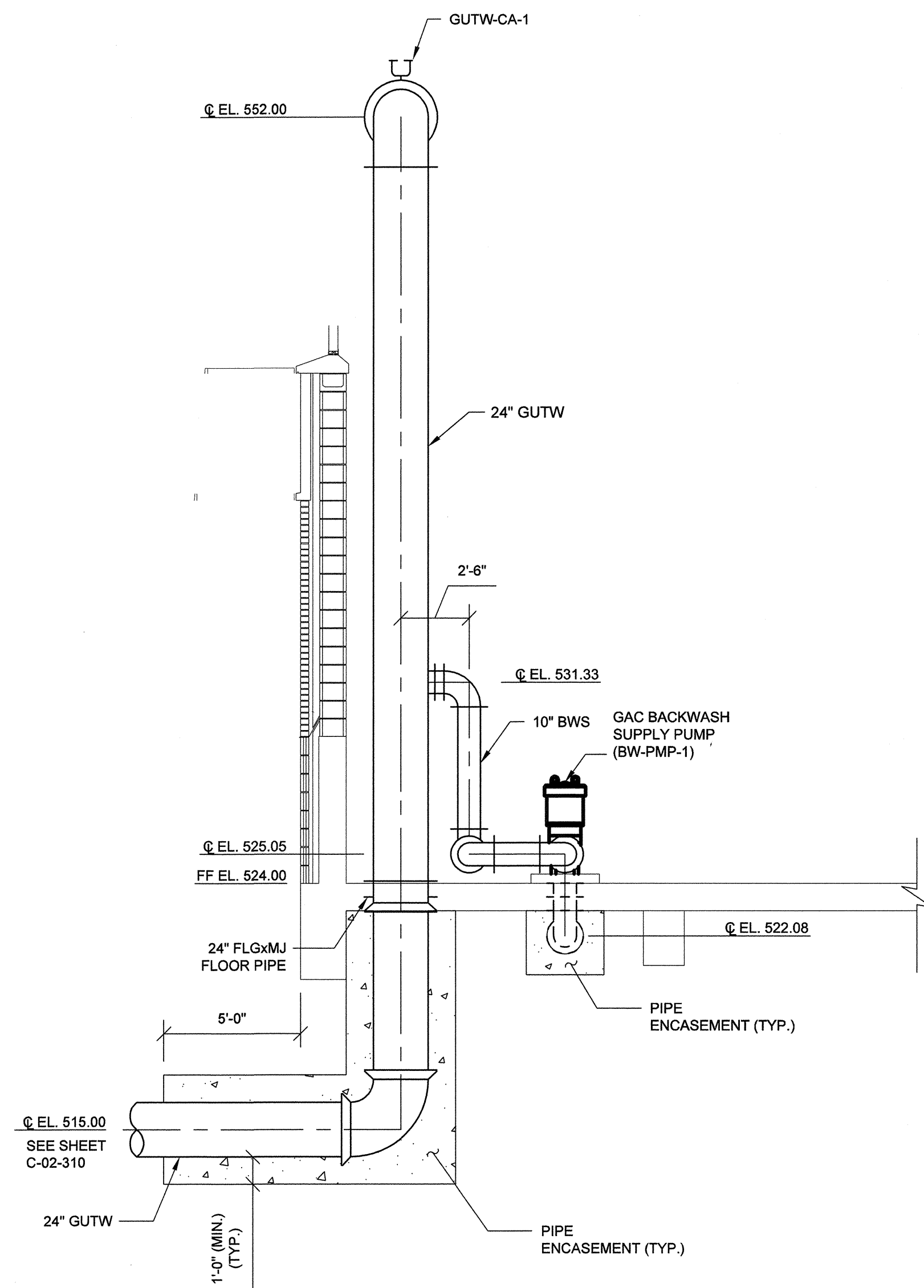
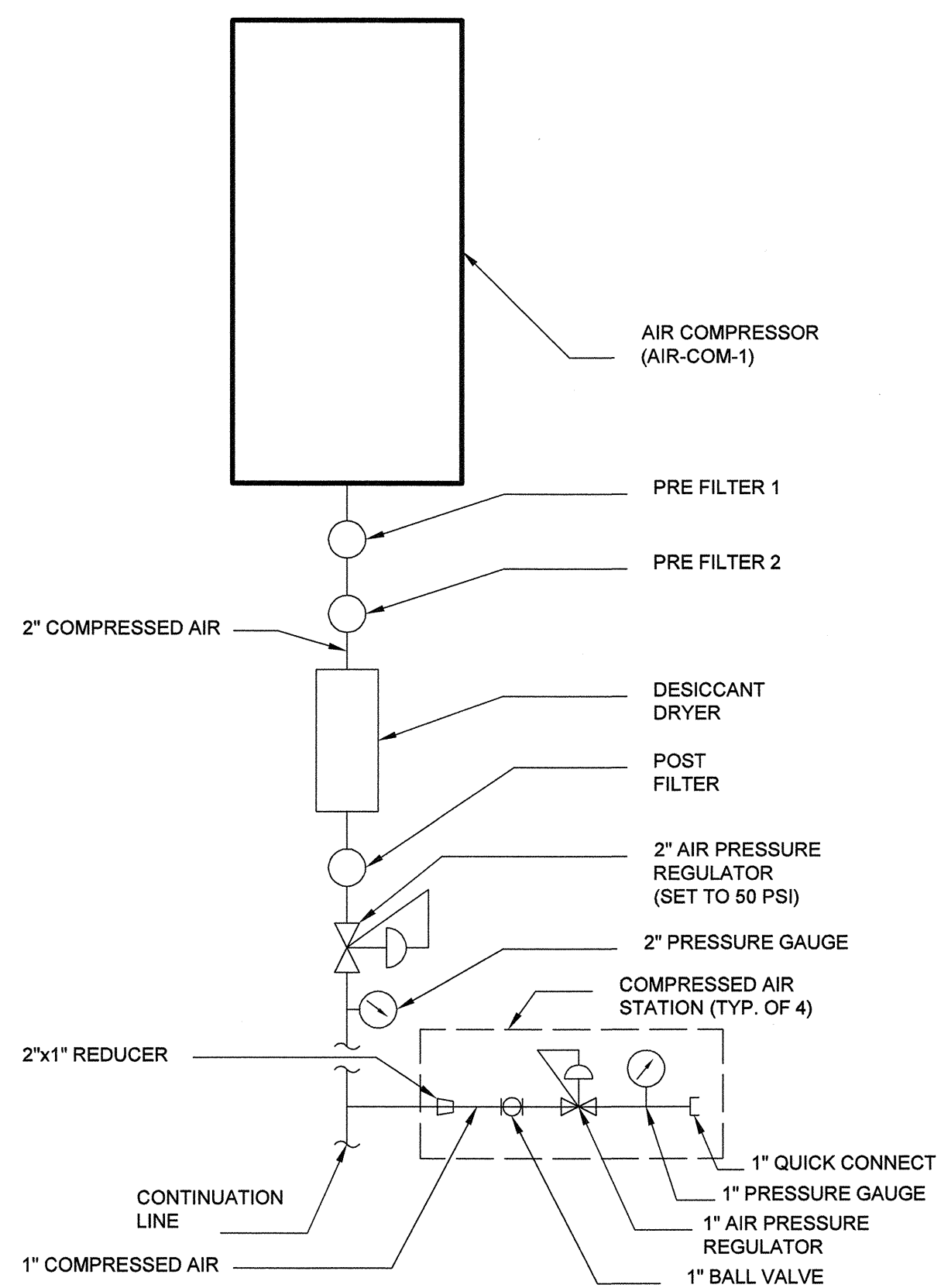
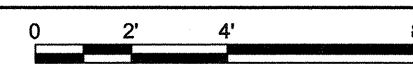


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1 PT / GAC BUILDING SECTION
SCALE: 1/4"=1'-0"

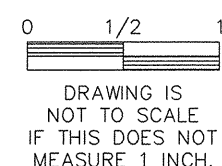


1 COMPRESSED AIR SYSTEM SCHEMATIC - PLAN
NOT TO SCALE

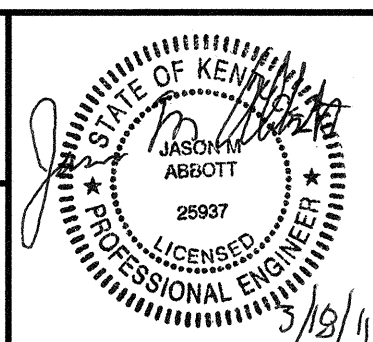
NOTE:
CONTRACTOR SHALL COORDINATE WITH AIR COMPRESSOR MANUFACTURER AND IN ACCORDANCE WITH SPECIFICATION 15483. CONTRACTOR SHALL PROVIDE AIR HOSE, HOSE RACK, AND SHELVING FOR EACH COMPRESSED AIR STATION PER SPECIFICATION 15483. PROVIDE EQUIPMENT PAD FOR AIR COMPRESSOR PER SHEET S-00-501. PROVIDE MANUAL CONDENSATE DRAIN AT LOW AREAS IN PIPING SYSTEM. FIELD ROUTE PIPING SYSTEM AS NECESSARY. CONTRACTOR SHALL VERIFY CONNECTION SIZE WITH SELECTED GAC PRESSURE VESSEL MANUFACTURER AND GAC SUPPLIER.

GENERAL NOTES:

- ALL PIPE HANGERS AND SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL PROVIDE ALL HANGERS AND SUPPORTS IN ACCORDANCE WITH SPECIFICATION 15055.



DRAWING IS NOT TO SCALE. IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JHC
DWN PJW
CKD CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
PT / GAC BUILDING
GAC SECTIONS III
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-06-307
CAD REF. NO.: M-06-307

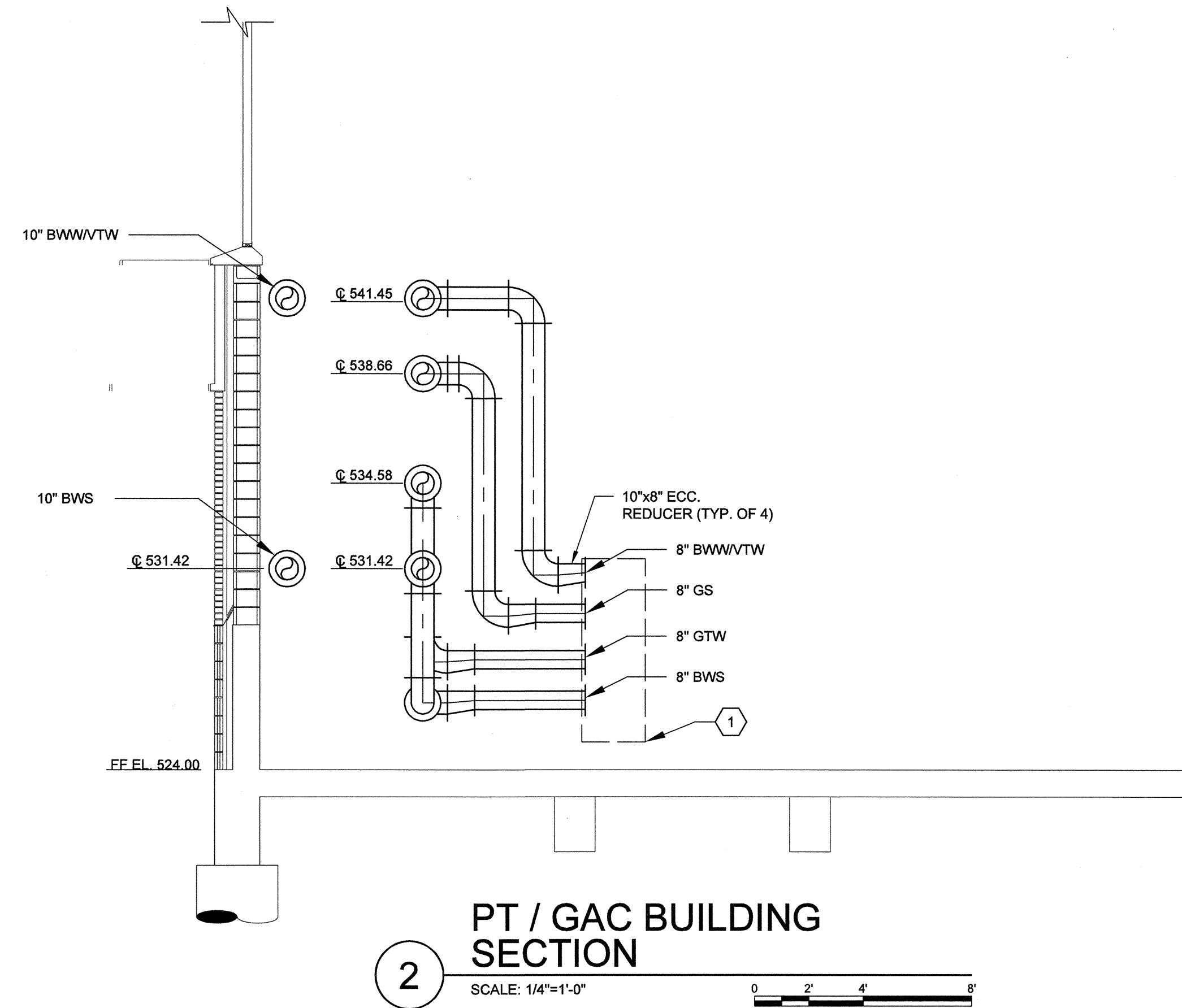
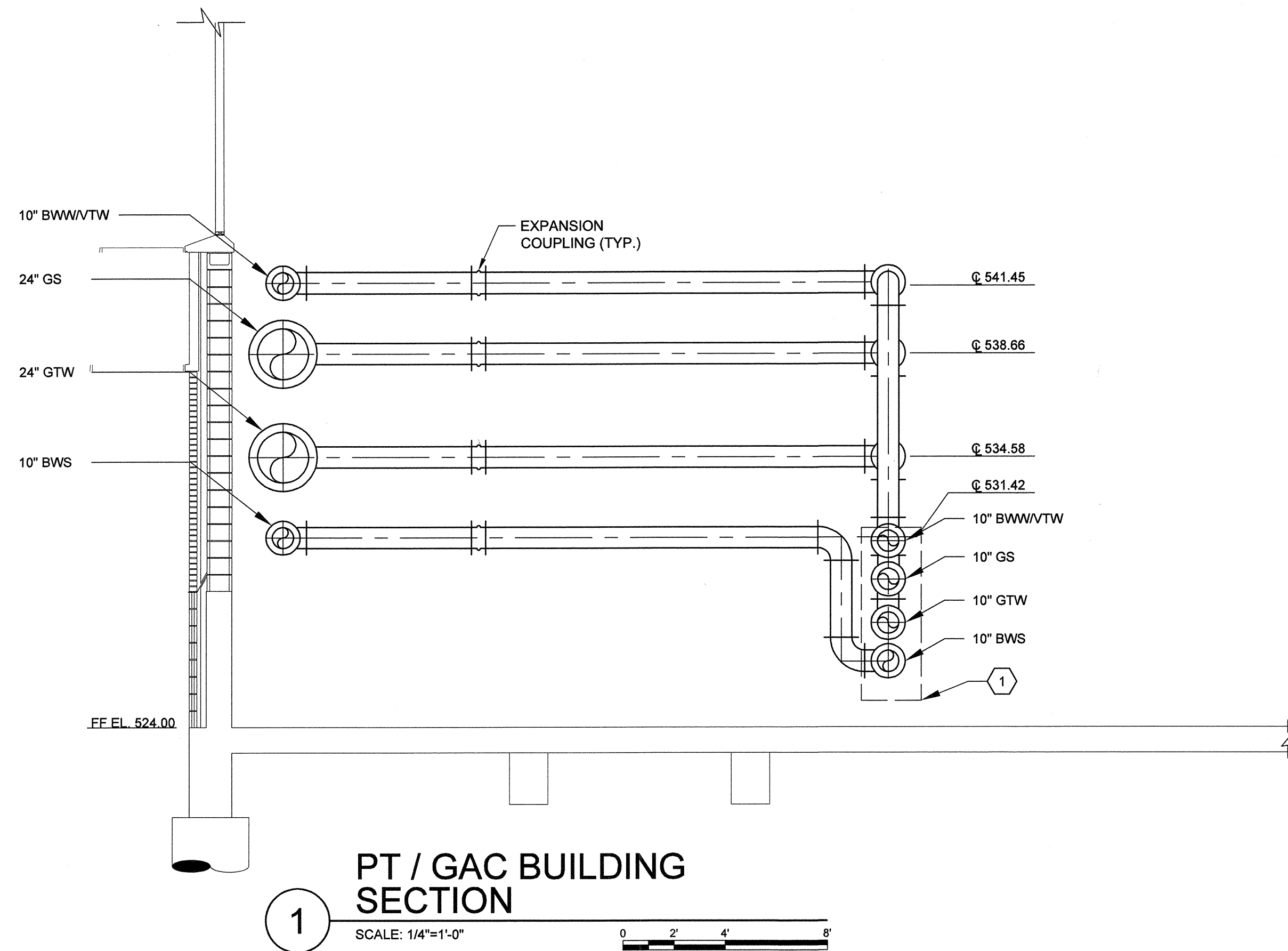


TABLE 1:
APPROXIMATE 10" CENTERLINE ELEVATIONS

CENTERLINE ELEVATION	OPTION 1 (CALGON PRESSURE VESSEL)	OPTION 2 (SIEMENS PRESSURE VESSEL)
BWW/VTW	531.27	532.13
GS	529.76	530.29
GTW	528.06	528.25
BWS	526.55	526.21

SHEET KEYNOTES:

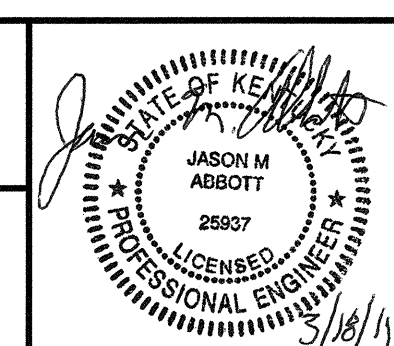
1. CENTERLINE ELEVATIONS OF 8" AND 10" LINES SHALL BE VERIFIED AND COORDINATED WITH SELECTED GAC PRESSURE VESSEL MANUFACTURER.

GENERAL NOTES:

- ALL PIPE HANGERS AND SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL PROVIDE ALL HANGERS AND SUPPORTS IN ACCORDANCE WITH SPECIFICATION 15055.
- PROVIDE EXPANSION COUPLINGS AT OR NEAR EXPANSION JOINTS IN BUILDING. GENERAL LOCATIONS SHOWN. SHALL NOT INTERFERE WITH FABRICATED PIPE RACK LOCATIONS.

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

User:WELLS Spec:PIRNE STANDARD File:G:\4775012\29-CADD\MECH-HPIM-96-308.DWG Scale:1:1 SavedDate:3/21/2011 Time:08:34 Plot Date: Wells_Pauli_3/21/2011_08:35 Layout: M-06-308



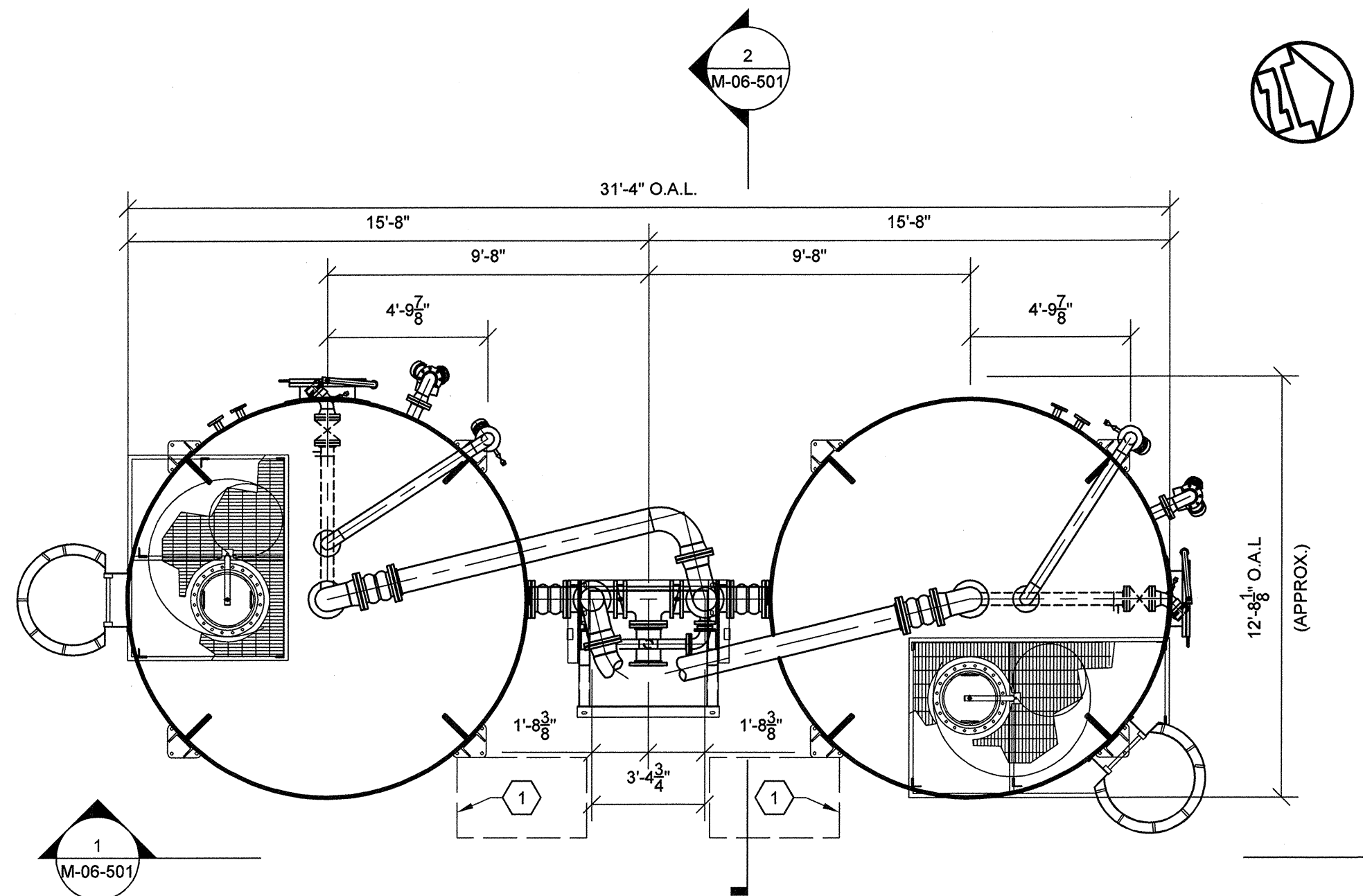
REVISIONS			
NO.	BY	DATE	REMARKS

DES JHC
OWN PJW
CKD CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
PT / GAC BUILDING
GAC SECTIONS IV
SCALE: 1/4" = 1'-0"

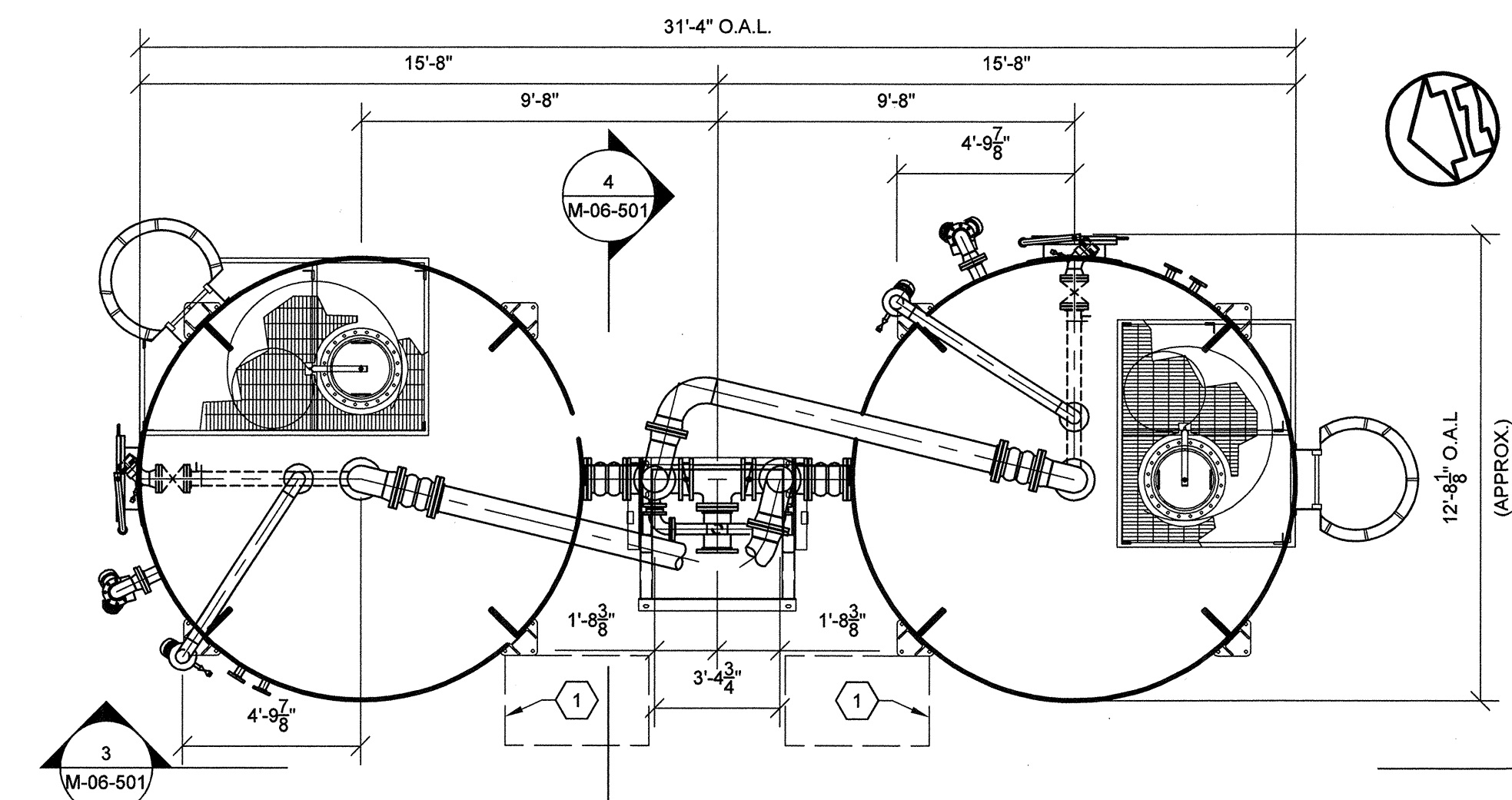
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-06-308
CAD REF. NO.: M-06-308



1 GAC PRESSURE VESSEL SYSTEM PLAN
NOT TO SCALE

PLAN 1 NOTES:

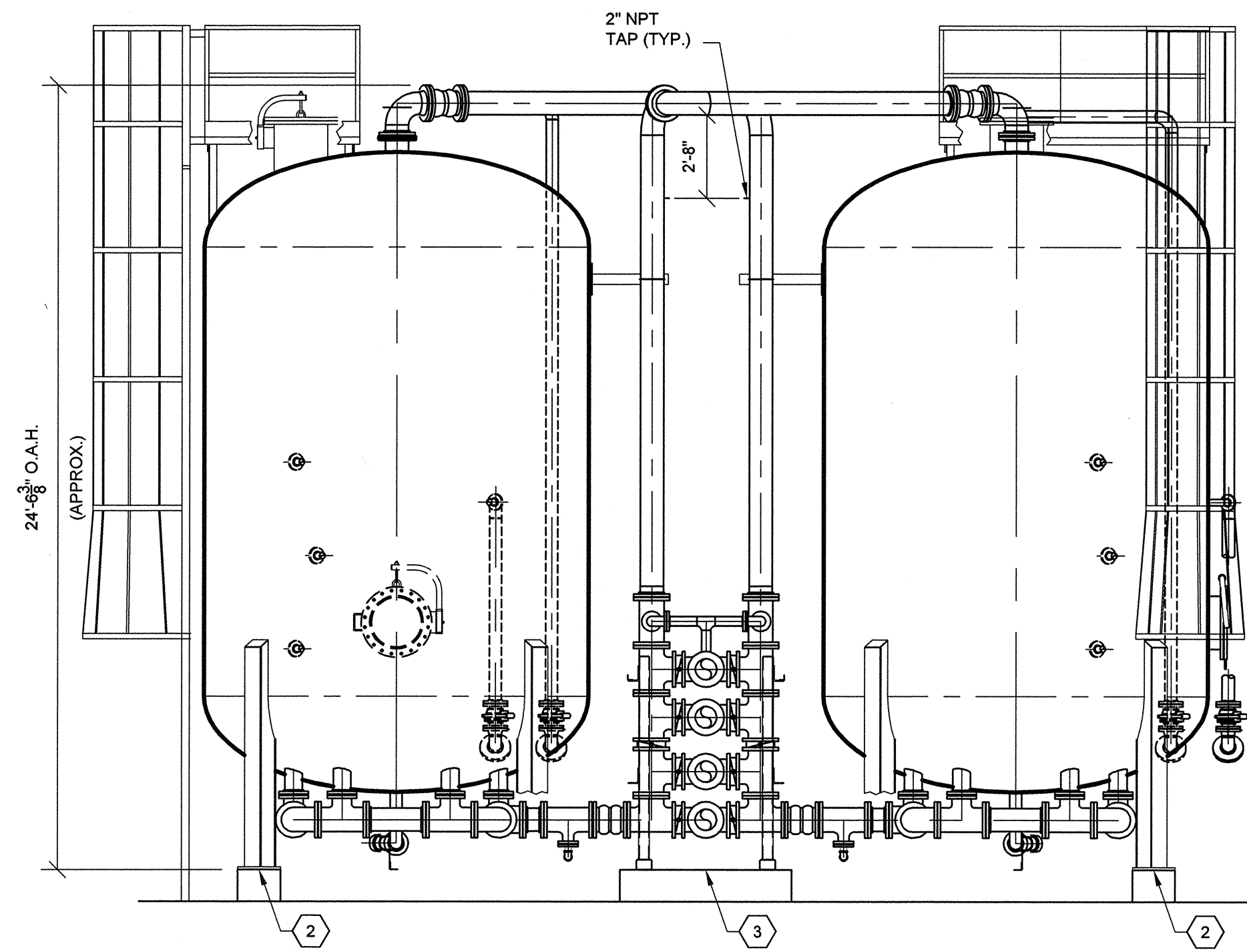
1. TYPICAL FOR VESSEL PAIRS PV-4N/PV-4S AND PV-6N/PV-6S.
2. LADDER AND PLATFORM FOR VESSEL PAIR PV-2N/PV-2S SHALL MATCH PLAN AS SHOWN ON SHEET M-06-102.
3. O.A.L. = OVERALL APPROXIMATE LENGTH.



2 GAC PRESSURE VESSEL SYSTEM PLAN
NOT TO SCALE

PLAN 2 NOTES:

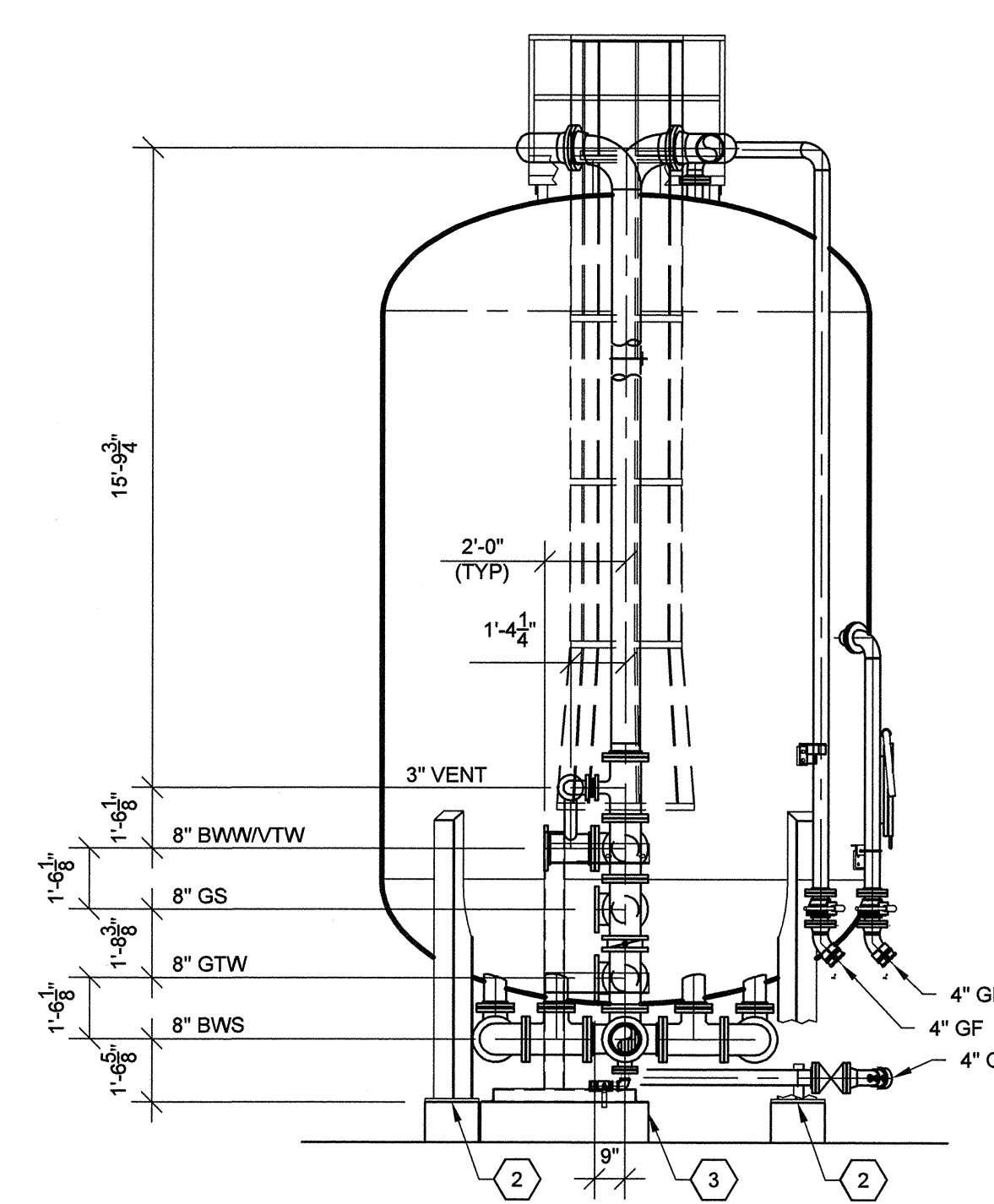
1. TYPICAL FOR VESSEL PAIRS PV-3N/PV-3S, PV-5N/PV-5S, AND PV-7N/PV-7S.
2. LADDER AND PLATFORM FOR VESSEL PAIR PV-1N/PV-1S SHALL MATCH PLAN AS SHOWN ON SHEET M-06-102.
3. O.A.L. = OVERALL APPROXIMATE LENGTH.



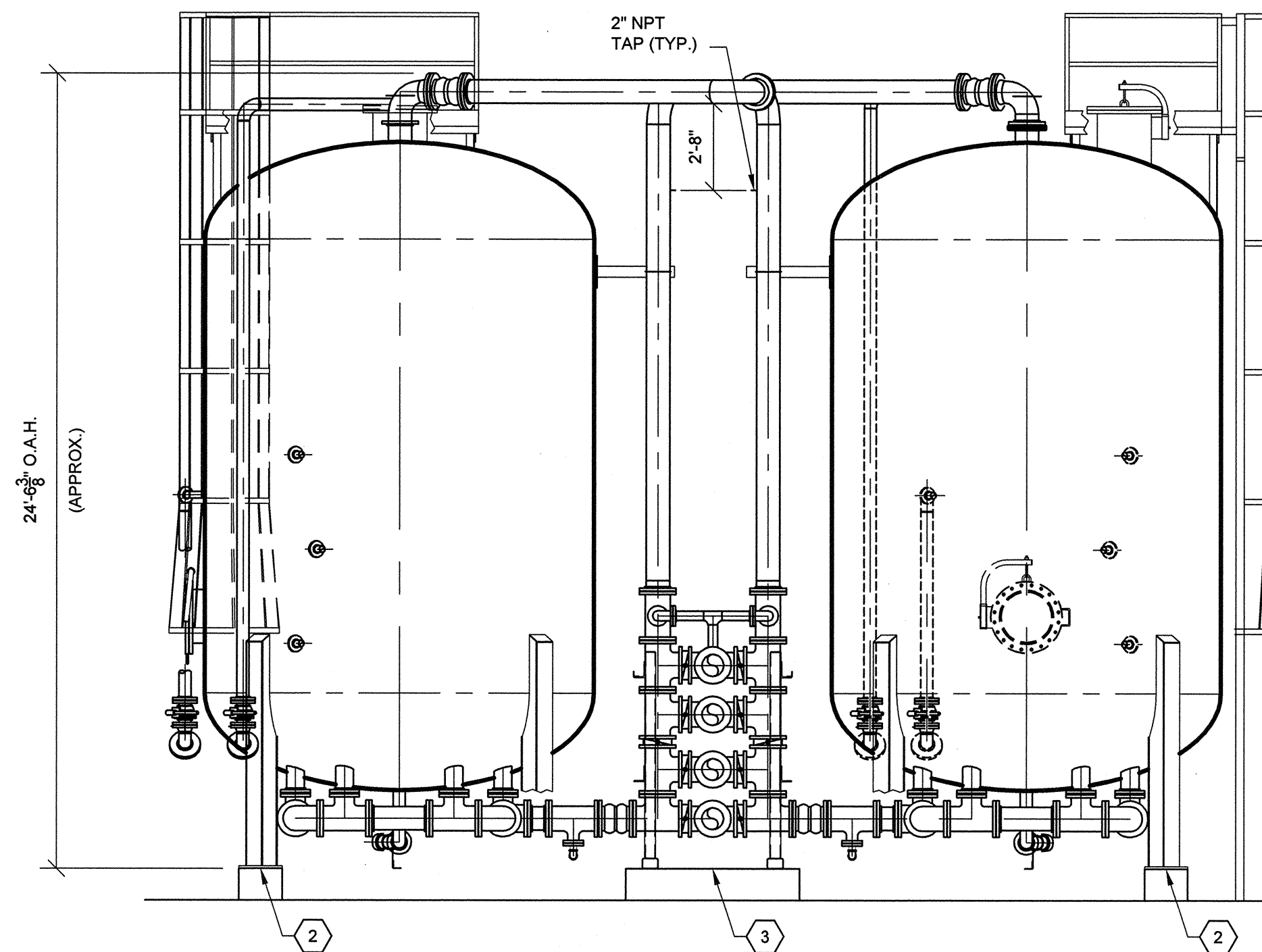
1 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE

SECTIONS NOTE:

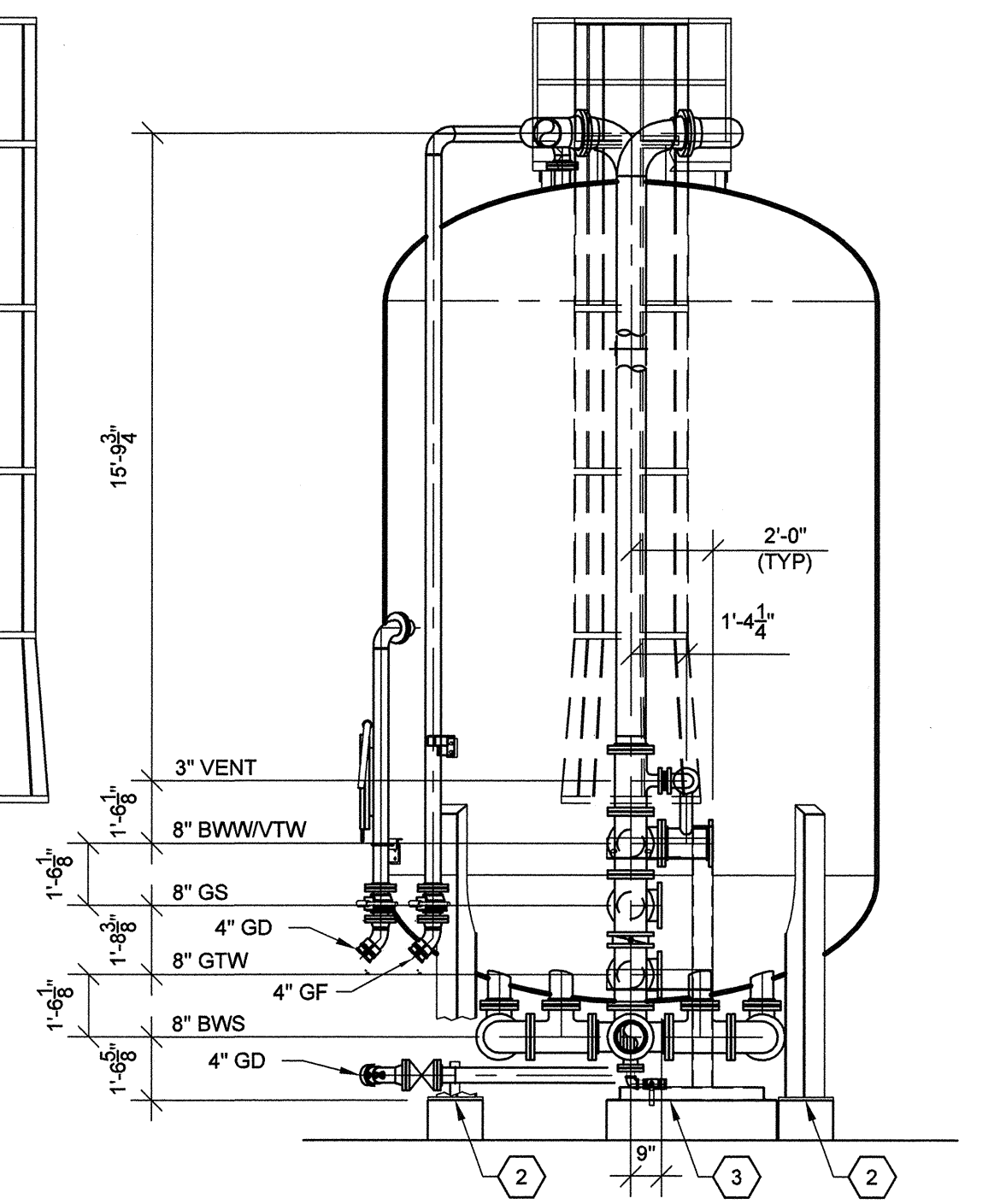
1. O.A.H. = OVERALL APPROXIMATE HEIGHT.



2 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE



3 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE



4 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE

SHEET KEYNOTES:

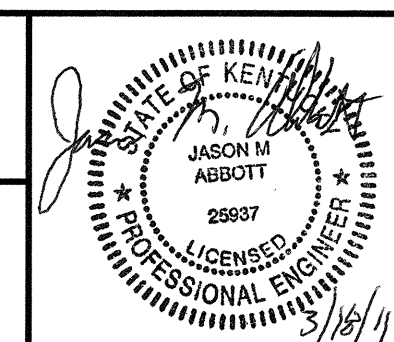
1. GENERAL LOCATION OF ROOM AVAILABLE FOR I&C AND ELECTRICAL EQUIPMENT. ALL EQUIPMENT SHALL BE LOCATED SUCH THAT IT DOES NOT INTERFERE WITH GAC FILL AND DRAIN LINES OR BLOCK WALKWAY.
2. PROVIDE 16"x16"x12" EQUIPMENT PAD CENTERED ON GRADE BEAM AT EACH VESSEL LEG. REFER TO SHEET S-00-501.
3. PROVIDE 12" EQUIPMENT PAD FOR 4-TIER MANIFOLD. REFER TO SHEET S-00-501.

GENERAL NOTES:

1. VESSEL DETAILS SHOWN TO PROVIDE CLARIFICATION ON GAC FILL AND DRAIN LINES. NOT ALL VESSEL DETAILS ARE SHOWN. REFER TO SPECIFICATIONS FOR ALL VESSEL APPURTENCES AND ACCESSORIES. ALL VESSEL MODIFICATIONS AND DETAILS SHALL BE VERIFIED WITH SELECTED MANUFACTURER.

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



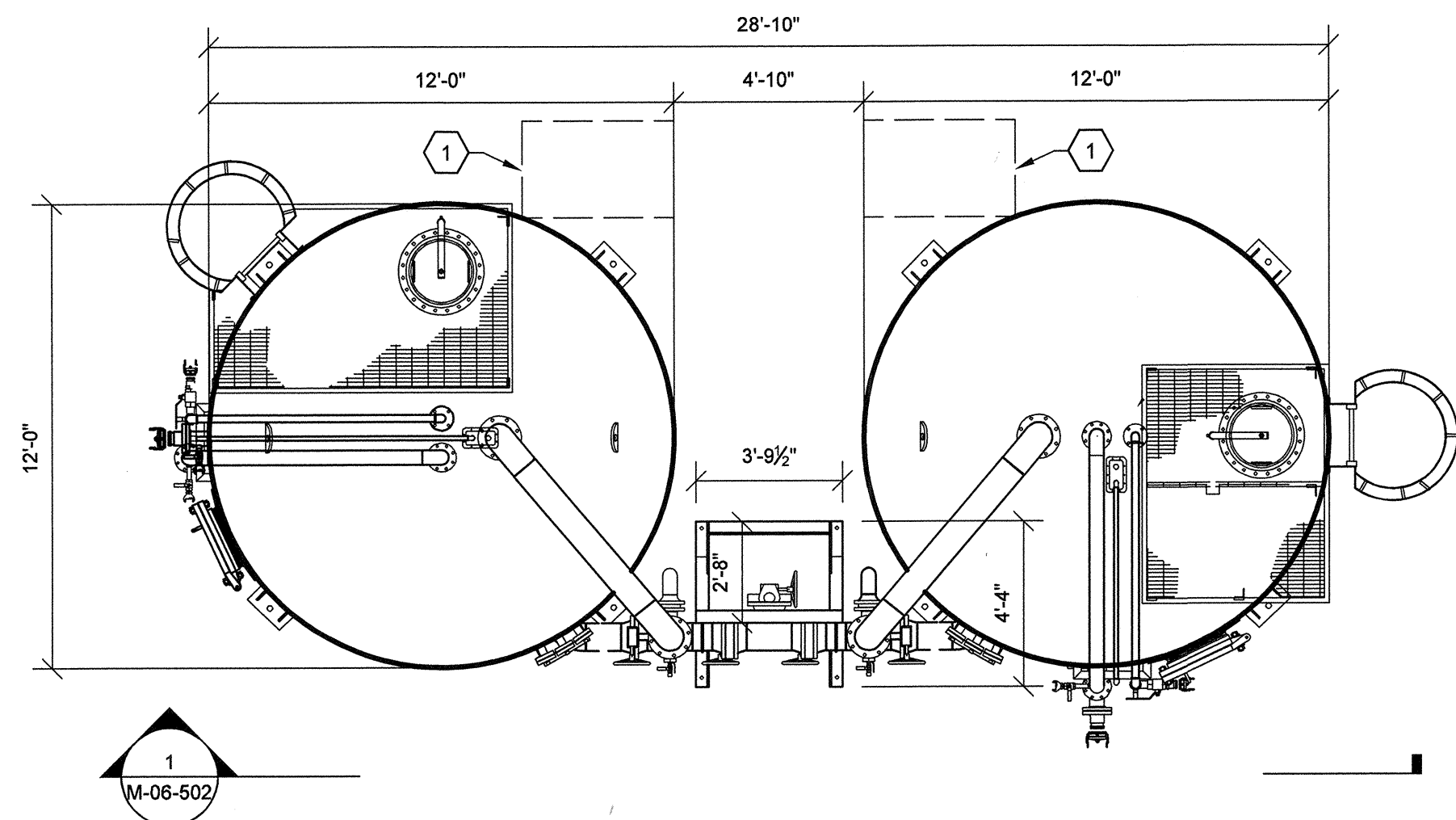
REVISIONS			
NO.	BY	DATE	REMARKS

DES: JHC
DWN: PJW
CKD: CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
GAC PRESSURE VESSEL SYSTEM
PLANS & SECTIONS DETAIL OPTION 1
SCALE: N.T.S.

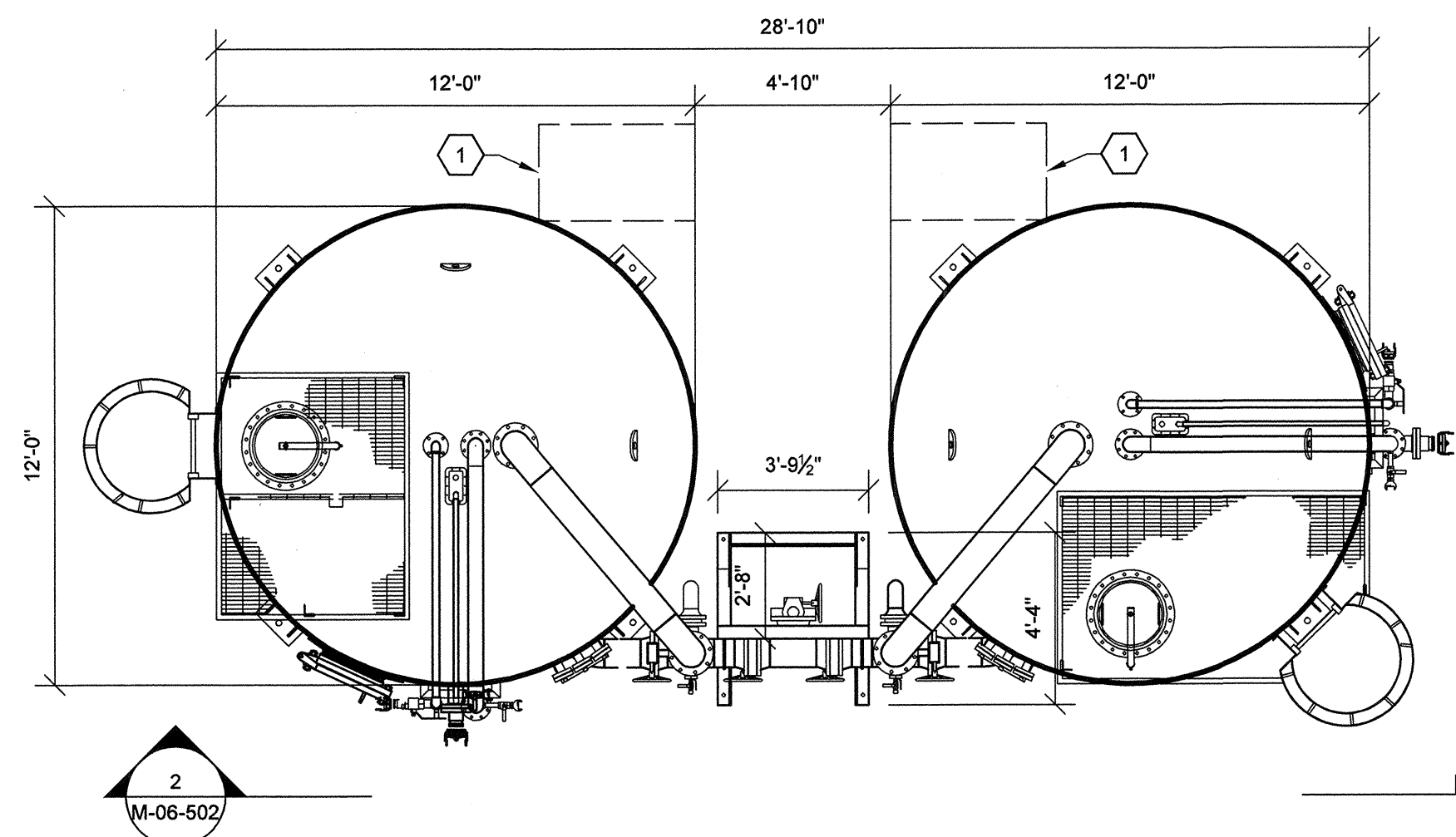
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-06-501
CAD REF. NO.: M-06-501



1 GAC PRESSURE VESSEL SYSTEM PLAN
NOT TO SCALE

PLAN 1 NOTES:

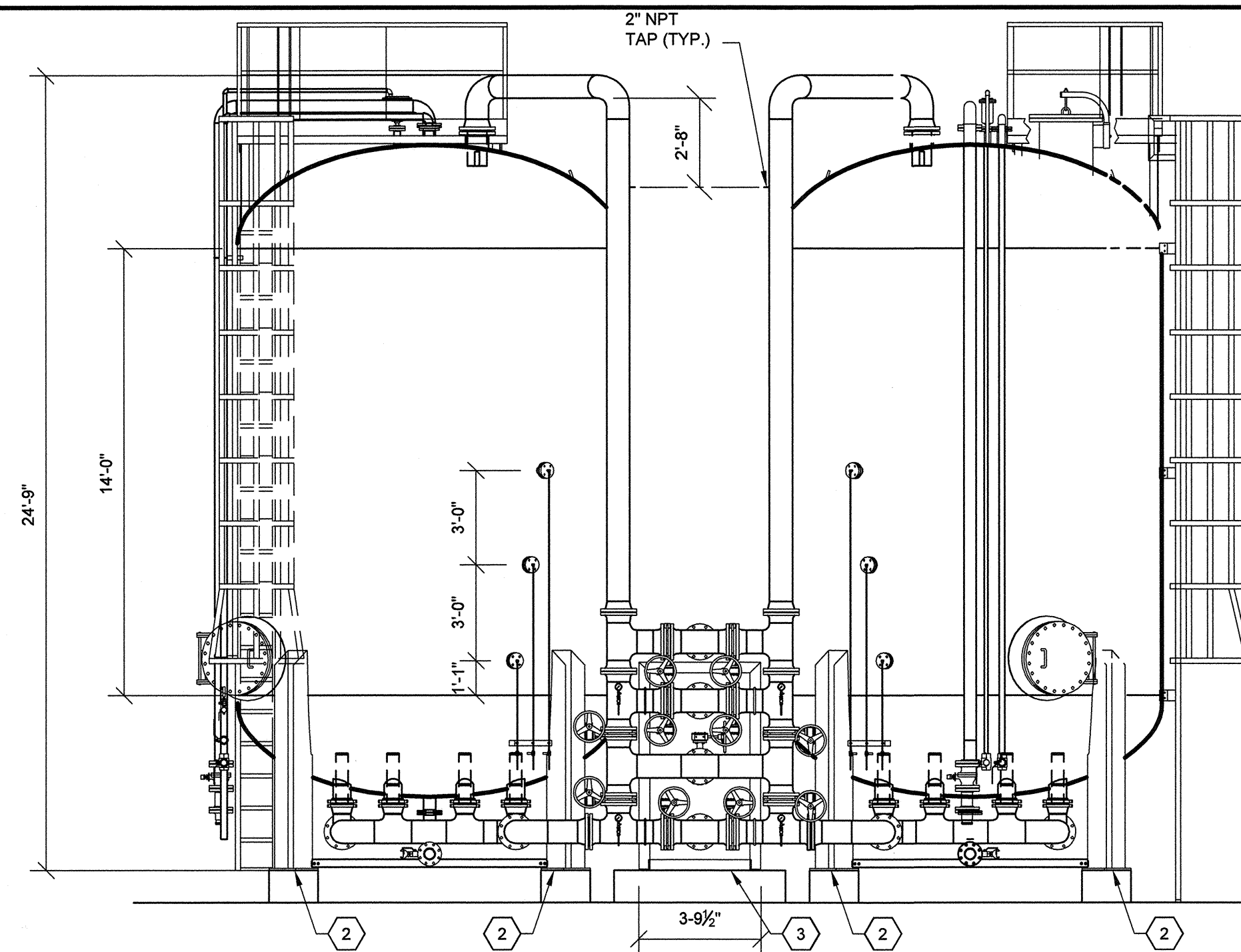
1. TYPICAL FOR VESSEL PAIRS PV-4N/PV-4S AND PV-6N/PV-6S.
2. LADDER AND PLATFORM FOR VESSEL PAIR PV-2N/PV-2S SHALL MATCH PLAN AS SHOWN ON SHEET M-06-102.



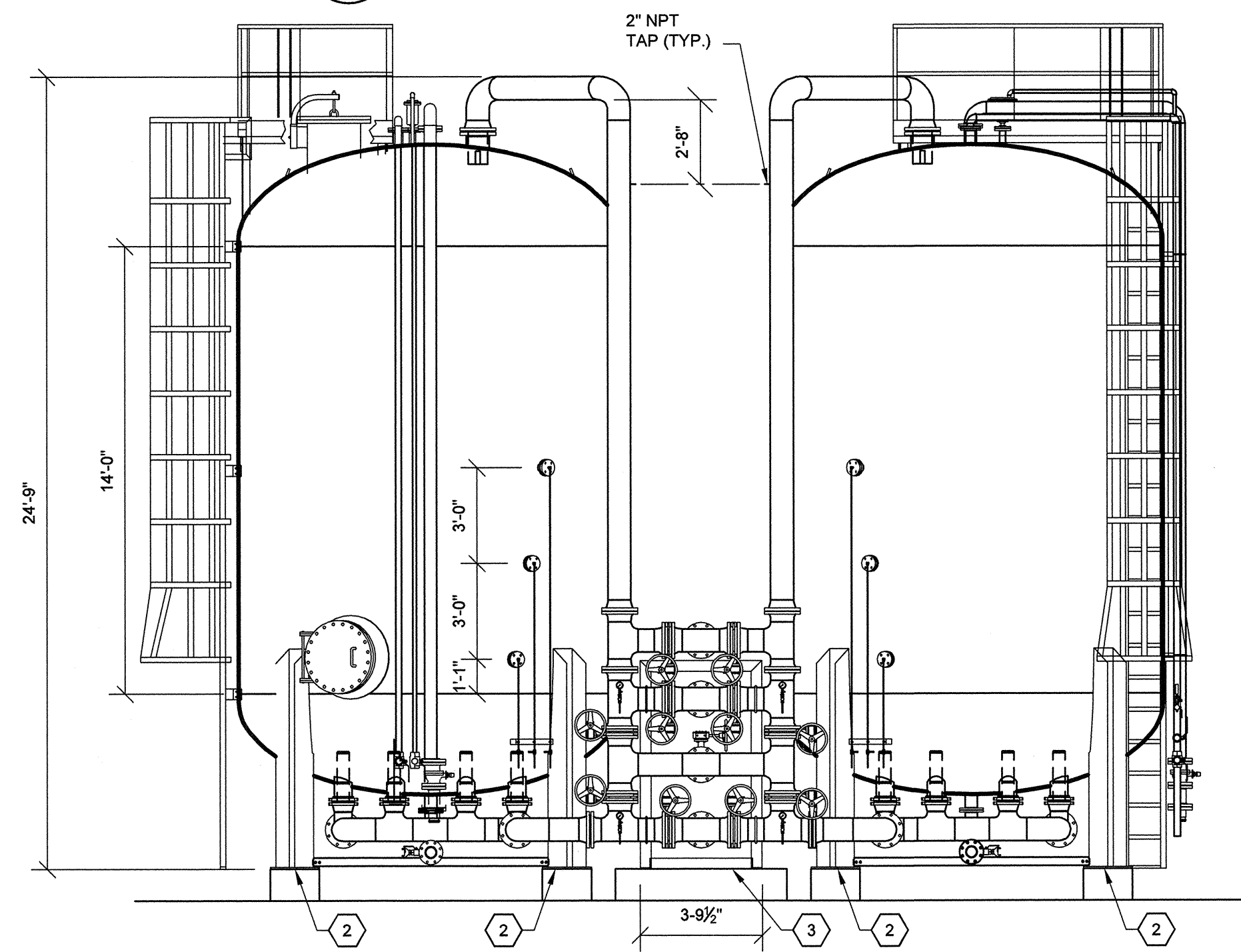
2 GAC PRESSURE VESSEL SYSTEM PLAN
NOT TO SCALE

PLAN 2 NOTES:

1. TYPICAL FOR VESSEL PAIRS PV-3N/PV-3S, PV-5N/PV-5S, AND PV-7N/PV-7S.
2. LADDER AND PLATFORM FOR VESSEL PAIR PV-1N/PV-1S SHALL MATCH PLAN AS SHOWN ON SHEET M-06-102.



1 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE



2 GAC PRESSURE VESSEL SYSTEM SECTION
NOT TO SCALE

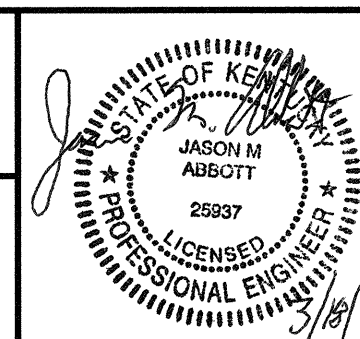
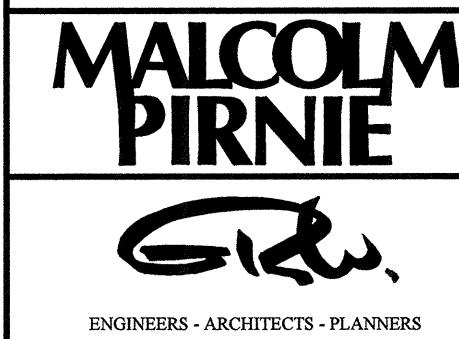
SHEET KEYNOTES:

1. GENERAL LOCATION OF ROOM AVAILABLE FOR I&C AND ELECTRICAL EQUIPMENT. ALL EQUIPMENT SHALL BE LOCATED SUCH THAT IT DOES NOT INTERFERE WITH GAC FILL AND DRAIN LINES OR BLOCK WALKWAY.
2. PROVIDE 16"x16"x12" EQUIPMENT PAD CENTERED ON GRADE BEAM AT EACH VESSEL LEG. REFER TO SHEET S-00-501.
3. PROVIDE 12" EQUIPMENT PAD FOR 4-TIER MANIFOLD. REFER TO SHEET S-00-501.

