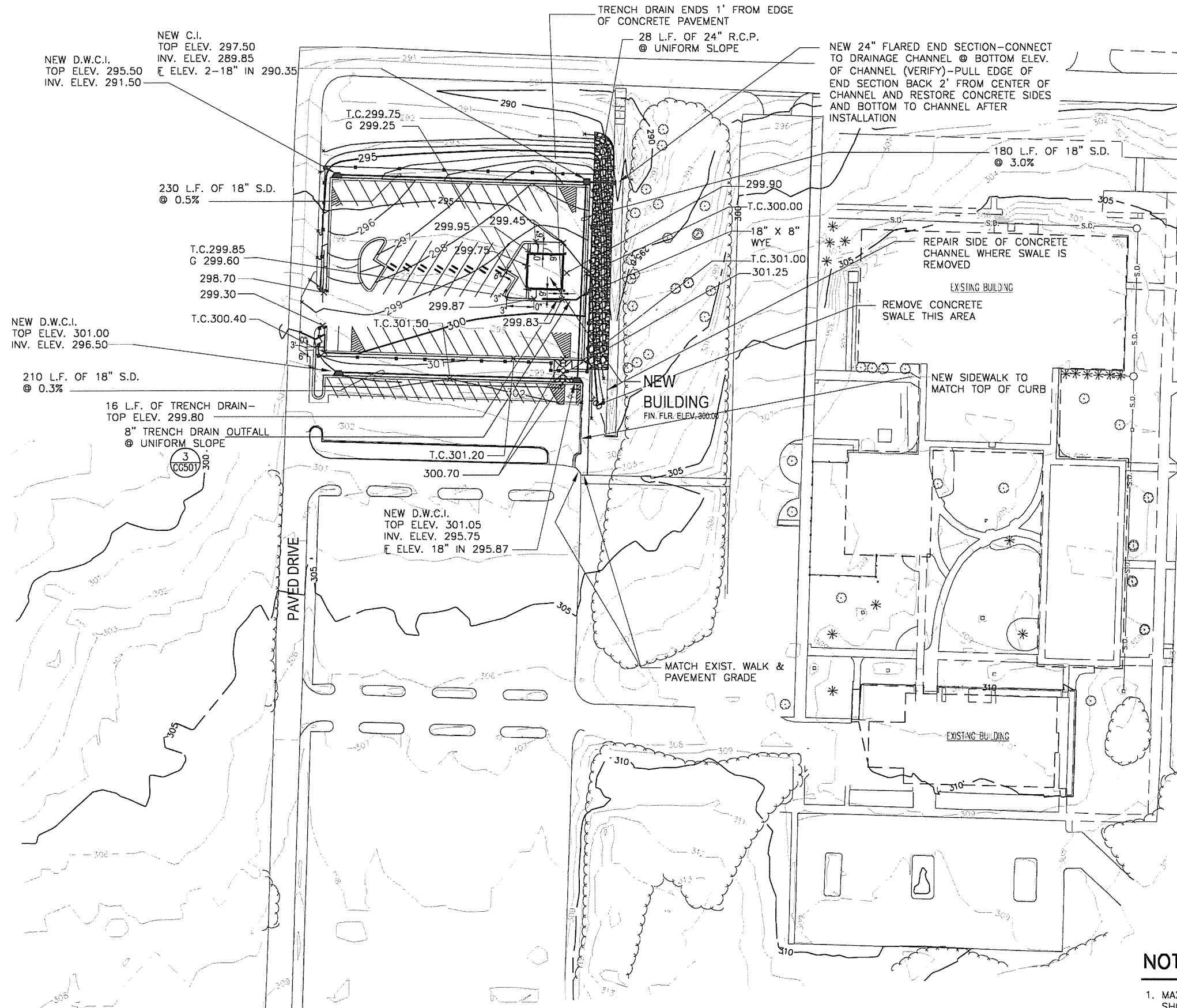


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | |
|--------------------------------------|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102-20 |
| Drawing Title SITE DETAILS | |
| Drawing Number CS502 | |
| 7 of 46 | |



NEW C.I.
TOP ELEV. 297.50
INV. ELEV. 289.85
E ELEV. 2-18" IN 290.35

NEW D.W.C.I.
TOP ELEV. 295.50
INV. ELEV. 291.50

230 L.F. OF 18" S.D.
@ 0.5%

T.C.299.85
G 299.60

298.70
299.30

T.C.300.40

NEW D.W.C.I.
TOP ELEV. 301.00
INV. ELEV. 296.50

210 L.F. OF 18" S.D.
@ 0.3%

16 L.F. OF TRENCH DRAIN-
TOP ELEV. 299.80

8" TRENCH DRAIN OUTFALL
@ UNIFORM SLOPE

NEW D.W.C.I.
TOP ELEV. 301.05
INV. ELEV. 295.75
E ELEV. 18" IN 295.87

TRENCH DRAIN ENDS 1' FROM EDGE
OF CONCRETE PAVEMENT

28 L.F. OF 24" R.C.P.
@ UNIFORM SLOPE

NEW 24" FLARED END SECTION-CONNECT
TO DRAINAGE CHANNEL @ BOTTOM ELEV.
OF CHANNEL (VERIFY)-PULL EDGE OF
END SECTION BACK 2' FROM CENTER OF
CHANNEL AND RESTORE CONCRETE SIDES
AND BOTTOM TO CHANNEL AFTER
INSTALLATION

180 L.F. OF 18" S.D.
@ 3.0%

REPAIR SIDE OF CONCRETE
CHANNEL WHERE SWALE IS
REMOVED

REMOVE CONCRETE
SWALE THIS AREA

NEW
BUILDING
FIN. FLR. ELEV. 300.00

NEW SIDEWALK TO
MATCH TOP OF CURB

MATCH EXIST. WALK &
PAVEMENT GRADE

LEGEND

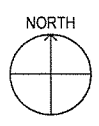
- EXISTING GRADE CONTOUR (1 FOOT INTERVAL) ———— 297 ————
- EXISTING GRADE CONTOUR (5 FOOT INTERVAL) ———— 295 ————
- FINISHED GRADE CONTOUR (1 FOOT INTERVAL) ———— 294 ————
- FINISHED GRADE CONTOUR (5 FOOT INTERVAL) ———— 290 ————
- FINISHED SPOT ELEVATION (T.C.=TOP OF CURB, G=GUTTER) x T.C.384.00
- NEW STORM DRAIN (S.D.) —————
- NEW CURB INLET (C.I.) ■
- NEW DOUBLE WING CURB INLET (D.W.C.I.) ▲
- REINFORCED CONCRETE PIPE R.C.P.
- NEW RIP-RAP OVER FILTER FABRIC [diagonal hatching]

DETAIL REFERENCE

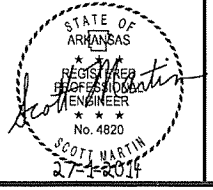
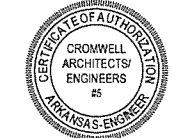
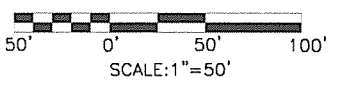
- 1 CG501
- 2 CG501

NOTES:

1. MAXIMUM LAWN GRADE SLOPE SHALL BE 3:1, UNLESS SHOWN OTHERWISE.
2. MAXIMUM WALK CROSS SLOPE SHALL BE 2%.
3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO EXCAVATING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
4. CONTRACTOR SHALL SPREAD 4" TOPSOIL & INSTALL SOD & FERTILIZER ON ALL DISTURBED EARTH SURFACES RESULTING FROM THE CONTRACTOR'S OPERATIONS, UNLESS SHOWN OTHERWISE.



**SITE GRADING &
DRAINAGE PLAN**



ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING



ARCHITECT OF RECORD

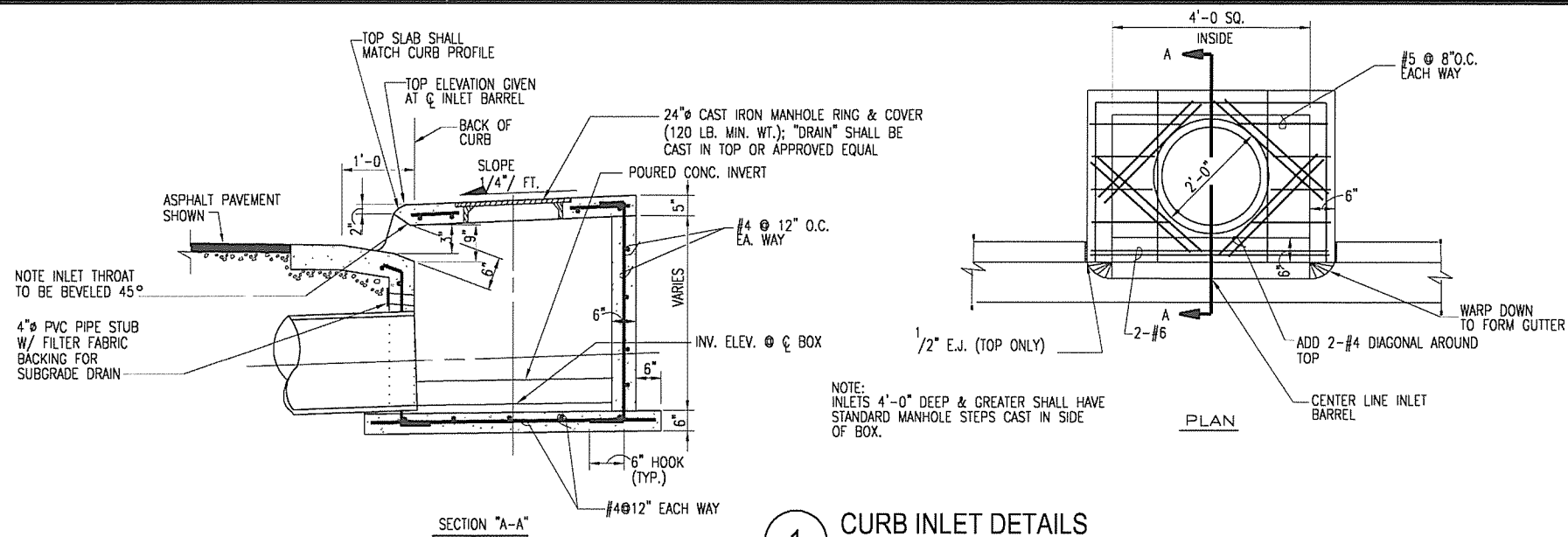


101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

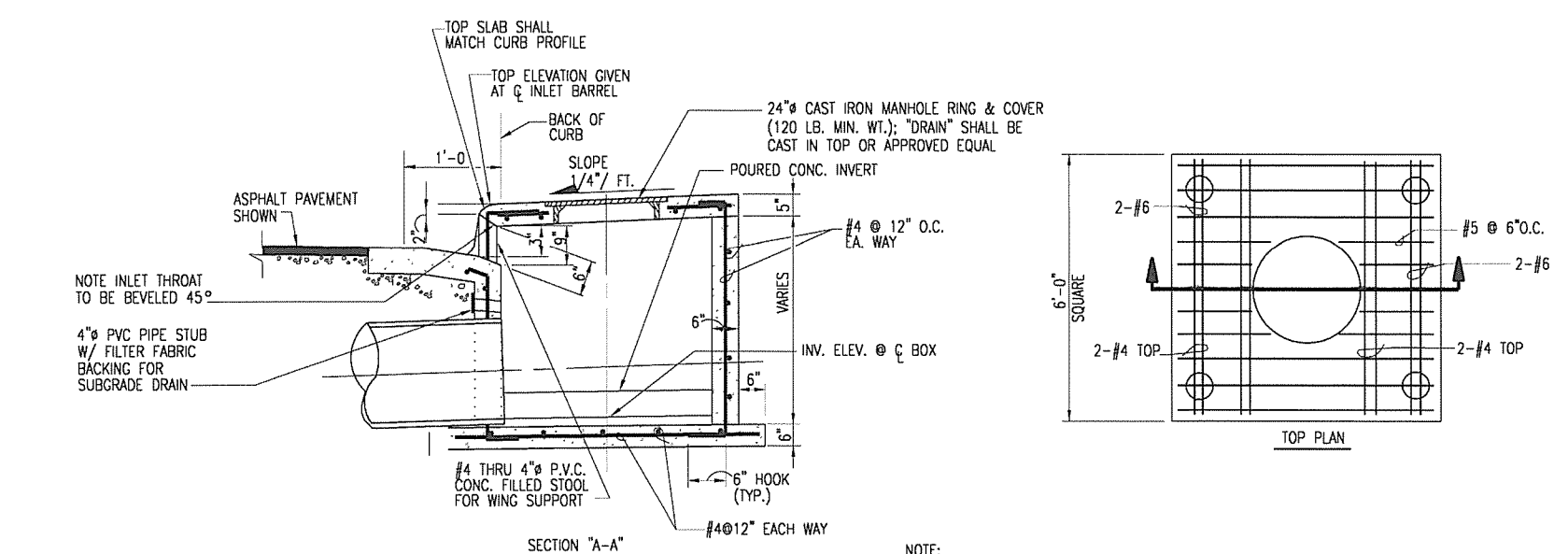
Issue Date 27-JANUARY-2014 Project Number 2012-102-20

Drawing Title
**SITE GRADING &
DRAINAGE PLAN**

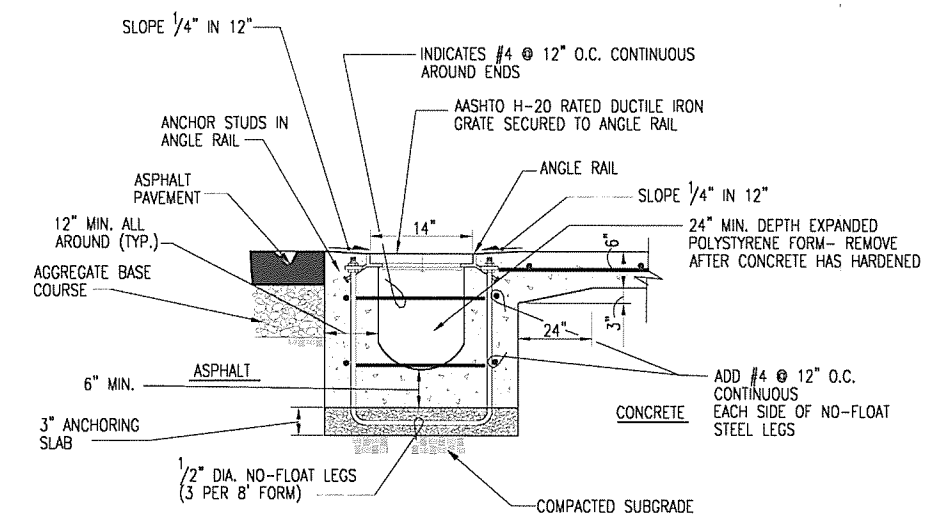
Drawing Number
CG101
8 of 45



1 CURB INLET DETAILS
NOT TO SCALE

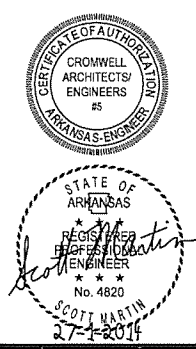


2 DOUBLE WING CURB INLET DETAIL
NOT TO SCALE



3 TRENCH DRAIN DETAIL
NOT TO SCALE

- NOTES:
1. TRENCH DRAIN SHALL BE CONSTRUCTED USING A PRE-MANUFACTURED FORMING SYSTEM. CONSTRUCT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 2. INSTALL ANGLE RAIL CLOSURE ON BOTH ENDS OF TRENCH DRAIN.



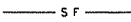



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

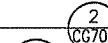

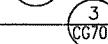




ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | |
|--------------------------------------|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102-20 |
| Drawing Title SITE DETAILS | |
| Drawing Number CG501 | |
| 9 of 46 | |

EROSION CONTROL LEGEND

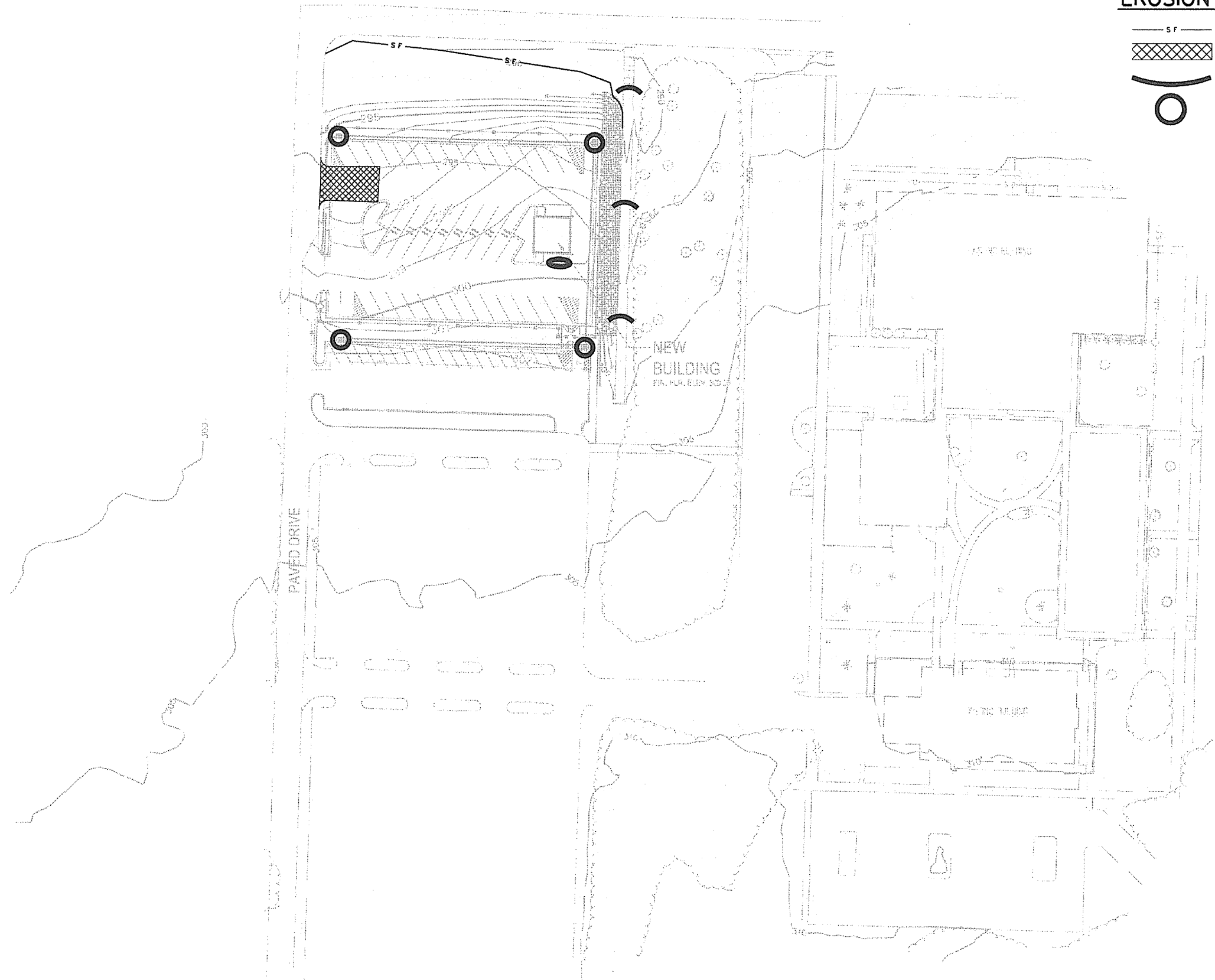
-  FILTER FABRIC FENCE (SILT FENCE)
-  CONSTRUCTION ENTRANCE/EXIT PAD
-  ROCK FILTER DAM
-  INLET PROTECTION

| DETAIL REFERENCE |
|---|
|  |
|  |
|  |
|  |
|  |

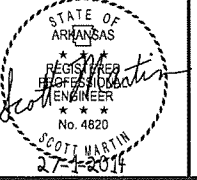
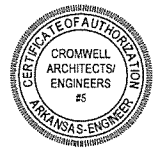
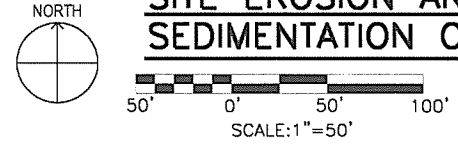
EROSION CONTROL NOTES:

1. ALL AREAS OF THE SITE EXPOSED BY CONSTRUCTION ACTIVITY AND LEFT UNDISTURBED FOR 21 DAYS MUST BE MULCHED WITHIN 14 DAYS OF LAST DISTURBANCE.
2. CONTRACTOR MUST PREVENT SEDIMENTATION RUN-OFF AND PREVENT OFF-SITE TRACKING TO PUBLIC STREETS. IF TRACKING OCCURS THE CONTRACTOR SHALL REMOVE MUD & DEBRIS FROM PUBLIC STREETS.
3. MULCH APPLICATION RATES FOR:

| | |
|----------------------------|------------|
| -LOOSE STRAW-@ 2 TONS/ACRE |] MINIMUMS |
| -GRAVEL -@ 135 TONS/ACRE | |
4. CONTRACTOR MUST PROTECT MUNICIPAL INLETS AND ADJACENT PROPERTIES FROM SEDIMENT.
5. EROSION CONTROLS SHALL BE MAINTAINED UNTIL SODDING, SEEDING, OR MULCHING SUPPLIES FILTERING.



SITE EROSION AND SEDIMENTATION CONTROL PLAN



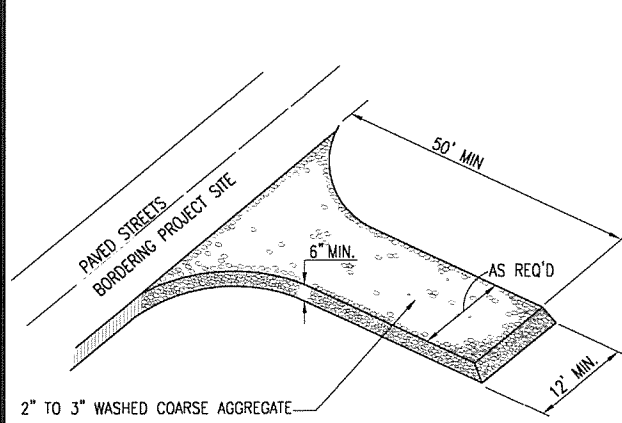
**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING**



ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Projec: Number: 2012-102_20
 Drawing Title:
SITE EROSION AND SEDIMENTATION CONTROL PLAN

Drawing Number:
CG701
 10 of 46



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT LOCATION:
 LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT FROM LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID STEEP GRADES, AND ENTRANCES AT CURVES IN PUBLIC ROADS WHERE VEHICLES ENTER AND LEAVE A CONSTRUCTION SITE. THE PURPOSE IS TO PROVIDE A BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PUBLIC ROADS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.

CONDITIONS WHERE PRACTICE APPLIES:
 WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED OFF-SITE AREA.

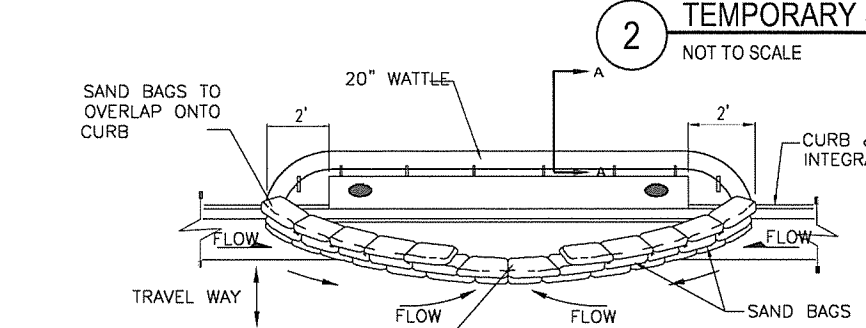
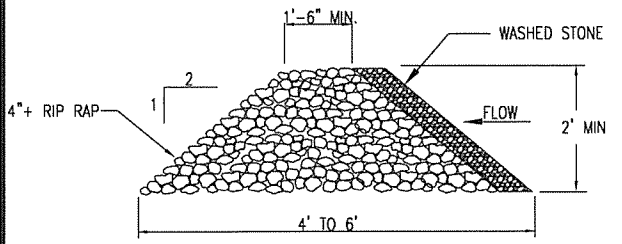
WASHING:
 IF CONDITIONS AT THE SITE ARE SUCH THAT MOST OF THE MUD AND SEDIMENT ARE NOT REMOVED BY VEHICLES TRAVELING OVER THE GRAVEL, THE TIRES SHOULD BE WASHED. WASHING SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO A SUITABLE DISPOSAL AREA.

MAINTENANCE:
 MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

NOTE:
 1. GRAVEL PAD IS REQUIRED TO PROVIDE BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PAVED STREETS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.
 2. PLACE AT ENTRANCE FROM PAVED ROAD TO SITE AS LOCATED ON THE DRAWINGS.

1 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD DETAIL

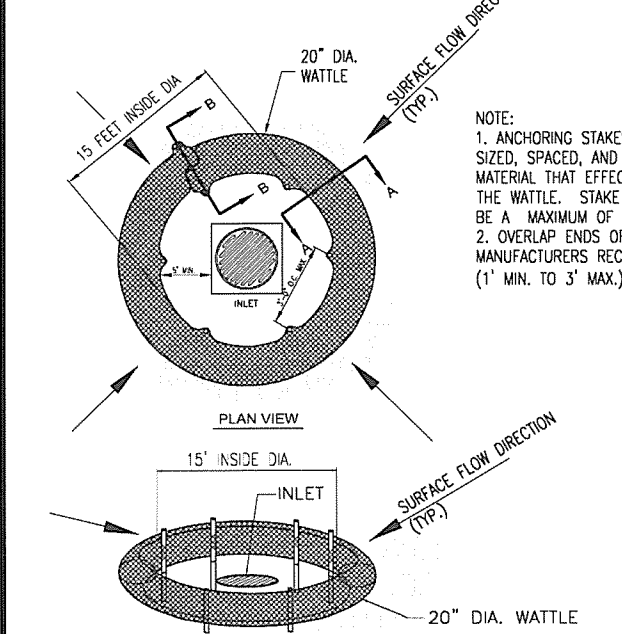
NOT TO SCALE



GENERAL NOTES:
 1. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.

3 ROCK FILTER DAM

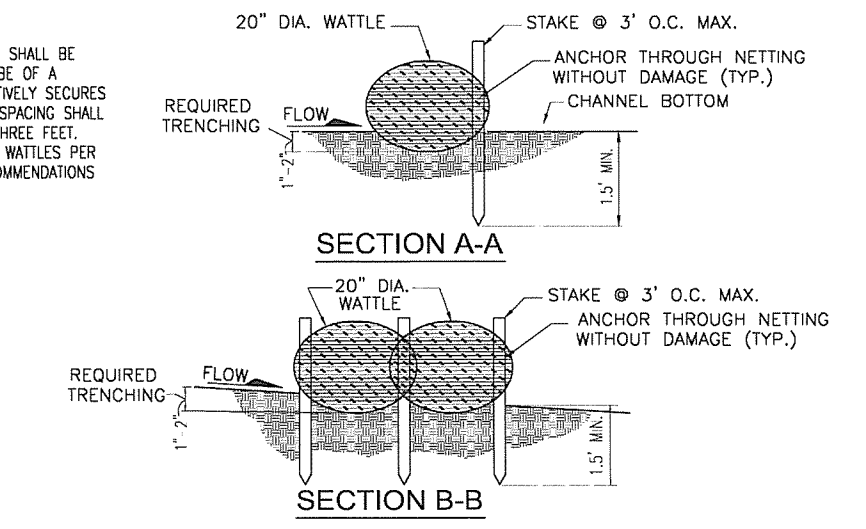
NOT TO SCALE



SPILLWAY
 (3 SAND BAGS WIDE MIN.)
 FLOW-LINE MUST BE LOWER THAN THE TOP OF CURB

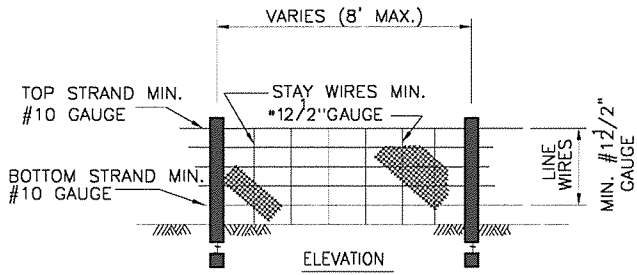
4 CURB INLET PROTECTION

NOT TO SCALE



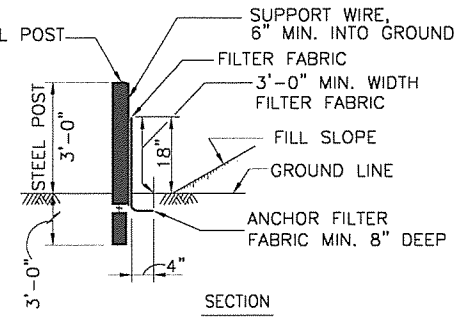
5 CATCH BASIN/TRENCH DRAIN PROTECTION

NOT TO SCALE



GENERAL NOTES:
 1. SILT FENCE SHALL BE INSTALLED OUTSIDE TOE OF EARTHFILL EMBANKMENTS.
 2. WIRE SHALL BE A MINIMUM OF 32\"/>

NOTE:
 THE FILTER FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS:
 A) EOS IS NOT LARGER THAN U.S. STANDARD SIEVE NO.70
 B) GRAB STRENGTH 90-120 LB C) CONFORM TO ASTM D-1682 OR ASTM D-177



TEMPORARY SEDIMENT FENCE MAINTENANCE:
 1) INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 2) SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 3) REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE, TAKING CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 4) REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SOIL LOSS CALCULATION

STEP ONE: SITE EXCAVATION
 A. TOTAL SITE AREA = 1.81 ACRES
 B. DISTURBED AREA = 1.46 ACRES
 C. MAXIMUM VERTICAL CUT = 0 FEET
 D. QUANTITY OF EXCAVATION = 0 CUBIC YARDS
 E. THIS PROPERTY IS NOT LOCATED WITHIN THE 100-YEAR FLOODPLAIN BOUNDARY.

STEP TWO: SOIL LOSS CALCULATION
 A. INITIAL SOIL LOSS CALCULATION
 1. $A = (R) \cdot (K) \cdot (LS) \cdot (C) \cdot (P)$
 WHERE A = SOIL LOSS IN TONS PER ACRE PER YEAR (T/A/Y),
 R = 300, A CONSTANT IN PULASKI COUNTY,
 K = SOIL ERODIBILITY FACTOR FROM TABLE 10-1,
 LS = SLOPE LENGTH FACTOR FROM TABLE 10-2,
 C = COVER AND MANAGEMENT FACTOR FROM TABLE 10-3 AND TABLE 10-4,
 P = PRACTICE FACTOR FROM TABLE 10-5 AND TABLE 10-6

TABLES 10-1, 10-2, 10-3, 10-4, 10-5 AND 10-6 ARE FROM THE CITY OF LITTLE ROCK STORMWATER MANAGEMENT AND DRAINAGE MANUAL, REVISED 1992.

2. FROM THE SOIL SURVEY OF PULASKI COUNTY, THE SOIL ON THE SITE ARE IDENTIFIED AS: TuC FROM TABLE 10-1, K=0.32 FOR TuC

3. SLOPE LENGTH : 234 FEET
 SLOPE : 3.4% AVERAGE
 LS =0.6356

4. FOR THE INITIAL CALCULATION, THERE IS NO COVER AND MANAGEMENT IN PLACE;
 THEREFORE, C = 1

5. FOR THE INITIAL CALCULATION, THERE ARE NO CONTROL PRACTICES IN PLACE;
 THEREFORE, P = 1

6. THE POTENTIAL SOIL LOSS FOR THIS SITE IS AS FOLLOWS:
 $A = (R) \cdot (K) \cdot (LS) \cdot (C) \cdot (P)$

A =61.018 T/A/Y IF LESS THAN 5.00 T/A/Y STANDARD BMP'S ARE OKAY NO FURTHER CALCULATION IS NEEDED.

B. SINCE EROSION POTENTIAL EXCEEDS THE ALLOWABLE 5.00 T/A/Y, CONTROLS ARE WARRANTED.

1. ALL DISTURBED SOIL LEFT IDLE FOR MORE THAN 21 DAYS WILL BE MULCHED WITH STRAW OR HAY AT A RATE OF 2 TONS PER ACRE. FROM TABLE 10-3,
 C = 0.12 A =7.3223 T/A/Y

2. DURING CONSTRUCTION AND UNTIL VEGETATION GROWTH IS EVIDENT FOLLOWING COMPLETION OF CONSTRUCTION, 50 FEET WIDE GRAVEL/STONE FILTER BERMS WILL BE USED FOR EROSION CONTROL. FROM TABLE 10-6,
 P =0.50 A =3.66 T/A/Y

3. UPON COMPLETION OF GRADING, A MINIMUM OF 60% OF THE SITE WILL BE SEEDED TO ESTABLISH A PERMANENT GRASS COVER. FROM TABLE 10-4,
 C = 0.042 A =2.56 T/A/Y

4. THE CONSTRUCTION PROCESS WILL TAKE NO LONGER THAN SIX MONTHS. ASSUMING THE SIX MONTH BLOCK WITH THE GREATEST RAINFALL ENERGY-INTENSITY PERCENTAGE OF THE RAINFALL WILL OCCUR, ACCORDING TO THE TABLE. THEREFORE, DURING THE YEAR OF CONSTRUCTION:

PERCENT OF YEARLY RAINFALL DURING PROJECTED CONSTRUCTION SCHEDULE = 54.45% (WORST CASE OF RAINFALL)

A =2.98 T/A/Y WHICH IS LESS THAN THE MAXIMUM ALLOWABLE OF 5.00 T/A/Y

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |

CROWWELL ARCHITECTS/ENGINEERS
 45
 STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 No. 4820
 SCOTT MARTIN
 2-7-2014

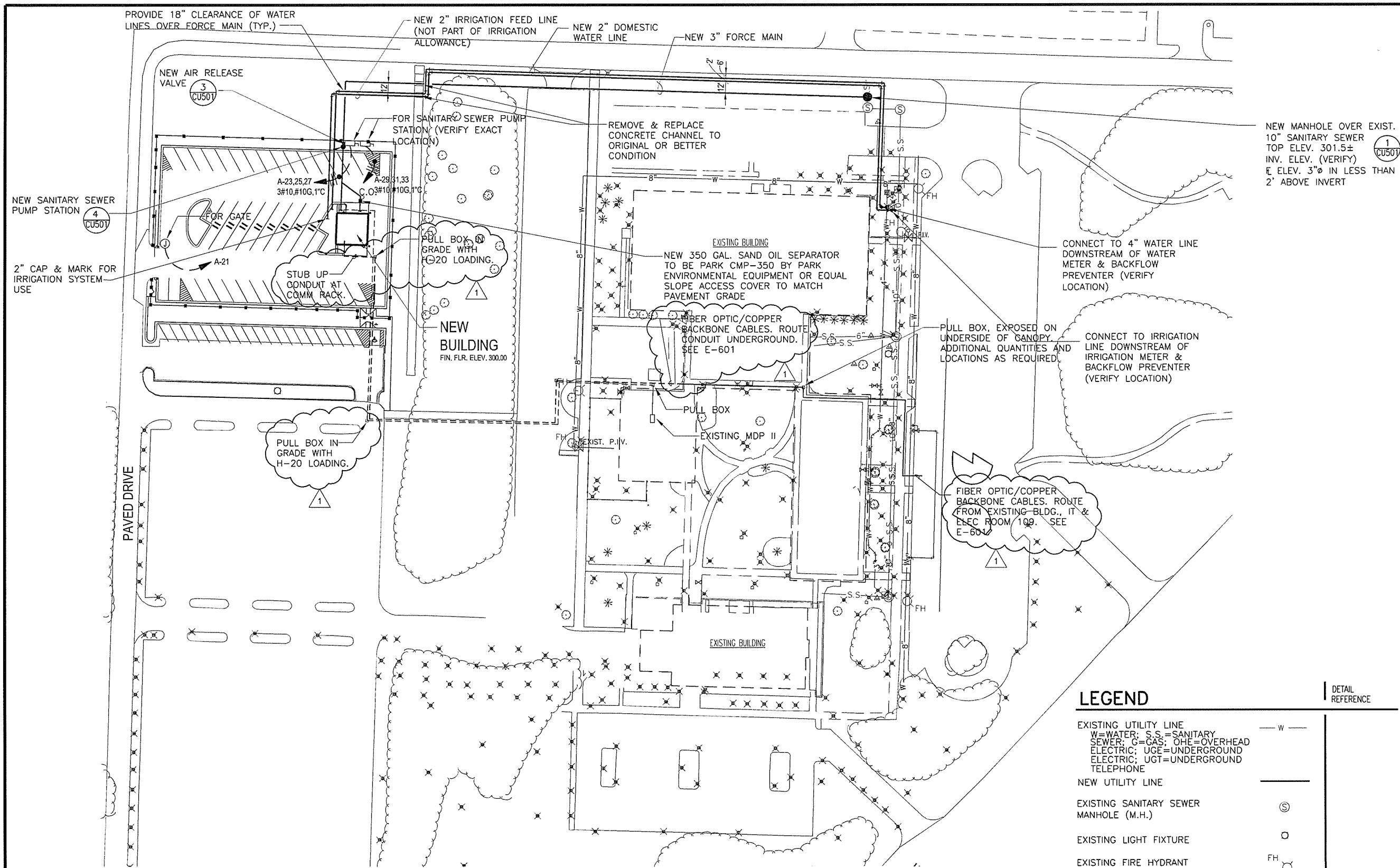
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD

CROWWELL

101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014
 Project Number: 2012-102-20
 Drawing Title: **SITE EROSION & SEDIMENTATION CONTROL DETAILS**
 Drawing Number: **CG702**
 11 of 46



PROVIDE 18" CLEARANCE OF WATER LINES OVER FORCE MAIN (TYP.)

NEW 2" IRRIGATION FEED LINE (NOT PART OF IRRIGATION ALLOWANCE)

NEW 2" DOMESTIC WATER LINE

NEW 3" FORCE MAIN

NEW MANHOLE OVER EXIST. 10" SANITARY SEWER TOP ELEV. 301.5± INV. ELEV. (VERIFY) E. ELEV. 3"Ø IN LESS THAN 2' ABOVE INVERT

NEW SANITARY SEWER PUMP STATION

2" CAP & MARK FOR IRRIGATION SYSTEM USE

PULL BOX IN GRADE WITH H-20 LOADING.

PULL BOX IN GRADE WITH H-20 LOADING.

REMOVE & REPLACE CONCRETE CHANNEL TO ORIGINAL OR BETTER CONDITION

NEW 350 GAL. SAND OIL SEPARATOR TO BE PARK CMP-350 BY PARK ENVIRONMENTAL EQUIPMENT OR EQUAL SLOPE ACCESS COVER TO MATCH PAVEMENT GRADE

CONNECT TO 4" WATER LINE DOWNSTREAM OF WATER METER & BACKFLOW PREVENTER (VERIFY LOCATION)

CONNECT TO IRRIGATION LINE DOWNSTREAM OF IRRIGATION METER & BACKFLOW PREVENTER (VERIFY LOCATION)

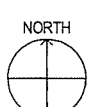
PULL BOX, EXPOSED ON UNDERSIDE OF CANOPY. ADDITIONAL QUANTITIES AND LOCATIONS AS REQUIRED.

FIBER OPTIC/COPPER BACKBONE CABLES. ROUTE CONDUIT UNDERGROUND. SEE E-601

FIBER OPTIC/COPPER BACKBONE CABLES. ROUTE FROM EXISTING-BLDG., IT & ELEC ROOM 109. SEE E-601

NEW BUILDING FIN. FLR. ELEV. 300.00

PAVED DRIVE



SITE UTILITY PLAN

SCALE: 1" = 50'

NOTES:

- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO EXCAVATING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
- COORDINATE WITH EACH LOCAL UTILITY COMPANY FOR CONNECTION OF NEW LINES. PAY ALL COSTS, IF ANY.

LEGEND

| | |
|--|--------|
| EXISTING UTILITY LINE W= WATER; S.S.= SANITARY SEWER; G= GAS; OHE= OVERHEAD ELECTRIC; UGE= UNDERGROUND ELECTRIC; UGT= UNDERGROUND TELEPHONE | — W — |
| NEW UTILITY LINE | — |
| EXISTING SANITARY SEWER MANHOLE (M.H.) | ⊙ |
| EXISTING LIGHT FIXTURE | ○ |
| EXISTING FIRE HYDRANT | FH |
| EXISTING IRRIGATION SPRINKLER HEAD | × |
| EXISTING WATER METER | ⊞ |
| EXISTING WATER VALVE | ⊞ |
| NEW WATER VALVE | ⊞ |
| NEW CLEANOUT TO GRADE | ○ C.O. |

DETAIL REFERENCE

5 CU501
2 CU501

| No. | Date | Description |
|-----|------------|--------------|
| 1 | 04-07-2014 | ADDENDUM 001 |

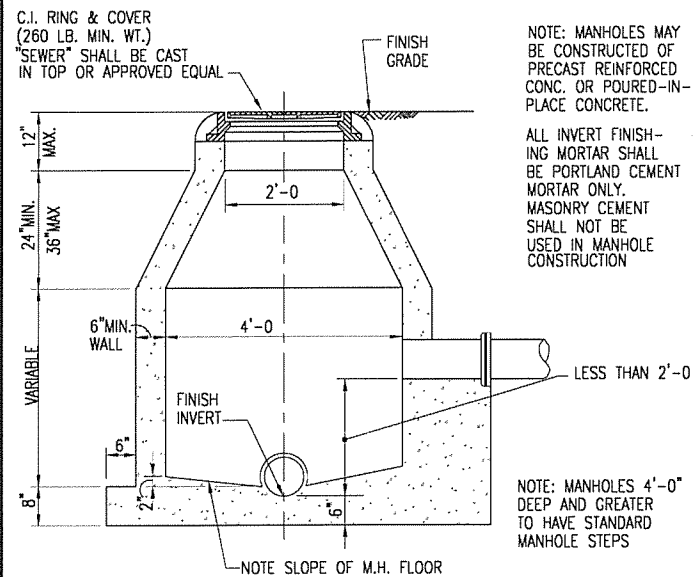
CROMWELL ARCHITECTS/ENGINEERS #5
REGISTERED PROFESSIONAL ENGINEER No. 4820
SCOTT MARTIN 2-7-2014

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

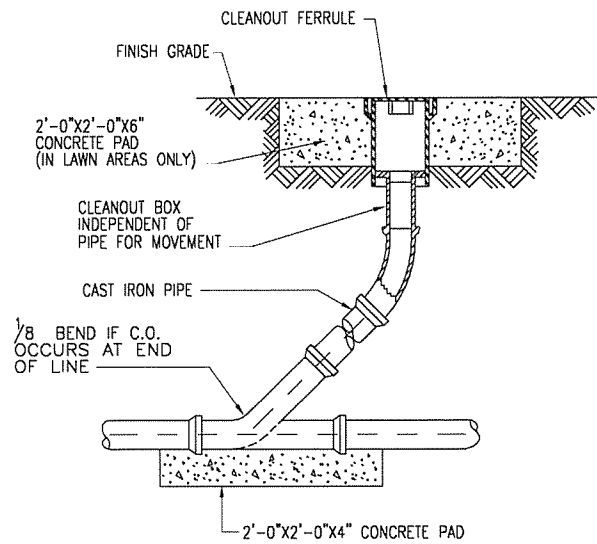
ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102-20

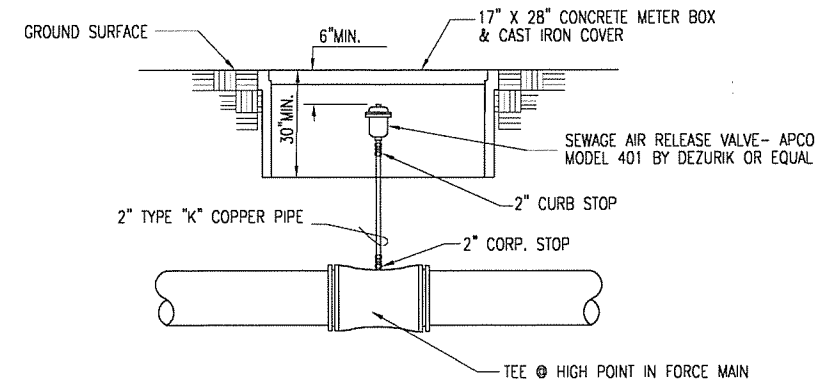
Drawing Title: **SITE UTILITY PLAN**
Drawing Number: **CU101**
12 of 46



1 SANITARY SEWER MANHOLE DETAIL
NOT TO SCALE

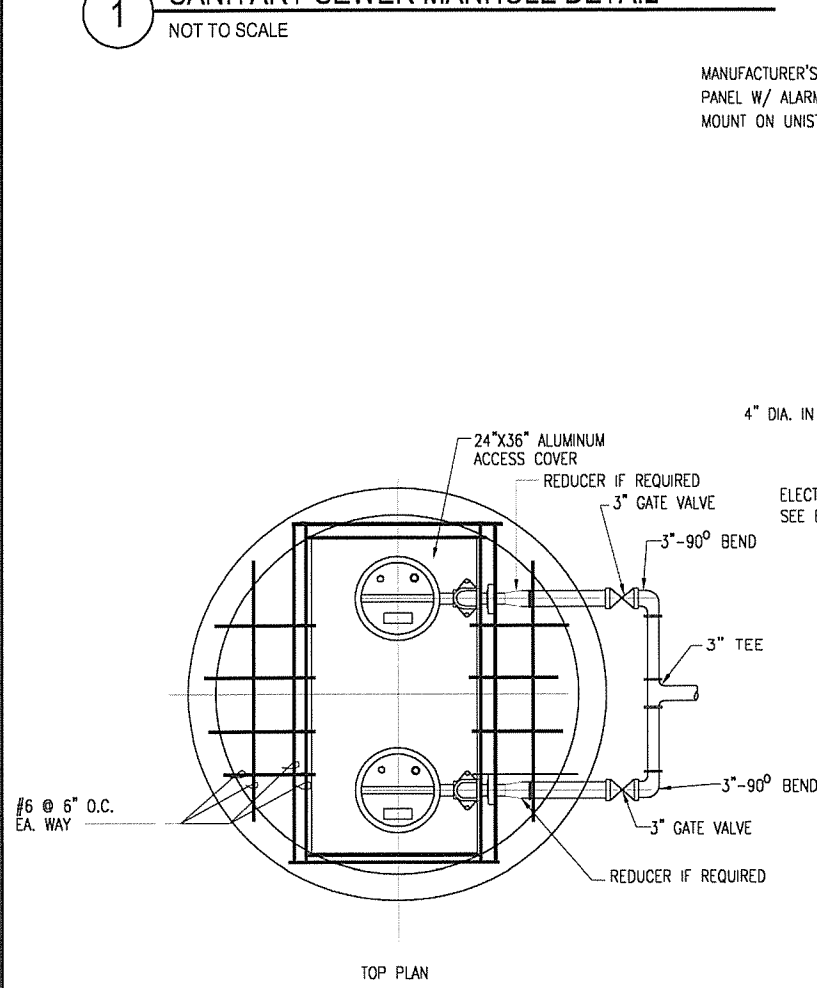


2 SANITARY SEWER CLEANOUT TO GRADE DETAIL (C.O.TG.)
NOT TO SCALE



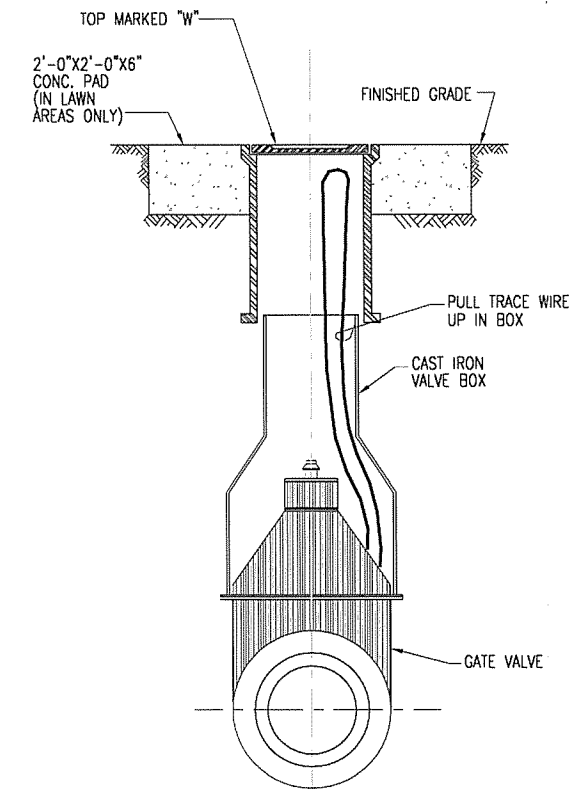
3 AUTOMATIC AIR RELEASE VALVE DETAIL
NOT TO SCALE

NOTE: COPPER PIPE SHALL SLOPE CONTINUOUSLY UPWARDS FROM MAIN TO AIR RELEASE.