GENERAL NOTES:

1. VESSEL DETAILS SHOWN TO PROVIDE CLARIFICATION ON GAC FILL AND DRAIN LINES. NOT ALL VESSEL DETAILS ARE SHOWN. REFER TO SPECIFICATIONS FOR ALL VESSEL APPURTENANCES AND ACCESSORIES. ALL VESSEL MODIFICATIONS AND DETAILS SHALL BE VERIFIED WITH SELECTED MANUFACTURER.

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

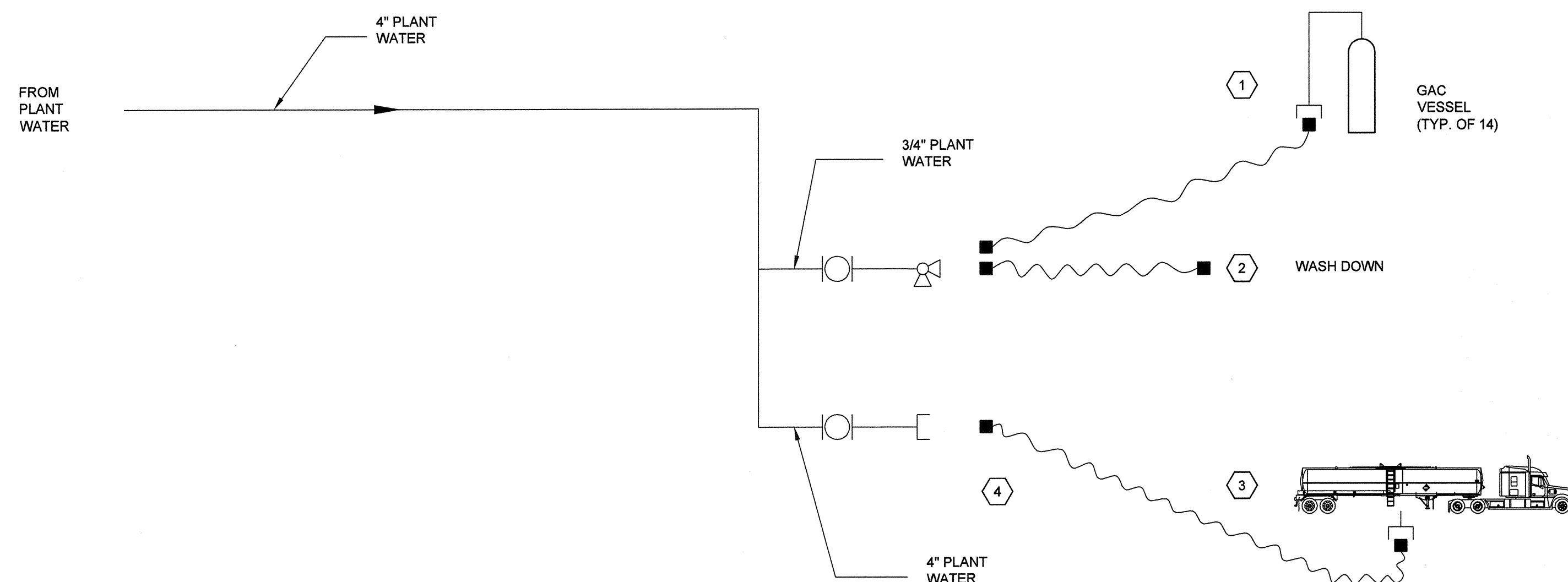
DES JHC
OWN PJW
CKD CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
GAC PRESSURE VESSEL SYSTEM
PLANS & SECTIONS DETAIL OPTION 2
SCALE: N.T.S.

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-06-502
CAD REF. NO.: M-06-502

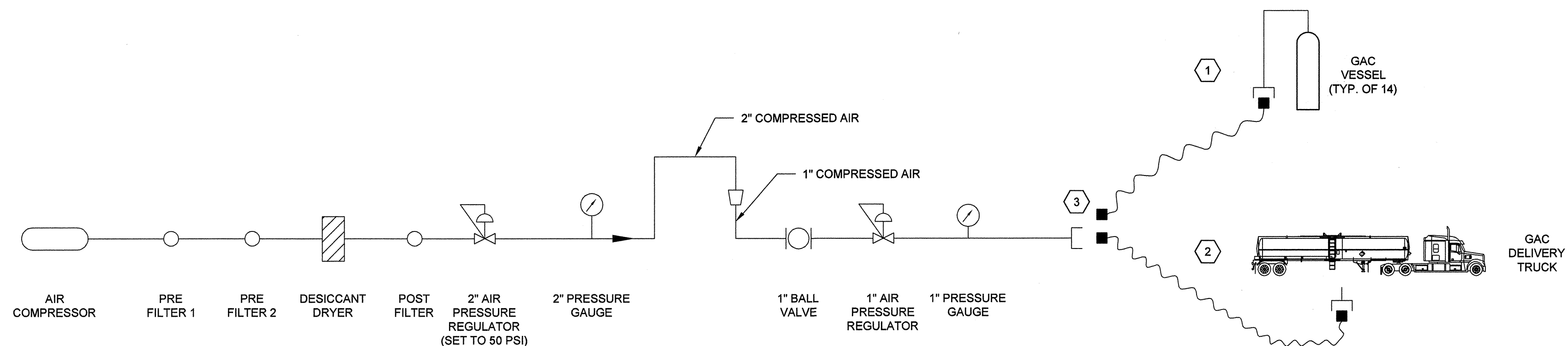
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1 PLANT WATER SCHEMATIC
NOT TO SCALE

PLANT WATER SCHEMATIC NOTES:

1. PLANT WATER SHALL PROVIDE WATER TO GAC VESSEL. CONTRACTOR SHALL VERIFY WATER HOSE END CONNECTION WITH SELECTED GAC VESSEL MANUFACTURER.
2. PLANT WATER SHALL PROVIDE WATER FOR GAC VESSEL AREA WASH DOWNS. CONTRACTOR SHALL VERIFY END CONNECTION WITH OWNER.
3. PLANT WATER SHALL PROVIDE WATER TO GAC DELIVERY TRUCK. CONTRACTOR SHALL VERIFY END CONNECTION AND HOSE TYPE WITH SELECTED GAC SUPPLIER.
4. CONTRACTOR SHALL PROVIDE PLANT WATER HOSES IN ACCORDANCE WITH SPECIFICATION 15403.



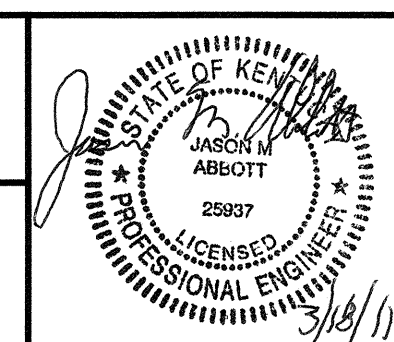
2 PLANT AIR SCHEMATIC
NOT TO SCALE

PLANT AIR SCHEMATIC NOTES:

1. COMPRESSED AIR STATION WILL PROVIDE AIR TO GAC VESSELS DURING SPENT GAC TRANSFER. CONTRACTOR SHALL VERIFY AIR HOSE GAC VESSEL END CONNECTION WITH SELECTED GAC VESSEL MANUFACTURER.
2. COMPRESSED AIR STATION WILL PROVIDE AIR TO GAC DELIVERY TRUCK DURING FRESH GAC TRANSFER. CONTRACTOR SHALL VERIFY HOSE GAC DELIVERY TRUCK END CONNECTION WITH SELECTED GAC SUPPLIER.
3. CONTRACTOR SHALL PROVIDE AIR HOSE IN ACCORDANCE WITH SPECIFICATION 15403. CONTRACTOR SHALL VERIFY CONNECTION SIZE WITH SELECTED GAC PRESSURE VESSEL MANUFACTURER.

User:WELLS Spec:PIRNE STANDARD File:G:\775012\29-CADD\MECH\PIRIM-06-001.DWG Scale:1:1 Saved:Date:3/1/2011 Time:11:41 Plot Date:Wells_Paul_3/19/2011_09:55 Layout:M-06-001

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH



REVISIONS			
NO.	BY	DATE	REMARKS

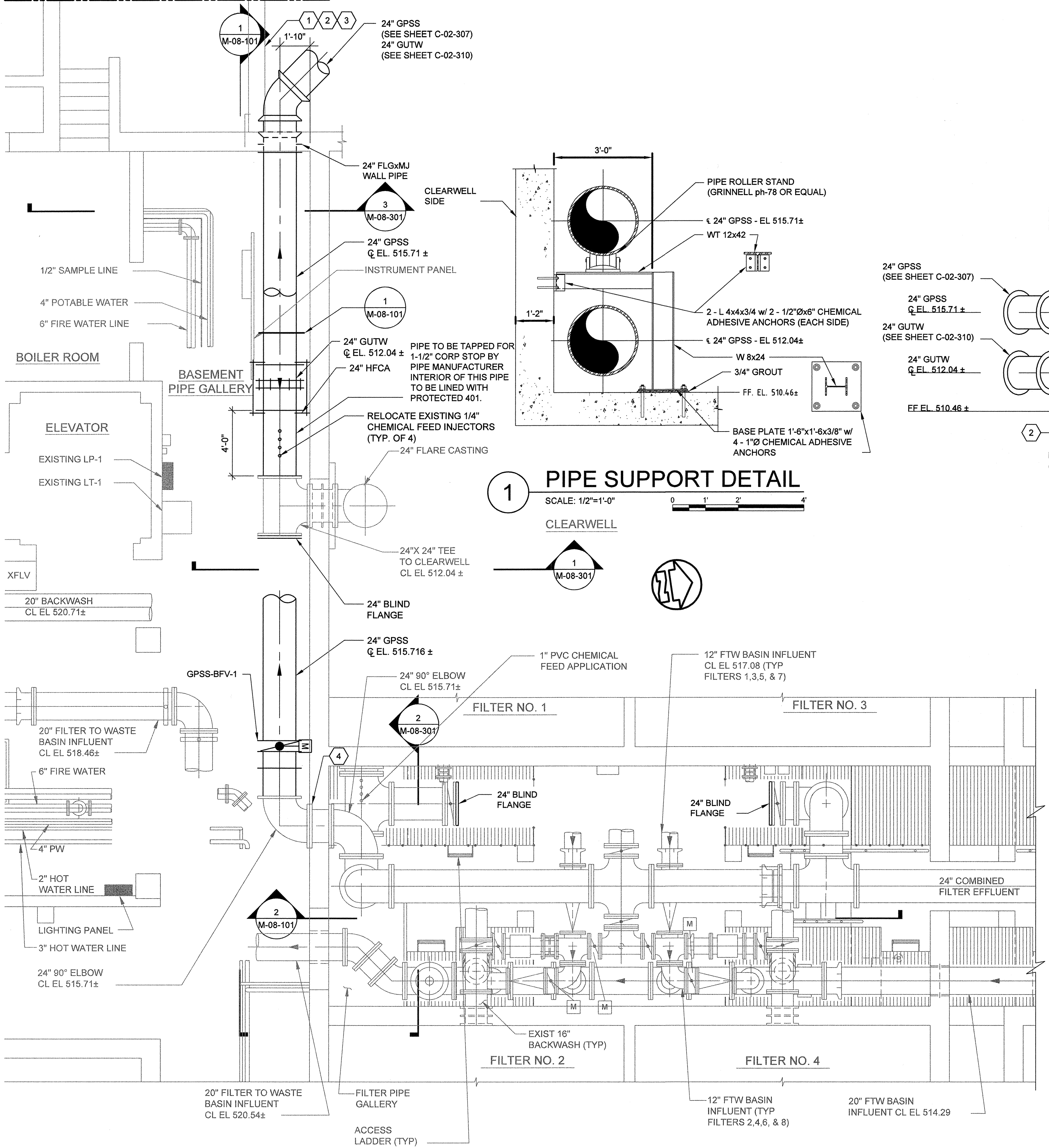
DES: JMA
DWN: PJW
CKD: CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
PT / GAC BUILDING
WATER AND AIR SCHEMATIC
SCALE: N.T.S.

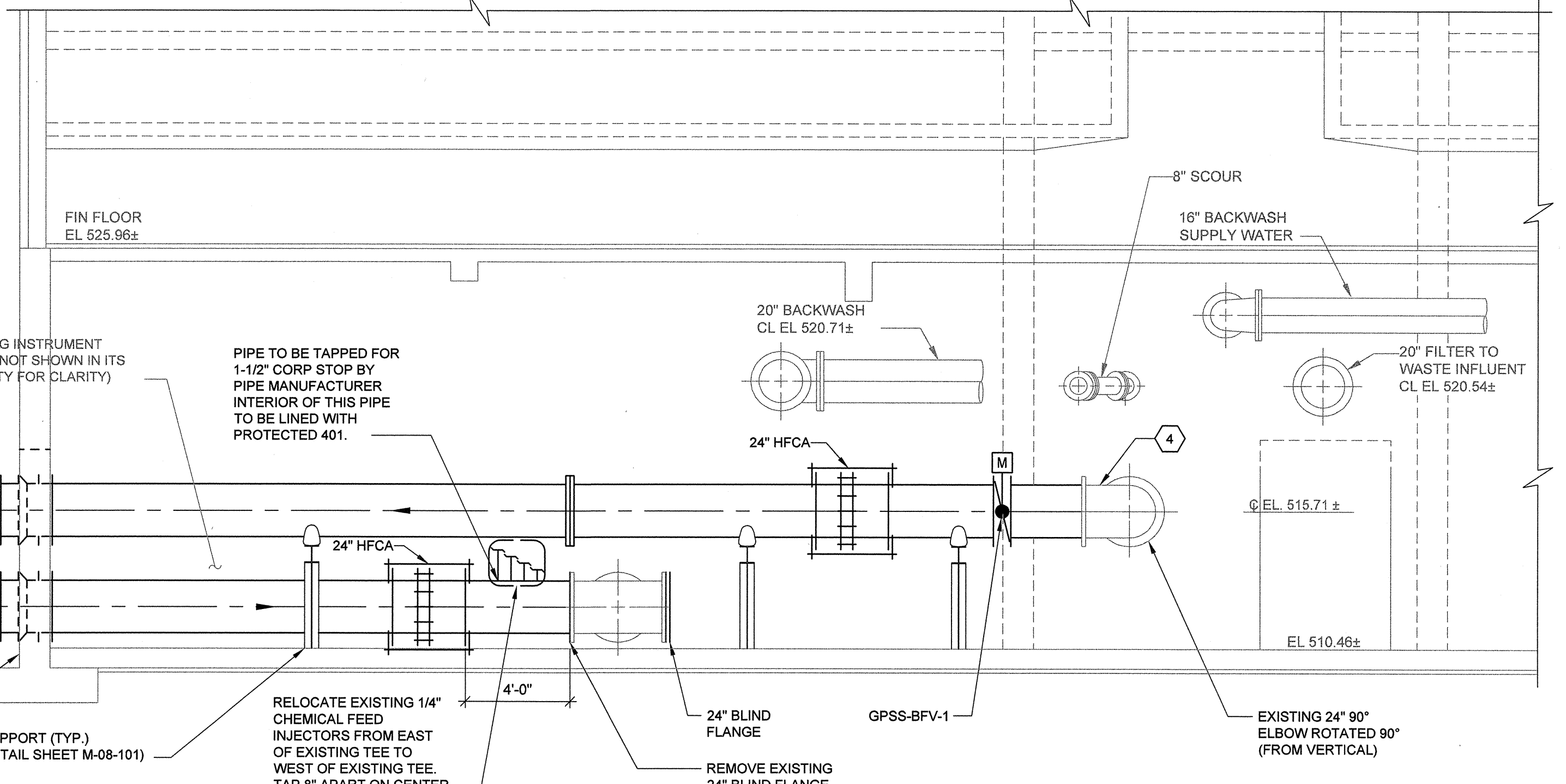
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-06-601
CAD REF. NO.: M-06-601

MATCHLINE (SEE THIS SHEET)

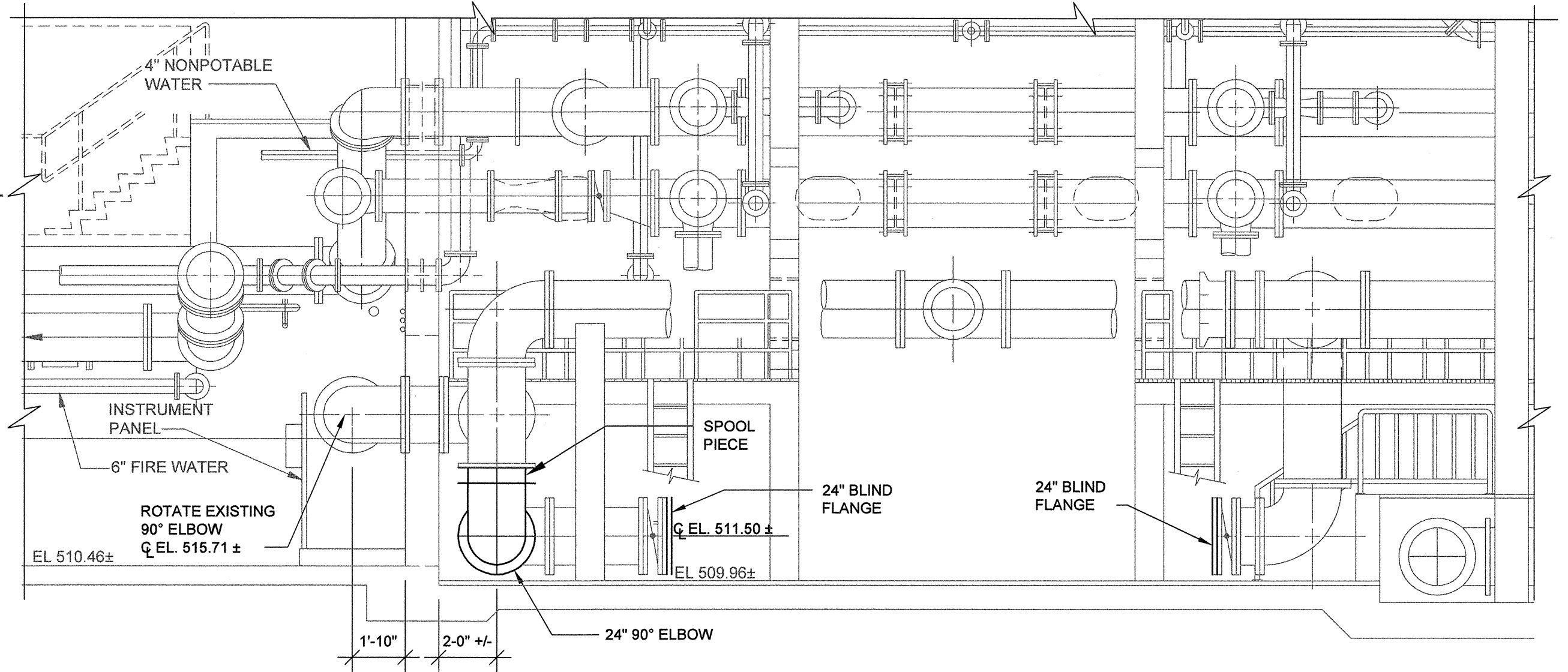


1
 FILTER BUILDING PIPE GALLERY
 PARTIAL PLAN AT EL. 510.46±
 SCALE: 1/4"=1'-0"

1
 PIPE SUPPORT DETAIL
 SCALE: 1/2"=1'-0"



1
 FILTER BUILDING
 PIPE GALLERY SECTION
 SCALE: 1/4"=1'-0"



2
 FILTER BUILDING
 PIPE GALLERY SECTION
 SCALE: 1/4"=1'-0"

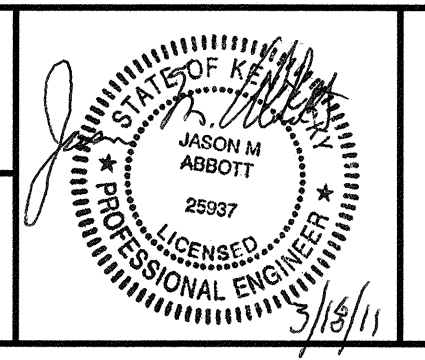
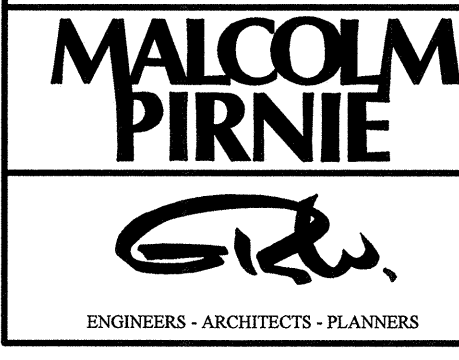
SHEET KEYNOTES:

- CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR EXISTING TUNNEL WALL AND SLAB AS REQUIRED.
- CONTRACTOR SHALL IMMEDIATELY FILL EXCAVATED AREA BELOW EXISTING TUNNEL WALL AND SLAB AND AROUND 24" PIPES AND FITTINGS WITH CONCRETE FILL UPON COMPLETION OF WORK IN THAT AREA. CONCRETE FILL TO BE PLACED A MINIMUM OF 4'-0" FROM EXISTING TUNNEL WALL.
- WORK SHALL BE PERFORMED ONCE TOP SLAB OF EXISTING TUNNEL IS REMOVED. SEE SPECIFICATION SECTION 01120.
- EXISTING ELECTRICAL CONDUIT SHALL BE RELOCATED PRIOR TO ANY UV REACTORS BEING REMOVED OR THE EXISTING 90° BEND BEING ROTATED.

GENERAL NOTES

- THE 2008 SURVEY OF THE TMTF FACILITY SHOWED A DIFFERENCE OF +0.29 FEET BETWEEN THE SURVEY AND THE FILTER BUILDING SECOND FLOOR ELEVATION (SURVEY ELEVATION 535.46 VS. PLAN ELEVATION 535.17). THE ELEVATIONS OF THE BLACK AND VEATCH UV DISINFECTION PROJECT ARE THE SAME AS THE PLAN ELEVATIONS ABOVE. THEREFORE 0.29 FEET HAVE BEEN ADDED TO THE ELEVATIONS SHOWN ON THE EXISTING PIPE GALLERY PLANS. CONTRACTOR TO CONFIRM RELATIONSHIP.
- ALL PIPE HANGERS AND SUPPORTS ARE NOT SHOWN. CONTRACTOR SHALL PROVIDE ALL HANGERS AND SUPPORTS IN ACCORDANCE WITH SPECIFICATION 16055.

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE, 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
 ADVANCED TREATMENT IMPROVEMENTS

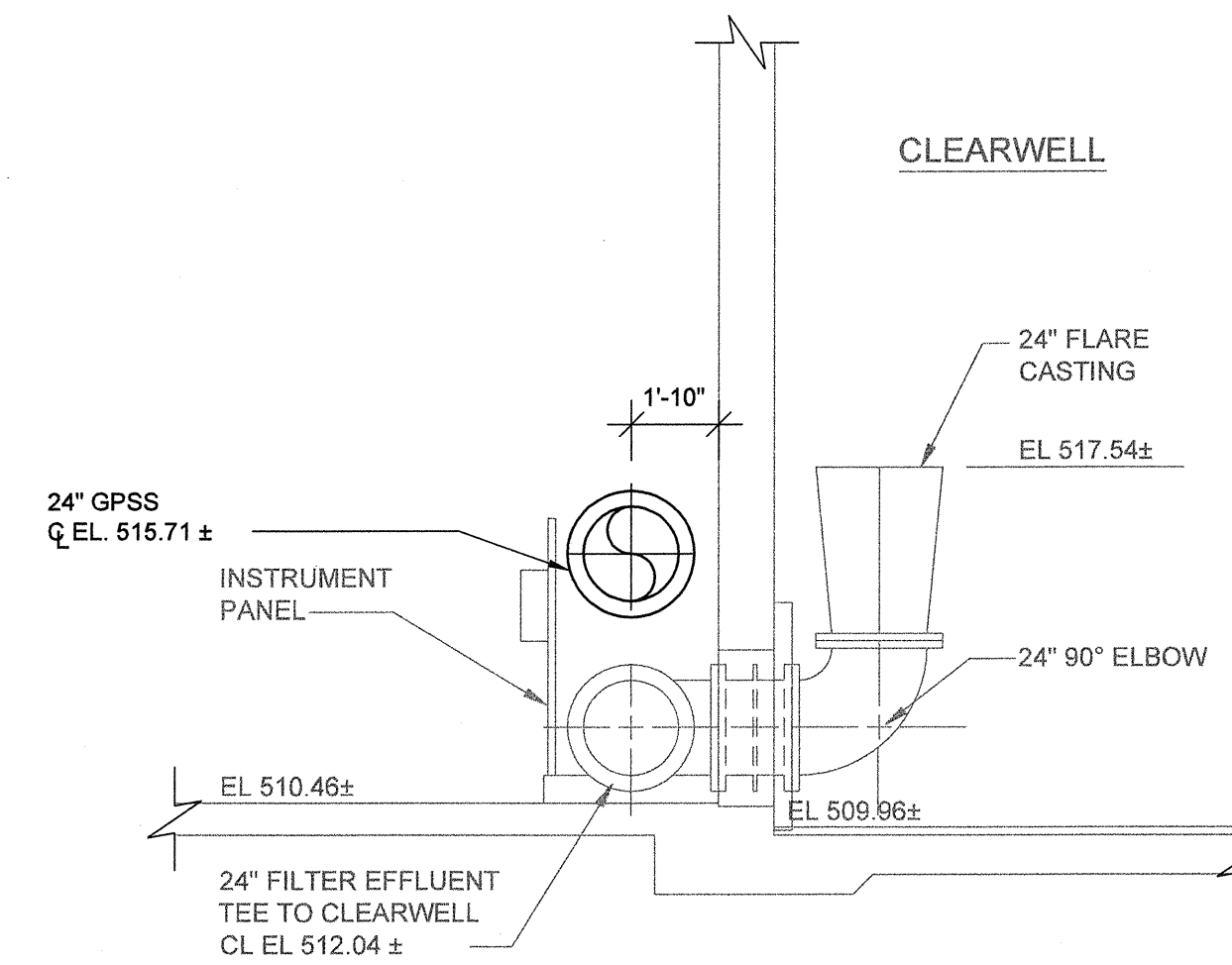
DES: JMA
 DWN: PJW
 CKD: CMW

MECHANICAL
 FILTER BUILDING PIPE GALLERY
 PLANS AT EL. 510.46± AND SECTIONS

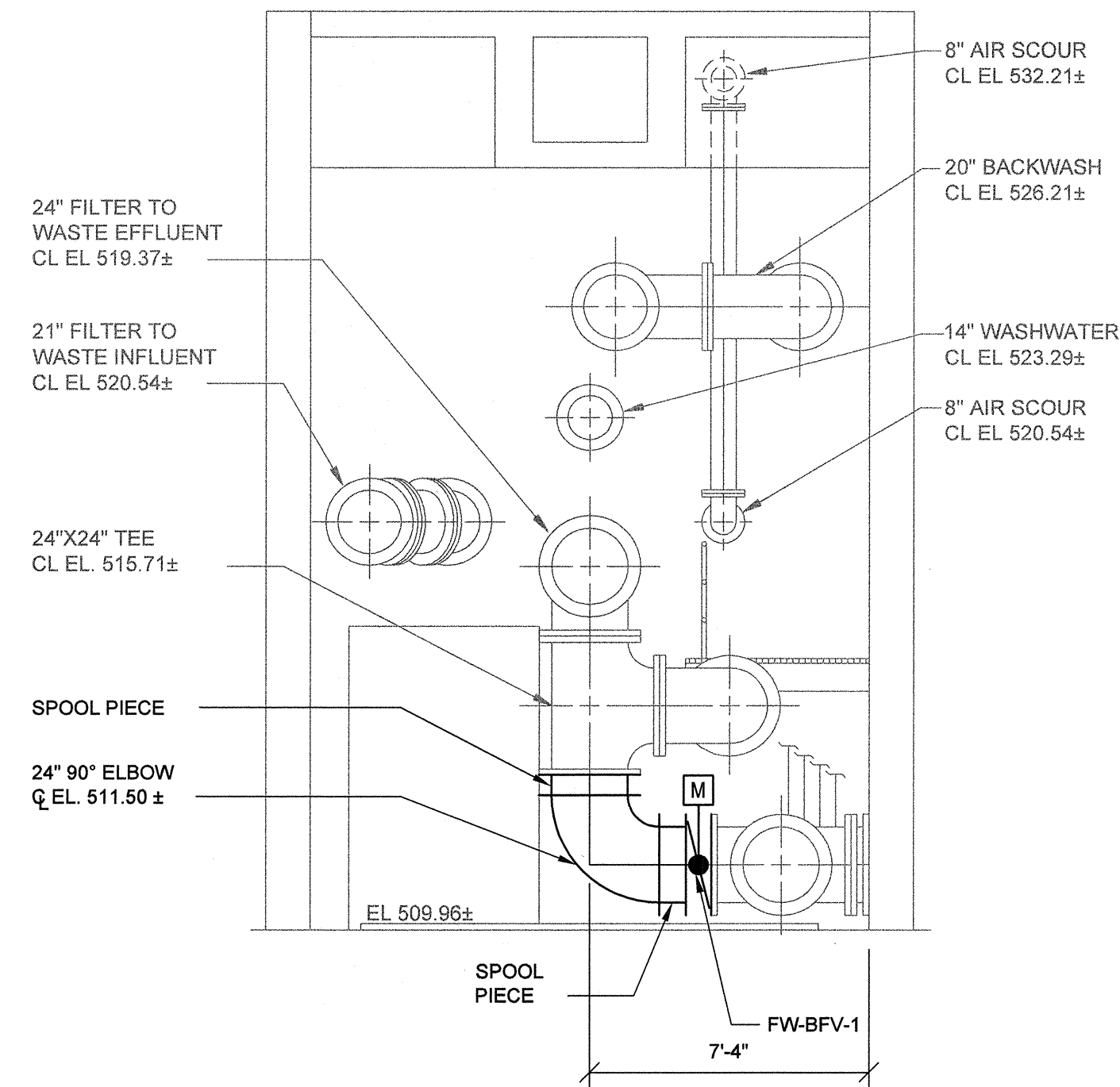
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
 DATE: MARCH, 2011
 SHEET: M-08-101
 CAD REF. NO.: M-08-101

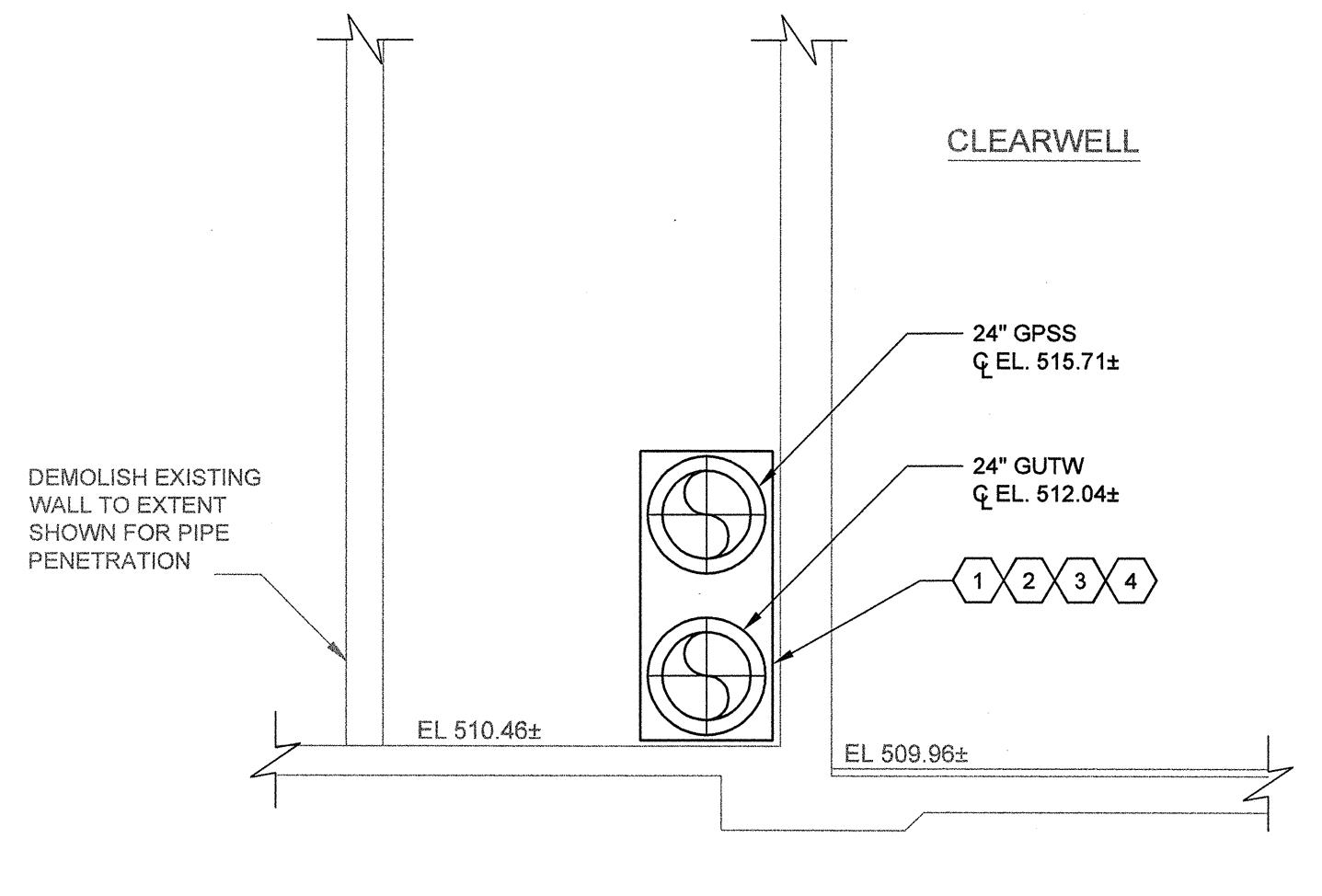
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1 FILTER BUILDING PIPE GALLERY PARTIAL SECTION
SCALE: 1/4"=1'-0"



2 FILTER BUILDING PIPE GALLERY PARTIAL SECTION
SCALE: 1/4"=1'-0"



3 FILTER BUILDING PIPE GALLERY PARTIAL SECTION
SCALE: 1/4"=1'-0"

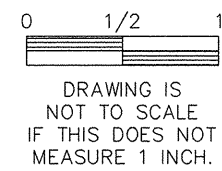
GENERAL NOTES:

1. THE 2008 SURVEY OF THE TMTP FACILITY SHOWED A DIFFERENCE OF +0.29 FEET BETWEEN THE SURVEY AND THE FILTER BUILDING SECOND FLOOR ELEVATION (SURVEY ELEVATION 535.46 VS. PLAN ELEVATION 535.17). THE ELEVATIONS OF THE BLACK AND VEATCH UV DISINFECTION PROJECT ARE THE SAME AS THE PLAN ELEVATIONS ABOVE, THEREFORE 0.29 FEET HAVE BEEN ADDED TO THE ELEVATIONS SHOWN ON THE EXISTING PIPE GALLERY PLANS. CONTRACTOR TO CONFIRM RELATIONSHIP.

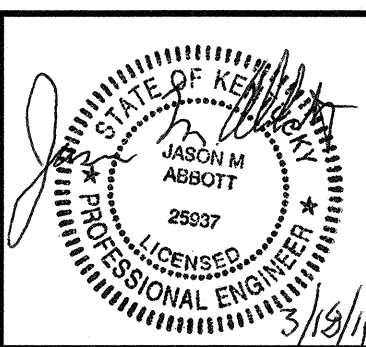
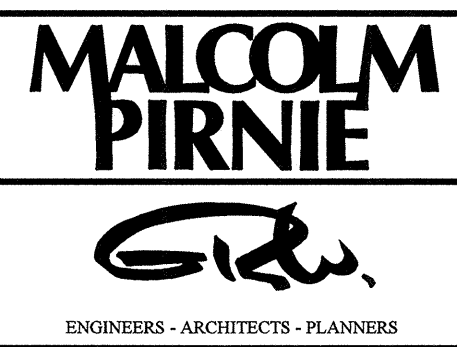
SHEET KEYNOTES:

1. CONTRACTOR SHALL REMOVE RECTANGULAR SECTION OF CONCRETE WALL AS REQUIRED FOR INSTALLATION OF TWO (2) 24" D.I. PIPES, WITH WALL COLLARS.
2. CONTRACTOR SHALL FILL VOID AROUND PIPES WITH CONCRETE AND PLACE WATER STOP SIKAWELL S-2 BETWEEN NEW CONCRETE AND EXISTING CONCRETE.
3. EXISTING REINFORCEMENT BETWEEN PIPES SHALL REMAIN IN PLACE.
4. WORK SHALL BE PERFORMED ONCE TOP SLAB OF EXISTING TUNNEL IS REMOVED. SEE SPECIFICATION SECTION 01120.

User: WELLS Spec: PIRNIE STANDARD File: G:\4775012\209-CADD\MECH-HP\IM-08-301.DWG Scale: 1:1 Saved Date: 3/1/2011 Time: 11:39 Plot Date: Wells_Paul_3/18/2011_09:57 Layout: M-08-301



DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



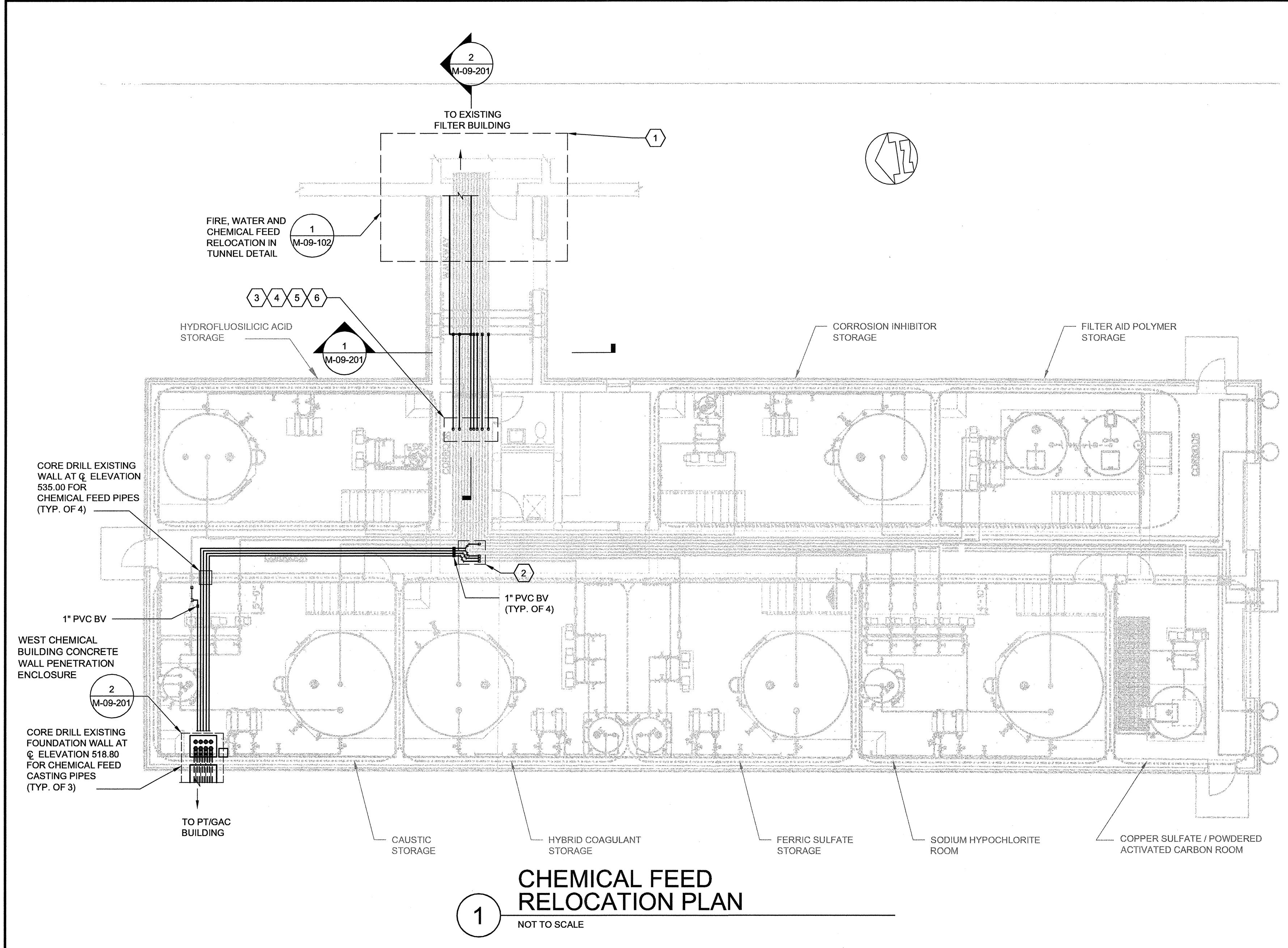
REVISIONS			
NO.	BY	DATE	REMARKS

DES: JMA
OWN: PJW
CKD: CMW

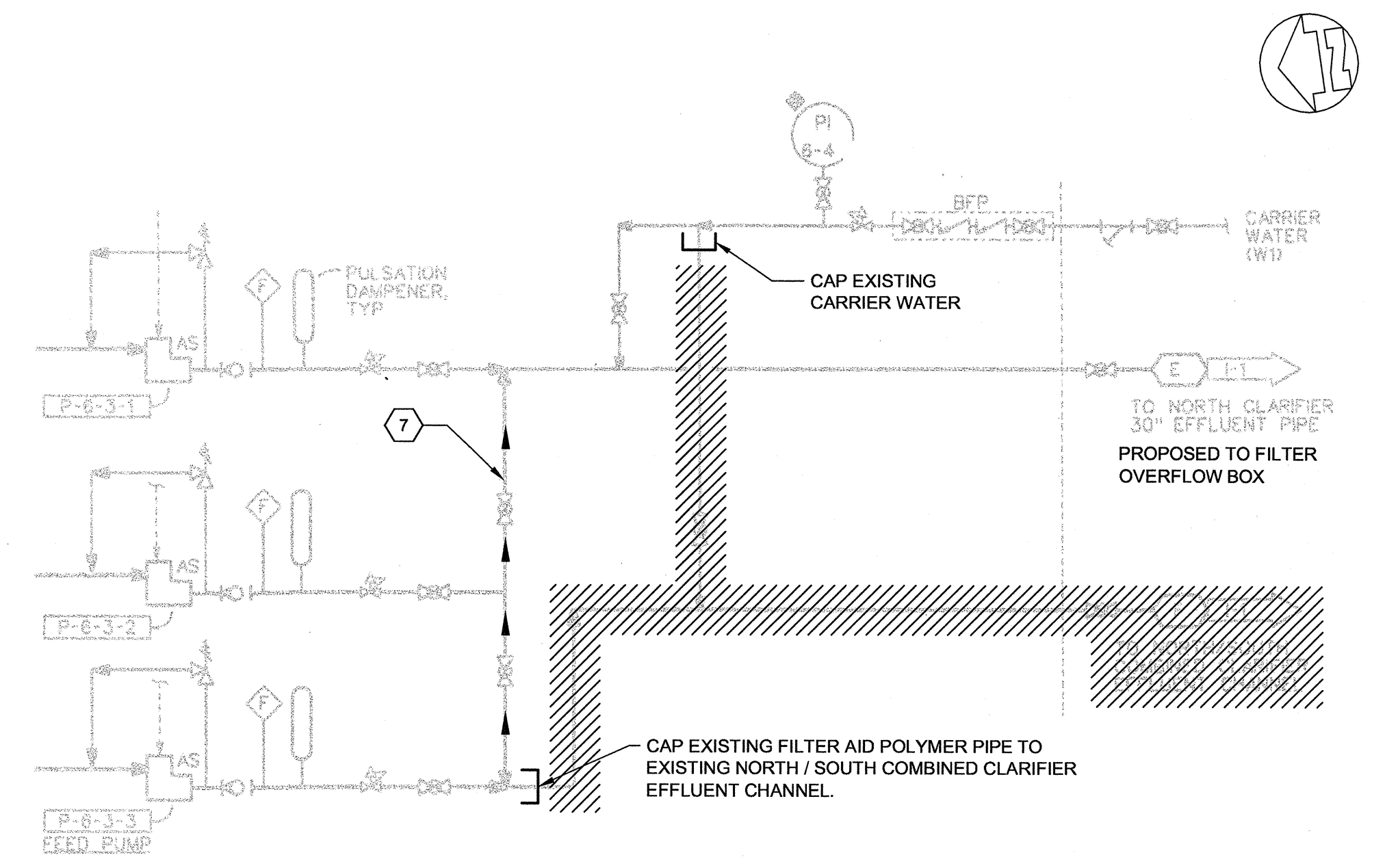
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
FILTER BUILDING PIPE GALLERY
PARTIAL SECTIONS
SCALE: 1/4" = 1'-0"

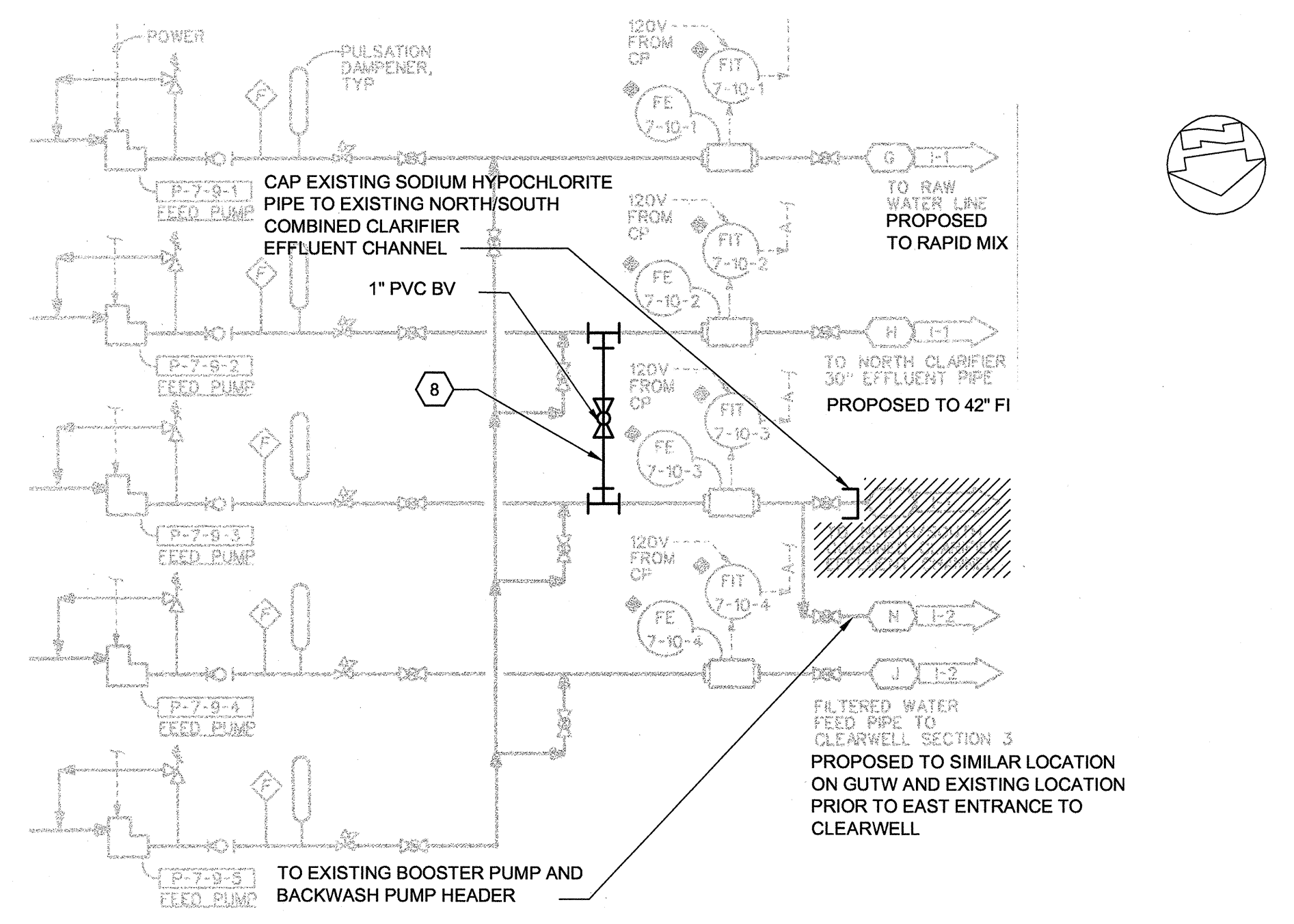
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-08-301
CAD REF. NO.: M-08-301



1 CHEMICAL FEED RELOCATION PLAN
NOT TO SCALE



2 FILTER AID POLYMER PUMP DISCHARGE RECONNECTION PLAN
NOT TO SCALE



3 SODIUM HYPOCHLORITE PUMP DISCHARGE RECONNECTION PLAN
NOT TO SCALE

SHEET KEYNOTES:

- EXISTING TUNNEL STRUCTURE TO BE DEMOLISHED AND ALL UTILITIES TO BE RELOCATED. SEE TUNNEL DEMOLITION (D-03-302) AND UTILITY RELOCATION DRAWINGS (M-09-102 AND M-09-201).
- EXISTING CHEMICAL FEED PIPES TO BE TIED INTO AND RUN TO THE RAPID MIX BASIN IN THE PT/GAC BUILDING ARE AS FOLLOWS:
 - 1" SODIUM HYPOCHLORITE
 - 1" COPPER SULFATE / POWDERED ACTIVATED CARBON
 - 1" CAUSTIC
 - 1" FERRIC SULFATE
 - 1" HYBRID COAGULANT
 FIELD ROUTE TIE IN BASED ON AVAILABLE SPACE.
- EXISTING CHEMICAL FEED PIPES TO BE TIED INTO AND RUN TO THE WEST FILTER BUILDING STAIRWELL ARE AS FOLLOWS:
 - 1" CORROSION INHIBITOR
 - 1" HYDROFLUOSILICIC ACID
 - 1" SODIUM HYPOCHLORITE
 - 1" CAUSTIC
 AT THE WEST FILTER BUILDING STAIRWELL TIE INTO EXISTING CHEMICAL FEED PIPING THAT WILL TIE INTO THE GAC / UV TREATED WATER PIPE (PRIOR TO THE EXISTING CLEARWELL) IN THE FILTER BUILDING. CONNECT TO EXISTING PIPING SO CHEMICALS ARE FED TO THE APPROXIMATE LOCATION OF THE EXISTING INJECTION POINTS.

GENERAL NOTES:

- BASE DRAWING FROM 1999 "NORTHERN KENTUCKY WATER SERVICE DISTRICT TAYLOR MILL PLANT CHEMICAL BUILDING, CLARIFIER, AND CLEARWELL IMPROVEMENTS" PROJECT DESIGNED BY CH2M HILL.
- EXISTING CHEMICAL FEED PIPE LAYOUT MAY BE DIFFERENT THAN WHAT IS SHOWN ON DRAWING AND EXISTING PIPE SUPPORTS, PIPE GANGWAYS, OTHER UTILITIES AND OTHER MISCELLANEOUS APPURTENANCES NOT SHOWN. CONTRACTOR SHALL INSPECT EXISTING FACILITY PRIOR TO SUBMITTING A BID TO DETERMINE ALL CONSTRAINTS THAT MAY AFFECT CONSTRUCTION ACTIVITIES, AND INCLUDE ALL COSTS ASSOCIATED WITH THEM IN ITS BID.
- DISPOSE OF PIPING CONTENTS BY RETURNING TO STORAGE VESSELS OR COLLECTING IN CONTAINERS AND DISPOSING OF OFF-SITE BY AN APPROVED METHOD.
- ONCE THE EXISTING CHEMICAL FEED PIPE IS TIED INTO, CONTRACTOR SHALL REMOVE ALL PORTIONS OF THE EXISTING CHEMICAL FEED PIPE BEYOND THE TIE-IN POINT, WHICH WILL NO LONGER BE IN SERVICE.
- HEAT TRACING SHALL BE INSTALLED ON THE CAUSTIC CHEMICAL FEED AND ALL OTHER EXTERIOR EXPOSED CHEMICAL FEED PIPING/TUBING.
- NOT ALL CHEMICAL FEED PIPES AND SUPPORTS ARE SHOWN IN THEIR EXISTING LOCATIONS. CONTRACTOR TO TRACE EXISTING CHEMICAL FEED PIPING FROM THE POINT OF FEED TO THE CHEMICAL FEED PUMP AND VERIFY PIPE WITH THE OWNER AND CCA PRIOR TO RELOCATING OR REMOVING CHEMICAL FEED PIPE.