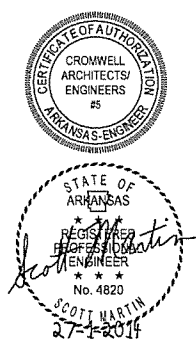


4 SANITARY SEWER PUMP STATION DETAIL
NOT TO SCALE

NOTE: CONTRACTOR MAY SUBSTITUTE A PACKAGE LIFT STATION EQUAL TO UNIT SHOWN.



5 WATER VALVE DETAIL
NOT TO SCALE



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | | | |
|----------------|-----------------|----------------|-------------|
| Issue Date | 27-JANUARY-2014 | Project Number | 2012-102-20 |
| Drawing Title | | | |
| SITE DETAILS | | | |
| Drawing Number | | | |
| CU501 | | | |
| 13 of 46 | | | |

**REQUIRED STRUCTURAL INSPECTIONS AND
STATEMENT OF SPECIAL INSPECTIONS**

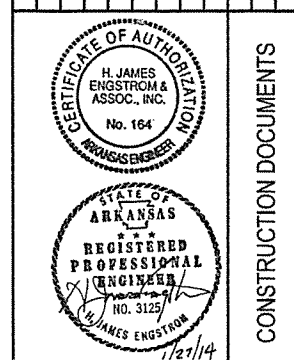
PER CHAPTER 17 OF CURRENT ARKANSAS FIRE PREVENTION CODE VOLUME II BUILDING (BASED ON IBC CODE)

| ITEM | CONTINUOUS | PERIODIC | ITEM | CONTINUOUS | PERIODIC | ITEM | CONTINUOUS | PERIODIC |
|---|------------|----------|--|------------|----------|---|------------|----------|
| SOILS: | | | STEEL CONSTRUCTION: | | | MASONRY CONSTRUCTION: | | |
| 1. VERIFY MATERIALS BELOW FOOTINGS AND SLAB AND UNDERCUT AREA EXTENDED BEYOND BUILDING PERIMETER ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY AND REQUIREMENTS OF GEOTECHNICAL ENGINEER. | X | | 1. MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS, AND WASHERS: A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. | | X | 1. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: A. THAT COMPRESSIVE STRENGTH OF CMU MASONRY WALL ASSEMBLAGE, f'm = 2000 psi B. PROPORTIONS OF SITE-PREPARED MORTAR AND GROUT C. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS D. LOCATION OF REINFORCEMENT, CONNECTORS, AND ANCHORAGES. | | |
| 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. | | X | 2. INSPECTION OF HIGH STRENGTH BOLTING: A. BEARING TYPE CONNECTION. | | X | 2. THE INSPECTION PROGRAM SHALL VERIFY: A. THAT COMPRESSIVE STRENGTH OF CMU MASONRY WALL ASSEMBLAGE, f'm = 2000 psi B. SIZE AND LOCATION OF STRUCTURAL ELEMENTS. C. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION. D. SPECIFIED SIZE, GRADE, PLACEMENT AND TYPE OF REINFORCEMENT. E. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 F) OR HOT WEATHER (TEMPERATURES ABOVE 90 F) | | X |
| 3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS. | | X | 3. INSPECTION OF WELDING: A. STRUCTURAL STEEL: 1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS. 2) MULTIPASS FILLET WELDS 3) SINGLE PASS FILLET WELDS GREATER THAN 5/16" 4) SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16" 5) FLOOR AND ROOF DECK WELDS. B. REINFORCING STEEL: 1) SHEAR REINFORCEMENT 2) OTHER REINFORCING STEEL | X | | 3. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE: A. GROUT SPACE IS CLEAN. B. PLACEMENT OF REINFORCEMENT AND CONNECTORS AND ANCHORAGES. C. PROPORTIONS OF SITE-PREPARED GROUT. D. CONSTRUCTION OF MORTAR JOINTS. | | |
| 4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL. | X | | 4. STEEL JOISTS: A. MATERIAL VERIFICATION THAT JOISTS COMPLY WITH THAT SPECIFIED ON DRAWINGS AND SPECIFICATIONS. B. JOIST BRIDGING: VERIFY PLACEMENT AND LOCATIONS. C. ANCHORAGE WELDING TO SUPPORTS D. INSTALLATION | | X | 4. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT PROVISIONS. | X | |
| 5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY | | X | MECHANICAL & ELECTRICAL COMPONENTS: SEE MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED ANCHORAGE SYSTEMS AND SEISMIC SYSTEMS. | | | 5. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED. | X | |
| CONCRETE CONSTRUCTION: | | | 1. ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS IN STRUCTURES. | | X | 6. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED. | | X |
| 1. INSPECTION OF REINFORCING STEEL AND PLACEMENT. | | X | 2. INSTALLATION OF PIPING SYSTEMS INTENDED TO CARRY FLAMMABLE, COMBUSTIBLE OR HIGHLY TOXIC CONTENTS AND THEIR ASSOCIATED MECHANICAL UNITS AND HVAC DUCTWORK CONTAINING HAZARDOUS MATERIALS AND ANCHORAGE OF SUCH TO DUCTWORK. | | X | | | |
| 2. INSPECT BOLTS TO BE INSTALLED IN CONCRETE AND/OR MASONRY WALLS PRIOR TO AND DURING PLACEMENT OF CONCRETE. | X | | 3. EXAMINE SEISMIC SYSTEM DESIGNED BY THE RESPONSIBLE MECHANICAL AND ELECTRICAL PROFESSIONAL ENGINEERS IN CHARGE REQUIRING SEISMIC QUALIFICATION IN ACCORDANCE WITH ARKANSAS FIRE PREVENTION CODE (IFC) SECTION 1708.5 AND VERIFY THE LABEL, ANCHORAGE OR MOUNTING CONFORMS TO THE CERTIFICATE OF COMPLIANCE. | | | | | |
| 3. VERIFYING USE OF REQUIRED DESIGN MIX.. | | X | | | | | | |
| 4. 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. | X | | | | | | | |
| 5. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES. | X | | | | | | | |
| 6. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES. | | X | | | | | | |
| 7. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS. | | X | | | | | | |
| 8. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED. | | X | | | | | | |
| 9. INSPECT VAPOR BARRIER/RETARDER FOR USE OF SPECIFIED MATERIAL AND PROPER PLACEMENT. | | X | | | | | | |

NOTES:

SEE DRAWING S-002 FOR NOTES APPLICABLE TO THE REQUIRED STRUCTURAL INSPECTIONS AND STATEMENT OF SPECIAL INSPECTIONS.

| | | |
|-----|------|-------------|
| No. | Date | Description |
| | | |
| | | |
| | | |



CONSTRUCTION DOCUMENTS

**ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING**

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com
 STRUCTURAL ENGINEER
 H. JAMES ENGSTROM &
 ASSOCIATES, INC.
 1100 WEST SECOND ST.
 LITTLE ROCK, AR 72201
 P: 501.376.7246
 F: 501.376.6627

| | | | |
|----------------|-------------------------------|----------------|-------------|
| Issue Date | 1/27/14 | Project Number | 2012-102_20 |
| Drawing Title | STRUCTURAL QUALITY CONTROL | | |
| Drawing Number | S-001 14 of 46 | | |

BUILDING DESIGN CRITERIA:

ROOF LIVE LOAD: 20 psf

GROUND SNOW LOAD: 10 psf

WIND LOADING: BASIC WIND SPEED = 90 mph
 IMPORTANCE FACTOR, I = 1.0
 WIND EXPOSURE = B
 METHOD 1 - SIMPLIFIED PROCEDURE
 WIND LOADING ON WALL COMPONENTS AND CLADDING, PER ASCE 7 METHOD 1, FIGURE 6.3
 WITHIN "a" DISTANCE OF CORNERS, ZONE 5 OF FIGURE 6-3
 OTHER WALL AREAS, ZONE 4 OF FIGURE 6-3

EARTHQUAKE DATA:

I = 1.0
 S_s = 0.5
 S₁ = 0.17
 OCCUPANCY CATEGORY = II
 SITE CLASS = C
 S_{ps} = 0.4
 SEISMIC DESIGN CATEGORY = SDC = C
 S_{DC} = C
 BASIC SEISMIC FORCE RESISTING SYSTEM = REINFORCED MASONRY SHEAR WALLS
 DESIGN BASE SHEAR = 21.35 kips
 F_s = 0.114
 R = 3.5
 ANALYSIS PROCEDURE = SIMPLIFIED ALTERNATIVE STRUCTURAL DESIGN PROCEDURE

GENERAL NOTES

- ① STRUCTURAL DESIGN OF BUILDING IS FOR THE COMPLETED STRUCTURE. CONTRACTOR IS TO BE RESPONSIBLE FOR MAINTAINING A SAFE AND STRUCTURAL SOUND STRUCTURE DURING ITS CONSTRUCTION UNTIL IT IS COMPLETED. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING AND FURNISHING ALL NECESSARY TEMPORARY BRACING, SHORING, GUYS, CABLES AND ANY OTHER MEANS NECESSARY TO DO THIS AND TO INSURE THAT THE ERECTED STRUCTURES ARE PROPERLY PLUMBED, LEVELED, AND ALIGNED.
- ② PERMANENT STABILITY OF THE BUILDING AND COMPONENTS IS NOT PROVIDED UNTIL ALL THE STRUCTURAL ELEMENTS ARE INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS; THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING STABILITY TO ALL NON-SELF SUPPORTING ELEMENTS AND SAFETY TO ALL WORKERS, ANIMALS AND PROPERTY DURING CONSTRUCTION AND UNTIL ALL STRUCTURAL ELEMENTS ARE INSTALLED.
- ③ BRACING USED TO STABILIZE THE BUILDING DURING THE ERECTION PROCESS SHALL BE DESIGNED BY THE CONTRACTOR SO AS NOT TO TWIST OR DISTORT MEMBERS.
- ④ STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH DRAWINGS RELATING TO OTHER TRADES. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND COORDINATING DIMENSIONS, CLEARANCES OPENINGS, PIPE SLEEVES, CURBS, ETC. WITH THE WORK OF OTHER TRADES.
- ⑤ PRINCIPAL OPENINGS THROUGH THE FRAMING MAY BE SHOWN ON THESE DRAWINGS. THE GENERAL CONTRACTOR SHALL EXAMINE THE DRAWINGS FOR REQUIRED OPENINGS AND SHALL PROVIDE FOR ALL OPENINGS WHETHER SHOWN ON THESE DRAWINGS OR NOT, AND SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH ALL SUB-CONTRACTORS. NOMINAL PIPE SLEEVES THROUGH THE DECK WILL NOT REQUIRE FRAMING UNLESS THE OPENING EXCEEDS 6" IN DIAMETER. IF THIS OCCURS, NOTIFY STRUCTURAL ENGINEER AND OBTAIN HIS WRITTEN INSTRUCTIONS BEFORE BEGINNING WORK.
- ⑥ ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS, AND DETAILS.
- ⑦ THE CONTRACTOR SHALL INSURE THAT ALL CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS AND THAT THESE LOADS ARE NOT PUT ON THE STRUCTURAL MEMBERS PRIOR TO THE TIME THAT THE CONCRETE REACHES THE FULL DESIGN STRENGTH AND ALL FRAMING MEMBERS AND THEIR CONNECTIONS ARE IN PLACE.
- ⑧ FOUNDATION DESIGN IS BASED ON SOIL INVESTIGATION AND REPORT BY THE GEOTECHNICAL ENGINEER, GRUBBS, HOSKINS, BARTON, & KYATT, #1 TRIGON PLACE, LITTLE ROCK, AR. 72209; PHONE 501-455-2536. CONTRACTOR IS TO OBTAIN A COPY OF SUCH AND BECOME FAMILIAR WITH ALL ITS REQUIREMENTS PRIOR TO SUBMITTING HIS BID FOR THE WORK.
- ⑨ CONTRACTOR TO PROVIDE FOR DRAINAGE OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, AND SEEPAGE. FOOTING EXCAVATIONS SHALL BE DRAINED OR PUMPED DRY, RECOMPACTED, AND REINSPECTED BEFORE POURING CONCRETE.
- ⑩ ALLOWABLE PRESSURE OF 1500 PSF USED FOR THE DESIGN OF CONTINUOUS FOOTINGS IS BASED UPON THEM BEING FOUNDED AT A MINIMUM DEPTH SHOWN ON DRAWINGS AND THAT CONTRACTOR SHALL HAVE GEOTECHNICAL ENGINEER INSPECT FOOTING EXCAVATIONS AND APPROVE SUCH BEFORE BEGINNING CONSTRUCTION OF CONCRETE FOOTING. SEE SOIL REPORT
- ⑪ ALL CONCRETE WORK IS TO BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE'S "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301" LATEST EDITION.
- ⑫ ALL CONCRETE IS TO HAVE A MINIMUM STRENGTH f'c = 4000 psi AT 28 DAYS VERIFIED BY CYLINDER TESTS AT THE CONTRACTOR'S EXPENSE.
- ⑬ REINFORCING STEEL SHALL COMPLY WITH ASTM A-615 GRADE 60 (MIN. YIELD STRENGTH 60,000 psi).
- ⑭ ALL REINFORCING SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS AND STIRRUPS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.
- ⑮ ALL REINFORCING SHALL BE LAPPED AS SHOWN ON DRAWINGS.
- ⑯ PROVIDE CORNER BARS IN ALL CONCRETE MEMBERS AT INTERSECTIONS. MATCH SIZE AND SPACING OF HORIZONTAL BARS IN THOSE MEMBERS.
- ⑰ REINFORCING BARS SHALL NOT BE WELDED.
- ⑱ COARSE AGGREGATE FOR CONCRETE SHALL NOT CONTAIN LIGNITE, STEEL OR OTHER MATERIALS THAT MAY BE DETRIMENTAL TO THE CONCRETE.
- ⑲ ALL STRUCTURAL STEEL WORK IS TO BE PER THE BEST PRACTICE OF THE "MANUAL OF STEEL CONSTRUCTION, LATEST EDITION", AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
- ⑳ STRUCTURAL STEEL:
 W-SHAPED MEMBERS, ASTM A992, F_y = 50 ksi
 MISC. PLATES, ANGLES, AND BARS:
 a. WHEN CONNECTED TO W SHAPED OR OTHER ASTM A992 MATERIAL, MISC. TO BE: ASTM A992, F_y = 50 ksi
 b. OTHERWISE: ASTM A36
 ALL MEMBERS TO BE FULL LENGTH WITHOUT ANY SPLICES UNLESS SHOWN OTHERWISE ON THESE DRAWINGS.
- ㉑ ALL WELDING IS TO BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) SPECIFICATIONS USING E70XX ELECTRODES AND SHALL BE DONE BY CERTIFIED WELDERS.
- ㉒ METAL ROOF DECK IS TO BE TYPE 1.5F 20 ga.
- ㉓ HORIZONTAL REINFORCING IN EVERY HORIZONTAL JOINT (AND CONNECTION TO FACE BRICK REINFORCEMENT), HOHMANN & BARNARD, INC. (HB) #270 LADDER EYE WIRE WITH SEISMIC HOOK FOR SINGLE WYTHE CMU WALL WITH SUPER DUTY (SHD) WIRE SIZE (DOUBLE 3/16" SIDE RODS x 3/16" CROSS RODS) FOR 7 5/8" CONCRETE MASONRY WALL (8" NOMINAL), HOT DIPPED GALVANIZED ASTM A 153 (1.5 OZ./FT.). IN ALL FACE BRICK JOINTS, USE HB LADDER EYE-WIRE SUPER HEAVY DUTY, HOT DIP GALVANIZED AND CONNECTED TO CMU WALL HORIZONTAL JOINT REINFORCEMENT. NO SUBSTITUTIONS. USE MANUFACTURERS SPECIAL CORNER PIECES AT EACH BUILDING CORNER. LAP SPLICE LENGTH SHALL BE 1'-0" AND SHALL OCCUR AT SPECIAL CORNER PIECES ONLY.
- ㉔ MINIMUM COMPRESSIVE STRENGTH OF CMU MASONRY WALL ASSEMBLAGE (CMU + GROUT), f'm = 2000 psi

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |

CONSTRUCTION DOCUMENTS

1/27/14

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING**

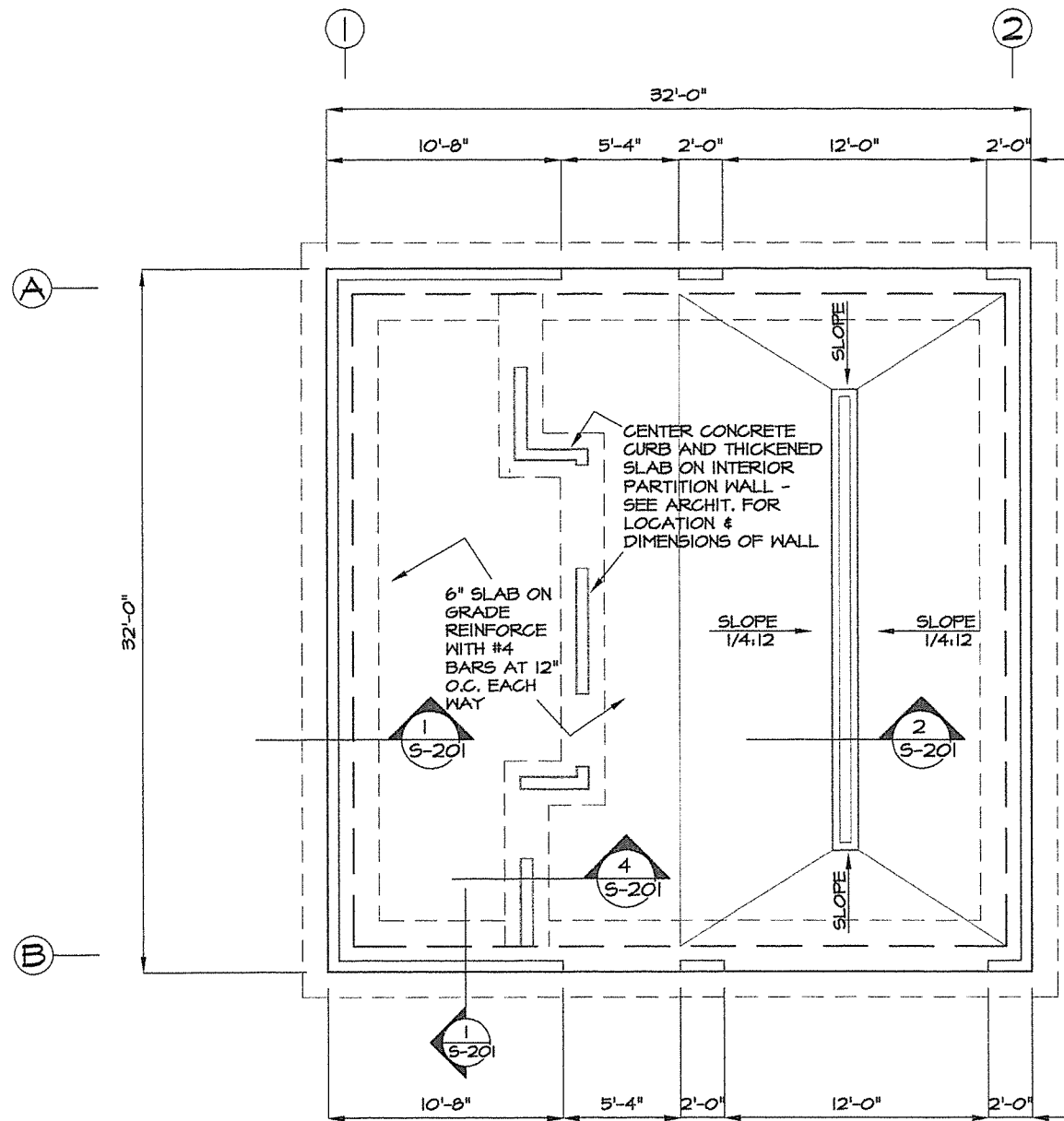
ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com
 STRUCTURAL ENGINEER
 H.JAMES ENGSTROM &
 ASSOCIATES, INC.
 1100 WEST SECOND ST.
 LITTLE ROCK, AR 72201
 P: 501.376.7246
 F: 501.376.6627

| | | | |
|------------|---------|----------------|-------------|
| Issue Date | 1/27/14 | Project Number | 2012-102_20 |
|------------|---------|----------------|-------------|

Drawing Title
GENERAL NOTES

Drawing Number
S-003
 16 of 46

ACAD Scale: 1/8"=1'-0"



NORTH

1 FOUNDATION PLAN
 S-101 1/4" = 1'-0"

ACAD Scale: 1/4"=1'-0"

| | | |
|-----|------|-------------|
| No. | Date | Description |
| | | |
| | | |
| | | |

CONSTRUCTION DOCUMENTS

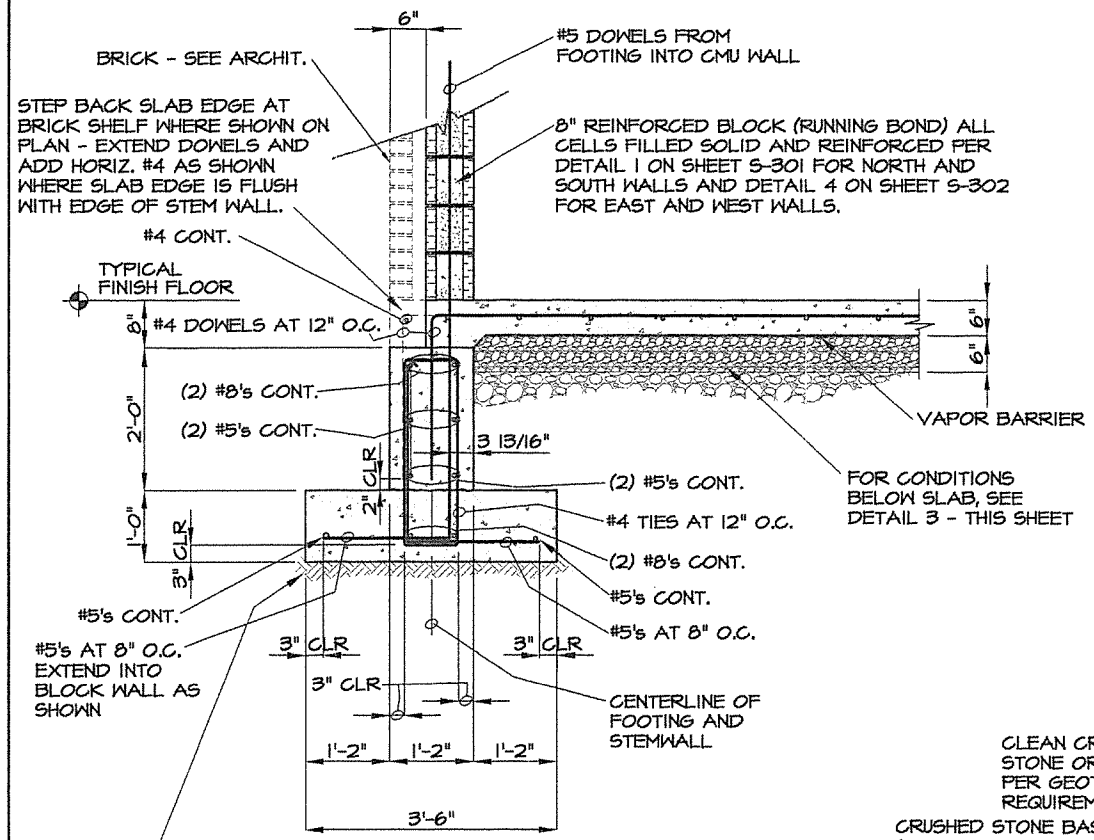
CERTIFICATE OF AUTHORIZATION
 H. JAMES ENGSTROM & ASSOC., INC.
 No. 154
 ARKANSAS ENGINEER

STATE OF ARKANSAS
 REGISTERED PROFESSIONAL ENGINEER
 H. JAMES ENGSTROM
 NO. 3125
 1/27/14

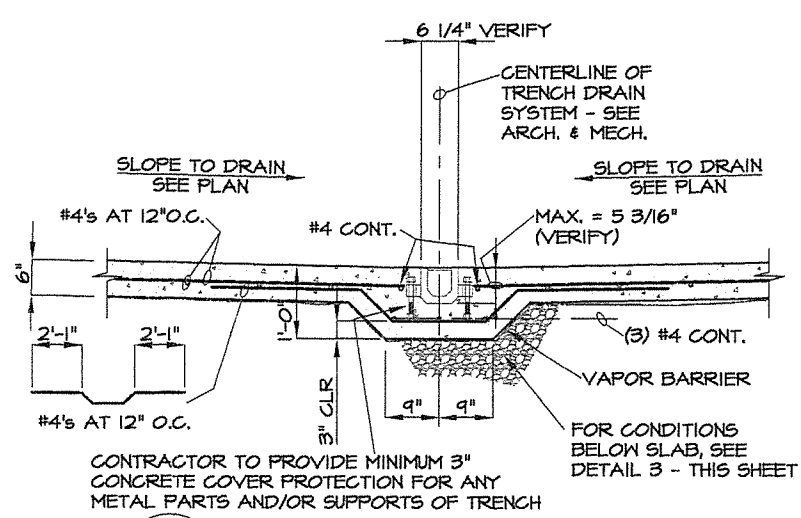
ARKANSAS STATE HIGHWAY AND
 TRANSPORTATION DEPARTMENT
 PARKING LOT &
 DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com
 STRUCTURAL ENGINEER
 H. JAMES ENGSTROM &
 ASSOCIATES, INC.
 1100 WEST SECOND ST.
 LITTLE ROCK, AR 72201
 P: 501.376.7246
 F: 501.376.6627

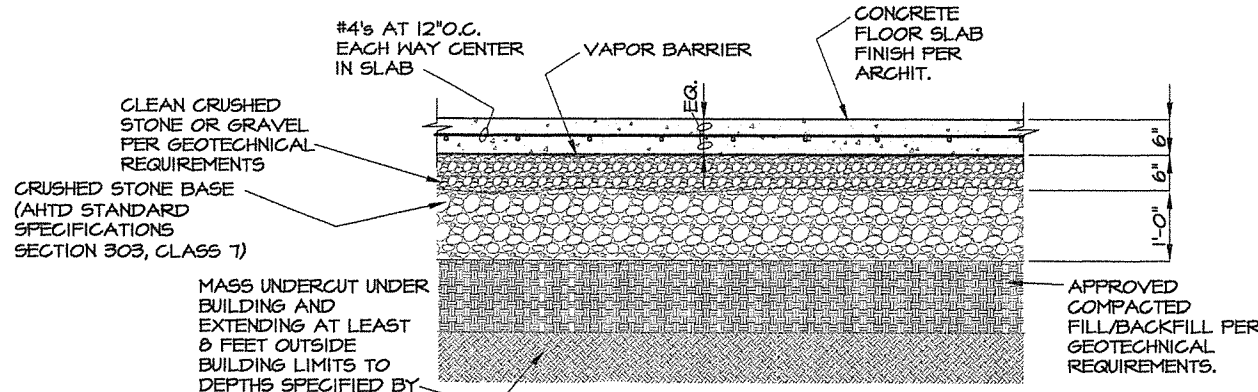
| | | | |
|----------------|------------------|----------------|-------------|
| Issue Date | 1/27/14 | Project Number | 2012-102_20 |
| Drawing Title | FOUNDATION PLANS | | |
| Drawing Number | S-101 | | |
| 17 of 46 | | | |



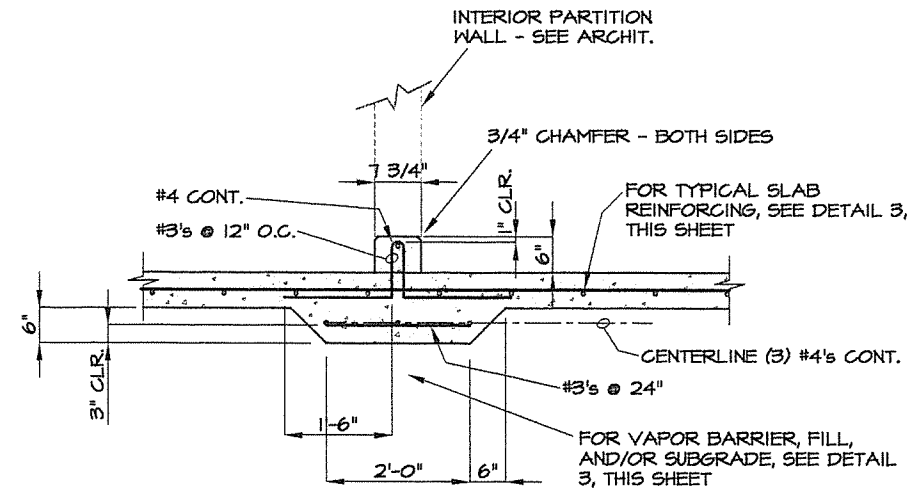
1 TYPICAL SLAB EDGE & FOOTING DETAIL
S-201 3/4" = 1'-0"



2 DETAIL AT TRENCH DRAIN
S-201 3/4" = 1'-0"



3 TYPICAL SLAB DETAIL
S-201 3/4" = 1'-0"



4 CONCRETE CURB DETAIL
S-201 SEE FOUNDATION PLAN 3/4" = 1'-0"

BAR LAPS
UNLESS SHOWN OTHERWISE

| BAR SIZE | LAP LENGTH |
|----------|------------|
| #3 | 25" |
| #4 | 32" |
| #5 | 41" |
| #6 | 48" |
| #7 | 70" |
| #8 | 80" |

NOTES

THIS SCHEDULE TYPICAL ALL BARS SPECIFICALLY NOT SHOWN OTHERWISE ON THESE DWGS. ALL BARS TO BE CONT. (NO LAPS) WHERE POSSIBLE. PROVIDE CORNER BARS ALL CORNERS.

BOTTOM OF FOOTING MUST BE FOUNDED IN THE STIFF GRAY, REDDISH TAN AND RED FINE SANDY CLAY, THE MEDIUM DENSE GRAY, RED, AND TAN CLAYEY FINE SAND OR IN COMPACTED SELECT FILL, FLOWABLE FILL (MINIMUM COMPRESSIVE STRENGTH = 300 psi) OR LEAN CONCRETE PLACED IN AN UNDERCUT TO RECOMMENDED BEARING STRATUM IN ACCORDANCE WITH THE REQUIREMENT OF THE GEOTECHNICAL REPORT, DECEMBER 2013 BY THE GEOTECHNICAL ENGINEER, GRUBBS, HOSKYN, BARTON, AND WYATT, INC.

CONSTRUCTION DOCUMENTS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. JAMES ENGSTROM & ASSOC., INC. No. 164

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER H. JAMES ENGSTROM No. 3129

1/21/14

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD

CROMWELL

101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

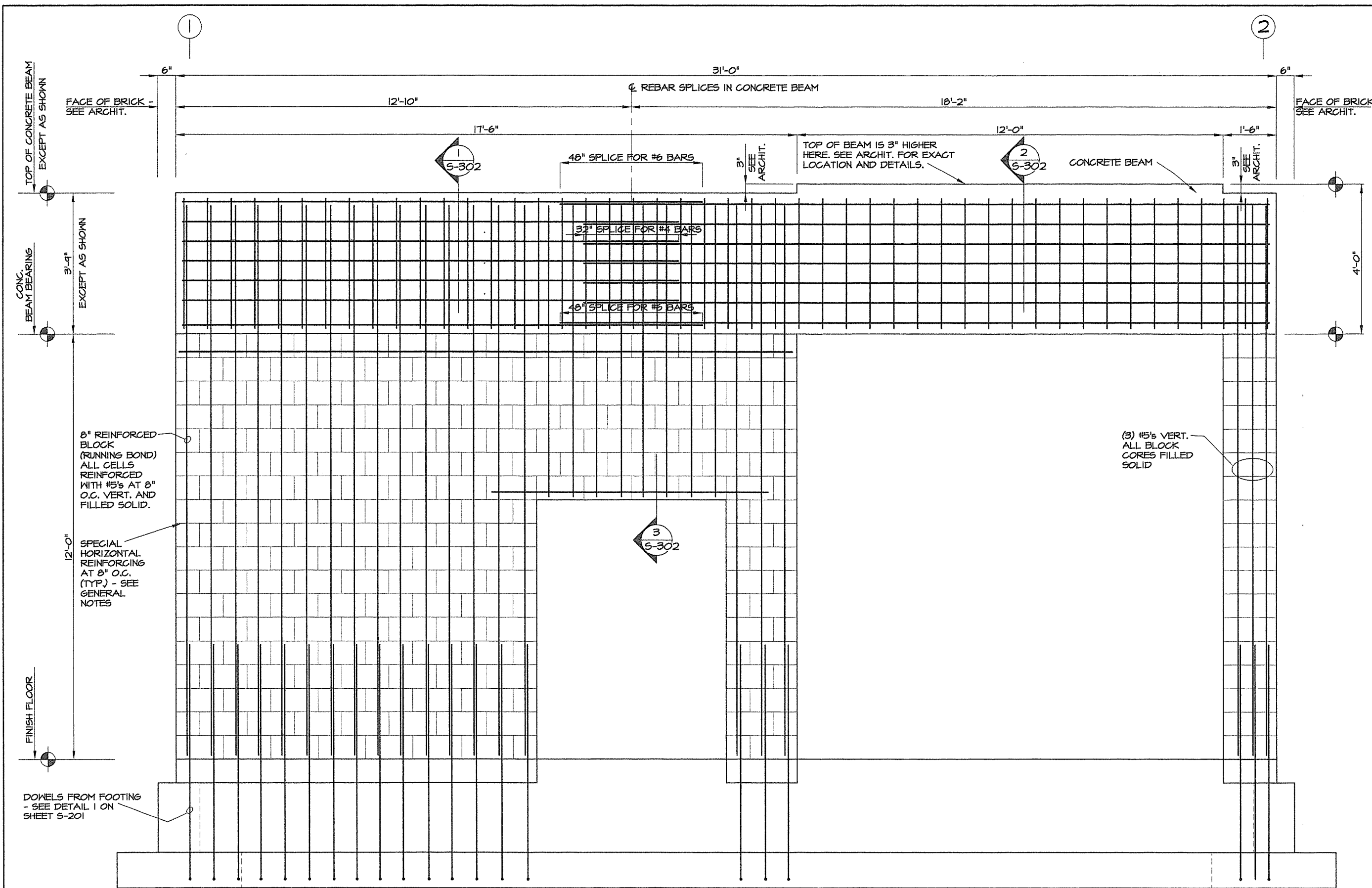
STRUCTURAL ENGINEER
H. JAMES ENGSTROM & ASSOCIATES, INC.
1100 WEST SECOND ST.
LITTLE ROCK, AR 72201
P: 501.376.7246
F: 501.376.6627

Issue Date 1/27/14 Project Number 2012-102_20

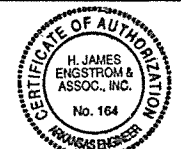



Drawing Title FOUNDATION DETAILS

Drawing Number S-201

18 of 46

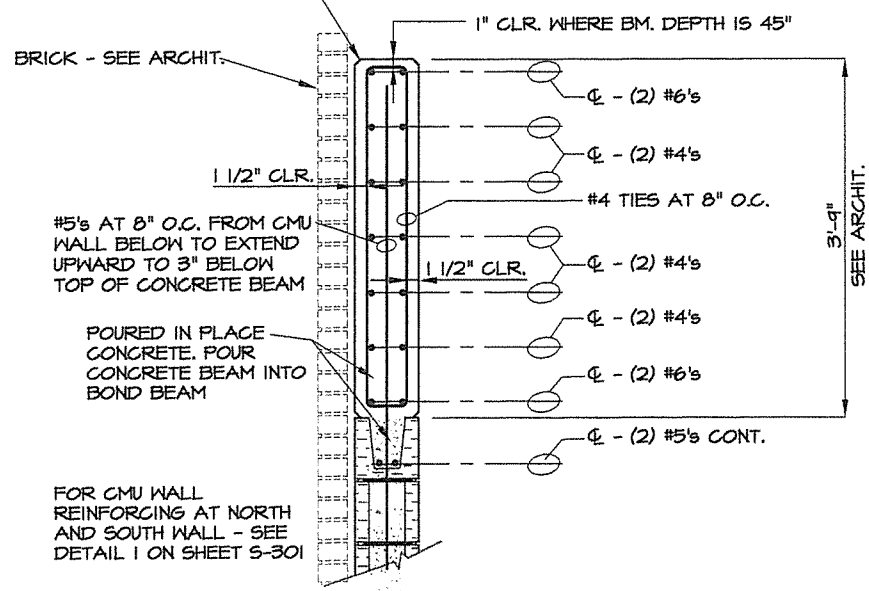


1 ELEVATION AT BLOCK WALL
 (LOOKING NORTH)
 (SOUTH WALL SHOWN - NORTH WALL OPPOSITE HAND)
 S-301
 3/4" = 1'-0"

| | |
|---|------------------------|
| Description | |
| Date | |
| No. | |
|   1/27/14 | CONSTRUCTION DOCUMENTS |
| ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING | |
|  | |
| ARCHITECT OF RECORD | |
|  | |
| 101 south spring street little rock, ar 72201 501.372.2900 cromwell.com STRUCTURAL ENGINEER H. JAMES ENGSTROM & ASSOCIATES, INC. 1100 WEST SECOND ST. LITTLE ROCK, AR 72201 P: 501.376.7246 F: 501.376.6627 | |
| Issue Date | Project Number |
| 1/27/14 | 2012-102_20 |
| Drawing Title | |
| BLOCK DETAILS | |
| Drawing Number | |
| S-301 | |
| 19 of 46 | |

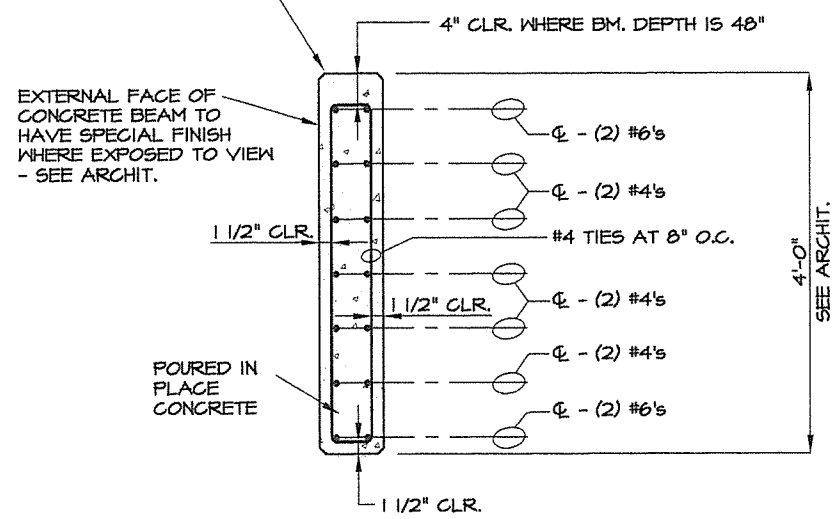
ACAD Scale: 3/4"=1'-0"

POURED IN PLACE CONCRETE BEAM,
48" DEEP WHERE EXPOSED AT O.H. DOOR OPENING,
45" DEEP WHERE BRICK AND TOP FLASHING AND BLOCKING OCCURS. SEE ARCHIT.

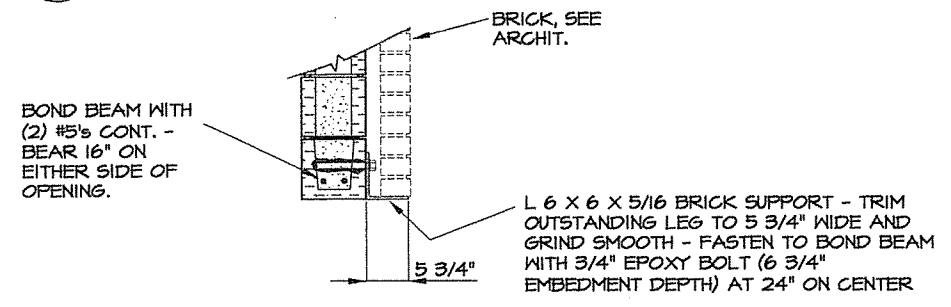


1 SECTION AT CONCRETE BEAM
S-302 1" = 1'-0"

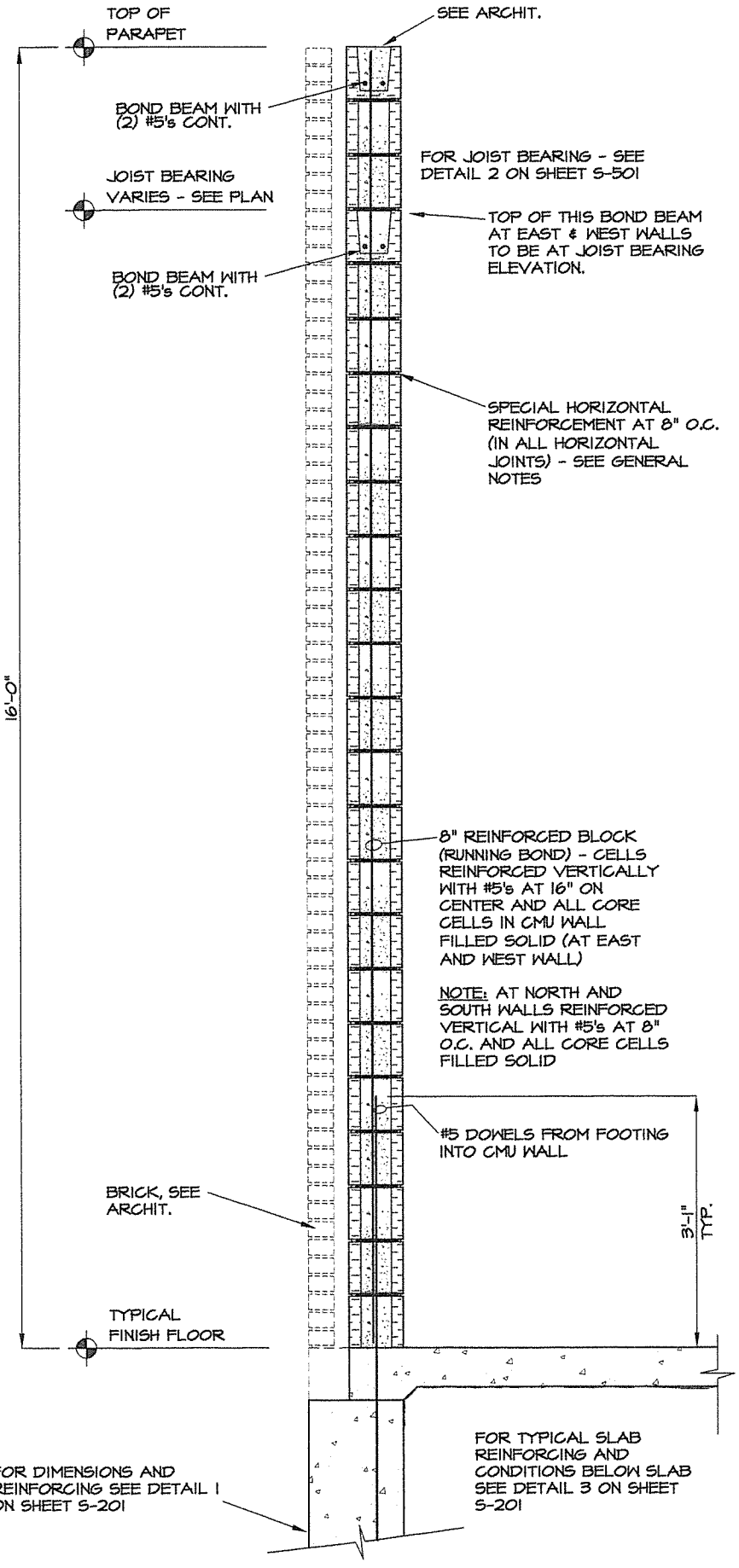
POURED IN PLACE CONCRETE BEAM,
48" DEEP WHERE EXPOSED AT O.H. DOOR OPENING,
45" DEEP WHERE BRICK AND TOP FLASHING AND BLOCKING OCCURS. SEE ARCHIT.



2 SECTION AT CONCRETE BEAM
S-302 1" = 1'-0"



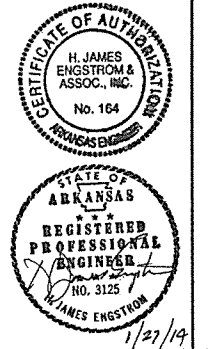
3 TYPICAL MASONRY LINTEL
S-302 1" = 1'-0"



4 WALL SECTION
S-302 TYPICAL REINFORCING AT EAST AND WEST WALLS 1" = 1'-0"

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Description
Date
No.



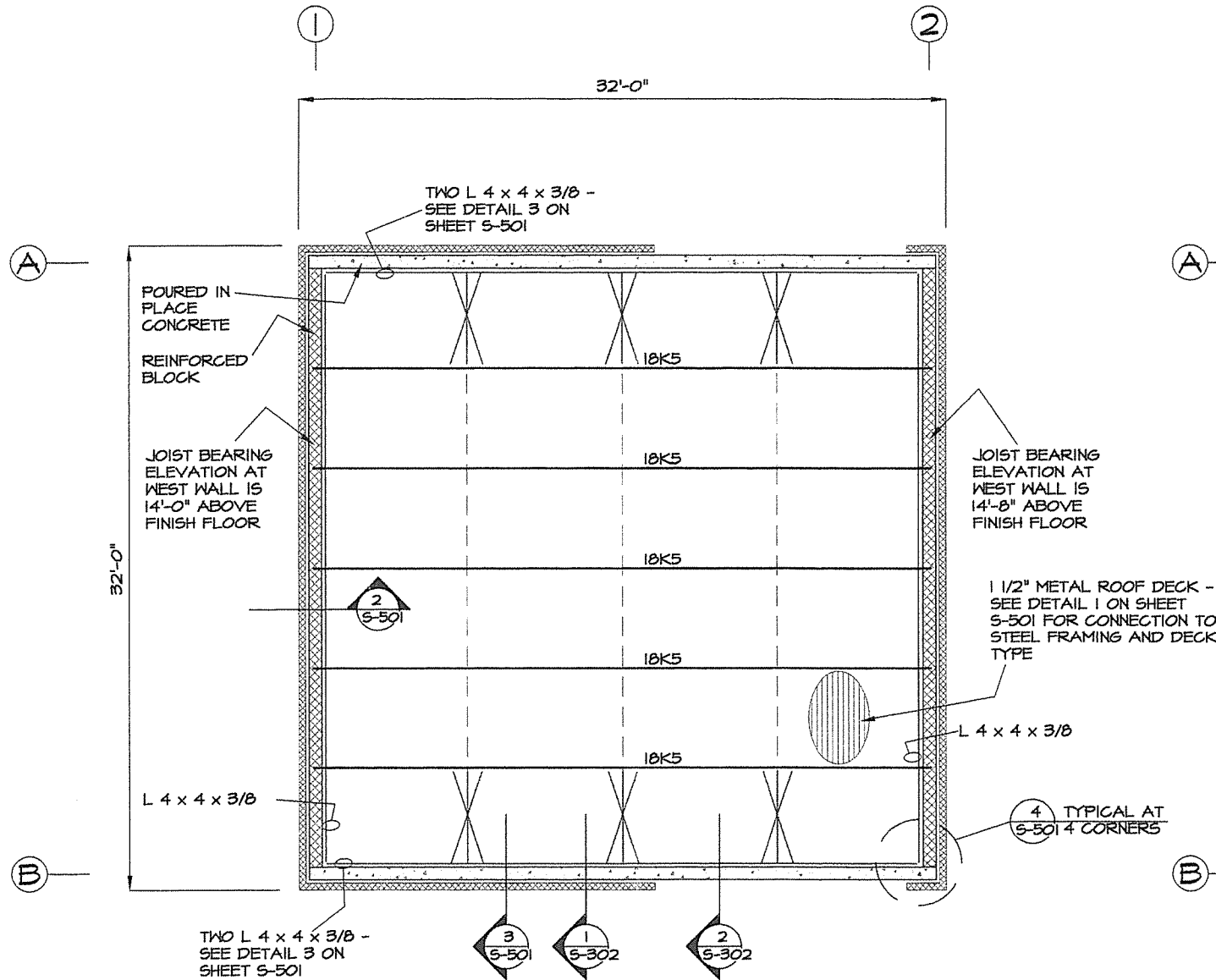
CONSTRUCTION DOCUMENTS

ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING

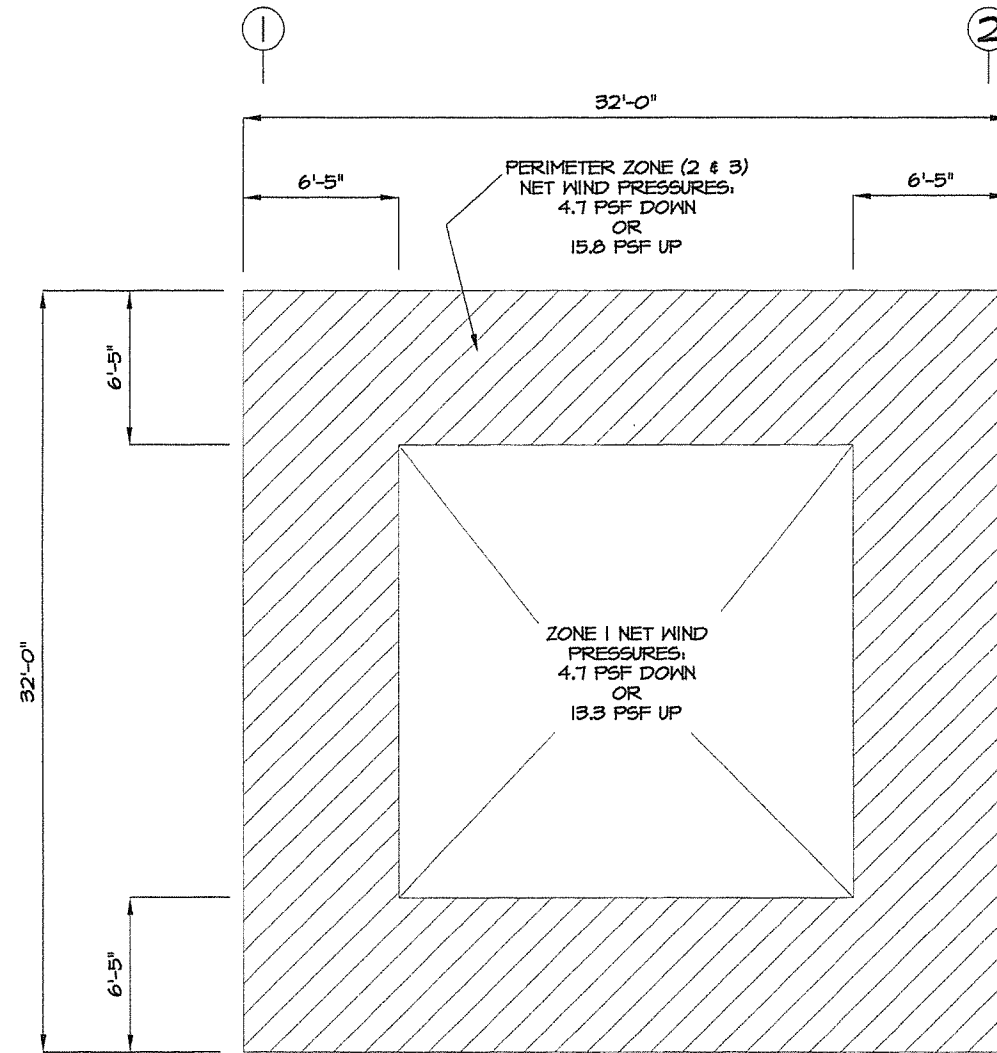
ARCHITECT OF RECORD
CROMWELL

101 south apring street little rock, ar 72201
501.372.2900 cromwell.com
STRUCTURAL ENGINEER
H. JAMES ENGSTROM &
ASSOCIATES, INC.
1100 WEST SECOND ST.
LITTLE ROCK, AR 72201
P: 501.376.7246
F: 501.376.6627

| | | | |
|----------------|-------------------|----------------|-------------|
| Issue Date | 1/27/14 | Project Number | 2012-102_20 |
| Drawing Title | BLOCK DETAILS | | |
| Drawing Number | S-302 20 of 46 | | |



1
S-40
FRAMING PLAN
1/4" = 1'-0"



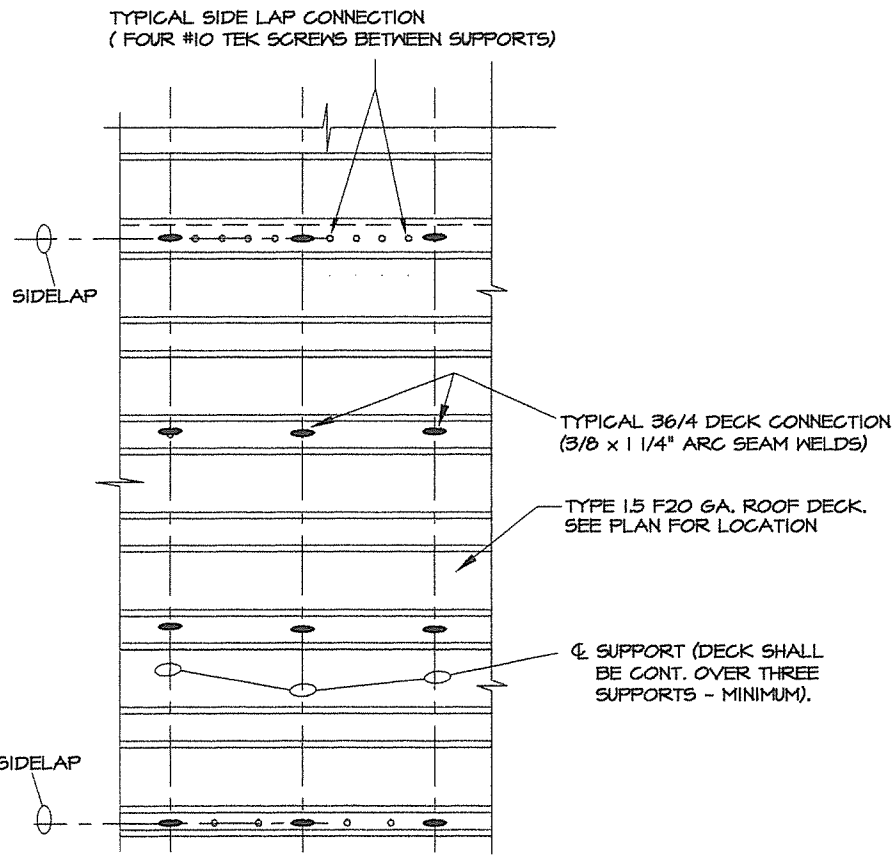
2
S-40
JOIST ROOF WIND LOADING PLAN
1/4" = 1'-0"



JOIST MANUFACTURER AND CONTRACTOR ARE TO BE RESPONSIBLE FOR DESIGNING IN ACCORDANCE WITH THE CURRENT ARKANSAS FIRE PREVENTION CODE, VOLUME II BUILDING AND, SUPPLYING, AND ERECTING JOISTS, BRIDGING, AND OTHER JOIST RELATED ITEMS (IN ACCORDANCE WITH SJI) TO BE CAPABLE OF CARRYING THE ABOVE UNFACTORED WIND FORCES IN ADDITION TO THE DEAD PLUS LIVE LOAD JOIST CAPACITY SHOWN IN THE SJI LOAD TABLES FOR THE JOISTS SPECIFIED. FOR THE LOADING CASES WHERE LOWER DEAD LOADS ARE MORE CRITICAL THAN HIGHER ONES, ASSUME AN UNFACTORED DEAD LOAD OF 8 POUNDS PER SQUARE FOOT.

- LEGEND**
- > SPECIAL WALL CONNECTION - SEE DETAIL 3 ON SHEET S-501
 - > JOIST BRIDGING PER JOIST MANUFACTURER
 - DBE DECK BEARING ELEVATION (BOTTOM OF METAL ROOF DECK)
 - A.F.F. ABOVE FINISH FLOOR
 - SJ SPECIAL JOIST - SEE SHEET S-501

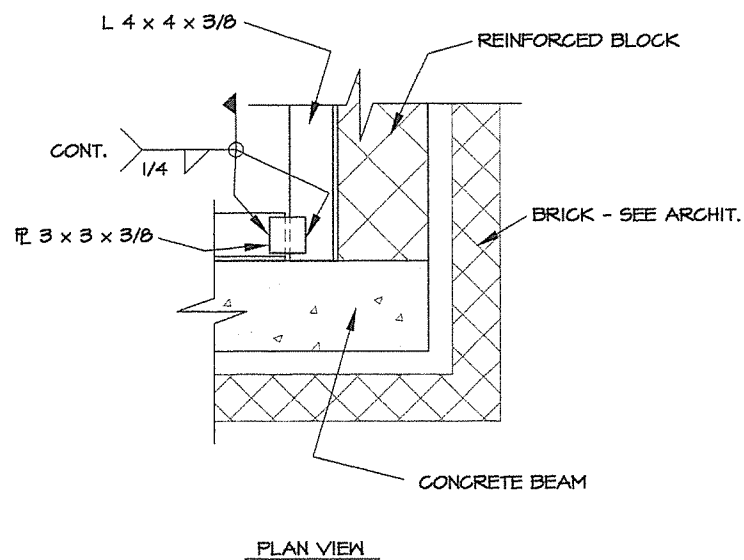
| | |
|--|-------------------------------|
| Description | |
| No. | |
| Date | |
| | |
| CONSTRUCTION DOCUMENTS | |
| ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING | |
| | |
| ARCHITECT OF RECORD | |
| | |
| 101 south spring street little rock, ar 72201 501.372.2900 cromwell.com STRUCTURAL ENGINEER H. JAMES ENGSTROM & ASSOCIATES, INC. 1100 WEST SECOND ST. LITTLE ROCK, AR 72201 P: 501.376.7246 F: 501.376.6627 | |
| Issue Date 1/27/14 | Project Number 2012-102_20 |
| Drawing Title FRAMING PLAN | |
| Drawing Number S-401 | |
| 21 of 48 | |



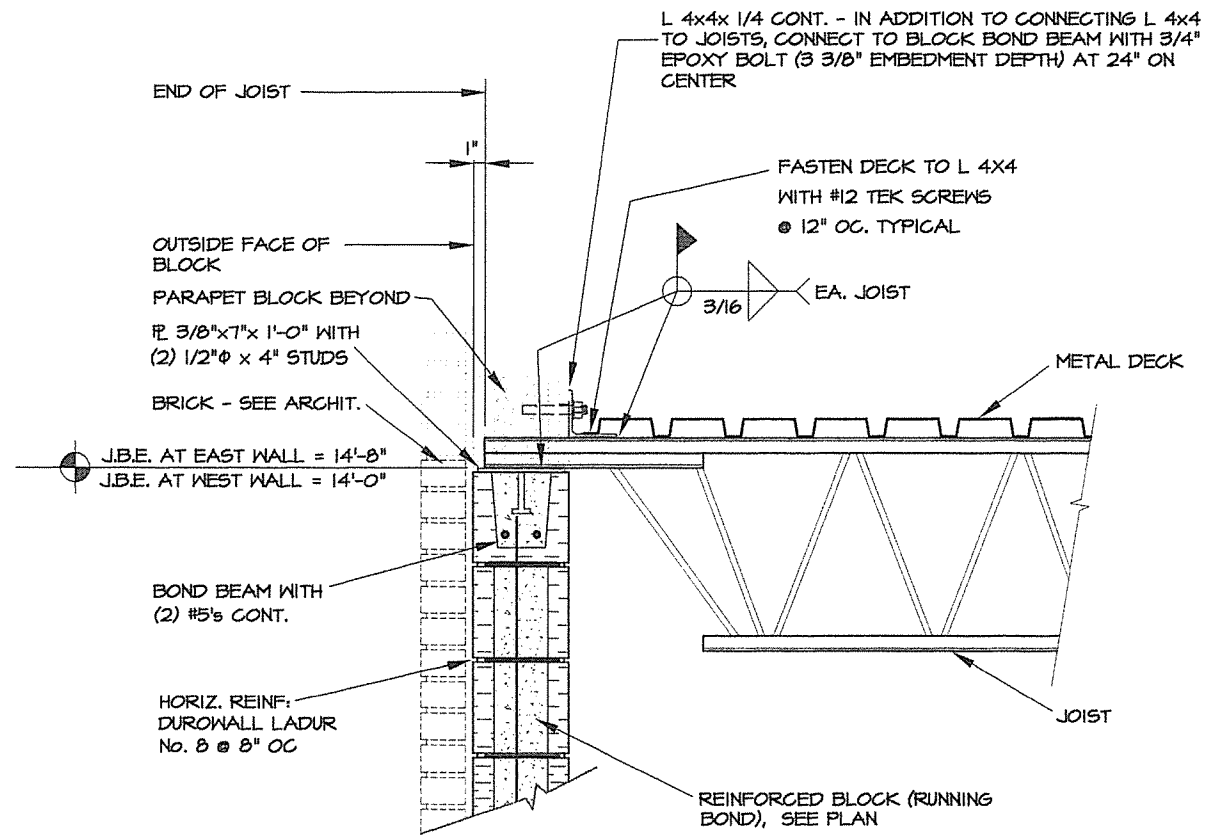
TYPICAL DECK CONNECTION PATTERN PLAN = 3/8\"/>

NOTE: METAL ROOF DECK IS TO BE CONNECTED WITH A 3/8\"/>

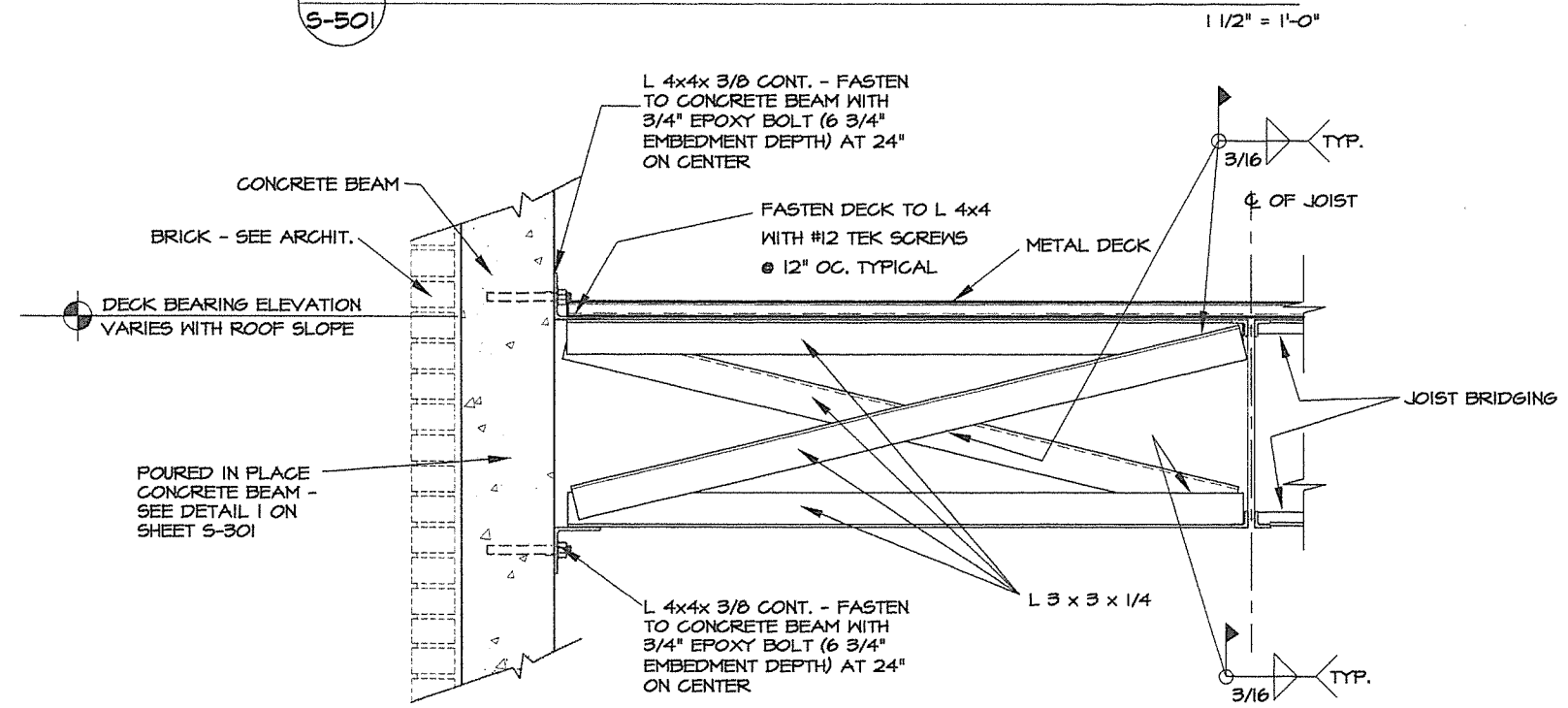
1 TYPICAL ROOF DECK & ANCHORAGE DETAILS
S-501 N.T.S.



4 CONNECTION DETAIL
S-501 1/2" = 1'-0"



2 JOIST BEARING DETAIL
S-501 1/2" = 1'-0"

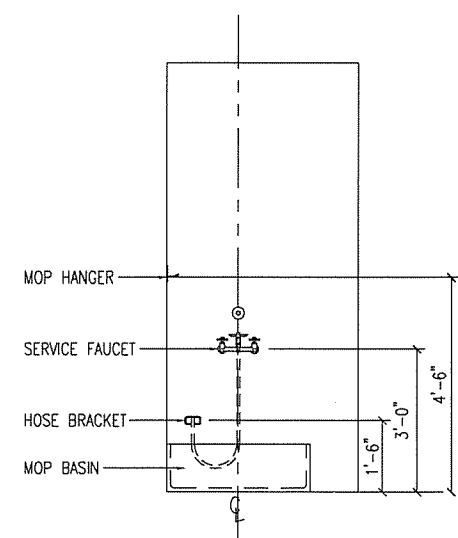
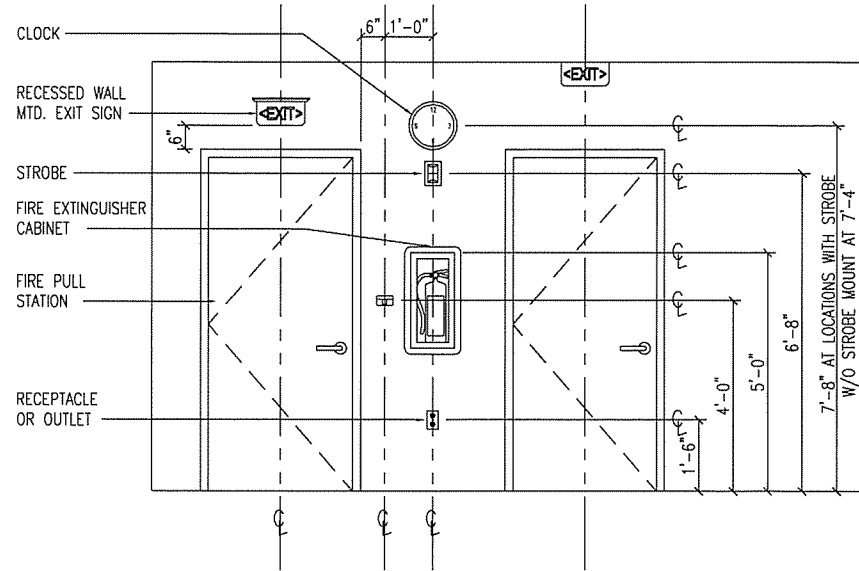
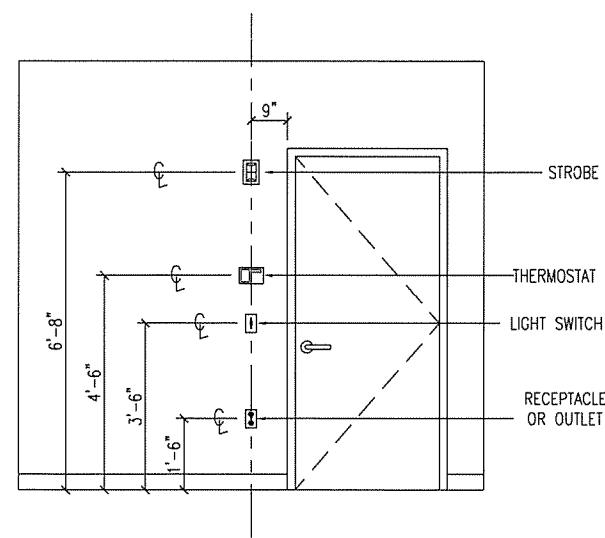
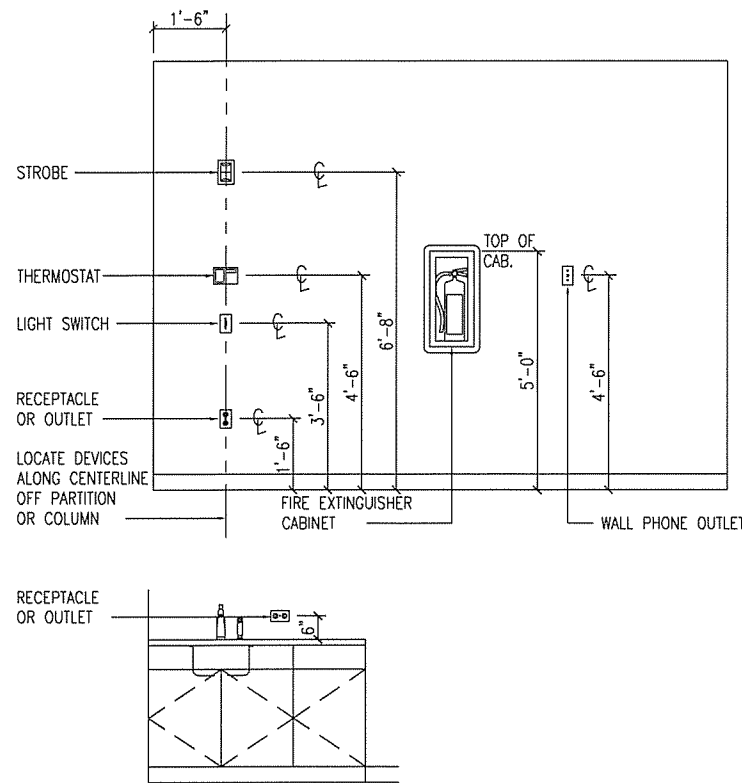


3 DECK BEARING DETAIL & WALL CONNECTION
S-501 1/2" = 1'-0"

| | |
|--|-----------------------------|
| | CONSTRUCTION DOCUMENTS |
| ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING | |
| | |
| ARCHITECT OF RECORD CROMWELL 101 south spring street little rock, ar 72201 501.372.2900 cromwell.com STRUCTURAL ENGINEER H. JAMES ENGSTROM & ASSOCIATES, INC. 1100 WEST SECOND ST. LITTLE ROCK, AR 72201 P: 501.376.7246 F: 501.376.6627 | |
| Issue Date: 1/27/14 | Project Number: 2012-102_20 |
| Drawing Title: FRAMING DETAILS | |
| Drawing Number: S-501 22 of 48 | |

ACAD Scale: 1/2"=1'-0"

TYPICAL MOUNTING HEIGHTS



ABBREVIATIONS

| A | |
|------------|--------------------------|
| A.C. | AIR CONDITIONED |
| A.D. | AREA DRAIN |
| A.H.U. | AIR HANDLING UNIT |
| ALT. | ALTERNATE |
| ALUM. | ALUMINUM |
| AMP., A. | AMPERES |
| A.O. | ACCESS OPENING |
| APPROX. | APPROXIMATELY |
| ARCH. | ARCHITECTURAL |
| A.T. | ASPHALT TILE |
| A.T.C. | ACOUSTIC TILE CEILING |
| B | |
| BAL. | BALANCE |
| BD. | BOARD |
| BLDG. | BUILDING |
| BLK. | BLANK |
| BM. | BEAM |
| BOT. | BOTTOM |
| BRG. | BEARING |
| B.T.U.H. | BRITISH THERMO UNIT/HOUR |
| C | |
| CAB. | CABINET |
| CAP. | CAPACITY |
| C/B | CIRCUIT BREAKER |
| C.D. | CEILING DIFFUSER |
| CER. | CERAMIC |
| C.F.M. | CUBIC FEET/MINUTE |
| CKT. | CIRCUIT |
| E. | CENTER LINE |
| CEIL. | CEILING |
| CL. | CLOSET |
| C.M.U. | CONCRETE MASONRY UNIT |
| C.O. | CLEAN OUT |
| COL. | COLUMN |
| CONC. | CONCRETE |
| COND. | CONDENSATE |
| CONN. | CONNECTION |
| CONST. | CONSTRUCTION |
| CONT. | CONTINUOUS |
| CONTR. JT. | CONTRACTION JOINT |
| C.S.C. | COLOR SYMBOL CODE |
| C.T. | CERAMIC TILE |
| C.T.B. | CERAMIC TILE BASE |
| C.T.C. | CENTER TO CENTER |

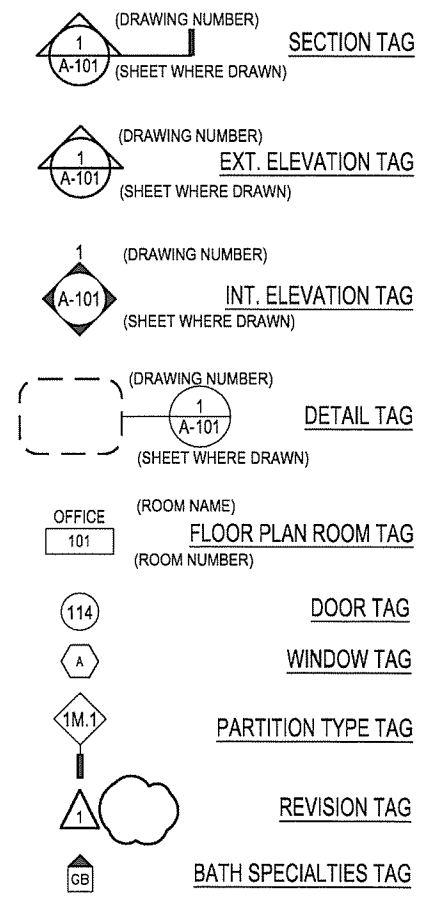
| D | |
|----------|--------------------------------|
| DET. | DETAIL |
| DIA. | DIAMETER |
| DIFF. | DIFFUSER |
| DIM. | DIMENSION |
| DISC. | DISCONNECT |
| D.J. | DUMMY JOINT |
| DN. | DOWN |
| DR. | DRAIN |
| D.S. | DOWN SPOUT |
| DWG.(S) | DRAWING(S) |
| E | |
| EA. | EACH |
| ELEC. | ELECTRIC |
| EQUIP. | EQUIPMENT |
| E.W.C. | ELECTRIC WATER COOLER |
| EXH. | EXHAUST |
| EXP. JT. | EXPANSION JOINT |
| EXT. | EXTERIOR |
| EXIST. | EXISTING |
| F | |
| F.A. | FIRE ALARM |
| F.C. | FLEXIBLE CONNECTION |
| F.D. | FLOOR DRAIN |
| F.E.C. | FIRE EXTINGUISHER CABINET |
| FIN. | FINISH |
| FL. | FLOOR |
| FT. | FOOT, FEET |
| FTG. | FOOTING |
| G | |
| GA. | GAGE |
| GAL. | GALLON |
| GALV. | GALVANIZED |
| G.F.E. | GOVERNMENT FURNISHED EQUIPMENT |
| GL. | GLASS |
| GND. | GROUND |
| GOVT | GOVERNMENT |
| G.P.H. | GALLONS/HOUR |
| G.P.M. | GALLONS/MINUTE |
| GR. | GRILLE |
| G.W.B. | GYPSUM WALL BOARD |

| H | |
|---------|-------------------------|
| H. | HIGH |
| H.B. | HOSE BIBB |
| H.C. | HOLLOW CORE |
| HT. | HEIGHT |
| H.M. | HOLLOW METAL |
| H.P. | HORSE POWER |
| HR. | HOUR |
| HTG. | HEATING |
| HTR. | HEATER |
| H.&V. | HEATING AND VENTILATING |
| HW. | HARDWARE |
| HYD. | HYDRANT |
| I | |
| I.D. | INSIDE DIAMETER |
| I.E. | INVERT ELEVATION |
| IN. | INCHES |
| INCAND. | INCANDESCENT |
| INSUL. | INSULATION |
| INT. | INTERIOR |
| J | |
| J.B. | JUNCTION BOX |
| JCT. | JUNCTION |
| JT. | JOINT |
| K | |
| KVA | KILOVOLT AMPERE |
| L | |
| LB.# | POUND |
| LG. | LONG |
| L.P. | LIGHTING PANEL |
| LTG. | LIGHTING |

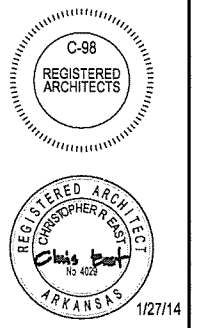
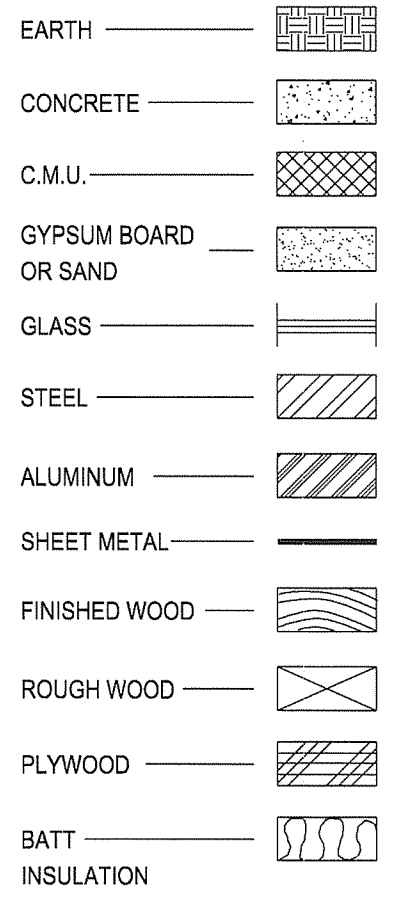
| M | |
|--------|-------------------------|
| M. | MOTOR |
| MAINT. | MAINTENANCE |
| MAX. | MAXIMUM |
| M.D.P. | MAIN DISTRIBUTION PANEL |
| MECH. | MECHANICAL |
| MTL. | METAL |
| MIN. | MINIMUM |
| MISC. | MISCELLANEOUS |
| M.O. | MASONRY OPENING |
| M.T. | METAL THRESHOLD |
| MTD. | MOUNTED |
| MTG. | MOUNTING |
| M.V. | MECHANICAL VENTILATION |
| M.G.T. | MATT GLAZE TILE |
| N | |
| N.A. | NOT APPLICABLE |
| N.I.C. | NOT IN CONTRACT |
| NO. | NUMBER |
| O | |
| O.A. | OUTDOOR AIR |
| OL. | OVERLOAD |
| OPNG. | OPENING |
| OPP. | OPPOSITE |
| O.S.D. | OPEN SIGHT DRAIN |
| P | |
| P. | PAPER |
| PART. | PARTITION |
| PER. | PERIMETER |
| P.L. | PLATE |
| PLBG. | PLUMBING |
| PLYWD | PLYWOOD |
| PNL. | PANEL |
| PRESS. | PRESSURE |
| PSF | POUNDS/SQUARE FOOT |
| PSI | POUNDS/SQUARE INCH |
| PSIG | POUNDS/SQUARE INCH GAGE |
| PT. | POINT |
| PTD. | PAINTED |
| Q | |
| QTR. | QUARTER |
| QUAN. | QUANTITY |

| R | |
|---------|---------------------|
| R. | RISER |
| R.A. | RETURN AIR |
| RAD. | RADIUS |
| RD. | ROUND |
| REG. | REGISTER |
| REINF. | REINFORCING |
| REQ. | REQUIRED |
| RET. | RETURN |
| R.G. | RETURN GRILLE |
| RM. | ROOM |
| R.P.M. | REVOLUTION/MINUTE |
| S | |
| S. | SUPPLY |
| S.A. | SUPPLY AIR |
| SCH. | SCHEDULE |
| SECT. | SECTION |
| SERV. | SERVICE |
| SHT. | SHEET |
| S.J. | SLIP JOINT |
| SPEC. | SPECIFICATIONS |
| SQ. FT. | SQUARE FEET |
| ST. | STEEL |
| STOR. | STORAGE |
| STRUC. | STRUCTURAL |
| SUSP. | SUSPENDED |
| SW. | SWITCH |
| T | |
| T. | TOILET |
| TEL. | TELEPHONE |
| TEMP. | TEMPERATURE |
| THK. | THICKNESS |
| THD. | THRESHOLD |
| TOIL. | TOILET |
| TYP. | TYPICAL |
| V | |
| V. | VOLT |
| V.A.T. | VINYL ASBESTOS TILE |
| VENT. | VENTILATION |
| VERT. | VERTICAL |
| VTR. | VENT THRU ROOF |
| W | |
| W. | WATT |
| W/ | WITH |
| WC | WAINSCOTING |
| WD. | WOOD |
| W.D. | WINDOW DIMENSION |
| WF | WIDE FLANGE |
| W.G. | WATER GAGE |
| WP. | WEATHERPROOF |
| WTR. | WATER |
| W.W.F. | WELDED WIRE FABRIC |

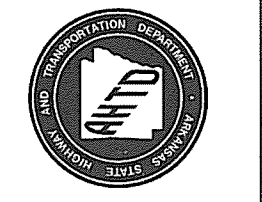
DRAWING TAG SYMBOLS



MATERIAL LEGEND

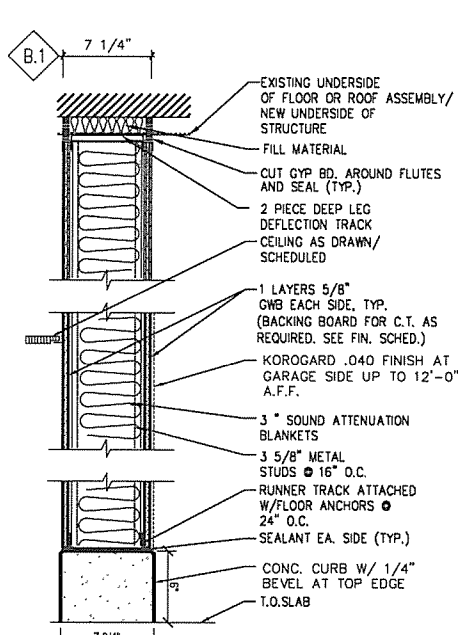


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING



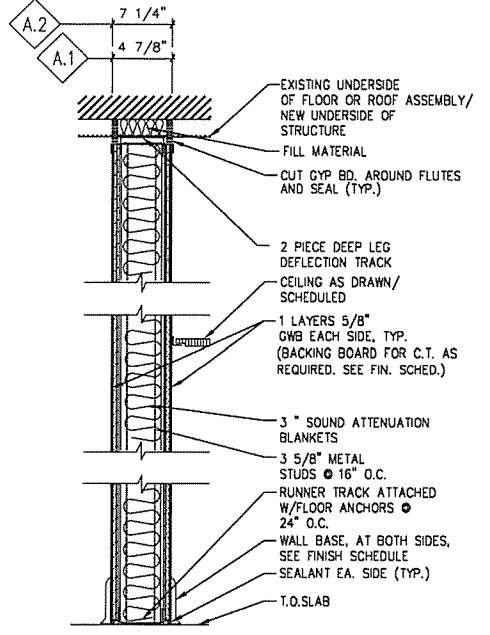
ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date 27-JANUARY-2014 Project Number 2012-102-20
 Drawing Title
MOUNTING HTS., ABBREVIATIONS AND SYMBOLS
 Drawing Number
A-001
 23 of 46



NON-RATED ACOUSTICAL PARTITION AT WET AREA WITH CONC. CURB

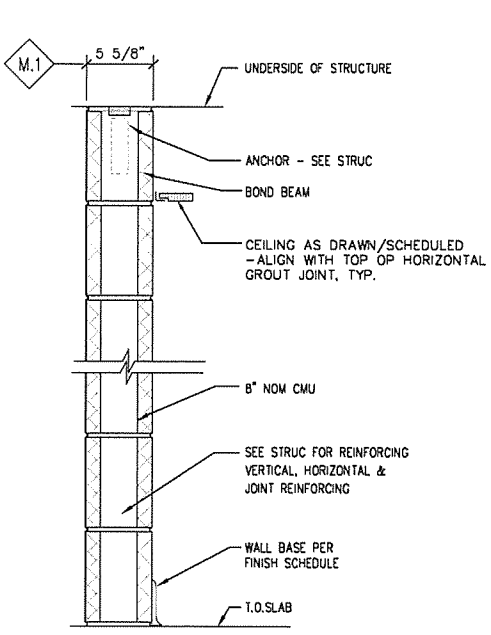
B.1 AS SHOWN ON PLANS



NON-RATED ACOUSTICAL PARTITION

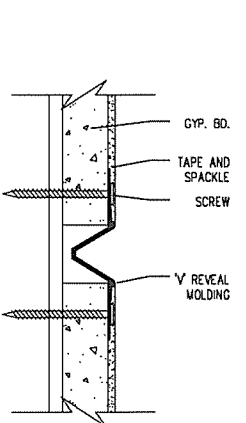
A.1 AS SHOWN ON PLANS

A.2 SAME AS A.1 EXCEPT WITH 6\"/>

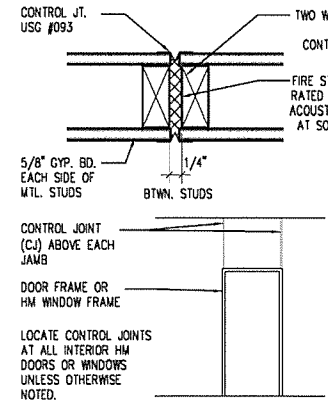


NON-RATED PARTITION

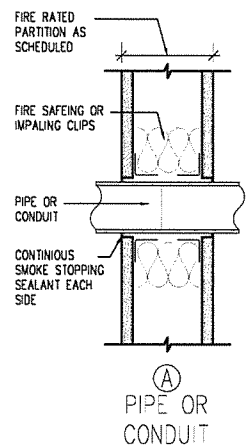
M.1 AS SHOWN ON PLANS



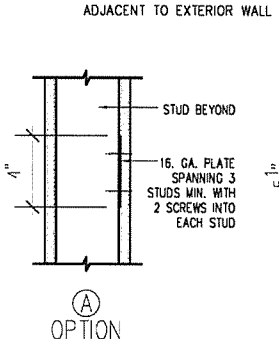
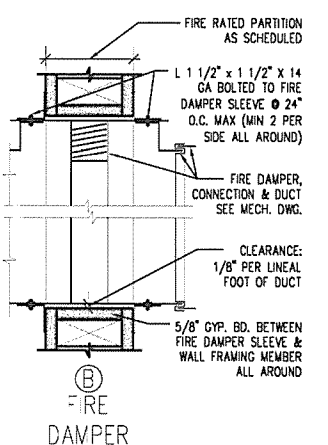
1 GYP. BD. REVEAL JOINT
A-002 NOT TO SCALE



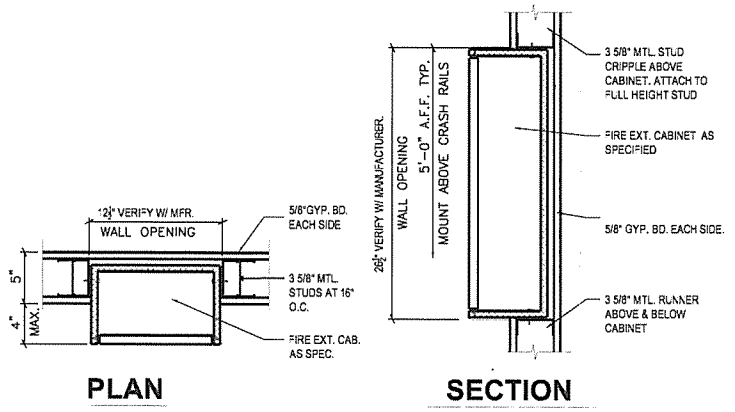
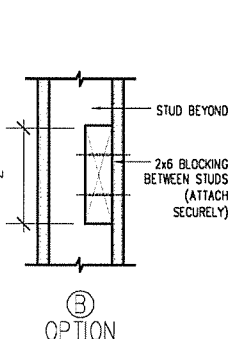
2 CONTROL JOINT
A-002 NOT TO SCALE



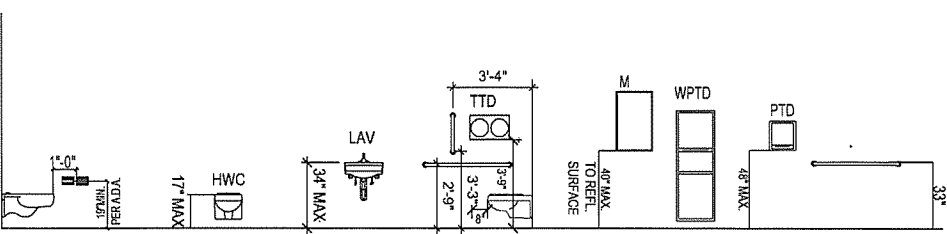
3 PENETRATION OF RATED PARTITIONS
A-002 NOT TO SCALE



4 WALL MOUNTED ITEMS
A-002 NOT TO SCALE



5 SEMI RECESSED FIRE EXTINGUISHER CABINET
A-002 NOT TO SCALE



6 STANDARD MOUNTING HEIGHTS
A-002 NO SCALE

NOTE: TOILET TO BE INSTALLED AT HANDICAPPED HEIGHT.

| TOILET ACCESSORIES | | | |
|--------------------|-------------------------------|---------------------------|----------------------|
| NO. | DESCRIPTION | BRAND/MODEL | SPECIAL INSTRUCTIONS |
| 1 | FREE STANDING WASTE CONTAINER | ---- | OFOI - NOT SHOWN |
| 2 | PAPER TOWEL DISPENSER | ---- | OFOI |
| 3 | HAND SOAP DISPENSER | ---- | OFOI |
| 4 | TOILET PAPER DISPENSER | ---- | OFOI |
| 5 | MIRROR | BRADLEY 781-2436 OR EQUAL | 24\"/> |
| 6 | 18\"/> | | |
| 7 | 42\"/> | | |
| 8 | 36\"/> | | |

OFOI - OWNER FURNISHED, OWNER INSTALLED
CFCI - CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
ALL OWNER OR CONTRACTOR INSTALLED ITEMS TO BE INSTALLED TO MEET ADA REQUIREMENTS.
PROVIDE 6\"/>

7 TOILET ACCESSORY SCHEDULE
A-002 NO SCALE

- NOTES:**
- AT METAL STUD PARTITIONS PROVIDE APPROPRIATE SIZE FRAMING AND HORIZONTAL / DIAGONAL BRACING, AS REQUIRED PER MANUFACTURER SPECIFICATIONS.
 - ALL PENETRATIONS IN FIRE RATED PARTITIONS AND CEILINGS SHALL BE FIRE STOPPED TO MATCH WALL RATING - RATINGS SHALL BE AS PER CODE REQUIREMENTS.
 - MAINTAIN INTEGRITY OF ALL RATED PARTITIONS AS REQUIRED AT ELECTRIC CONDUITS, J-BOXES, PANELS, PLUMBING & FIRE EXTINGUISHERS.
 - PROVIDE HORIZONTAL METAL STUD BRACING AT CHASE WALLS AS PER MANUFACTURERS SPECIFICATIONS.
 - PROVIDE CONTINUOUS BLOCKING FOR ALL EQUIPMENT RACKS, LIGHTING FIXTURES, CASEWORK, COUNTERS, SHELVES, ACCESSORIES, AND ALL EQUIPMENT OR ITEMS SUPPLIED BY THE CONTRACTOR OR BY THE OWNER, AS REQUIRED.
 - REFER TO FINISH SCHEDULE FOR FINISHES (FINISHES ARE NOT SHOWN ON WALL TYPES).
 - ALL DIMENSIONS ARE TO THE FACE OF PARTITION UNLESS OTHERWISE SHOWN.
 - ANY DISCREPANCIES IN DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.