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

PROFESSIONAL ENGINEER
JASON M. ASSOTT
25937
3/28/11

REVISIONS			
NO.	BY	DATE	REMARKS

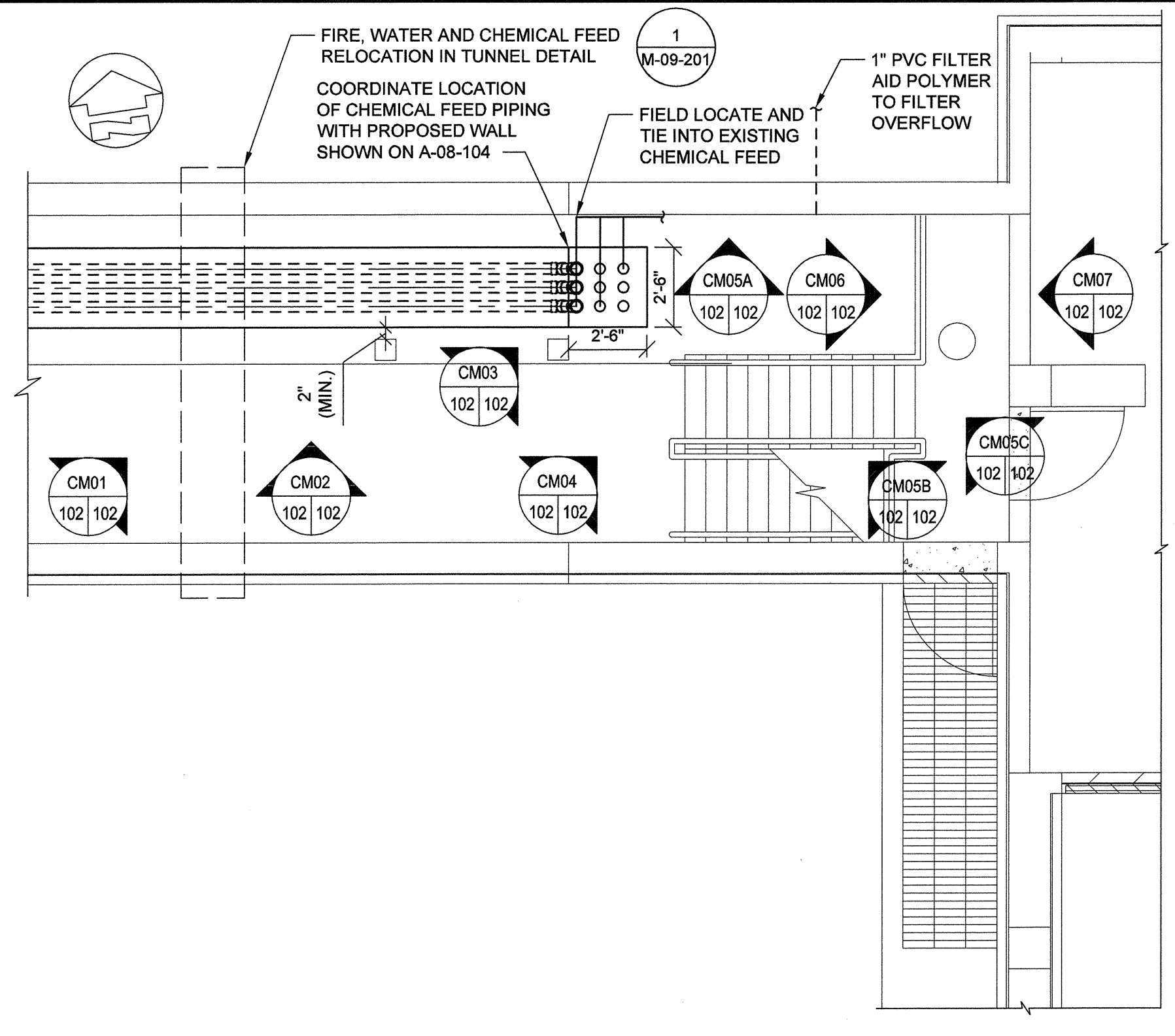
DES. JMA
DWN. PJW
CKD. CMW

**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**MECHANICAL
CHEMICAL FEED RELOCATION
PLAN
SCALE: NOT TO SCALE**

ISSUED STATUS: **BID SET**
DATE: MARCH, 2011
SHEET: M-09-101
CAD REF. NO.: M-09-101

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1 PARTIAL FILTER BUILDING AND TUNNEL - CHEMICAL FEED DEMOLITION AND RELOCATION - PLAN
NOT TO SCALE

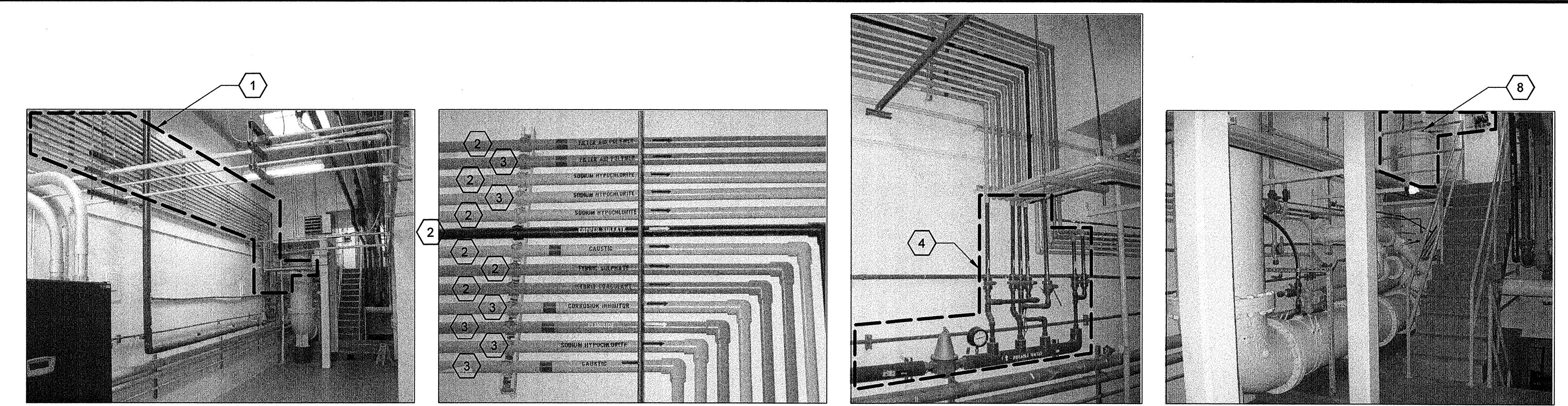


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PHOTO CM02
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PHOTO CM03
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PHOTO CM04
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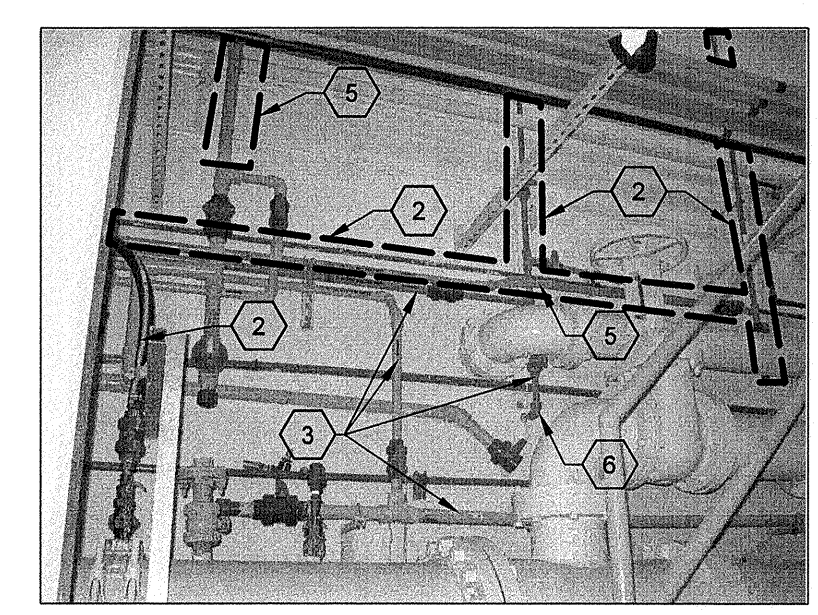


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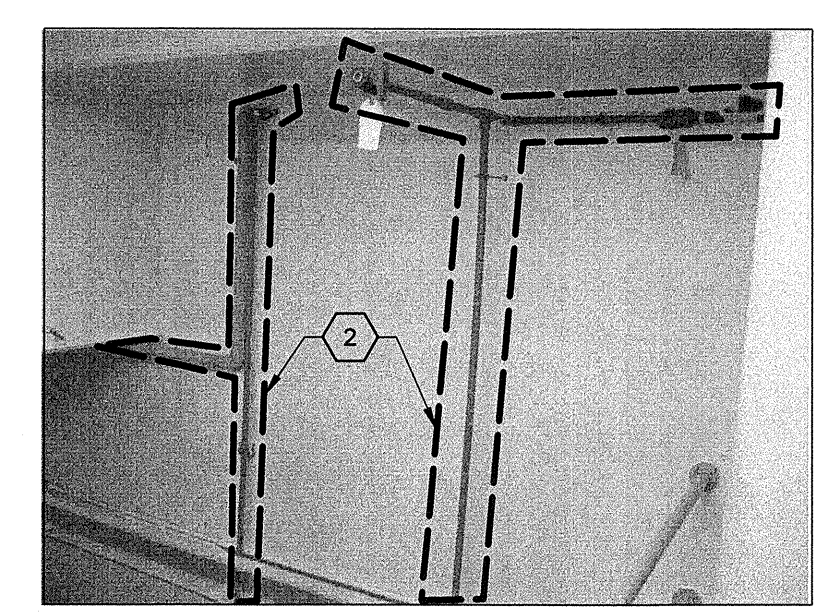


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PHOTO CM06
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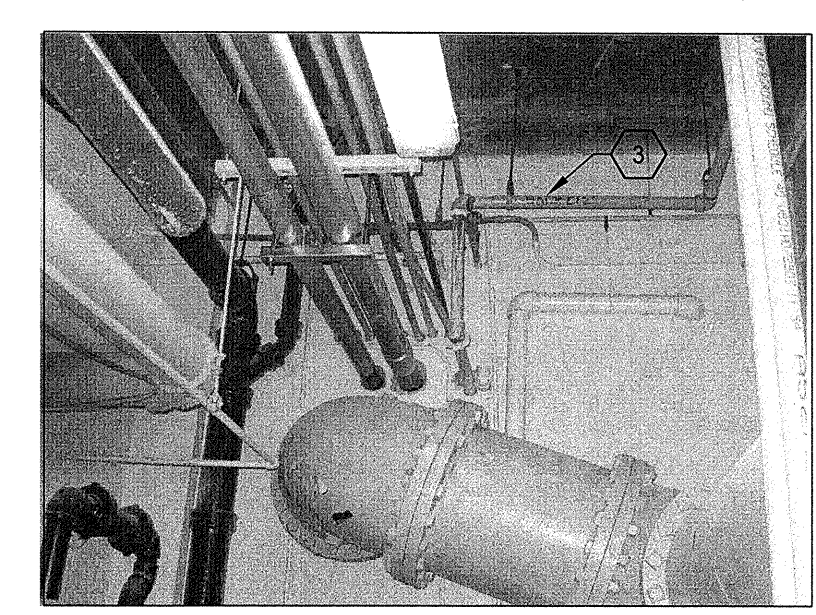


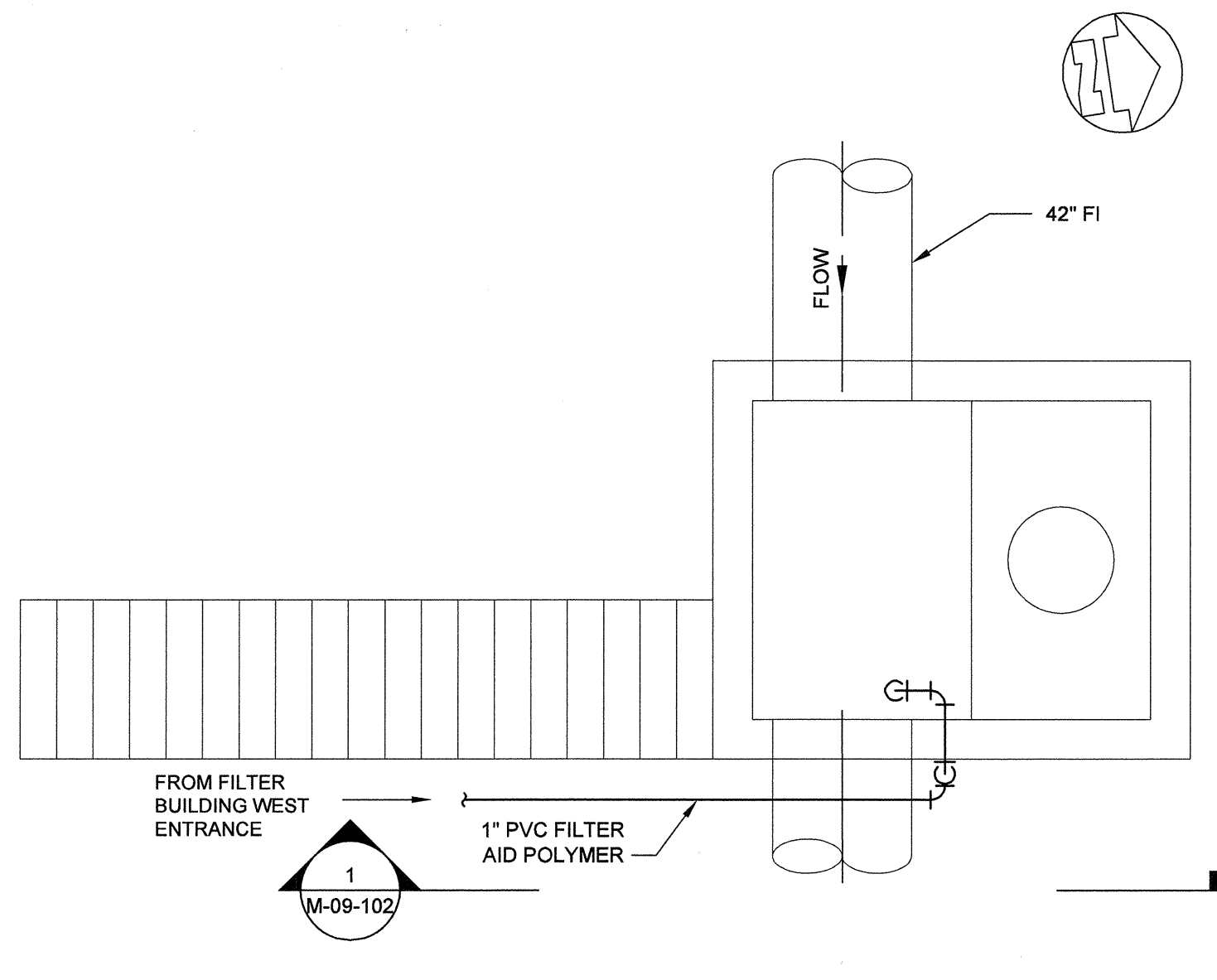
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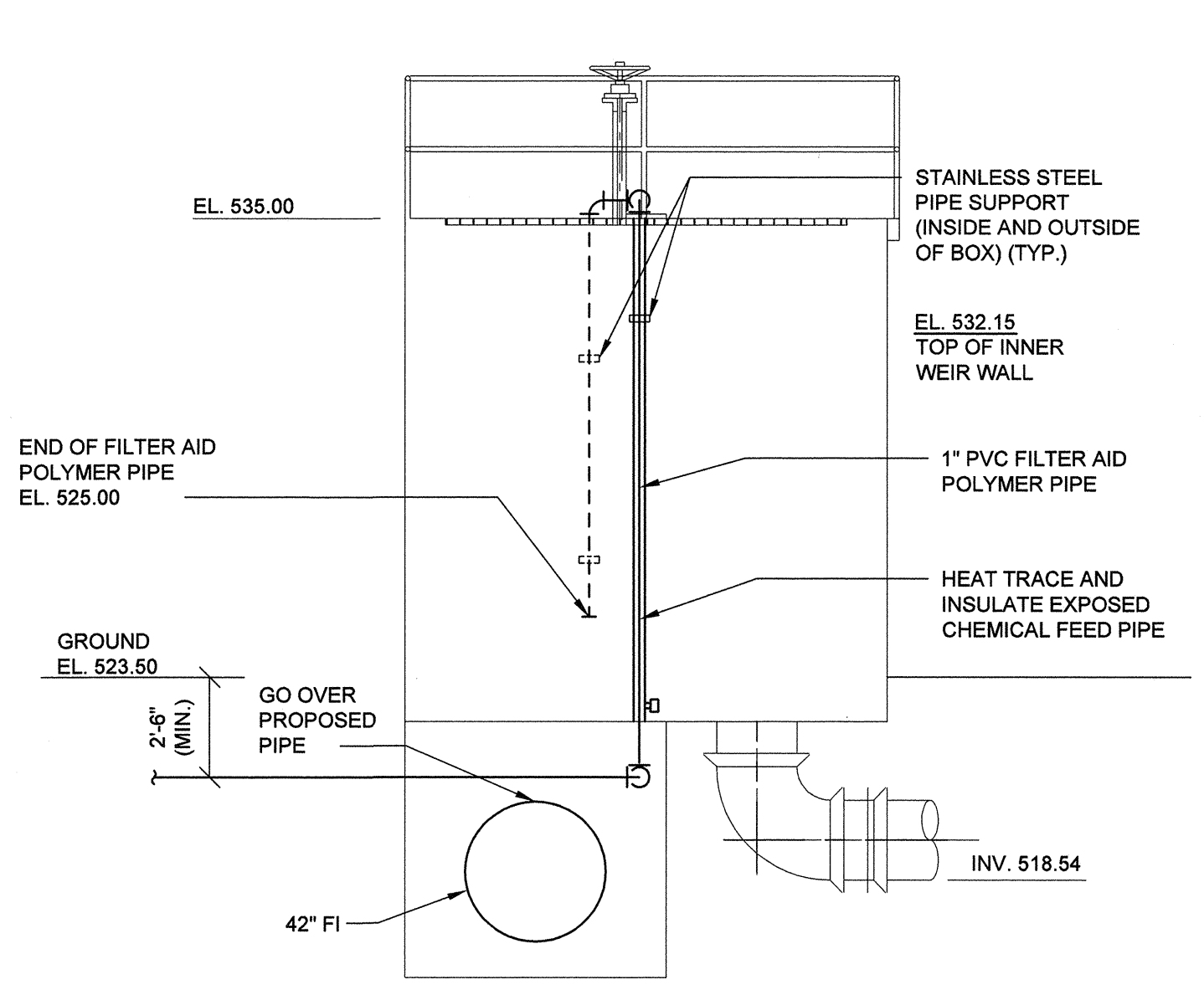
- RELOCATE REQUIRED CHEMICAL FEED TO THE FLOOR OF THE TUNNEL WITH PIPE ENCASEMENT AND REMOVE ALL EXISTING CHEMICAL FEED PIPE ON THE TUNNEL WALL, UP TO THE FILTER BUILDING WEST STAIRWELL, PRIOR TO DEMOLITION.
- PIPE TO BE REMOVED (CONTRACTOR TO VERIFY).
- PIPE TO BE RELOCATED TO THE FLOOR, THROUGH THE TUNNEL, AND RECONNECTED IN THE FILTER BUILDING WEST STAIRWELL (CONTRACTOR TO VERIFY).
- NEW PLUMBING AND FITTINGS, SIMILAR TO THE EXISTING, SHALL BE INSTALLED AS REQUIRED TO PROVIDE PUSH WATER FOR RECONNECTED CHEMICAL FEED, SEE SHEET P-08-101.
- PROVIDE CAP FOR CHEMICAL FEED TO REMAIN IN SERVICE.
- UTILIZE EXISTING WALL PENETRATION TO INSTALL PROPOSED FILTER AID POLYMER TO THE PROPOSED FILTER OVERFLOW.
- CONNECT TO EXISTING 2" SODIUM HYPOCHLORITE PIPE 2 FEET INSIDE OF FILTER BUILDING, WITH SOLVENT WELD COUPLING. REPLACE EXISTING INJECTOR IN KIND TO 42 INCH FI. INSTALL NEW HEAT TRACE AND INSULATION.
- EXISTING STAND ALONE CHEMICAL FEED TO REMAIN OPERATIONAL THROUGHOUT PROJECT.

GENERAL NOTES:

- EXISTING CHEMICAL FEED SHALL NOT BE TAKEN OUT OF SERVICE UNTIL THE NEW CHEMICAL FEED IS OPERATIONAL.
- CONTRACTOR TO TRACE EXISTING CHEMICAL FEED PIPING FROM THE POINT OF FEED TO THE CHEMICAL FEED PUMP AND VERIFY PIPE WITH THE OWNER AND CCA PRIOR TO RELOCATING OR REMOVING CHEMICAL FEED PIPE.
- ALL CHEMICAL FEED PIPING SHALL BE PROTECTED DURING DEMOLITION. ANY DAMAGE TO THE RELOCATED CHEMICAL FEED SHALL BE CORRECTED BY THE CONTRACTOR. CHEMICAL FEED SHALL REMAIN IN OPERATION AT ALL TIMES WHILE THE PLANT IS OPERATING.
- CONTRACTOR TO PROVIDE ALL APPURTENANCES TO CONNECT TO AND CAP EXISTING CHEMICAL FEED PIPE.
- EXISTING RAW WATER PIPE AND EXISTING BASIN PIPING TO BE REMOVED ONCE PROPOSED RAW WATER AND PROPOSED PRELIMINARY TREATMENT ARE OPERATIONAL.

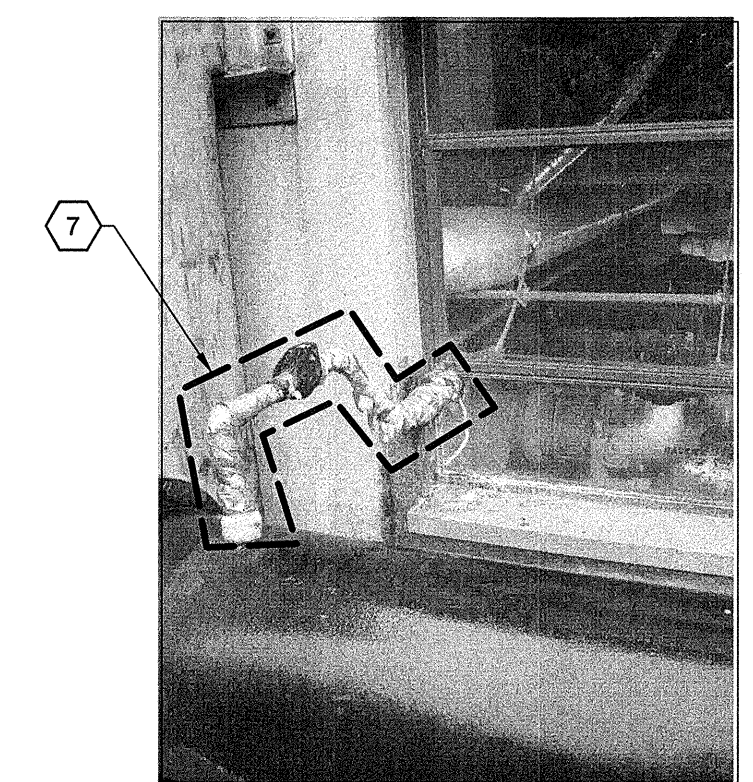


2 OVERFLOW BOX / FILTER AID POLYMER FEED - PLAN
NOT TO SCALE



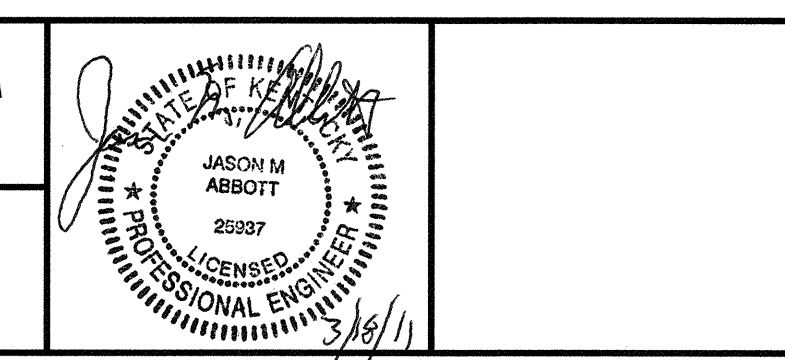
1 OVERFLOW BOX / FILTER AID POLYMER FEED - SECTION
NOT TO SCALE

- NOTES:
- BED PVC FILTER AND POLYMER PIPE IN 4" OF SAND ON ALL SIDES.
 - SEE SHEET C-02-306 FOR FILTER OVERFLOW BOX.



6 42" FILTER INFLUENT / SODIUM HYPOCHLORITE FEED
NOT TO SCALE

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

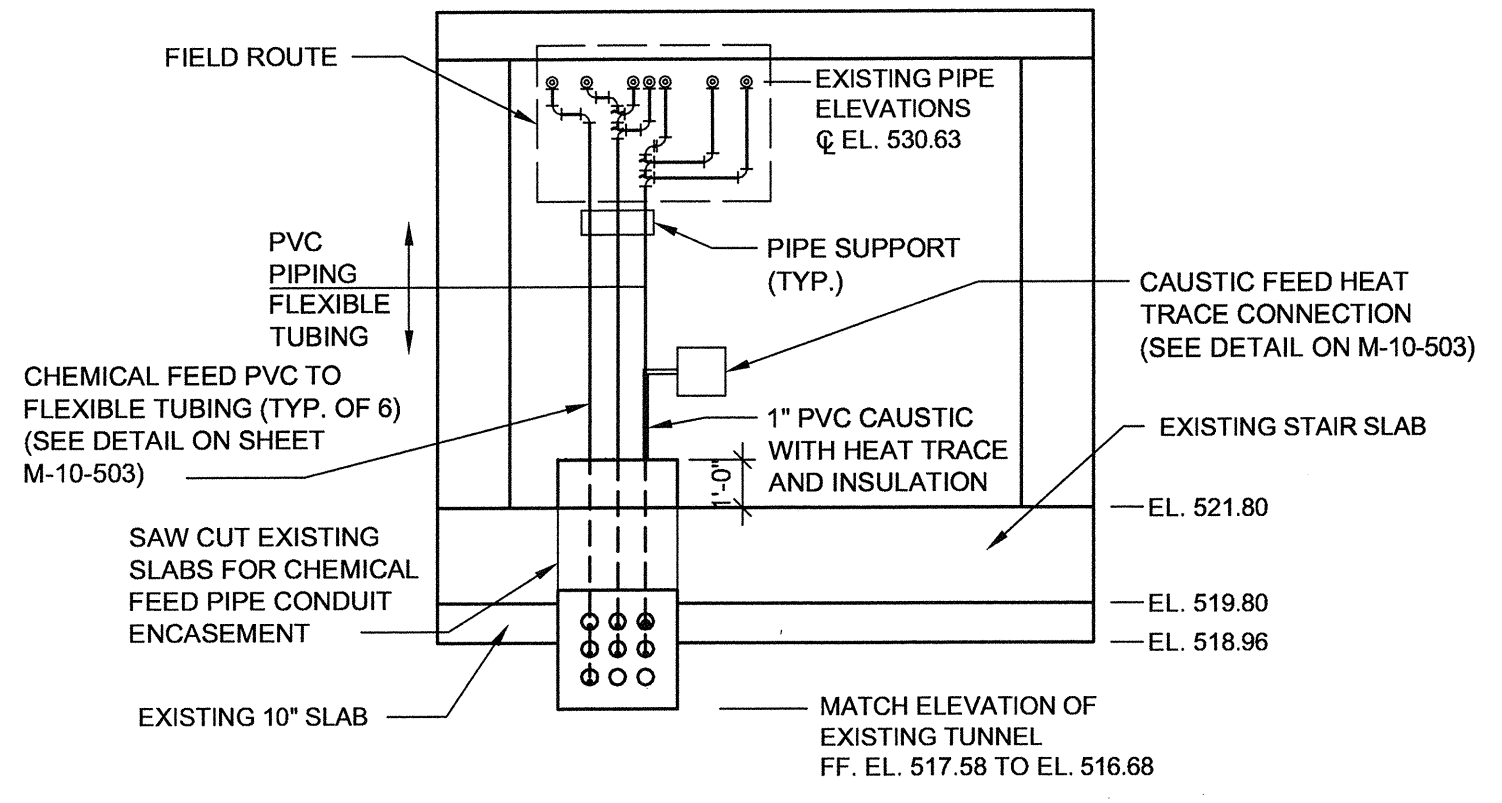
DES: JMA
DWN: PJW
CKD: CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

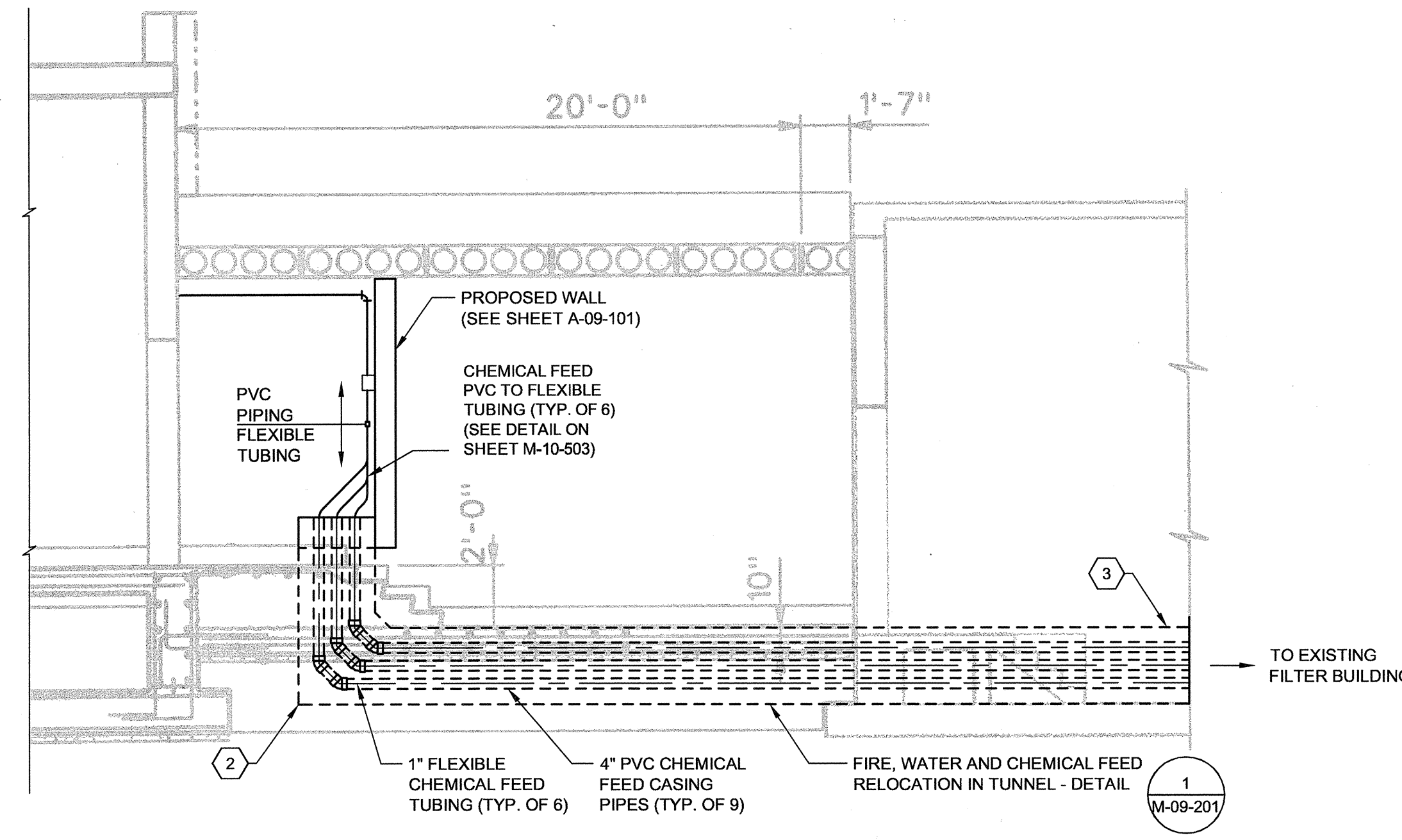
MECHANICAL
CHEMICAL FEED RELOCATION
PLANS AND SCHEMATICS
SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: M-09-102
CAD REF. NO.: M-09-102

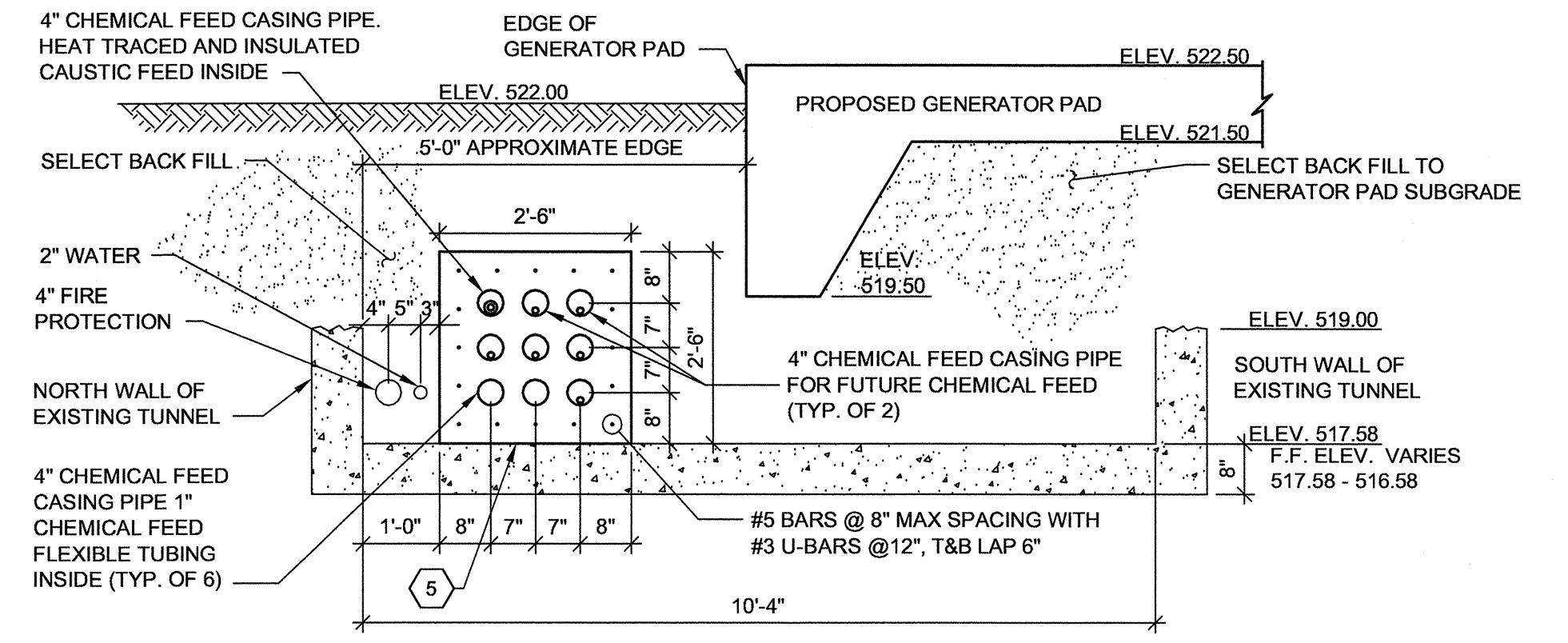
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1 EAST CHEMICAL BUILDING CHEMICAL FEED PIPING - EAST SECTION
SCALE: 1/4"=1'-0"

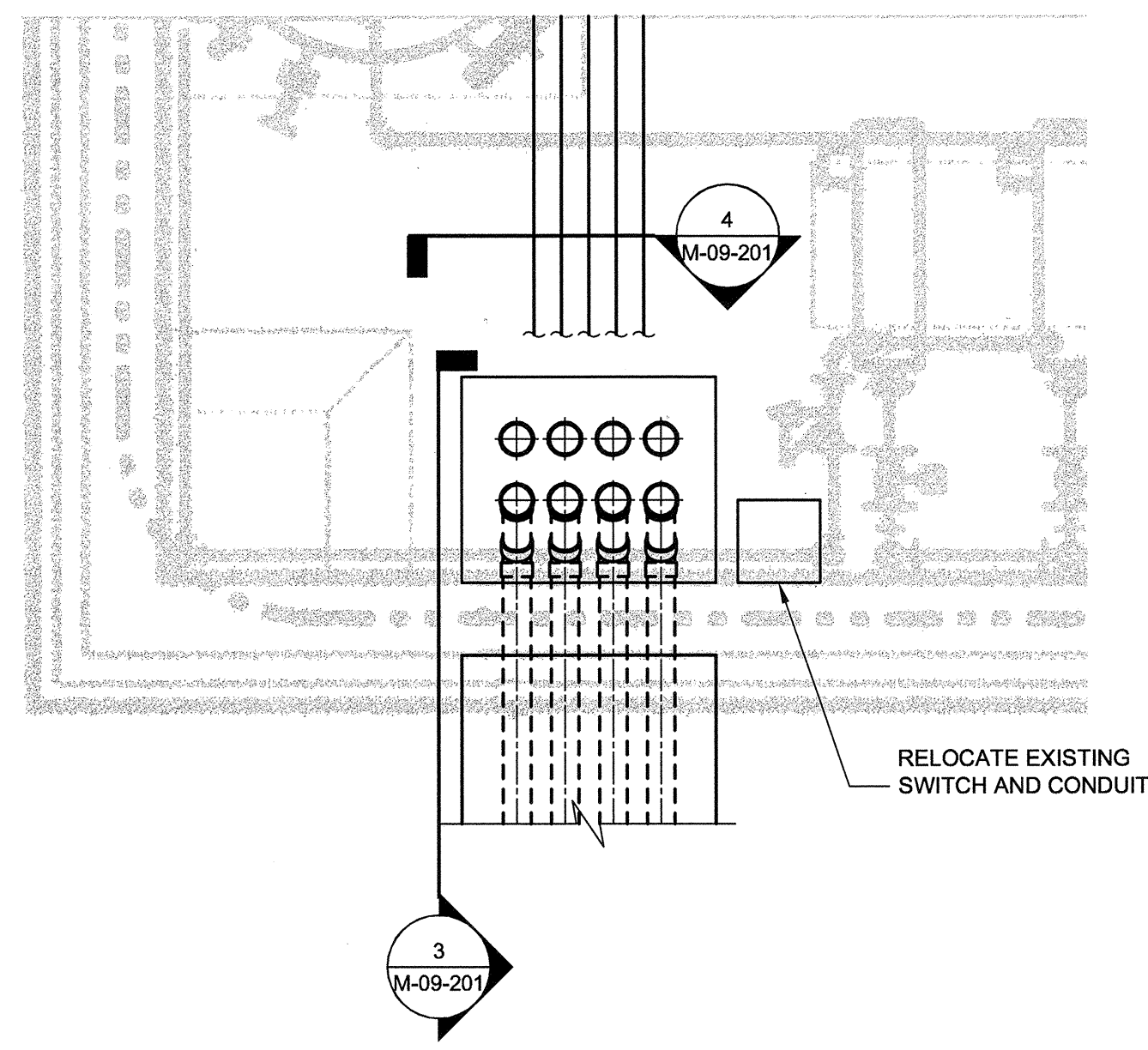


2 EAST CHEMICAL BUILDING CHEMICAL FEED PIPING - NORTH SECTION
SCALE: 1/4"=1'-0"

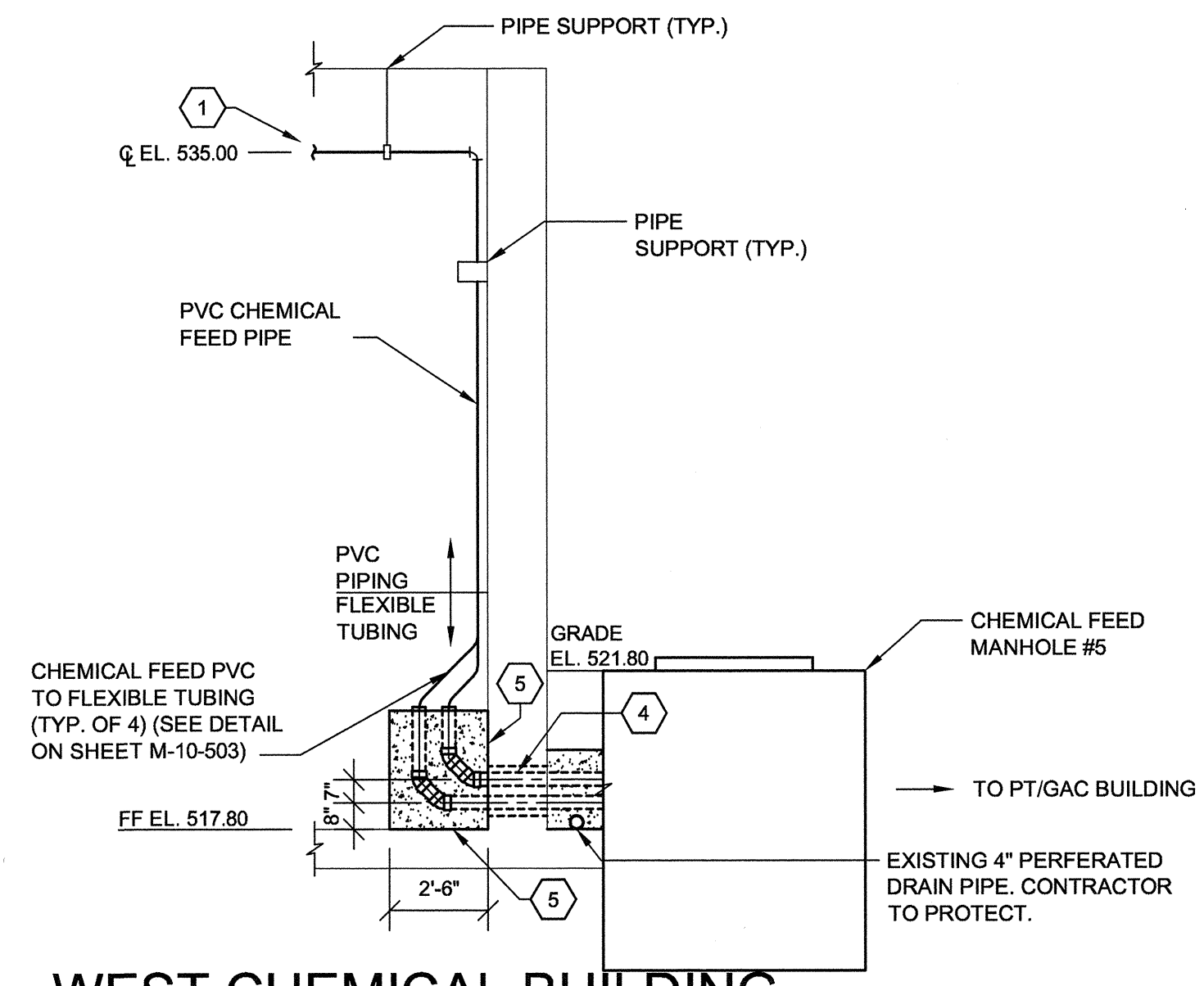


1 FIRE, WATER AND CHEMICAL FEED RELOCATION IN TUNNEL - DETAIL
SCALE: 1/2"=1'-0"

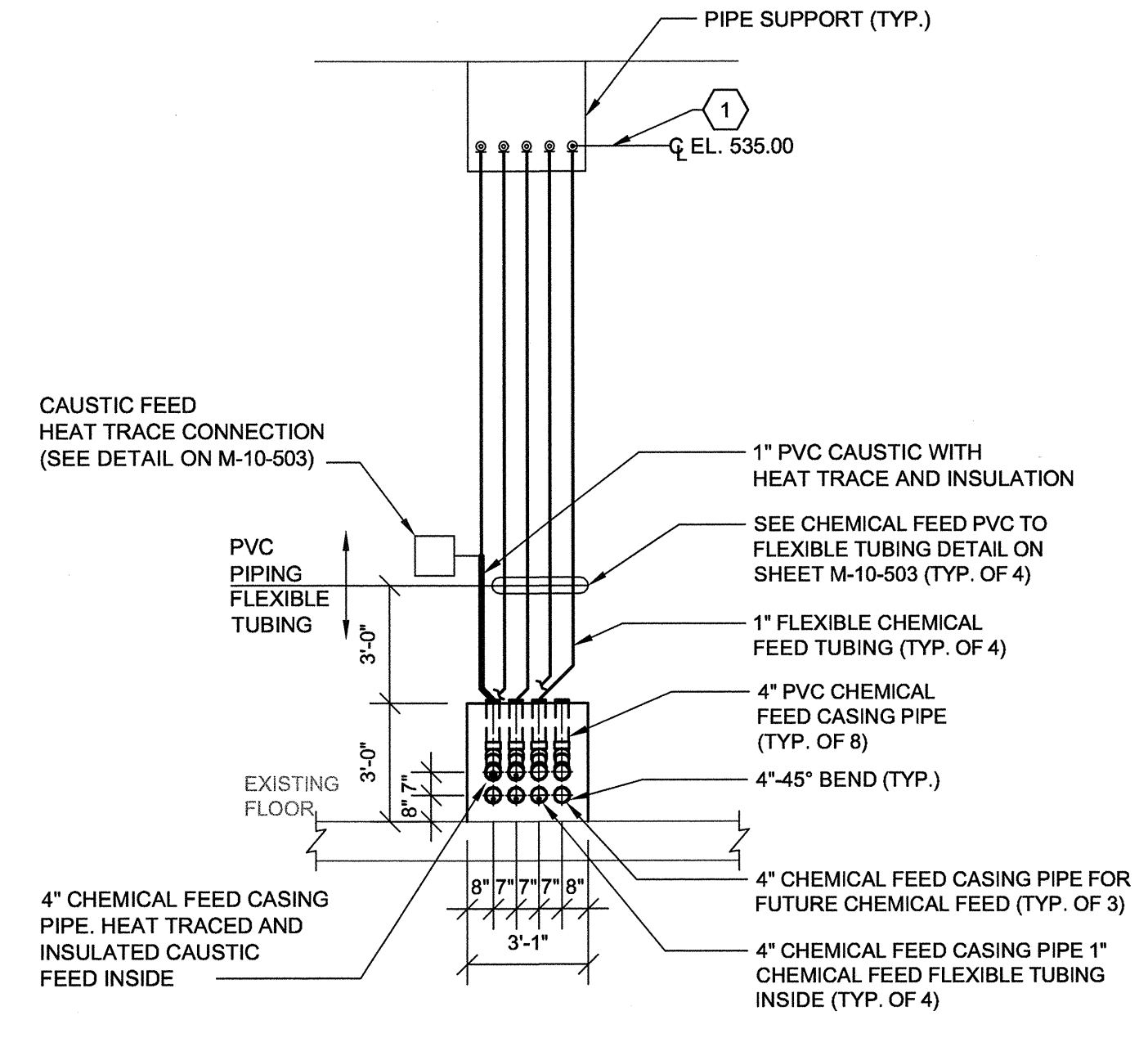
- NOTES:**
- FLOOR OF TUNNEL SHALL BE 6 INCH-CORE DRILLED EVERY 3 FEET NORTH AND SOUTH OF PROPOSED CHEMICAL FEED ENCASUREMENT TO PROVIDE DRAINAGE.
 - 1" MINIMUM CLEARANCE BETWEEN CONDUITS AND REBAR. 3" CLEARANCE BETWEEN OUTER SURFACE AND REBAR.
 - ALL CHEMICAL FEED, WATER AND FIRE PROTECTION PIPING SHALL BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION AND CONSTRUCTION.



2 WEST CHEMICAL BUILDING CONCRETE WALL PENETRATION ENCLOSURE - DETAIL
SCALE: 1/2"=1'-0"



3 WEST CHEMICAL BUILDING CHEMICAL FEED PIPING - SECTION
SCALE: 1/4"=1'-0"



4 CHEMICAL BUILDING CONCRETE WALL PENETRATION ENCLOSURE - SECTION
SCALE: 1/4"=1'-0"

SHEET KEYNOTES:

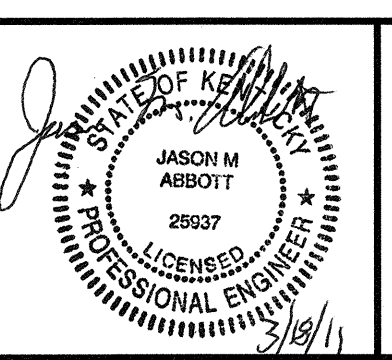
- FIELD LOCATE ELEVATION BASED ON AVAILABLE SPACE OF EXISTING PIPING AND UTILITIES. CONFIRM ELEVATION WITH CCA.
- PRIOR TO DEMOLITION OF THE TUNNEL SAW CUT THE EXISTING SLABS IN THE CHEMICAL BUILDING EAST ENTRANCE AND UPPER PORTION OF THE EXISTING TUNNEL. INSTALL CONDUIT ENCASUREMENT, CHEMICAL FEED CASING PIPE AND RELOCATED CHEMICAL FEED PIPE.
- PRIOR TO DEMOLITION OF THE TUNNEL, INSTALL CONDUIT ENCASUREMENT, CHEMICAL FEED CASING PIPE AND RELOCATED CHEMICAL FEED PIPE ALONG FLOOR OF EXISTING TUNNEL. SEE SHEET M-09-102.
- CONTRACTOR SHALL FILL VOID AROUND CASING PIPES WITH SIKA FLEX.
- CONTRACTOR SHALL APPLY EPOXY BONDING COMPOUND BEFORE PLACING NEW CONCRETE.

GENERAL NOTES:

- BASE DRAWING FROM 1999 "NORTHERN KENTUCKY WATER SERVICE DISTRICT TAYLOR MILL PLANT CHEMICAL BUILDING, CLARIFIER, AND CLEARWELL IMPROVEMENTS" PROJECT DESIGNED BY CH2M HILL.
- HEAT TRACING SHALL BE INSTALLED ON THE CAUSTIC CHEMICAL FEED TUBING OUTSIDE OF THE BUILDINGS AND ALL OTHER EXTERIOR EXPOSED CHEMICAL FEED PIPING/TUBING.
- COMPACT EXISTING SUBGRADE AND INSTALL A MINIMUM OF 6" OF STRUCTURAL FILL BENEATH CONCRETE CHEMICAL FEED ENCASUREMENT WHERE ENCASUREMENT IS INSTALLED ON SOIL.

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DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

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DWN - PJW
CKD - CMW

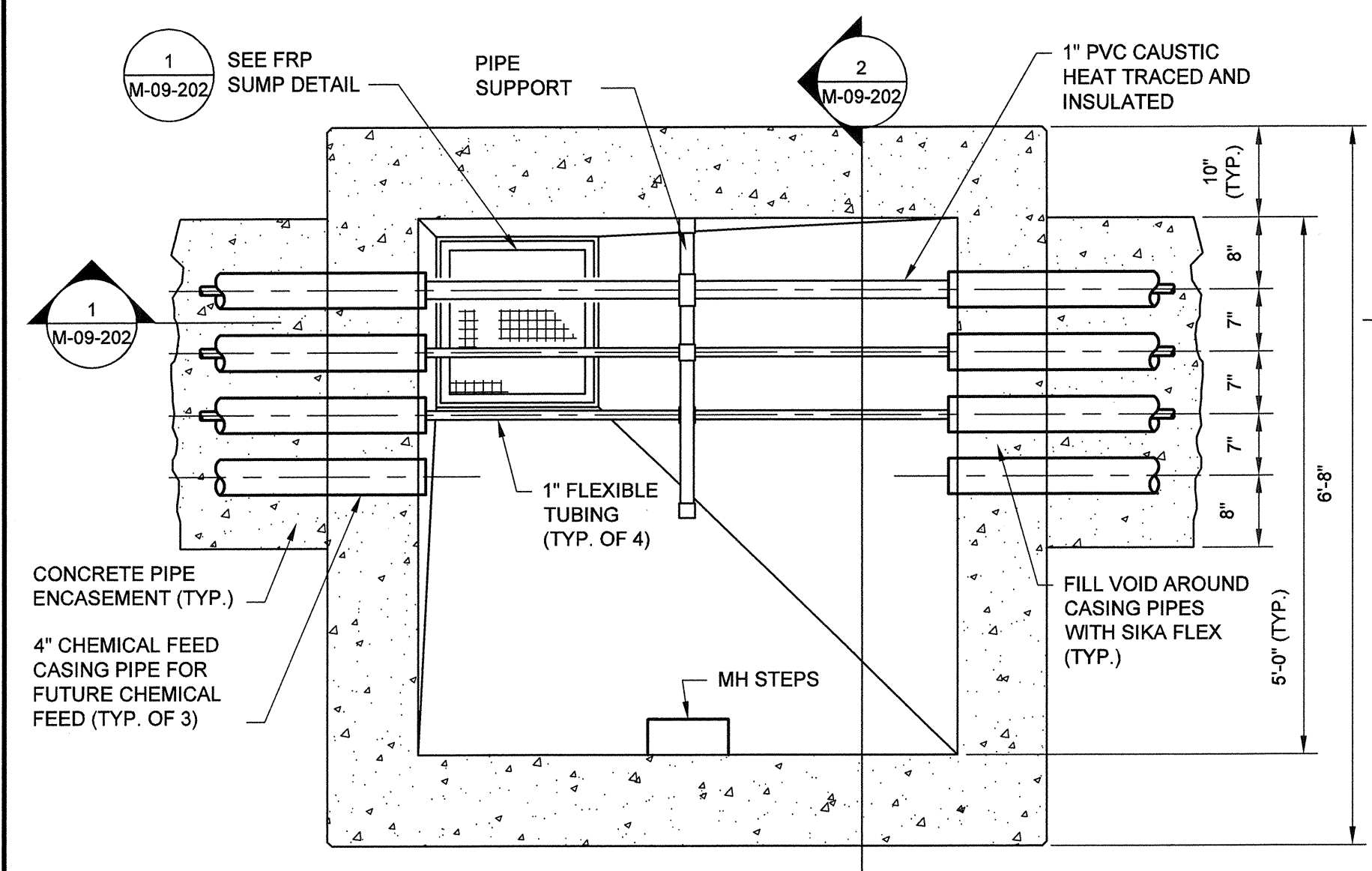
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
CHEMICAL FEED RELOCATION ELEVATIONS AND SECTIONS - I
SCALE: NOT TO SCALE

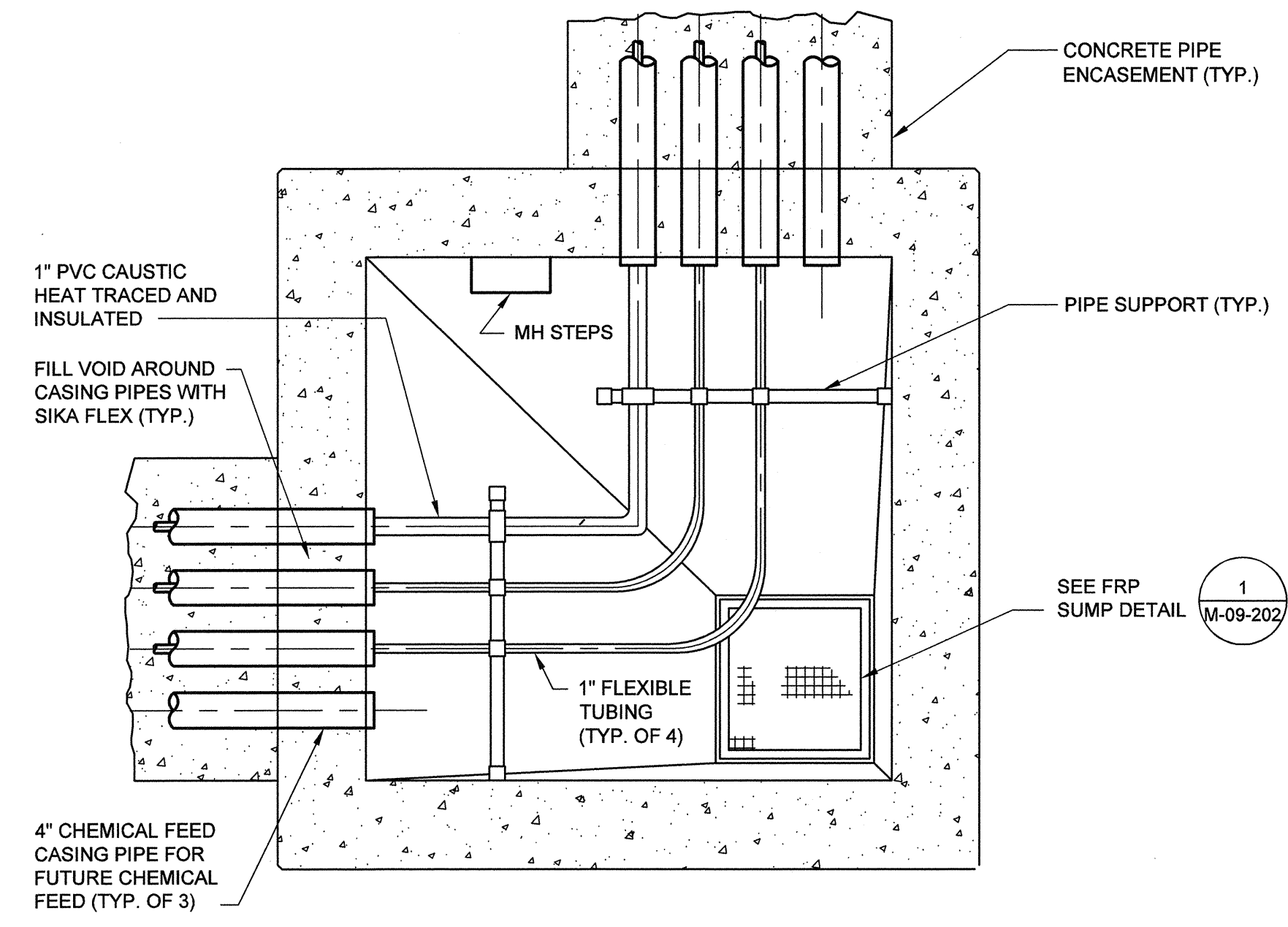
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DATE MARCH, 2011
SHEET M-09-201
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CHEMICAL FEED SCHEDULE

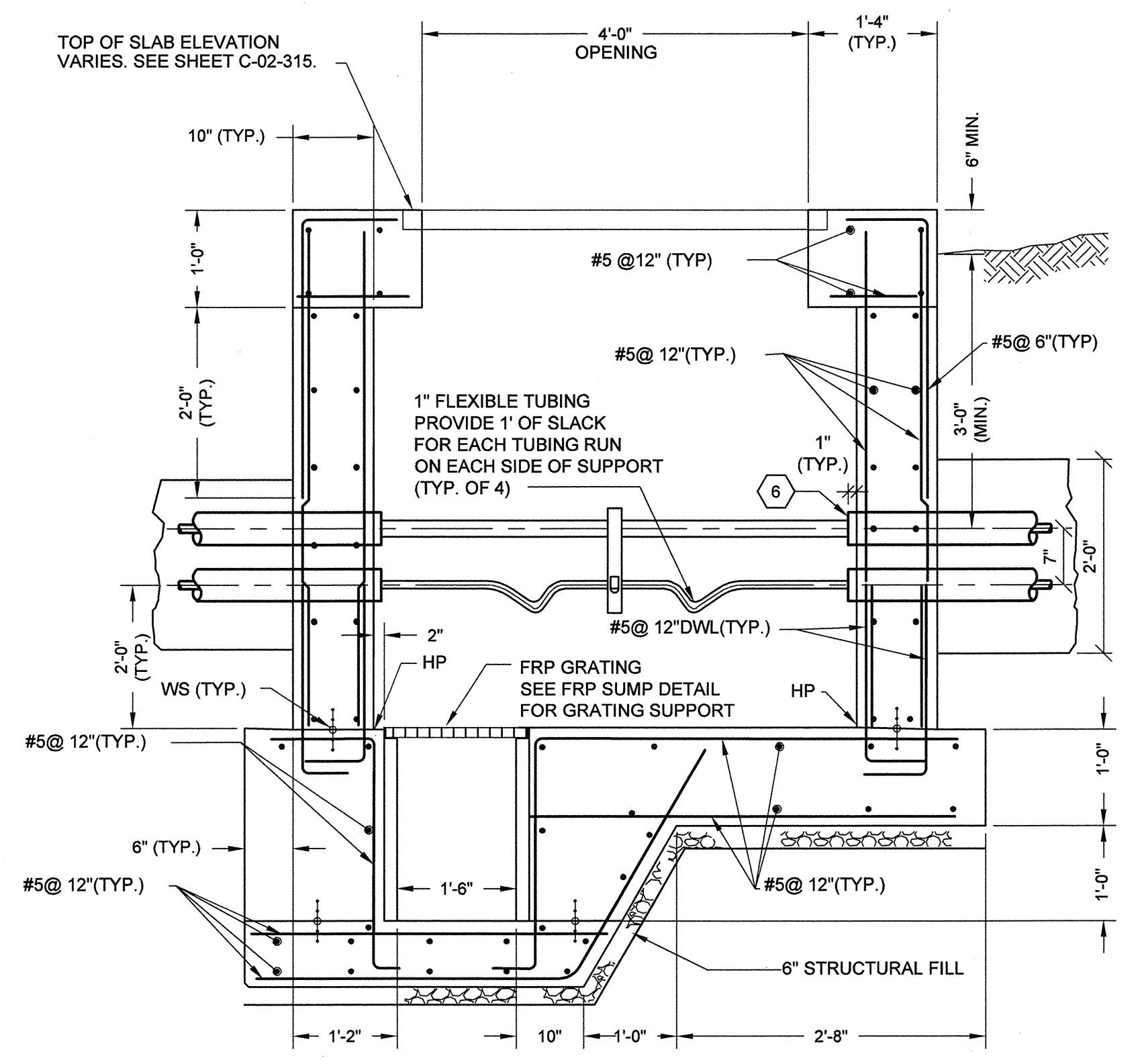
TRENCH FROM CHEMICAL BUILDING, THROUGH YARD TO PT/GAC BUILDING		
CHEMICALS	EXISTING FEED LOCATION	PROPOSED FEED LOCATION
1. 1" SODIUM HYPOCHLORITE	EXISTING RAW WATER PIPE	PROPOSED RAPID MIX
2. 1" COPPER SULFATE / POWDERED ACTIVATED CARBON	EXISTING RAW WATER PIPE	PROPOSED RAPID MIX
3. 1" CAUSTIC	EXISTING RAW WATER PIPE	PROPOSED RAPID MIX
4. 1" FERRIC SULFATE	EXISTING RAW WATER PIPE	PROPOSED RAPID MIX
5. 1" HYBRID COAGULANT	EXISTING RAW WATER PIPE	PROPOSED RAPID MIX
TRENCH FROM CHEMICAL BUILDING, THROUGH TUNNEL TO FILTER BUILDING		
CHEMICALS	EXISTING FEED LOCATION	PROPOSED FEED LOCATION
1. 1" SODIUM HYPOCHLORITE	EXISTING NORTH CLARIFIER 30" EFFLUENT PIPE AND EXISTING NORTH/SOUTH TROUGH	PROPOSED 42" FI
2. 1" FILTER AID POLYMER	EXISTING NORTH CLARIFIER EFFLUENT BOX AND EXISTING NORTH/SOUTH TROUGH	PROPOSED FILTER OVERFLOW BOX
3. 1" CORROSION INHIBITOR	EXISTING FILTER EFFLUENT 2 LOCATIONS PRIOR TO CLEARWELL	PROPOSED 24" GUTW AND EXISTING LOCATION IN THE NORTH PIPE GALLERY
4. 1" HYDROFLUOSILICIC ACID	EXISTING FILTER EFFLUENT 2 LOCATIONS PRIOR TO CLEARWELL	PROPOSED 24" GUTW AND EXISTING LOCATION IN THE NORTH PIPE GALLERY
5. 1" SODIUM HYPOCHLORITE	EXISTING FILTER EFFLUENT 2 LOCATIONS PRIOR TO CLEARWELL	PROPOSED 24" GUTW AND EXISTING LOCATION IN THE NORTH PIPE GALLERY
6. 1" CAUSTIC	EXISTING FILTER EFFLUENT 2 LOCATIONS PRIOR TO CLEARWELL	PROPOSED 24" GUTW AND EXISTING LOCATION IN THE NORTH PIPE GALLERY
7. 1" SODIUM HYPOCHLORITE	EXISTING BOOSTER PUMP AND BACKWASH PUMP HEADER	EXISTING BOOSTER PUMP AND BACKWASH PUMP HEADER



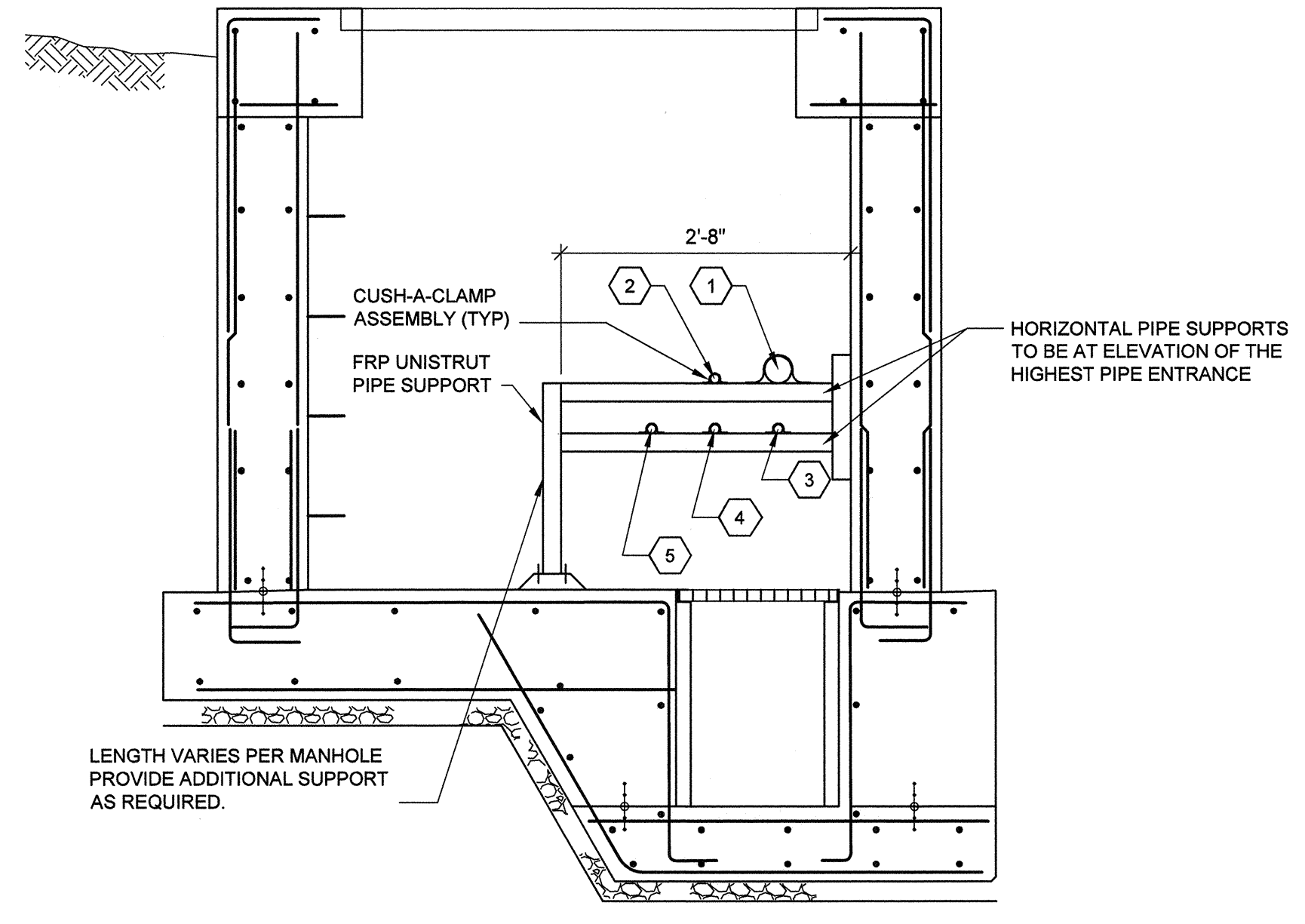
1 TYPICAL CHEMICAL FEED MANHOLE - PLAN
NOT TO SCALE



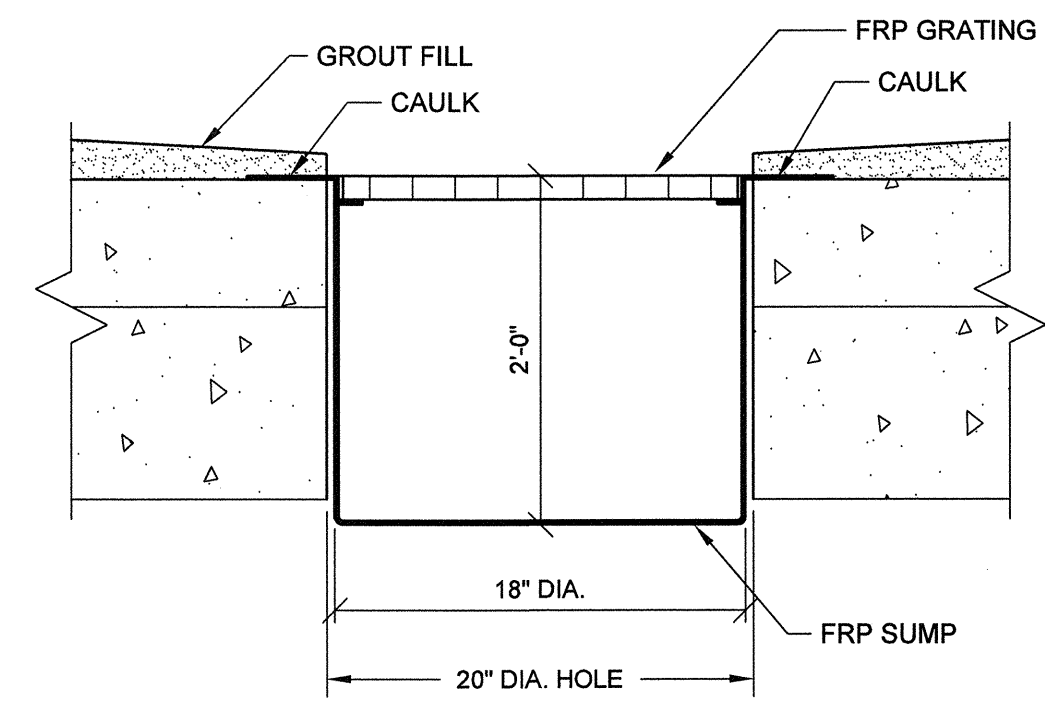
2 CHEMICAL FEED MANHOLE PLAN - WITH OFFSET PIPES
NOT TO SCALE



1 TYPICAL CHEMICAL FEED MANHOLE - SECTION
NOT TO SCALE
NOTE: 1. SLOPE BOTTOM SLAB TO DRAIN 1/8" PER 1'-0" (SEE FRP SUMP DRAIN DETAIL)



2 TYPICAL CHEMICAL FEED PIPE SUPPORT - SECTION
NOT TO SCALE



1 FRP SUMP - DETAIL
NOT TO SCALE

SHEET KEYNOTES:

- 1" PVC PIPE FOR CAUSTIC WITH HEAT TRACE AND INSULATION
- 1" FLEXIBLE TUBING FOR COPPER SULFATE / POWDERED ACTIVATED CARBON
- 1" FLEXIBLE TUBING FOR HYBRID COAGULANT
- 1" FLEXIBLE TUBING FOR FERRIC SULFATE
- 1" FLEXIBLE TUBING FOR SODIUM HYPOCHLORITE
- TERMINATE CASING PIPE 1" INTO MANHOLE LEAVE OPEN TO DRAIN.