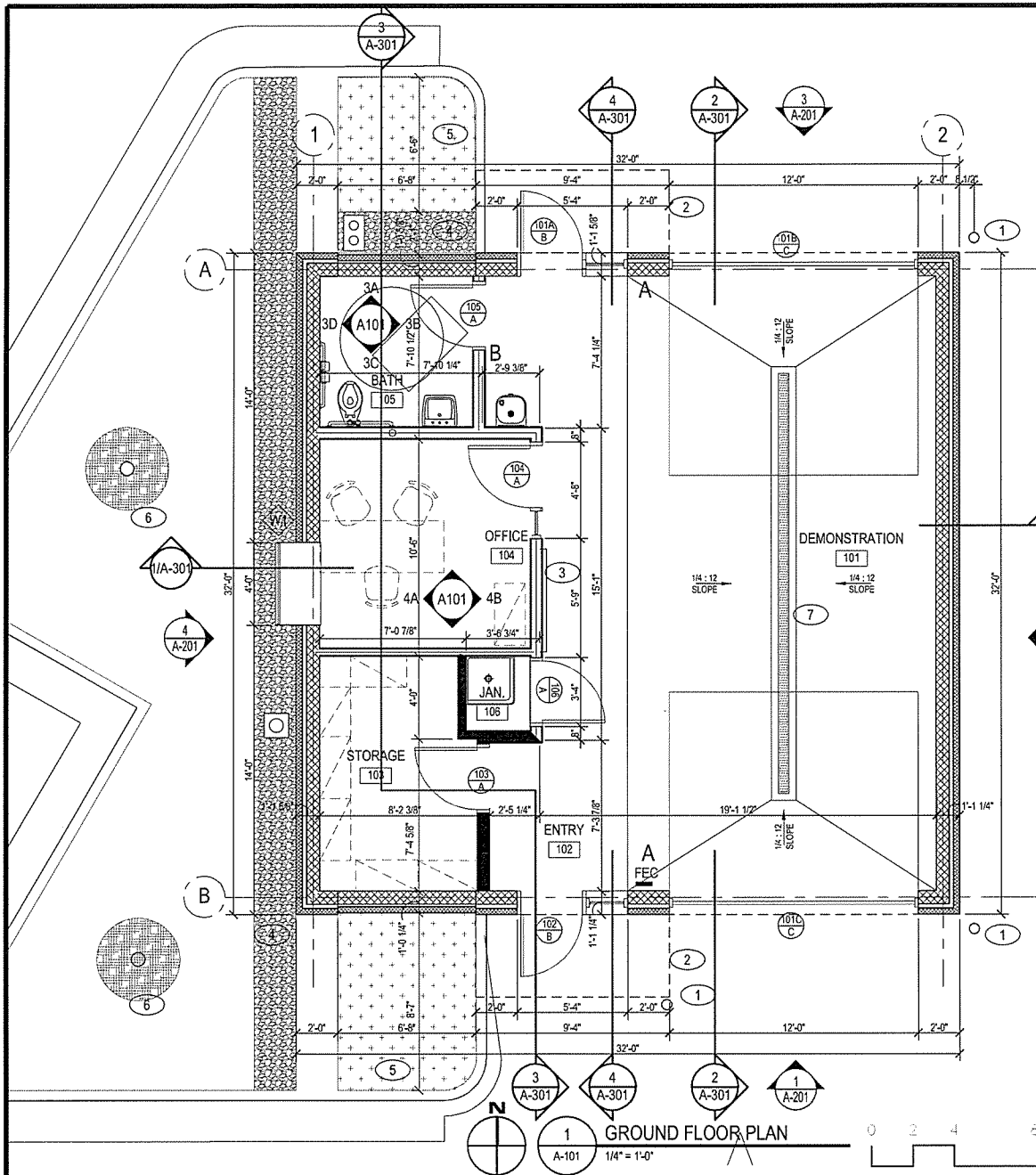
Architectural stamps and registration information for CROMWELL ARCHITECTS, INC. and CHRISTOPHER EAST ARCHITECTS, including registration numbers and dates.

**ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING**

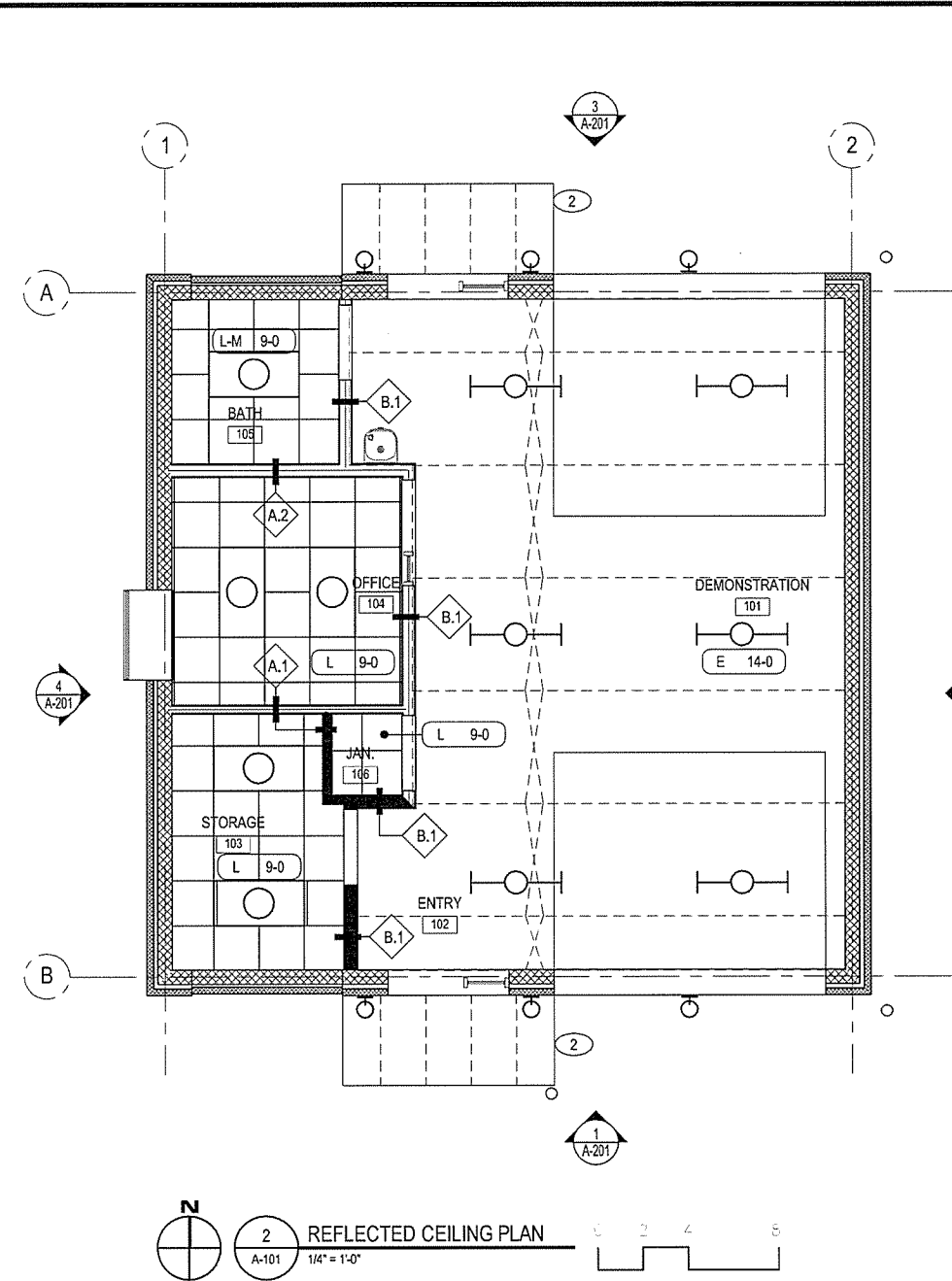


ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014
Project Number: 2012-102-20
Drawing Title: **PARTITION SCHEDULE**
Drawing Number: **A-002**
24 of 46



1 GROUND FLOOR PLAN
1/4" = 1'-0"



2 REFLECTED CEILING PLAN
1/4" = 1'-0"

SYMBOL LEGEND

- WALL SECTION
- EXTERIOR ELEVATION TAG
- INTERIOR ELEVATION TAG
- DETAIL TAG
- DOOR TAG, SEE A-901
- WINDOW TAG, SEE A-901
- BATH SPECIALTIES TAG
- FLR PLAN ROOM TAG
- PARTITION TYPE TAG
- FIRE EXTINGUISHER CABINET SEE DETAIL 5/A002
- ELECTRICAL PANEL BOARD
- REVISION TAG

RCP SYMBOL LEGEND

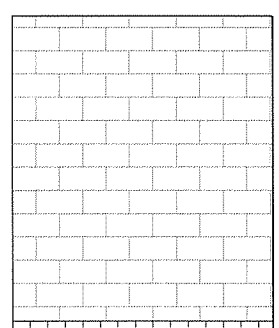
- CEILING TYPE: G = GYPSUM BOARD
- E = OPEN TO STRUCTURE, L = LAY-IN, L-M = LAY-IN MOISTURE RESISTANT
- CEILING HEIGHT

GENERAL NOTES:

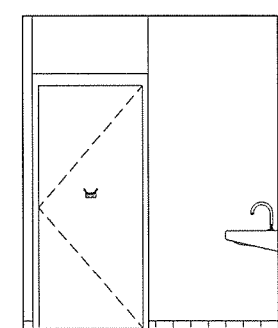
1. REFER TO SHEET A-002 FOR INTERIOR PARTITION TYPES.
2. CONTRACTOR SHALL VERIFY THAT ALL FIELD CONDITIONS AND DIMENSIONS ARE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS.
4. REFER TO M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION & FULL SCOPE OF M.E.P. WORK
5. ALL NEW GWB WALLS TO BE PAINTED (PTD) -ORANGE PEEL.
6. SEE DETAILS 6&7 A002 FOR TOILET ACCESSORY SCHEDULE.

KEYED NOTES:

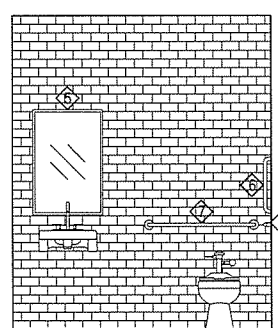
1. STEEL BOLLARD. SEE DETAIL 6/A402
2. TRANSLUCENT AWNING ABOVE
3. 4'-8" x 5'-0" CORK TACKBOARD
4. RIVER ROCK BASE, SEE DETAIL 4/A502
5. HORSE TRAIL REED PLANTING
6. 4" CALIPER GINKGO BILOBA TREE, SEE DETAIL 7/A402
7. TRENCH DRAIN



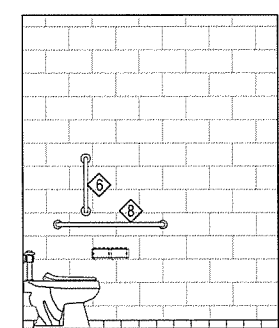
A NORTH WALL



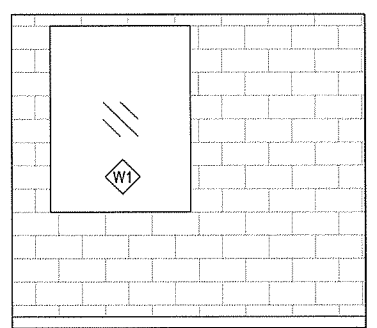
B EAST WALL



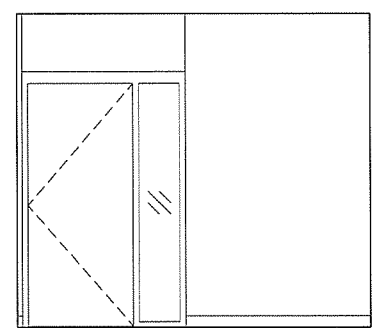
C SOUTH WALL



D WEST WALL



A WEST WALL

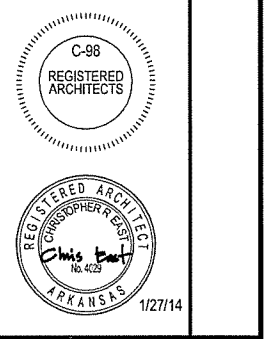


B EAST WALL

3 INTERIOR ELEVATION - BATH
A-101 3/8" = 1'-0"

4 INTERIOR ELEVATION - OFFICE
A-101 3/8" = 1'-0"

| No. | Date | Description |
|-----|------------|----------------|
| 1 | 04-07-2014 | ADDED/DIM. 001 |

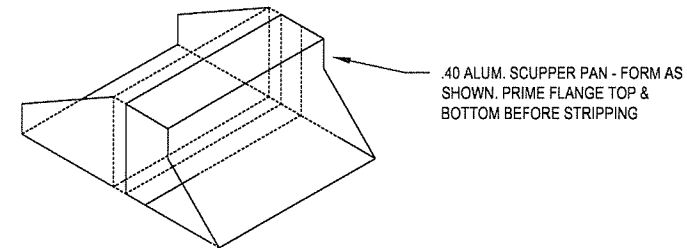


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



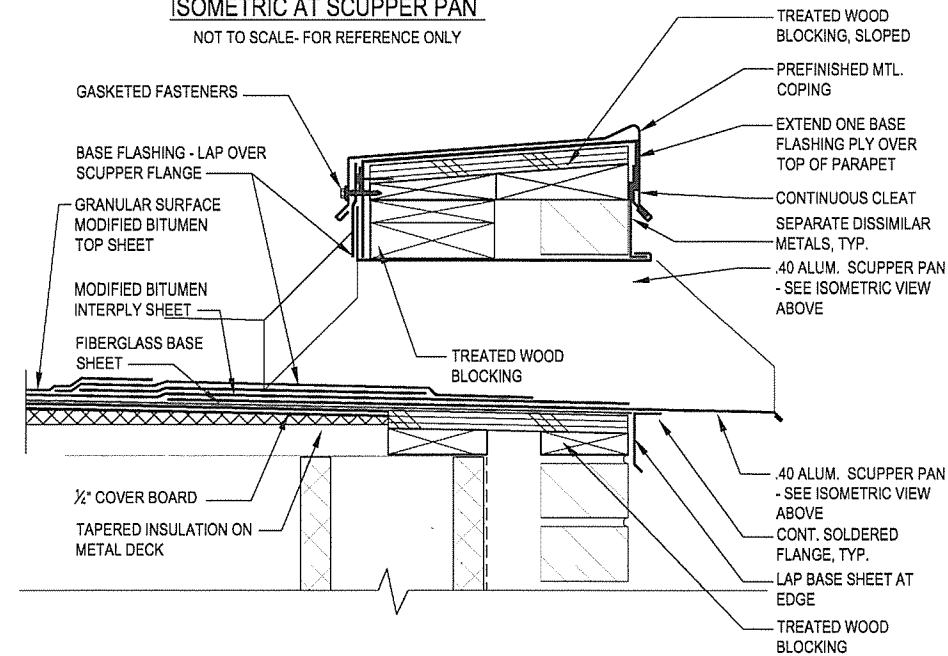
ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | | | |
|----------------|-----------------------------------|----------------|-------------|
| Issue Date | 27-JANUARY-2014 | Project Number | 2012-102_20 |
| Drawing Title | FLOOR PLANS & INTERIOR ELEVATIONS | | |
| Drawing Number | A-101 | | |
| | 25 of 46 | | |

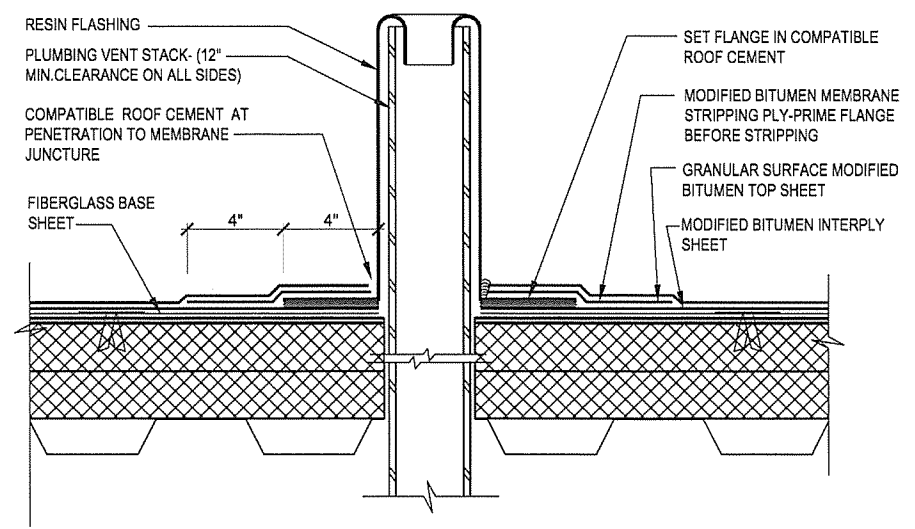


.40 ALUM. SCUPPER PAN - FORM AS SHOWN. PRIME FLANGE TOP & BOTTOM BEFORE STRIPPING

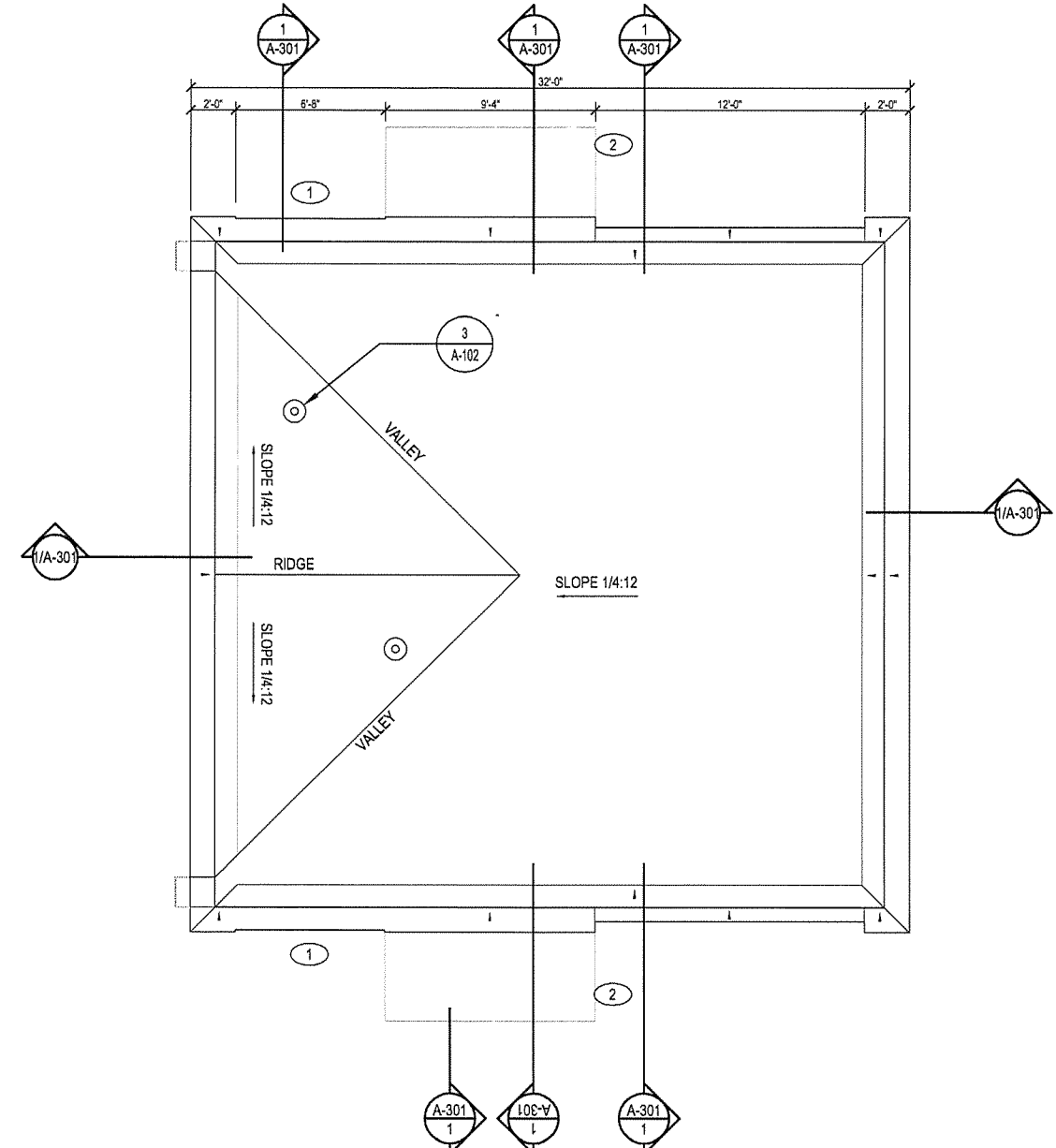
ISOMETRIC AT SCUPPER PAN
NOT TO SCALE - FOR REFERENCE ONLY



2 SCUPPER DETAIL
A-102 3" = 1'-0"



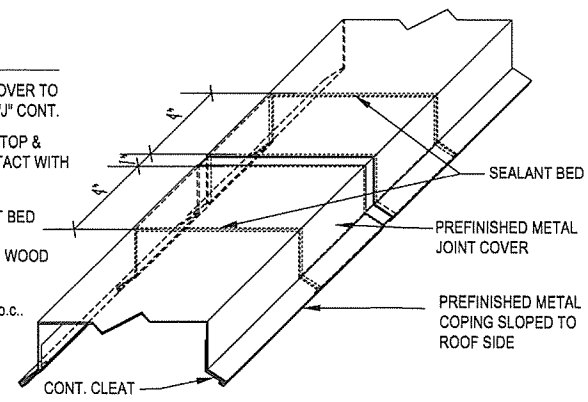
3 TYPICAL PIPE PENETRATION
A-102 3" = 1'-0"



1 ROOF PLAN
A-101 1/4" = 1'-0"

NOTES:

1. PREFINISHED METAL JOINT COVER TO MATCH PARAPET COPING W/ "J" CONT.
2. PROVIDE HEMMED EDGES AT TOP & VERTICAL SURFACES IN CONTACT WITH UNDERSIDE OF COPING
3. SET COPING IN FULL SEALANT BED
4. ANCHOR COVER TO TREATED WOOD BLOCKING.
5. SPACE JOINTS AT MAX. 10'-0" o.c.



4 COPING EXPANSION JOINT
A-102 NOT TO SCALE

GENERAL NOTES:

1. ALL ROOF SLOPE TO BE CREATED WITH SLOPED STRUCTURE, UNLESS OTHERWISE NOTED.
2. ALL DOWNSPOUTS TO BE 6" ROUND PREFINISHED METAL TO MATCH COLOR ACM-2.

KEYED NOTES:

1. SCUPPER 6'-8" WIDE x 6" TALL
2. TRANSLUCENT AWNING BELOW - SEE ELEVATIONS.



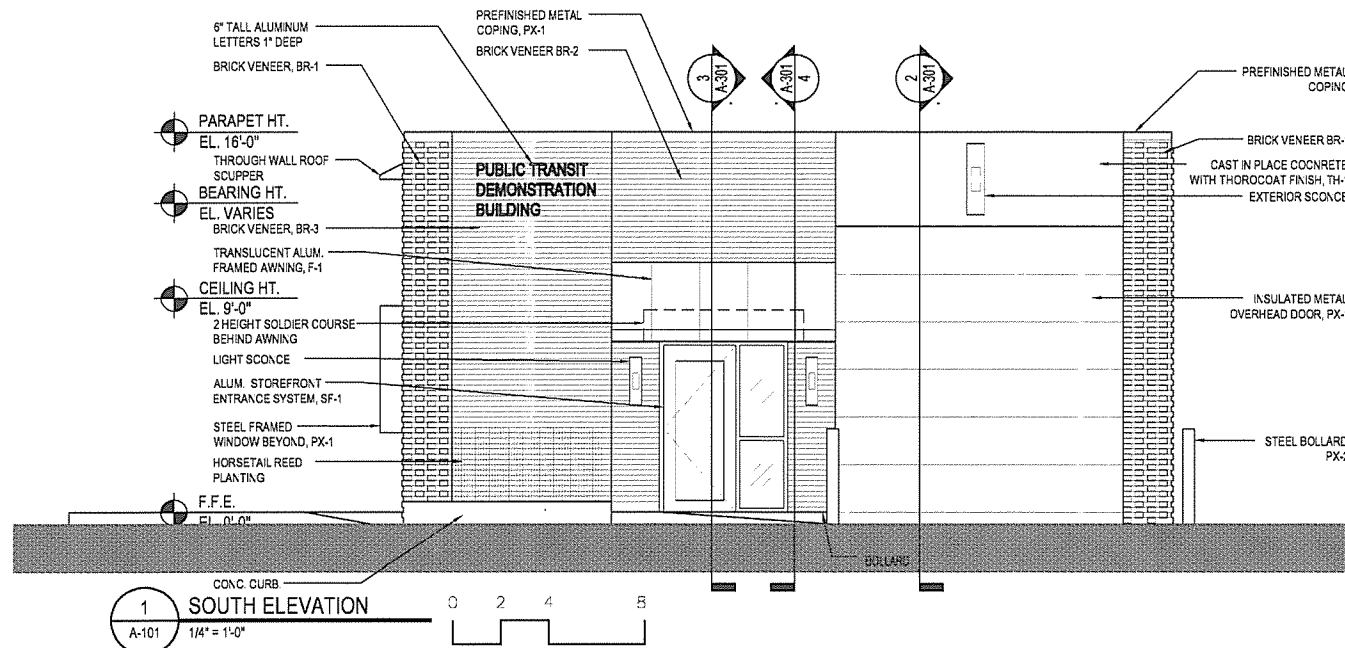
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



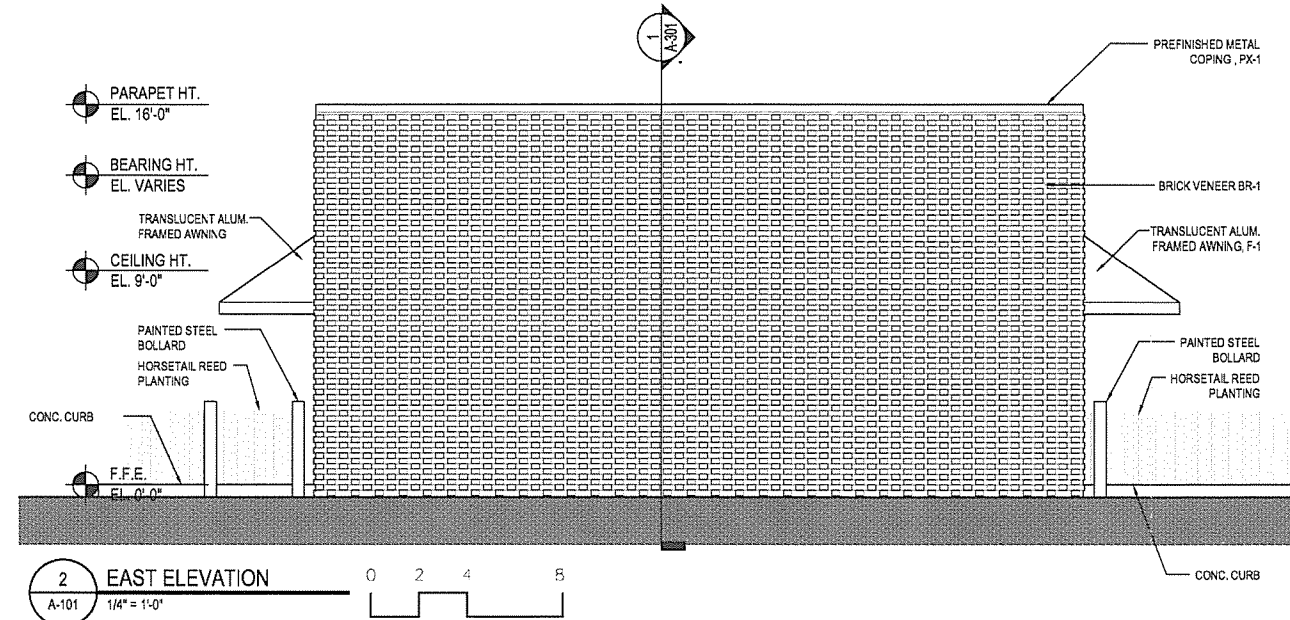
ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20
Drawing Title:
ROOF PLAN AND DETAILS

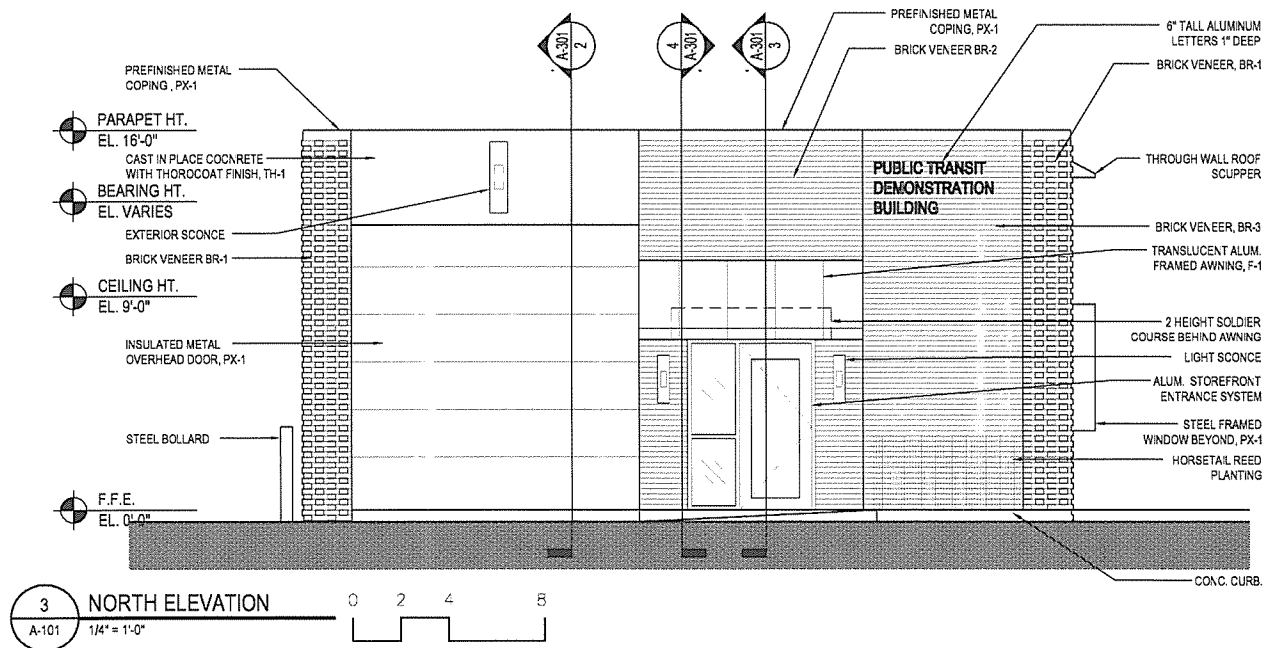
Drawing Number:
A-102
26 of 46



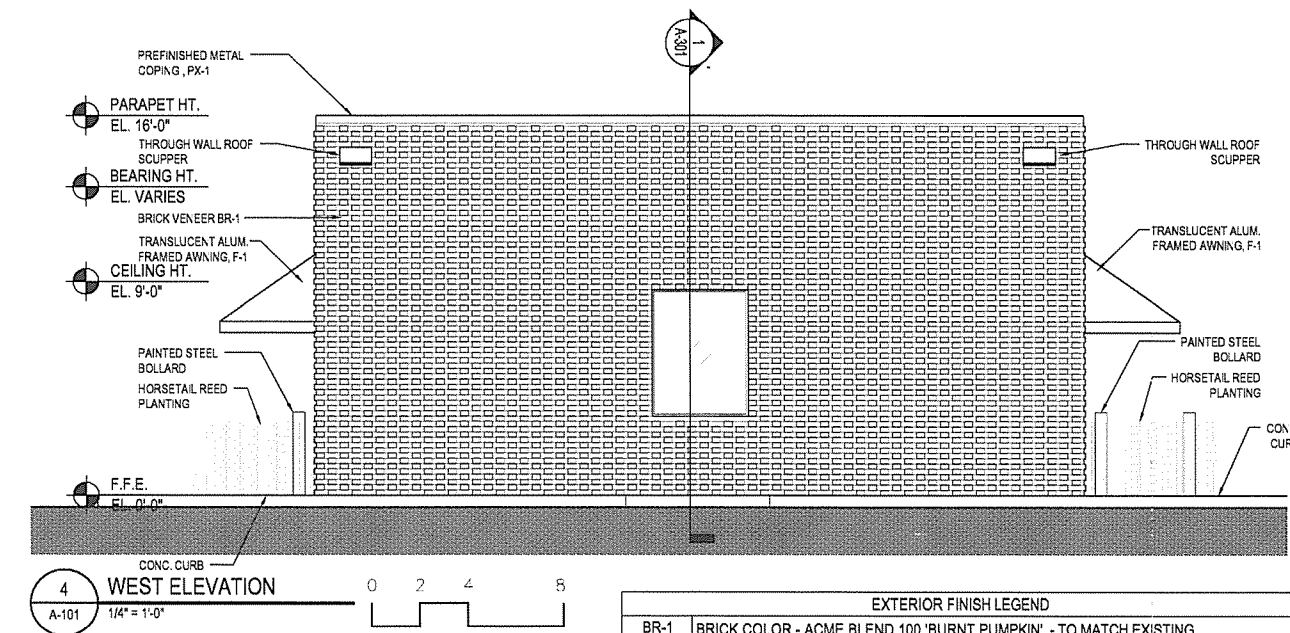
1 SOUTH ELEVATION
A-101 1/4" = 1'-0"



2 EAST ELEVATION
A-101 1/4" = 1'-0"



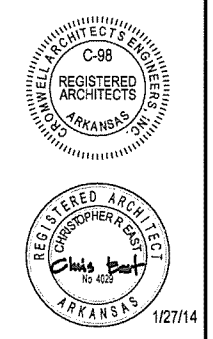
3 NORTH ELEVATION
A-101 1/4" = 1'-0"



4 WEST ELEVATION
A-101 1/4" = 1'-0"

| EXTERIOR FINISH LEGEND | |
|------------------------|---|
| BR-1 | BRICK COLOR - ACME BLEND 100 'BURNT PUMPKIN' - TO MATCH EXISTING CAMPUS STANDARD - STAGGERED FLEMISH BOND |
| BR-2 | BRICK COLOR - ACME BLEND 100 'BURNT PUMPKIN' - TO MATCH EXISTING CAMPUS STANDARD - TYPICAL RUNNING BOND |
| BR-3 | BRICK COLOR - ACME BLEND 100 'BURNT PUMPKIN' - TO MATCH EXISTING CAMPUS STANDARD - STACKED BOND |
| SF-1 | ALUMINUM STOREFRONT GLAZING SYSTEM - WHITE TO MATCH EXISTING CAMPUS STANDARD, VERIFY COLOR WITH ARCHITECT PRIOR TO ORDERING |
| G-1 | GLAZING COLOR - SOLARBAN 70 (2) XL CLEAR + CLEAR 1" INSULATING GLASS OR EQUAL |
| PX-1 | METAL COLOR #1, WHITE TO MATCH EXISTING CAMPUS STANDARD, VERIFY COLOR WITH ARCHITECT PRIOR TO ORDERING |
| TH-1 | THOROCOAT FINISH OVER EXPOSED CAST IN PLACE CONCRETE, COLOR TO BE CUSTOM MATCHED TO ARCHITECT'S SAMPLE |
| F-1 | FABRIC AWNING MATERIAL - WHITE TRANSLUSCENT COMMERCIAL AWNING FABRIC, VERIFY COLOR, PATTERN AND TEXTURE WITH ARCHITECT PRIOR TO ORDERING. FABRIC TO BE SOLID ON SIDES AND TOP, OPEN AT BUILDING AND BOTTOM. |

| Description | Date | No. |
|-------------|------|-----|
| | | |
| | | |
| | | |



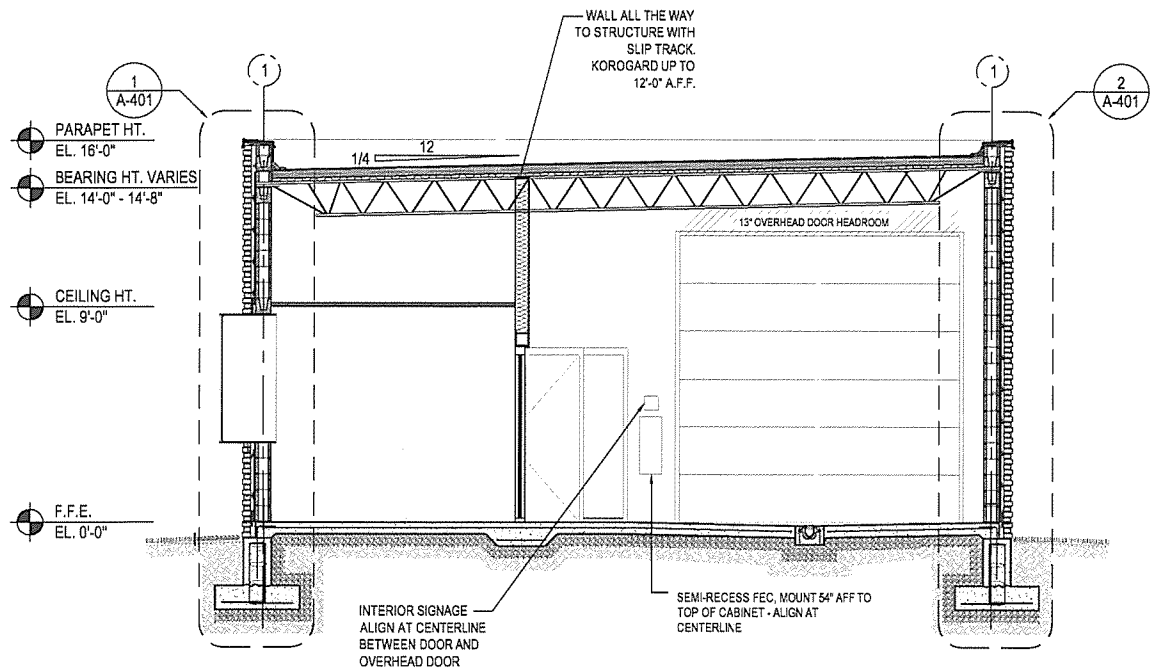
**ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT**
**PARKING LOT &
DEMONSTRATION BUILDING**

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

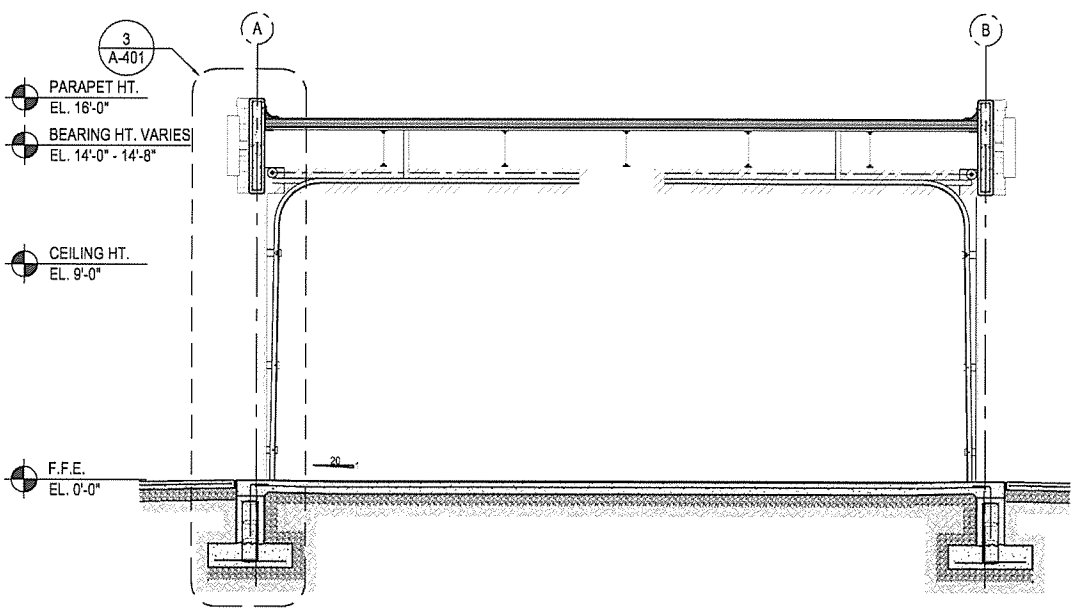
| | |
|-------------------------------|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102-20 |
|-------------------------------|-------------------------------|

**EXTERIOR
ELEVATIONS**

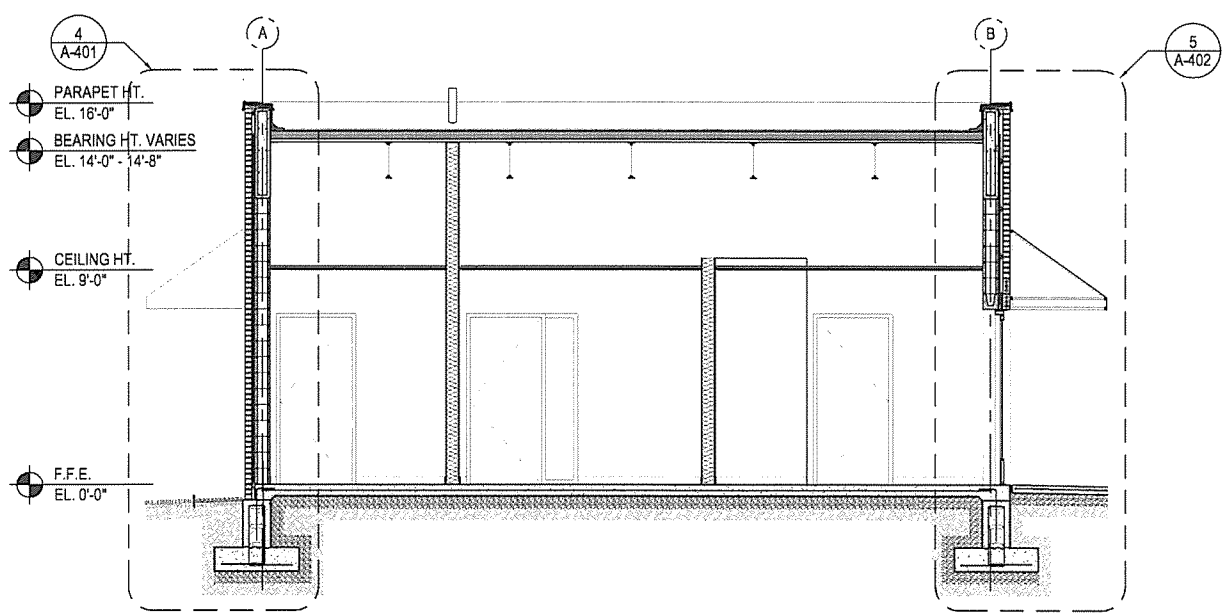
Drawing Number
A-201
 27 of 46



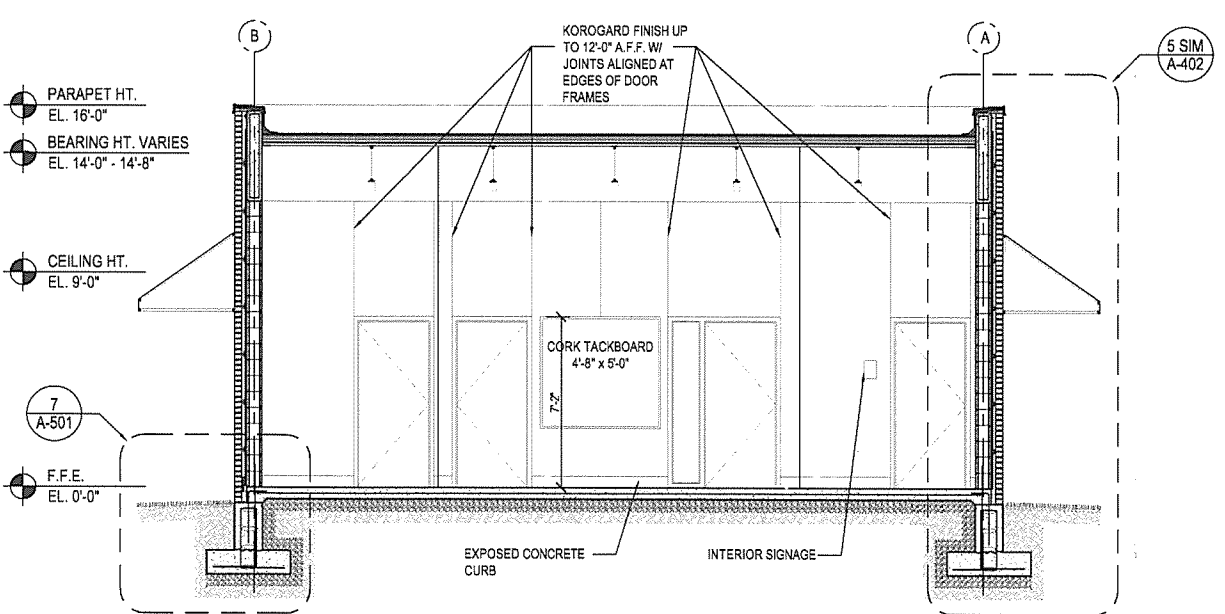
1 BUILDING SECTION
A-301 1/4" = 1'-0"