GENERAL NOTES:

1. INSTALL ALL CHEMICAL FEED CARRIER PIPES BETWEEN MANHOLES TO CONTINUOUSLY DRAIN TO THE DOWN SLOPE MANHOLE.
2. ALL HORIZONTAL AND VERTICAL CHANGES SHALL BE MADE GENTLY TO ALLOW THE CHEMICAL FEED TUBING TO BE INSTALLED.
3. THE TOP OF EACH CHEMICAL FEED MANHOLE SHALL READ "CHEMICAL FEED - CONFINED SPACE ENTRANCE REQUIRED".

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MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

PROFESSIONAL ENGINEER
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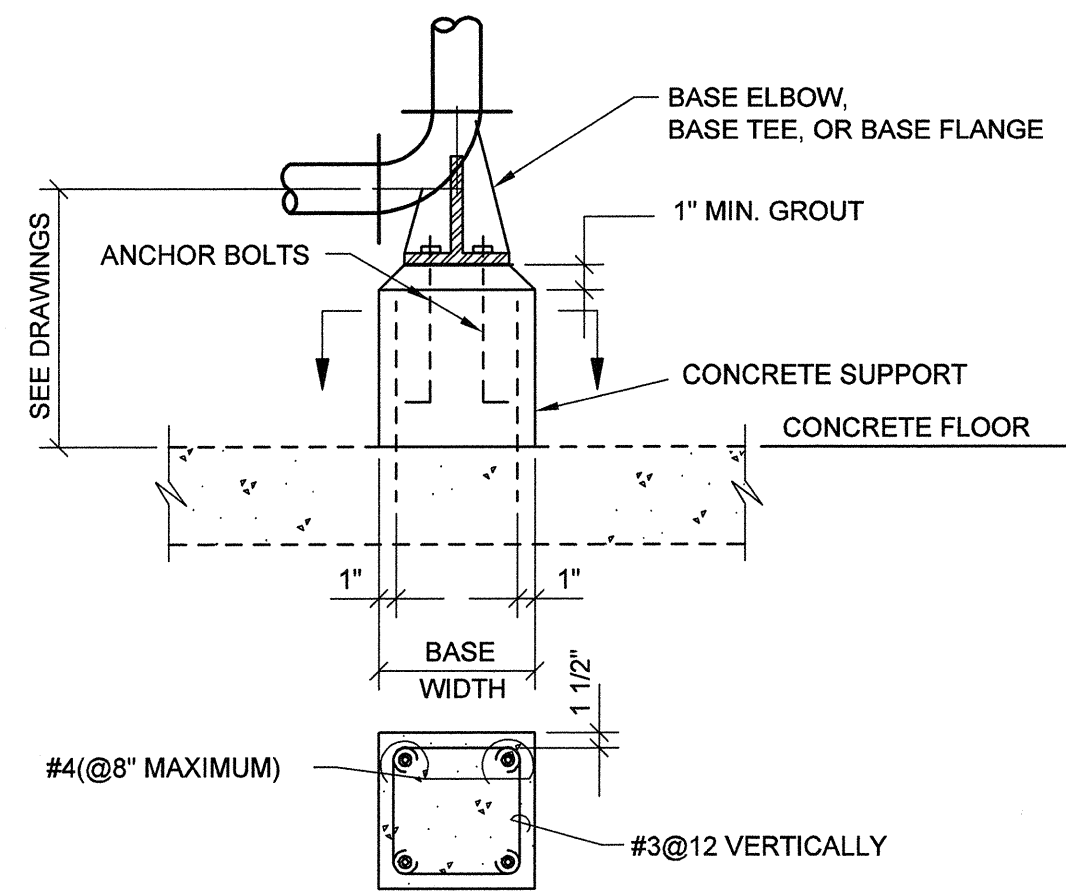
REVISIONS	
NO.	REMARKS

DES	JMA
DWN	PJW
CKD	CMW

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

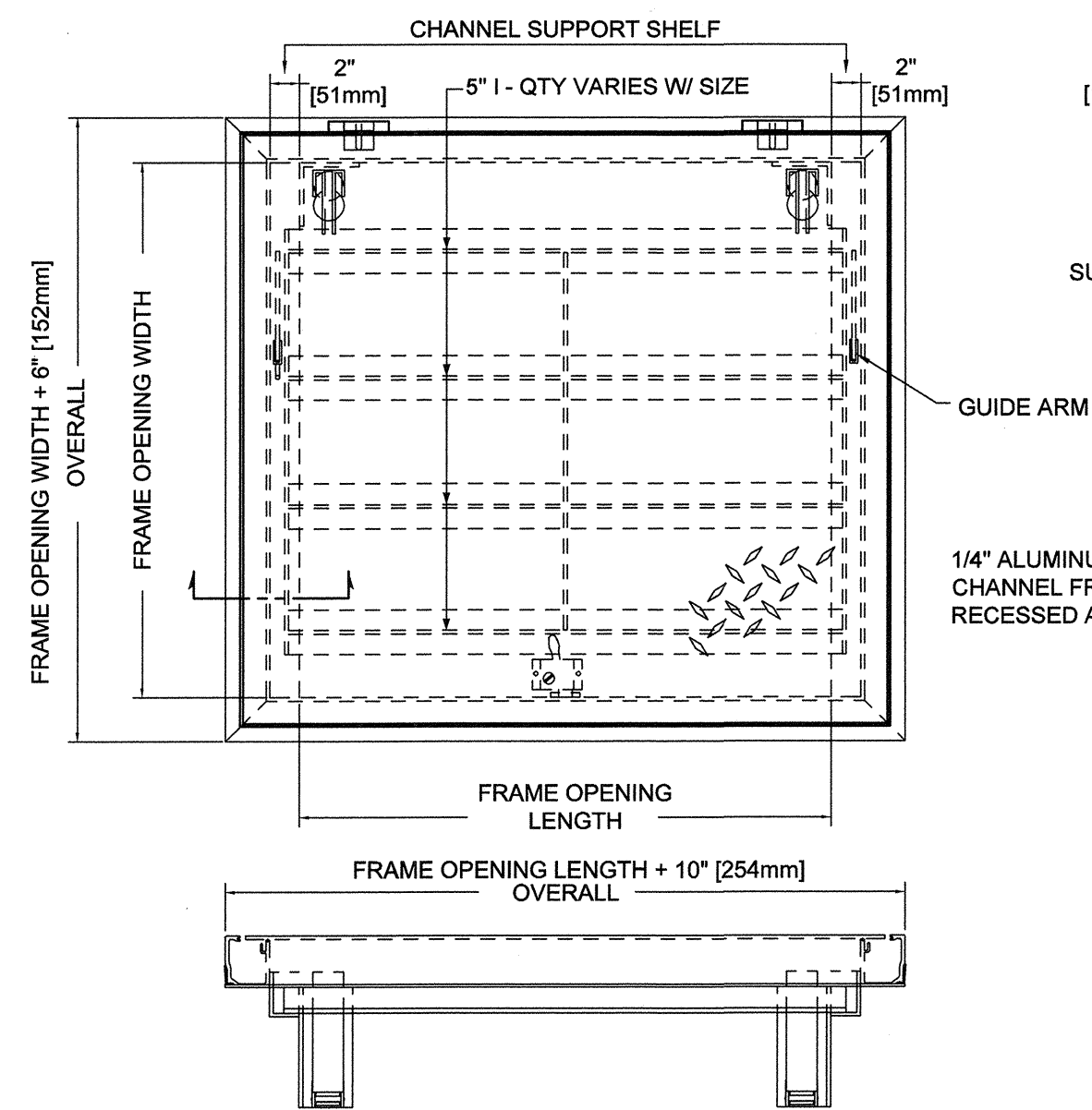
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DATE:	MARCH, 2011
SHEET:	M-09-202
CAD REF. NO.:	M-09-202

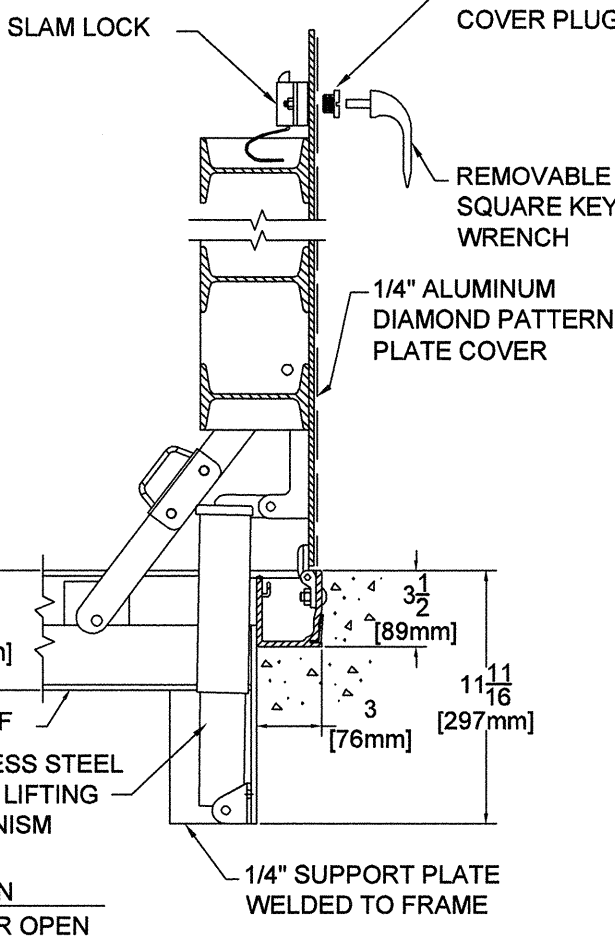
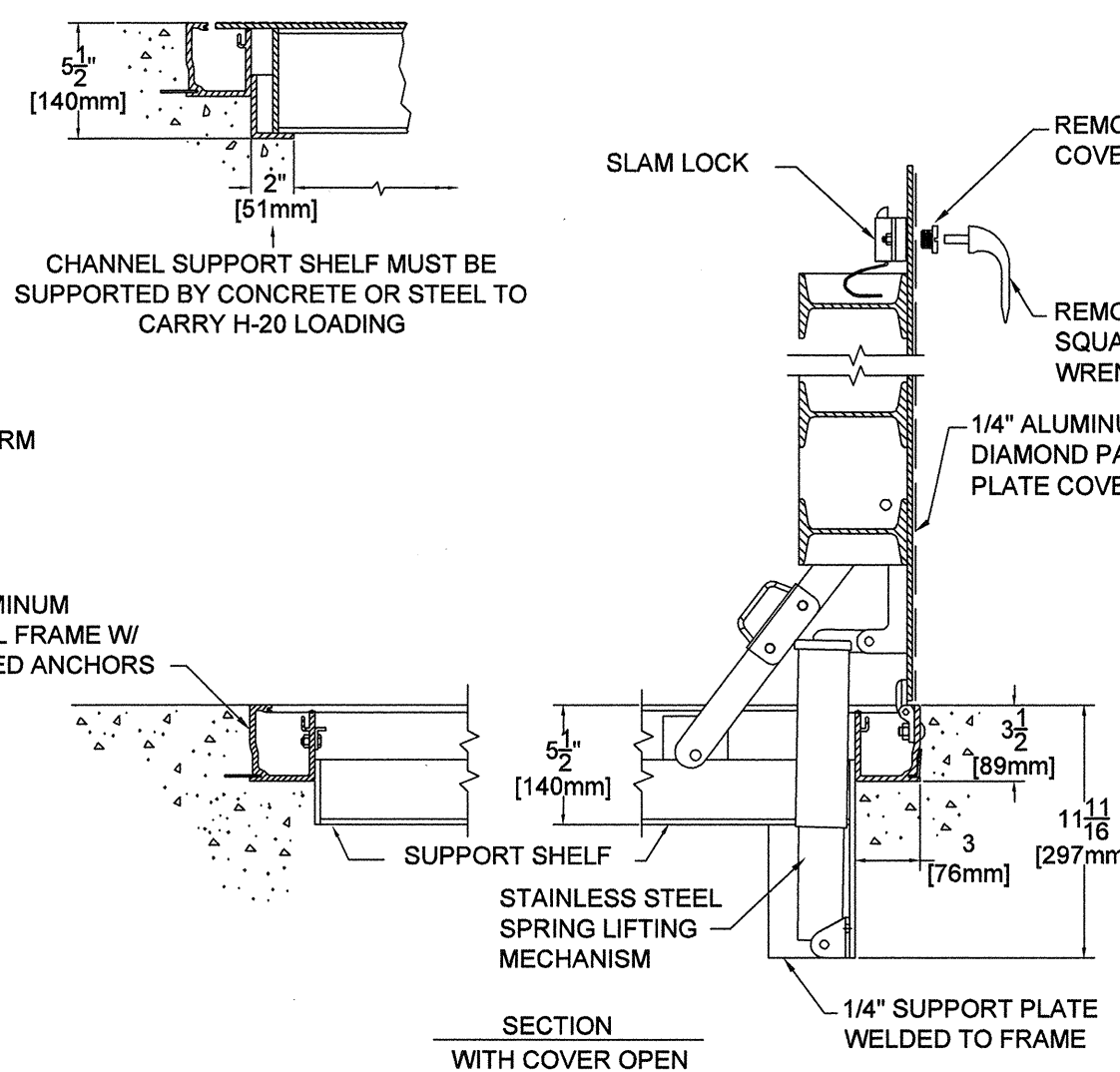


BASE FITTING WITH CONCRETE PEDESTAL DETAIL

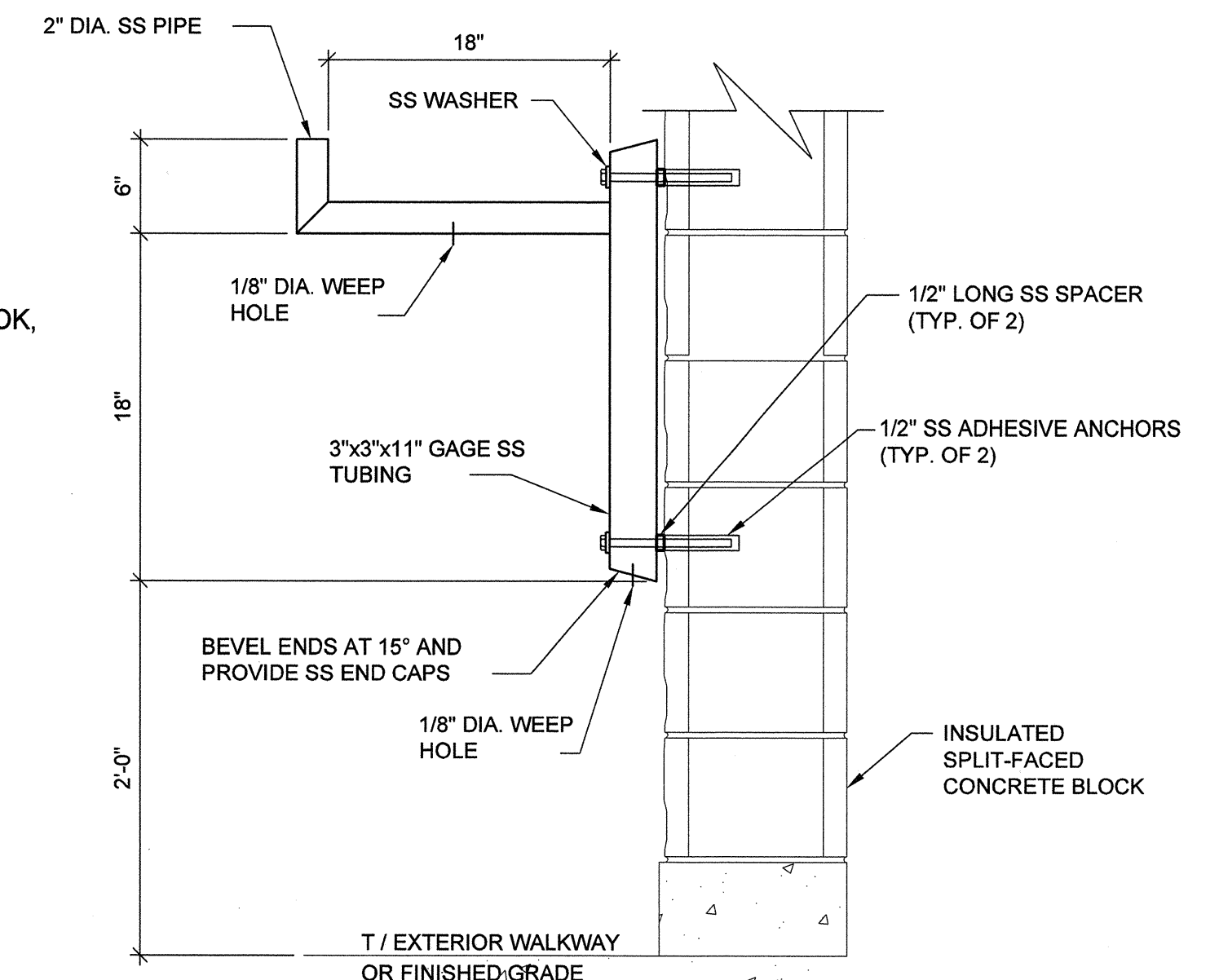
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ACCESS HATCH DETAIL

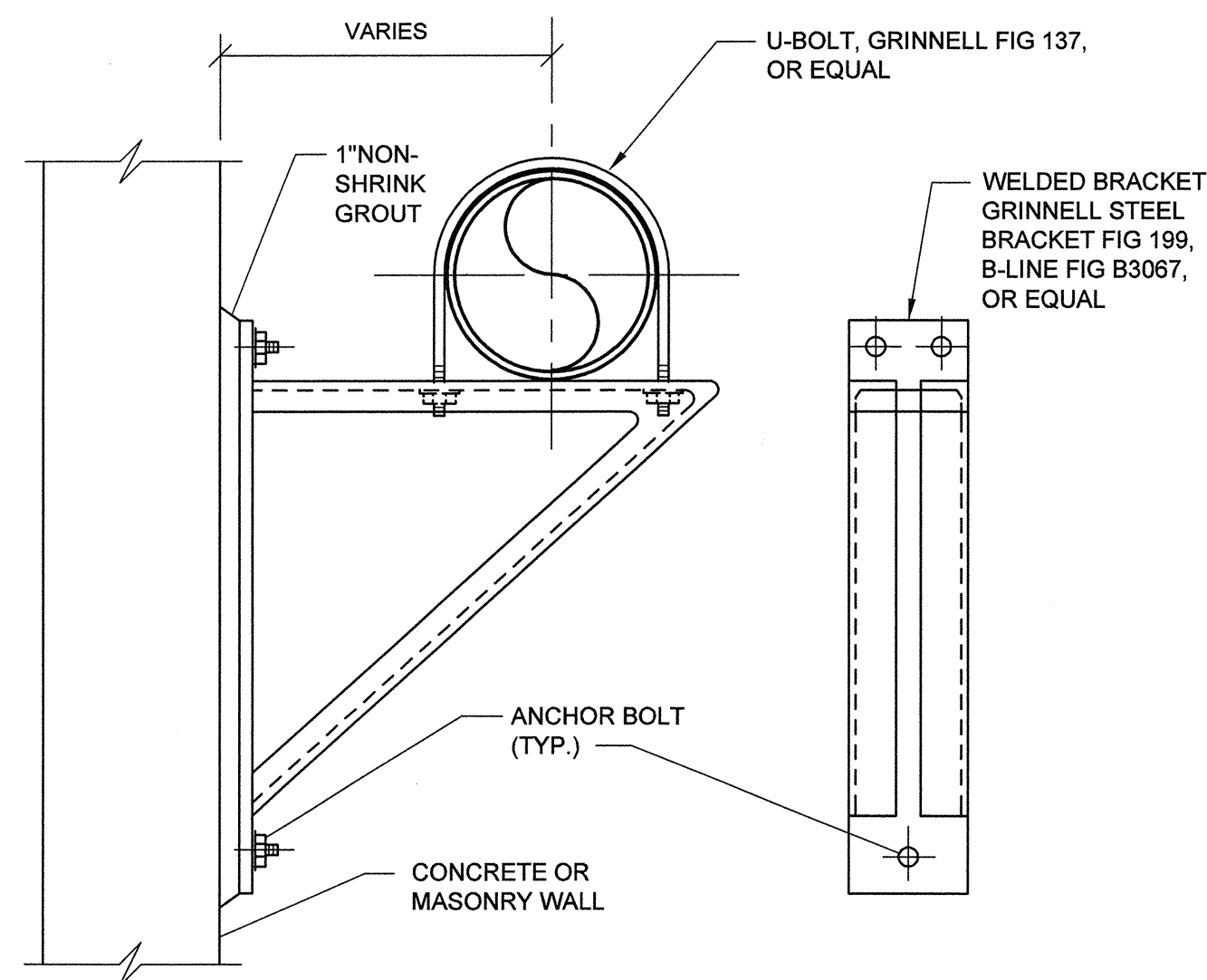


4" FLEXIBLE HOSE RACK VERTICAL ARRANGEMENT DETAIL

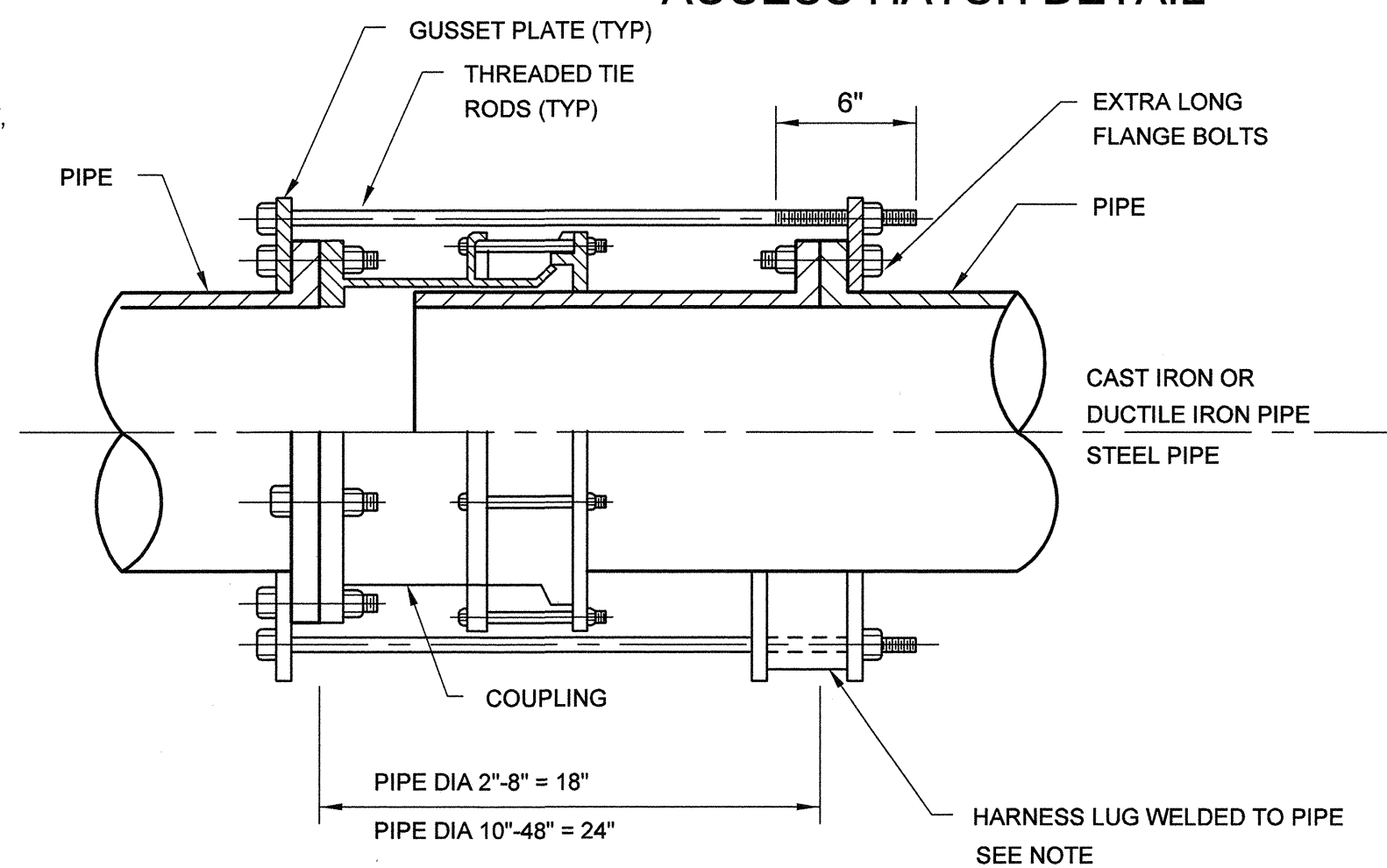


DETAIL NOTES:
 1. HOSE RACK AND FASTENER MATERIALS SHALL BE TYPE 316 STAINLESS STEEL.
 2. WELDING SHALL BE FILLET WELDS OR GROOVE WELDS ALL AROUND.
 3. HOSE RACK SHALL BE FREE OF BURS AND SHARP EDGES.

WALL MOUNTED HOSE RACK DETAIL

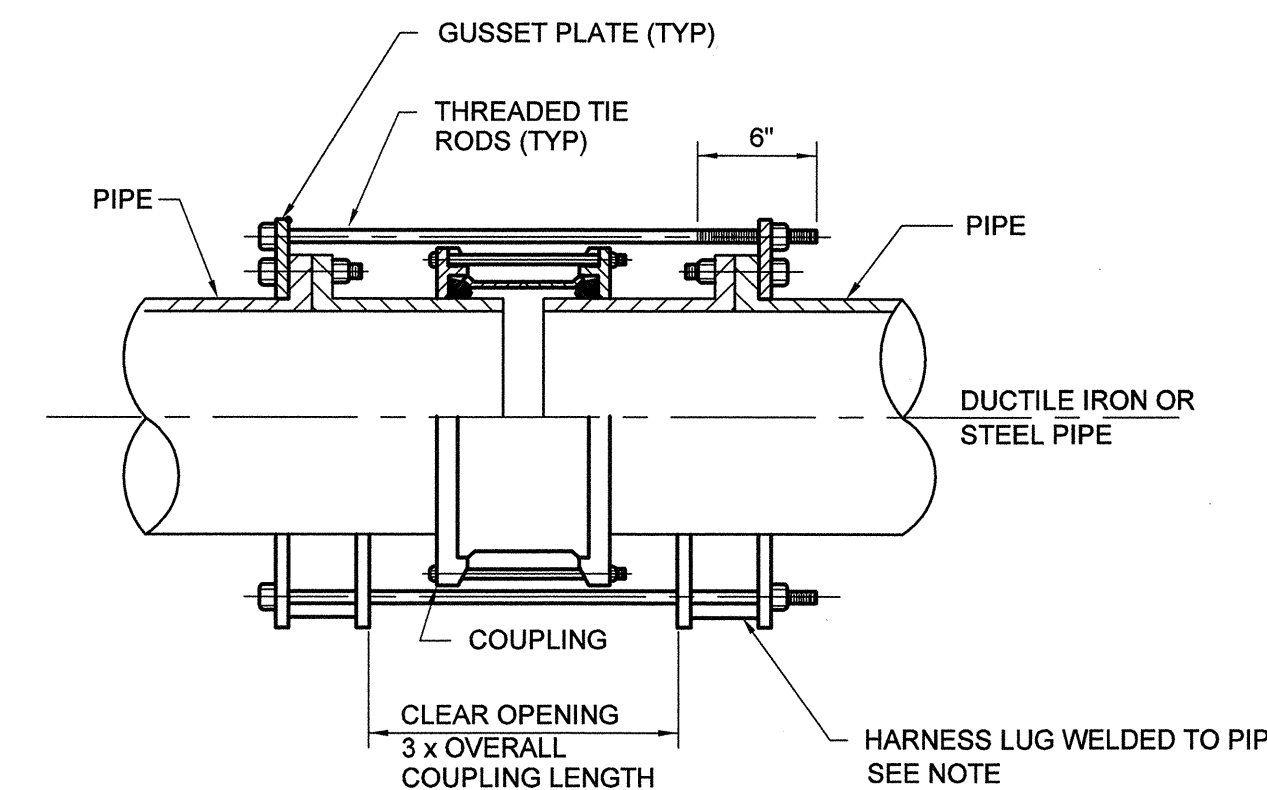


WALL BRACKET PIPE SUPPORT DETAIL



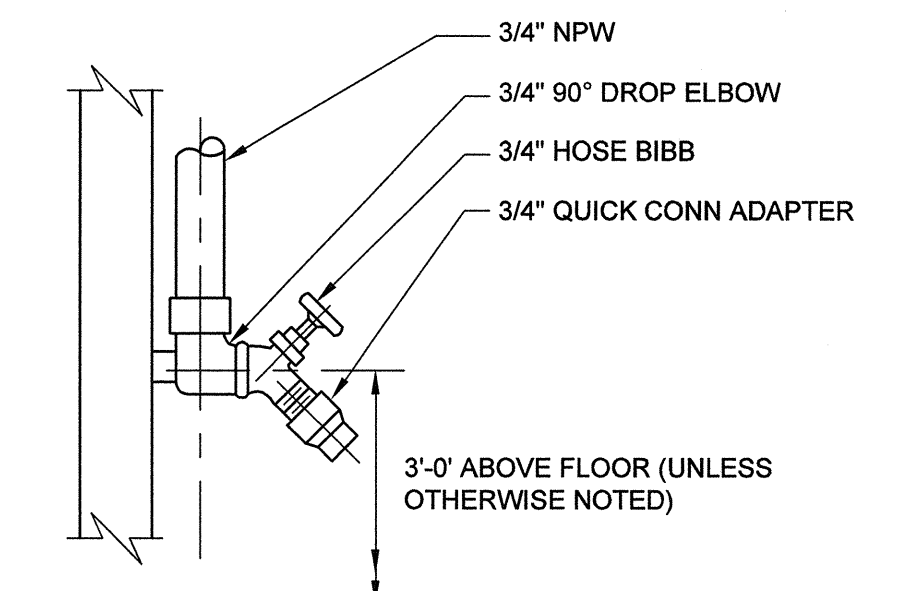
NOTE: THE NUMBER OF TIE RODS, HARNESSES LUGS CONFIGURATION AND MATERIAL THICKNESS SHALL BE IN ACCORDANCE WITH AWWA M-11, STEEL PIPE - A GUIDE FOR DESIGN AND INSTALLATION.

HARNESSES FLANGED COUPLING ADAPTER DETAIL



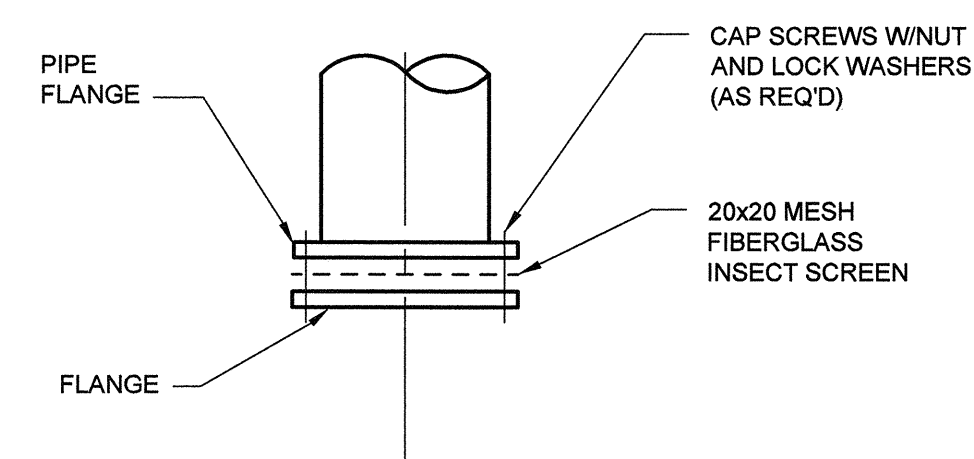
NOTE: THE NUMBER OF TIE RODS, HARNESSES LUGS CONFIGURATION AND MATERIAL THICKNESS SHALL BE IN ACCORDANCE WITH AWWA M-11, STEEL PIPE - A GUIDE FOR DESIGN AND INSTALLATION.

HARNESSES FLEXIBLE COUPLING DETAIL

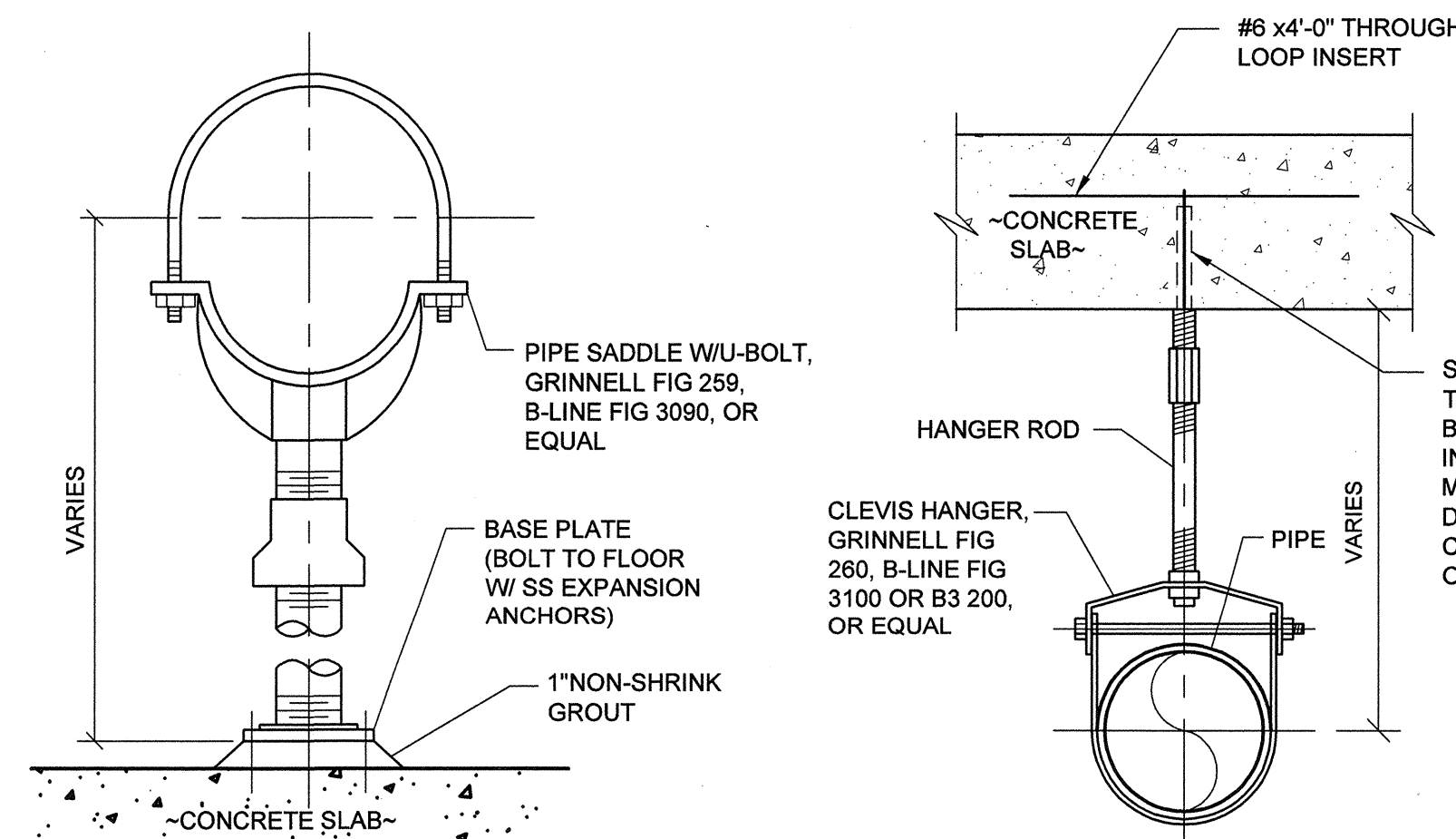


NOTES:
 1. INSULATION NOT SHOWN.
 2. PROVIDE WALL MOUNTED HOSE RACKS SPACED AT 2'-6", FROM HOSE BIBB FOR ALL INTERIOR HOSE BIBBS.

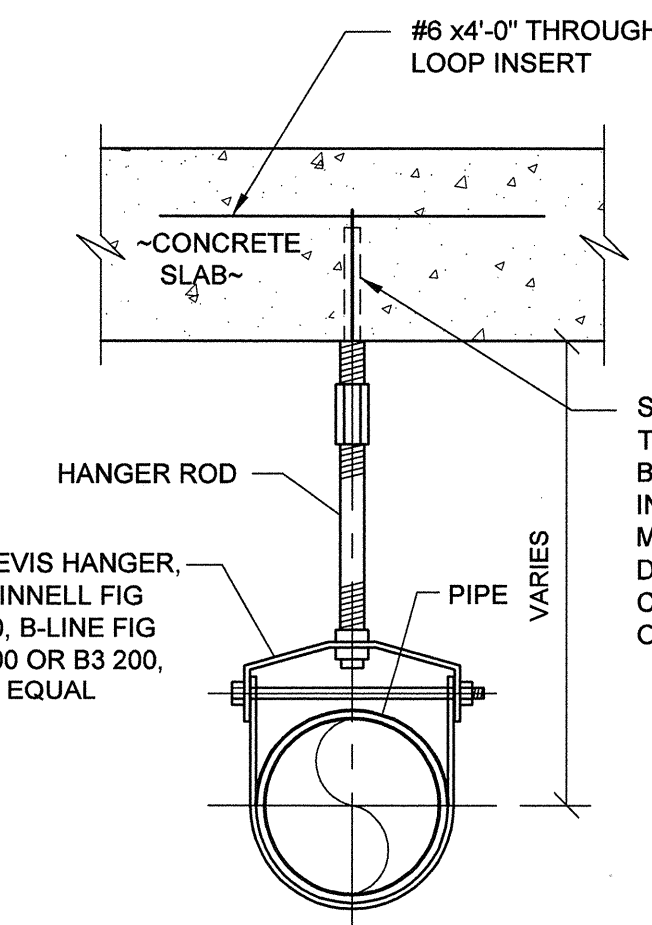
HOSE BIBB CONNECTION DETAIL



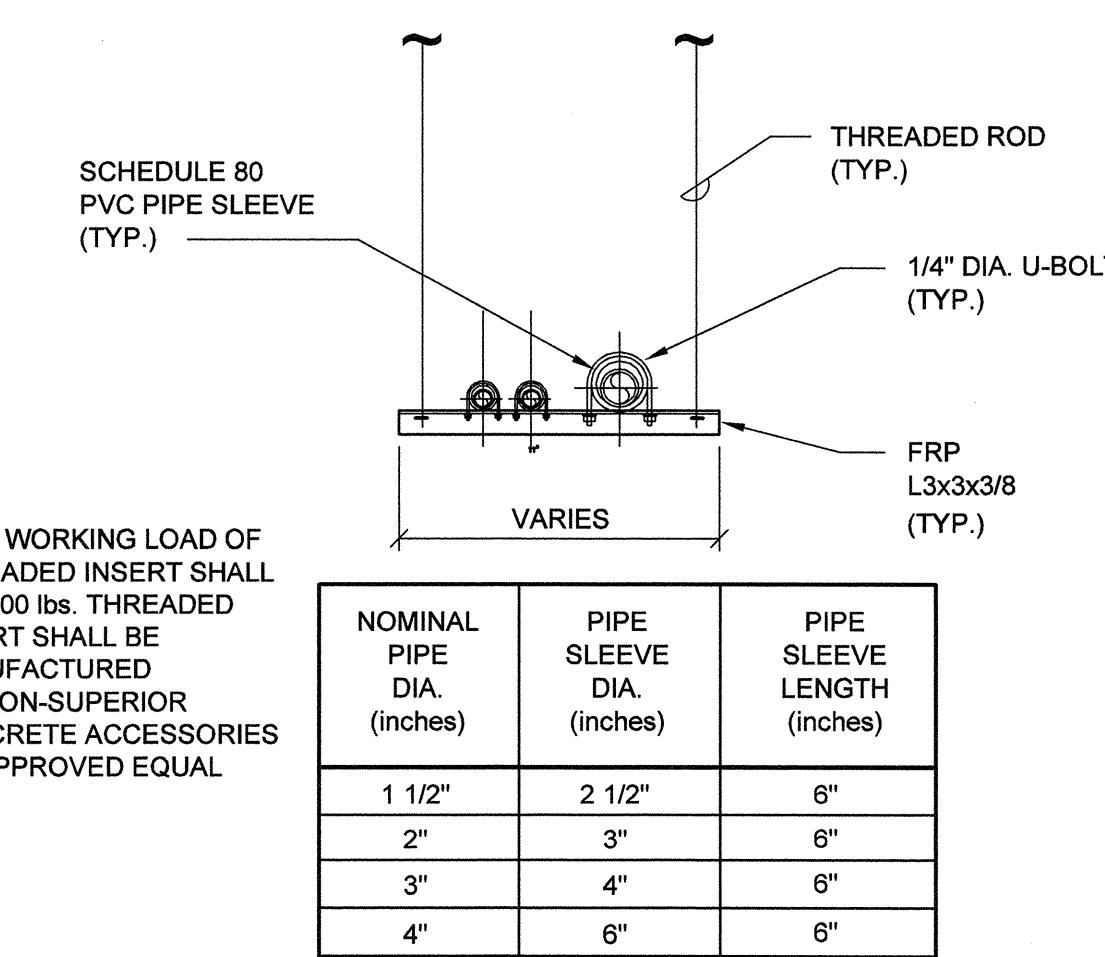
TYPICAL INSECT SCREEN DETAIL



STANCHION SADDLE PIPE SUPPORT DETAIL



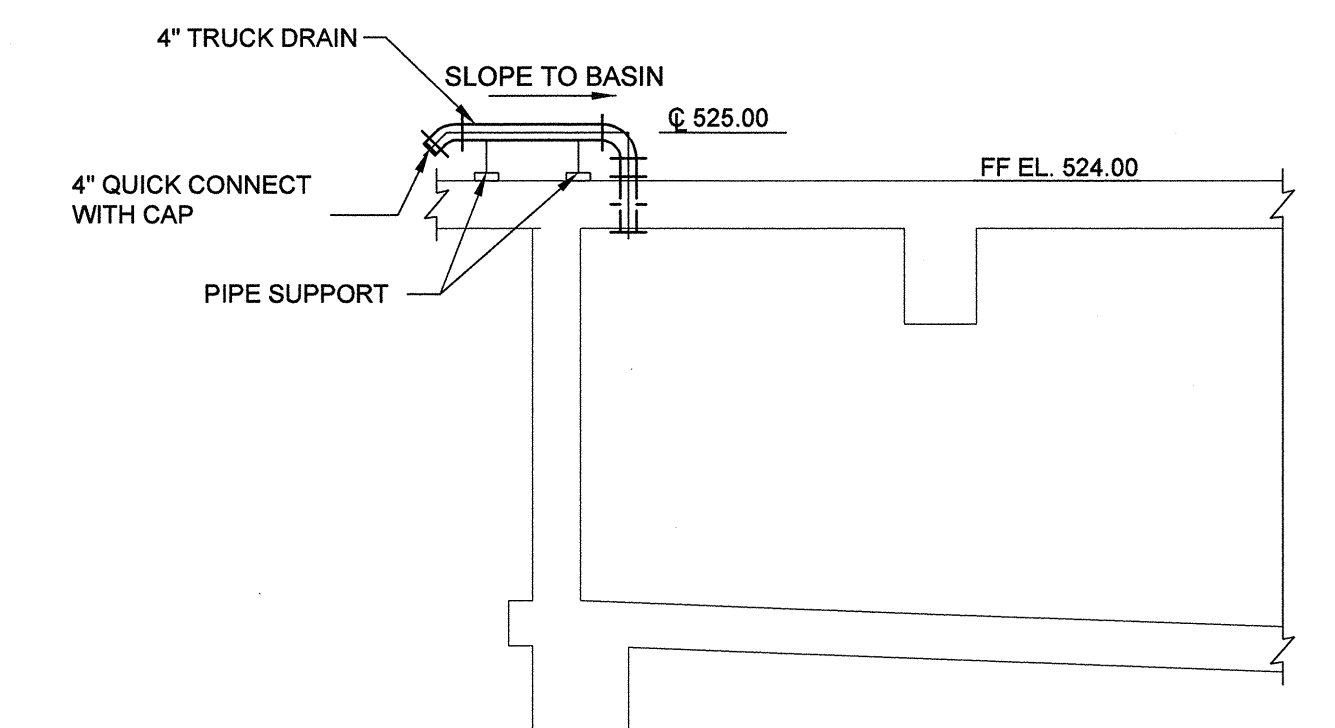
CLEVIS HANGER PIPE SUPPORT DETAILS



NOTE: PIPE SUPPORTS SHALL BE PROVIDED BASED ON SUPPORT SPACING FOR THE SMALLEST DIAMETER PIPE. SEE SPECIFICATION SECTION 15140 - PIPE HANGERS AND SUPPORTS.

NOMINAL PIPE DIA. (inches)	PIPE SLEEVE DIA. (inches)	PIPE SLEEVE LENGTH (inches)
1 1/2"	2 1/2"	6"
2"	3"	6"
3"	4"	6"
4"	6"	6"

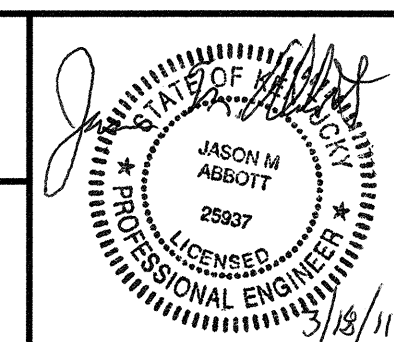
TRAPEZE PIPE SUPPORT DETAIL



NOTE: GENERAL PIPE SUPPORT LOCATION SHOWN. CONTRACTOR SHALL PROVIDE ALL HANGERS AND SUPPORTS ACCORDING TO SPECIFICATION 15055.

TRUCK DRAIN DETAIL

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS	
NO.	REMARKS

DES - JHC
 DWN - PJW
 CKD - CMW

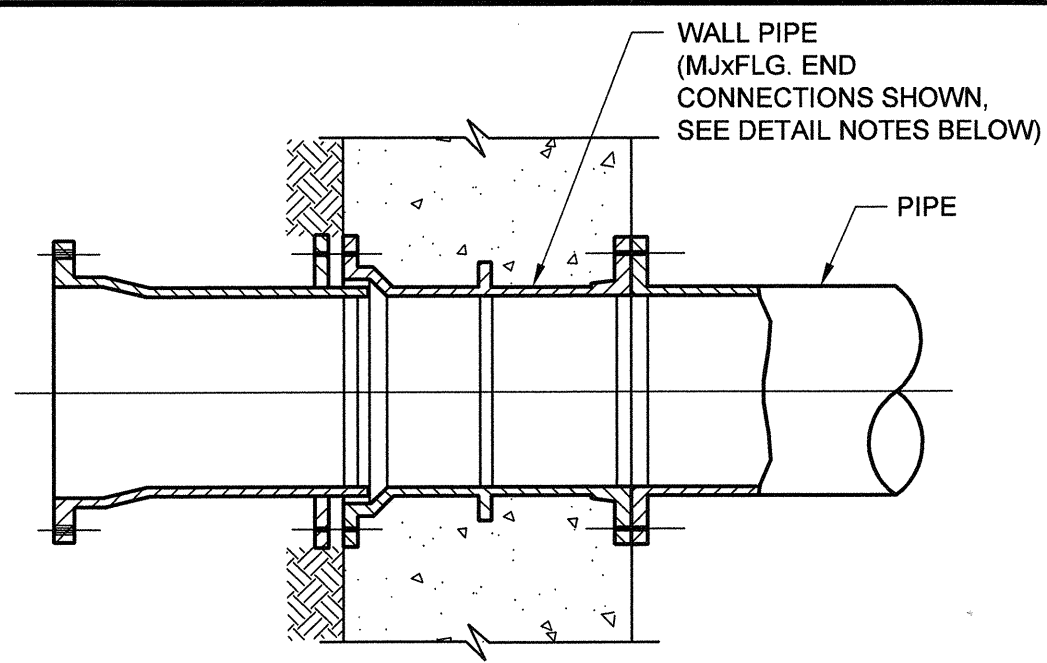
NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
 ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
 DETAILS I

SCALE: N.T.S.

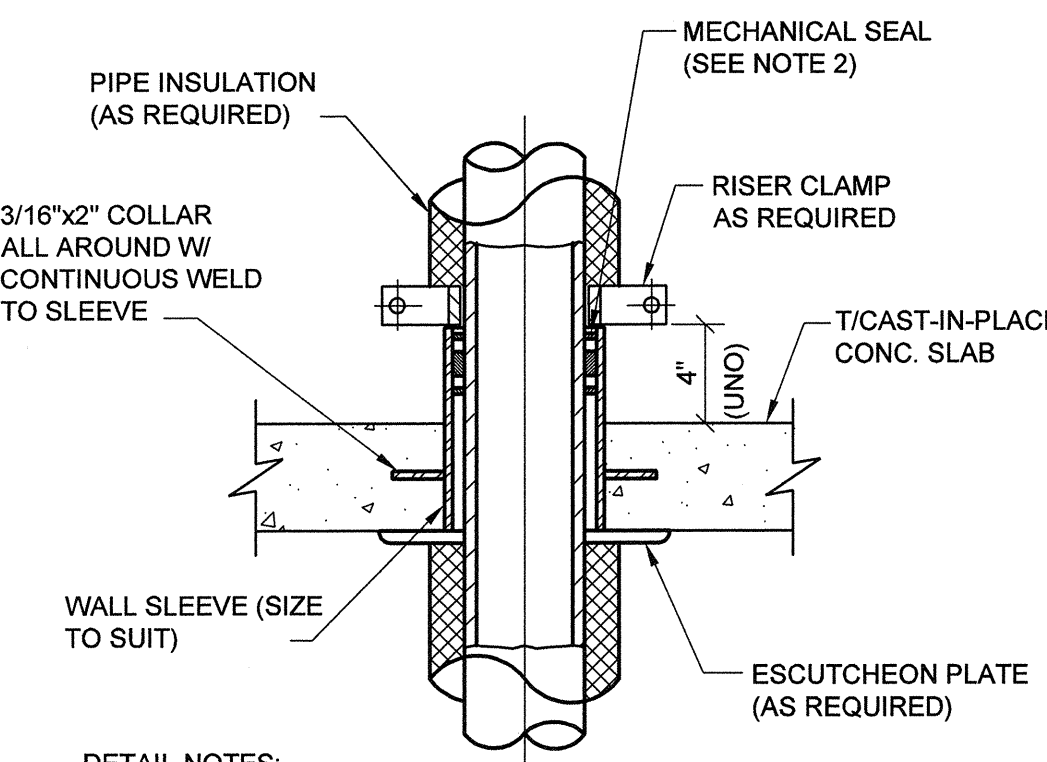
ISSUED STATUS: BID SET
 DATE: MARCH, 2011
 SHEET: M-10-501
 CAD REF. NO.: M-10-501

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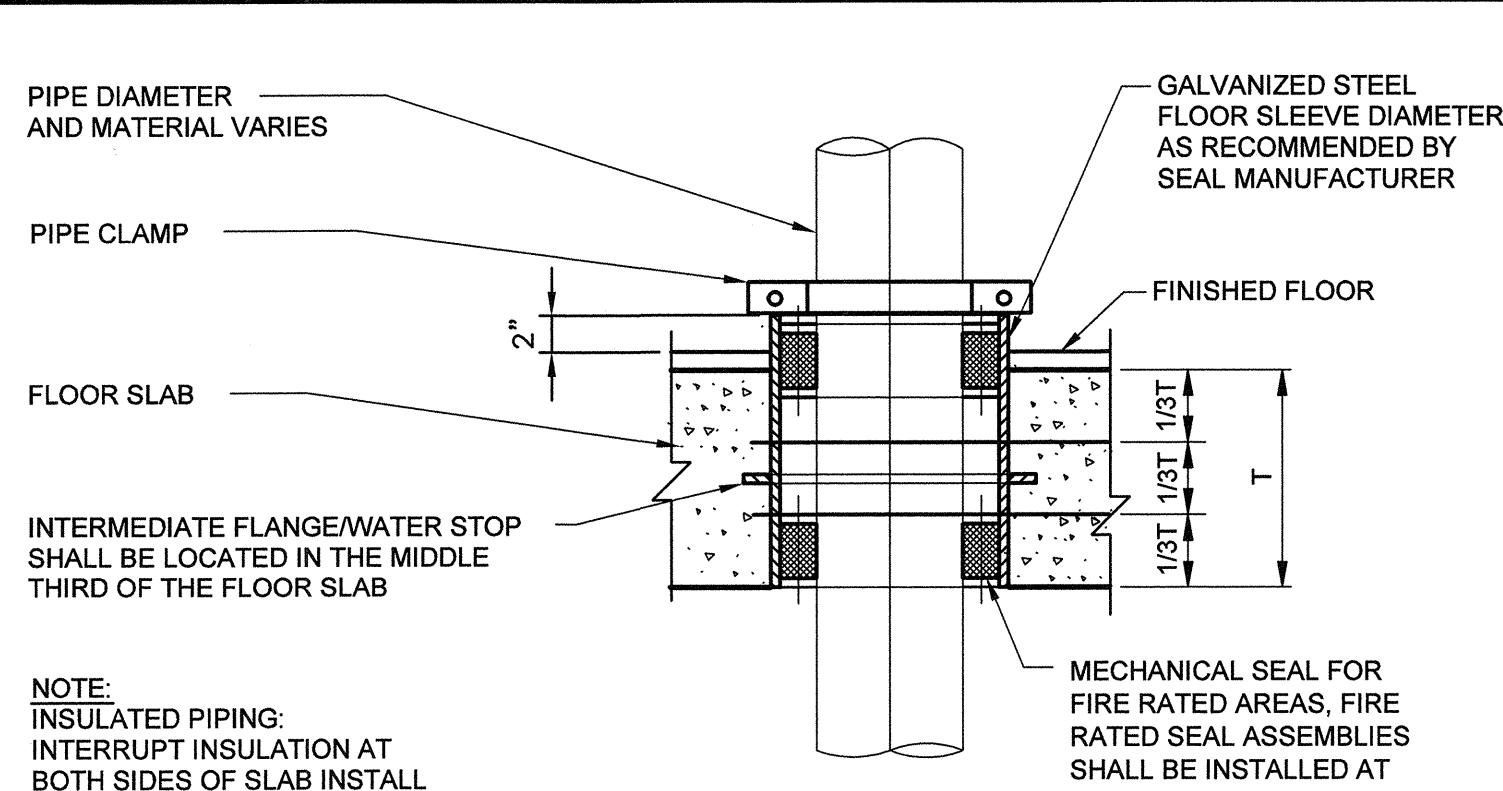
- DETAIL NOTES:**
1. WALL PIPE END CONNECTIONS TO BE AS NOTED ON DRAWINGS.
 2. INSTALL WALL PIPE FLUSH WITH WALL UNLESS OTHERWISE SHOWN OR NOTED.
 3. DRILL AND TAP FLANGES, MJ BELLS AND RESTRAINED JOINT BELLS FOR STUDS.

TYPICAL WALL PIPE DETAIL



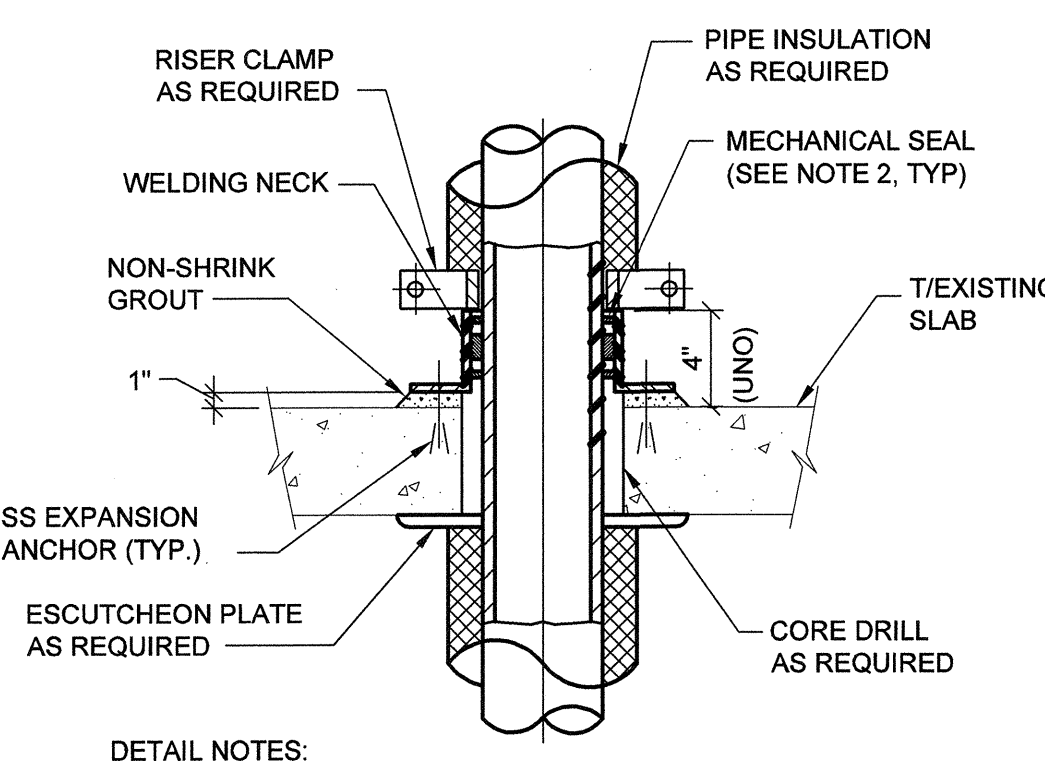
- DETAIL NOTES:**
1. TYPE 1 - MECHANICAL SEAL REQUIRED
TYPE 2 - MECHANICAL SEAL NOT REQUIRED
 2. PROVIDE FIRE RATED MECHANICAL SEALS AS REQUIRED.

TYPICAL FLOOR SLEEVE DETAIL
(PROVIDE TYPE 1 UNLESS OTHERWISE NOTED.)



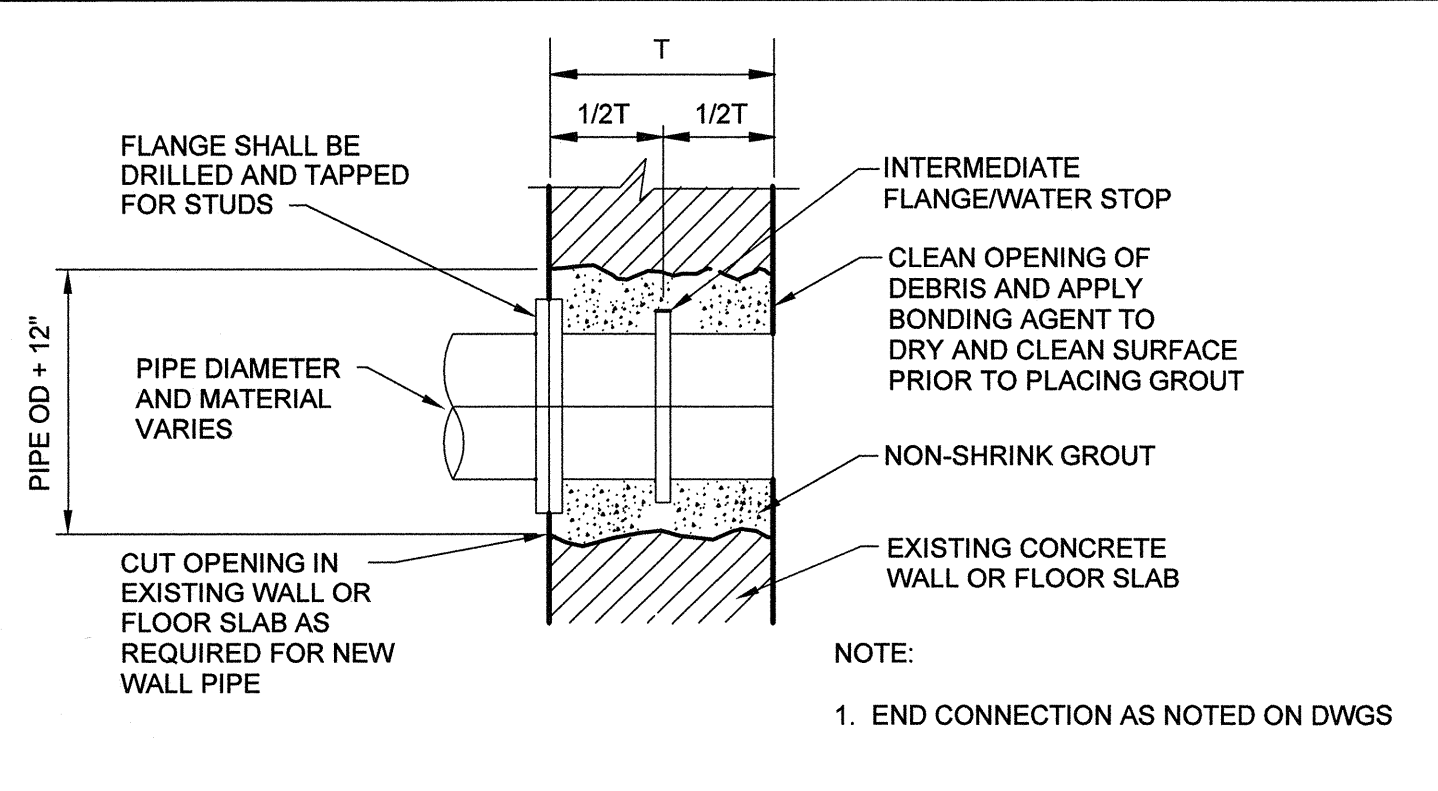
- NOTE:**
INSULATED PIPING: INTERRUPT INSULATION AT BOTH SIDES OF SLAB INSTALL INSULATION FLUSH WITH SLAB AFTER WATER TIGHT INSTALLATION OF MECHANICAL SEAL

FLOOR SLEEVE WITH DUAL MECHANICAL SEAL



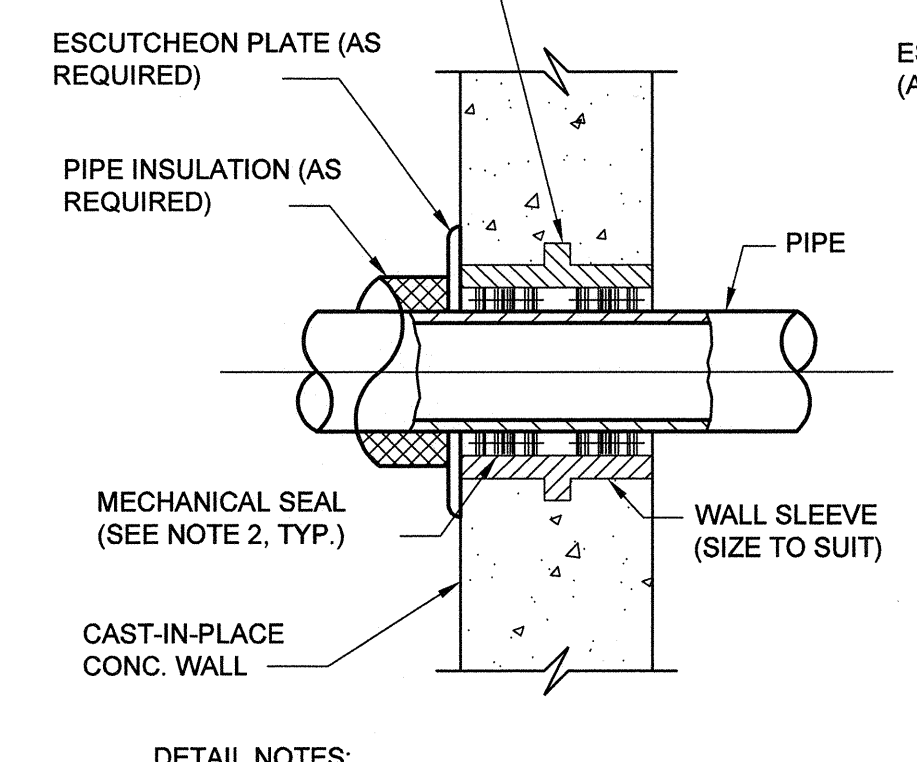
- DETAIL NOTES:**
1. TYPE 1 - MECHANICAL SEAL REQUIRED
TYPE 2 - MECHANICAL SEAL NOT REQUIRED
 2. PROVIDE FIRE RATED MECHANICAL SEALS AS REQUIRED.

TYPICAL FLOOR CORE DETAIL
(PROVIDE TYPE 1 UNLESS OTHERWISE NOTED.)



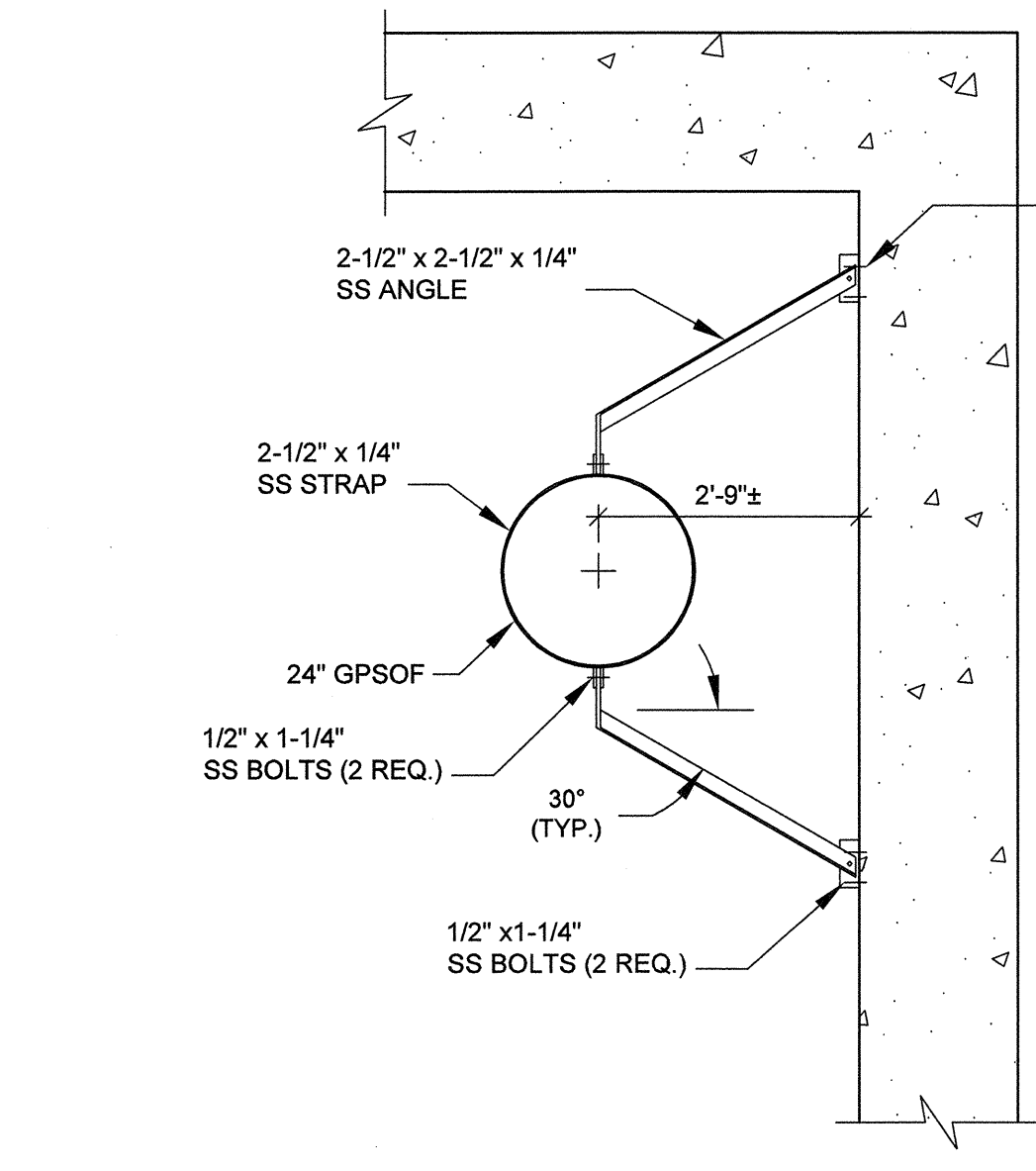
- NOTE:**
1. END CONNECTION AS NOTED ON DWGS

FLOOR/WALL PIPE TO BE INSTALLED IN EXISTING WALLS OR FLOOR SLABS

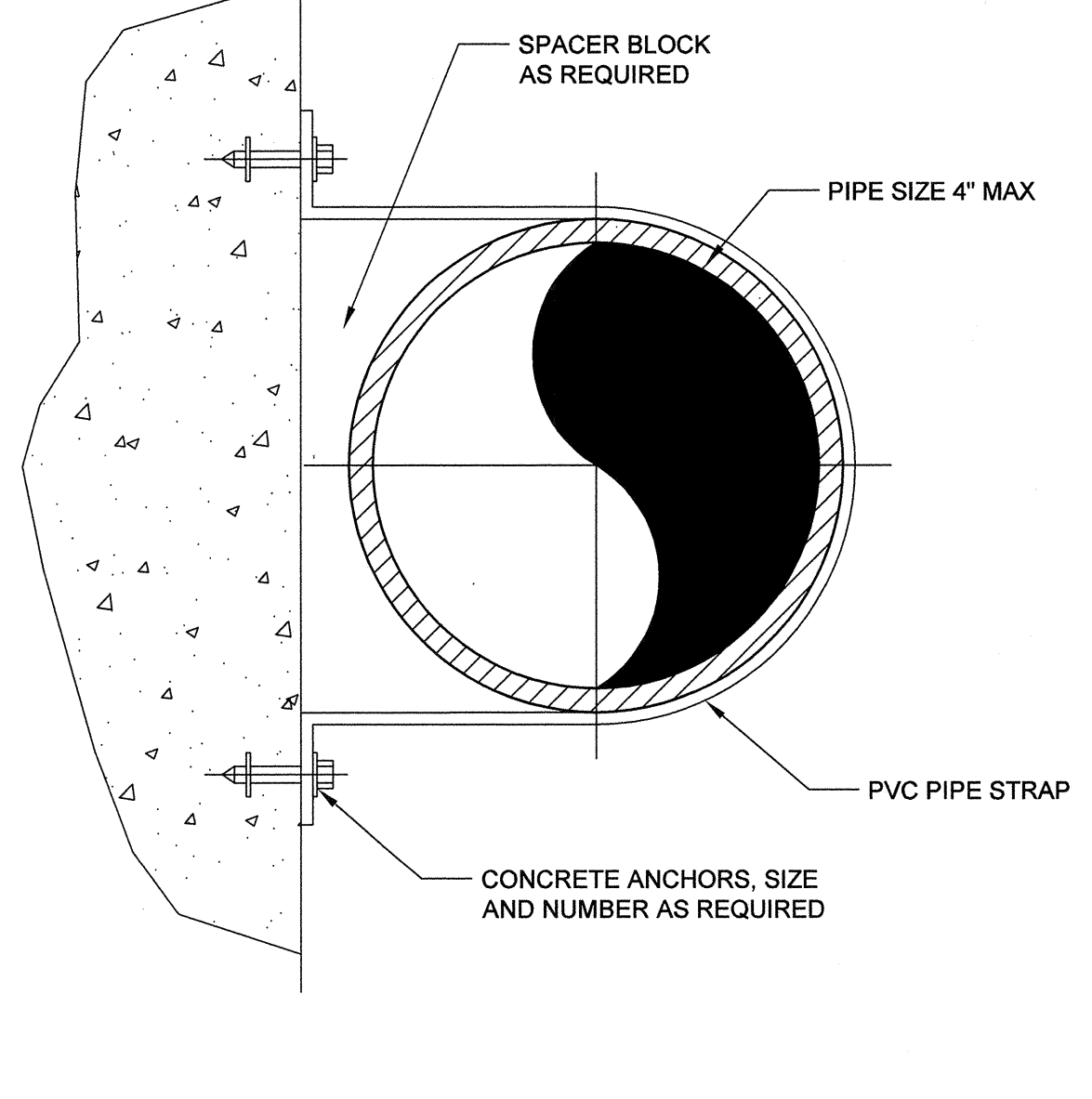


- DETAIL NOTES:**
1. TYPE 1: CONC. WALL - MECHANICAL SEAL REQUIRED ON ONE FACE
TYPE 2: CONC. WALL - MECHANICAL SEAL REQUIRED ON BOTH FACES
TYPE 3: CMU WALL - MECHANICAL SEAL REQUIRED ON ONE FACE
TYPE 4: CMU WALL - MECHANICAL SEAL REQUIRED ON BOTH FACES

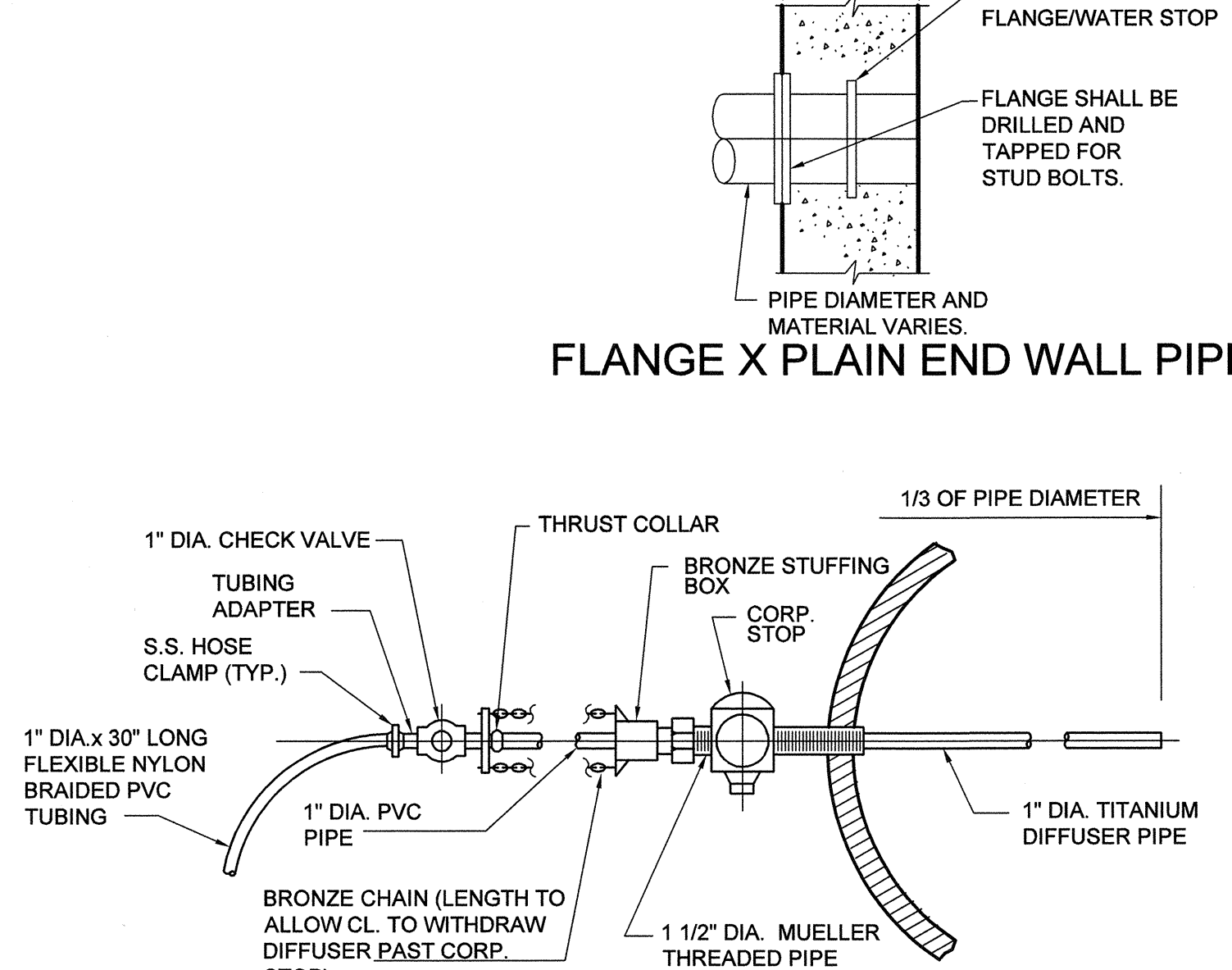
TYPICAL WALL SLEEVE DETAILS
(PROVIDE TYPE 1 UNLESS OTHERWISE NOTED.)



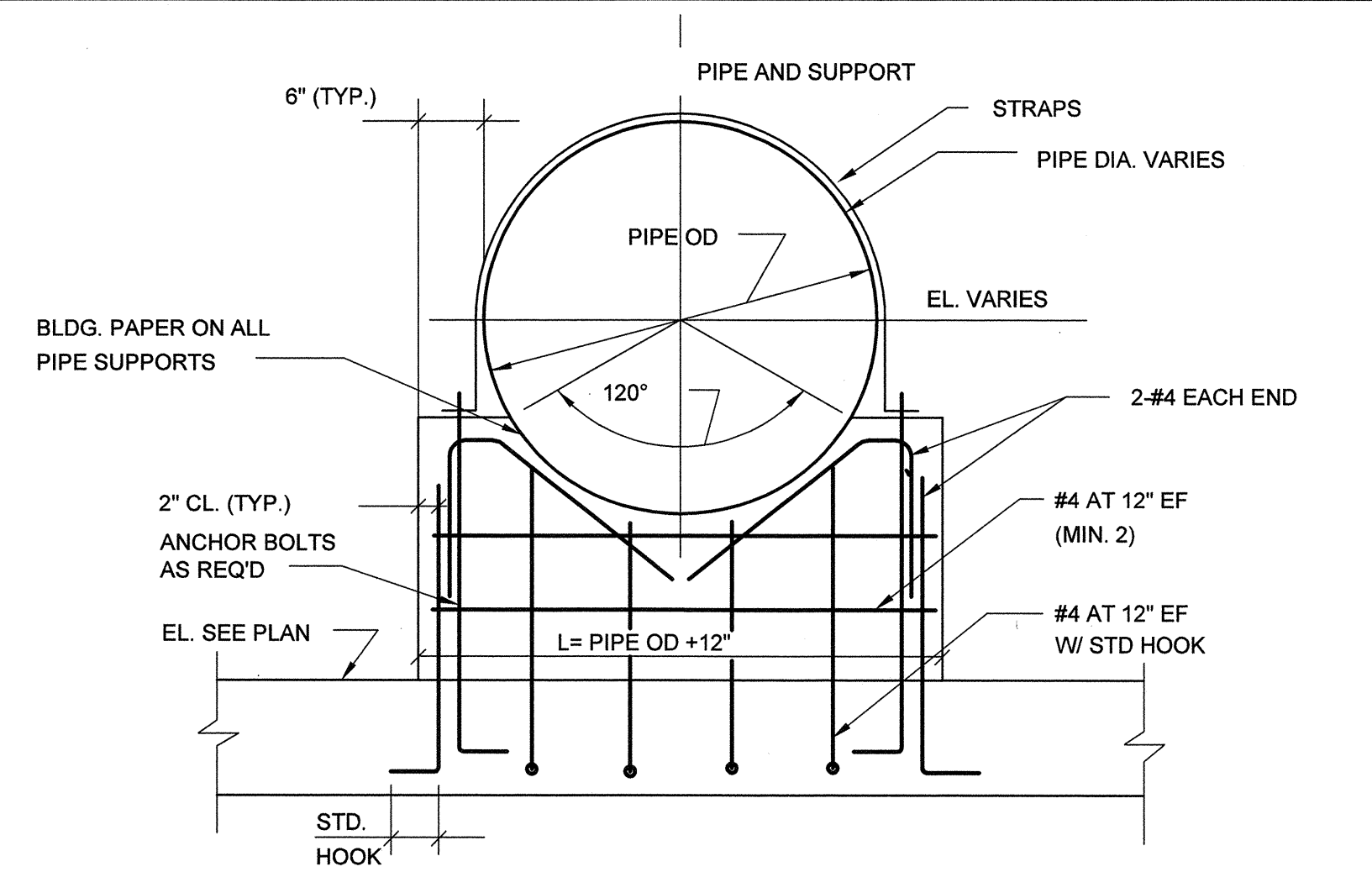
GPSOF PIPE BRACKET DETAIL
NOT TO SCALE



CHEMICAL FEED PIPE SUPPORT
NOT TO SCALE

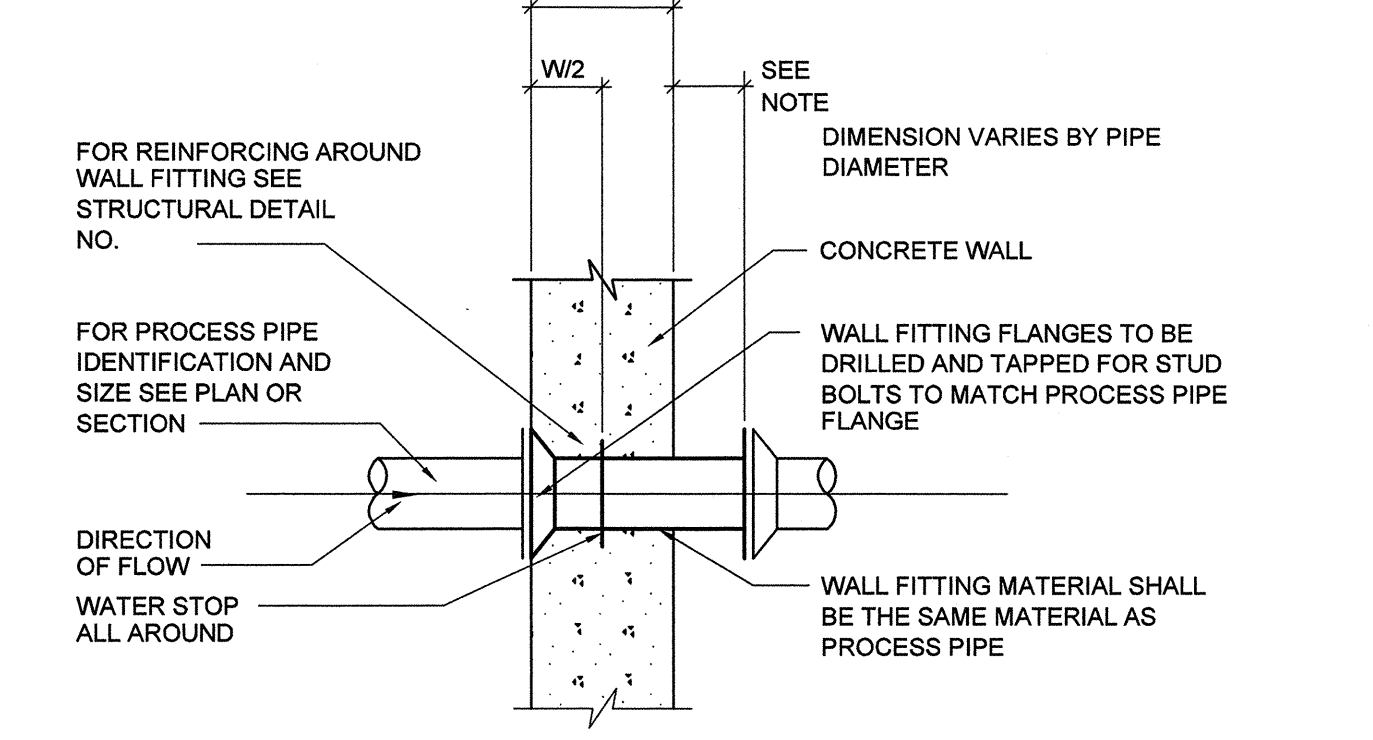


CHEMICAL SOLUTION DIFFUSER DETAIL
NOT TO SCALE

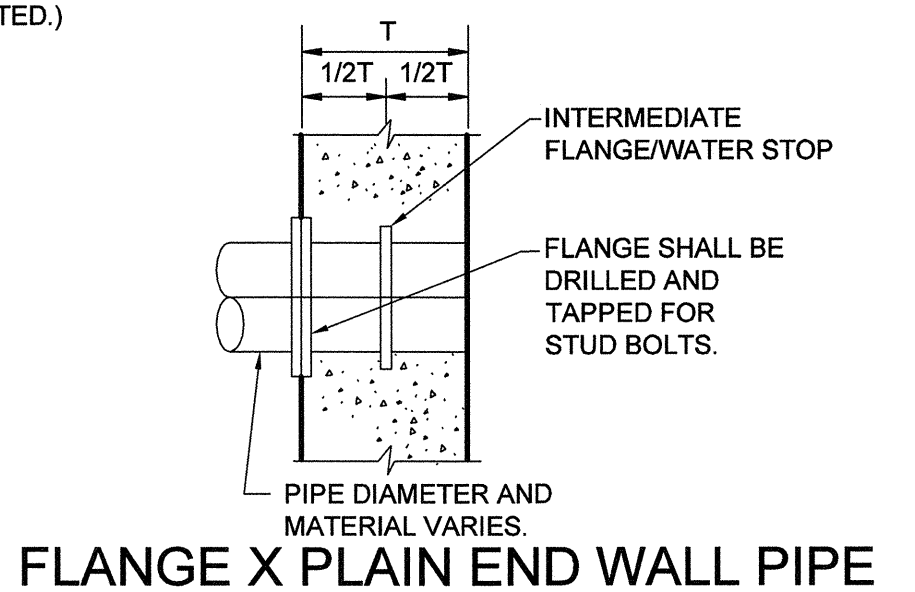


TYPICAL PIPE/VALVE/TANK SUPPORT DETAIL

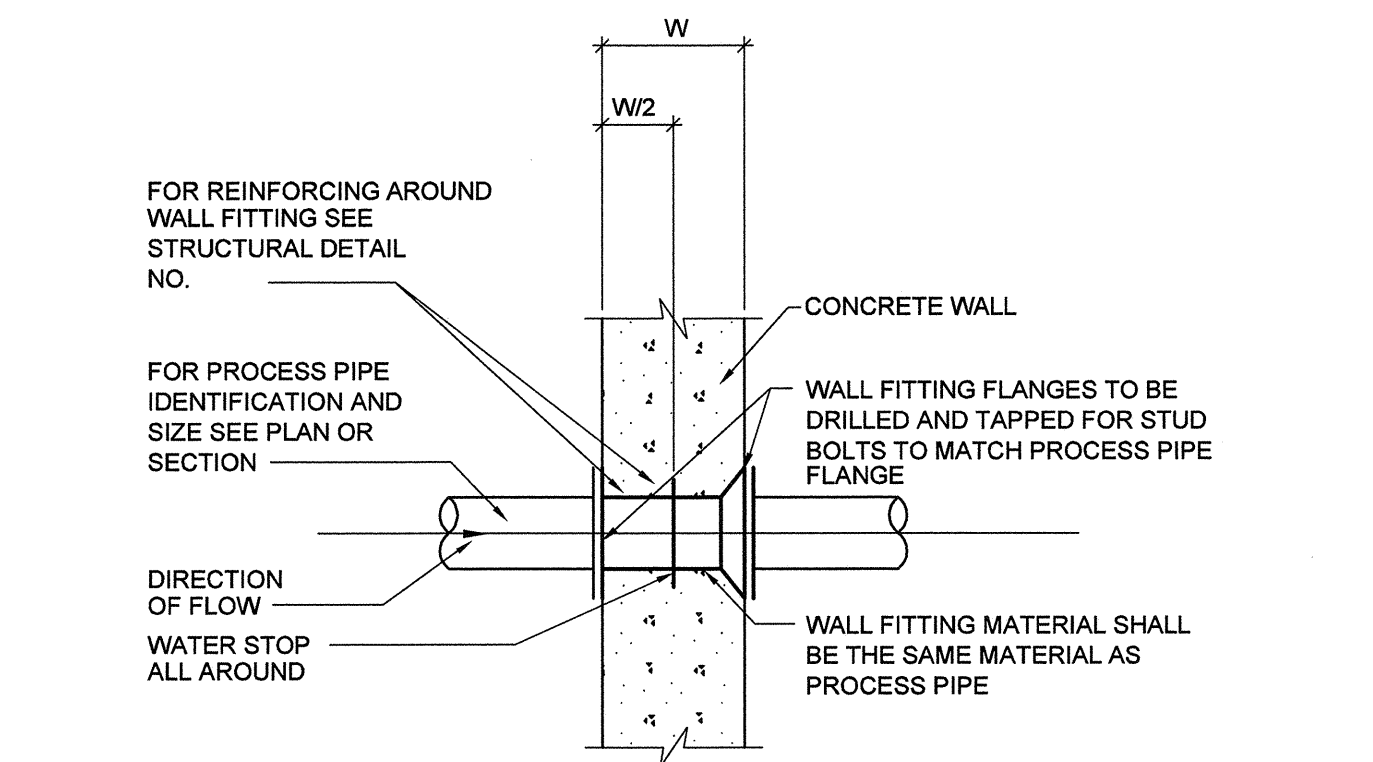
- NOTES:**
1. SUPPORT TO BE 12" THICK (U.O.N.)
 2. COORDINATE LOCATION OF PIPE SUPPORTS WITH M SHEETS AND SPECIFICATIONS.



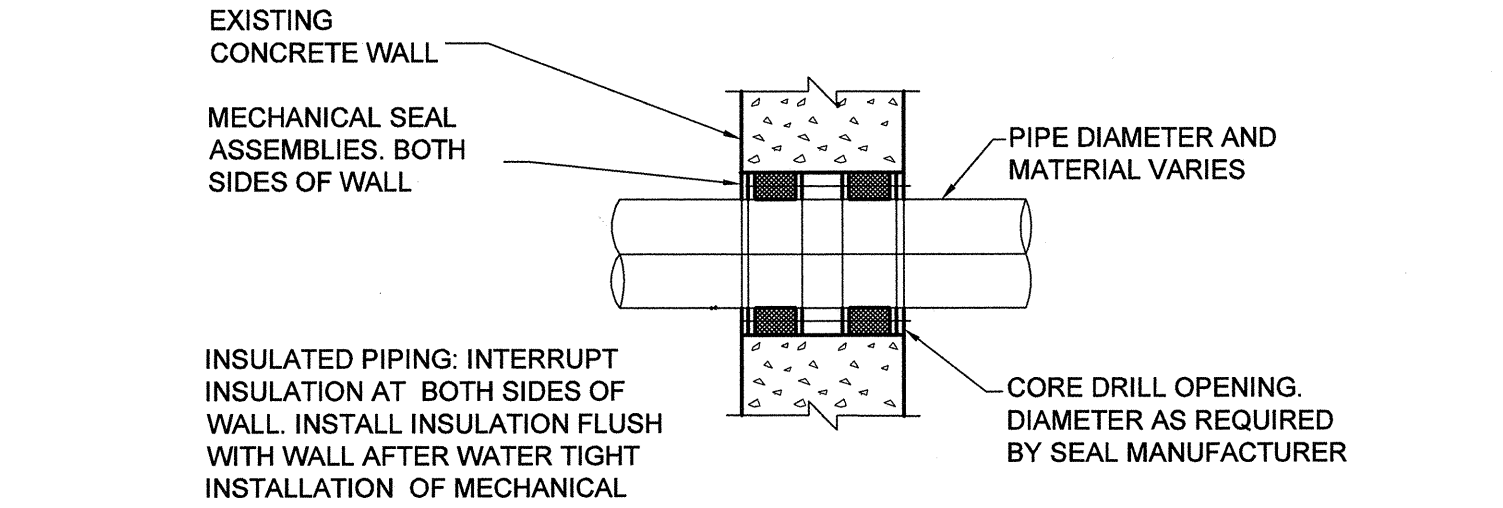
TYPICAL MJ-PLAIN END WALL FITTING



FLANGE X PLAIN END WALL PIPE

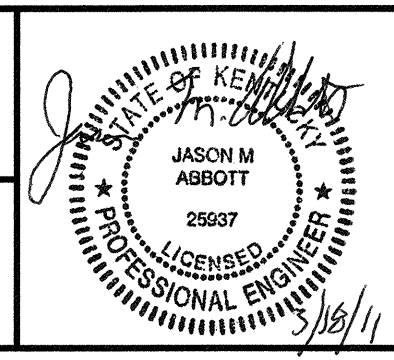


TYPICAL FLG-MJ WALL FITTING



CORE DRILLED OPENING AND DUAL MECHANICAL SEALS PENETRATION THROUGH EXISTING CONCRETE

User:WELLS Spac:PIRNE STANDARD File:G:\77501235\CADD\MECH\HP1M-10-502.DWG Scale:1:18 SavedDate:3/1/2011 Time:11:34 Plot Date:Wells_Paul_3/18/2011 10:12 Layout:M-10-502



REVISIONS			
NO.	BY	DATE	REMARKS

DES - JHC
DWN - PJW
CKD - CMW

**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**MECHANICAL
DETAILS II**

SCALE: N.T.S.

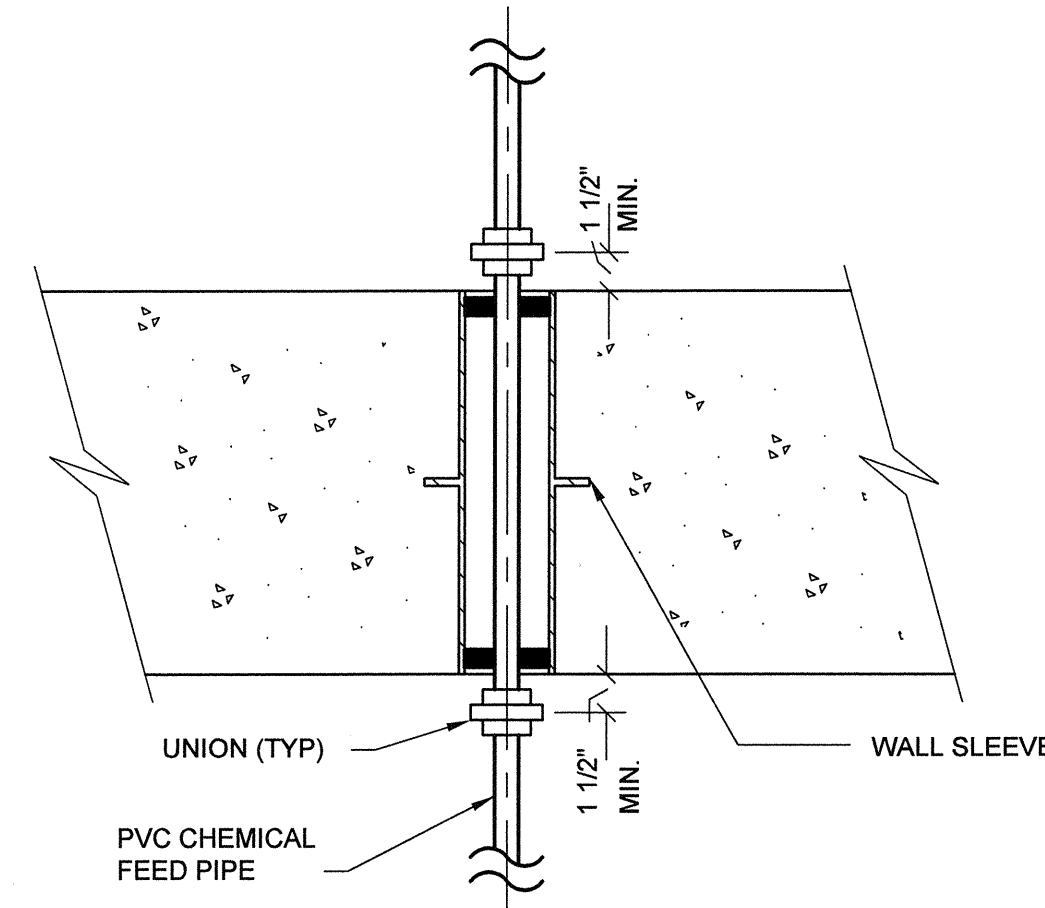
ISSUED STATUS: BID SET

DATE: MARCH, 2011

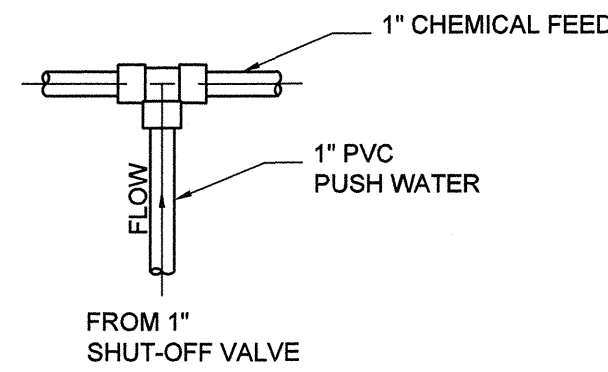
SHEET: M-10-502

CAD REF. NO.: M-10-502

User:WELLS Spec:Pirnie STANDARD File:G:\775012\99-CADD\MECH\MPIM-10-503.DWG Scale:1:1 Saved:Date:3/17/2011 Time:11:51 Plot Date:Wells, Paul, 3/18/2011, 10:12 Layout:M-10-503

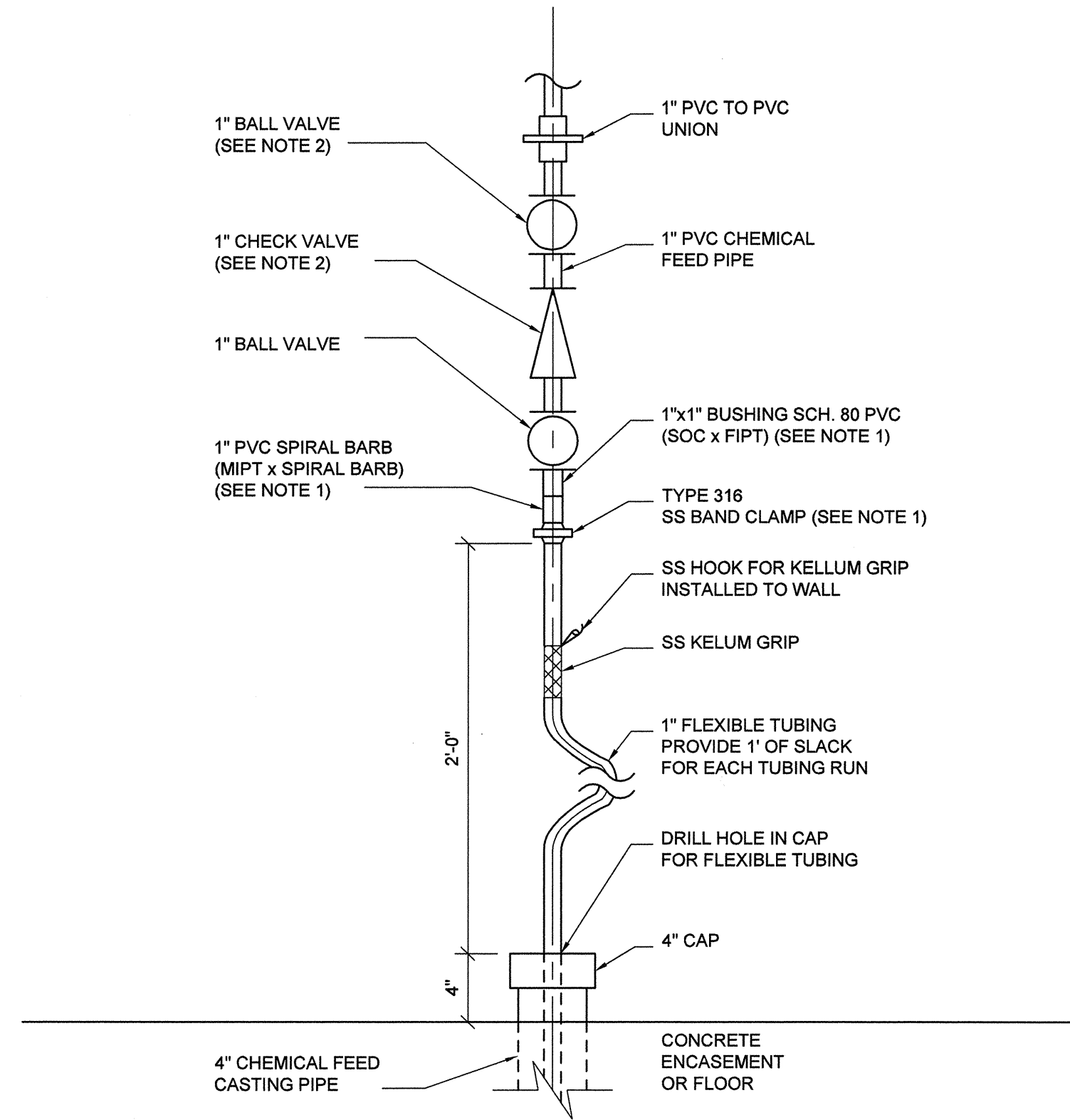


CHEMICAL FEED SLAB PENETRATION DETAIL



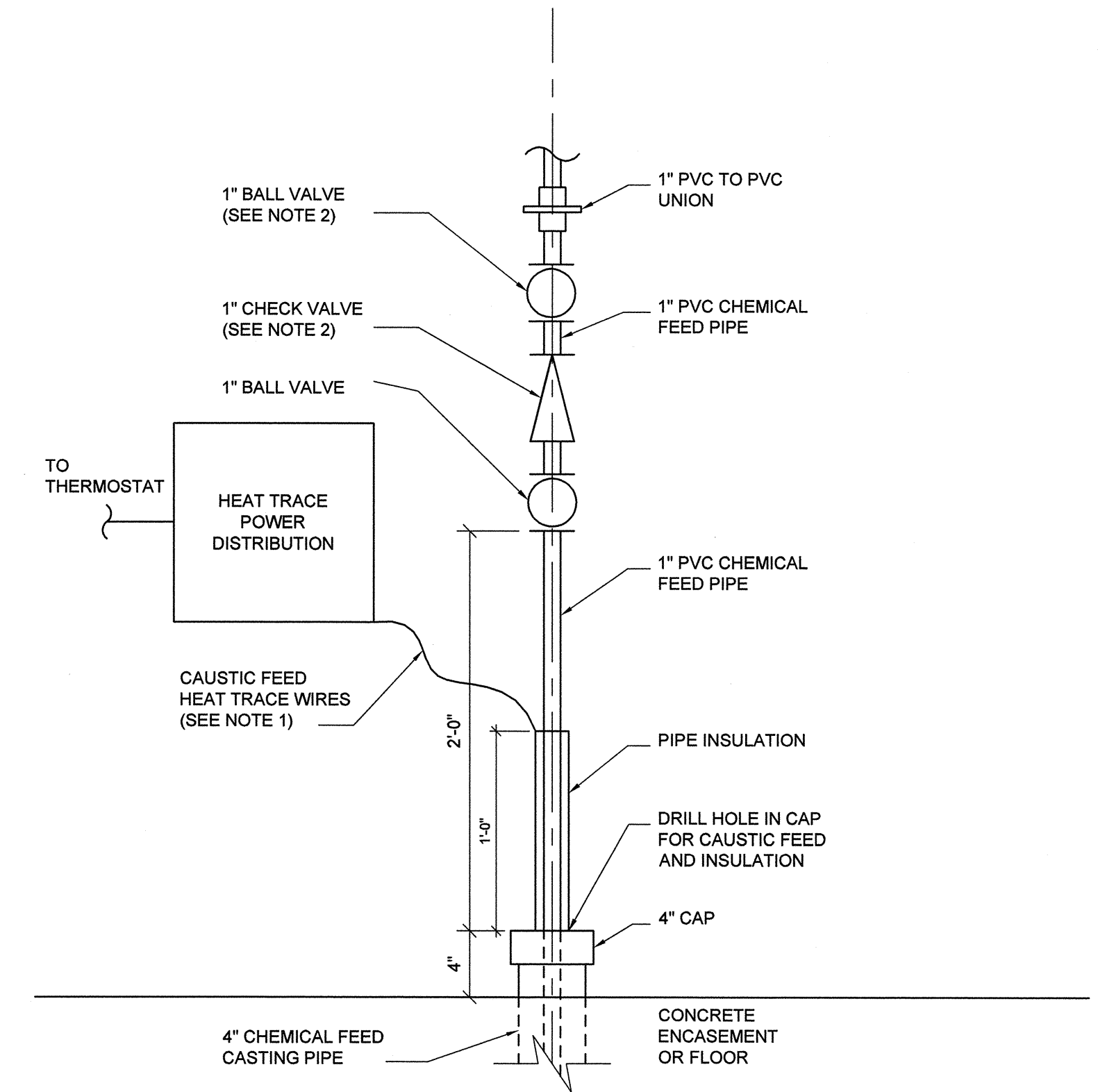
PUSH WATER CONNECTIONS
NOT TO SCALE

NOTES:
1. CONNECT 1" PVC FROM 1" PUSH STATION SHUT-OFF VALVES SHOWN ON SHEETS P-06-602 AND P-08-101 TO CHEMICAL FEED LINES.



CHEMICAL FEED PVC TO FLEXIBLE TUBING DETAIL
NOT TO SCALE

NOTES:
1. TRANSITION FROM PVC PIPING TO FLEXIBLE TUBING WITH A SCH. 80 PVC SOC x FIPT TRANSITION FITTING AND 1" MIPT x SPIRAL BARB FITTING SECURED WITH TYPE 316 SS BAND CLAMP.
2. FOR CHEMICAL FEED WITH FLOW IN THE UPWARD DIRECTION PROVIDE 1" CHECK VALVE AND ADDITIONAL 1" BALL VALVE.



CAUSTIC FEED HEAT TRACE CONNECTION DETAIL
NOT TO SCALE

NOTES:
1. ZIP TIE CAUSTIC FEED HEAT TRACE WIRES TO CAUSTIC FEED PIPING.
2. FOR CHEMICAL FEED WITH FLOW IN THE UPWARD DIRECTION PROVIDE 1" CHECK VALVE AND ADDITIONAL 1" BALL VALVE.
3. CAUSTIC FEED HEAT TRACE TABLE:

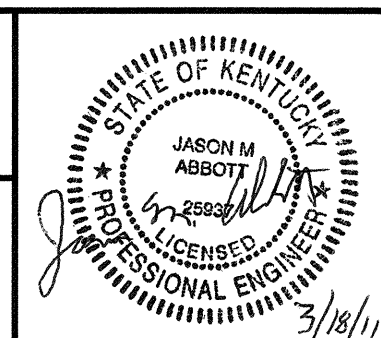
POWER DISTRIBUTION LOCATION	HEAT TRACE FROM	HEAT TRACE TO
PT/GAC BUILDING	PT/GAC BUILDING	CFM-3
CHEMICAL BUILDING	CHEMICAL BUILDING	CFM-3
CHEMICAL BUILDING	CHEMICAL BUILDING	FILTER BUILDING

LOCATE THERMOSTAT AS RECOMMENDED BY MANUFACTURER. PROVIDE WALL PENETRATIONS AS REQUIRED.

4. FOR OTHER HEAT TRACE LOCATIONS UTILIZE PRE-ASSEMBLED SELF-REGULATING HEATING CABLE.

OUTLET LOCATION	HEAT TRACE FROM	HEAT TRACE TO
FILTER OVERFLOW BOX	GRADE	TOP OF OVERFLOW BOX
FILTER BUILDING	PIPE GALLERY	42" FI

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JHC
DWN PJW
CKD CMW

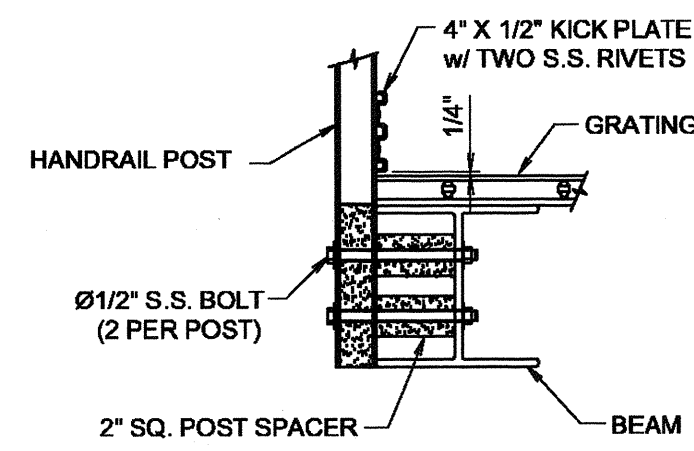
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL
DETAILS III

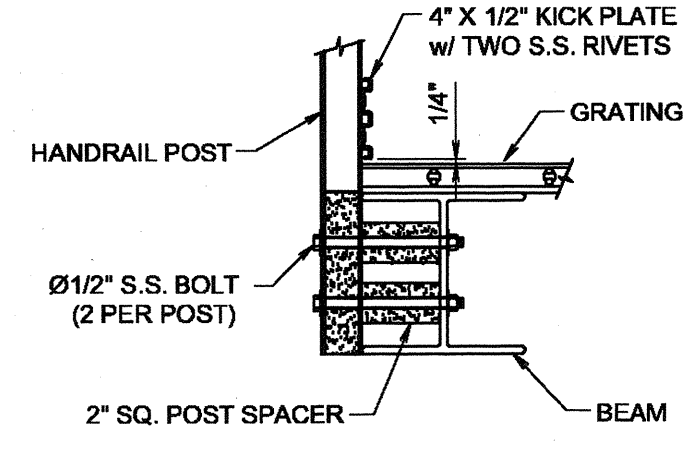
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ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET M-10-503
CAD REF. NO. M-10-503

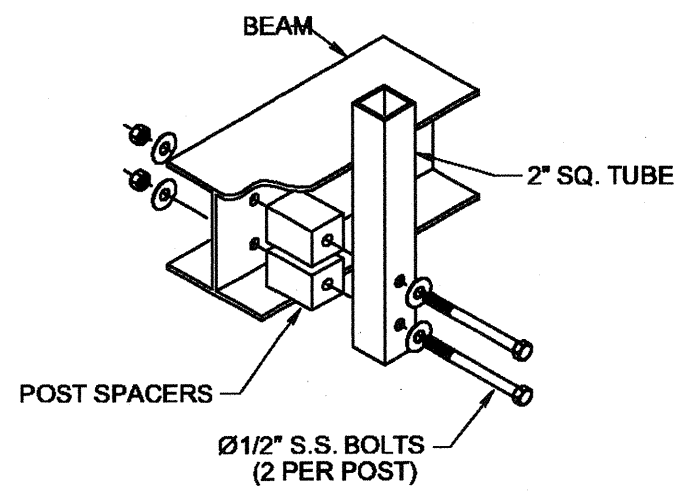
User: BOND Spec: PIRNIE STANDARD File: U:\3788-NKWD TAYLOR MILL\WORKING DRAWINGS\MECH-GRP\3788-M-10-504.DWG Scale: 1:28 Saved Date: 2/19/2011 Time: 08:34 Pld Date: Bond, Jeff, 3/10/2011, 08:38 Layout: M-10-504



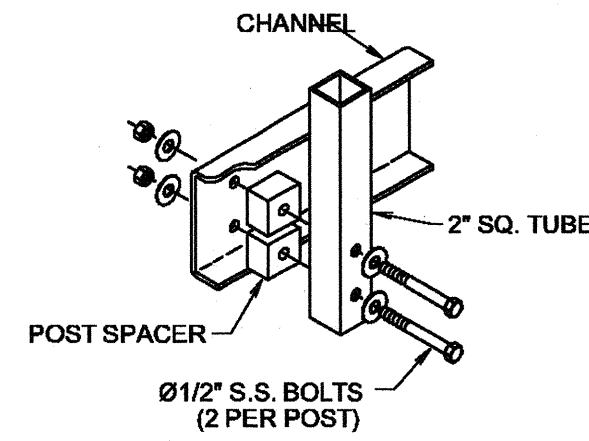
POST SPACER DETAIL



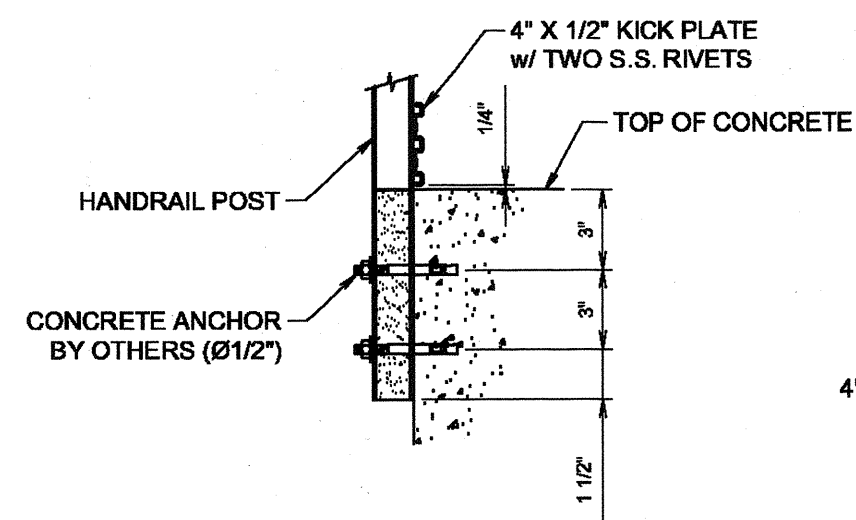
POST SPACER DETAIL



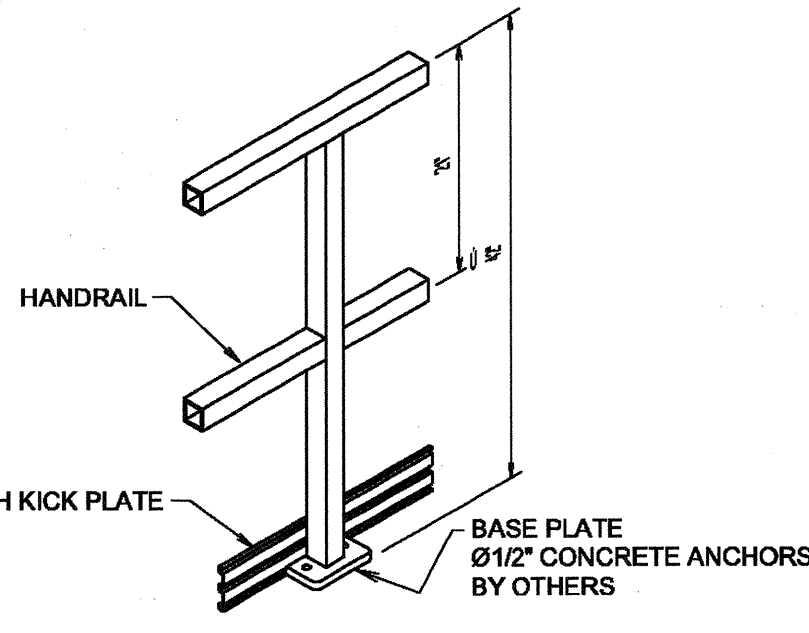
HANDRAIL POST TO BEAM CONNECTION



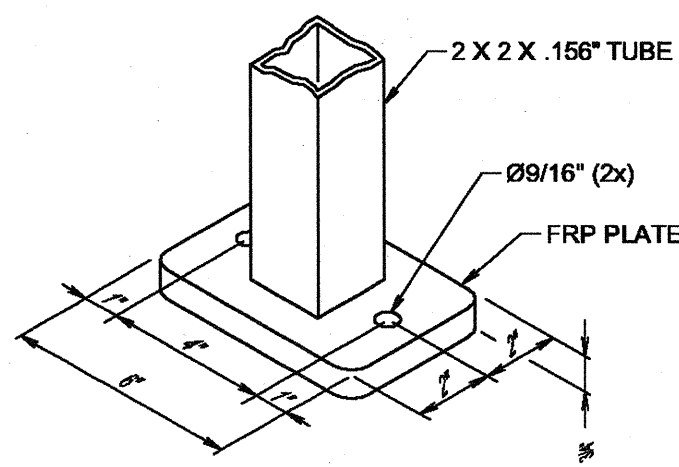
HANDRAIL POST TO CHANNEL CONNECTION



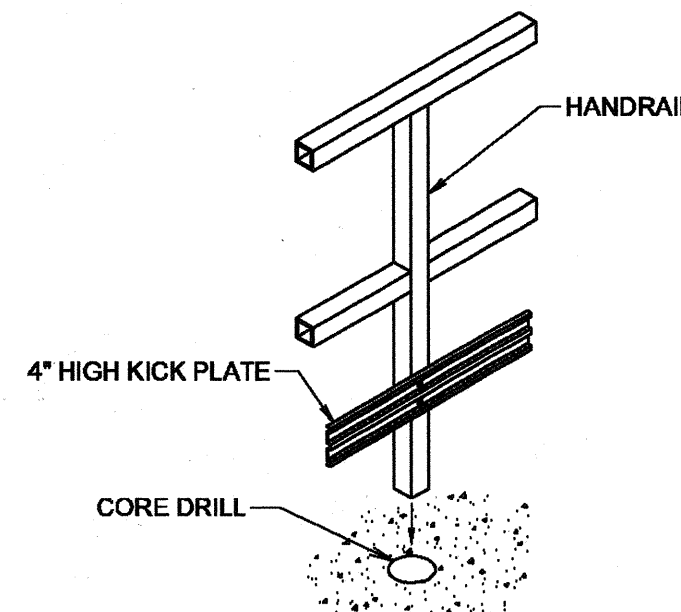
SIDE MOUNTED HANDRAIL TO CONCRETE



BASE PLATE MOUNTED HANDRAIL DETAIL



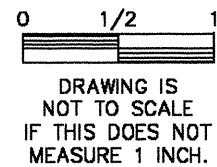
BASE PLATE DETAIL



DETAIL OF POCKET MOUNTED HANDRAIL

FIBERGLASS REINFORCED PLASTIC HANDRAIL DETAILS

NOT TO SCALE



DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES	MRC
DWN	JAB
CKD	RCC

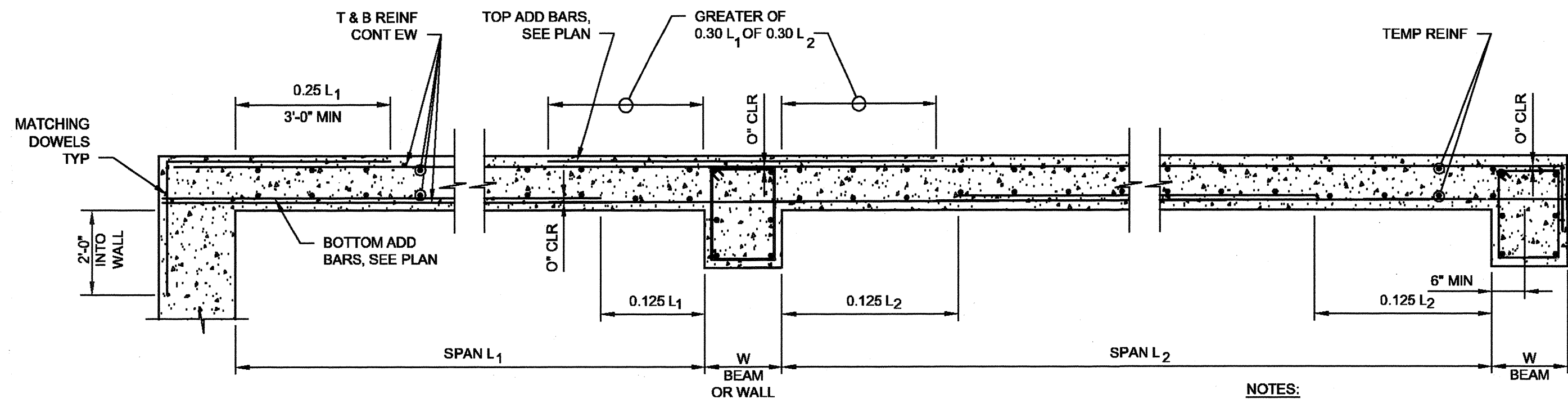
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

MECHANICAL DETAILS IV

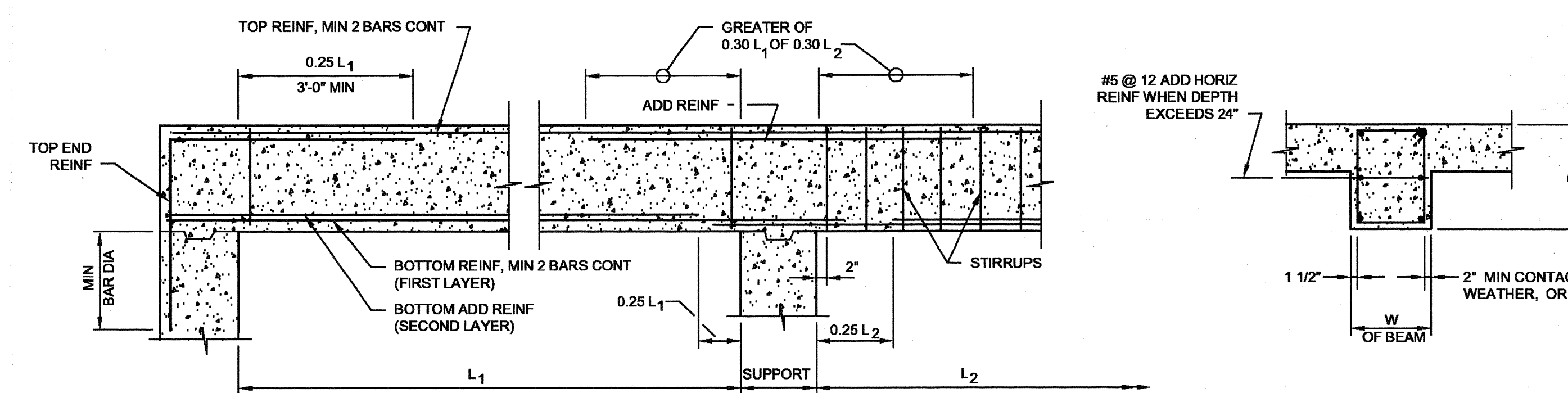
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ISSUED STATUS:	BID SET
DATE	MARCH, 2011
SHEET	M-10-504
CAD REF. NO.	3789-M-10-504

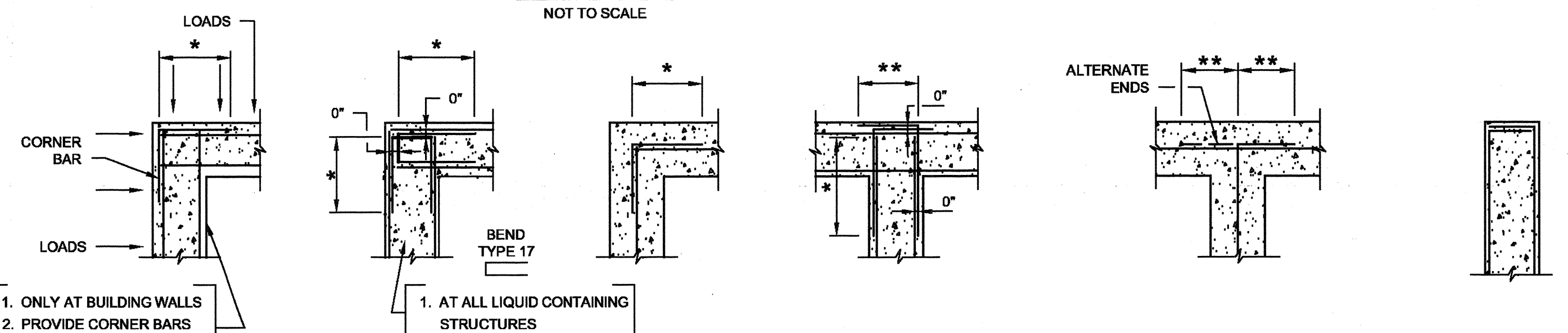
GENERAL STRUCTURAL NOTES



TYPICAL CONCRETE SLAB DETAIL
NOT TO SCALE



TYPICAL CONCRETE BEAM DETAIL
NOT TO SCALE



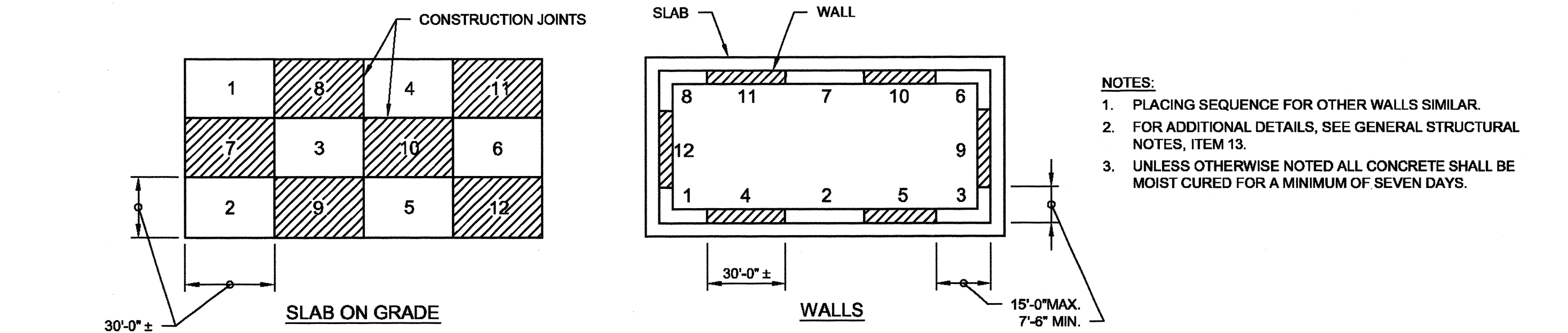
TYPICAL CORNER DETAILS

TYPICAL INTERSECTION DETAILS

TYPICAL ENDWALL DETAILS

TYPICAL WALL DETAILS - SHOWN IN HORIZONTAL CROSS SECTION

NOT TO SCALE



TYPICAL CONCRETE PLACING SEQUENCE DETAILS
NOT TO SCALE

1. DESIGN LIVE LOADS:
 WORKING ROOFS 100 psf
 ALL OTHER ROOFS 30 psf
 OFFICES, LABS, STAIRS AND MISC. AREAS 100 psf

- WIND LOAD DATA
 BASIC WIND SPEED (3 SECOND GUST) 90 MPH
 WIND EXPOSURE CATEGORY C
 WIND IMPORTANCE FACTOR $I_w = 1.15$
 COMPONENTS AND CLADDING WIND DESIGN PRESSURES

- ROOF LOADS
 INTERIOR ZONE 1 -22 PSF
 PERIMETER ZONE 2 -26 PSF
 CORNER ZONE 3 -26 PSF
 WALL LOADS
 INTERIOR ZONE 4 -20 PSF
 CORNER ZONE 5 -20 PSF

- MAIN WIND FORCE RESISTING SYSTEM WIND DESIGN PRESSURES
 WALL LOADS (TRANSVERSE WIND)
 WINDWARD CORNER ZONE 1E 16 PSF
 WINDWARD INTERIOR ZONE 1 12 PSF
 LEEWARD CORNER ZONE 4E -12 PSF
 LEEWARD INTERIOR ZONE 4 -9 PSF
 SIDE ZONE 5 & 6 -13 PSF

- WALL LOADS (LONGITUDINAL WIND)
 WINDWARD CORNER ZONE 1E 16 PSF
 WINDWARD INTERIOR ZONE 1 12 PSF
 LEEWARD CORNER ZONE 4E -12 PSF
 LEEWARD INTERIOR ZONE 4 -9 PSF
 SIDE ZONES 5 & 6 -13 PSF

- ROOF LOADS (TRANSVERSE WIND)
 WINDWARD RAKE ZONE 2E -25 PSF
 LEEWARD RAKE ZONE 3E -14 PSF
 WINDWARD INTERIOR ZONE 2 -18 PSF
 LEEWARD INTERIOR ZONE 3 -11 PSF

- ROOF LOADS (LONGITUDINAL WIND)
 WINDWARD EAVE ZONE 2E -25 PSF
 LEEWARD EAVE ZONE 3E -14 PSF
 WINDWARD INTERIOR ZONE 2 -18 PSF
 LEEWARD INTERIOR ZONE 3 -11 PSF

- SEISMIC:
 OCCUPANCY CATEGORY III
 Ss 0.193g
 S1 0.079g
 SITE CLASS D
 Fa 1.6
 Fv 2.4
 Sms 0.309g
 Sm1 0.190g
 Sds 0.206g
 Sd1 0.126g
 DESIGN CATEGORY (SHORT PERIOD) C
 DESIGN CATEGORY (ONE SECOND PERIOD) C
 DESIGN BASE SHEAR 128 kips
 SEISMIC RESPONSE COEFFICIENT Cs 0.088
 RESPONSE MODIFICATION FACTOR 3.5
 ANALYSIS PROCEDURE USED EQUIVALENT LATERAL FORCE PROCEDURE
- DRILLED PIERS BEARING CAPACITY 60,000 psf
 BEARING CAPACITY AT SPREAD FOOTING 3,000 psf

2. MATERIALS:
 CONCRETE CLASS A $f_c = 4,000$ psi
 CONCRETE CLASS B $f_c = 3,000$ psi

- REINFORCING STEEL A615
 GRADE 60 $f_y = 60$ ksi
 WELDED WIRE REINFORCEMENT A185 $f_y = 65$ ksi

- STRUCTURAL STEEL A36
 A36 $F_y = 36$ ksi
 A992 (W-SHAPES ONLY) $F_y = 50$ ksi

3. CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH ACI 318. USE MIXES WITH MAXIMUM AGGREGATE SIZE APPROPRIATE FOR FORM SPACERS AND REINFORCEMENT PLACEMENT REQUIRED IN THIS PROJECT.