2 BUILDING SECTION
A-301 1/4" = 1'-0"



3 BUILDING SECTION
A-301 1/4" = 1'-0"



4 BUILDING SECTION / INTERIOR ELEVATION
A-301 1/4" = 1'-0"

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |



1/27/14

ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING



ARCHITECT OF RECORD

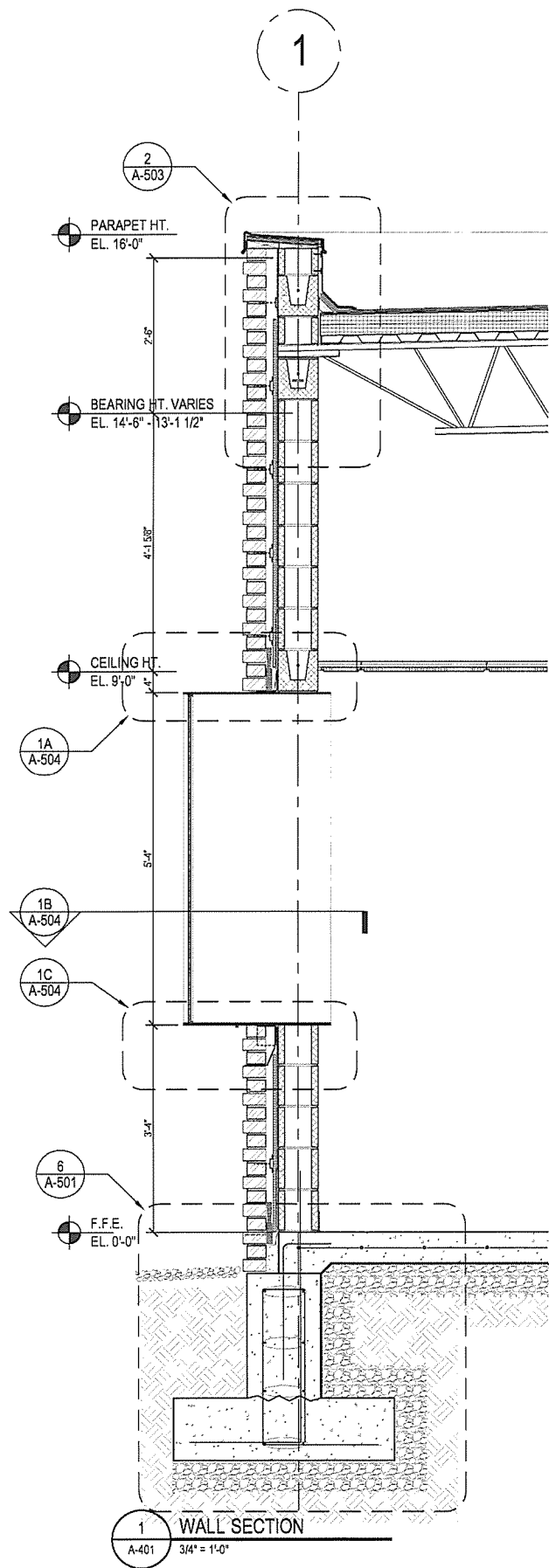


101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

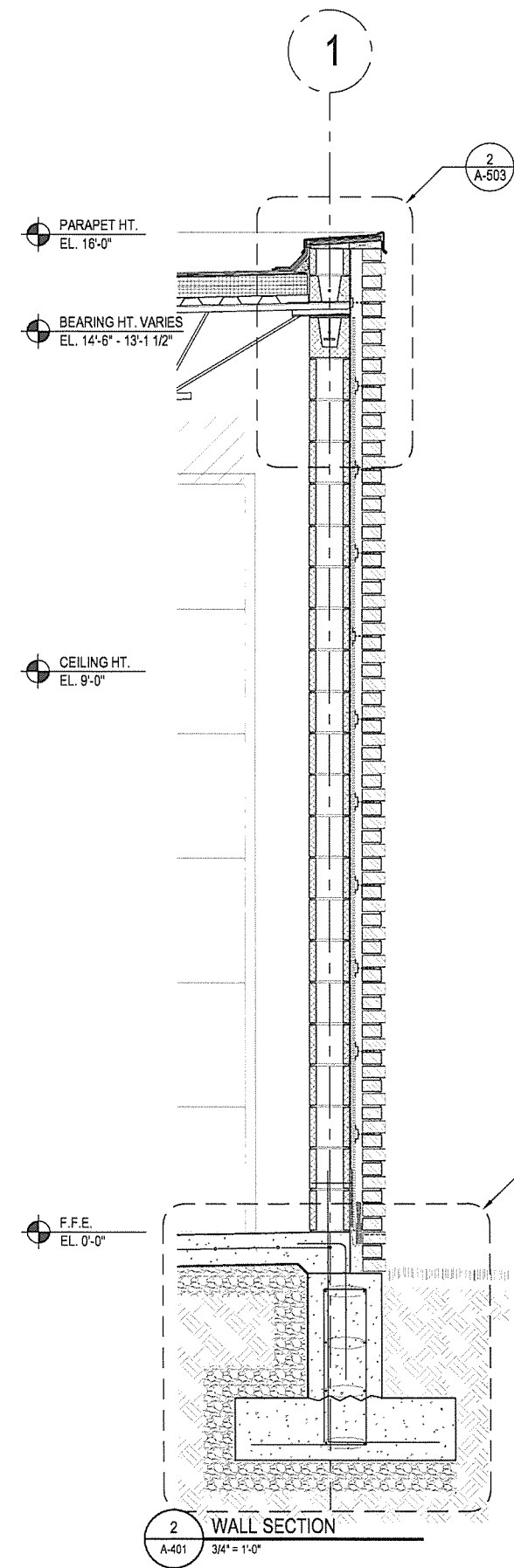
Issue Date 27-JANUARY-2014 Project Number 2012-102_20

Drawing Title
**BUILDING SECTIONS
/ INTERIOR
ELEVATIONS**

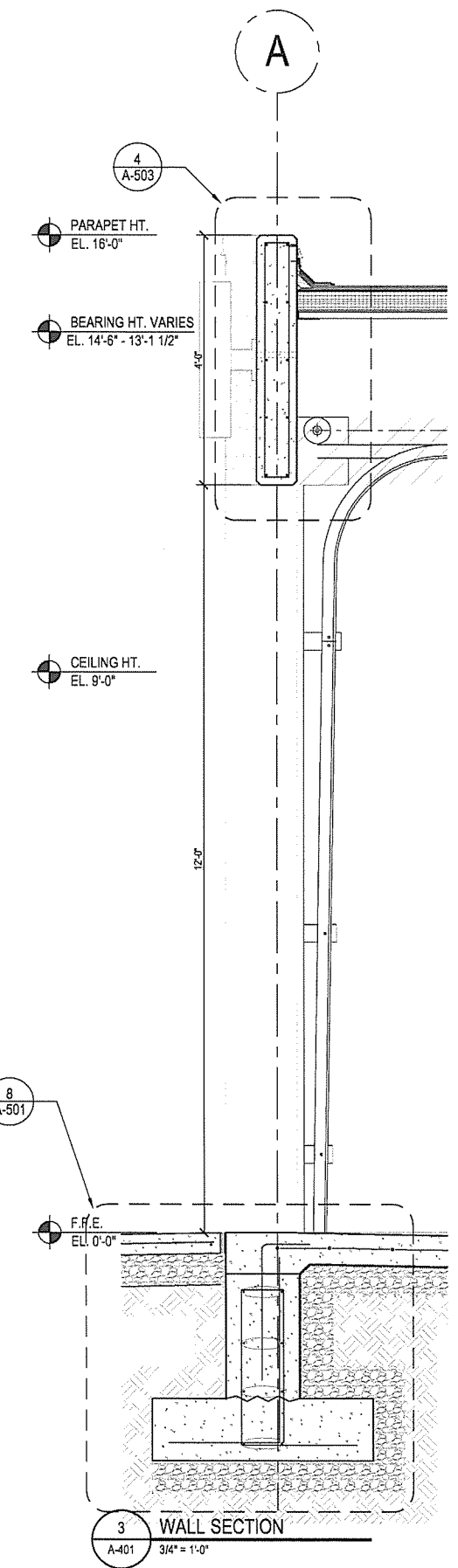
Drawing Number
A-301
28 of 46



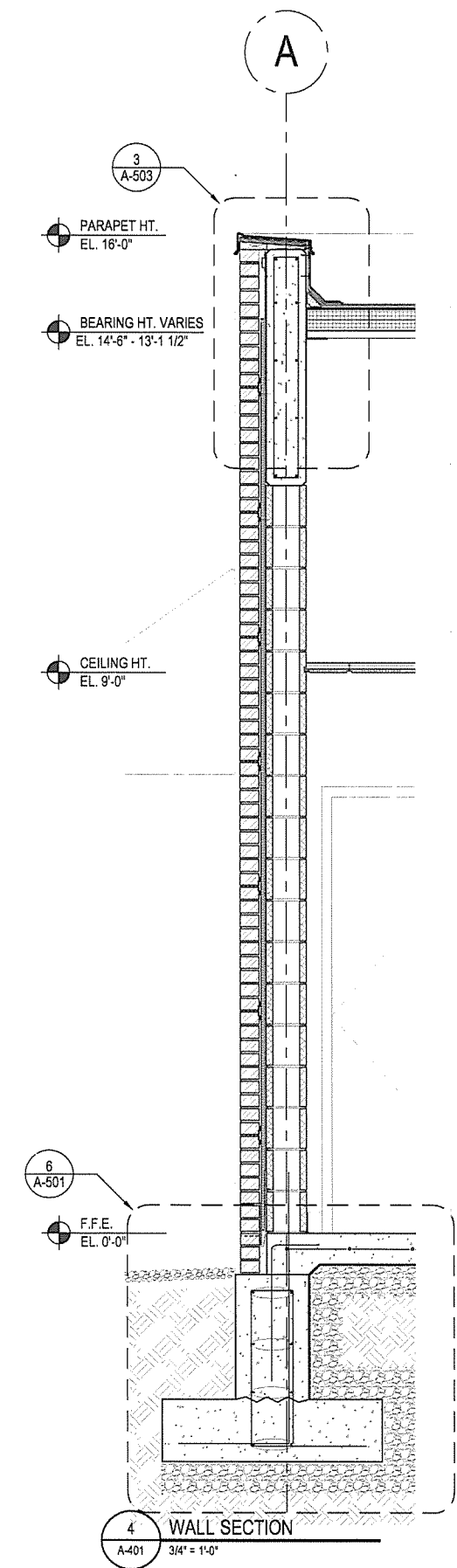
1 WALL SECTION
A-401 3/4" = 1'-0"



2 WALL SECTION
A-401 3/4" = 1'-0"



3 WALL SECTION
A-401 3/4" = 1'-0"



4 WALL SECTION
A-401 3/4" = 1'-0"

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |



ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING

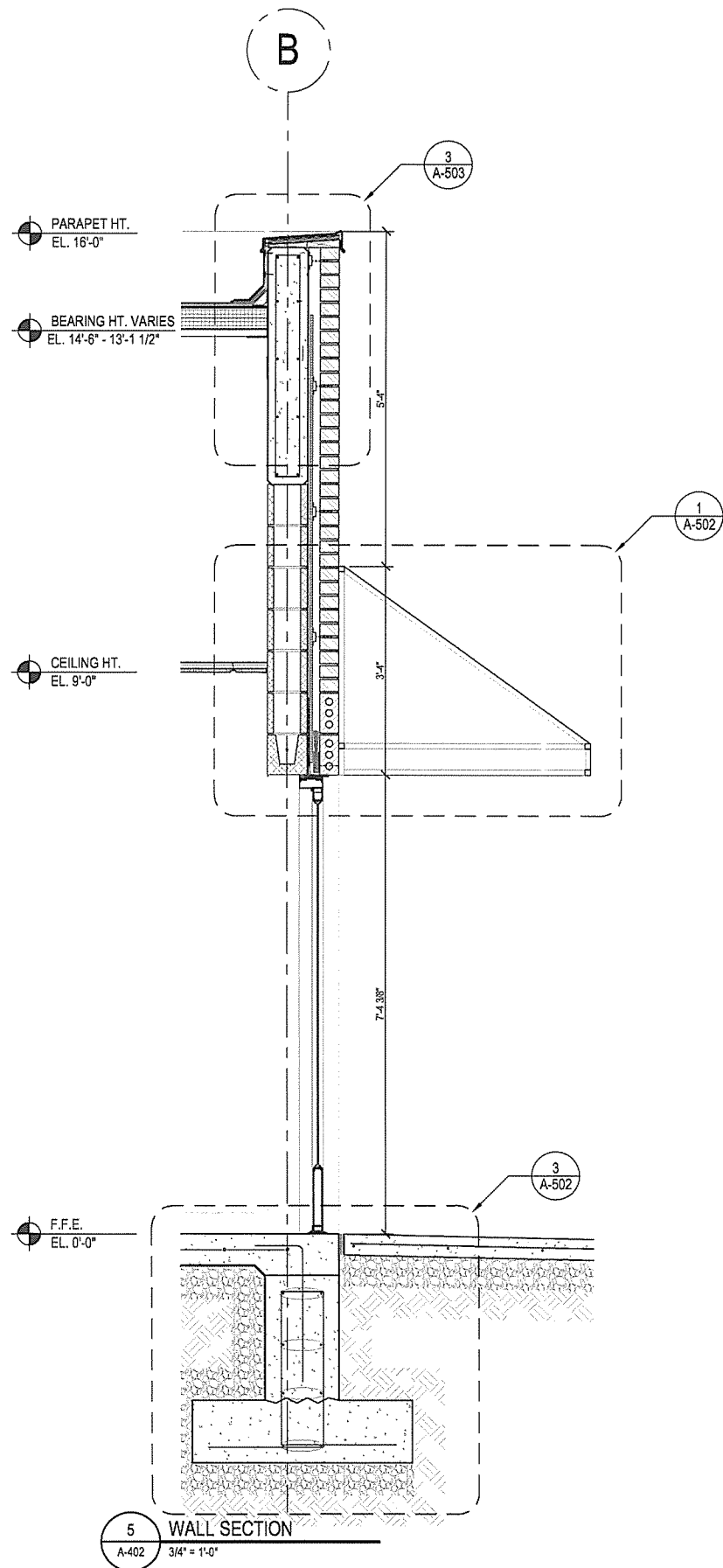


ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

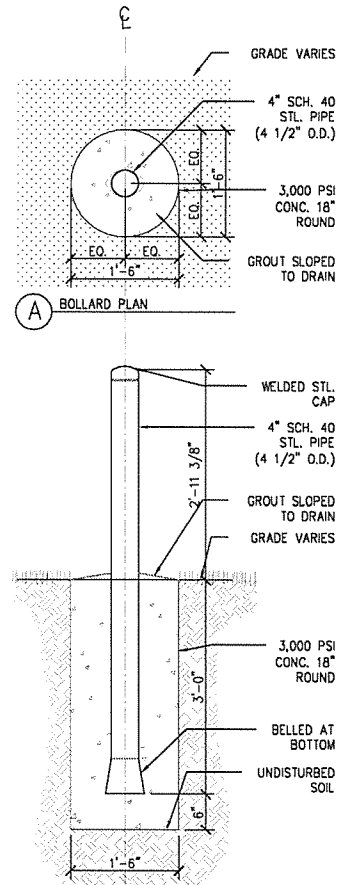
| | |
|-------------------------------|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102_20 |
|-------------------------------|-------------------------------|

Drawing Title
WALL SECTIONS

Drawing Number
A-401
29 of 46



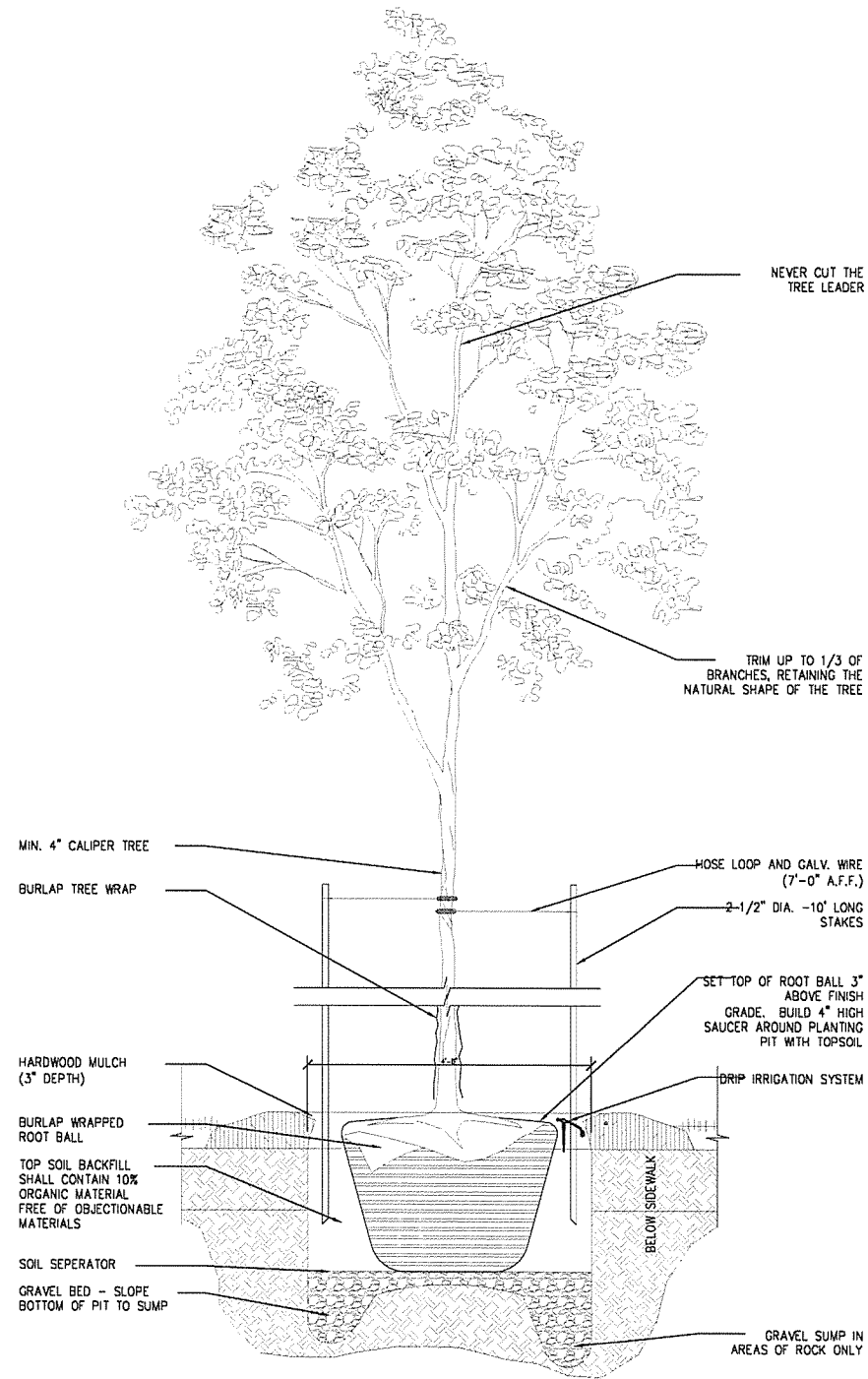
5 WALL SECTION
A-402 3/4" = 1'-0"



B BOLLARD SECTION

NOTE:
1. STL BOLLARD TO BE COATED WITH ZINC RICH EPOXY,
THEN FINISHED W/ POWDER COAT.

6 WALL SECTION
A-402 3/4" = 1'-0"



7 WALL SECTION
A-402 3/4" = 1'-0"

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |



ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING

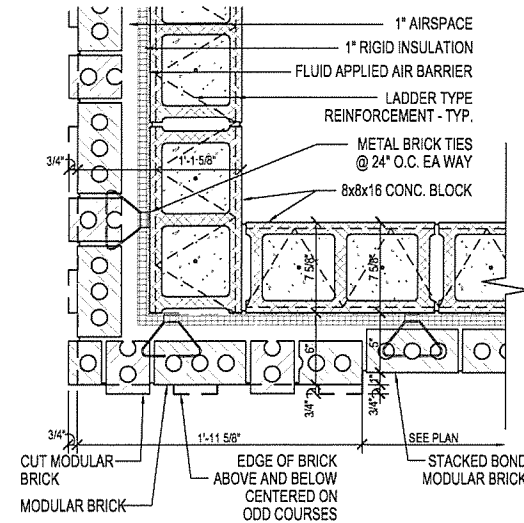


ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

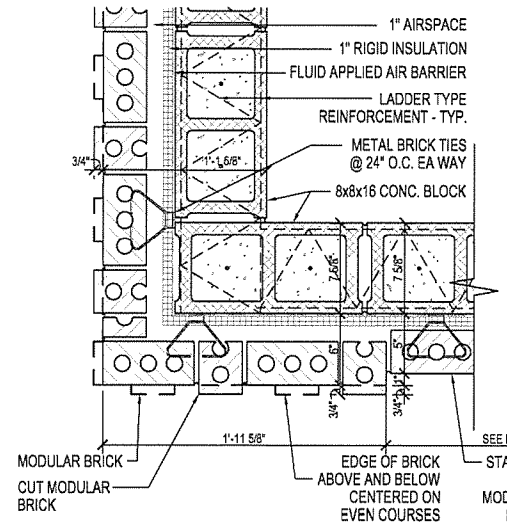
Issue Date 27-JANUARY-2014 Project Number 2012-102_20

Drawing Title
WALL SECTIONS

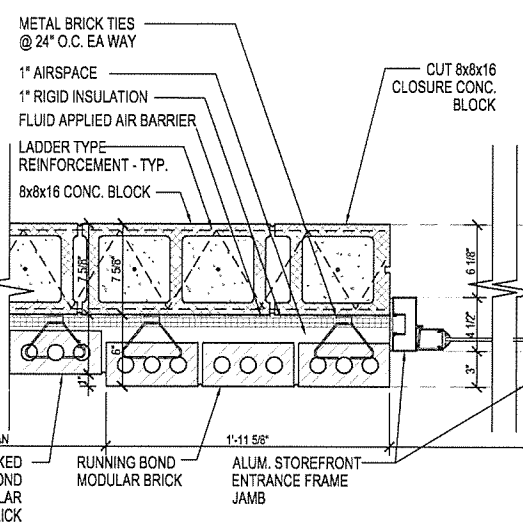
Drawing Number
A-402
30 of 46



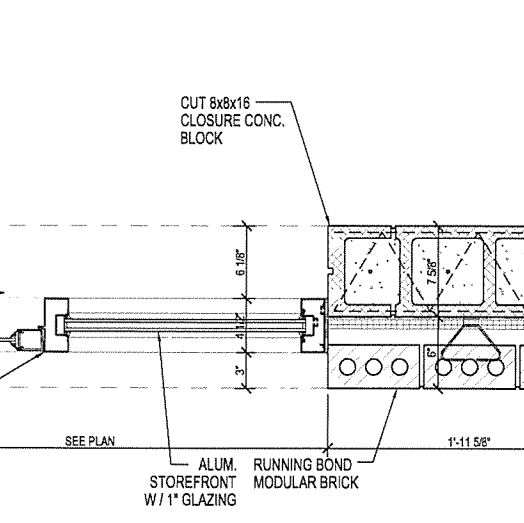
1 STAGGARED FLEMISH BOND BRICK DETAIL - EVEN COURSES
A-501 1 1/2" = 1'-0"



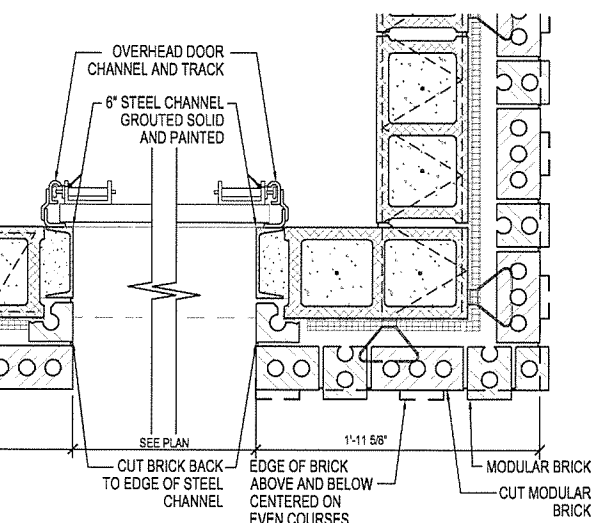
2 STAGGARED FLEMISH BOND BRICK DETAIL - ODD COURSES
A-501 1 1/2" = 1'-0"



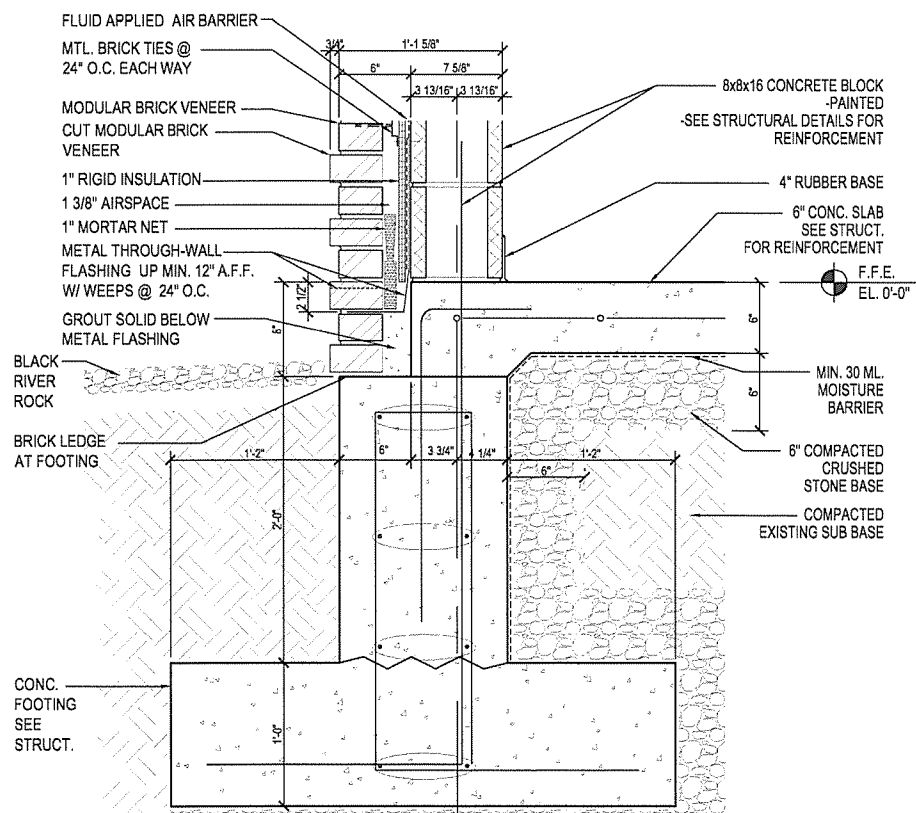
3 EXTERIOR PLAN DETAIL
A-501 1 1/2" = 1'-0"



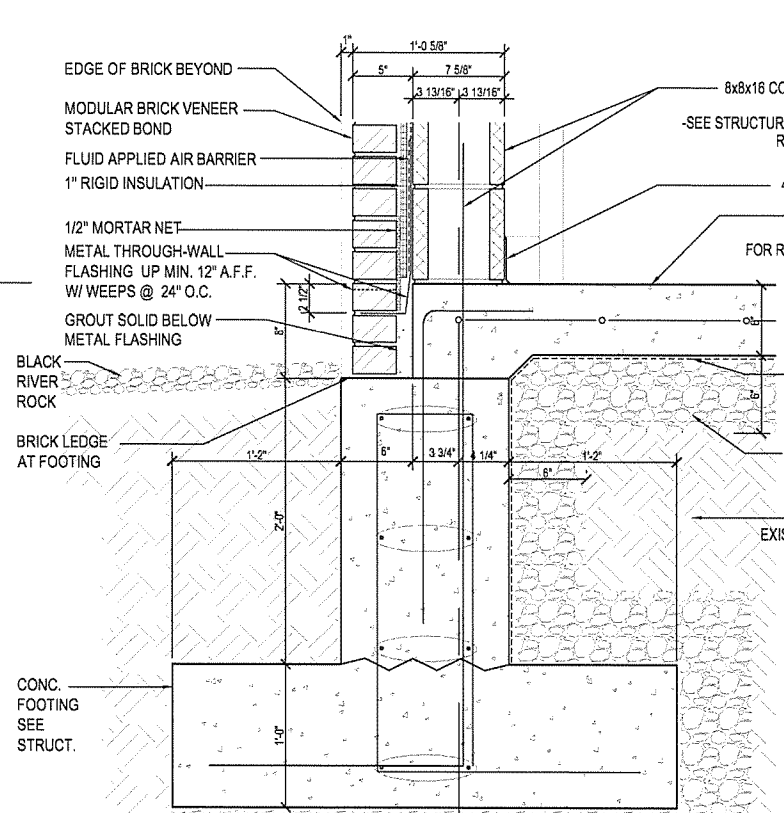
4 EXTERIOR PLAN DETAIL
A-501 1 1/2" = 1'-0"



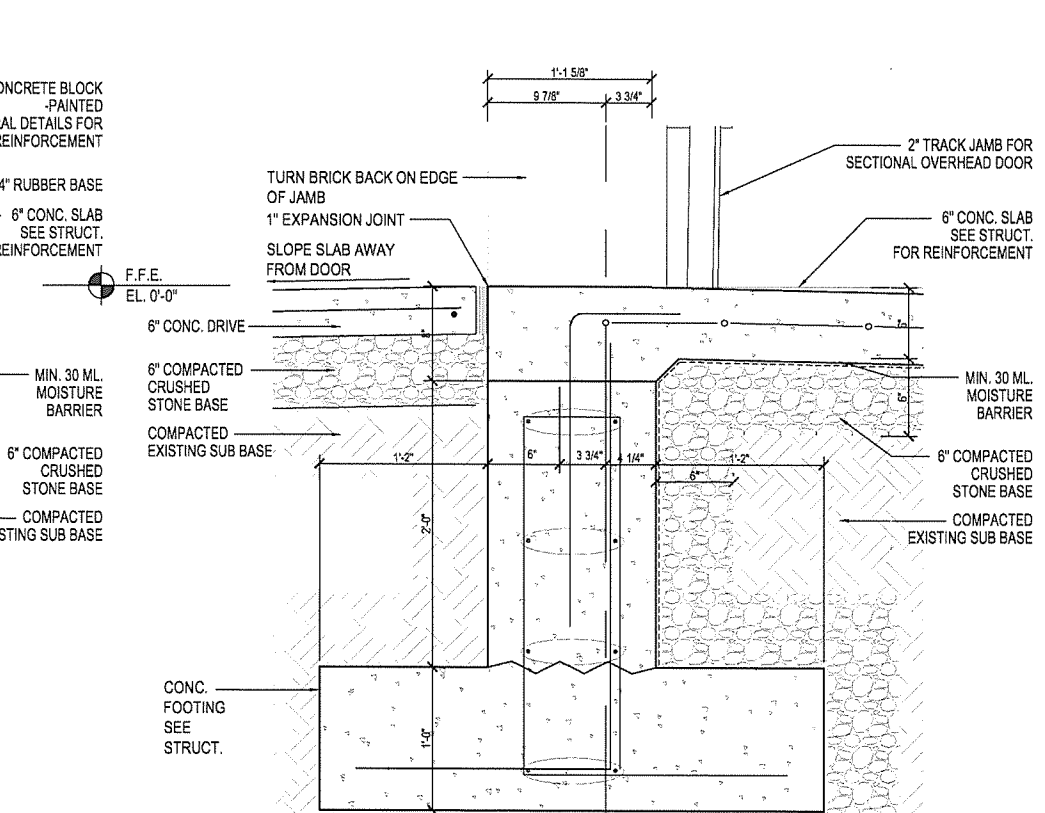
5 STAGGARED FLEMISH BOND BRICK DETAIL - ODD COURSES
A-501 1 1/2" = 1'-0"



6 STAGGARED FLEMISH BOND EXTERIOR DETAIL
A-501 1 1/2" = 1'-0"



7 STACKED BOND EXTERIOR DETAIL
A-501 1 1/2" = 1'-0"



8 EXTERIOR DETAIL
A-501 1 1/2" = 1'-0"

| No. | Description |
|-----|-------------|
| | |
| | |
| | |
| | |
| | |

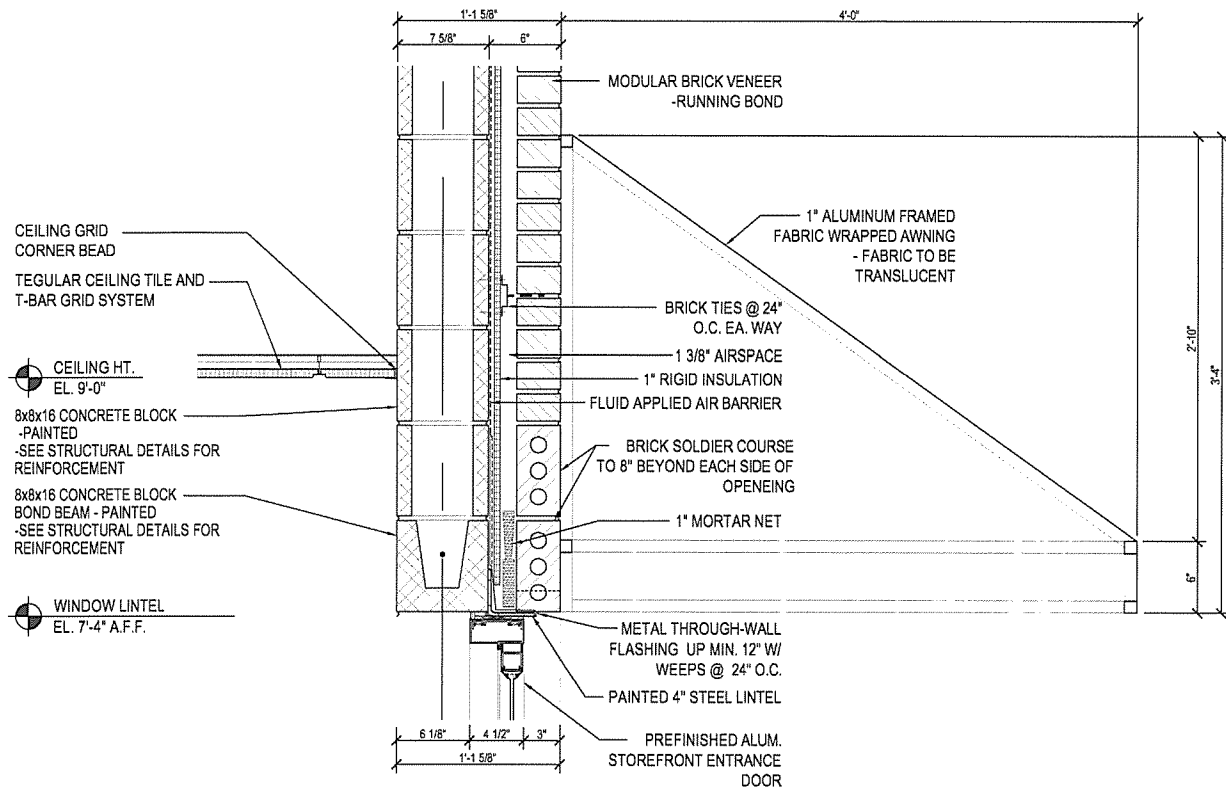
REGISTERED ARCHITECTS
C-98
CROMWELL ARCHITECTS
ARKANSAS

REGISTERED ARCHITECT
CHRISTOPHER R. EAST
No. 4025
ARKANSAS
1/27/14

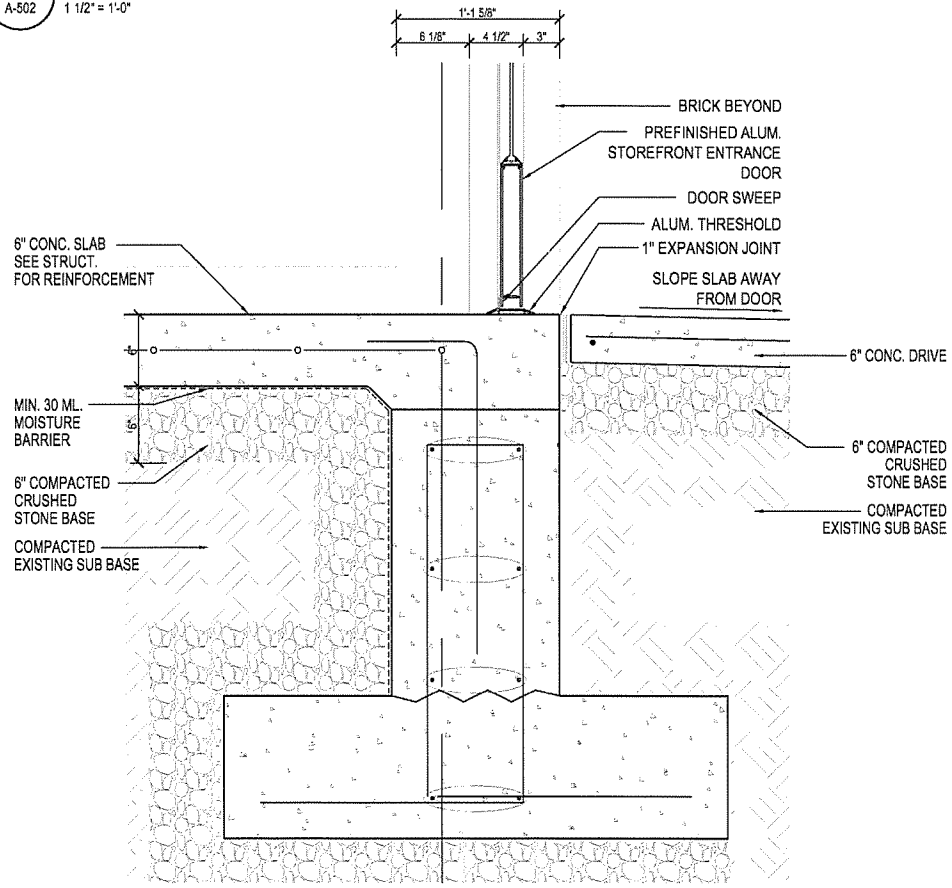
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

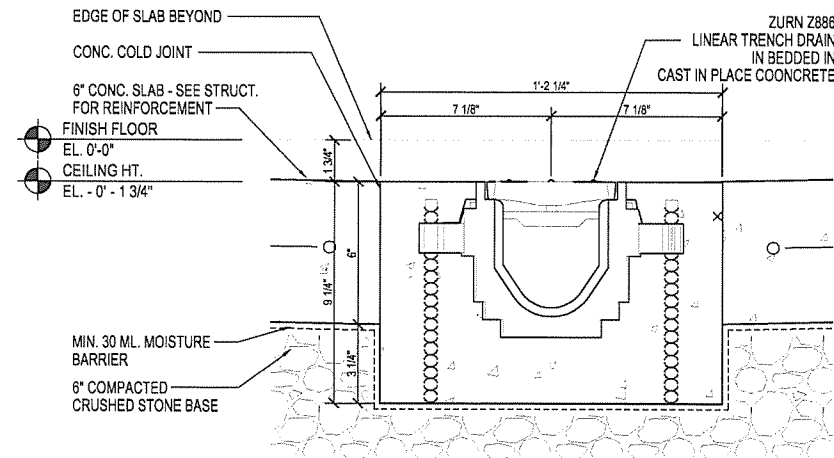
Issue Date 27-JANUARY-2014 Project Number 2012-102_20
Drawing Title EXTERIOR DETAILS
Drawing Number **A-501**
31 of 46



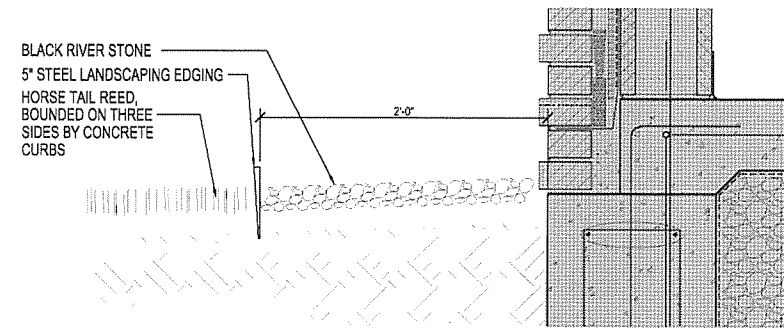
1 EXTERIOR DETAIL
A-502 1 1/2" = 1'-0"



3 EXTERIOR DETAIL
A-502 1 1/2" = 1'-0"



2 TRENCH DRAIN DETAIL
A-502 3" = 1'-0"



4 TRENCH DRAIN DETAIL
A-502 3" = 1'-0"

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |



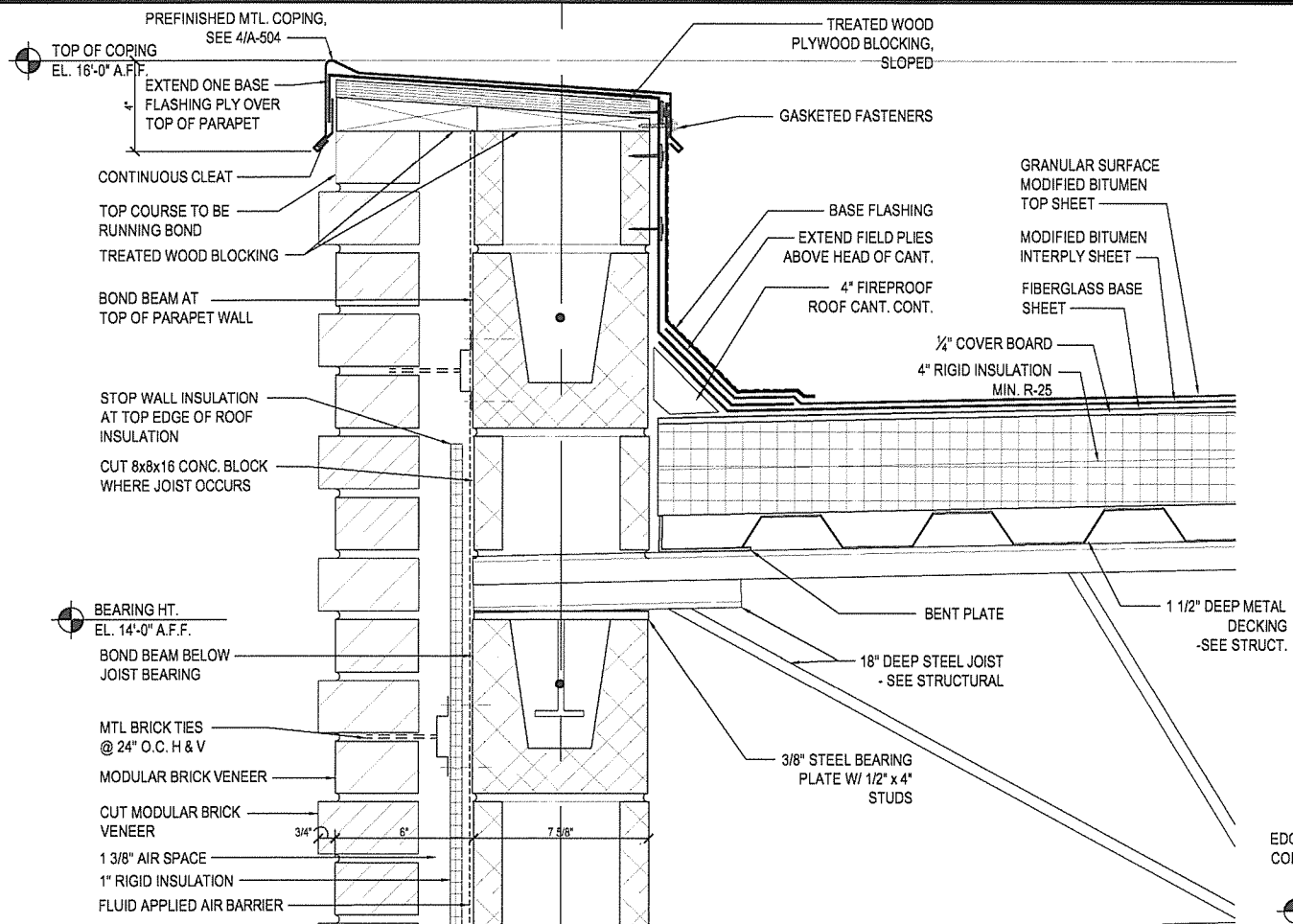
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



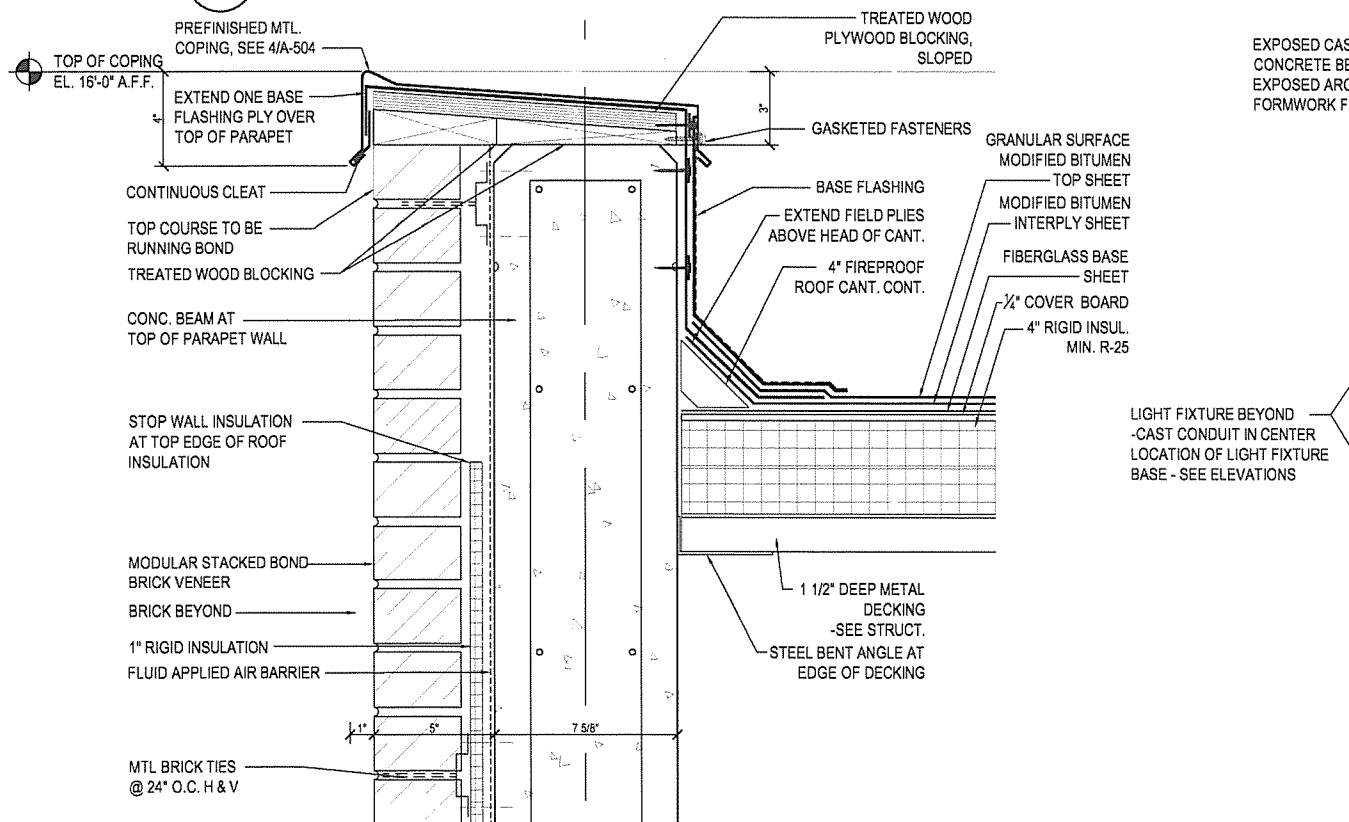
ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | |
|-----------------------------------|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102_20 |
| Drawing Title EXTERIOR DETAILS | |