4. CONCRETE SHALL BE REINFORCED UNLESS SPECIFICALLY NOTED "NOT REINFORCED".

5. PROVIDE WATERSTOPS IN EXPANSION JOINTS AND CONSTRUCTION JOINTS OF LIQUID CONTAINING STRUCTURES AND WHERE REQUIRED TO PREVENT INFILTRATION OF GROUND WATER.

6. UNLESS OTHERWISE SHOWN, PROVIDE DOWELS TO MATCH VERTICAL BARS IN ALL WALLS AND COLUMNS, AND HORIZONTAL BARS IN ALL BEAMS AND SLABS.

7. UNLESS OTHERWISE DETAILED, SPREAD REINFORCING AT OPENINGS AND SLEEVES. DO NOT CUT REINFORCING BARS. CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH SHOP DRAWINGS FOR EQUIPMENT TO BE INSTALLED.

8. STRUCTURE SHALL NOT BE BACKFILLED UNTIL MEMBERS DESIGNED TO BRACE THE WALLS HAVE ATTAINED THEIR DESIGN COMPRESSIVE STRENGTH.

9. UNLESS OTHERWISE NOTED, PROVIDE 1" CHAMFER ON EXPOSED CONCRETE EDGES.

10. UNLESS OTHERWISE SHOWN, PROVIDE CONCRETE PROTECTION FOR ALL REINFORCING IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).

11. ALL REINFORCEMENT SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315.
 a. TOP BARS ARE HORIZONTAL BARS WHICH HAVE MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BAR (INCLUDES ALL HORIZONTAL WALL REINFORCEMENT).
 b. OTHER BARS INCLUDE ALL VERTICAL REINFORCEMENT AND ALL HORIZONTAL REINFORCEMENT WHICH HAS LESS THAN 12 INCHES OF CONCRETE CAST BELOW THE BAR FOR WHICH BASIC TENSION LAP SPLICES IN NORMAL WEIGHT CONCRETE ARE APPLICABLE.
 c. UNLESS OTHERWISE SHOWN, ALL REINFORCEMENT SHALL BE TREATED AS TENSION REINFORCEMENT.
 d. THE TENSION DEVELOPMENT (EMBEDMENT) LENGTH, L_d OR L_{dt} , EQUALS A CLASS A SPLICE LENGTH.
 e. TENSION SPLICE AND TENSION EMBEDMENT LENGTHS SHALL BE NOT LESS THAN 12 INCHES.

12. UNLESS OTHERWISE SHOWN, REINFORCEMENT AT WALL CORNERS AND INTERSECTIONS SHALL BE AS SHOWN ON THIS SHEET.

13. UNLESS OTHERWISE NOTED CONSTRUCTION JOINTS SHALL BE AT THE LOCATIONS SHOWN ON THE DRAWINGS ADDITIONAL CONSTRUCTION JOINTS LOCATED BY THE CONTRACTOR AS FOLLOWS:
 a. FOUNDATION SLABS, SLABS ON GRADE AND SLABS RETAINING LIQUIDS AT A SPACING OF APPROXIMATELY 30 FEET. CONCRETE SHALL BE PLACED IN A CHECKERBOARD PATTERN. FOR DETAIL SEE THIS SHEET.
 b. WALLS AT A SPACING OF APPROXIMATELY 30 FEET, CONCRETE SHALL BE PLACED IN ALTERNATE SECTIONS, WITH CONSTRUCTION JOINTS LOCATED APPROXIMATELY 12 FEET FROM CORNERS. FOR DETAIL SEE THIS SHEET.
 c. FRAMED SLABS AND BEAMS: CONSTRUCTION JOINTS SHALL BE LOCATED AT THE CENTER OF SPANS OF SLABS OR BEAMS.
 d. FOR ADDITIONAL INFORMATION SEE SPECIFICATIONS - SECTION 03300, ITEM 3.3g
 THESE ADDITIONAL CONSTRUCTION JOINTS LOCATIONS SHALL HAVE THE WRITTEN APPROVAL OF THE ENGINEER. CONSTRUCTION AND EXPANSION JOINTS SHALL BE IN ACCORDANCE WITH TYPICAL DETAILS.

14. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND ALL SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHENEVER POSSIBLE SPLICES SHALL BE STAGGERED.

15. REINFORCE ALL CONCRETE WALLS, NOT OTHERWISE SHOWN, AS FOLLOWS:
 a. 8" #4 @ 8 EW, MIDDLE
 10" #4 @ 12 EW, EF
 12" #4 @ 10 EW, EF
 14" & 15" #4 @ 9 EW, EF
 16" #4 @ 8 EW, EF
 b. ADD 2-#5 CONTINUOUS AT THE TOP OF ALL WALLS.

16. STUD SHEAR CONNECTORS AND CONCRETE ANCHORS SHALL BE AUTOMATICALLY END WELDED HEADED STUDS OF STANDARD MANUFACTURER. WHERE USED AS CONCRETE ANCHORS IN CURB AND EDGE ANGLES ONLY, WELDED FLAT BARS OF EQUAL YIELD LOAD VALUES MAY BE SUBSTITUTED FOR WELDED STUD.

17. SEE EQUIPMENT MANUFACTURERS DRAWINGS FOR SIZES AND/OR LOCATIONS OF EQUIPMENT PIERS & PADS, ANCHOR BOLTS, FRAMES SUPPORTING EQUIPMENT, AND OPENINGS IN SLABS AND GRATING. CONTRACTOR TO VERIFY OPENING SIZES AND LOCATIONS OF SLEEVES, ETC. WITH SHOP DRAWINGS FOR EQUIPMENT.

18. UNLESS OTHERWISE SHOWN OR NOTED, ALL PIERS AND FOOTINGS ARE LOCATED ON COLUMN CENTER LINES.

19. FOR COORDINATES TO LOCATE STRUCTURES, SEE CIVIL DRAWINGS.

20. UNLESS OTHERWISE NOTED, POROUS FILL AND WATERPROOF PAPER SHALL BE PLACED UNDER ALL CONCRETE SLABS ON GRADE, TANK BOTTOMS AND FOUNDATIONS. FOR ADDITIONAL INFORMATION, SEE SPECIFICATION SECTION 03300, ITEMS 2.04H & 3.03B

21. UNLESS OTHERWISE NOTED, ALL CONCRETE COLUMN REINFORCEMENT, TIES AND SPLICES SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315.

22. ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF THE LATEST AISC CODE, SECTIONS 3.1, 3.4, 3.5, AND 4.2 OF THE AISC CODE OF STANDARD PRACTICE ARE EXCLUDED FROM THIS PROJECT.

23. UNLESS OTHERWISE NOTED, ALL BOLTS FOR BOLTED STRUCTURAL JOINT FASTENERS SHALL BE 3/4" DIAMETER HIGH STRENGTH STRUCTURAL BOLTS, ASTM A-325.

24. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATIONS ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND THEREFORE REQUIRES ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.

25. GUSSET PLATES SHALL BE 3/8" THICK MINIMUM.

26. WHERE PRACTICAL, UNLESS SHOWN DIFFERENTLY ON DRAWINGS, ALL BRACING CONNECTIONS SHALL BE DESIGNED AND DETAILED SO THAT ALL FORCE COMPONENTS CAN BE DELIVERED DIRECTLY TO THE CENTERLINE OF INTERSECTING MEMBERS.

27. THE CONTRACTOR IS TO COORDINATE THE STRUCTURAL DRAWINGS WITH THE SANITARY, ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND MAKE CERTAIN ALL PIPE SLEEVES, DUCTS, INSERTS AND HOLES ARE LOCATED AND IN PLACE BEFORE EACH CONCRETE POUR.

28. OMISSIONS, CONFLICTS OR MISUNDERSTANDINGS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS, IF ANY, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.

29. MEMBERS AND BRACING REQUIRED TO SUPPORT EQUIPMENT FROM (OR ATTACH IT TO) THE STRUCTURAL FRAMING SHOWN ON THE DRAWINGS SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR SUPPLYING THE EQUIPMENT.

30. UNLESS OTHERWISE NOTED THE CONTRACTOR SHALL NOTIFY THE OWNER OF RECORD, IF THERE IS A CONFLICT BETWEEN DRAWING AND SPECIFICATION OR BETWEEN DRAWINGS.

31. WHERE FLOOR DRAINS ARE SHOWN ON THE PLUMBING DRAWINGS, CONTINUOUSLY SLOPE FLOOR FROM WALL TO DRAIN.

32. CHEMICAL ADHESIVES SHALL BE EPOXY ICC-ES-ESR-1772 OR ACRYLIC ICC-ES-ESR-5791.

User: \\BOND Spec: PIRNIE STANDARD File: \\L3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCTURE\3789-S-00-01.DWG Scale: 1:1 Saved Date: 1/31/2011 Time: 13:29 Pld Date: Bant, Jeff, 3/10/2011, 08:40 Layout: S-00-001

MALCOLM PIRNIE

 ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
 KRISHNAPUR R
 NARAYANAPPA
 11569
 LICENSED PROFESSIONAL ENGINEER

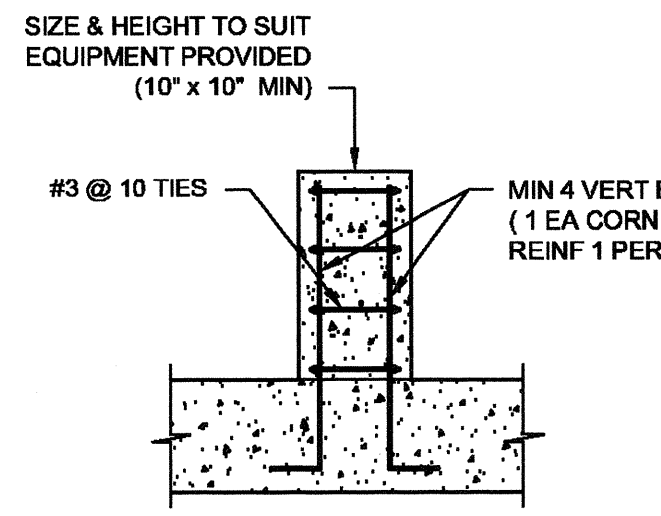
REVISIONS		REMARKS
NO.	BY	DATE

DES: STAFF
 DWN: STAFF
 CKD: KRN

NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

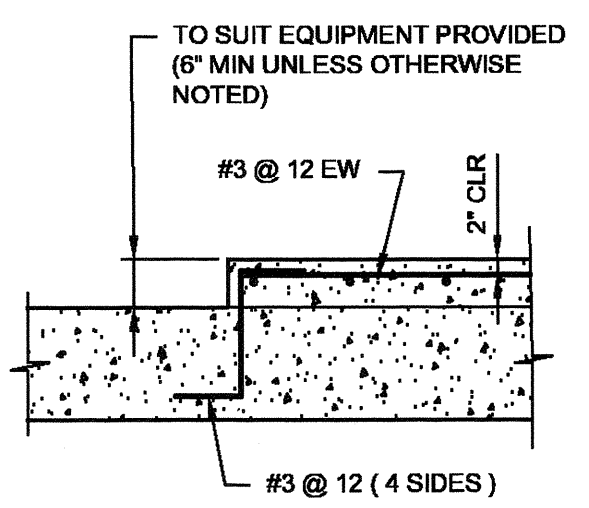
STRUCTURAL
TYPICAL DETAILS AND GENERAL STRUCTURAL NOTES
 SCALE: AS NOTED

ISSUED STATUS: BID SET
 DATE: MARCH, 2011
 SHEET: S-00-001
 CAD REF. NO.: 3789-S-00-001



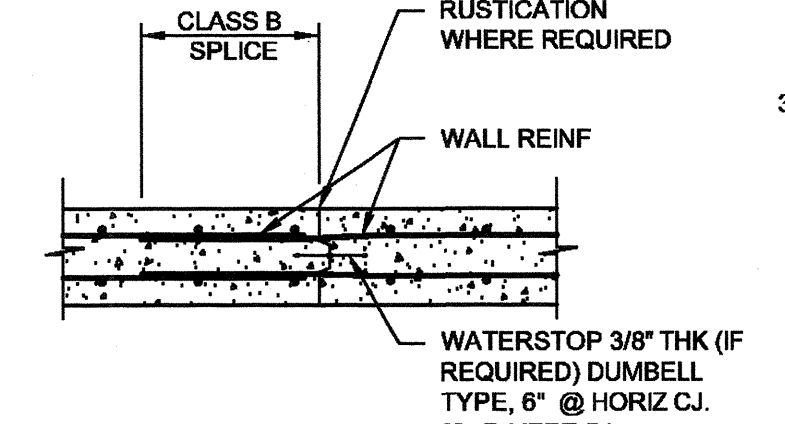
EQUIPMENT PIER

NOT TO SCALE



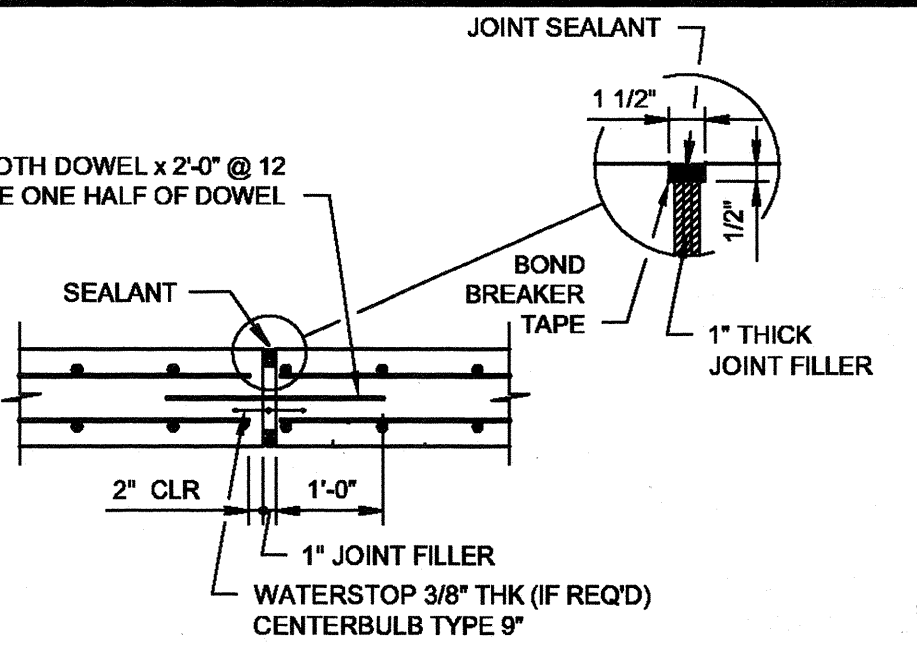
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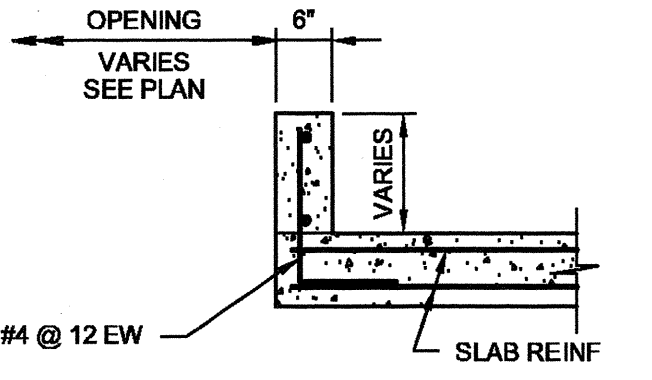
CONSTRUCTION JOINT IN SLAB OR WALL

NOT TO SCALE



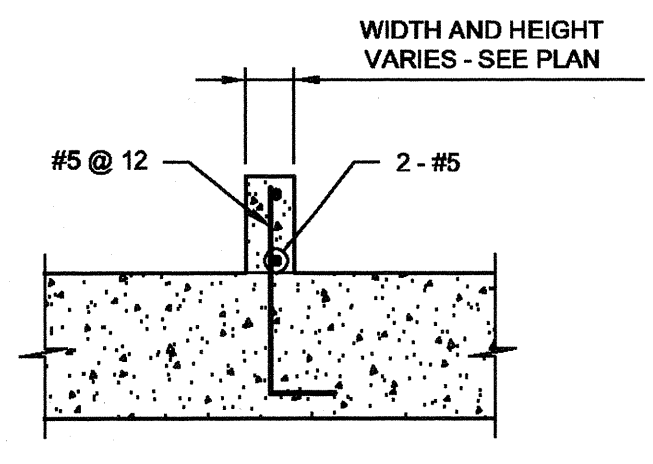
EXPANSION JOINT IN SLAB OR WALL

NOT TO SCALE



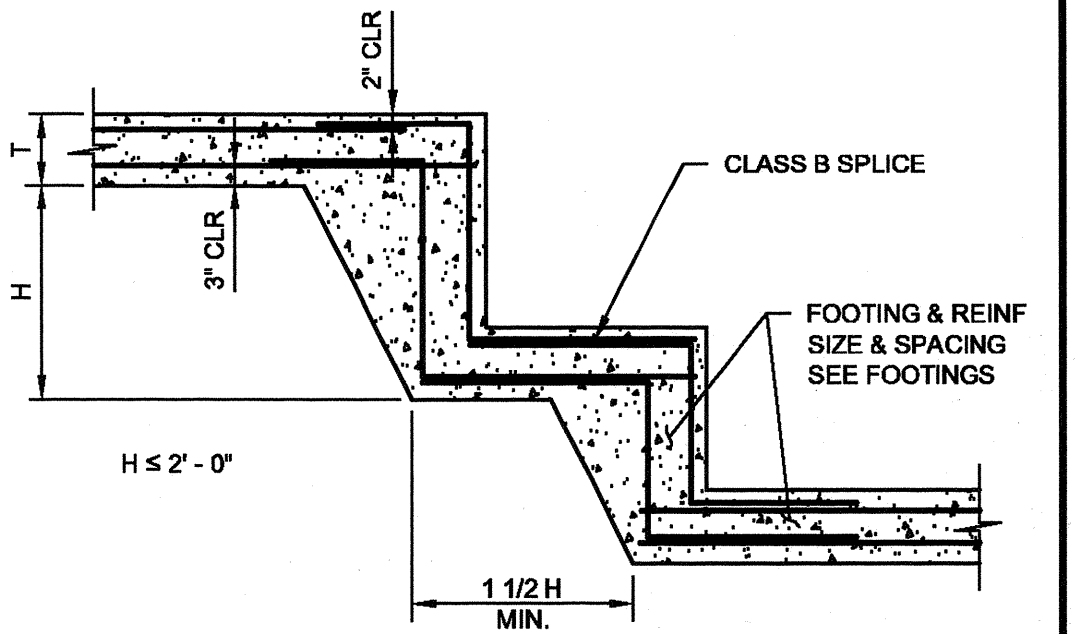
CURB DETAIL 1

NOT TO SCALE



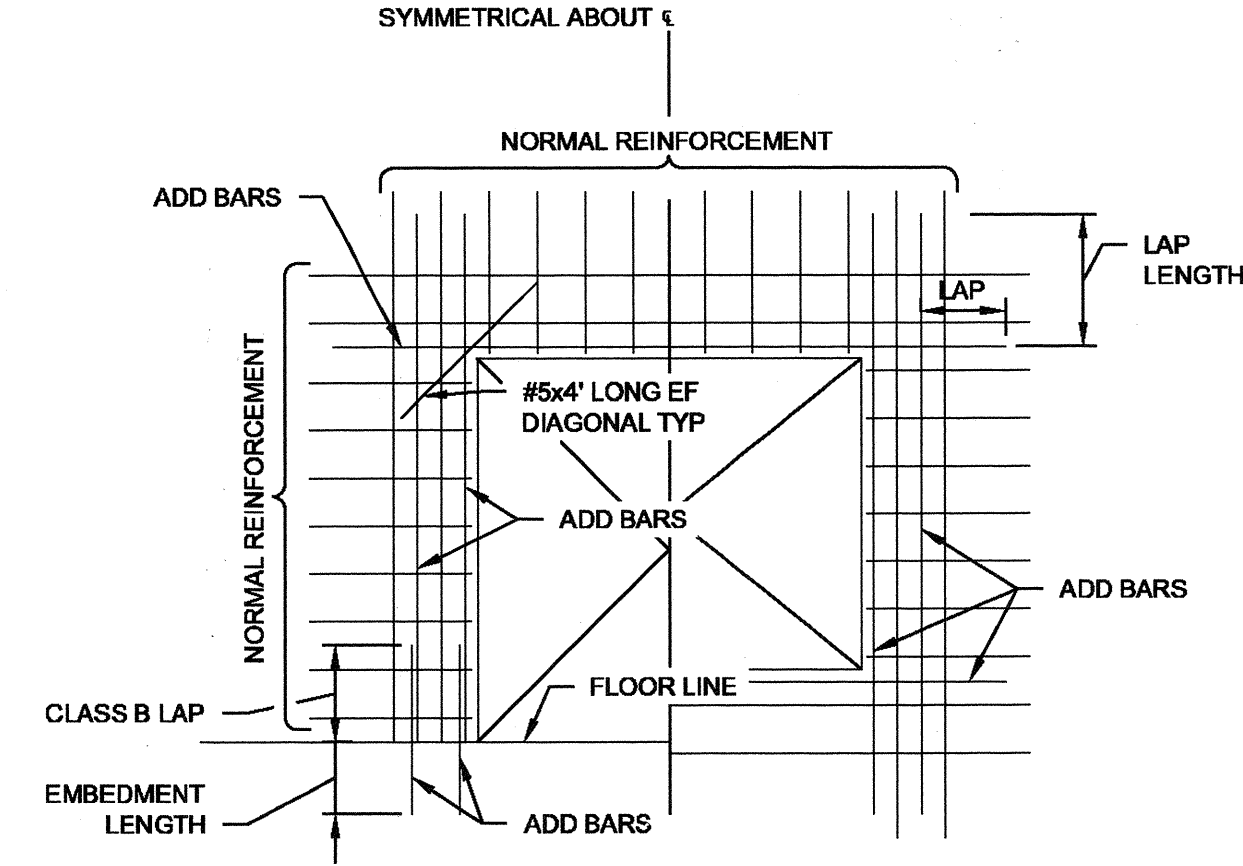
CURB DETAIL 2

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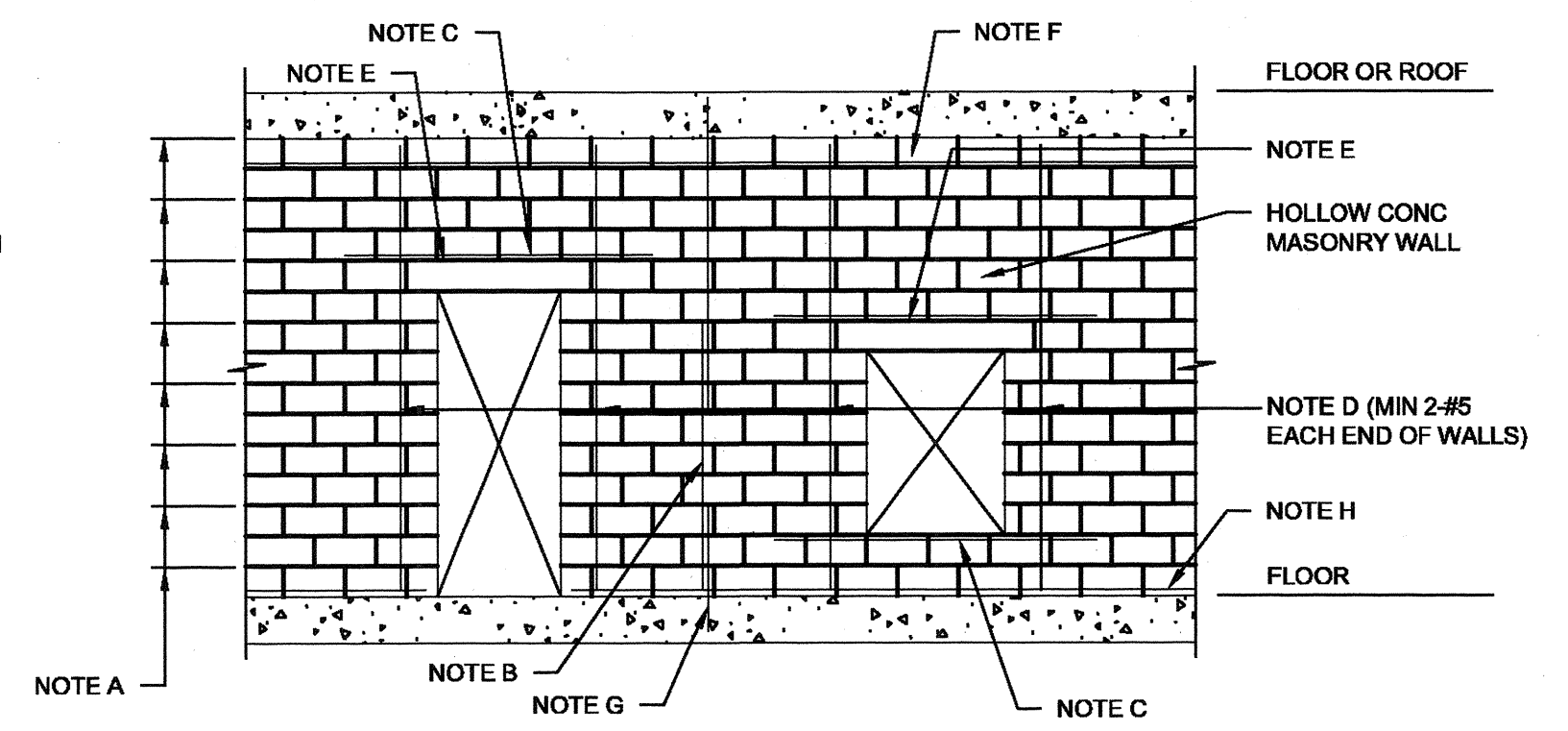
FOOTING STEP

NOT TO SCALE



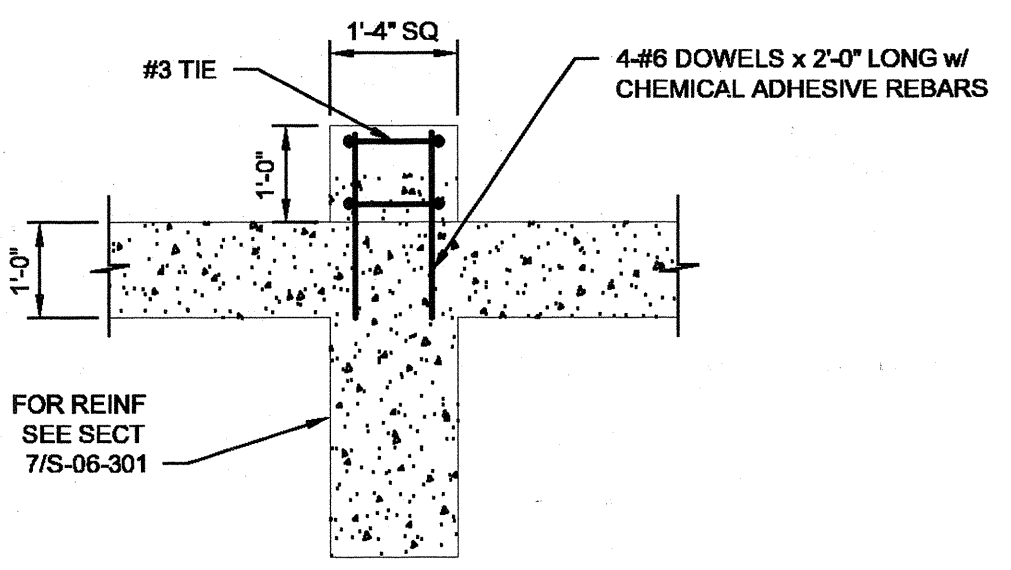
ADDITIONAL REINFORCEMENT AT OPENINGS IN CONCRETE

NOT TO SCALE



REINFORCEMENT IN CONCRETE MASONRY WALLS AND MASONRY SHEAR WALLS

NOT TO SCALE



TYPICAL VESSEL LEG PEDESTAL

NOT TO SCALE

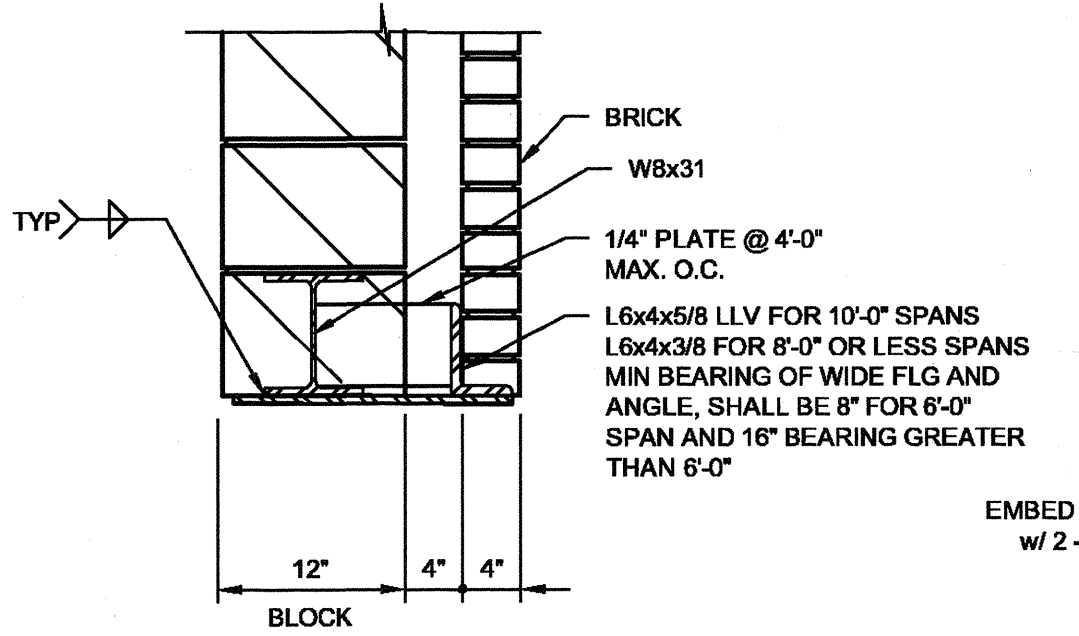
- NOTES:**
- CUT NORMAL REINFORCEMENT AT OPENING. PLACE 1/2 AREA OF CUT BARS TO BE ADDED ON EACH SIDE OF OPENING.
 - THE ADDED BARS SHALL BE PLACED AT A DISTANCE OF 2x SLAB OR WALL THICKNESS AT SPACING OF 2" O.C.
 - REINFORCING AT CIRCULAR OPENINGS SIMILAR.
 - THIS DETAIL TO BE USED ONLY WHEN NO OTHER DETAIL IS INDICATED ON THE DRAWING.

- NOTES:**
- HORIZONTAL REINFORCEMENT IN EVERY SECOND BED JOINT.
 - VERTICAL WALL REINFS: CORES CONTAINING REINFORCING SHALL BE GROUTED SOLID.
 - SUPPLEMENTARY HORIZ REINF, #5 REBARS ABOVE AND BELOW ALL OPENINGS. EXTEND REINF 2'-0" BEYOND CORNER OF OPENING.
 - SUPPLEMENTARY VERTICAL REINF, #5 REBARS AT EACH SIDE OF EACH OPENING, AND AT WALL ENDS. EXTEND REINF FULL HEIGHT AT OPENINGS REINF EACH SIDE OF OPENINGS SHALL NOT BE LESS
- (CONT.) THAN 0.5 X THE REINF INTERRUPTED BY THE OPENING.
 - CONCRETE, CONCRETE MASONRY LINTEL OR MASONRY BEAM. SEE LINTEL SCHEDULE
 - HORIZONTAL REINF: #5 IN BOND BEAM CHANNEL BLOCK, CONTINUOUS.
 - DOWELS FROM THE SLAB INTO THE WALL.
 - HORIZONTAL REINF: #5 IN BOND BEAM. ON SLABS, ON STEEL DECK OR PRECAST PLANK FLOORS:

CONCRETE MASONRY NOTES

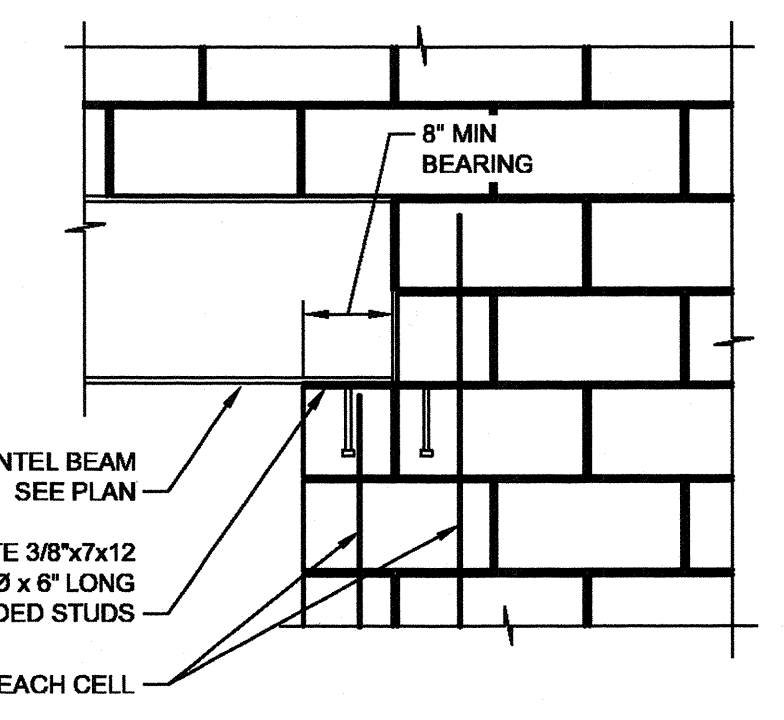
NOT TO SCALE

- THE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY UNITS SHALL BE 1900 psi ON THE NET AREA, PROVIDING A STRUCTURAL DESIGN COMPRESSIVE STRENGTH OF 1500 psi. UNITS SHALL CONFORM TO ASTM C90 TYPE 1
- MORTAR SHALL BE TYPE S IN ACCORD WITH THE ASTM C 270, MORTAR PROPORTIONS FOR UNIT MASONRY, USING CEMENT LIME. (MASONRY CEMENT SHALL NOT BE USED)
- MINIMUM 28-DAY COMPRESSIVE STRENGTH OF GROUT SHALL BE 3000 psi. AIR ENTRAINMENT AND OTHER ADDITIVES ARE NOT ACCEPTABLE IN GROUT MIX. GROUT SHALL HAVE A SLUMP OF 9 TO 11 in.
- MASONRY REINFORCING STEEL SHALL BE ASTM A615M GRADE, 60000 psi.
- HORIZONTAL JOINT REINFORCING SHALL BE STANDARD LADDER TYPE OR TRUSS TYPE. GALVANIZED, AT 16 in ON CENTER, UNLESS OTHERWISE NOTED ON PLAN.
- MINIMUM BOND BEAM REINFORCING SHALL BE 2-#5 IN 6" AND 8" WALLS, AND 2-#6 IN 12" WALLS. BOND BEAM REINFORCING SHALL BE CONTINUOUS THROUGH CONTROL JOINTS EXCEPT AS NOTED ON TYPICAL MASONRY WALL OPENING DETAIL.
- SPLICE LENGTHS FOR MASONRY REINFORCEMENT SHALL AS PER ACI 315.
- PROVIDE BOND BEAMS AT TOP OF ALL WALLS AT ROOFS, STRUCTURAL FLOORS, AND WHERE SHOWN ON THE DRAWINGS. MAXIMUM SPACING OF BOND BEAMS SHALL BE 10'-0" O.C.
- PROVIDE VERTICAL REINFORCING AT JAMB OF OPENINGS, ENDS OF CORNERS OF ALL WALLS AND EACH SIDE OF CONTROL JOINTS. SPECIAL JAMB REINFORCING, WHERE REQUIRED IS CALLED OUT ON THE PLANS.
- VERTICAL REINFORCING BY THESE NOTES OR SHOWN ON THE FOUNDATION PLANS SHALL EXTEND FROM FOUNDATION TO TOP OF WALL UNLESS OTHERWISE NOTED.
- ALL MASONRY BELOW HIGHEST ADJACENT GRADE SHALL BE GROUTED SOLID.
- PROVIDE GROUT AND MASONRY UNIT TESTING PRIOR TO AND DURING CONSTRUCTION IN ACCORD WITH THE PROJECT SPECIFICATIONS.
- MASONRY WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 530.1.



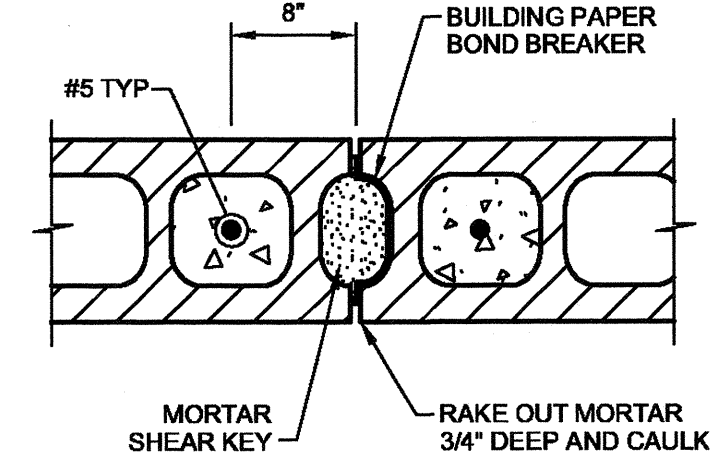
LINTEL DETAIL

NOT TO SCALE



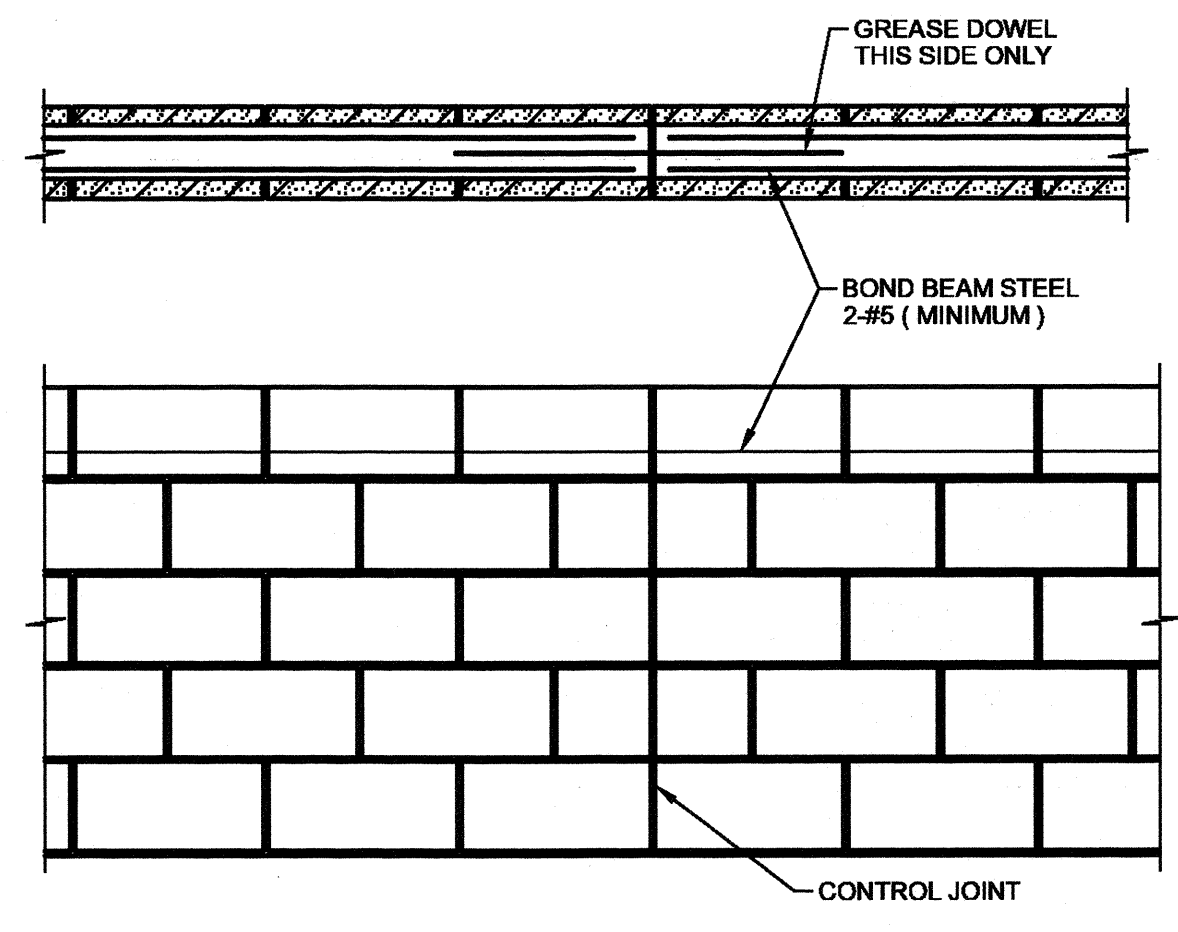
ELEVATION LINTEL BEARING DETAIL

NOT TO SCALE



MASONRY CONTROL JOINT

NOT TO SCALE

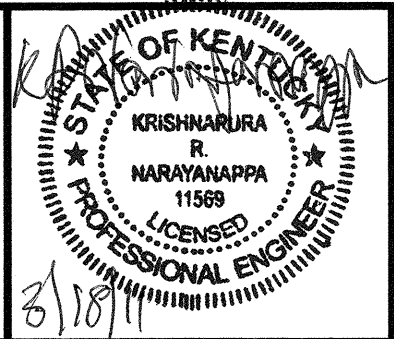
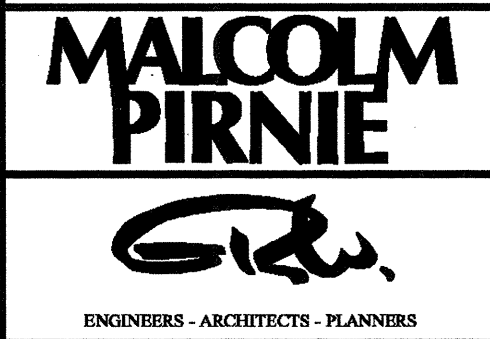


MASONRY CONTROL JOINT IN BOND BEAM

NOT TO SCALE

DOOR AND WINDOW LINTEL SCHEDULE

MASONRY OPENING	4" BRICK OR BLOCK		8" BLOCK		12" BLOCK		14" WALL		20" WALL		STIFFENER PLATE	REMARKS
	SIZE	SHAPE	SIZE	SHAPE	SIZE	SHAPE	SIZE	SHAPE	SIZE	SHAPE		
0 TO 6'-0"	L 4 X 4 X 5/16		BOND BEAM w/ 2-#5		BOND BEAM w/ 2-#6		PLATE 13" X 3/8" w/ 2- 6" X 5/8" PLATE LEGS		PLATE 19" X 3/8" w/ 2- 6" X 5/8" PLATE LEGS		1/4" THICK AT 32" O.C.	
6'-0" TO 10'-0"			W 8 X 28 w/ PLATE 1/4" X 7"		W 8 X 28 w/ PLATE 5/16" X 11"		W 8 X 28 w/ PLATE 5/16" X 13"		W 8 X 31 w/ PLATE 5/16" X 17"		1/4" THICK AT 32" O.C.	PROVIDE BEARING PLATE 3/8" THK. PROVIDE 2-1/2" DIA HEADED STUDS, 6" LONG, FOR DETAILS SEE THIS SHEET



REVISIONS		REMARKS
NO.	BY	DATE

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL TYPICAL DETAILS

SCALE: AS NOTED

ISSUED STATUS: BID SET

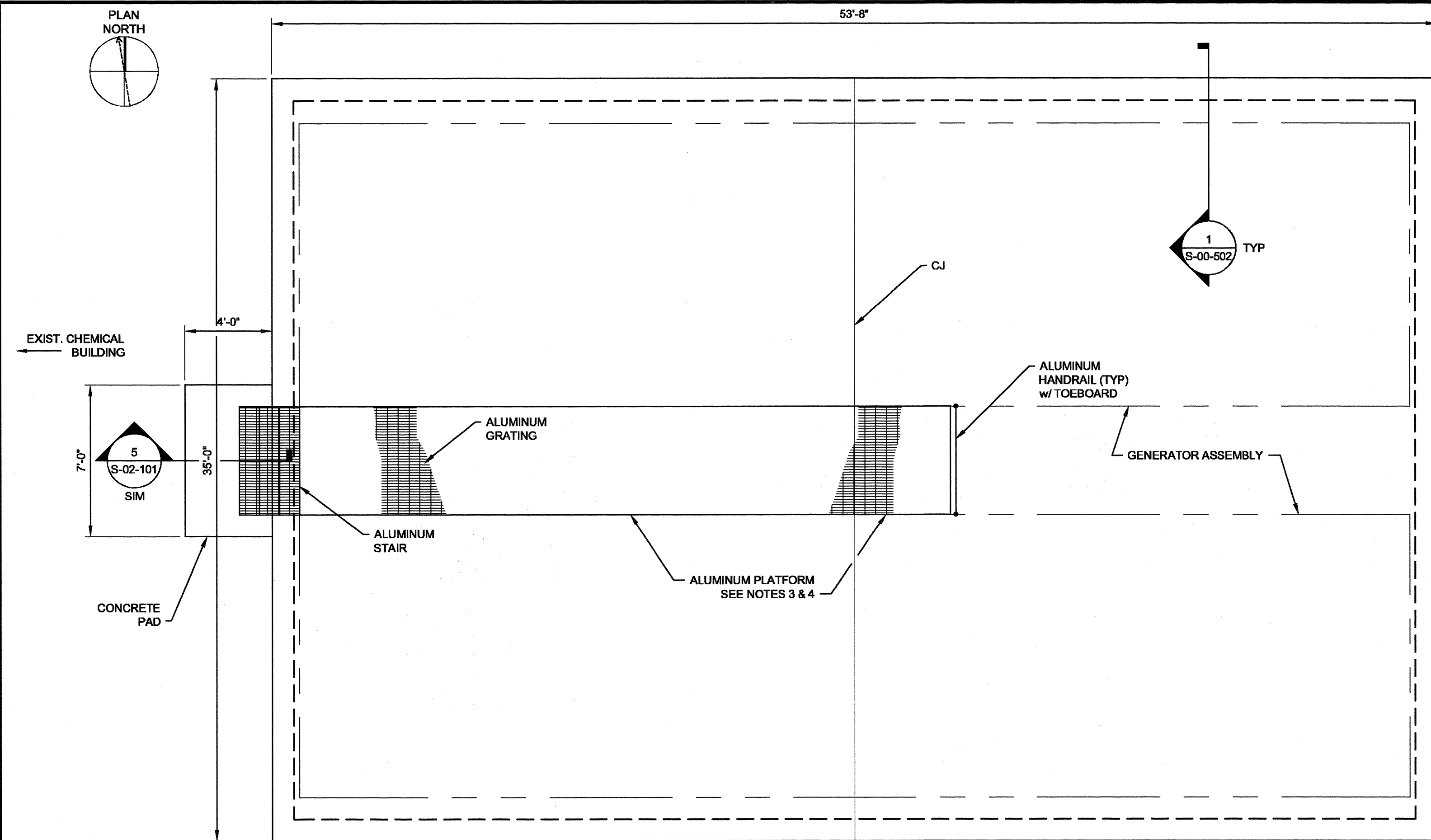
DATE: MARCH, 2011

SHEET: S-00-501

CAD REF. NO.: 3789-S-00-501

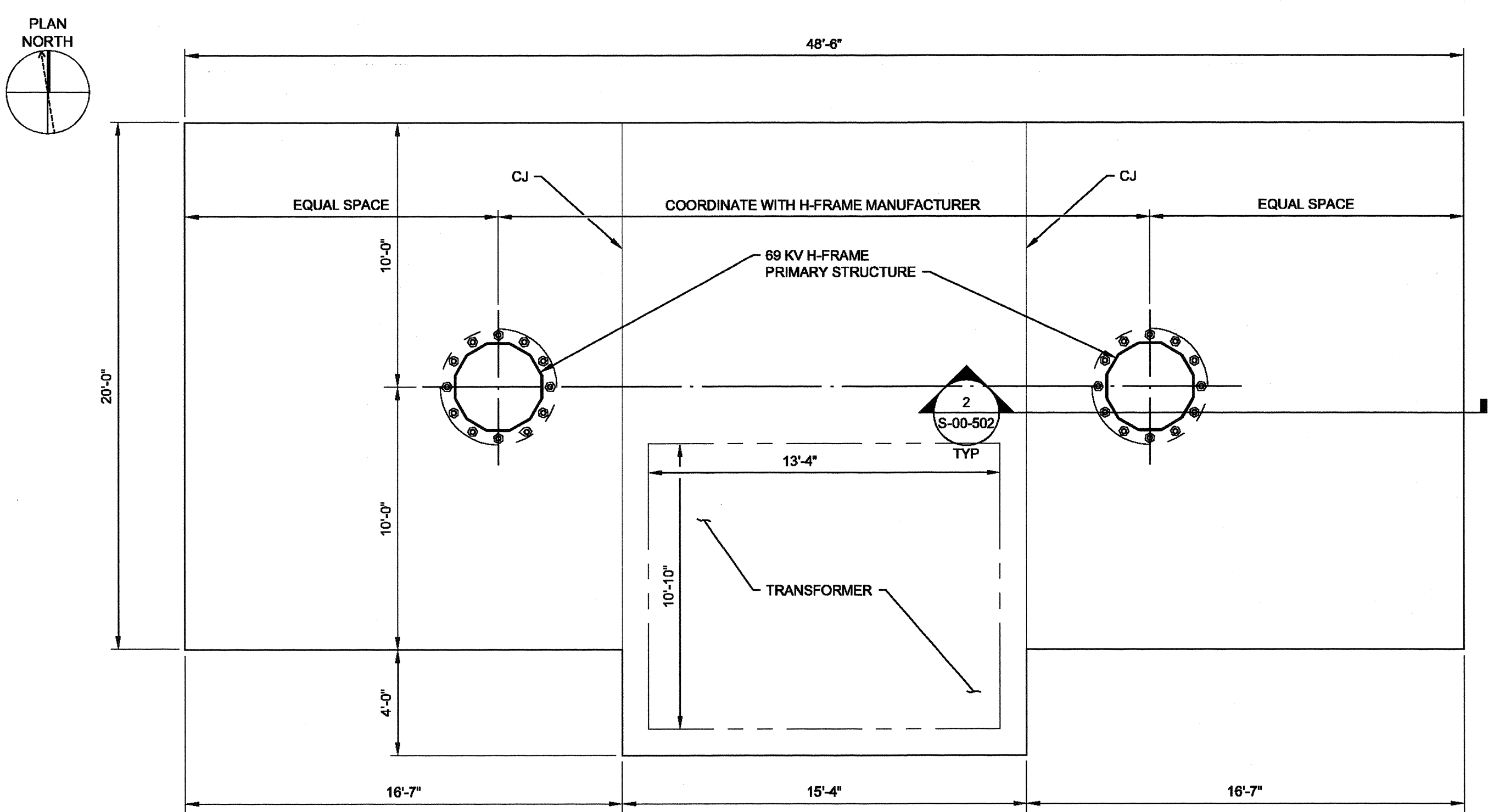
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GENERATOR PAD PLAN

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

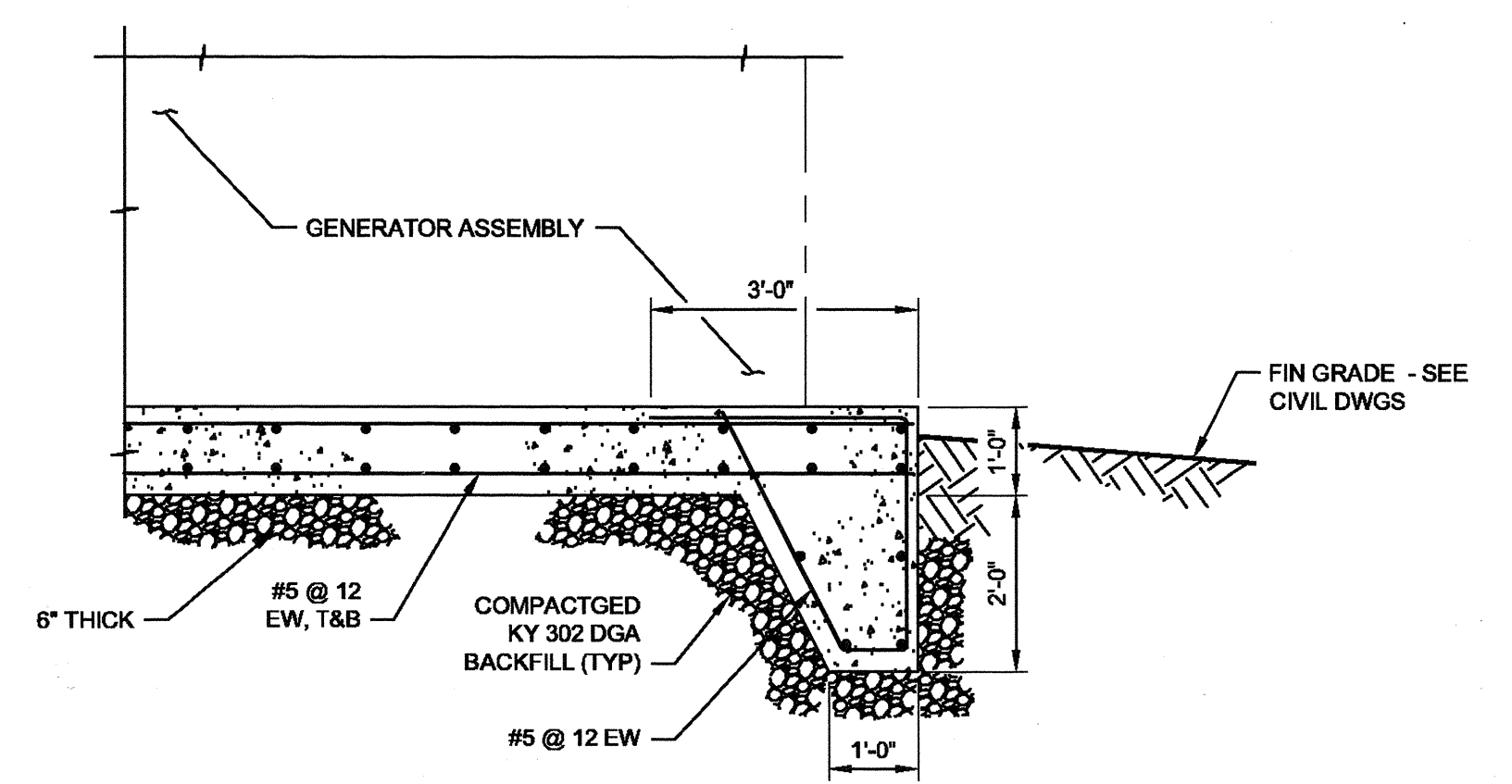


TOWER / TRANSFORMER PLAN

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

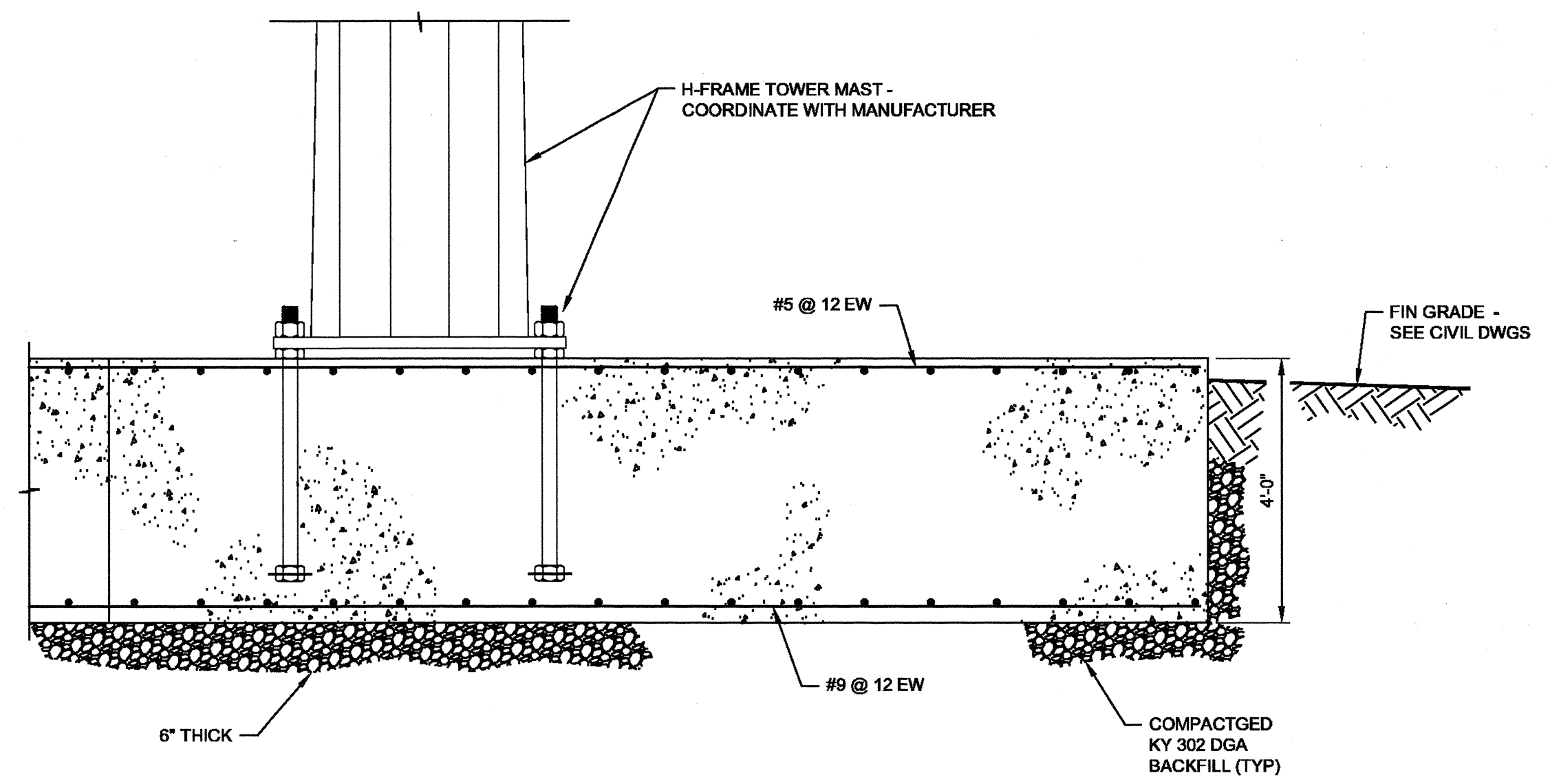
- NOTES:**
1. FOR LOCATION SEE SHEET C-01-101.
 2. GENERATOR LOAD 95,000 lbs.
 3. HEIGHT OF ALUMINUM PLATFORM SHALL BE APPROXIMATELY 30". FIELD COORDINATE EXACT HEIGHT OF PLATFORM W/GENERATOR ENCLOSURE.
 4. ALUMINUM PLATFORM SYSTEM INCLUDING ALL SUPPORTS SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

- NOTE:**
1. A 15'-4" x 7'-0" x 4'-0" DEEP AREA SHALL BE BACKFILLED WITH #67 CRUSHED STONE IN FRONT OF THE TRANSFORMER PAD FOR POTENTIAL OIL CONTAINMENT. SLOPE TRANSFORMER PAD TO TRENCH.



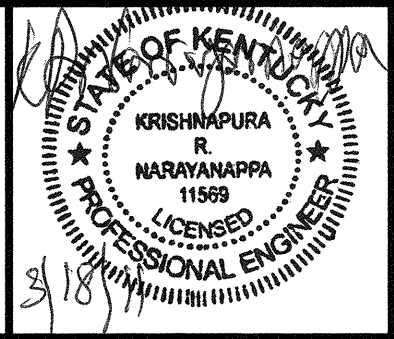
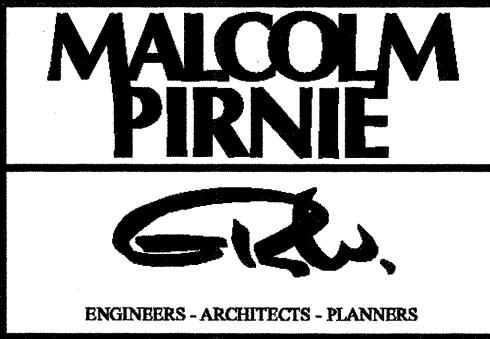
1 SECTION

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



2 SECTION

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



REVISIONS			
NO.	BY	DATE	REMARKS

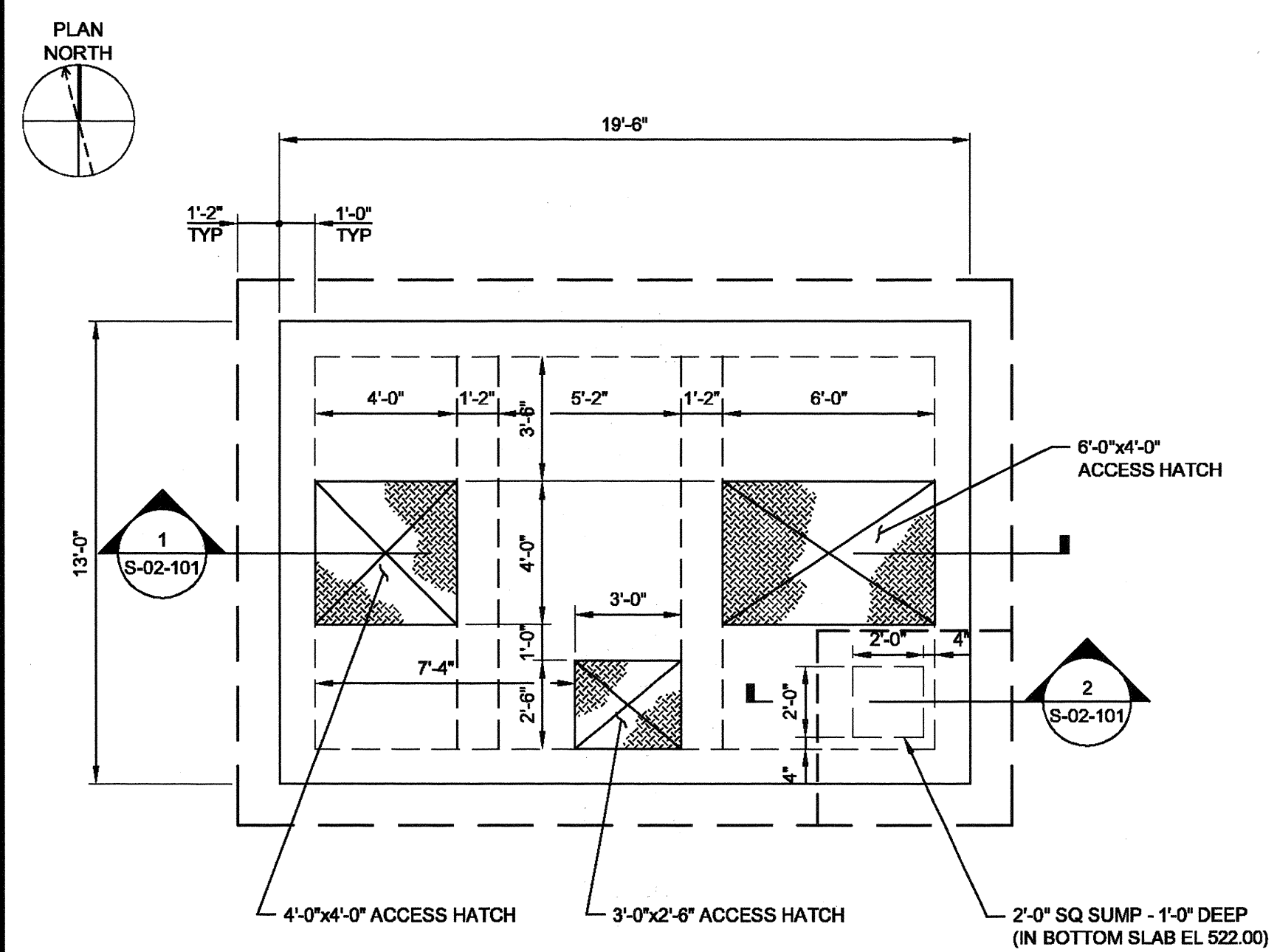
DES: STAFF
DWN: STAFF
CKD: KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

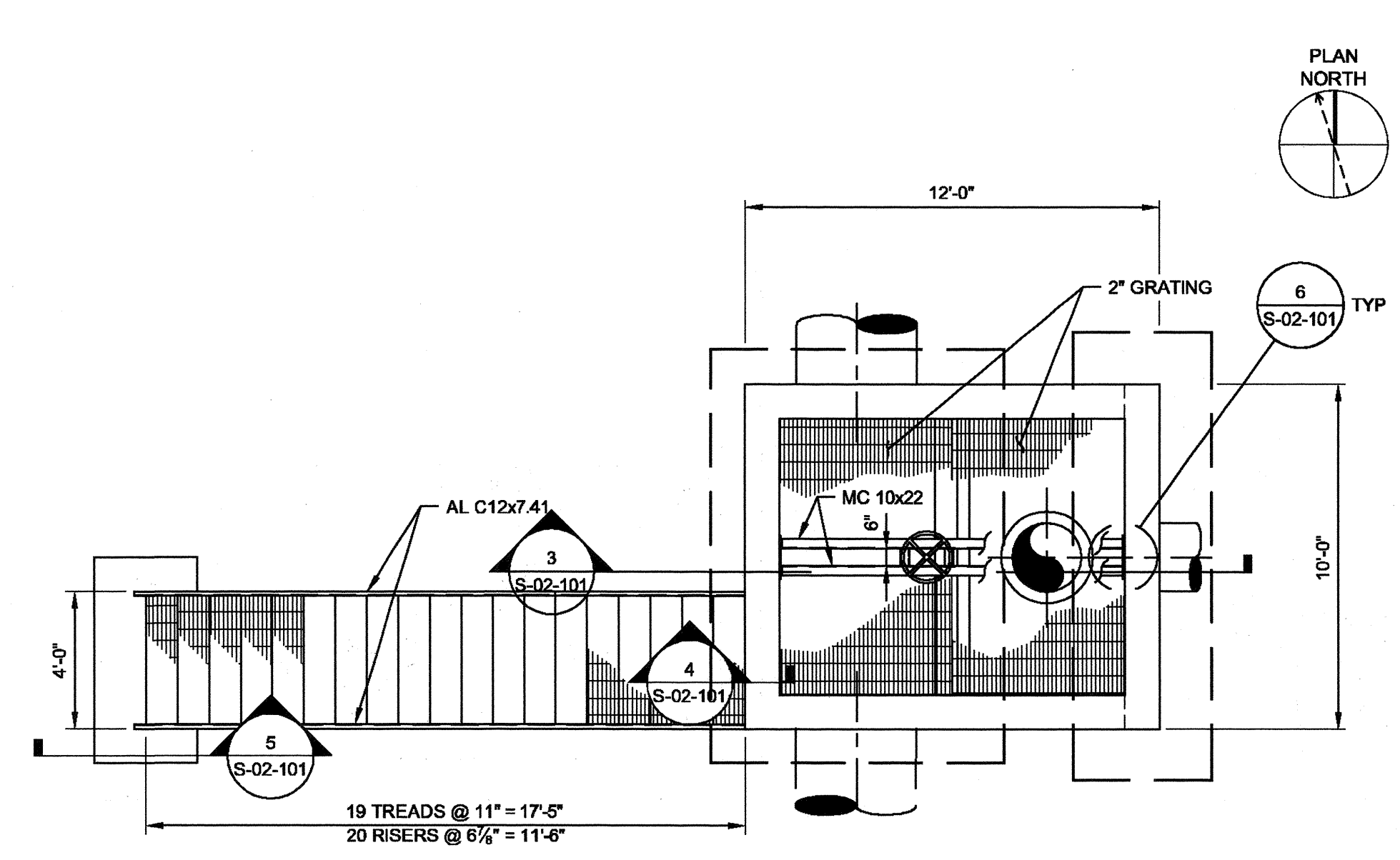
STRUCTURAL
GENERATOR PAD AND
TOWER / TRANSFORMER PAD PLANS
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-00-502
CAD REF. NO.: 3789-S-00-502

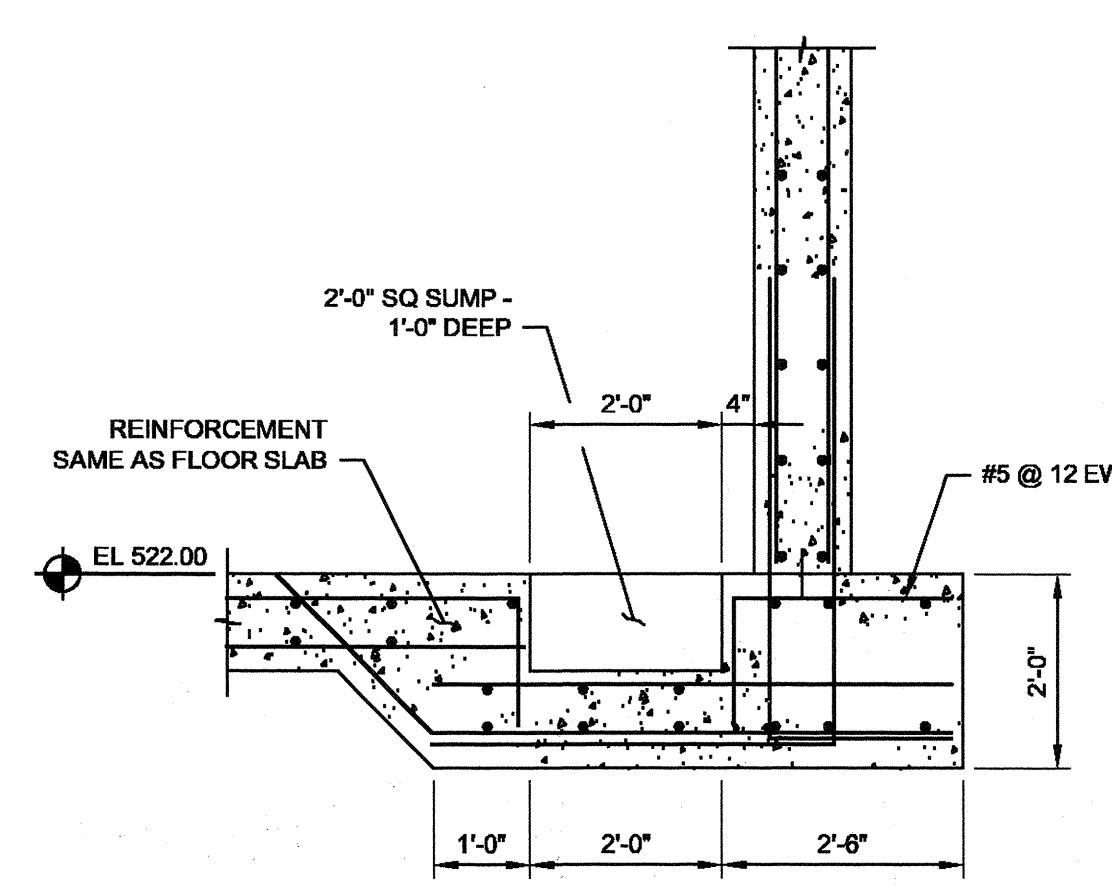
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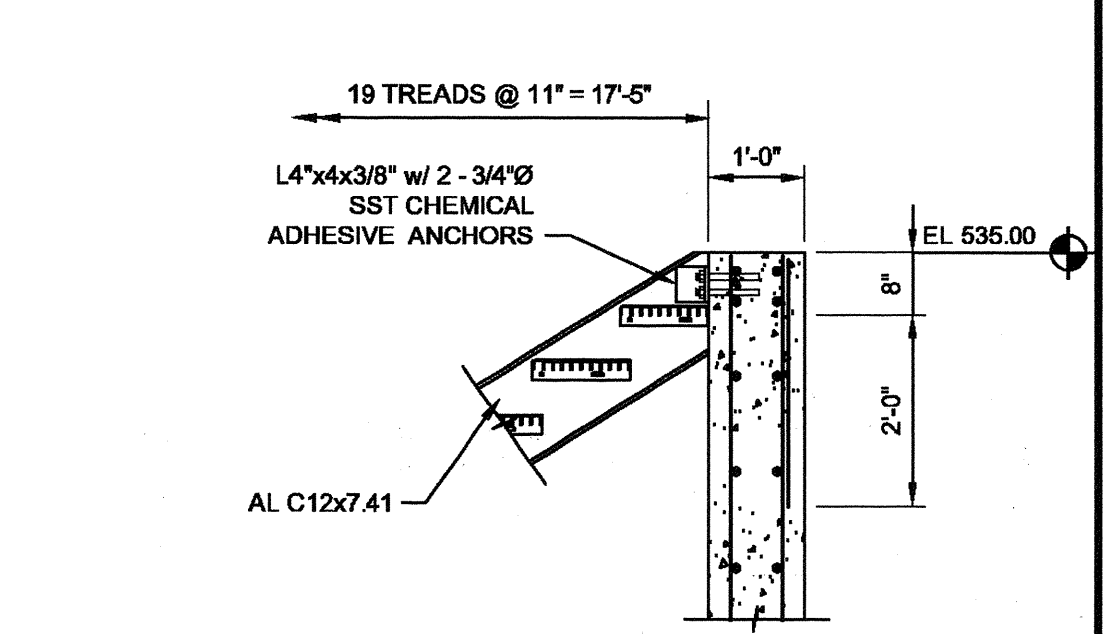
FTWR METER VAULT PLAN
SCALE: 1/4"=1'-0"
NOTE:
1. SEE SHEET C-02-302 FOR ADDITIONAL INFORMATION.



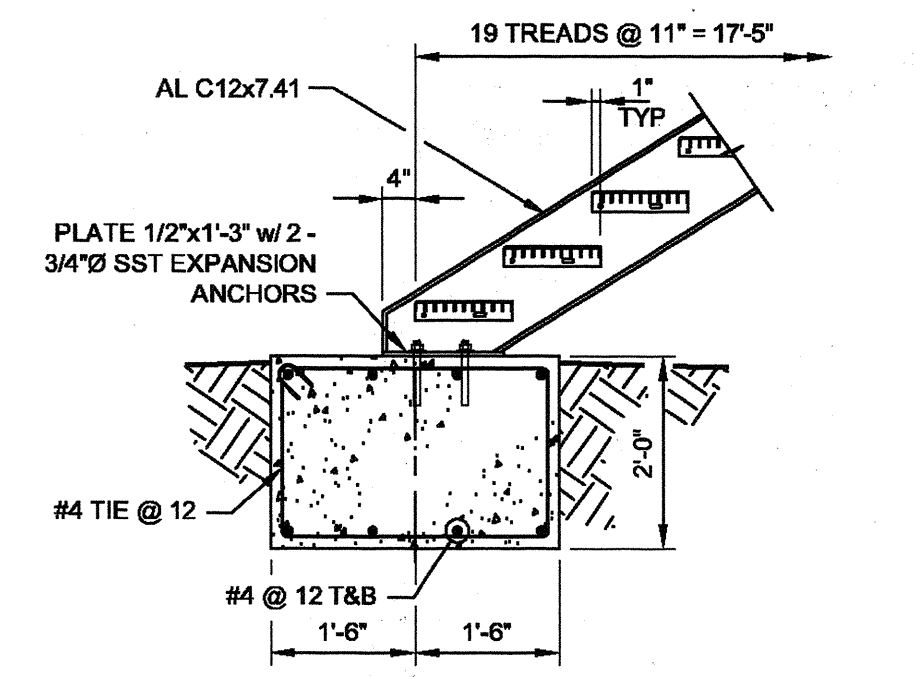
YARD PIPING FILTER OVERFLOW - PLAN
SCALE: 1/4"=1'-0"



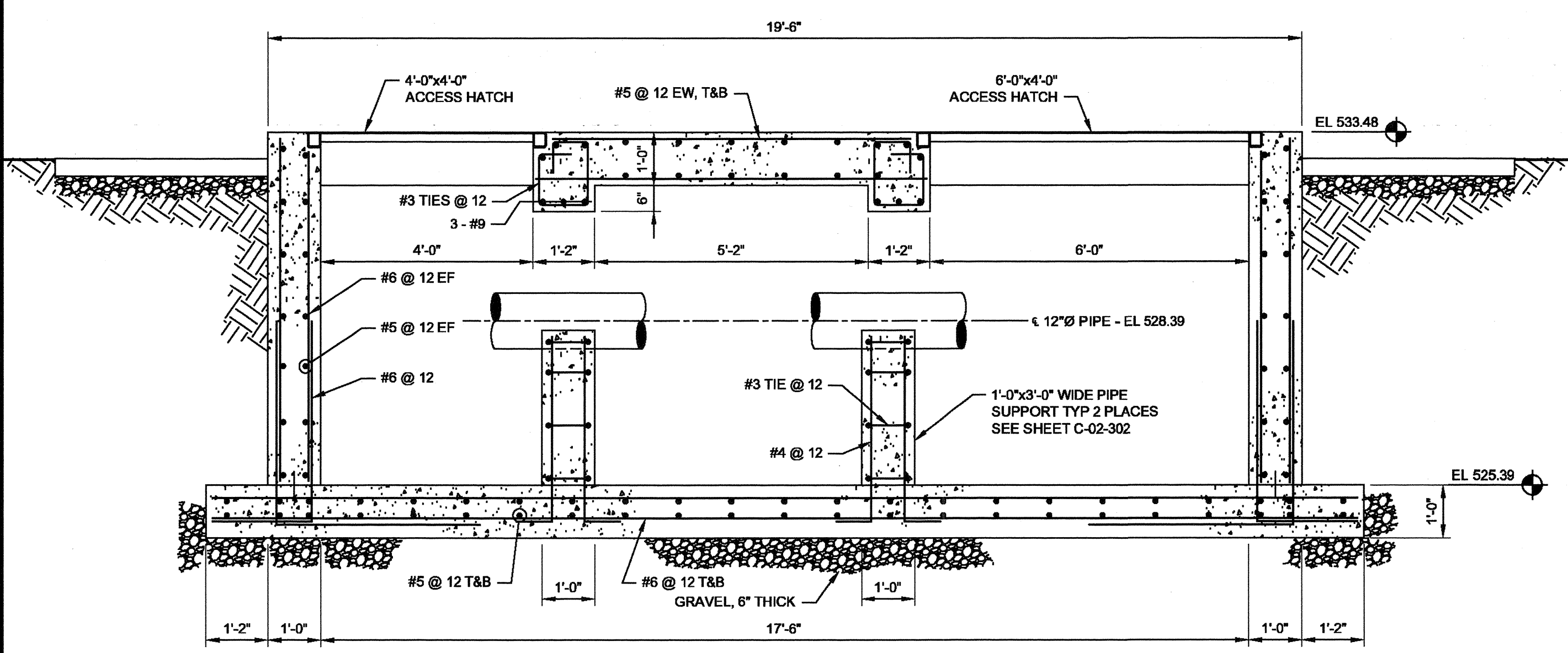
SECTION 2
SCALE: 1/2"=1'-0"



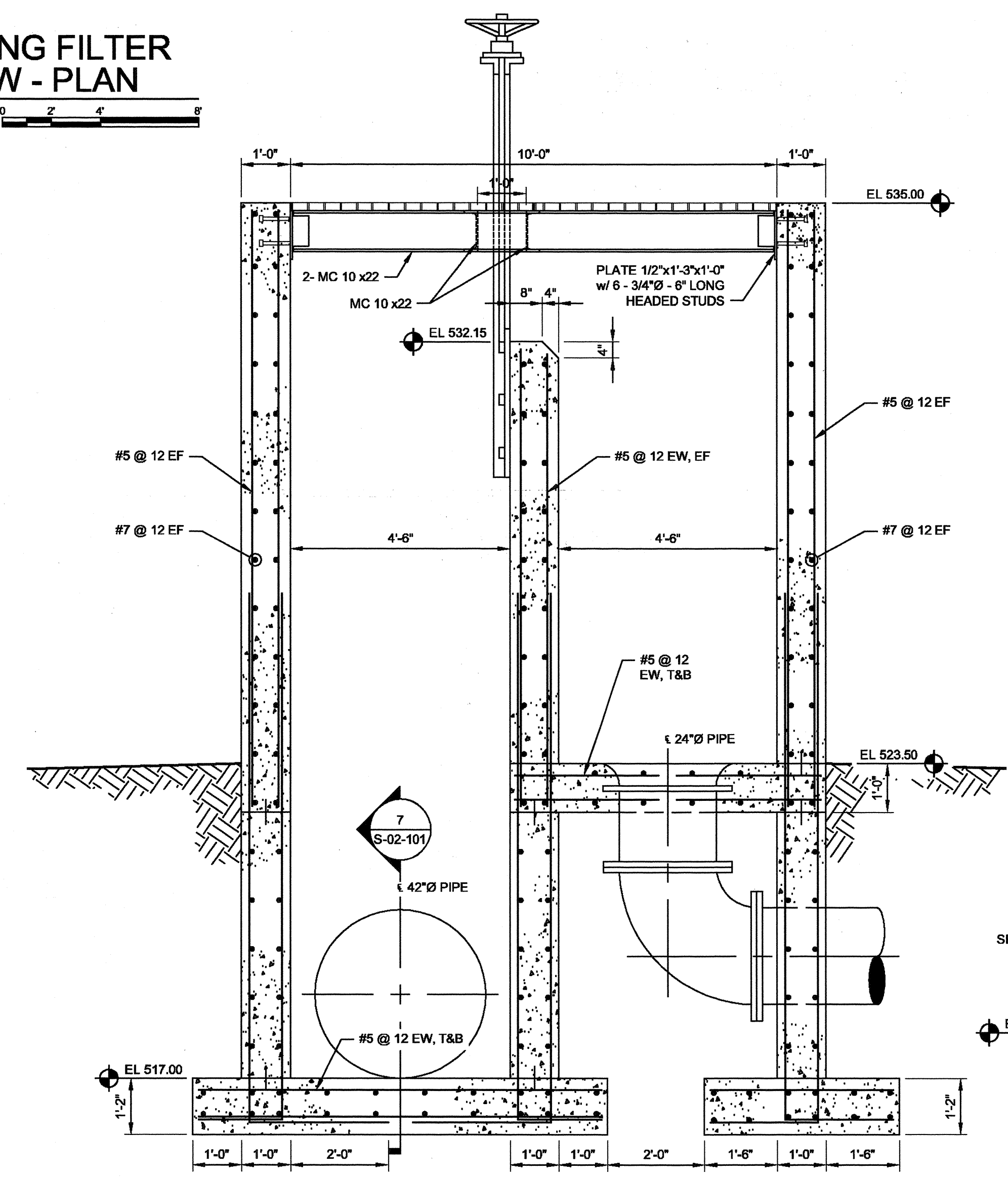
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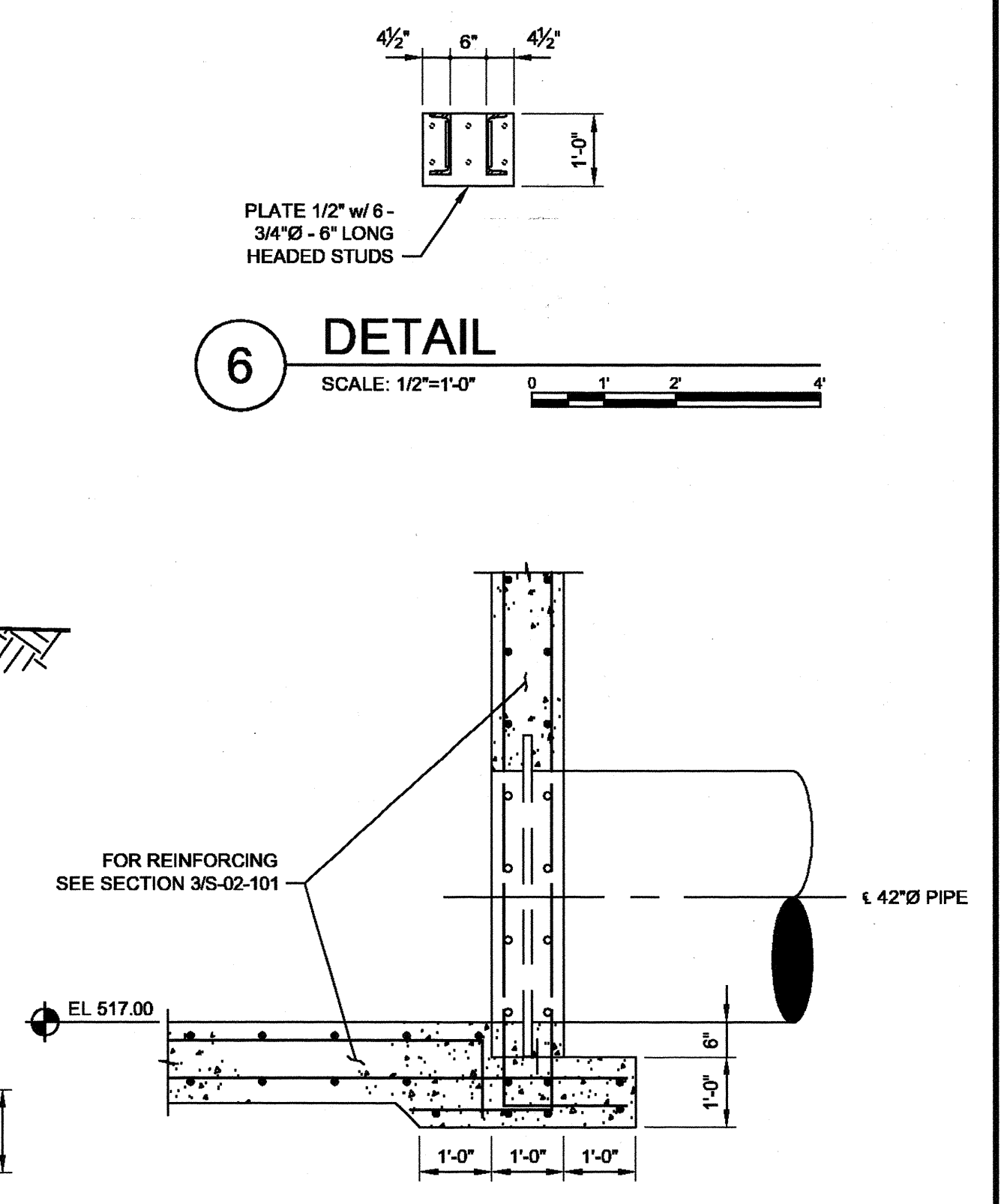
SECTION 5
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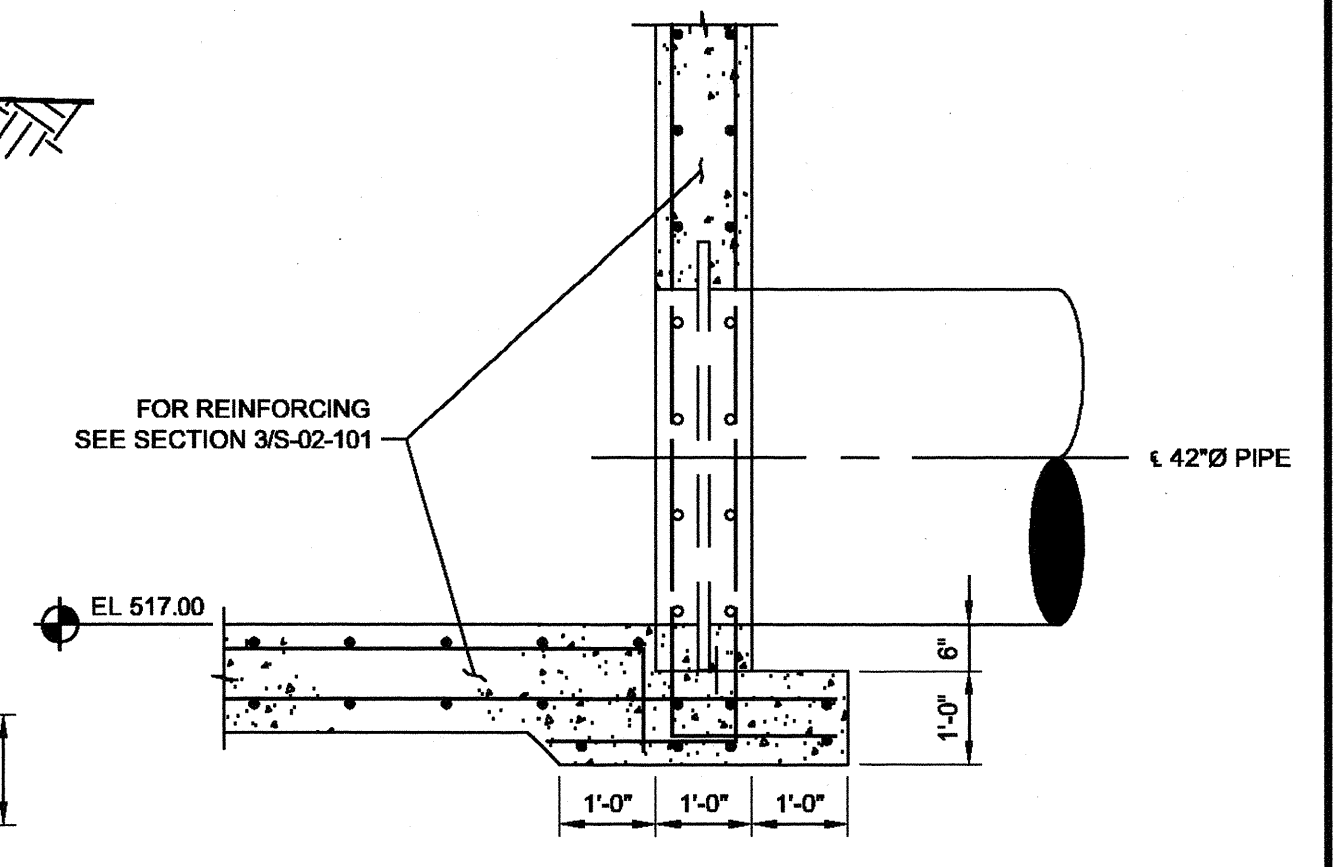
SECTION 1
SCALE: 1/2"=1'-0"



SECTION 3
SCALE: 1/2"=1'-0"



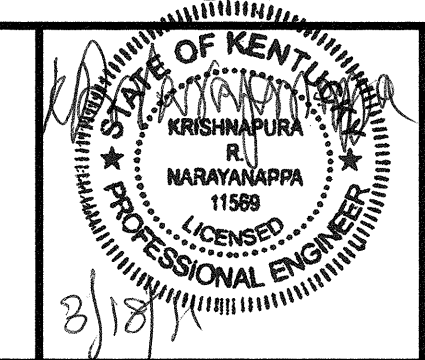
SECTION 6
SCALE: 1/2"=1'-0"



SECTION 7
SCALE: 1/2"=1'-0"

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS



NO.	BY	DATE	REVISIONS	REMARKS

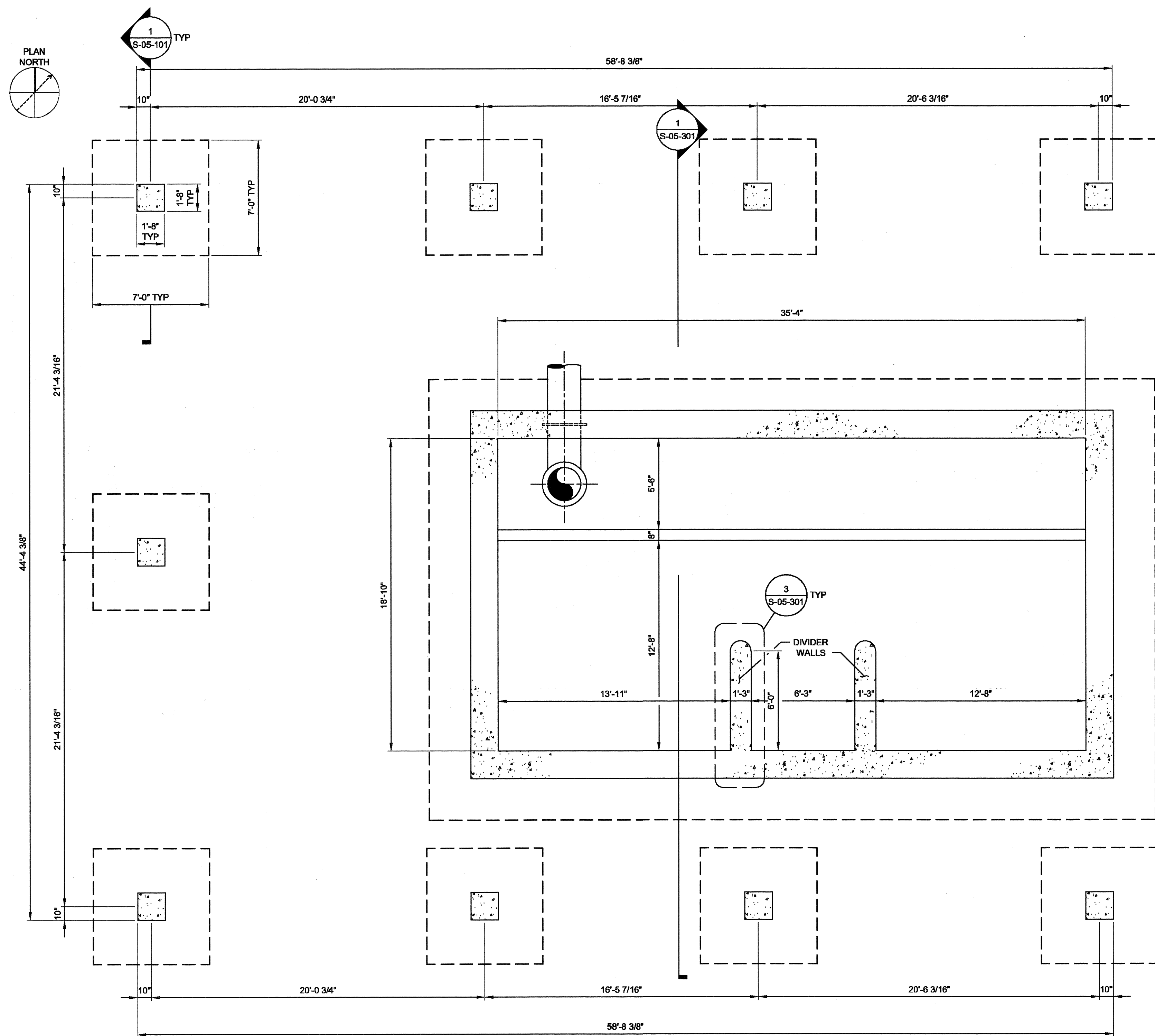
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
FTWR METER VAULT & YARD
PIPING FILTER OVERFLOW PLANS
SCALE: 1/8" = 1'-0"

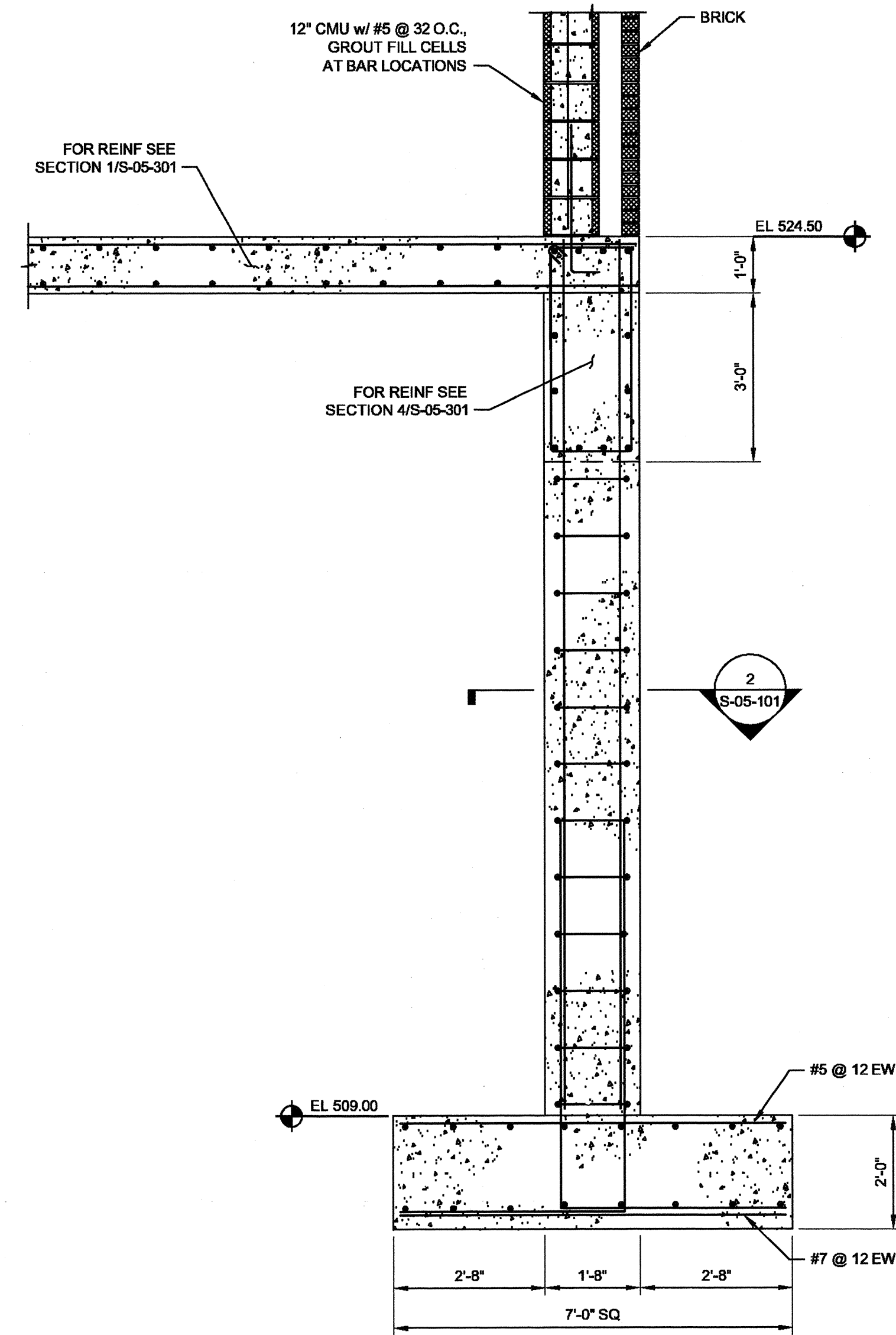
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DATE: MARCH, 2011
SHEET: S-02-101
CAD REF. NO.: 3789-S-02-101

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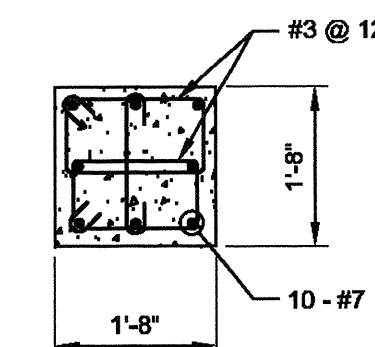
FOUNDATION PLAN

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



1 TYPICAL SECTION

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



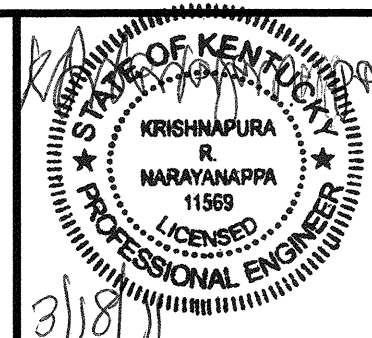
PLAN

2 SECTION

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

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

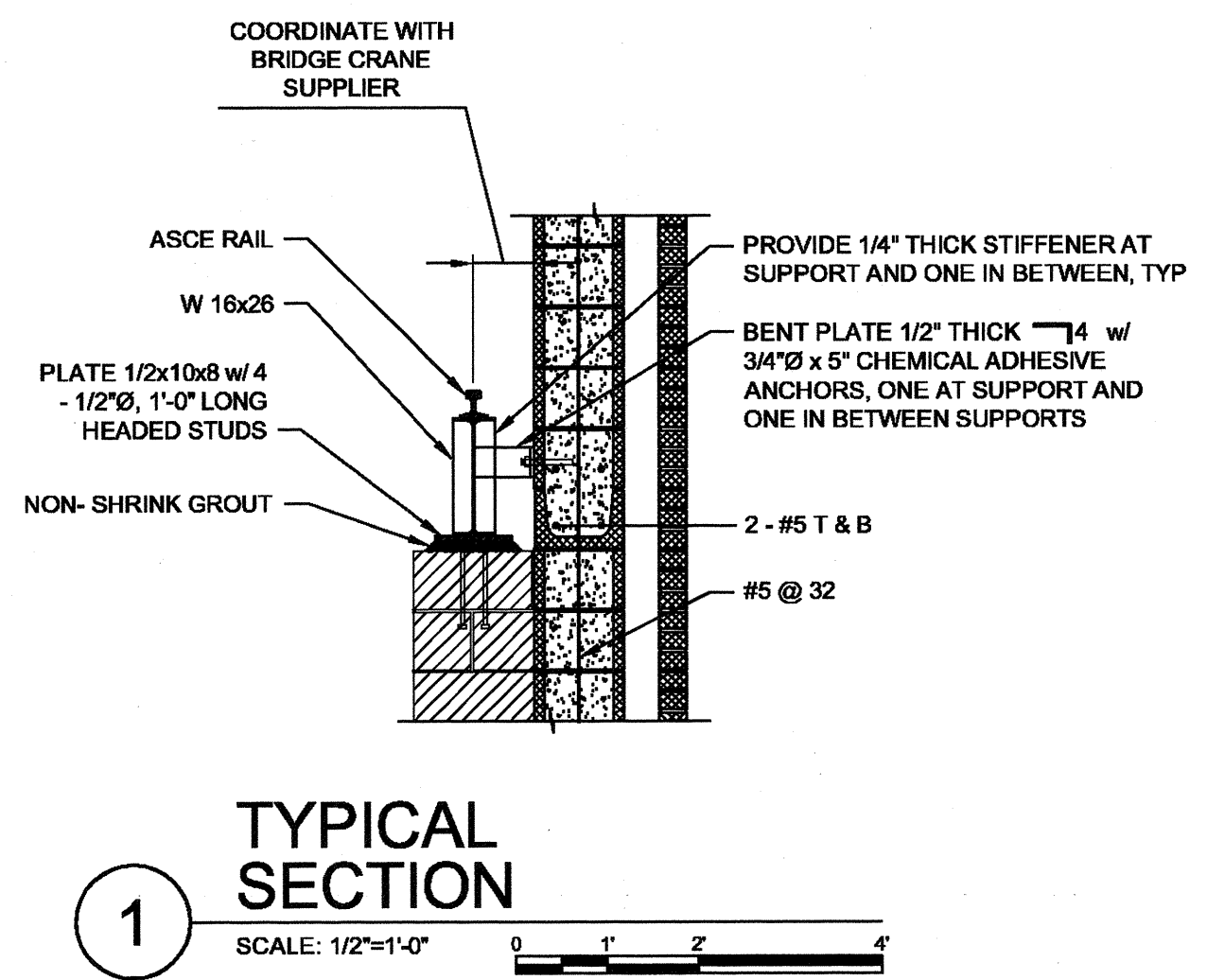
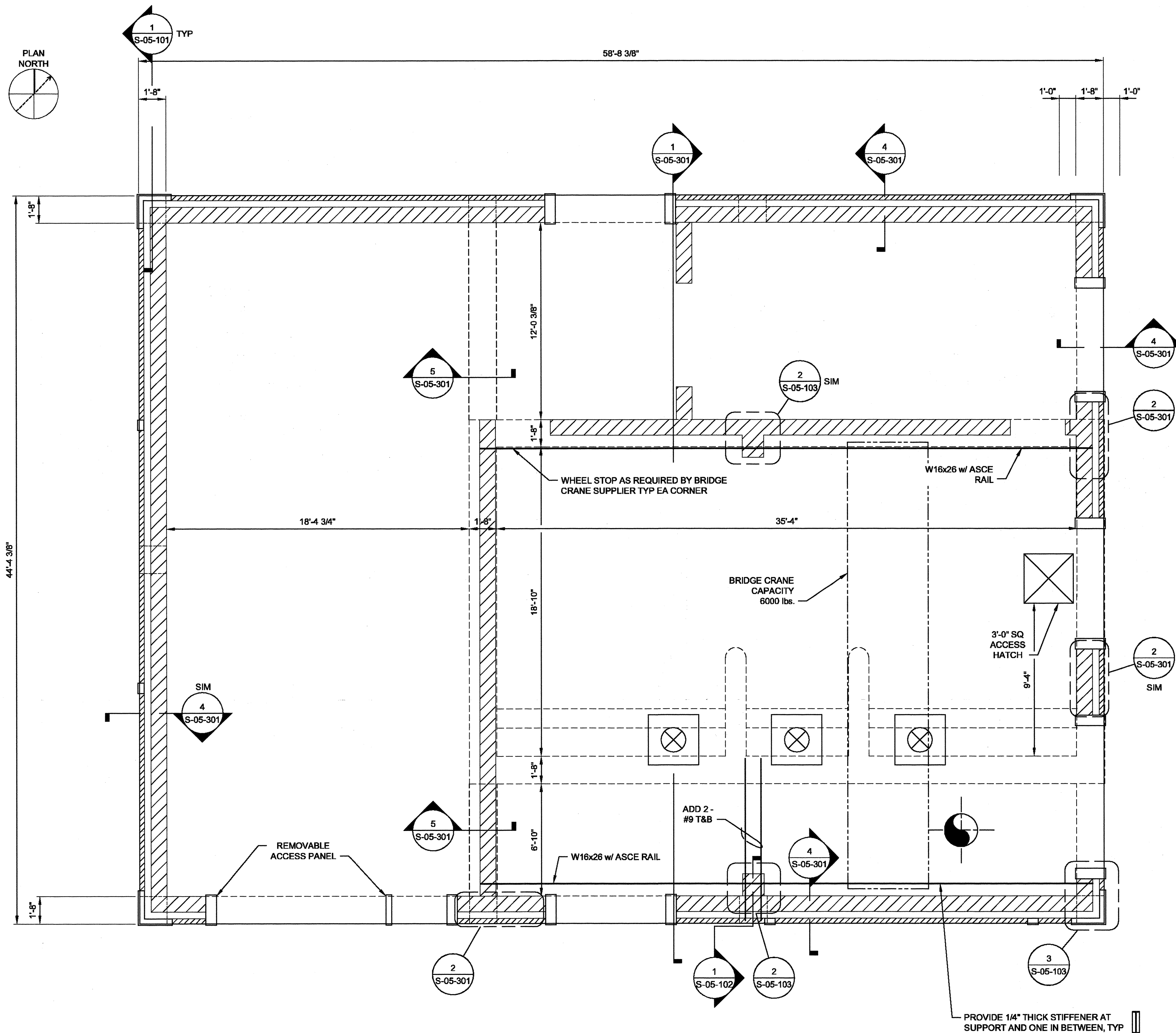
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION FOUNDATION PLAN
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-101
CAD REF. NO.: 3789-S-05-101

User: J:\BOND Spec\PIRNE STANDARD File\U3788-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3788-S-05-102.DWG Scale: 1:18 Saved Date: 1/16/2011 Time: 09:47 Plot Date: 03/01/2011 09:41 Layout: S-05-102



PLAN AT EL 524.50
SCALE: 1/4"=1'-0"

NOTE:
1. FOR DOOR AND WINDOW LINTEL SCHEDULE SEE SHEET S-00-501

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
KRISHNANURU R. HARAHANAPPA
LICENSED PROFESSIONAL ENGINEER
11569

REVISIONS			
NO.	BY	DATE	REMARKS

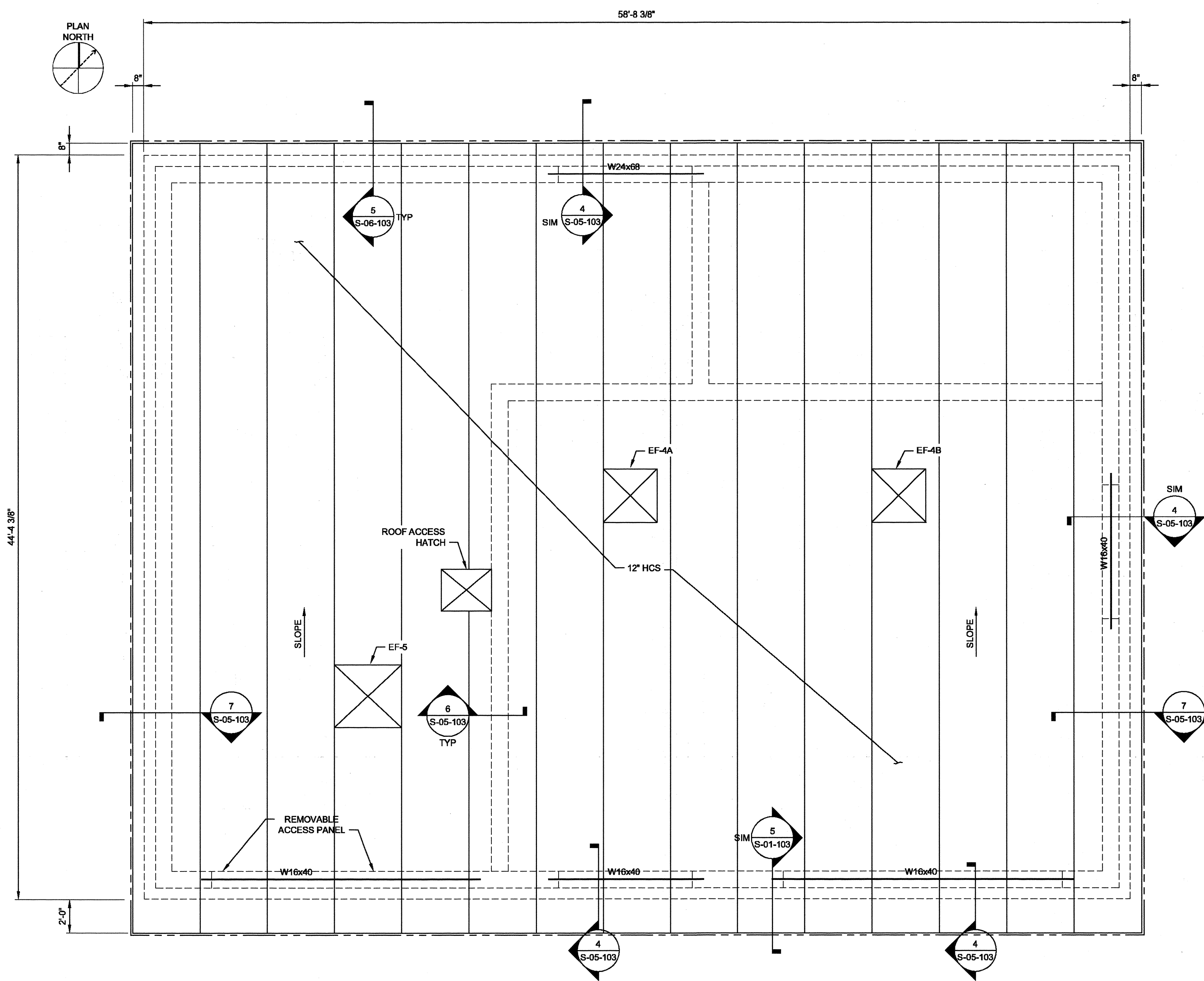
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION
PLAN AT EL 524.50
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-102
CAD REF. NO.: 3789-S-05-102

User: BOND Spc: PIRNIE STANDARD File: J:\3786-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STL\3786-S-05-103.DWG Scale: 1:18 Sheet: 1 of 12 Pld Date: 03/10/2011 09:41 Layout: S-05-103



ROOF FRAMING PLAN

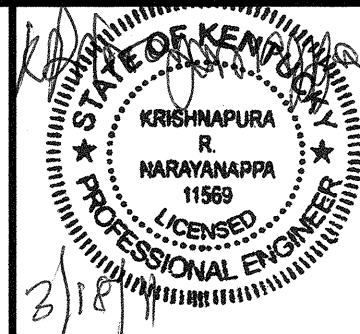
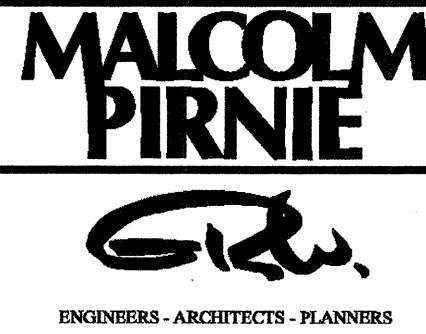
SCALE: 1/4"=1'-0"

- NOTE:**
- FOR DOOR AND WINDOW LINTEL SCHEDULE SEE SHEET S-00-501
 - COORDINATE ROOF OPENINGS WITH EQUIPMENT WITH EQUIPMENT PROVIDED.