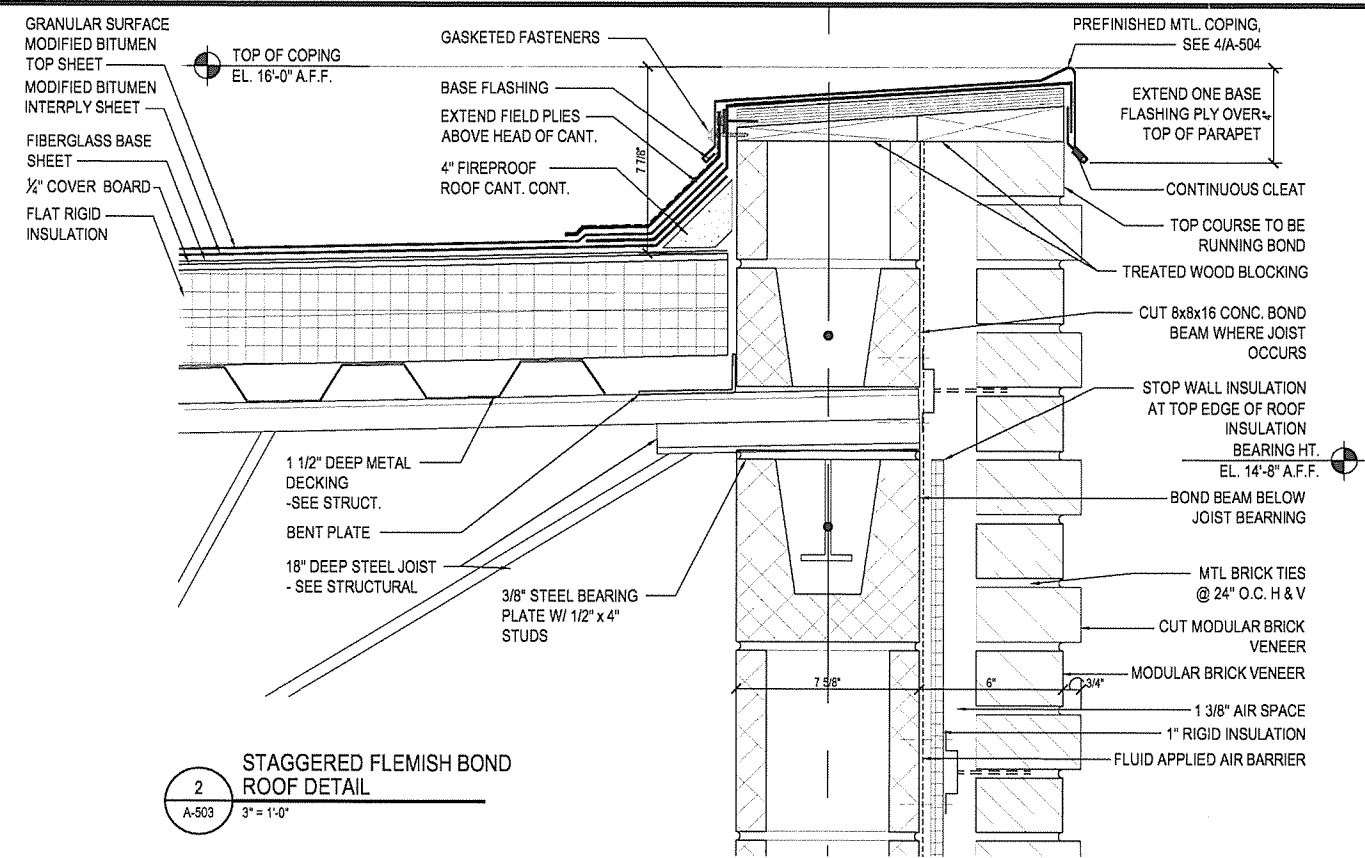
Drawing Number
A-502
32 of 46



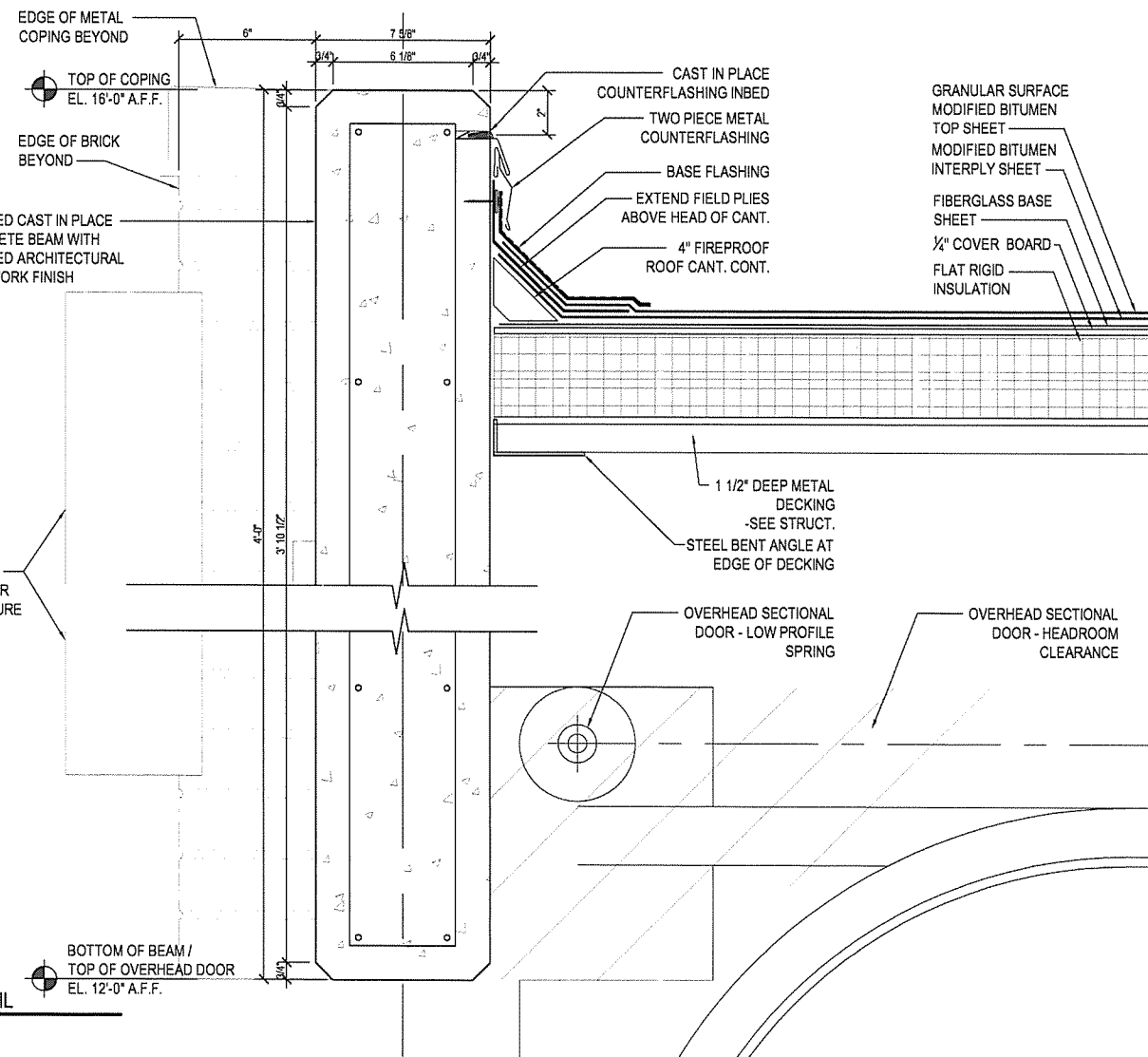
1 STAGGERED FLEMISH BOND ROOF DETAIL
A-503 3" = 1'-0"



3 STACKED BOND ROOF DETAIL
A-503 3" = 1'-0"

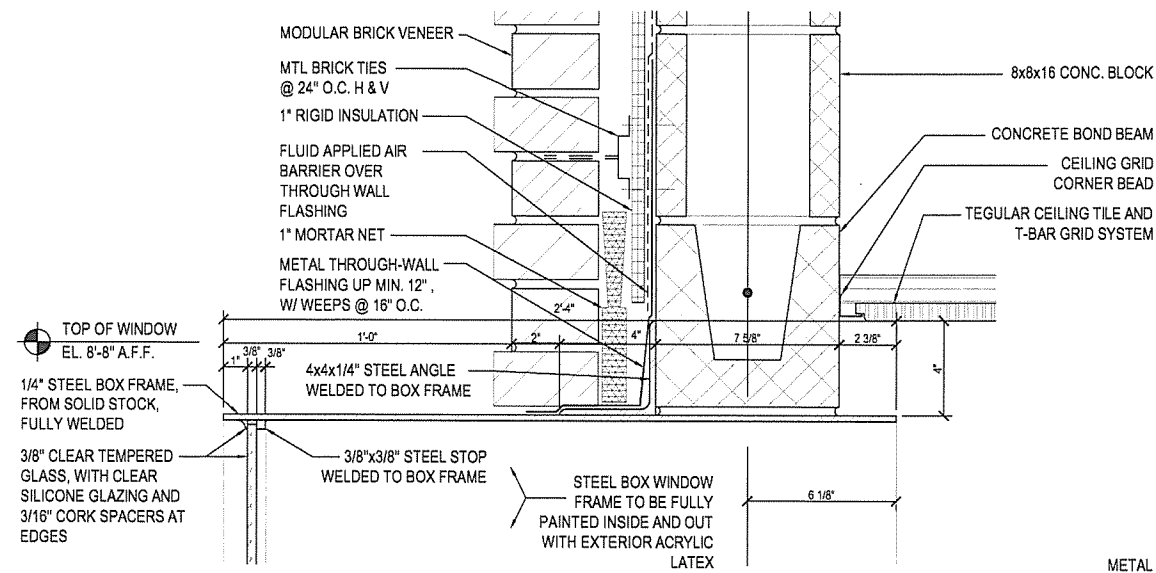


2 STAGGERED FLEMISH BOND ROOF DETAIL
A-503 3" = 1'-0"

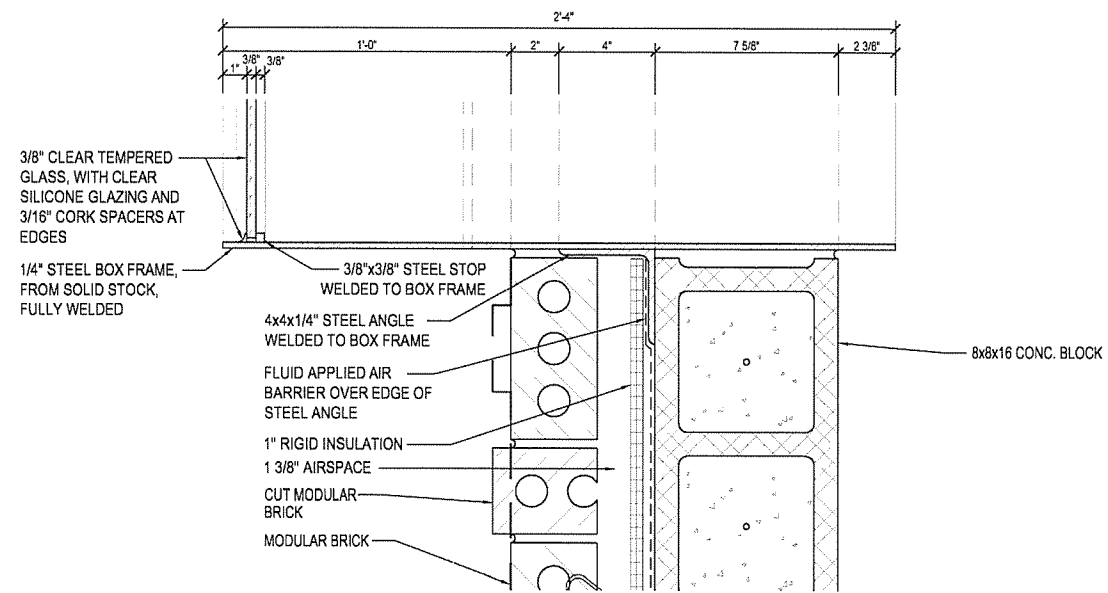


4 ROOF DETAIL
A-503 3" = 1'-0"

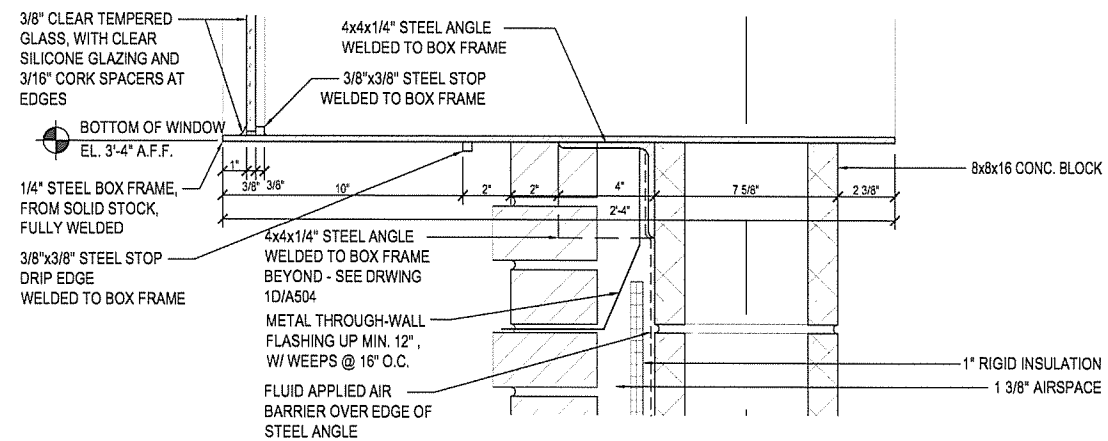
| | | |
|--|----------------|-----|
| Description | Date | No. |
| | | |
| | | |
| | | |
| <p>ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING</p> | | |
| | | |
| <p>ARCHITECT OF RECORD</p> <p>CROMWELL</p> <p>101 south spring street little rock, ar 72201 501.372.2900 cromwell.com</p> | | |
| Issue Date | Project Number | |
| 27-JANUARY-2014 | 2012-102-20 | |
| Drawing Title | | |
| ROOF DETAILS | | |
| Drawing Number | | |
| A-503 | | |
| 33 of 46 | | |



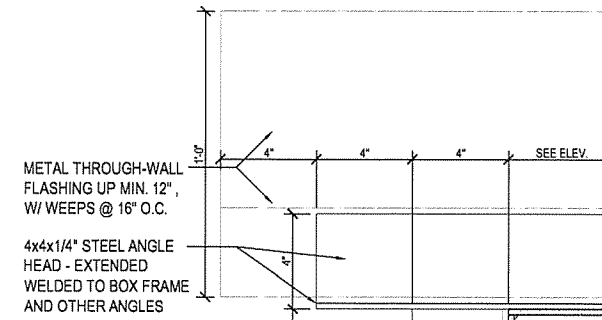
A STEEL FRAMED BOX WINDOW HEAD



B STEEL FRAMED BOX WINDOW JAMB



C STEEL FRAMED BOX WINDOW SILL



D STEEL FRAMED BOX WINDOW DIAGRAMMATIC ELEVATION OF BOX WITHOUT BRICK

1 STEEL BOX WINDOW DETAILS

A-504 3\"/>



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD



101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date 27-JANUARY-2014 Project Number 2012-102_20

Drawing Title

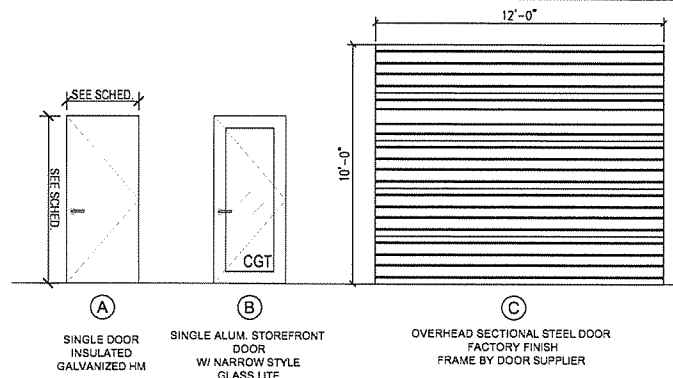
EXTERIOR DETAILS

Drawing Number

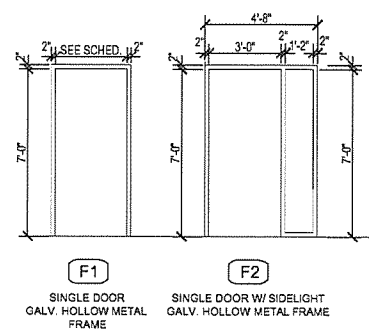
A-504

34 of 46

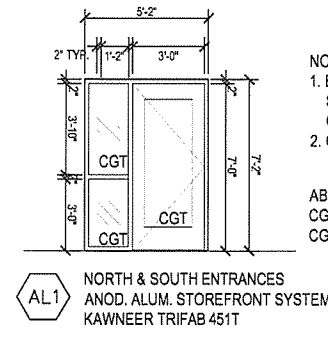
| ABBREVIATIONS | |
|---------------|-------------------------|
| ACT | ACOUSTICAL CEILING TILE |
| AL | ALUMINUM |
| ANOD | ANODIZED |
| CGT | CLEAR GLASS TEMPERED |
| FF | FACTORY FINISH |
| GHM | GALVANIZED HOLLOW METAL |
| GL | GLASS |
| GWB | GYPHUM WALL BOARD |
| HM | HOLLOW METAL |
| OTS | OPEN TO STRUCTURE |
| P | PAINT |
| PT | PORCELAIN TILE |
| PTB | PORCELAIN TILE BASE |
| RB | RESILIENT BASE |
| SF | STORE FRONT |



2 DOOR ELEVATIONS
A-401 1/4" = 1'-0"

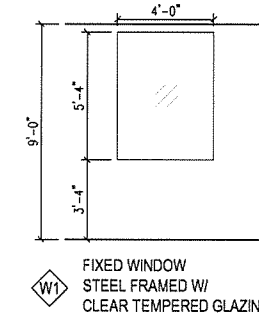


3 FRAME ELEVATIONS
A-401 1/4" = 1'-0"



4 STOREFRONT ENTRANCES
A-401 1/4" = 1'-0"

- NOTES:
1. EXTERIOR GLAZING - PPG SOLARBAN 70 (2) CLEAR & CLEAR
2. GLASS TEMPERED WHEREVER REQUIRED BY CODE
- ABBREVIATIONS:
CG - CLEAR GLASS
CGT - CLEAR GLASS TEMPERED

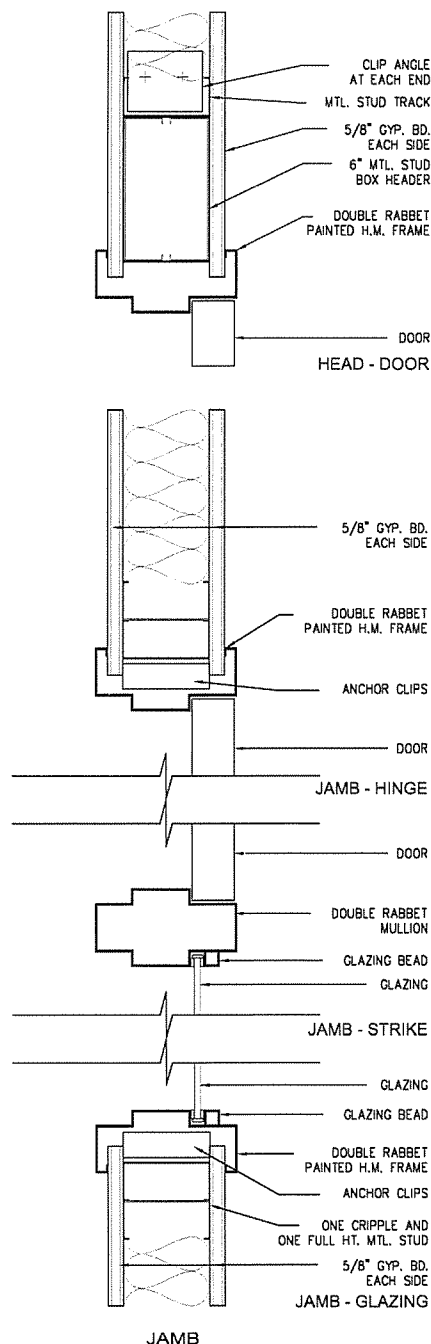


5 STEEL BOX WINDOW
A-401 1/4" = 1'-0"

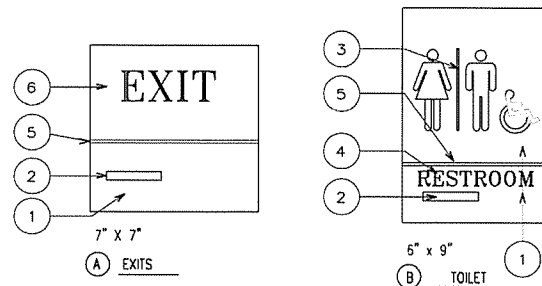
DOOR AND FRAME SCHEDULE

| MARK | TYPE | DOOR | | | FRAME | | FIRE RATING | SET NO. | NOTES | | | |
|------|------|--------|--------|--------|-------|-------|-------------|---------|---------------|----|----|--------------------------------|
| | | WD | HT | THK | TYPE | MAT'L | | | | | | |
| | | HD | JMB | | | | | | | | | |
| 101A | B | 3'-0" | 7'-0" | 1 3/4" | ALG | P | AL-1 | AL | 1/A502 3/A501 | -- | 1 | KEY CARD & POWER ASSIST OPENER |
| 101B | C | 12'-0" | 12'-0" | 1 3/4" | MTL | P-1 | -- | MTL | 4/A503 4/A501 | -- | -- | SEE SPECIFICATIONS |
| 101C | C | 12'-0" | 12'-0" | 1 3/4" | MTL | P-1 | -- | MTL | 4/A503 4/A501 | -- | -- | SEE SPECIFICATIONS |
| 102 | B | 3'-0" | 7'-0" | 1 3/4" | ALG | P | AL-1 | AL | 1/A502 3/A501 | -- | 1 | KEY CARD & POWER ASSIST OPENER |
| 103 | A | 3'-0" | 7'-0" | 1 3/4" | MTL | P-5 | F-1 | HM | 1/A601 1/A601 | -- | 5 | -- |
| 104 | A | 3'-0" | 7'-0" | 1 3/4" | MTL | P-5 | F-2 | HM | 1/A601 1/A601 | -- | 3 | -- |
| 105 | A | 3'-0" | 7'-0" | 1 3/4" | MTL | P-5 | F-1 | HM | 1/A601 1/A601 | -- | 7 | -- |
| 106 | B | 3'-0" | 7'-0" | 1 3/4" | MTL | P-5 | F-1 | HM | 1/A601 1/A601 | -- | 5 | -- |

6 DOOR SCHEDULE
A-101 NO SCALE

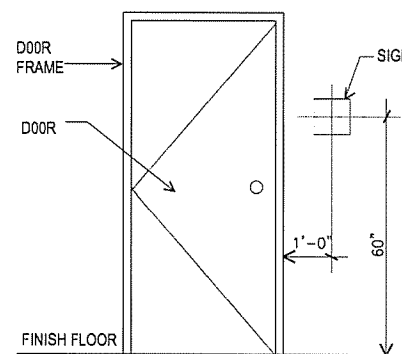


1 WOOD DOOR WITH SIDELIGHT DETAILS
A-601 3" = 1'-0"



- KEYED SIGN NOTES:
- 1/2" CAST ACRYLIC PLAQUE WITH P-95 MATTE FINISH, SUBSURFACE PAINTED, COLOR AS SELECTED BY ARCHITECT
 - GRADE 2 BRAILLE EITHER RAISED ABOVE THE SURFACE OF THE PLAQUE OR ENGRAVED INTO THE ACRYLIC FACE. SURFACE APPLIED TAPES ARE NOT ACCEPTABLE.
 - 4 1/2" TALL PICTOGRAM RAISED 1/2".
 - 5/8" TALL LETTERING RAISED 1/2" FONT: HELVETICA
 - 5/8" x 1/2" RAISED ACCENT STRIP.
 - 1-1/4" LETTERING RAISED 1/2"
 - 1/2" LETTERING RAISED 1/2"
 - 2-1/2" LETTERING RAISED 1/2"
 - PICTOGRAPH RAISED 1/2" TO COMPLY WITH ADA

7 SIGN SCHEDULE
A-401 NO SCALE



8 SIGN MOUNTING HEIGHT
A-401 NO SCALE

| NUMBER | NAME | FLOOR | | NORTH WALL | | SOUTH WALL | | EAST WALL | | WEST WALL | | CEILING | | REMARKS |
|--------|---------------|----------|------|------------|-------|------------|-------|-----------|-------|-----------|-------|----------|-------|---------|
| | | MATERIAL | BASE | MATERIAL | COLOR | MATERIAL | COLOR | MATERIAL | COLOR | MATERIAL | COLOR | MATERIAL | COLOR | |
| 101 | DEMONSTRATION | SC | RB-1 | CMU | P-1 | CMU | P-1 | CMU | P-1 | K-1, GYB | P-1 | OTS | P-1 | |
| 102 | ENTRY | SC | RB-1 | CMU | P-1 | CMU | P-1 | -- | -- | K-1, GYB | P-1 | OTS | P-1 | |
| 103 | STORAGE | VCT-1 | RB-1 | GWB | P-1 | CMU | P-1 | GWB | P-1 | CMU | P-1 | ACT | ACT-1 | |
| 104 | OFFICE | VCT-1 | RB-1 | GWB | P-1 | GWB | P-1 | GWB | P-1 | CMU | P-4 | ACT | ACT-1 | |
| 105 | BATH | PT-1 | PT-1 | CMU | P-3 | PT-1 | -- | GWB | P-3 | CMU | P-3 | ACT | ACT-1 | |
| 106 | JANITOR | SC | RB-1 | GWB | P-1 | GWB | P-1 | GWB | P-1 | GWB | P-1 | ACT | ACT-1 | |

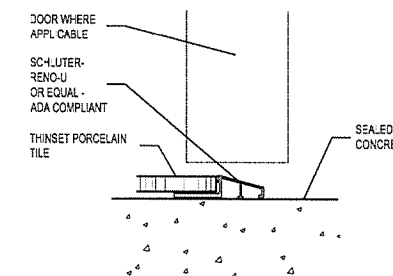
9 ROOM FINISH SCHEDULE
A-401 NO SCALE

INTERIOR COLOR LEGEND

| | |
|---------|--|
| CEILING | |
| ACT-1 | ARMSTRONG, 24" X 24" BEVELED TEGULAR ULTIMA #1911, PRELUDE XL 15/16" GRID |
| FLOORS | |
| VCT-1 | ARMSTRONG, STRIATIONS 3BT, COLOR: T3603 TWILIGHT |
| PT-1 | DALTILE, RITTENHOUSE SQUARE, 3" X 6" MATTE FIELD TILE, COLOR: ARCTIC WHITE #0190; INSTALL IN HORIZONTAL RUNNING BOND PATTERN |
| SC | SEALED CONCRETE |
| BASE | |
| RB-1 | JOHNSONITE, 4"H VINYL COVE BASE, COLOR: 20 CHARCOAL WG |
| PTB-1 | DALTILE, RITTENHOUSE SQUARE, 3" X 6" COVE BASE AND CORNER, COLOR: ARCTIC WHITE #A-3361 AND L-3361 |
| WALLS | |
| P-1 | SHERWIN WILLIAMS, SHOJI WHITE #SW7042 |
| P-2 | SHERWIN WILLIAMS, GRIZZLE GRAY #SW7068 (TYPICAL TRIM PAINT) |
| P-3 | SHERWIN WILLIAMS, BRASSY #SW6410 |
| P-4 | SHERWIN WILLIAMS, CHEERFUL #SW6903 |
| P-5 | SHERWIN WILLIAMS, RED TOMATO #SW6607 |
| PT-1 | DALTILE, RITTENHOUSE SQUARE, 3" X 6" MATTE FIELD TILE, COLOR: ARCTIC WHITE #0190; INSTALL IN HORIZONTAL RUNNING BOND PATTERN |
| K-1 | KOROGARD WALLCOVERING 12' TALL SHEETS, COLOR 'VAPOR' |

GENERAL FINISH NOTES

1. PROVIDE TRANSITION STRIPS AND THRESHOLDS FOR FLOOR CHANGES. CONTRACTOR TO PROVIDE SAMPLES TO A/E FIRM FOR APPROVAL AND COLOR SELECTION.
2. EPOXY GROUT TO BE USED ON PT-1 FLOOR AND PTB-1 TO MATCH LATICRETE #78 STERLING SILVER.
3. HOLLOW METAL DOOR FRAMES TO BE P-2, SEMI-GLOSS FINISH.
4. TYPICAL WALL PAINT TO BE EGGSHELL FINISH, CEILING PAINT TO BE FLAT FINISH, EPOXY PAINT TO BE USED ON TOILET & DEMONSTRATION WALLS.
5. VCT FLOOR PATTERNS TO BE DETERMINED.



10 FLOOR DETAIL
A-401 NOT TO SCALE

| No. | Description | Date |
|-----|-------------|------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

C-98 REGISTERED ARCHITECTS ARKANSAS

REGISTERED ARCHITECT CHRISTOPHER REST

1/27/14

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

PARKING LOT & DEMONSTRATION BUILDING

ARKANSAS HIGHWAY AND TRANSPORTATION DEPARTMENT

ARCHITECT OF RECORD

CROMWELL

101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102-20

Drawing Title: INTERIOR ELEVATIONS & SCHEDULES

Drawing Number: A-601

35 of 46

PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|--------|--|
| | NEW COLD WATER |
| | NEW HOT WATER |
| | NEW SANITARY SEWER |
| | NEW VENT |
| | PRESSURE GAUGE WITH GAUGE COCK |
| | CHECK VALVE |
| | GATE VALVE |
| | GLOBE VALVE |
| | PLUG VALVE |
| | UNION |
| | FLOW - IN DIRECTION OF ARROW |
| | CONCENTRIC REDUCER |
| | 90° ELBOW |
| | 45° ELBOW |
| | BRANCH CONNECTION OUT OF SIDE |
| | BRANCH CONNECTION OUT OF TWO SIDES |
| | RISER DOWN (ELBOW) |
| | RISER UP (ELBOW) |
| | RISER UP (ELBOW) |
| | BRANCH CONNECTION OUT OF TOP |
| | BRANCH CONNECTION OUT OF BOTTOM |
| | BRANCH CONNECTION OUT OF BOTTOM TO 90° ELBOW |
| | BRANCH CONNECTION OUT OF TOP TO 90° ELBOW |
| | RISER DOWN TO 90° ELBOW |
| | NEW PLUMBING FIXTURE |
| | WATER HAMMER ARRESTOR (SUFFIX IS THE PDI RATING) |

NOTE: ALL SYMBOLS MAY NOT BE USED.

ADA REQUIREMENTS

THIS SECTION APPLIES TO HANDICAPPED ACCESSIBLE FIXTURES ONLY.

WATER CLOSETS: THE HEIGHT OF WATER CLOSETS SHALL BE 17"-19" MEASURED FROM THE TOP OF THE TOILET SEAT. SEATS SHALL NOT BE SPRUNG OR RETURN TO A LIFTED POSITION. THE WATER CLOSET SHALL BE LOCATED 18" FROM THE SIDE WALL TO THE CENTER OF THE BOWL. HAND OPERATED FLUSH CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS NO MORE THAN 29" ABOVE FINISHED FLOOR. SEE ARCHITECTURAL SHEETS FOR GRAB BAR LOCATIONS.

LAVATORIES: LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO MORE THAN 34" ABOVE FINISHED FLOOR. PROVIDE A CLEARANCE OF AT LEAST 29" ABOVE FINISHED FLOOR TO THE BOTTOM OF THE APRON. KNEE SPACE SHALL BE 8" FROM THE BOTTOM EDGE OF APRON TO THE LEADING EDGE OF THE BOTTOM OF BOWL. THE BOTTOM OF THE BOWL SHALL BE A MINIMUM OF 27" ABOVE FINISHED FLOOR. ALL WATER AND DRAIN PIPING UNDER LAVATORIES SHALL BE INSULATED WITH FOAM INSERT, COVERED WITH A 1/8" VINYL OUTER SHELL. ANGLE STOPS SHALL HAVE A FLIP TOP ACCESS.

DRINKING FOUNTAINS-WATER COLLERS: WHEN INSTALLING A HI-LO ACCESSIBLE FOUNTAIN THE LOWEST SPOUT AT NO MORE THAN 38" ABOVE FINISHED FLOOR AND HIGH SPOUT AT 40" ABOVE FINISHED FLOOR. SPOUT SHALL BE AT THE FRONT OF THE UNIT AND SHALL DIRECT THE WATER FLOW IN A TRAJECTORY THAT IS PARALLEL OR NEARLY PARALLEL TO THE FRONT OF THE UNIT. THE SPOUT SHALL PROVIDE A WATER FLOW OF AT LEAST 4" HIGH. THE CONTROLS SHALL BE FRONT MOUNTED OR SIDE MOUNTED NEAR THE FRONT EDGE. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL BE NO GREATER THAN 5 lbf. WALL MOUNTED UNITS SHALL HAVE A CLEAR KNEE SPACE BETWEEN THE BOTTOM OF THE APRON AND THE FINISHED FLOOR OF 27" HIGH, AND 17"-19" DEEP. FOUNTAINS SHALL NOT PROTRUDE MORE 4" INTO WALKWAY.

GENERAL NOTES

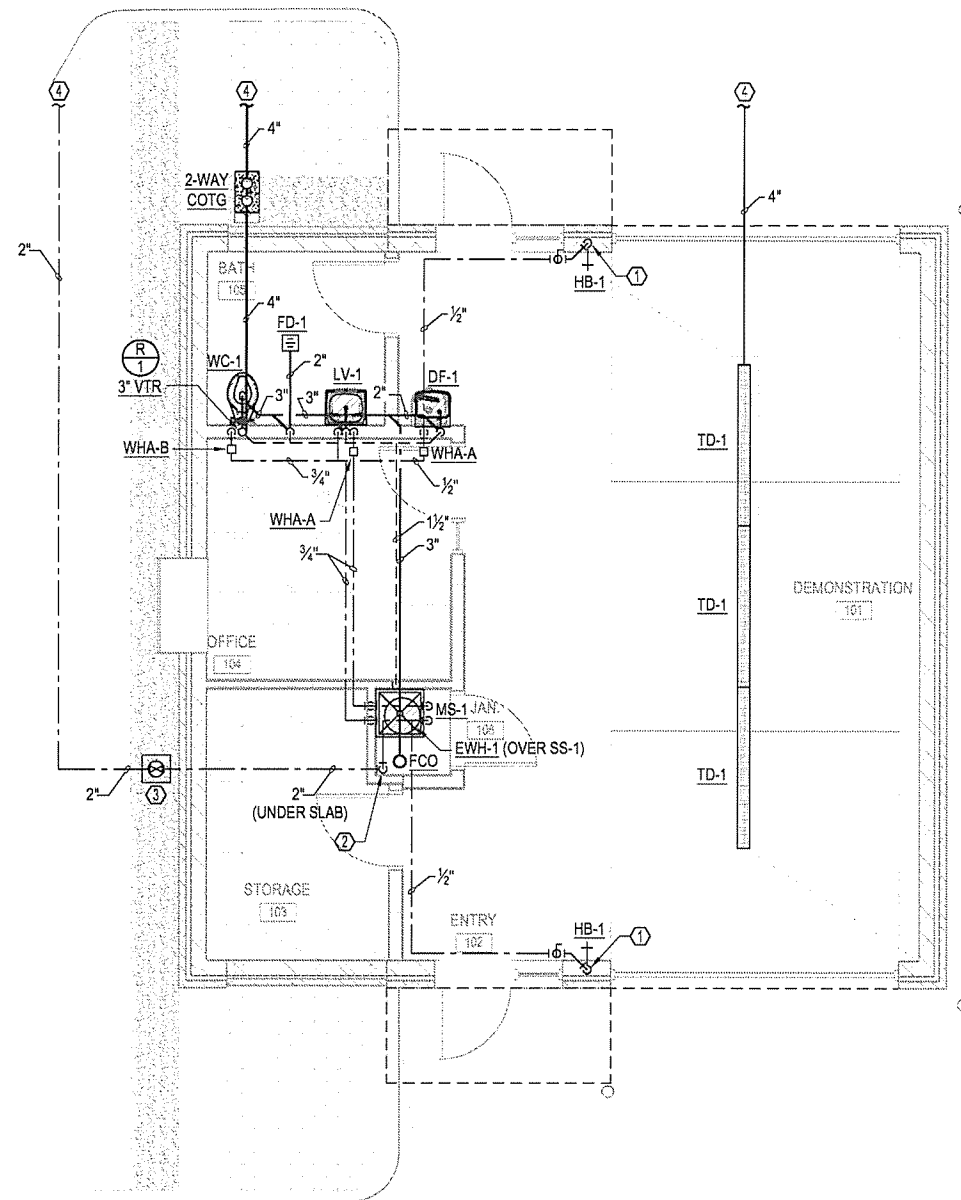
1. ALL PLUMBING SYSTEMS SHALL BE INSTALLED AS PER SPECIFICATIONS AND GOVERNING CODES.
2. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. CONTRACTOR SHALL NOT SCALE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR COMPLETE INFORMATION.
3. BY NECESSITY, THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.
4. EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.
5. CONTRACTOR SHALL PAY ALL UTILITY FEES & CHARGES AS PART OF BASE BID IN THE CONTRACT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES; i.e., ARCHITECTURAL, HVAC, ELECTRICAL, STRUCTURAL, FIRE PROTECTION AND CIVIL PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL COORDINATE EXISTING UTILITY LOCATIONS, SIZES AND INVERT ELEVATIONS PRIOR TO CONSTRUCTION; i.e., SANITARY SEWER, STORM DRAIN, FIRE PROTECTION AND DOMESTIC WATER SERVICES AS IT PERTAINS TO THIS PROJECT.
8. PROVIDE ISOLATION VALVES AT EACH FIXTURE GROUP OR BATTERY OF FIXTURES IN THE DOMESTIC CW, HW AND HWR PIPING. VALVES SHALL BE EASILY ACCESSIBLE. WHERE HARD CEILINGS ARE LOCATED, VALVES SHALL BE ACCESSED THROUGH ACCESS PANELS. ACCESS PANELS SHALL BE COORDINATED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. PROVIDE STOP VALVES AT ALL PLUMBING FIXTURES ON BOTH HOT AND COLD WATER SUPPLY LINES. VALVES, ESCUTCHEONS, FITTINGS, ETC., SHALL BE CHROME PLATED AND INSTALLED TIGHT TO WALL. WHERE PIPING IS EXPOSED, CHROME PLATED PIPE SHALL BE USED.
10. ALL EXPOSED OR ACCESSIBLE P-TRAPS SHALL BE CHROME PLATED AND PROVIDED WITH BOTTOM CLEANOUT PLUGS.
11. SLOPE 2 1/2" AND SMALLER DRAIN WASTE AND VENT (DWV) LINES AT MIN. (2%) 1/4" FALL PER FT., 3" TO 6" DWV LINES AT MIN. (1%) 1/8" FALL PER FT. AND 8" AND LARGER DWV LINES AT MIN. (.5%) 1/16" FALL PER FT. SANITARY SEWER AND WATER SHALL BE A MINIMUM OF 10' APART OR THE DOMESTIC WATER SERVICE SHALL BE 12" ABOVE THE TOP OF THE SEWER LINE, AT ITS HIGHEST POINT, IF PLACED IN SAME TRENCH.
12. PROVIDE ALL FITTINGS, TRANSITIONS, COUPLINGS, ADAPTERS, UNIONS, AND OTHER ACCESSORIES NEEDED TO COMPLETE CONNECTIONS AND PROPER OPERATIONS OF PLUMBING FIXTURES AND PLUMBING EQUIPMENT.
13. REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.
14. PROVIDE CLEANOUTS IN ALL SEWERS, WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 50 FEET, AT EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES, AND ALL VERTICAL STACKS AT A HEIGHT OF 30' ABOVE FINISH FLOOR AT THE BASE OF EACH STACK.
15. DO NOT ROUTE ANY PIPING OVER ELEC. ROOMS, COMPUTER ROOMS, OR ELEC. PANELS.
16. ALL DOMESTIC WATER PIPING ROUTED IN AREAS SUBJECT TO FREEZING TEMPERATURES SHALL BE ROUTED BELOW INSULATION AND WITHIN THE HEATED ENVELOPE OF THE BUILDING. WHERE PIPING CAN NOT BE ROUTED BELOW INSULATION, PIPING SHALL HAVE 5 WATT/FT HEAT TRACING ATTACHED. SEE ARCHITECTURAL DRAWINGS FOR INSULATION PLACEMENT AND DETAILS. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR AND ENGINEER.
17. UNLESS OTHERWISE INDICATED DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS. WHEN ROUTED IN EXTERIOR WALLS, CAREFULLY POSITION WATER PIPING ON THE HEATED SIDE (INTERIOR SIDE) OF THE WALL INSULATION.
18. MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES, OPERABLE WINDOWS AND FLUES, PLUMBING VENTS AND GAS REGULATORS.
19. ALL STORM DRAIN, CONDENSATE DRAIN, SEWER & VENT PIPING SHALL BE RODDED AND CLEANED AT END OF CONSTRUCTION. ALL TRAPS SHALL BE CLEANED AND PRIMED AT END OF CONSTRUCTION.
20. ALL PIPE DROPS FROM CEILING PLENUM TO FLOOR SHALL BE MADE IN FURROUTS AT COLUMNS, IN WEB OF BEAMS AT COLUMNS OR IN WALLS. PIPING SHALL BE CONCEALED UNLESS APPROVED BY ARCHITECT.
21. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES WHERE QUICK CLOSING VALVES ARE INSTALLED; i.e., FLUSH VALVES, ICE MAKERS, DISHWASHERS, ETC.
22. BELOW SLAB WATER PIPE TO BE TYPE K SOFT DRAWN COPPER WITHOUT FITTINGS OR JOINTS. SLEEVE IN ENTIRETY WITH ARMAFLEX OR APPROPRIATE POLYETHYLENE SLEEVE MATERIAL.
23. PROVIDE APPROVED BACKFLOW PREVENTION OR ANTI-SIPHON DEVICES AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.
24. INSULATE ALL WATER, CONDENSATE, STORM DRAIN PIPING (VERTICAL AND HORIZONTAL) AND ROOF DRAIN BODIES ABOVE FINISH FLOOR. SEE SPECIFICATIONS FOR THICKNESS SCHEDULE.
25. INSULATE ALL EXPOSED HOT WATER & DRAIN PIPING FOR ACCESSIBLE FIXTURES PER ANSI A117.1 AND ADA REQUIREMENTS.
26. AN APPROVED TRAP GUARD PRODUCT CONFORMING TO NSF-14, CSAB802-99 AND CSAB79-94 SHALL BE INSTALLED AT ALL FLOOR AND HUB DRAINS. ALL DRAINS SHALL HAVE DEEP SEAL TRAPS, 4" DEEP SEAL MINIMUM. INSTALL TRAP GUARD DEVICES PER MANUFACTURER'S INSTRUCTIONS.
27. PER ARKANSAS PLUMBING CODE (2006 EDITION) SECTION 705.18 JOINTS BETWEEN DIFFERENT MATERIALS STATES THAT "JOINTS BETWEEN DIFFERENT PIPING MATERIAL SHALL BE MADE WITH MECHANICAL JOINT OF THE COMPRESSION OR MECHANICAL-SEALING TYPE CONFORMING TO ASTM C 1173, ASTM C 1460 OR ASTM C 1461. CONNECTORS AND ADAPTERS SHALL HAVE AN ELASTOMERIC SEAL CONFORMING TO ASTM C 425, ASTM C 443, ASTM C 564, ASTM C 1440, ASTM D 1869, ASTM F 477, CSA A257.3M OR CSA B602, OR AS REQUIRED IN SECTIONS 705.18.1 THRU 705.18.7."

| | | |
|-----|------|-------------|
| No. | Date | Description |
| | | |
| | | |
| | | |

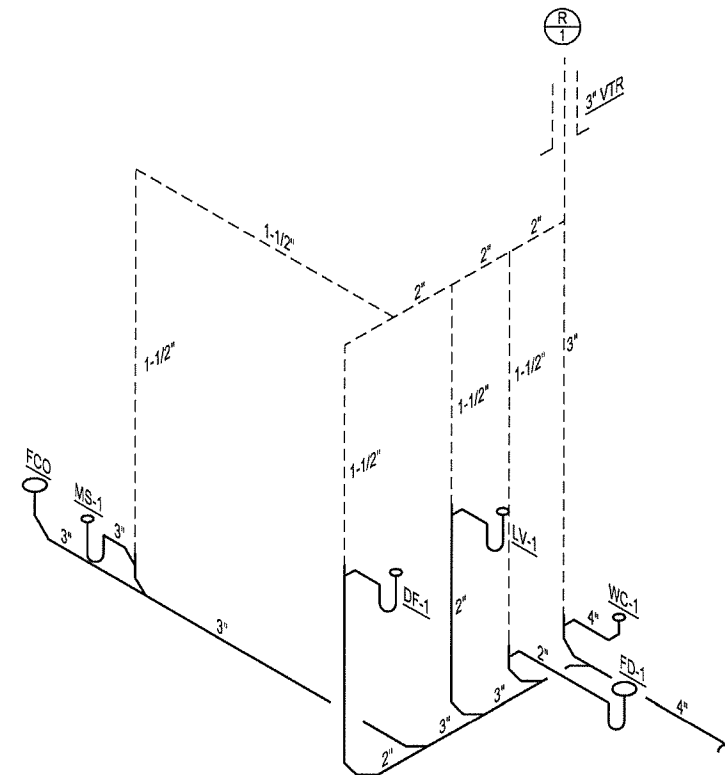
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

| | | | |
|----------------|-----------------------------------|----------------|-------------|
| Issue Date | 27-JANUARY-2014 | Project Number | 2012-102-20 |
| Drawing Title | PLUMBING LEGEND AND GENERAL NOTES | | |
| Drawing Number | P-001 | | |
| | 36 of 46 | | |



- LEGEND AND NOTES**
REFER TO SHEET P-001 FOR LEGEND AND NOTES.
- PLUMBING PLAN - KEYED NOTES**
- ① CW LINE DN IN WALL TO A HOSE BIBB AT 24" A.F.F.
 - ② RISE IN WALL WITH DOMESTIC CW LINE TO ABOVE CEILING AND CONTINUE AS SHOWN.
 - ③ PROVIDE A DOMESTIC WATER SHUT-OFF VALVE IN A CAST-IRON VALVE BOX WITH A CAST-IRON DROP COVER MARKED "WATER".
 - ④ RE: SITE UTILITY PLAN FOR CONTINUATION.



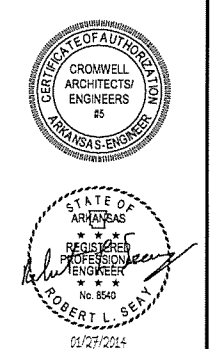
R1 PLUMBING WASTE AND VENT RISER
NO SCALE

1 PLUMBING PLAN
1/4" = 1'-0"

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

PLAN NORTH

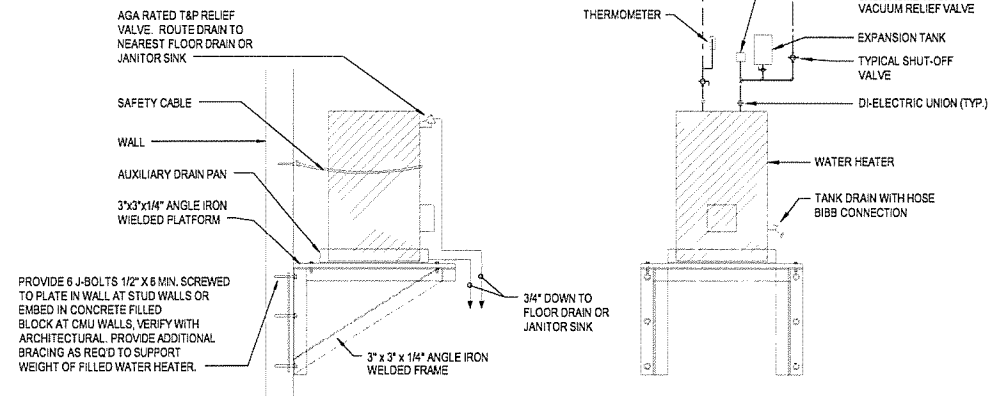
| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |



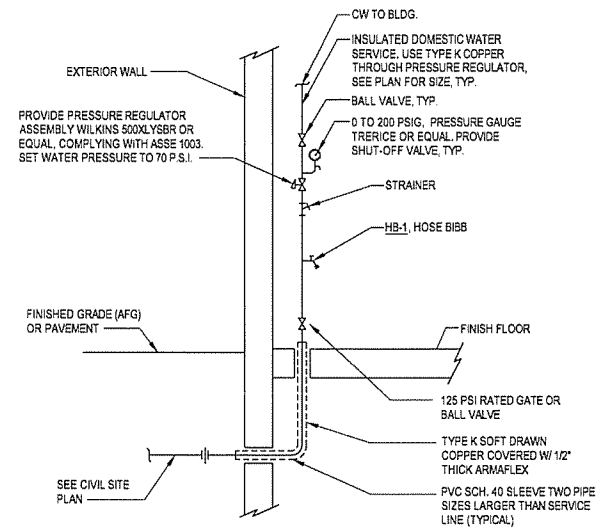
ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

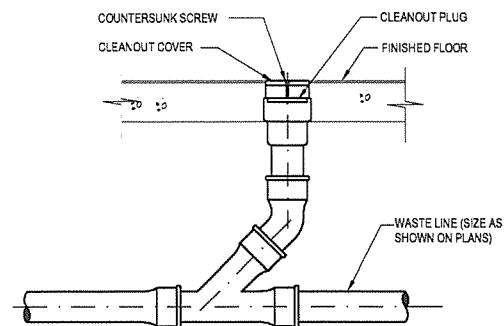
Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20
Drawing Title: **PLUMBING PLAN AND RISER**
Drawing Number: **P-101**
37 of 46



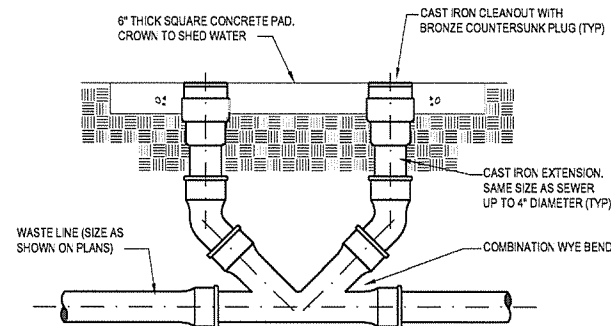
1 ELECTRIC WATER HEATER WITH MIXING VALVE
NO SCALE



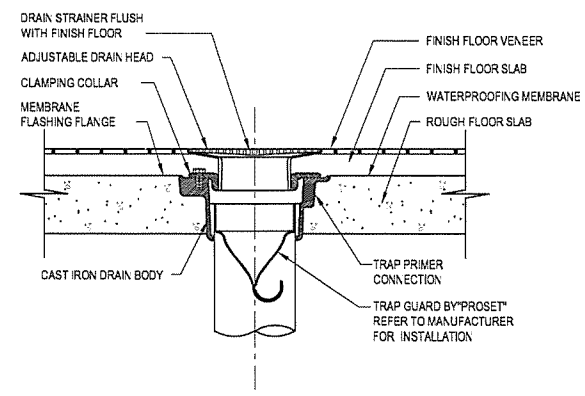
2 DOMESTIC WATER SERVICE RISER
NO SCALE



3 FLOOR CLEANOUT



4 DOUBLE CLEANOUT-TO-GRADE



5 TRAP GUARD INSTALLATION
NO SCALE



ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT
PARKING LOT &
DEMONSTRATION BUILDING



ARCHITECT OF RECORD



101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date 27-JANUARY-2014 Project Number 2012-102_20

Drawing Title
**PLUMBING
DETAILS**

Drawing Number
P-501
38 of 46

PLUMBING FIXTURE SCHEDULE

WC-1 WATER CLOSET, FLOOR-MOUNTED, SENSOR FLUSH VALVE, ADA ACCESSIBLE
FIXTURE - AMERICAN STANDARD "MADERA" #3461.001 (BOWL ONLY) WITH EVERCLEAN, VITREOUS CHINA, WHITE, FLOOR MOUNTED, ELONGATED BOWL, 1.28 GPF, FULLY GLAZED 2-1/8" PASSAGEWAY, 1-1/2" INLET SPUD, SIPHON JET FLUSHING, AND INTEGRAL TRAPS.
TOILET SEAT - AMERICAN STANDARD #5901.110 WITH EVERCLEAN, ELONGATED SEAT OPEN FRONT WITH NO COVER, WHITE.
FLUSH VALVE - SLOAN OPTIMA PLUS #8111- 1.28 GPF, BATTERY POWERED INFRARED SENSOR, COURTESY OVER-RIDE BUTTON, VACUUM BREAKER, EXPOSED CHROME PLATED, FLUSHOMETER, VANDAL RESISTANT STOP CAP.
PLUMBING ROUGH-INS - 4" SS, 2" V, 1" CW
MOUNTING HEIGHT - SEE ADA COMPLIANT NOTES FOR ADDITIONAL REQUIREMENTS

LV-1 LAVATORY - WALL HUNG - ADA COMPLIANT
FIXTURE - AMERICAN STANDARD "LUCERNE" #0356.421, VITREOUS CHINA, 20-1/2" X 18-1/4", WALL HUNG, CONCEALED ARMS, WHITE IN COLOR.
FAUCET - CHICAGO FAUCET #116.202.AB.1, BATTERY POWERED INFRARED SENSOR, SINGLE HOLE, .5 GPM LOW FLOW, VANDAL RESISTANT AERATOR. INSTALL HIGH AND TIGHT BELOW FIXTURE TO CONCEAL.
MIXING VALVE - LAWLER #TMM-1070, BELOW DECK MECHANICAL THERMOSTATIC MIXING VALVE (SET @ 115°F).
GRID STRAINER - McGUIRE #155WC OFFSET TYPE, 1-1/4".
STOPS - McGUIRE #2165CCLK, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - McGUIRE #8872, 1-1/4" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
COVERS - TUREBRO PRODUCTS TRAP AND SUPPLY COVERS. (LESS COVERS AT NON-ADA, SEE ARCHITECTURAL).
CARRIER - WADE 520-M24
PLUMBING ROUGH-INS - 2" SS, 2" V, 1/2" CW, 1/2" HW
MOUNTING HEIGHT - SEE ADA COMPLIANT NOTES FOR ADDITIONAL REQUIREMENTS.

MS-1 MOP SINK, FLOOR MOUNT
FIXTURE - STERN-WILLIAMS #MTB-2424, 24" X 24" X 10", TERRAZZO RECEPTOR WITH STAINLESS STEEL CAPS.
FAUCET - #T-10-VB ROUGH CHROME PLATED FAUCET WITH VACUUM BREAKER AND PAIL HOOK, MOUNTED 36" AFF, #T-35, 36" RUBBER HOSE AND HOSE HANGER.
ACCESSORIES - #T-40 STAINLESS STEEL MOP HANGER, (2) #BP STAINLESS STEEL SPLASH PANELS, CAULK JOINTS BETWEEN SINK AND WALL WITH SILICONE SEALANT.
PLUMBING ROUGH-INS - 3" SS, 2" V, 1/2" CW, 1/2" HW

DF-1 DRINKING FOUNTAIN (ADA COMPLIANT)
FIXTURE - OASIS #M110PM, NON-REFRIGERATED DRINKING FOUNTAIN, STAINLESS STEEL BUBBLER, STAINLESS STEEL CABINET, ANSI A117.1.
STOP - McGUIRE #ST17LK, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - McGUIRE #8872, 1-1/4" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
CARRIER - WADE #440 SERIES FLOOR MOUNTED CARRIER.
PLUMBING ROUGH-INS - 2" SS, 2" V, 1/2" CW
MOUNTING HEIGHT - SEE ADA COMPLIANT NOTES FOR ADDITIONAL REQUIREMENTS.

HB -1 HOSE BIBB
FIXTURE - ZURN #Z1334-C WITH VACUUM BREAKER BACKFLOW PREVENTER, 3/4" HOSE THREAD NOZZLE, LOOSE TEE KEY HANDLE.
PLUMBING ROUGH-INS - 3/4" CW

FD-1 FLOOR DRAIN
FIXTURE - EQUAL TO WADE #W-1100TS, CAST IRON FLOOR DRAIN WITH FLANGE, INTEGRAL CLAMPING COLLAR, SEEPAGE OPENING, ROUND ADJUSTABLE HEAVY DUTY CAST IRON 7" DIAMETER NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS, WITH DEEP-SEAL TRAP, PROSET SYSTEM TRAP GUARD INSERT, SEE PLAN FOR SIZE.
PLUMBING ROUGH-INS - 2", 3", 4" SS, 2" V

TD-1 TRENCH DRAIN
FIXTURE - EQUAL TO ZURN #Z886-BG, HDPE MODULAR CHANNEL TRENCH DRAIN, INTEGRAL ANCHORS AT 10" O.C. FOR CASTING INTO CONCRETE SLAB, 1-1/2" RADIUS BOTTOM WITH MANNING'S N=0.009 AND INTEGRAL CONTINUOUS SLOPE OF 0.75%, AND TRAFFIC RATED CLASS C GALVANIZED DUCTILE IRON GRATE.

FCO FLOOR CLEANOUT
FIXTURE - ZURN #ZN1400-HD SERIES ADJUSTABLE, HEAVY DUTY CAST IRON FLOOR OUTLET, BRONZE PLUG, POLISHED NICKLE BRONZE TOP AND THREADED INSERTS.

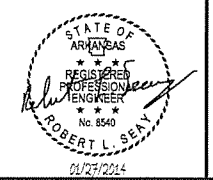
COTG CLEANOUT TO GRADE
FIXTURE - ZURN #Z-1400-HD-BP-VP CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, FLANGED FERRULE WITH PLUG, AND ROUND CAST IRON TRACTOR TOP.
PLUMBING ROUGH-INS - SEE PLANS

WATER HAMMER ARRESTORS
FIXTURE - EQUAL TO WADE "SHOKTROL" WHERE REQUIRED IN PIPING SYSTEMS, PROPERLY SIZED WATER HAMMER ARRESTORS SHALL BE PROVIDED. WATER HAMMER ARRESTERS SHALL BE LOCATED ON ALL QUICK CLOSING VALVES (FLUSH VALVES, DISHWASHERS, ICE MAKERS, ETC.)

EW-H-1 DOMESTIC WATER HEATER, ELECTRIC WATER HEATER
FIXTURE - EQUAL TO RHEEM #EGSP10, 10 GALLON STORAGE CAPACITY, 2.5 KW INPUT, 208V/1 PHASE, 17 GPH CONTINUOUS RECOVERY AT 60°F RISE, SURFACE THERMOSTATS, SEAMLESS GLASS-LINED TANK, 150 PSI WORKING PRESSURE, HIGH LIMIT CUT-OFF. WARRANTIES: 3-YEAR LIMITED/1 YEAR PARTS.
EXPANSION TANK - ET-1 - EQUAL TO AMTROL "THERM-X-TROL" #ST-5, 2.0 GALLONS TOTAL SYSTEM VOLUME, 150 PSI MAXIMUM WORKING PRESSURE. PRESSURE, 8" Ø X 12-5/8" HT, 3/4" NPT, 5 LBS. PROVIDE BALL VALVE TO ISOLATE.

| WATER HAMMER ARRESTOR | | | | | | |
|-----------------------|------|-------|-------|--------|---------|---------|
| WADE SHOKTROL SIZE | #5 | #10 | #20 | #50 | #75 | #100 |
| P.D.I. UNITS | A | B | C | D | E | F |
| FIXTURE UNITS | 1-11 | 12-32 | 33-60 | 61-113 | 114-154 | 155-330 |

| | | |
|-----|------|-------------|
| No. | Date | Description |
| | | |
| | | |



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

| | |
|-------------------|----------------|
| Issue Date | Project Number |
| 27-JANUARY-2014 | 2012-102_20 |
| Drawing Title | |
| PLUMBING SCHEDULE | |
| Drawing Number | |
| P-601 | |
| 39 of 46 | |

ABBREVIATIONS

| DESCRIPTION | ABBREVIATION | DESCRIPTION | ABBREVIATION |
|---------------------------------|-----------------|----------------------------------|--------------|
| ABOVE FINISH FLOOR | AFF | HEAT RECLAIM WATER HEATER | HRWH |
| ABOVE FINISH SLAB | AFS | HEATING COIL | HC |
| AIR FILTER | AF | HEATING AND VENTILATING UNIT | HV |
| AIR COMPRESSOR | AC | HEATING, VENTILATING & COOLING | HVAC |
| AIR COOLED CONDENSER | ACC | HORSE POWER | HP |
| AIR HANDLING UNIT | AHU | HOT WATER GENERATOR | HWG |
| AMBIENT | AMB | HOT WATER STORAGE TANK | HWT |
| AREA DRAIN | AD | HOSE BIBB | HB |
| AUTOMATIC DAMPER | ADPR | HOSE STATION | HS |
| AUXILIARY ROOF DRAIN | ARD | HUMIDIFIER | H |
| BACK DRAFT DAMPER | BD | INTAKE VENTILATOR | IV |
| BOILER | B | INVERT | INV |
| BOILER FEED UNIT | BFU | KILOWATTS | KW |
| BRITISH THERMAL UNITS | BTU | LEAVING AIR TEMPERATURE | LAT |
| CAPACITY | CAP | LEAVING DRY BULB | LDB |
| CATCH BASIN | CB | LEAVING WATER TEMPERATURE | LWT |
| CAST IRON | CI | LEAVING WET BULB | LWB |
| CEILING DIFFUSER | CD | LAVATORY | LAV |
| CHILLER | CH | LINEAR DIFFUSER | LD |
| CIRCULATING PUMP | CP | MANHOLE | MH |
| CLEAN OUT | CO | MAKE-UP AIR UNIT | MAU |
| CLEAN OUT TO GRADE | COTG | MANUAL DAMPER | MD |
| CONVERTOR | C | MAXIMUM | MAX |
| CONDENSING UNIT | CU | MINIMUM | MIN |
| CONNECT | CONN | MOTOR OPERATED DAMPER | MOD |
| COOLING COIL | CC | MOUNTED | MTD |
| COOLING TOWER | CT | OPPOSED BLADE DAMPER | OBD |
| CARBON DIOXIDE | CO ₂ | OUTSIDE AIR | OSA |
| CUBIC FEET PER MINUTE | CFM | PACKAGE TERMINAL AIR CONDITIONER | PTAC |
| COMB. FIRE, SMOKE DAMPER | FSDPR | PLUMBING | PLBG |
| CONDENSATE RETURN | CR | POUNDS PER SQUARE INCH | PSI |
| DAMPER | DPR | P | P |
| DESICCANT DEHUMIDIFIER | DD | PLUMBING FIXTURE | PF |
| DETAIL | DTL | POWER ROOF VENTILATION | PRV |
| DOOR GRILLE | DG | PRESSURE DROP | PD |
| DOWN SPOUT | DS | REGISTER | REG |
| DRY BULB | DB | RELATIVE HUMIDITY | RH |
| DRINKING FOUNTAIN | DF | RETURN AIR | RA |
| DUCT HEATING COIL | DHC | RETURN AIR GRILLE | RAG |
| EFFICIENT | EFF | REVOLUTIONS PER MINUTE | RPM |
| ELECTRIC HEATING COIL | EHC | ROOM AIR CONDITIONING UNIT | RAC |
| ELECTRIC WATER HEATER | EWH | ROOF DRAIN | RD |
| ENERGY EFFICIENCY RATIO | EER | SATURATED CONDENSING TEMPERATURE | SCT |
| ENTERING AIR TEMPERATURE | EAT | SATURATED SUCTION TEMPERATURE | SST |
| ENTERING DRY BULB | EDB | SMOKE DAMPER | S.DPR |
| ENTERING WATER TEMPERATURE | EWT | SPLITTER DAMPER | SD |
| ENTERING WET BULB | EWB | STAINLESS STEEL | SS |
| EXTERNAL STATIC PRESSURE | ESP | STATIC PRESSURE | SP |
| EXHAUST | EXH | STEAM | STM |
| EXHAUST FAN | EF | SUPPLY AIR | SA |
| FEET PER MINUTE | FPM | SUPPLY FAN | SF |
| FLOOR CLEANOUT | FCO | TEMPERATURE | TEMP |
| FLOOR DRAIN | FD | THERMOSTAT | T'STAT |
| FAN | F | THOUSAND BTU/PER HOUR | MBH |
| FAN COIL UNIT | FCU | THREE WAY MODULATING VALVE | TW/MV |
| FINNED TUBE | FT | TOTAL STATIC PRESSURE | TSP |
| FIRE DAMPER | F.DPR | TOTAL DYNAMIC HEAD | TDH |
| FIRE/SMOKE DAMPER (COMBINATION) | FS DPR | UNIT COOLER | UC |
| FLEXIBLE CONNECTION | FLEX CONN | UNIT HEATER | UH |
| FLOOR | FLR | UNIT VENTILATOR | UV |
| FLY FAN | FF | URINAL | UR |
| FREEZE PROOF WALL HYDRANT | FPWH | VENT THROUGH ROOF | VTR |
| FREEZE PROOF BOX HYDRANT | FPBH | WATER HEATER | WH |
| FORWARD CURVE | FC | WALL CLEANOUT | WCO |
| FURNACE | FU | WATER CLOSET | WC |
| GALLON | GAL | WATER PRESSURE DROP | WPD |
| GALLONS PER HOUR | GPH | WATER TEMPERATURE DIFFERENCE | WTD |
| GALLONS PER MINUTE | GPM | WATER TEMPERING VALVE | WTV |
| GRAVITY ROOF VENTILATOR | GRV | WET BULB | WB |
| GREASE TRAP | GT | | |

HVAC GENERAL, DUCTWORK, AND CONTROLS LEGEND

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|--------|---------------------------|--------|--|
| | SUPPLY AIR DEVICE | | SPLITTER DAMPER AT BRANCH OFF |
| | RETURN AIR DEVICE | | SPLITTER DAMPER AT TEE |
| | EXHAUST AIR DEVICE | | BULL HEAD TEE W/ TURNING VANES & DAMPERS |
| | SUPPLY UP | | TAKE OFF W/ EXTRACTOR & MANUAL DAMPER |
| | RETURN UP | | RECTANGULAR TRANSITION |
| | EXHAUST UP | | 90° BEND, ROUND DUCT |
| | SUPPLY DOWN | | 45° BEND, ROUND DUCT |
| | RETURN DOWN | | 45° RECTANGULAR DUCT |
| | EXHAUST DOWN | | THERMOSTAT |
| | ROUND UP | | KEY NOTE |
| | ROUND DOWN | | REVISION SYMBOL |
| | ROUND DUCT BREAK | | DIFFUSER CALL-OUT = ID PER SCHEDULE / NECK SIZE DIFFUSER CFM |
| | RECTANGULAR DUCT BREAK | | AIR TERMINAL CALL-OUT = AIR TERMINAL DESIGNATION ID PER SCHEDULE |
| | MANUAL DAMPER | | |
| | FLEXIBLE CONNECTION | | |
| | LINED DUCT | | |
| | 90° ELBOW W/ TURNING VANE | | |

HVAC PIPING LEGEND

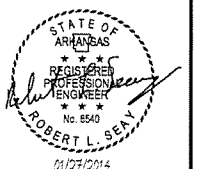
| SYMBOL | DESCRIPTION |
|--------|-----------------------|
| | REFRIGERANT LINE SET |
| | CONDENSATE DRAIN LINE |

NOTE: ALL SYMBOLS MAY NOT BE USED.

HVAC GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE 2010 EDITION OF THE "ARKANSAS MECHANICAL CODE", THE 2011 EDITION OF THE "ARKANSAS ENERGY CODE", NFPA 90A, AND ALL STATE, CITY, AND LOCAL REQUIREMENTS.
- REFER TO ARCHITECTURAL PLANS FOR:
 - REFLECTED CEILING PLAN FOR EXACT LOCATION OF AIR DEVICES AND CEILING TYPES
 - EXACT LOCATIONS AND MOUNTING HEIGHTS OF EXTERIOR LOUVERS.
 - FIRE RATED WALLS AND PARTITIONS. PROVIDE FIRE DAMPERS IN DUCT PENETRATIONS OF ALL FIRE RATED WALLS AND PARTITIONS AS NECESSARY TO MEET CITY AND STATE REQUIREMENTS.
 - ALL WALL AND ROOF PENETRATIONS AND EQUIPMENT MOUNTING DETAILS.
- ALL DUCT DIMENSIONS REPRESENT AIRFLOW AREA. INCREASE DUCT DIMENSIONS AS REQUIRED WHERE INTERNAL LINER IS SPECIFIED.
- ALL DUCTWORK SHALL BE CONSTRUCTED FROM GALVANIZED STEEL IN CONFORMANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION.
- U.L. LISTED FLEXIBLE DUCT RUN-OUTS MAY BE USED, BUT SHALL NOT EXCEED 3'-0" IN LENGTH. ALL FLEXIBLE DUCT TO BE PROPERLY SUPPORTED WITH NO KINKS OR HARD BENDS.
- DUCT FITTINGS:
 - SUPPLY TAKE-OFFS TO CEILING SUPPLY DIFFUSERS TO BE 45° "SHOE" TAP.
 - ALL DUCT RUN-OUTS TO HAVE 2" STAND-OFF LOCKING QUADRANT VOLUME DAMPERS
 - ALL 90° ROUND ELBOWS TO HAVE R/D=1:5 (UNLESS OTHERWISE NOTED).
 - ALL 90° RECTANGULAR ELBOWS TO HAVE TURNING VANES (UNLESS OTHERWISE NOTED).
 - PROVIDE HARD ELBOW WHEN TRANSITIONING FROM RIGID TO FLEXIBLE DUCT WHEN CONNECTING TO AIR DEVICES. REFER TO DETAIL.
- ALL SUPPLY, RETURN, EXHAUST AND OUTSIDE AIR DUCTS SHALL BE EXTERNALLY WRAPPED WITH 2" FIBERGLASS WITH FOIL-SCRIM-KRAFT VAPOR BARRIER WHILE OUTSIDE THE MECHANICAL ROOM (UNLESS OTHERWISE NOTED).
- DUCTWORK TO BE COORDINATED WITH STRUCTURAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION, COMPONENTS AND SYSTEMS. ALL DUCTWORK THAT HAS TO BE OFFSET DUE TO AN OBSTRUCTION SHALL BE SLOPED WITH 2-45° ELBOWS UNLESS OTHERWISE NOTED.
- PROVIDE ACCESS PANELS IN CEILINGS OTHER THAN LAY-IN TYPE WHERE NECESSARY:
 - PROVIDE 24"x24" ACCESS PANEL AT BALANCING DAMPERS, FIRE DAMPERS, CONTROLS, VALVES, TRAPS, CLEAN OUTS, ETC.
 - CLOSELY COORDINATE LOCATIONS AND SIZE OF ACCESS PANELS WITH INSTALLED EQUIPMENT TO ACHIEVE GREATEST ACCESSIBILITY FOR MAINTENANCE PURPOSES.
 - PROVIDE 96"x24" ACCESS PANEL FOR EACH HEAT PUMP.
 - PROVIDE ACCESS PANELS FOR GREASE DUCTS, AS REQUIRED BY NFPA 96, AT CHANGES IN DIRECTION, ETC.
- COMPLETELY INSULATE THE TOPS OF ALL CEILING DIFFUSERS.
- CLOSELY COORDINATE LOCATIONS OF INSTALLED EQUIPMENT TO ACHIEVE THE GREATEST ACCESSIBILITY.
- MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ALL EXHAUST FANS, FLUES, PLUMBING VENTS, ETC.
- PROVIDE FLEXIBLE CONNECTIONS AT INLETS AND OUTLETS OF ALL AIR HANDLING UNITS. MAKE-UP AIR UNITS, FURNACES, AND/OR EXHAUST FANS.
- ATTIC MOUNTED AND ABOVE CEILING MOUNTED EQUIPMENT SUBJECT TO WATER/CONDENSATE OVERFLOW SHALL BE SET IN DRAIN PANS WITH DRAINS TO THE OUTSIDE OR SANITARY SEWER SYSTEM WITH VISIBLE DISCHARGE
- CONDENSATE PIPING SHALL BE COMPRISED OF TYPE "M" COPPER TUBE, DWV COPPER, OR SCHEDULE 40 PVC.
- PROVIDE APPROVED, NON-FLAMMABLE PIPE INSULATION ON ALL INSULATED PIPES AND PIPES OF PVC MATERIAL PASSING THRU AREAS OF BUILDING WITH RETURN AIR PLENUMS.
- THERMOSTATS TO BE MOUNTED 4'-0" ABOVE FINISHED FLOOR, MAX. THERMOSTATS IN "PUBLIC" AREAS TO HAVE LOCKING COVERS. COORDINATE WITH ARCHITECT.
- SLEEVE AND SEAL ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED AND NON-RATED SLABS AND PARTITIONS.

| Description | Date | No. |
|-------------|------|-----|
| | | |

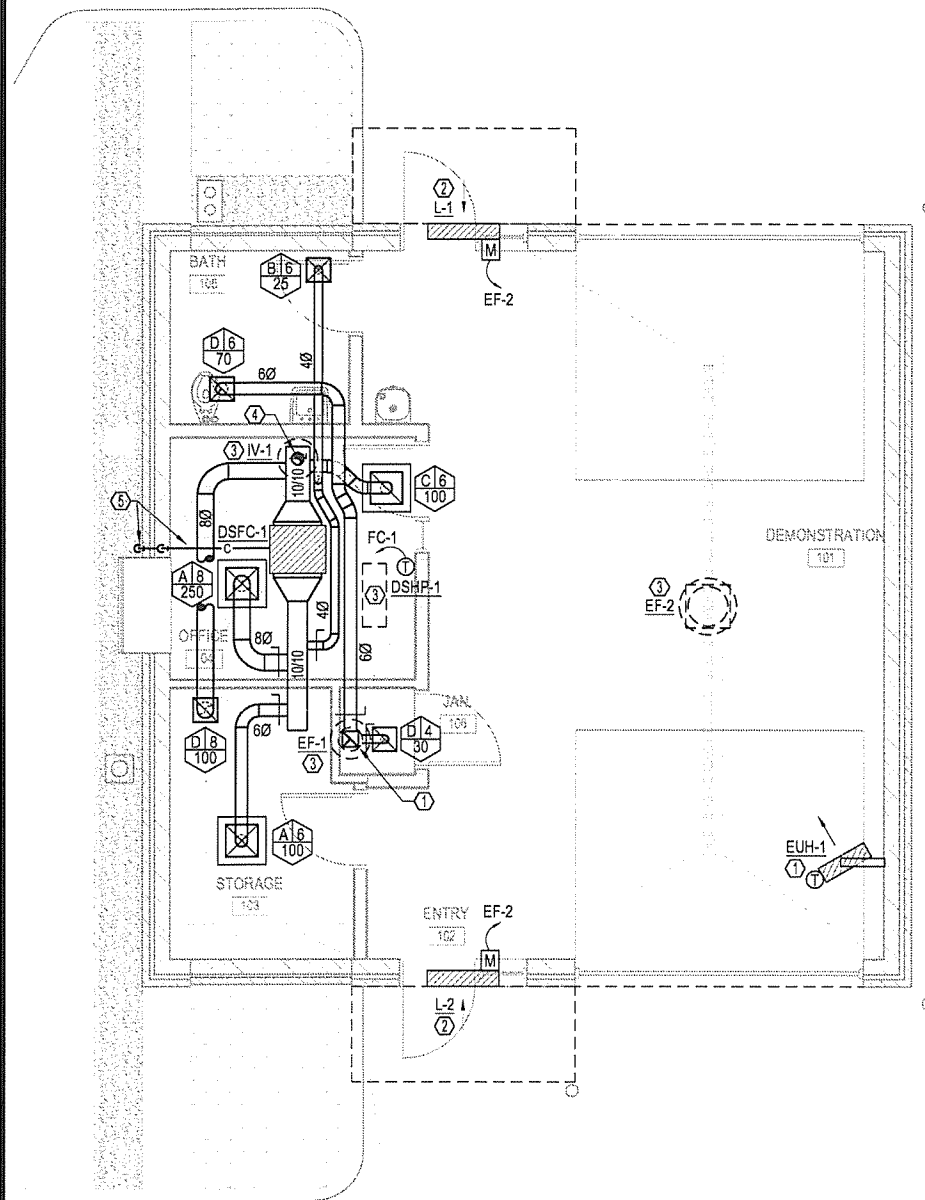


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

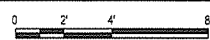
| | |
|--|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102-20 |
| Drawing Title MECH. ABBREV'S., LEGENDS & GEN. NOTES | |
| Drawing Number M-001 40 of 46 | |



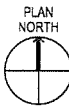
1

MECHANICAL PLAN

1/4" = 1'-0"



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



LEGEND AND NOTES

REFER TO SHEET M-001 FOR LEGEND AND NOTES.

MECHANICAL PLAN - KEYED NOTES

- ① INSTALL THE UNIT HEATER AT 10' A.F.F. MEASURED TO THE BOTTOM OF THE HEATER.
- ② INSTALL THE LOUVER ABOVE THE DOORWAY AND BENEATH THE CANOPY.
- ③ UNIT IS ROOF MOUNTED. PROVIDE AN EQUIPMENT STAND EQUAL TO A MIRO #LD MECHANICAL UNIT SUPPORT. COORDINATE THE EXACT SIZE REQUIRED WITH THE SIZE OF THE ROOFTOP HEAT PUMP. PROVIDE MIRO RECYCLED RUBBER D/E SUPPORT PADS BENEATH THE EQUIPMENT STAND BASES. ROUTE THE REFRIGERANT LINE SET, CONTROL CIRCUIT, AND POWERS CIRCUIT THROUGH A COMMON ROOF PENETRATION (ROOF PENETRATION AND WEATHERPROOFING BY G.C.) TO THE INDOOR UNIT.
- ④ 6" O.A. BRANCH DUCT WITH MANUAL BALANCING DAMPER FROM R.A. DUCT TO GRAVITY INTAKE VENTILATOR "IV-1" ON ROOF.
- ⑤ ROUTE A 3/4" TRAPPED REFRIGERANT CONDENSATE DRAIN LINE TO THE EXTERIOR WALL, DOWN IN THE WALL, OUT TO THE EXTERIOR AT 6' A.F.F., TURN DOWN AND TERMINATE WITH A BUG SCREEN.

MINI-SPLIT HVAC SYSTEM

| MARK | | SERVES | INDOOR UNIT TYPE | COOLING CAPACITY (BTUH) | HEATING CAPACITY (BTUH) | CFM (LO-M1-M2-H) | ELECTRICAL | | | | SEER | REFRIG. | MANUFACTURER | MODEL | REMARKS |
|--------|---------|----------------|--------------------|-------------------------|-------------------------|------------------|------------|------|-------|---|------|---------|--------------|---------|-----------|
| INDOOR | OUTDOOR | | | | | | MCA | MOCP | VOLTS | Ø | | | | | |
| DSFC-1 | DSHP-1 | OFFICE/RR/STOR | LOW-PROFILE DUCTED | 12,000 | 16,000 | 350-390-420-490 | 13.4 | 15A | 208 | 1 | 13.5 | R-410A | FUJITSU | 12RLFCD | SEE NOTES |

1. S/S HEAT PUMP
 2. PROVIDE INTEGRAL CONDENSATE PUMP KIT
 3. PROVIDE LOW AMBIENT KIT DOWN TO 0°F
 4. CFM IS WET COIL CONDITION
 5. LOW VOLTAGE, WALL MOUNTED THERMOSTAT
 6. INVERTER DRIVEN VAR. SPEED DC ROTARY COMPRESSOR
 7. PROVIDE UNIT MOUNTED DISCONNECT
 8. PROVIDE LIQUID LINE FILTER DRYER
 9. OUTDOOR UNIT PROVIDES POWER TO INDOOR UNIT - COORDINATE THE ELECTRICAL REQUIREMENTS FOR BOTH THE INDOOR UNIT AND THE OUTDOOR UNIT WITH THE E.C. TO ENSURE THE INSTALLATION IS COMPLETE AND OPERATIVE

EXHAUST FAN

| MARK | SERVES | TYPE | CONTROL | DRIVE | FAN DATA | | | MOTOR DATA | | | SONE LEVEL | TOTAL UNIT WEIGHT (LBS) | MANUFACTURER | MODEL | REMARKS |
|------|-------------------|--------------------|--------------------------------|--------|----------|-----|-------|------------|-------|---|------------|-------------------------|--------------|--------------|-----------|
| | | | | | CFM | ESP | RPM | POWER | VOLTS | Ø | | | | | |
| EF-1 | BATH 105 | DNFLOW CENTRIFUGAL | INTERLOCK WITH BATH 105 LIGHTS | DIRECT | 100 | 1/8 | 1,550 | 1/60 HP | 120 | 1 | 2.2 | 15 | GREENHECK | G-060-D | NOTES 1-4 |
| EF-2 | DEMONSTRATION 101 | DNFLOW PROPELLER | WALL SWITCH | DIRECT | 1,500 | 1/4 | 1,750 | 1/2 HP | 120 | 1 | 10.9 | 55 | GREENHECK | AE-14-438-A5 | NOTES 1-5 |

1. INTEGRAL DISCONNECT
 2. GRAVITY BACKDRAFT DAMPER
 3. 14" HIGH FACTORY CURB
 4. FAN SPEED CONTROL FACTORY MOUNTED ON FAN HOUSING
 5. INTERLOCK FAN OPERATION WITH INTAKE DAMPER ACTUATORS ON "L-1" AND "L-2".

UNIT HEATER - ELECTRIC

| MARK | LOCATION | HEATING CAPACITY | | CFM | ELECTRICAL DATA | | | MANUFACTURER | MODEL | REMARKS |
|-------|-------------------|------------------|--------|-----|-----------------|-------|---|--------------|--------------|-----------|
| | | KW | MBH | | FLA | VOLTS | Ø | | | |
| EUH-1 | DEMONSTRATION 101 | 11.2 | 38,400 | 700 | 31.3 | 208 | 3 | RAYWALL | HF3B5115CA1L | SEE NOTES |

1. PROVIDE UNIT MOUNTED ELECTRICAL DISCONNECT
 2. PROVIDE A LINE VOLTAGE DOUBLE POLE THERMOSTAT WITH THERMOMETER EQUAL TO TPI ET5DT5
 3. INDIVIDUALLY ADJUSTABLE LOUVERS
 4. MOUNTED FOR HORIZONTAL DISCHARGE
 5. WALL BRACKET EQUAL TO TPI A5100 (W/B5100 HEATER BRACKET)
 6. WALL MOUNT AT 9' A.F.F.

LOUVER

| MARK | SERVES | SERVICE | CFM | SIZE | FREE AREA (SQFT) | PRESSURE DROP (IN.) | MANUFACTURER | MODEL | REMARKS |
|------|--------|------------|-----|---------|------------------|---------------------|--------------|----------|-----------|
| L-1 | EF-2 | INTAKE AIR | 750 | 36"x18" | 0.88 | 0.05 | GREENHECK | EACN-601 | SEE NOTES |
| L-2 | EF-2 | INTAKE AIR | 750 | 18"x18" | 0.83 | 0.04 | GREENHECK | EACN-601 | SEE NOTES |

1. COLOR AND FINISH PER ARCHITECT
 2. FACTORY MOUNTED 120V DAMPER ACTUATOR
 3. INTEGRAL BIRD SCREEN
 4. DAMPER MOTOR SHALL BE INTERLOCKED WITH "EF-2" SUCH THAT THE DAMPER SHALL BE FULLY OPEN WHEN "EF-2" IS OPERATING AND VICE-VERSA.
 5. EXACT LOCATION AND MOUNTING HEIGHT PER ARCHITECT

INTAKE VENTILATOR

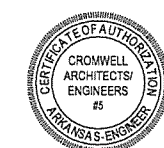
| MARK | SERVES | TYPE | CFM | SP (IN WC) | THROAT SIZE (S.F.) | TOTAL UNIT WEIGHT (LBS) | MANUFACTURER | MODEL | REMARKS |
|------|-------------|-------------|-----|------------|--------------------|-------------------------|--------------|--------|-----------|
| IV-1 | DSFC-1 O.A. | LOW-PROFILE | 70 | 0.05 | 0.37 | 10 | GREENHECK | GRSI-8 | SEE NOTES |

1. PROVIDE MANUFACTURERS ROOF CURB
 2. PROVIDE AN INTEGRAL 24V MOTORIZED O.A. DAMPER INTERLOCKED WITH THE DUCTLESS MINI-SPLIT SYSTEM OPERATION SUCH THAT THE DAMPER IS FULLY OPEN WHEN THE FAN COIL IS OPERATIONAL AND VICE-VERSA.

AIR DEVICES

| MARK | TYPE | DESCRIPTION | SIZE | NECK | INSTALLATION | MATERIAL | COLOR | MAX NC | MANUFACTURER | MODEL | REMARKS |
|------|---------|-------------|-------|-----------|--------------|----------|-------|--------|--------------|-------|-----------|
| A | SUPPLY | SQUARE CONE | 24x24 | SEE PLANS | LAY-IN CLG | STEEL | WHITE | 30 | PRICE | SCD | SEE NOTES |
| B | SUPPLY | SQUARE CONE | 12x12 | SEE PLANS | LAY-IN CLG | STEEL | WHITE | 30 | PRICE | SCD | SEE NOTES |
| C | RET/EXH | EGGCRATE | 24x24 | SEE PLANS | LAY-IN CLG | STEEL | WHITE | 30 | PRICE | 80 | SEE NOTES |
| D | RET/EXH | EGGCRATE | 12x12 | SEE PLANS | LAY-IN CLG | STEEL | WHITE | 30 | PRICE | 80 | SEE NOTES |

1. BORDER SHALL BE APPROPRIATE FOR INSTALLATION TYPE.
 2. LAY-IN AIR GRILLES SHALL HAVE CORE SIZES AS SCHEDULED WITH SOLID PANEL BORDERS SIZED FOR THE GRID IN WHICH THEY ARE INSTALLED.

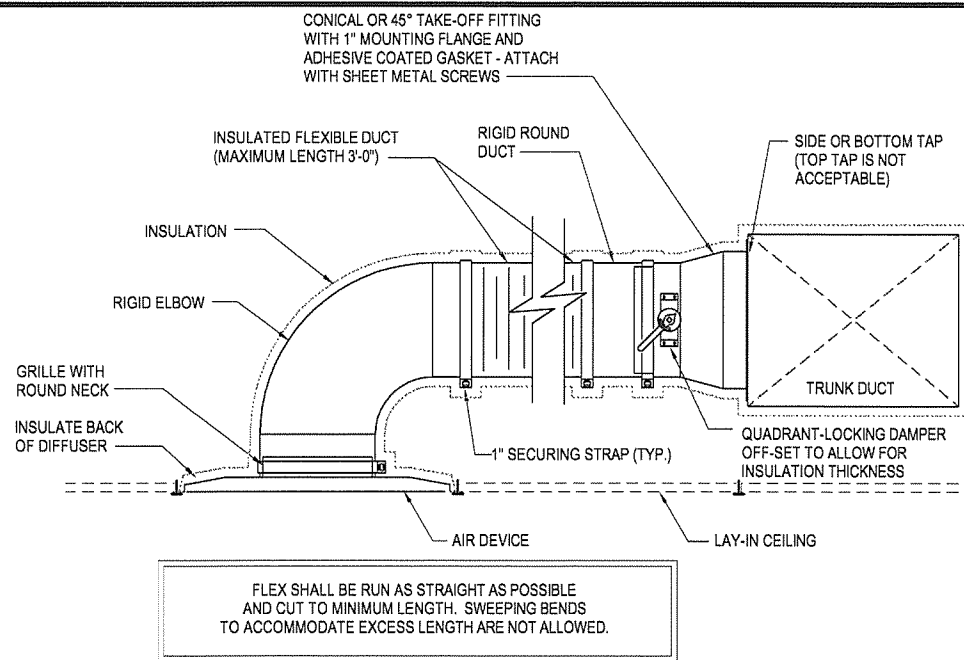


ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING

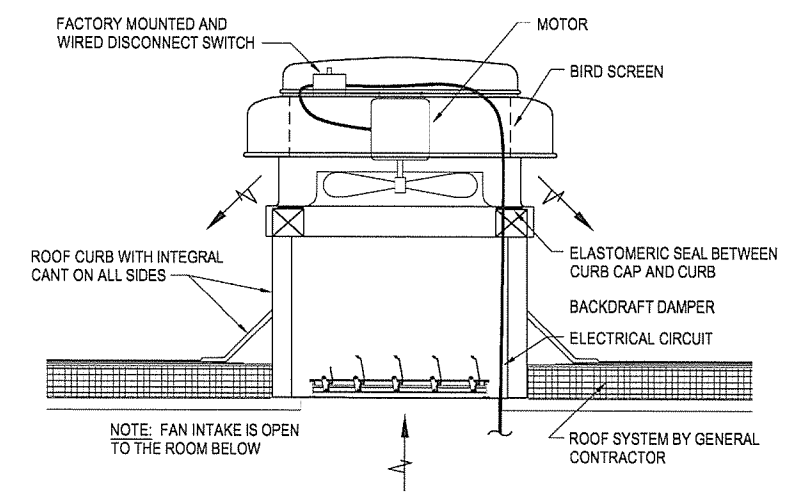


ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

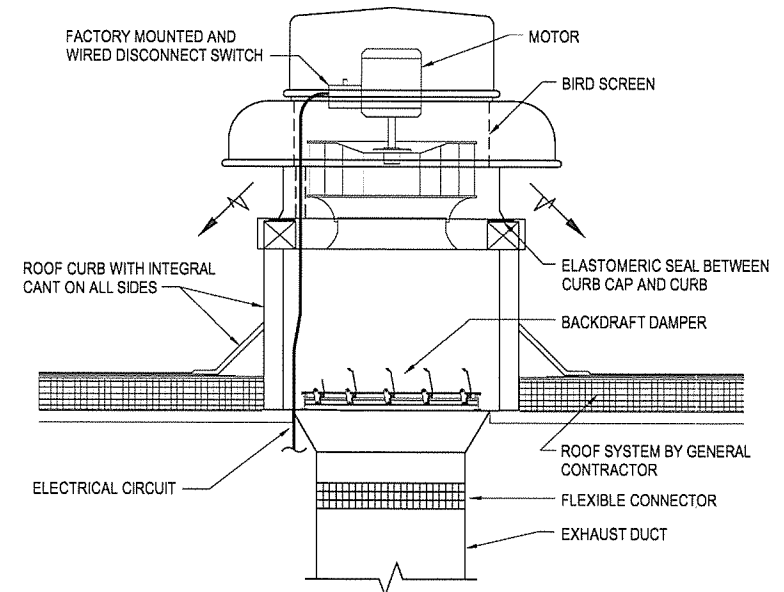
Issue Date: 27-JANUARY-2014 Project Number: 2012-102-20
 Drawing Title: **MECHANICAL PLAN**
 Drawing Number: **M-101**
 41 of 46



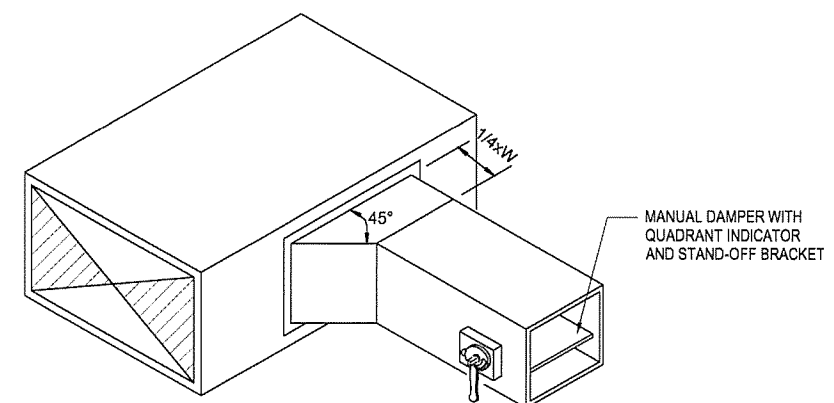
1 ROUND TAKE-OFF DUCT CONNECTION DETAIL
NO SCALE



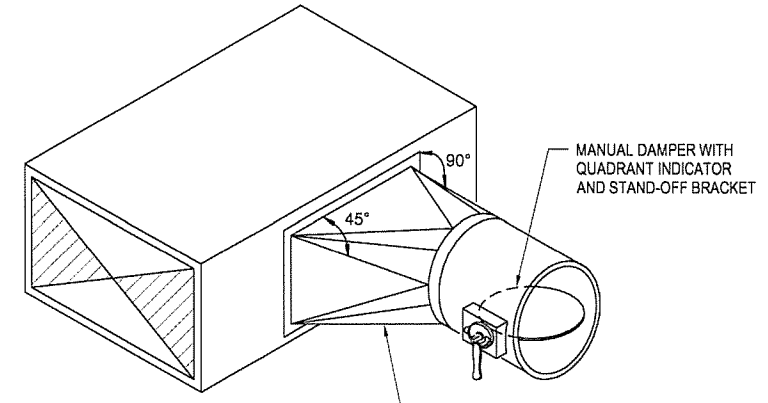
2 PROPELLER DOWNBLAST EXHAUST FAN DETAIL
NO SCALE



3 CENTRIFUGAL DOWNBLAST EXHAUST FAN DETAIL
NO SCALE

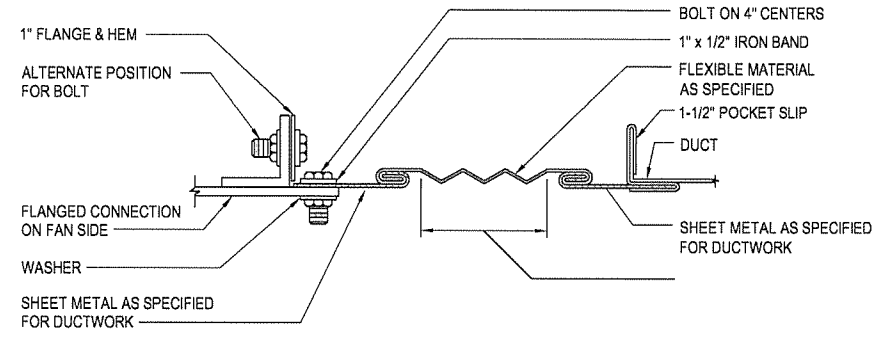


RECTANGULAR TO RECTANGULAR

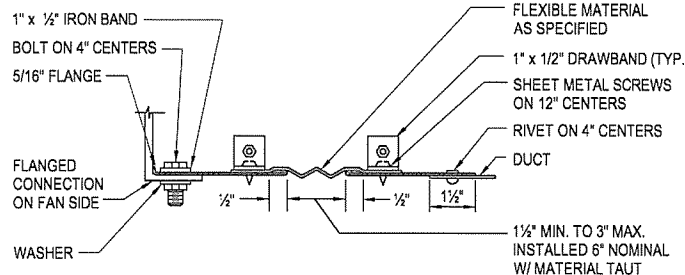


RECTANGULAR TO ROUND

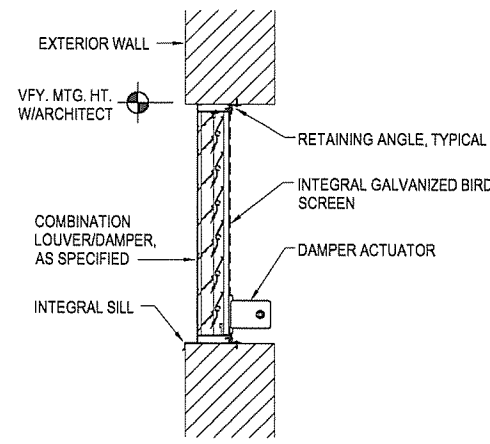
6 DUCT TAKE-OFF (SQUARE & ROUND) DUCT
NO SCALE



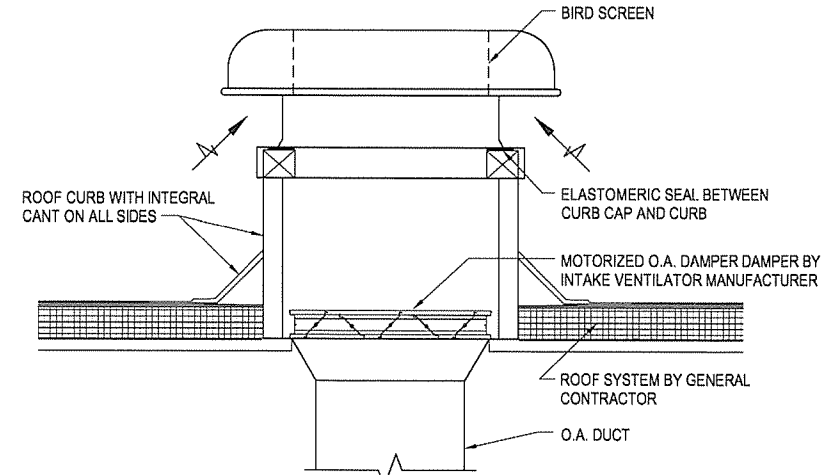
4 RECTANGULAR FLEXIBLE CONNECTION
NO SCALE



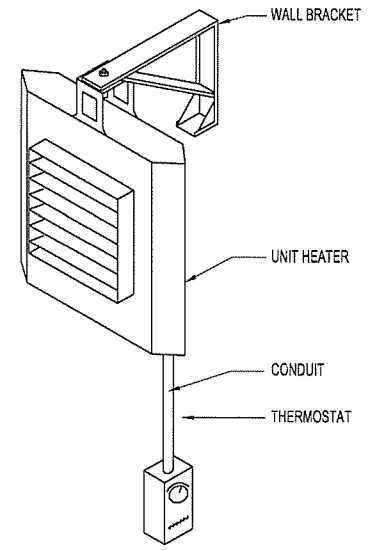
7 ROUND FLEXIBLE CONNECTION
NO SCALE



8 MOTORIZED LOUVER/DAMPER DETAIL
NO SCALE

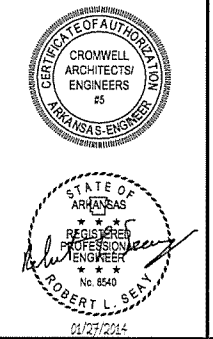


5 GRAVITY INTAKE VENTILATOR DETAIL
NO SCALE



9 ELECTRIC UNIT HEATER DETAIL
NO SCALE

| No. | Description | Date |
|-----|-------------|------|
| | | |



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20

Drawing Title
MECHANICAL DETAILS

Drawing Number
M-501
42 of 46

ELECTRICAL SYMBOLS

RECEPTACLES (MOUNTED 18" AFF UNLESS INDICATED OTHERWISE)

- DUPLEX RECEPTACLE OUTLET (20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 5-20R)
- DUPLEX RECEPTACLE OUTLET (20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 5-20R) MOUNT 4" ABOVE COUNTER TOP, SINK, OR BACKSPLASH (IF PRESENT).
- SINGLE RECEPTACLE OUTLET (20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 5-20R)
- FLOOR RECEPTACLE OUTLET (20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 5-20R)
- SINGLE RECEPTACLE OUTLET (20A, 250V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 6-20R)
- SINGLE RECEPTACLE OUTLET (30A, 250V, 2 POLE, 3 WIRE, GROUNDING TYPE, NEMA 6-30R)
- SINGLE SPECIAL-PURPOSE RECEPTACLE OUTLET; NUMBER CORRESPONDS TO THE SPECIAL-PURPOSE RECEPTACLE SCHEDULE.
- DUPLEX RECEPTACLE MOUNTED IN CEILING (20A, 125V, 2 POLE, 3 WIRE GROUNDING TYPE NEMA 5-20R)
- TWO (2) DUPLEX RECEPTACLES MOUNTED IN DOUBLE GANG BACKBOX (20A, 125V, 2 POLE, 3 WIRE GROUNDING TYPE NEMA 5-20R)
- TWO (2) DUPLEX RECEPTACLES FLOOR MOUNTED IN DOUBLE GANG BACKBOX (20A, 125V, 2 POLE, 3 WIRE GROUNDING TYPE NEMA 5-20R)

LIGHT FIXTURES

- LIGHT FIXTURE, FLUORESCENT, CEILING MOUNTED.
- LIGHT FIXTURE, FLUORESCENT, CEILING MOUNTED ON EMERGENCY CIRCUIT.
- LIGHT FIXTURE, FLUORESCENT, CEILING MOUNTED WITH EMERGENCY SELF CONTAINED BATTERY PACK. BATTERY PACK IS TO REMAIN UNSWITCHED.
- LIGHT FIXTURE, FLUORESCENT, WALL MOUNTED.
- LIGHT FIXTURE, FLUORESCENT, INDUSTRIAL STRIP, SURFACE OR PENDANT MOUNTED.
- LIGHT FIXTURE, INCANDESCENT, FLUORESCENT OR H.I.D., CEILING MOUNTED. (REFER TO FIXTURE SCHEDULE FOR TYPE).
- LIGHT FIXTURE, INCANDESCENT, FLUORESCENT OR H.I.D., WALL MOUNTED. (REFER TO FIXTURE SCHEDULE FOR TYPE).
- EMERGENCY BATTERY POWERED LIGHTING UNIT, WITH SELF CONTAINED BATTERY, CHARGER, ETC. (REFER TO FIXTURE SCHEDULE FOR BATTERY TYPE, VOLTAGE, LAMP TYPE, WATTAGE, ETC.) TRIANGLES DEPICT QUANTITY AND AIMING OF LAMP HEADS.
- EXIT SIGN, LIGHTED, CEILING MOUNTED. SHADED AREA INDICATES FACE. ARROW DEPICTS DIRECTIONAL ARROW ON SIGN. WHEN REQUIRED BY THE FIXTURE SCHEDULE, AN EMERGENCY SELF-CONTAINED BATTERY PACK IS TO REMAIN UNSWITCHED.
- EXIT SIGN, LIGHTED, WALL MOUNTED AT 7'-0" AFF UNLESS INDICATED OTHERWISE. WHEN REQUIRED BY THE FIXTURE SCHEDULE, AN EMERGENCY SELF-CONTAINED BATTERY PACK IS TO REMAIN UNSWITCHED.
- FLOOD LIGHT. ARROW INDICATES DIRECTION OF BEAM.
- DOCK LIGHT

LIGHT FIXTURE IDENTIFICATION

- LOWER CASE LETTER BESIDE FIXTURE DENOTES SWITCH CONTROL (WHERE APPLICABLE)
- UPPER CASE LETTER BESIDE EACH FIXTURE DENOTES FIXTURE TYPE.

SWITCHGEAR

- MAGNETIC MOTOR STARTER (FURNISHED BY DIVISION 15, UNLESS NOTED OTHERWISE)
- ELECTRICAL PANELBOARD, FLUSH MOUNTED
- ELECTRICAL PANELBOARD, SURFACE MOUNTED
- SAFETY SWITCH; 30A CURRENT RATING UNLESS NOTED OTHERWISE. +4'-0" TO HANDLE
- FUSIBLE SAFETY SWITCH; CURRENT RATING AND FUSE RATING NOTED. +4'-0" TO HANDLE.
- CIRCUIT BREAKER IN WALL MOUNTED ENCLOSURE
- ELECTRICAL TRANSFORMER. FLOOR MOUNTED UNLESS INDICATED OTHERWISE.

ELECTRICAL SYMBOLS

SWITCHES (MOUNTED AT 46", UNLESS INDICATED OTHERWISE)

- SWITCH, SINGLE POLE, 20A; LOWER CASE LETTER INDICATES DEVICES CONTROLLED.
- SWITCH, DOUBLE POLE, 20A SWITCH,
- 3-WAY, 20A SWITCH,
- 4-WAY, 20A SWITCH,
- SINGLE POLE MANUAL MOTOR STARTING SWITCH, WITH THERMAL OVERLOAD ELEMENT AND PROVISIONS FOR LOCKING OPEN
- SWITCH, DIMMING (ON FLUORESCENT FIXTURES, COORDINATE WITH BALLAST MANUFACTURER)
- LOW VOLTAGE WITH MOMENTARY CONTACTS SWITCH,
- OCCUPANCY SENSOR, COMBINATION ULTRASONIC SWITCH AND PASSIVE INFRARED
- OCCUPANCY SENSOR, CEILING MOUNTED, COMBINATION ULTRASONIC AND PASSIVE INFRARED
- MULTIPLE DEVICES LOCATED SIDE BY SIDE (OR ABOVE AND BELOW, IF DIFFERENT ELEVATIONS ARE SHOWN) AT THE LOCATION INDICATED).

SINGLE LINE

- CIRCUIT BREAKER, TRIP RATING AS INDICATED, 3 POLE OR AS INDICATED.
- DISCONNECT SWITCH OR LOAD INTERRUPTER SWITCH, CURRENT RATING AS INDICATED, 3 POLE OR AS INDICATED.
- SWITCH WITH GROUND FAULT INTERRUPTER
- FUSE, CURRENT RATING AND TYPE WHEN INDICATED.
- TRANSFORMER, DESCRIPTION AS NOTED OR PER SCHEDULE
- CURRENT TRANSFORMER
- WATT-HOUR METER
- GENERATOR
- MAGNETIC ALARM SWITCH
- MOTION DETECTOR
- CARD READER

ABBREVIATIONS:

- AFF = ABOVE FINISHED FLOOR
- AFL = ABOVE FINISHED LANDING
- GFI = GROUND FAULT INTERRUPTER
- IG = ISOLATED GROUND
- U/O = UNLESS INDICATED OTHERWISE
- WP = WEATHERPROOF CONSTRUCTION
- O/F/OI = OWNER FURNISHED / OWNER INSTALLED
- CF/CI = CONTRACTOR FURNISHED / CONTRACTOR INSTALLED

GENERAL SYMBOLS NOTES:

1. ALL SYMBOLS MAY NOT BE USED.
2. MOUNTING HEIGHTS ARE ABOVE FINISHED FLOOR OR GRADE TO THE CENTER LINE OF THE OUTLET, DEVICE, ETC. UNLESS INDICATED OTHERWISE.
3. LARGE AMPACITY CIRCUIT DESIGNATION EXAMPLE: "4 SETS OF 3#500, #250N, #1/0G, 4"C MEANS IN EACH OF FOUR 4" CONDUITS INSTALL THREE 500 KCM CONDUCTORS, ONE 250 KCM NEUTRAL AND ONE #1/0 GROUND.

ELECTRICAL SYMBOLS

TELEPHONE/COMMUNICATIONS/DATA (OUTLETS SHALL BE MOUNTED 18" AFF UNLESS INDICATED OTHERWISE)

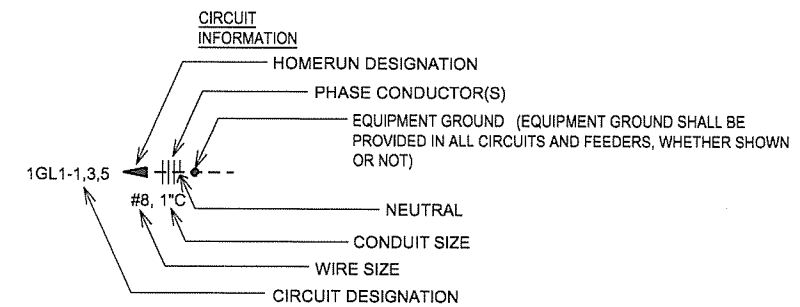
- COMBINATION VOICE/DATA OUTLET. OUTLET BOX WITH 3/4" C STUBBED ABOVE ACCESSIBLE CEILING SPACE AND PULL CORD.
- COMBINATION VOICE/DATA FLOOR OUTLET. OUTLET BOX WITH 3/4" C STUBBED ABOVE ACCESSIBLE CEILING SPACE AND PULL CORD.
- 4'-0" HIGH x 3/4" THICK VARNISHED PLYWOOD BACKBOARD. SEE PLANS FOR LENGTH.
- JUNCTION BOX. WALL MOUNT AS INDICATED. FINAL CONNECTION TO BE MADE BY ELECTRICAL CONTRACTOR.
- MOTOR
- 10' BARE #6 COILED & EXOTHERMICALLY WELDED TO COLUMN
- CONDUIT RUN, EXPOSED
- CONDUIT RUN, CONCEALED
- FLEXIBLE CONDUIT

MISCELLANEOUS

- FIRE ALARM CONTROL PANEL
- MANUAL PULL STATION - RED TRIM, MOUNTING HEIGHT PER NFPA 72
- SMOKE DETECTOR (P-PHOTOELECTRIC)
- HEAT DETECTOR ABOVE CEILING (RoR-RATE OF RISE)
- HORN STROBE - WALL MOUNTED, WHITE TRIM (CANDELA AS NOTED)
- STROBE - CEILING MOUNTED, WHITE TRIM (CANDELA AS NOTED)

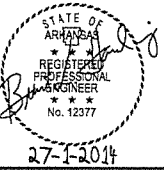
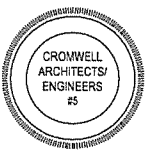
FIRE ALARM

- FIRE ALARM CONTROL PANEL
- MANUAL PULL STATION - RED TRIM, MOUNTING HEIGHT PER NFPA 72
- SMOKE DETECTOR (P-PHOTOELECTRIC)
- HEAT DETECTOR ABOVE CEILING (RoR-RATE OF RISE)
- HORN STROBE - WALL MOUNTED, WHITE TRIM (CANDELA AS NOTED)
- STROBE - CEILING MOUNTED, WHITE TRIM (CANDELA AS NOTED)



- CIRCUIT DESIGNATION INDICATES PANELBOARD AND CIRCUIT(S) TO WHICH HOMERUN IS CONNECTED.
- WIRE SIZE SHALL BE NO. 12, UNLESS INDICATED OTHERWISE.
- CONDUIT SIZE SHALL BE MINIMUM ALLOWED BY SPECIFICATIONS FOR NO. 12 SIZE WIRE, 3/4" FOR NO. 10, UNLESS INDICATED OTHERWISE.
- CIRCUIT INFORMATION PROVIDED AT THE HOMERUN SYMBOL SHALL APPLY THE ENTIRE LENGTH OF THE CIRCUIT (FROM PANELBOARD TO LAST LOAD).
- WHEN NO PHASE CONDUCTOR OR NEUTRAL IS INDICATED AT THE HOMERUN SYMBOL, PROVIDE ONE PHASE CONDUCTOR AND ONE NEUTRAL, BOTH NO. 12.
- SWITCHING CONDUCTORS, CONDUCTORS FOR NIGHT LIGHT CIRCUITS (UNSWITCHED), ETC. ARE NOT SHOWN, BUT SHALL BE PROVIDED AS NECESSARY.
- WIRE SIZE INDICATED ON THESE DOCUMENTS AS INDICATED BY "NO." OR "#" HAS THE SAME MEANING AS "AWG" (N.E.C. NOMENCLATURE). (i.e. "NO. 12" OR "#12" MEANS "12AWG" IN N.E.C. NOMENCLATURE.)

| Description | Date | No. |
|-------------|------|-----|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING



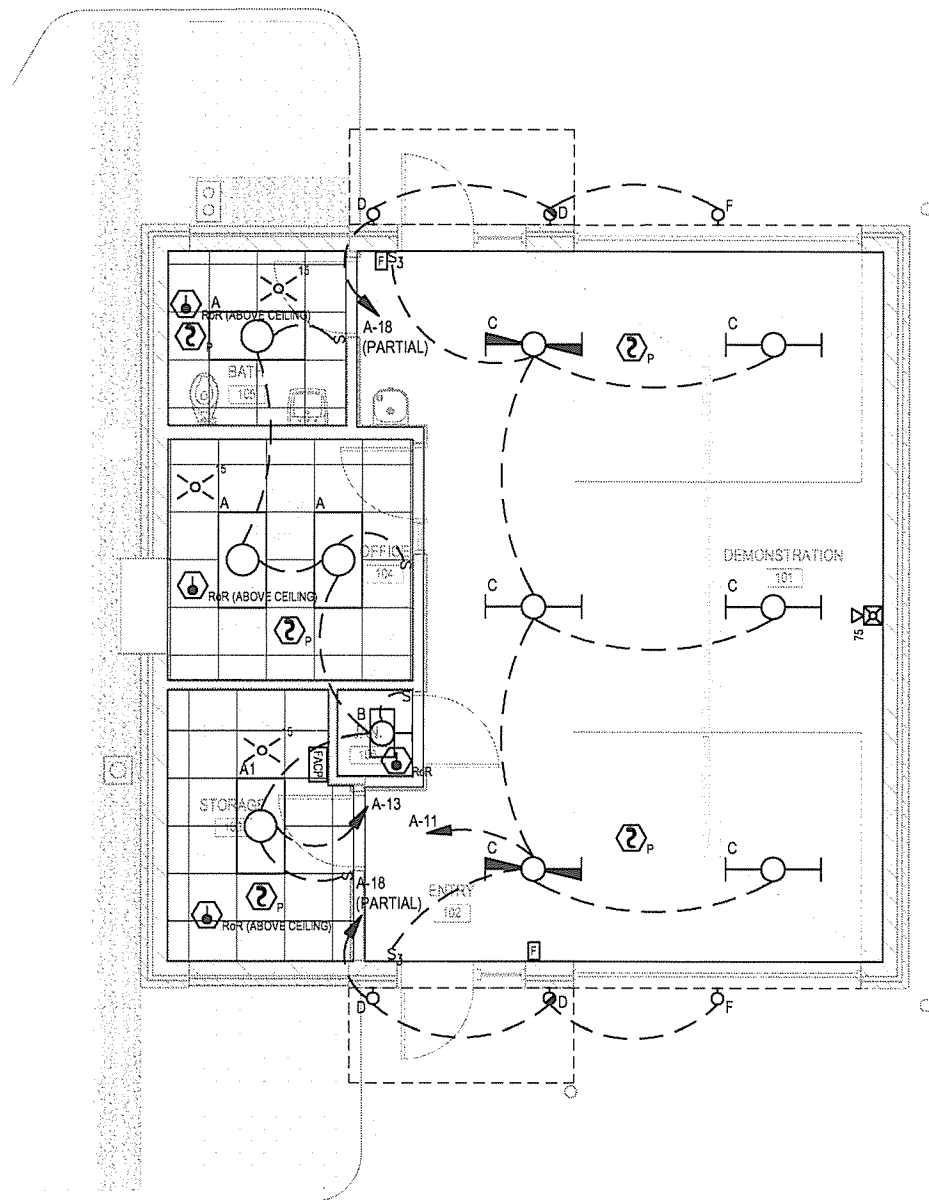
ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

Issue Date: 27-JANUARY-2014 Project Number: 2012-102_20
 Drawing Title:
ELECTRICAL LEGEND

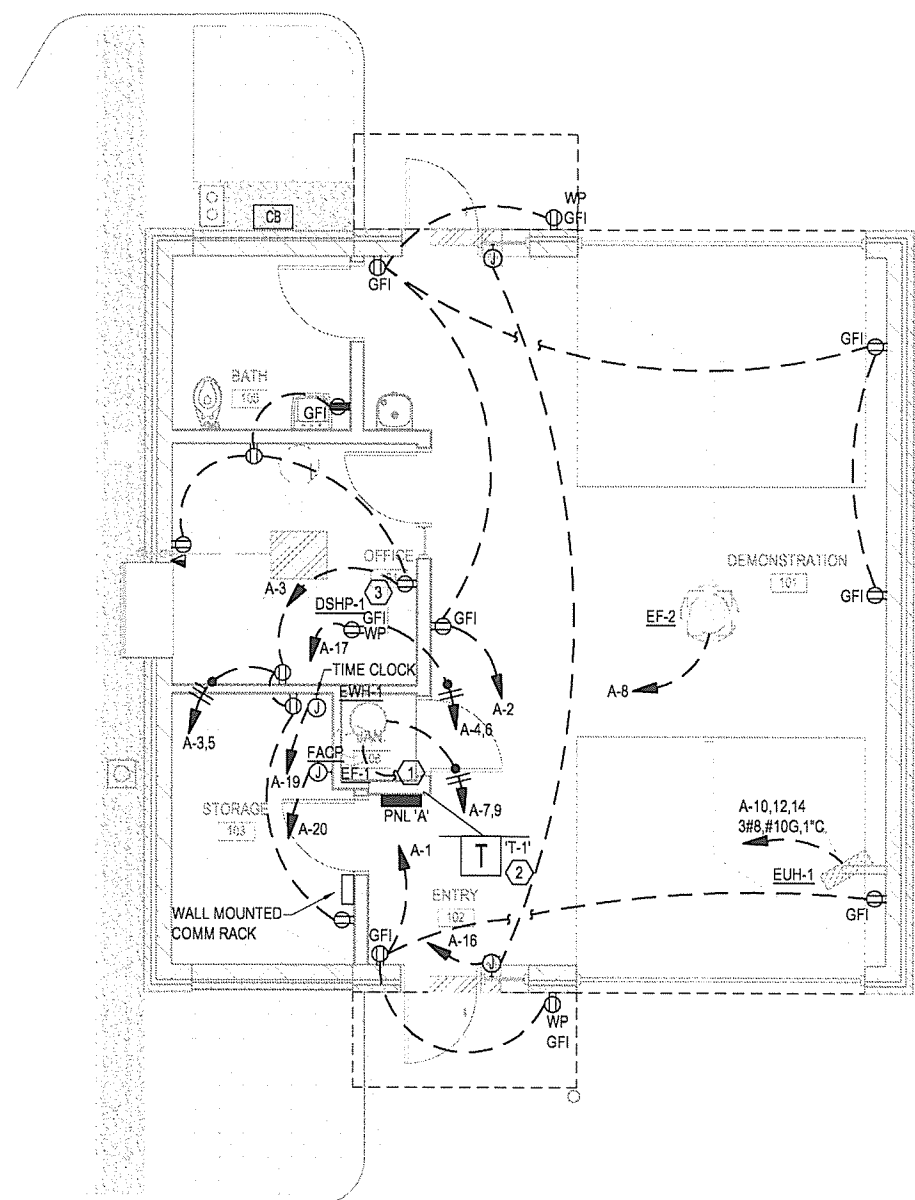
Drawing Number:
E-001
 43 of 46

ELECTRICAL PLAN - KEYED NOTES

- ① INTERLOCK WITH BATHROOM LIGHTING CIRCUIT
- ② MOUNT TRANSFORMER ABOVE PANEL. USE MANUFACTURER'S REQUIREMENTS FOR MOUNTING.
- ③ DSHP-1 IS LOCATED ON ROOF. COORDINATE WITH MECHANICAL. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. LOCATE WEATHERPROOF/GFI RECEPTACLE SHOWN ON A-17 WITHIN 25 FEET OF DSHP-1. COORDINATE ROUTING OF POWER FOR RECEPTACLE WITH POWER FOR DSHP-1 AND INDOOR UNIT (DSFC-1).



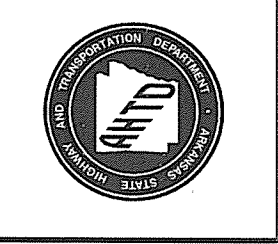
① LIGHTING PLAN
 1/4" = 1'-0"
 SCALE: 1/4" = 1'-0"
 PLAN NORTH



① POWER & SYSTEMS PLAN
 1/4" = 1'-0"
 SCALE: 1/4" = 1'-0"
 PLAN NORTH

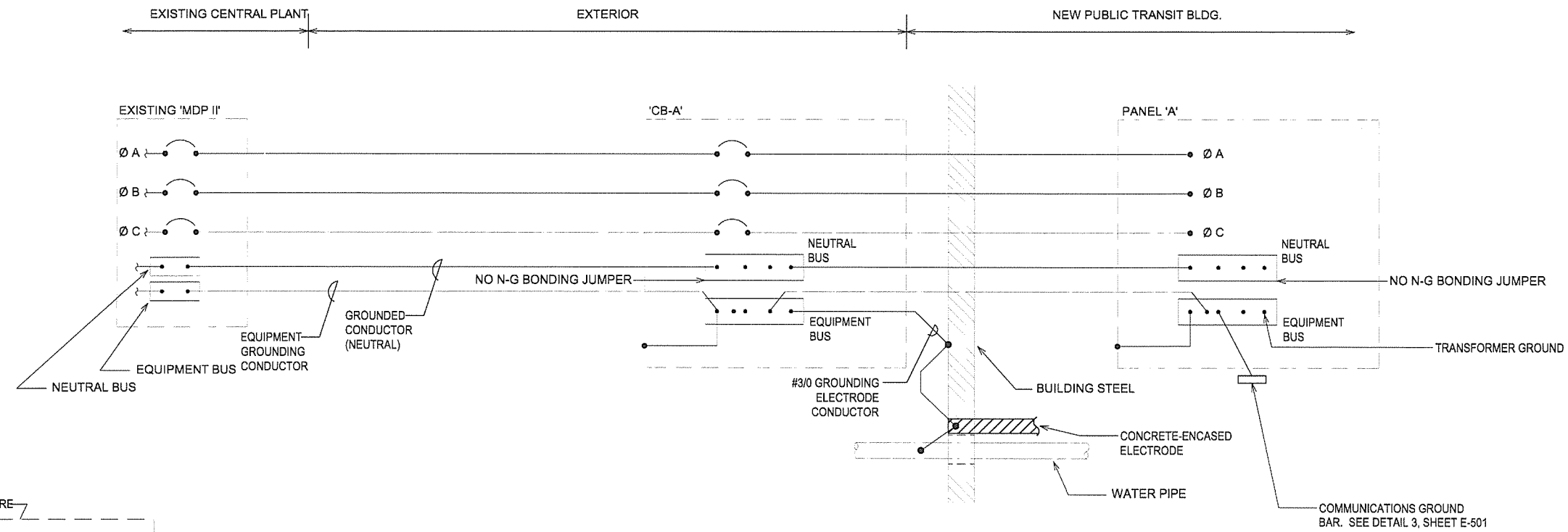
CROMWELL ARCHITECTS/ENGINEERS
 ARKANSAS ENGINEER
 No. 12377
 27-F-2014

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 PARKING LOT & DEMONSTRATION BUILDING

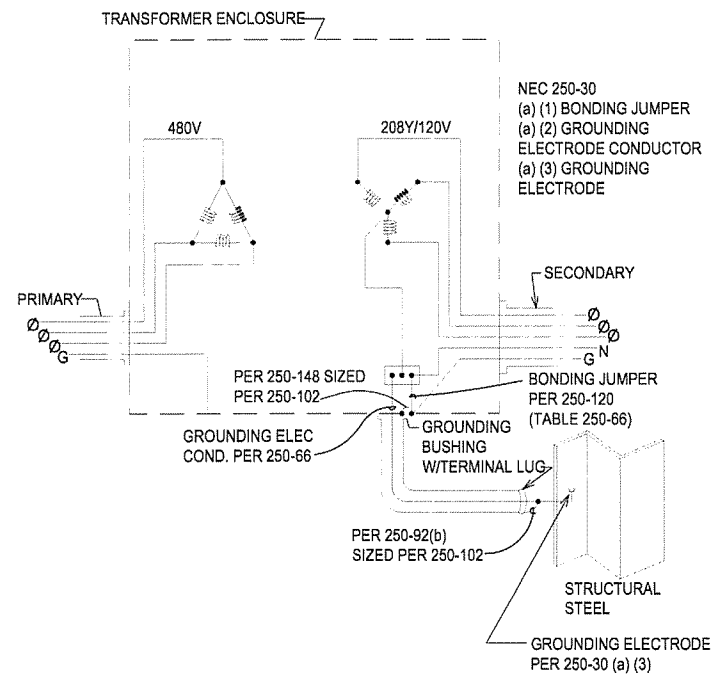


ARCHITECT OF RECORD
CROMWELL
 101 south spring street little rock, ar 72201
 501.372.2900 cromwell.com

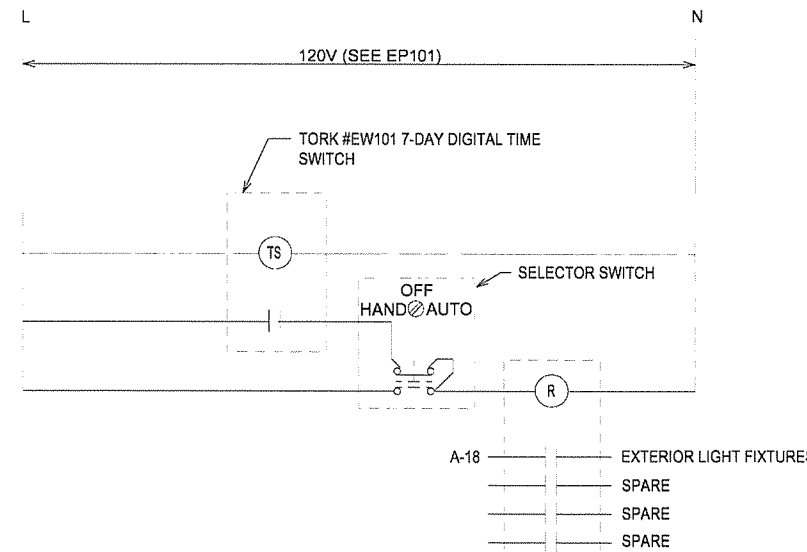
| | | | |
|-------------------------|-----------------|----------------|-------------|
| Issue Date | 27-JANUARY-2014 | Project Number | 2012-102-20 |
| Drawing Title | | | |
| ELECTRICAL PLANS | | | |
| Drawing Number | | | |
| E-101 | | | |
| 44 of 46 | | | |



1 OUTSIDE FEEDER GROUNDING
NOT TO SCALE

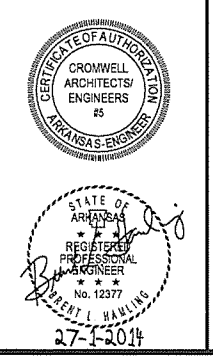


2 TYPICAL TRANSFORMER GROUNDING
NOT TO SCALE



4 TIME SWITCH 'TS1' SCHEMATIC DIAGRAM
NOT TO SCALE

| No. | Date | Description |
|-----|------|-------------|
| | | |
| | | |
| | | |



ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING



ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

| | |
|--|-------------------------------|
| Issue Date 27-JANUARY-2014 | Project Number 2012-102-20 |
| Drawing Title ELECTRICAL DETAILS | |
| Drawing Number E-501 45 of 46 | |

| PANEL | | MOUNTING SURFACE | | LOCATION | | MAIN BUS RATING | | | | | | | | | |
|--------------------------|-------|------------------|------|---------------------------------------|------------|-----------------|-------|----------------|-------|--------------------|-----------|------------------------|------|-------|-----------|
| A | | SURFACE | | 101 | | 225 AMPS | | | | | | | | | |
| MAIN | | POLES | | FRAME | | TRIP | | | | | | | | | |
| CB | | 1 | | 225 | | 175 | | | | | | | | | |
| VOLTAGE | | PHASE | | MINIMUM BREAKER INTERRUPTING CAPACITY | | | | | | | | | | | |
| 208Y/120 | | 3 | | 10 KAIC | | | | | | | | | | | |
| ACCESSORIES SN + EQP GND | | | | | | | | | | | | | | | |
| DEVICE | | BRANCH CIRCUIT | | | PHASE LOAD | | | BRANCH CIRCUIT | | | DEVICE | | | | |
| AMPS TRIP | POLES | TYPE | LOAD | DESCRIPTION | VOLT AMPS | NO | A | B | C | NO | VOLT AMPS | LOAD | TYPE | POLES | AMPS TRIP |
| 20 | 1 | R | | EXTERIOR RECPT, 101,102 | 540 | 1 | 1440 | | | 2 | 900 | EXTERIOR RECPT 101,102 | R | 1 | 20 |
| 20 | 1 | R | | RECEPTS 104,105 | 720 | 3 | | 1800 | | 4 | 1080 | DSHP-1 | H | 2 | 20 |
| 20 | 1 | R | | RECPTS 104,103 | 540 | 5 | | | 1620 | 6 | 1080 | | H | - | - |
| 20 | 2 | M | | EWI-1 | 1250 | 7 | 2426 | | | 8 | 1176 | EF-2 | H | 1 | 25 |
| - | - | M | | | 1250 | 9 | | 4983 | | 10 | 3733 | EUH-1 | H | 3 | 40 |
| 20 | 1 | L | | LIGHTS 101,102 | 546 | 11 | | | 4279 | 12 | 3733 | | H | - | - |
| 20 | 1 | L | | LIGHTS 103,104,105,106 | 283 | 13 | 4016 | | | 14 | 3733 | | H | - | - |
| 20 | 1 | | | SPARE | | 15 | | 400 | | 16 | 400 | MOTORIZED LOUVERS | H | 1 | 20 |
| 20 | 1 | R | | ROOF | 180 | 17 | | | 500 | 18 | 320 | EXTERIOR LIGHTING | L | 1 | 20 |
| 20 | 1 | M | | TIME CLOCK | 200 | 19 | 1400 | | | 20 | 1200 | FIRE ALARM PANEL | M | 1 | 20 |
| 20 | 1 | M | | GATE | 1200 | 21 | | 1200 | | 22 | | SPARE | | 1 | 20 |
| 45 | 3 | | | GRINDER PUMP | 2004 | 23 | | | 2004 | 24 | | SPARE | | 1 | 20 |
| - | - | | | | 2004 | 25 | 2004 | | | 26 | | SPARE | | 1 | 20 |
| - | - | | | | 2004 | 27 | | 2004 | | 28 | | SPARE | | 1 | 20 |
| 45 | 3 | | | GRINDER PUMP | 2004 | 29 | | | 2004 | 30 | | SPARE | | 1 | 20 |
| - | - | | | | 2004 | 31 | 2004 | | | 32 | | SPACE | | 1 | 20 |
| - | - | | | | 2004 | 33 | | 2004 | | 34 | | SPACE | | 1 | 20 |
| 20 | 1 | | | SPACE | | 35 | | | | 36 | | SPACE | | 1 | 20 |
| 20 | 1 | | | SPACE | | 37 | | | | 38 | | SPACE | | 1 | 20 |
| 20 | 1 | | | SPACE | | 39 | | | | 40 | | SPACE | | 1 | 20 |
| 20 | 1 | | | SPACE | | 41 | | | | 42 | | SPACE | | 1 | 20 |
| TOTAL | | | | | | | 13290 | 12391 | 10407 | 36 KVA (CONNECTED) | | 100 AMPS (CONNECTED) | | | |
| | | | | | | | | | | 24 KVA (DEMAND) | | 67 AMPS (DEMAND) | | | |

LEGEND

MAIN
CB = CIRCUIT BREAKER
LO = LUGS ONLY

BRANCH CIRCUIT BREAKER TYPE
A = ARC FAULT CIRCUIT INTERRUPTER
G = GROUND FAULT CIRCUIT INTERRUPTER
S = SHUNT TRIP
V = VARIABLE (ADJUSTABLE TRIP)
E = EQUIPMENT GROUND FAULT PROTECTION

LOAD TYPE
L = LIGHTING
R = RECEPTACLE
H = HVAC
M = MISCELLANEOUS
V = VARIOUS

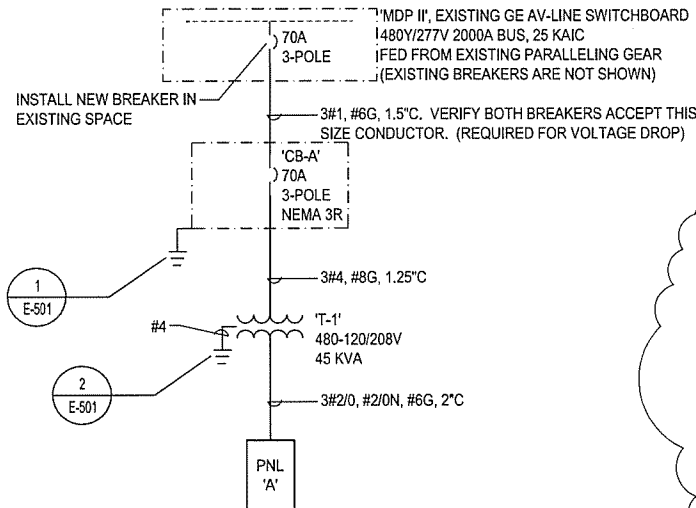
MISCELLANEOUS
SN = SOLID NEUTRAL
EQP GND = EQUIPMENT GROUND BUS
IG = INSULATED GROUND BUS
SPD = SURGE PROTECTIVE DEVICE

LIGHTING FIXTURE SCHEDULE

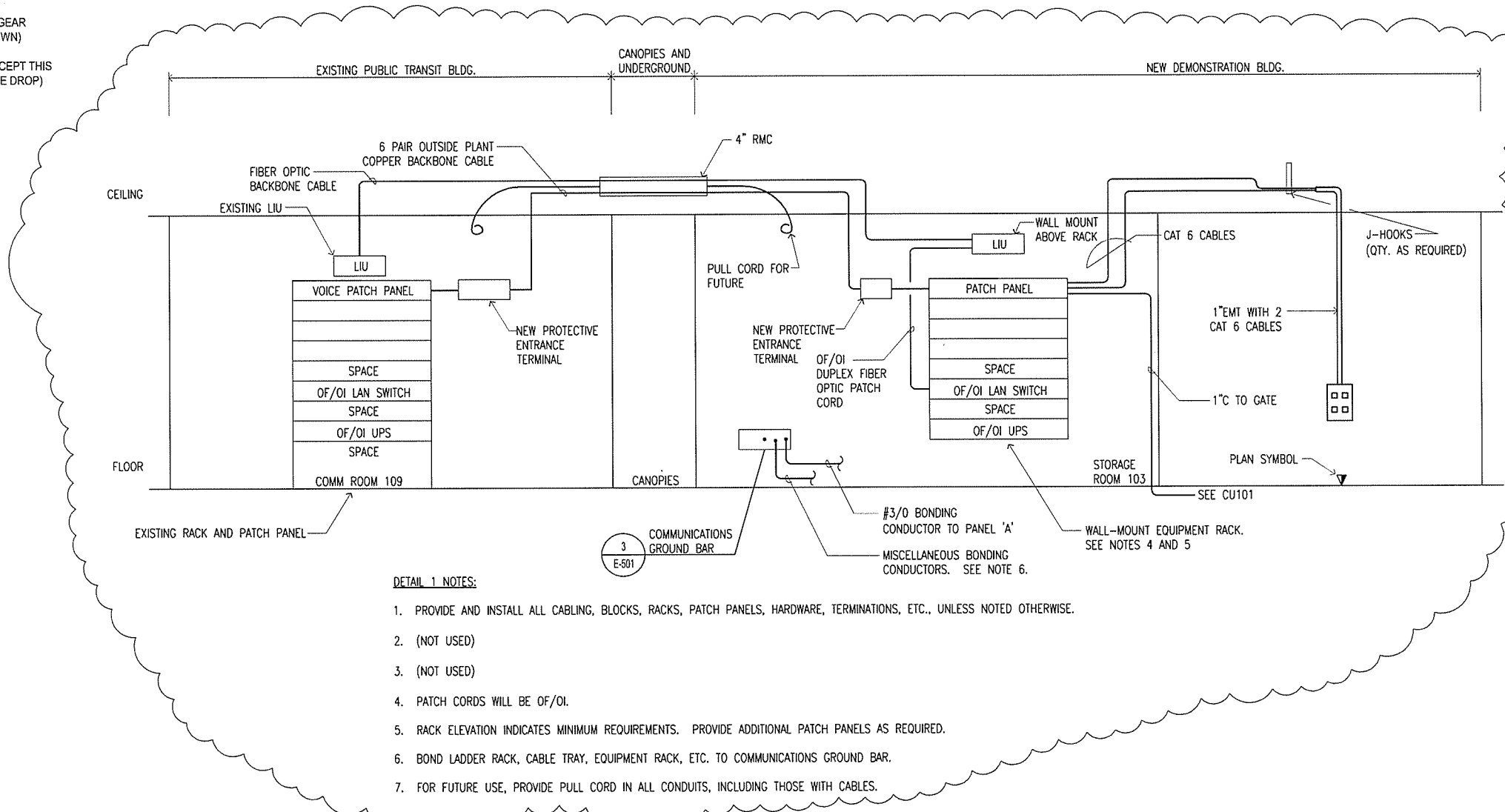
| TYPE | MANUFACTURER | CATALOG NUMBER | VOLTS | LAMPS | DESCRIPTION | NOTES |
|------|--------------|---------------------------------|-------|----------|---|-------|
| A | METALUX | 2GC8-232A125-UNV-ER81-PAF-U | 120 | 2-32WT8 | 2X4 RECESSED LENSED PRISMATIC TROFFER | |
| A1 | METALUX | 2EP3GX-432S481-PAF-U | 120 | 4-32WT8 | 2X4 RECESSED LENSED PRISMATIC TROFFER | |
| B | METALUX | BE-117-UNV-EB81 | 120 | 1-F17T8 | 2' LOW PROFILE WALL BRACKET MOUNTED AT 7'-6" AFF | |
| C | METALUX | 4VT3-332DR-UNV-EL-B50-ER81-WL-U | 120 | 3-32WT8 | 1X4 INDUSTRIAL STRIP CHAIN OR CABLE HUNG AT 12'-0" AFF W REMOTE BATTERY BACK UP | |
| D | TMS LIGHTING | P6U-2x CF32W PL-T-120V-F??-TGL6 | 120 | 1-32WCFL | WALL MOUNTED DIRECT/INDIRECT SCONCE | |
| F | TMS LIGHTING | P8W-CF32W-PLT-120V-F??-BGL8 | 120 | 1-32WCFL | WALL MOUNTED SCONCE | |

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

1. PROVIDE FLANGE KITS AND ACCESSORIES AS REQUIRED.
2. PROVIDE EMERGENCY BATTERY PACK, INTEGRAL TEST SWITCH, AND ACCESSORIES WHERE BATTERY PACK IS INDICATED ON PLANS.



1 ELECTRICAL SINGLE-LINE DIAGRAM
N.T.S



DETAIL 1 NOTES:

1. PROVIDE AND INSTALL ALL CABLING, BLOCKS, RACKS, PATCH PANELS, HARDWARE, TERMINATIONS, ETC., UNLESS NOTED OTHERWISE.
2. (NOT USED)
3. (NOT USED)
4. PATCH CORDS WILL BE OF/OI.
5. RACK ELEVATION INDICATES MINIMUM REQUIREMENTS. PROVIDE ADDITIONAL PATCH PANELS AS REQUIRED.
6. BOND LADDER RACK, CABLE TRAY, EQUIPMENT RACK, ETC. TO COMMUNICATIONS GROUND BAR.
7. FOR FUTURE USE, PROVIDE PULL CORD IN ALL CONDUITS, INCLUDING THOSE WITH CABLES.

2 TELEPHONE/DATA SCHEMATIC
NOT TO SCALE

1 04-07-2014 ADDENDUM 001 Description

1 04-07-2014 Date

1 No.

27-1-2014

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
PARKING LOT & DEMONSTRATION BUILDING

ARCHITECT OF RECORD
CROMWELL
101 south spring street little rock, ar 72201
501.372.2900 cromwell.com

Issue Date 27-JANUARY-2014 Project Number 2012-102_20
Drawing Title **SINGLE-LINE DIAGRAM & SCHEDULES**
Drawing Number **E-601**
46 of 46