DESIGN LOADS

HOLLOW CORE SLABS	
12" HOLLOW CORE SLAB	88 psf
MECHANICAL + ELECTRICAL	10 psf
LIVE LOAD	30 psf
EF-4A, EF-4B, EF-5	500 lbs

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



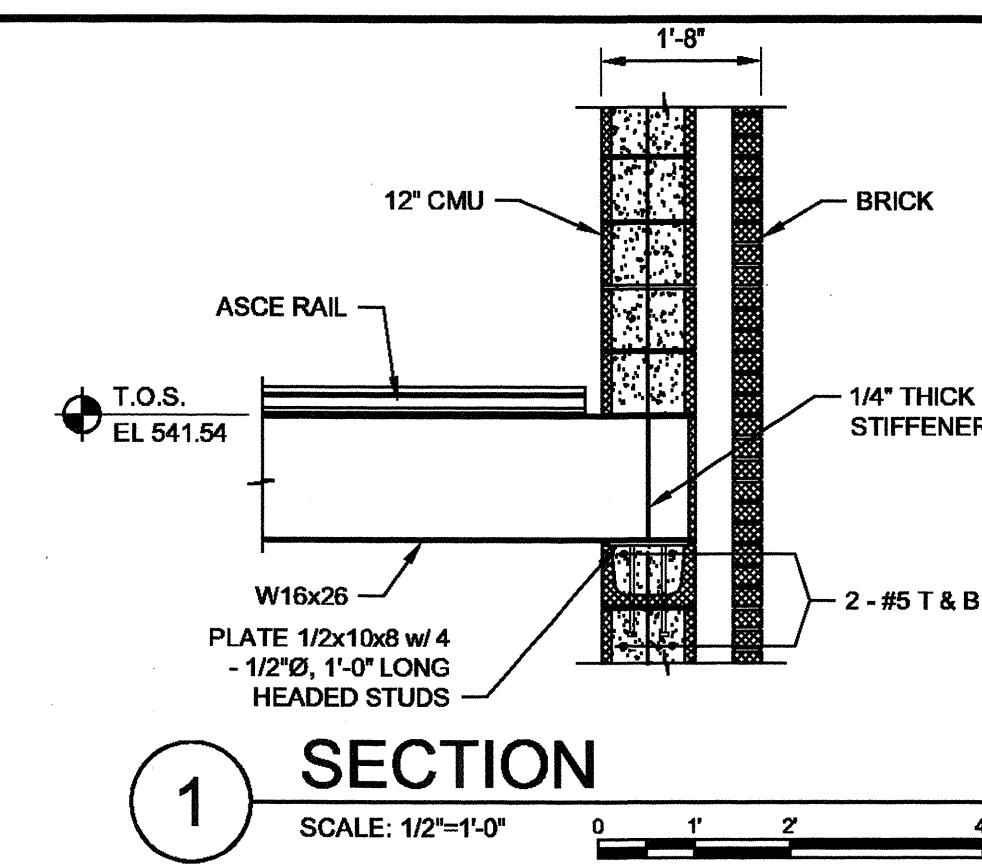
REVISIONS		REMARKS
NO.	BY	DATE

DES STAFF
DWN STAFF
CKD KRN

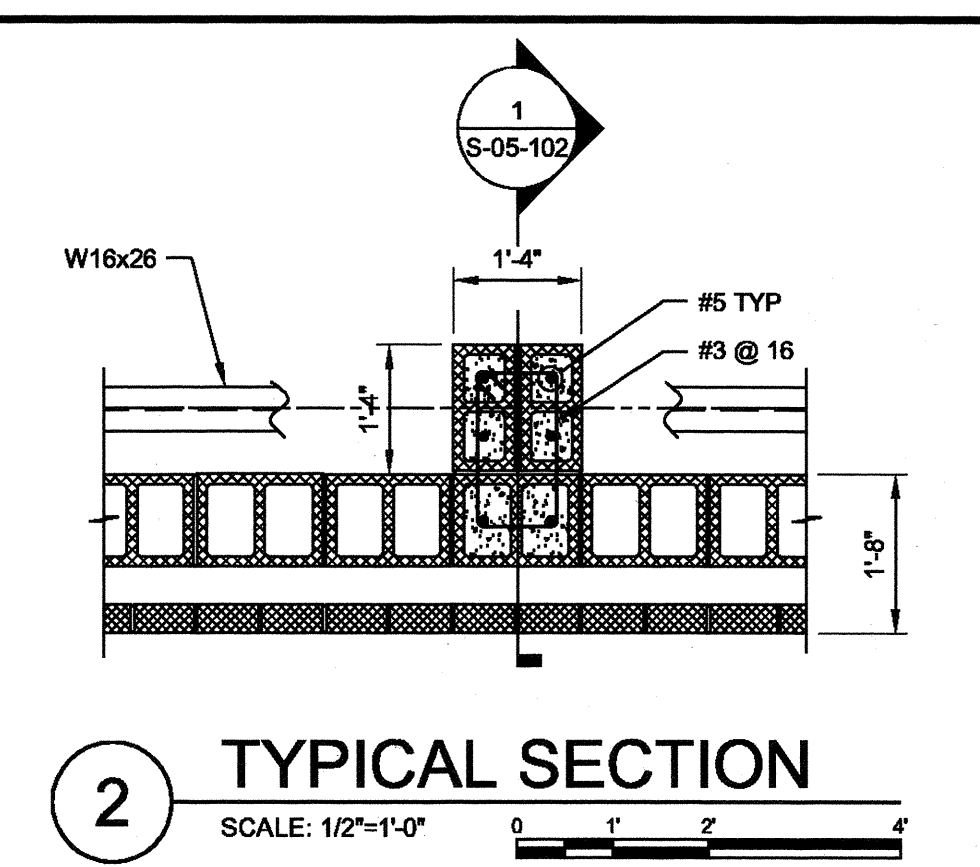
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION
ROOF FRAMING PLAN
SCALE: AS NOTED

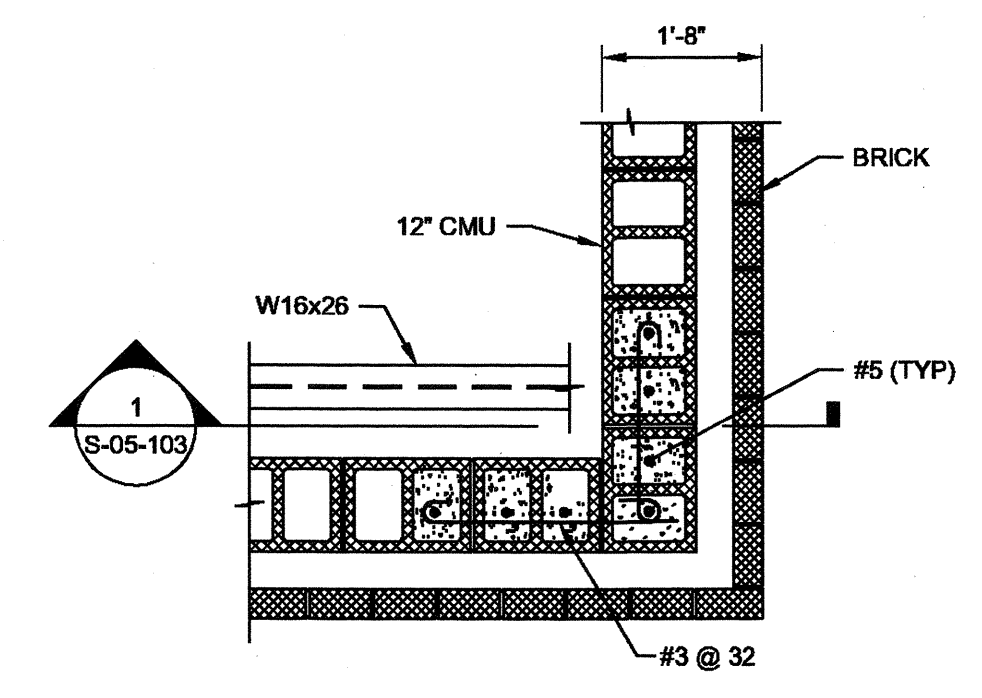
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-103
CAD REF. NO.: 3789-S-05-103



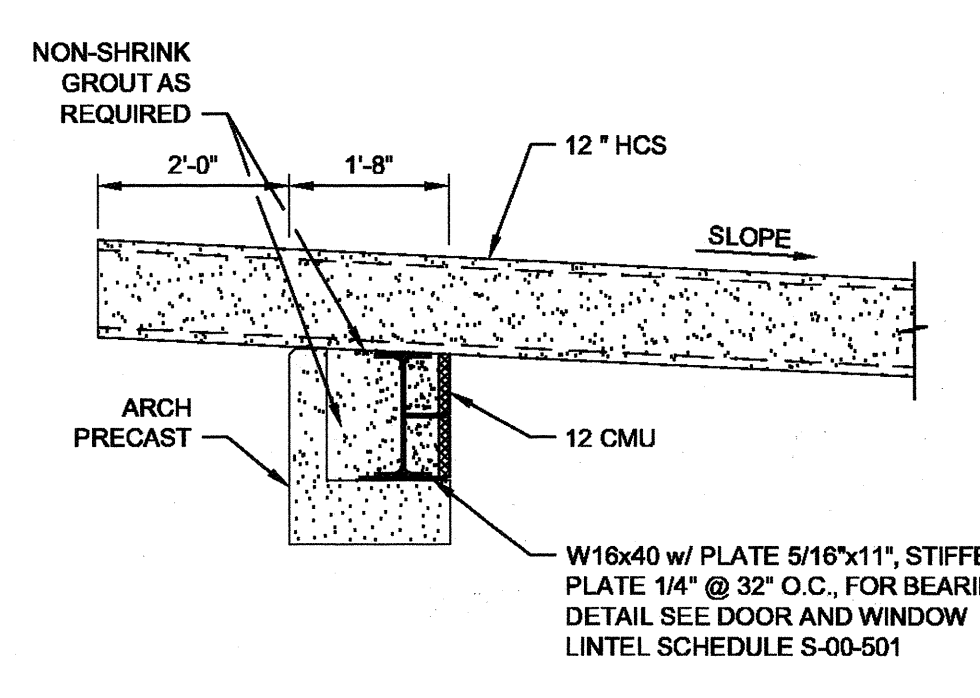
1 SECTION
SCALE: 1/2"=1'-0"



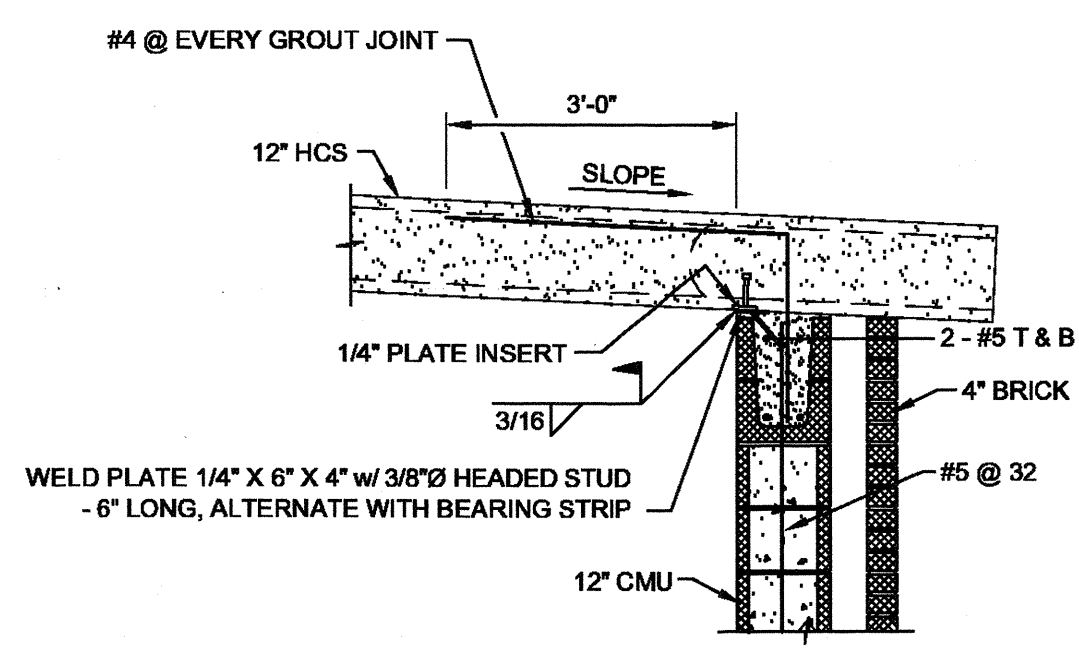
2 TYPICAL SECTION
SCALE: 1/2"=1'-0"



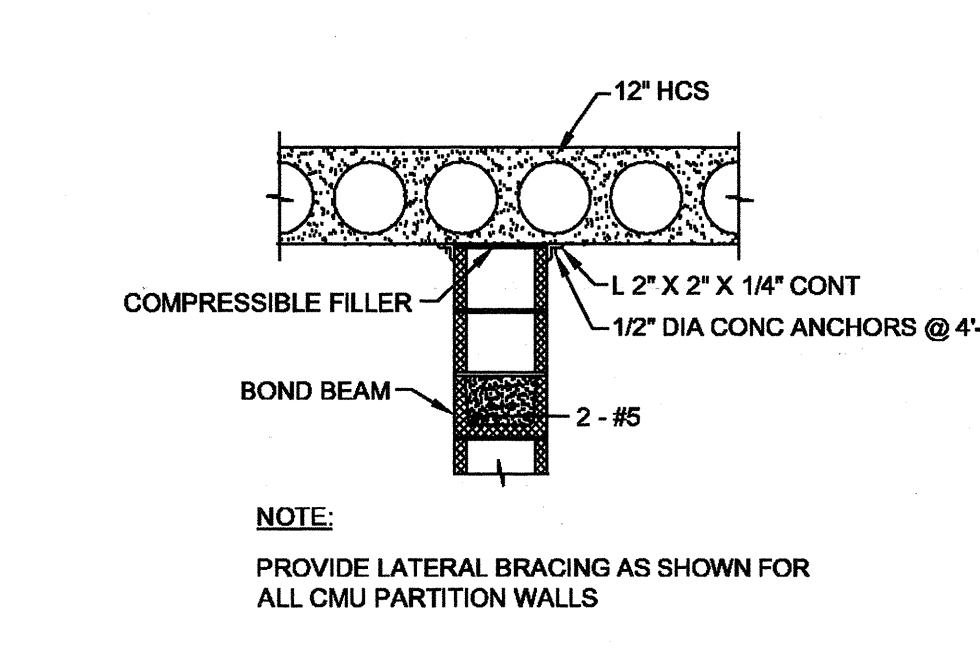
3 TYPICAL SECTION
SCALE: 1/2"=1'-0"



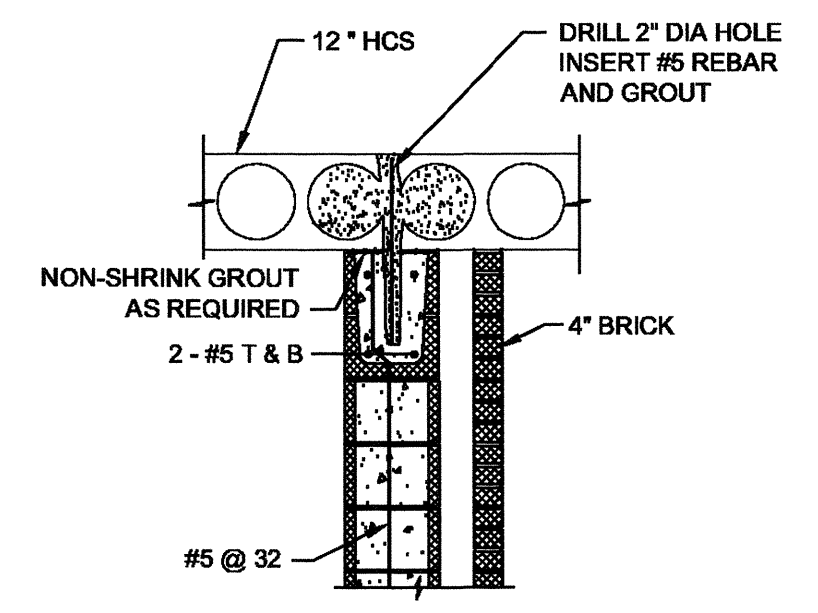
4 SECTION
SCALE: 1/2"=1'-0"



5 SECTION
SCALE: 1/2"=1'-0"

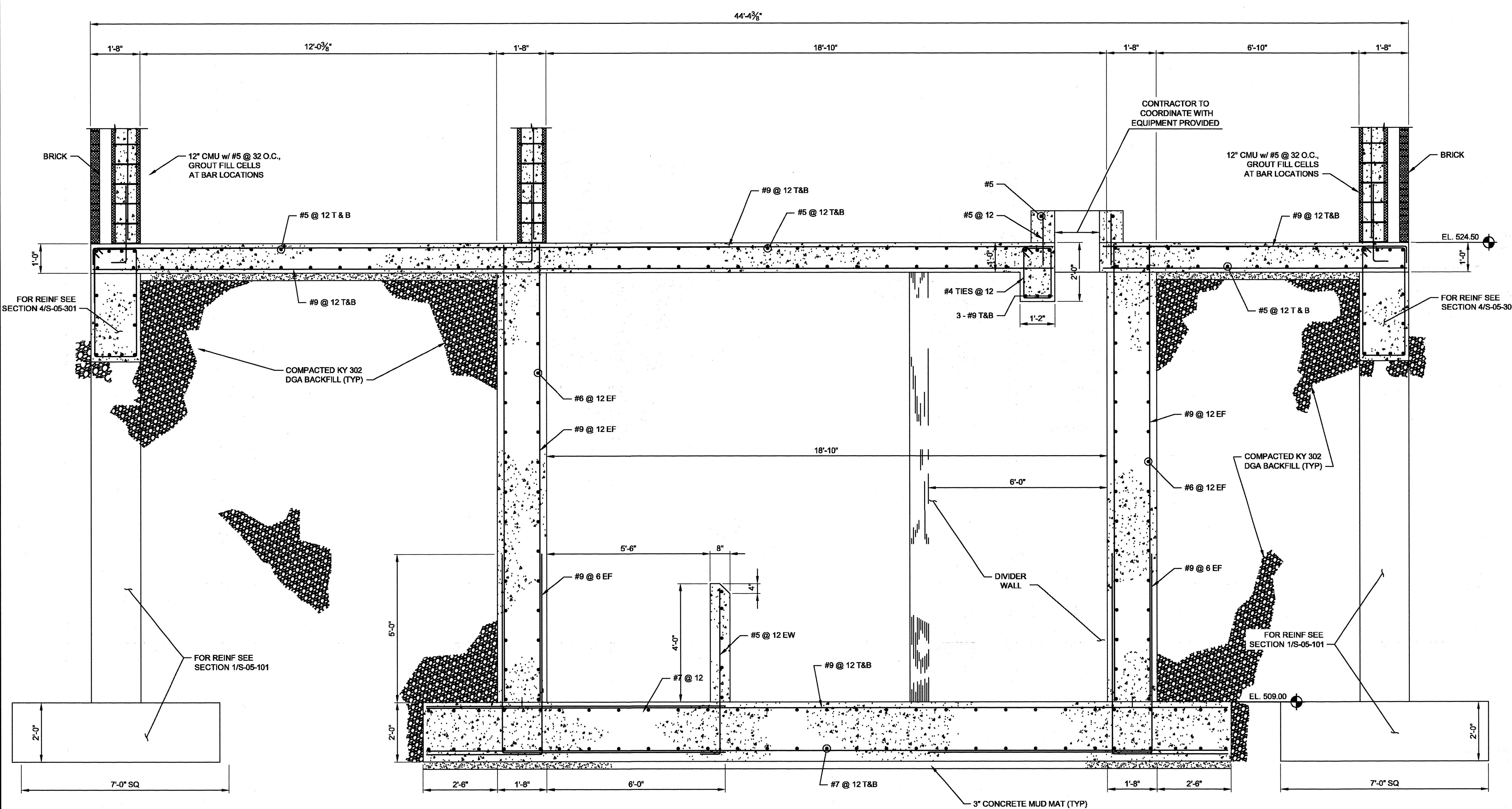


6 SECTION
SCALE: 1/2"=1'-0"

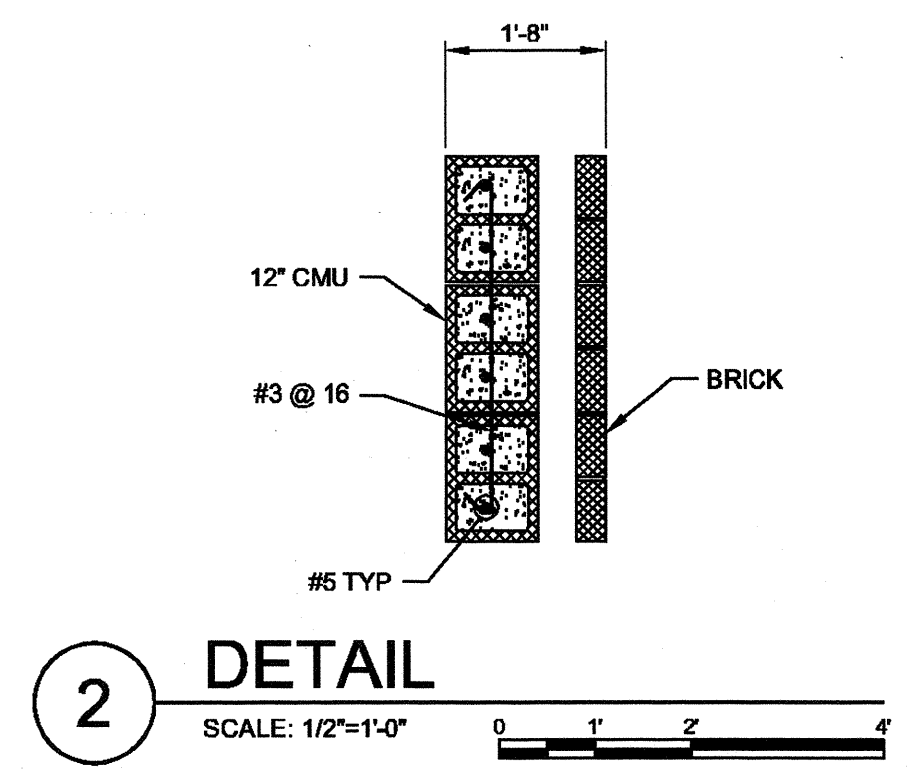


7 SECTION
SCALE: 1/2"=1'-0"

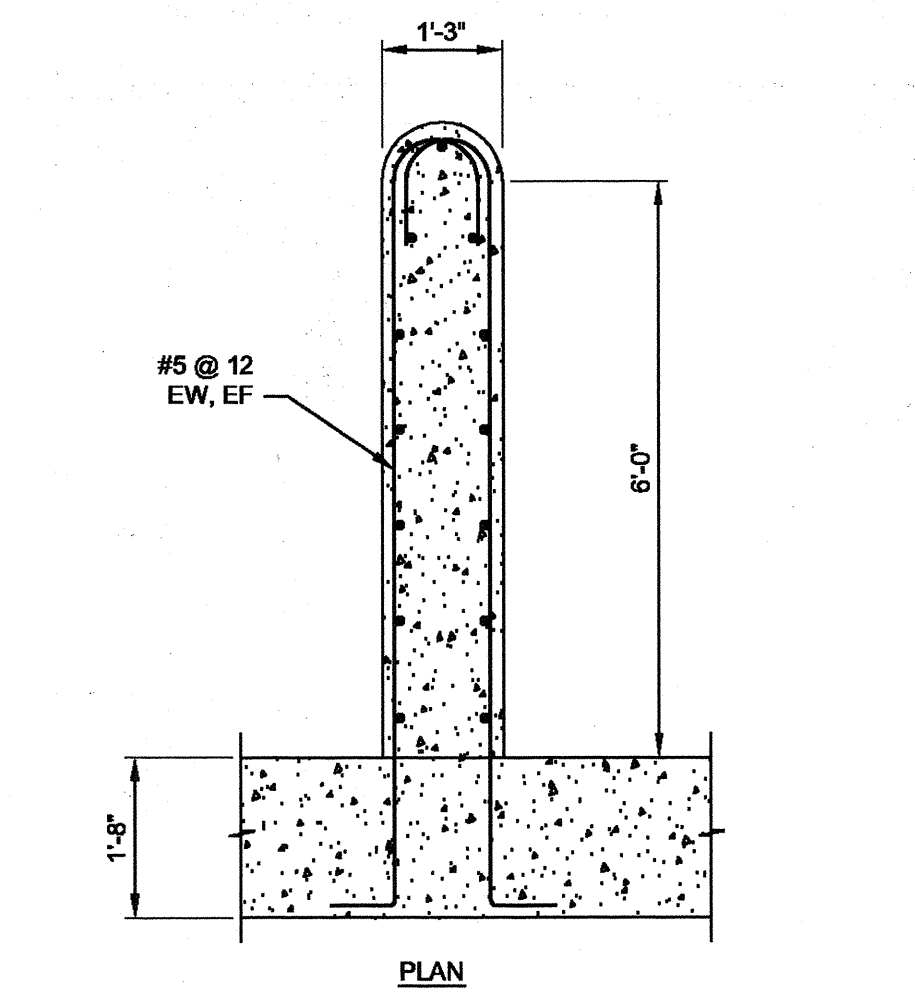
User: \\BOND-Spec:Pirnie STANDARD File: J:\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STL\03789-S-05-301.DWG Scale: 1:18 SheetDate: 3/7/2011 Time: 09:20 Pict Date: Barnd, Jeff, 3/10/2011, 09:42, Layout: S-05-301



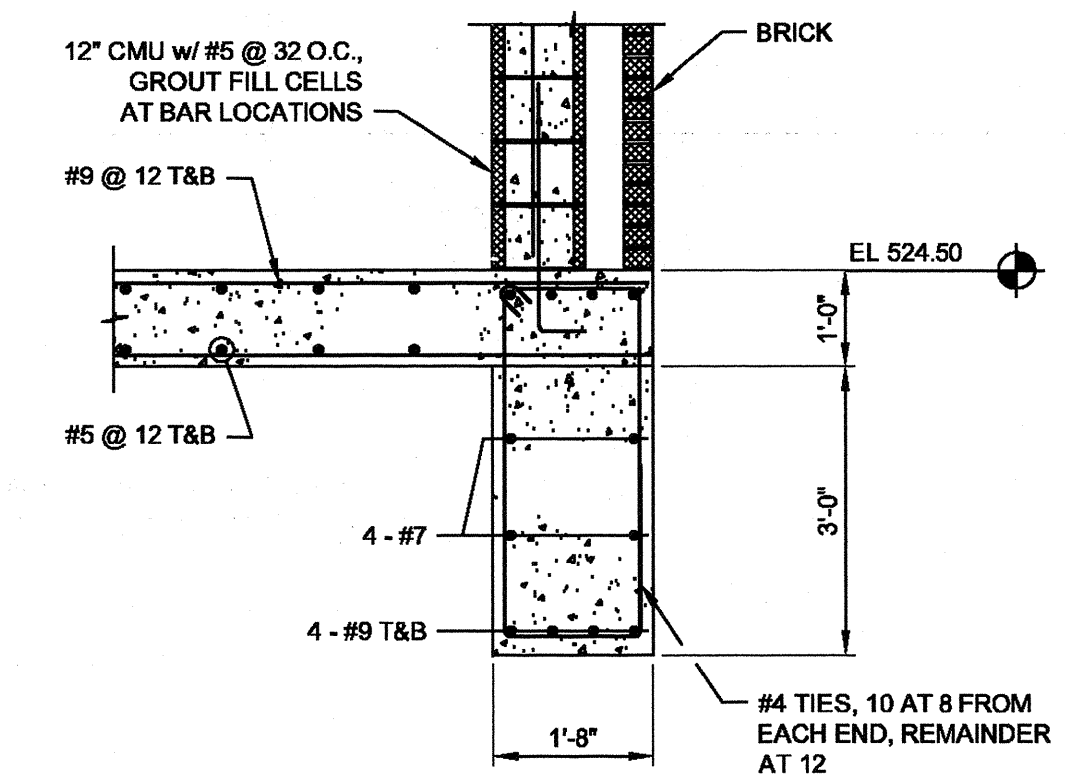
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SCALE: 1/2"=1'-0"



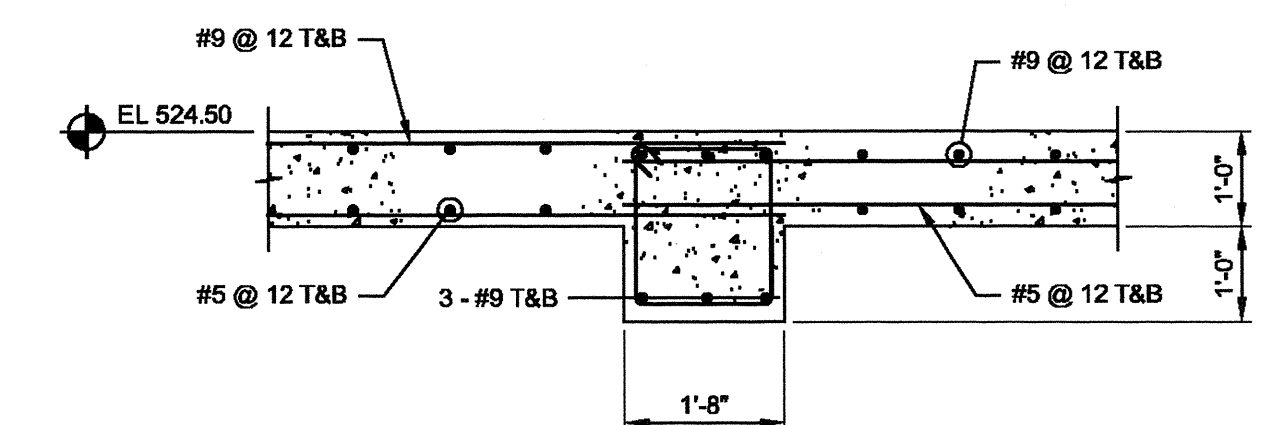
2 DETAIL
SCALE: 1/2"=1'-0"



3 DETAIL
SCALE: 1/2"=1'-0"

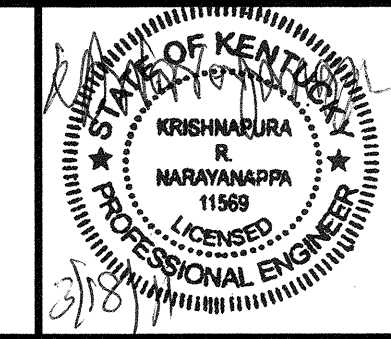
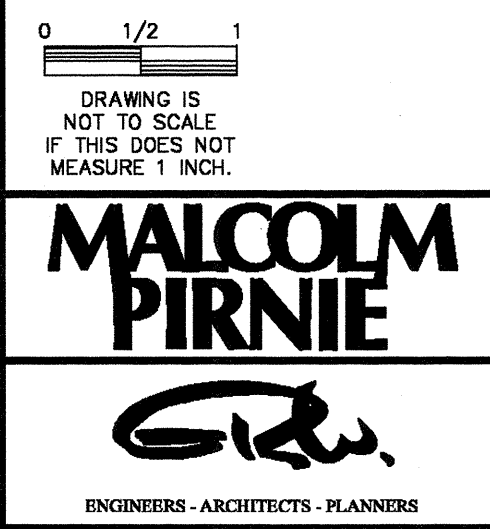


4 SECTION
SCALE: 1/2"=1'-0"



5 SECTION
SCALE: 1/2"=1'-0"

GENERAL NOTE:
1. CONTRACTOR SHALL ALSO BACKFILL EAST SIDE OF GAC FEED PUMP STATION BUILDING WITH COMPACTED KY 302 DGA AND PROVIDE A CLAY CAP, THEN A 6" TOPSOIL CAP.



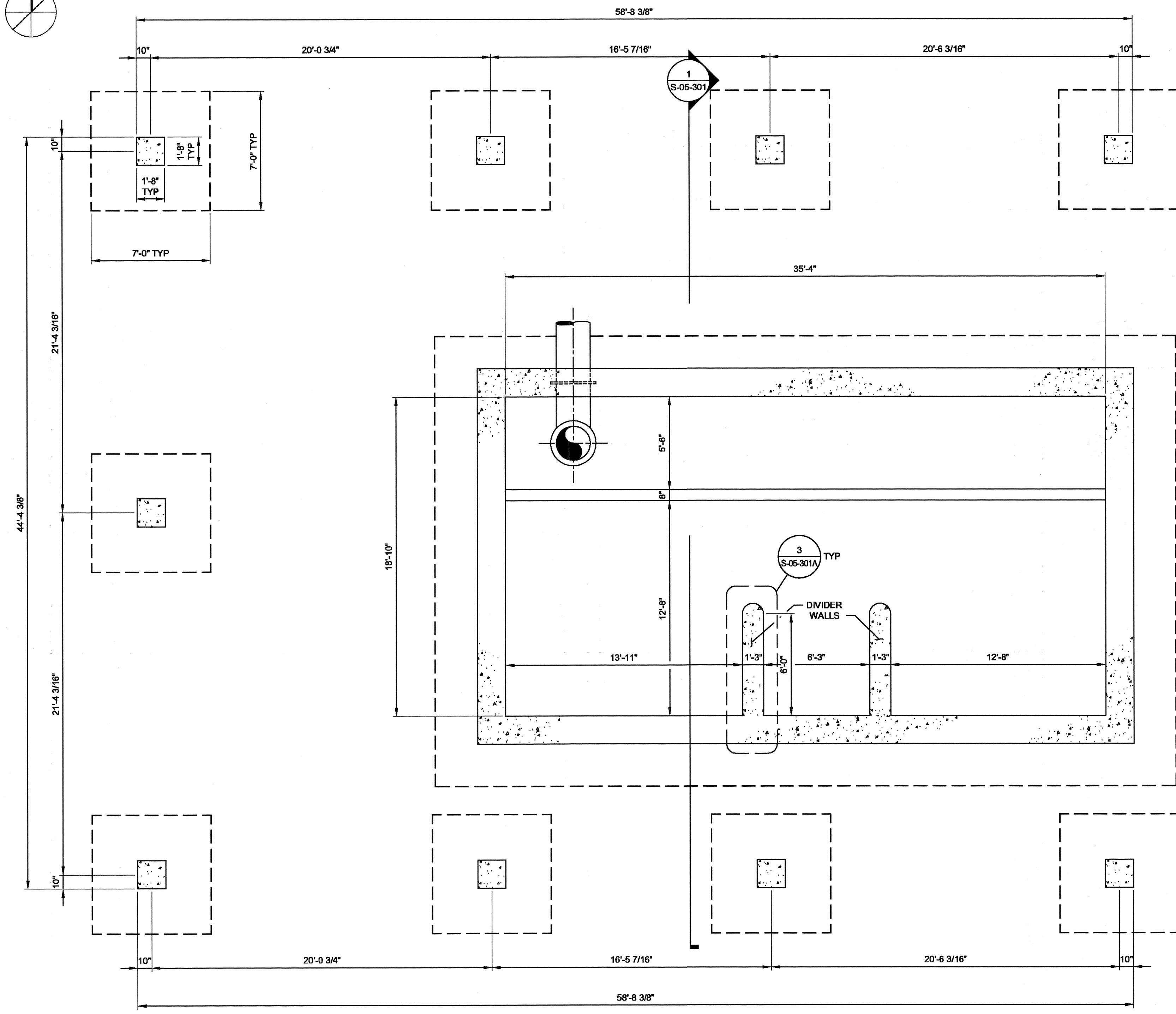
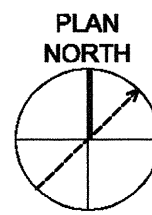
REVISIONS			
NO.	BY	DATE	REMARKS

DES STAFF
DWN STAFF
CKD KRN

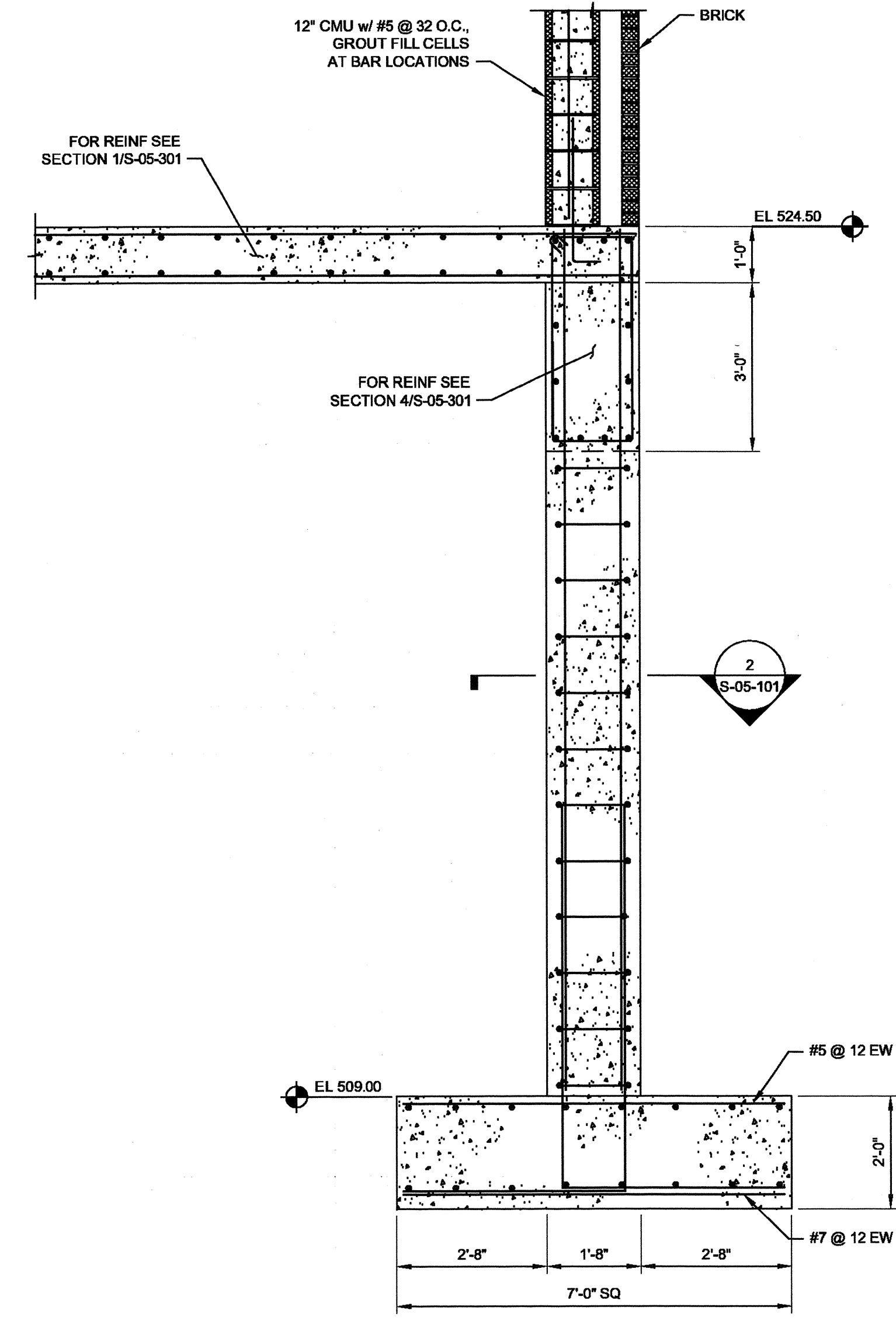
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION SECTIONS
SCALE: AS NOTED

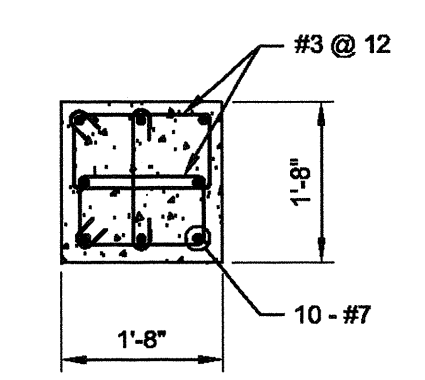
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-301
CAD REF. NO.: 3789-S-05-301



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



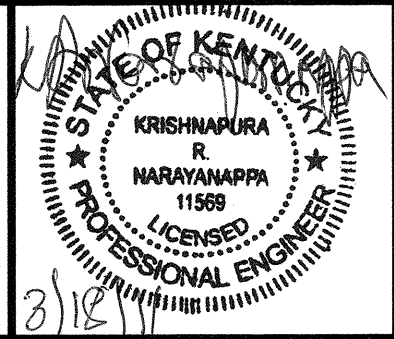
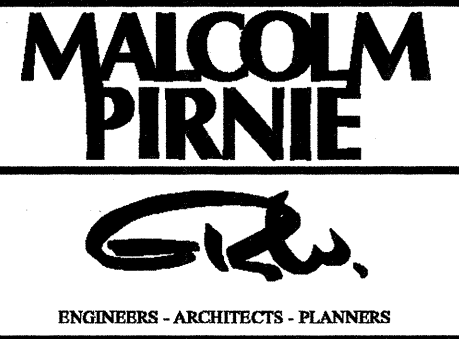
1 TYPICAL SECTION
SCALE: 1/2"=1'-0"



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

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

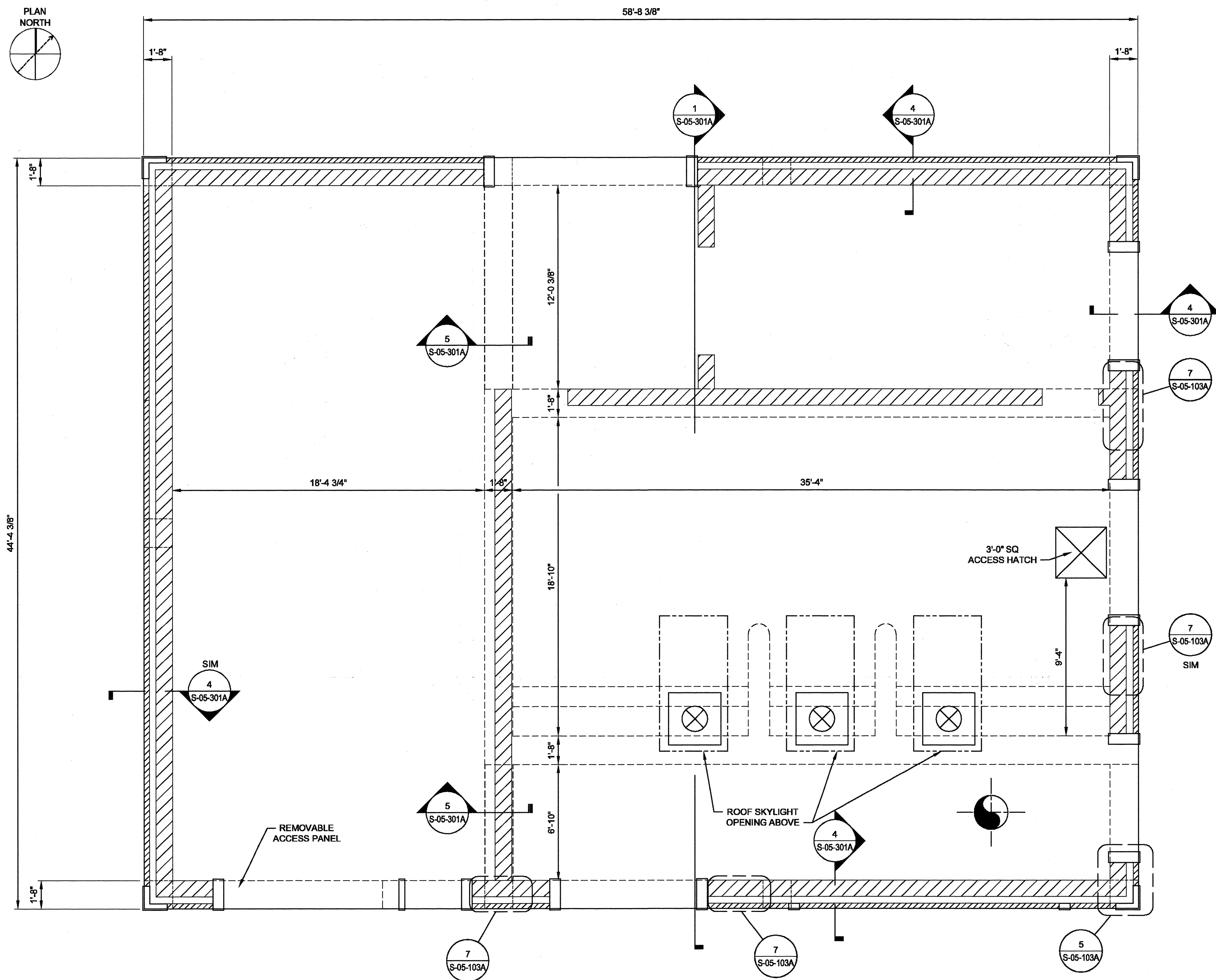
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION - PLAN
ALT. BID No. 1 - SKYLIGHT ACCESS
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-101A
CAD REF. NO.: 3789-S-05-101A

User: BOND Spec: PIRNIE STANDARD File: U:\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-05-102A.DWG Scale: 1:18 SavedDate: 1/19/2010 Time: 15:08 Pld: Date: Bernd, Jeff, 3/10/2011, 09:42, Layout: S-05-102A

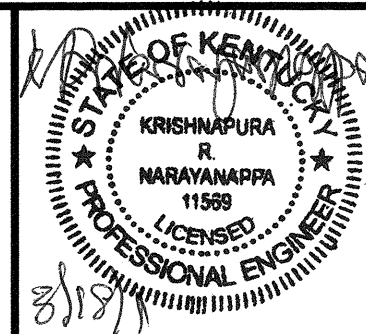


PLAN AT EL 524.50

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

NOTE:
1. FOR DOOR AND WINDOW LINTEL SCHEDULE SEE SHEET S-00-501

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

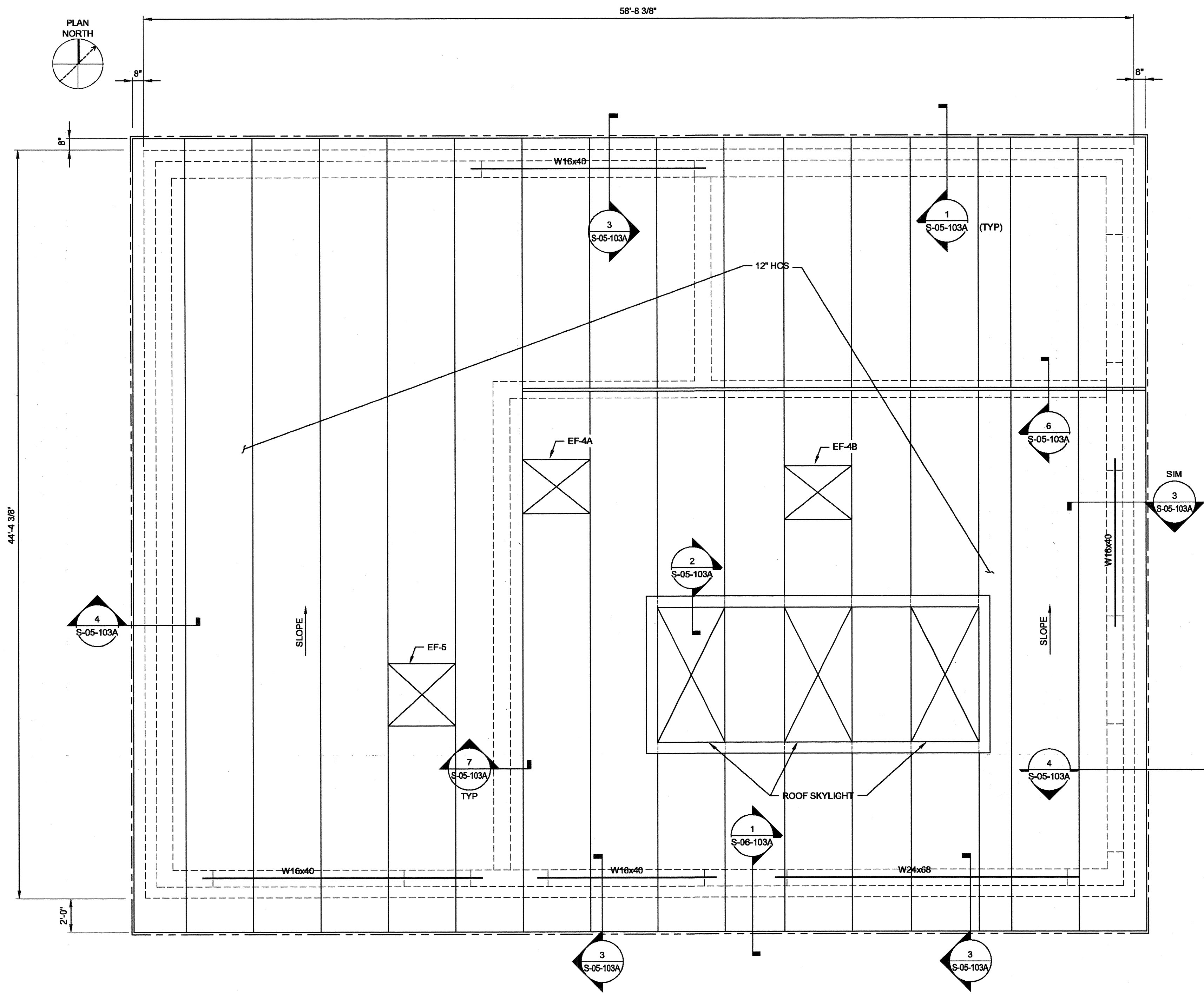
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION - PLAN
ALT. BID No. 1 - SKYLIGHT ACCESS
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE	MARCH, 2011
SHEET	S-05-102A
CAD REF. NO.	3789-S-05-102A

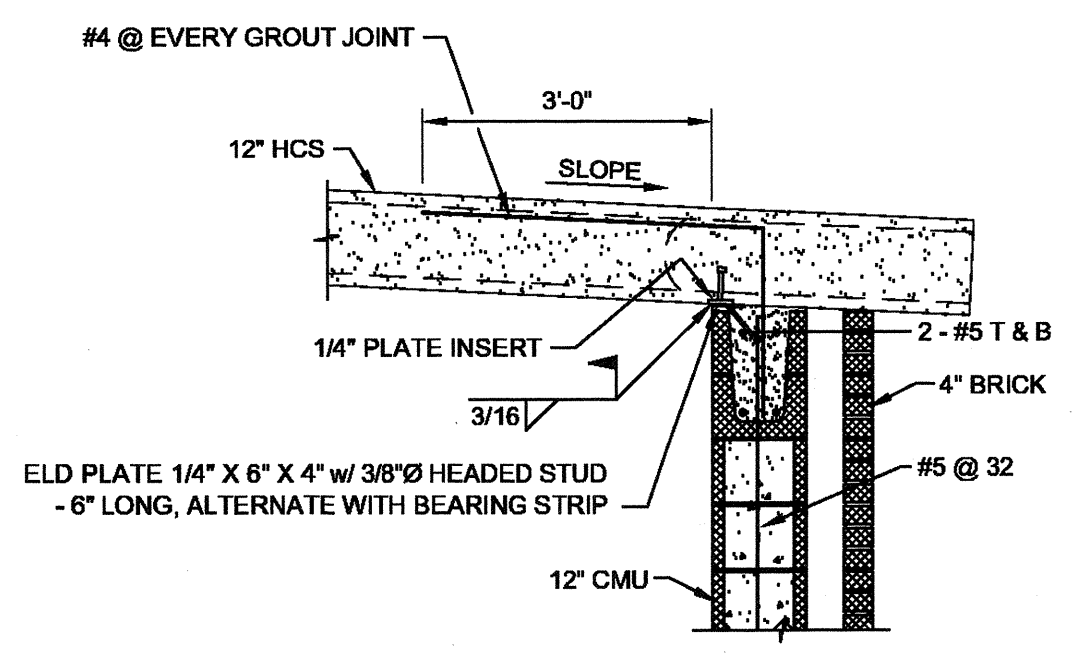
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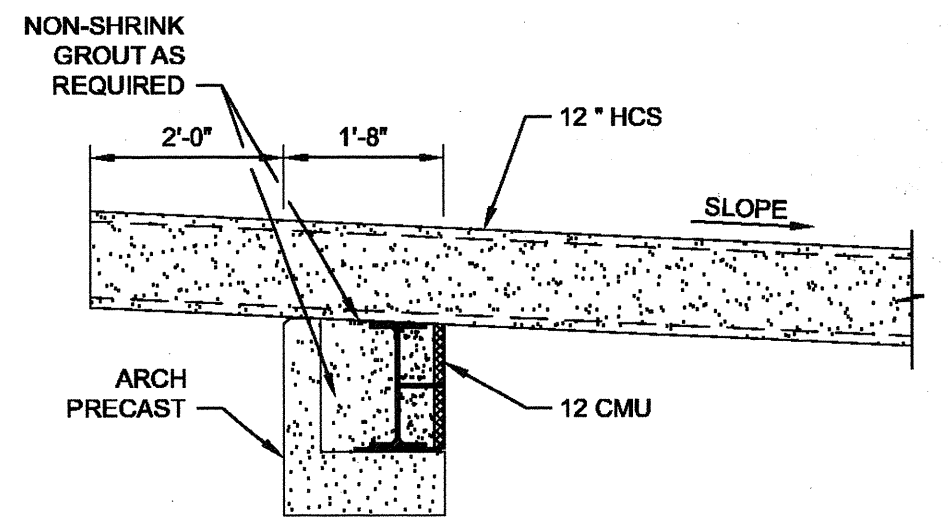
ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

NOTE:
1. FOR DOOR AND WINDOW LINTEL SCHEDULE SEE SHEET S-00-501
2. COORDINATE ROOF OPENINGS WITH EQUIPMENT WITH EQUIPMENT PROVIDED.

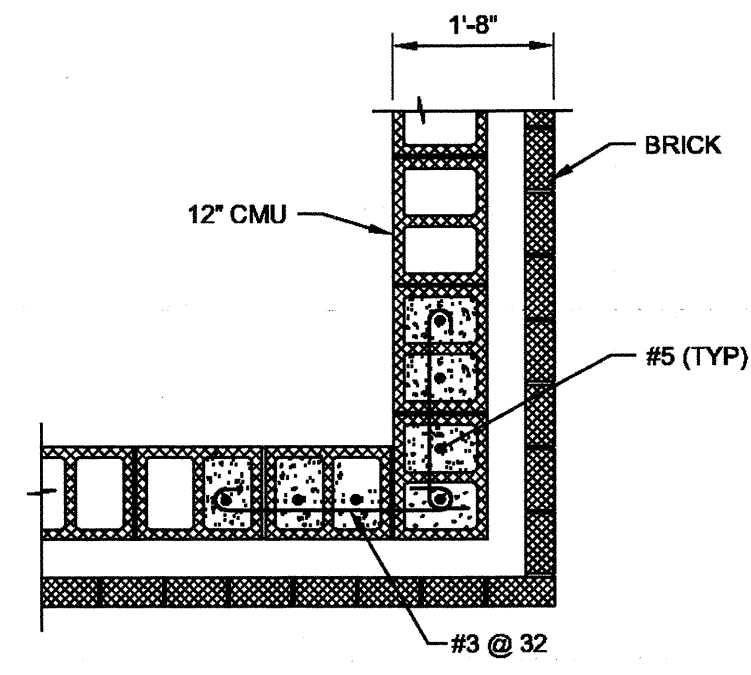
DESIGN LOADS	
HOLLOW CORE SLABS	
12' HOLLOW CORE SLAB	68 psf
MECHANICAL + ELECTRICAL	10 psf
LIVE LOAD	30 psf
EF-4A, EF-4B, EF-5	500 lbs



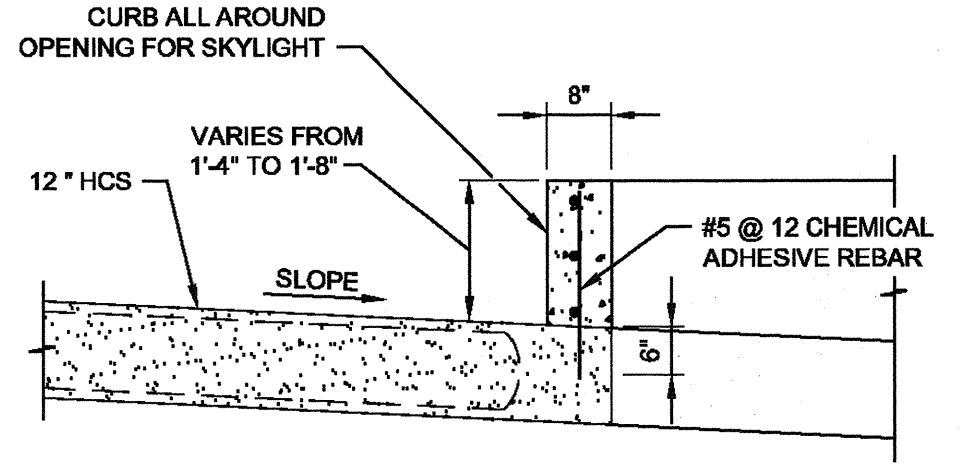
1 SECTION
SCALE: 1/2"=1'-0"



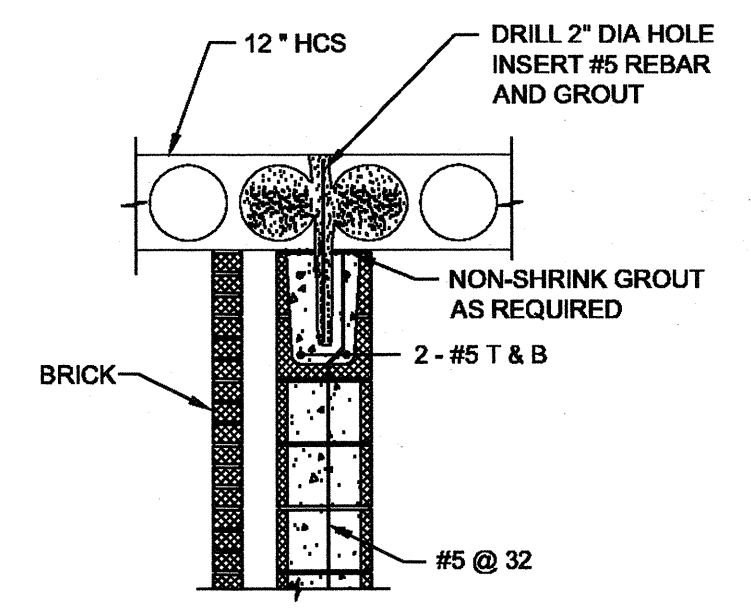
3 SECTION
SCALE: 1/2"=1'-0"



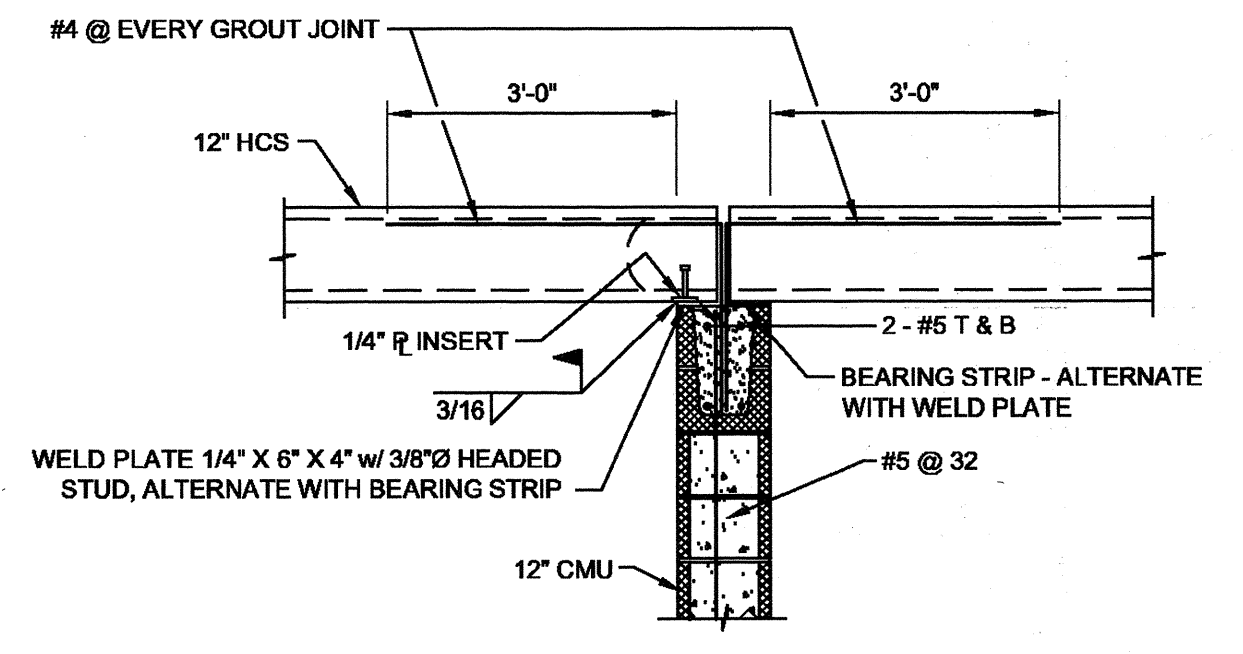
5 TYPICAL SECTION
SCALE: 1/2"=1'-0"



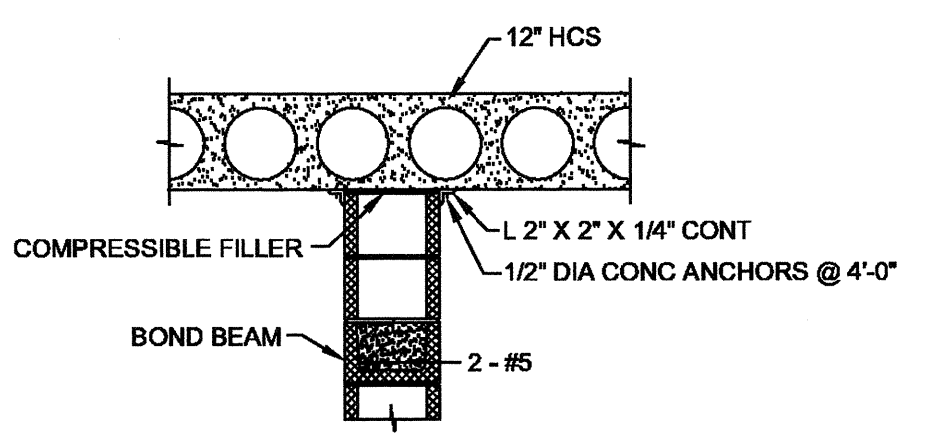
2 SECTION
SCALE: 1/2"=1'-0"



4 SECTION
SCALE: 1/2"=1'-0"

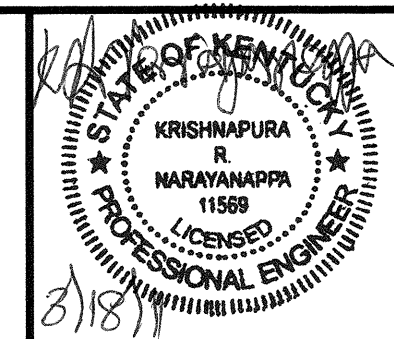
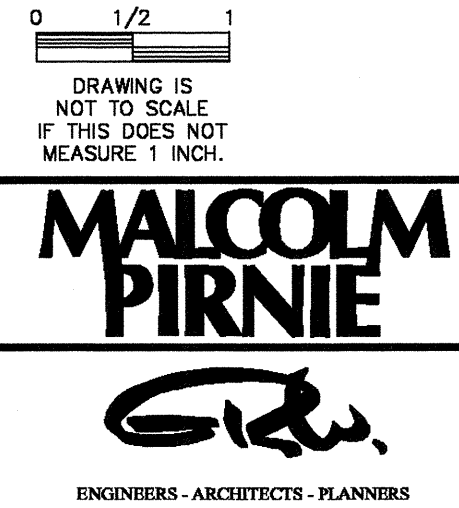


6 SECTION
SCALE: 1/2"=1'-0"



NOTE:
PROVIDE LATERAL BRACING AS SHOWN FOR ALL CMU PARTITION WALLS

7 SECTION
SCALE: 1/2"=1'-0"



REVISIONS		NO.	BY	DATE	REMARKS

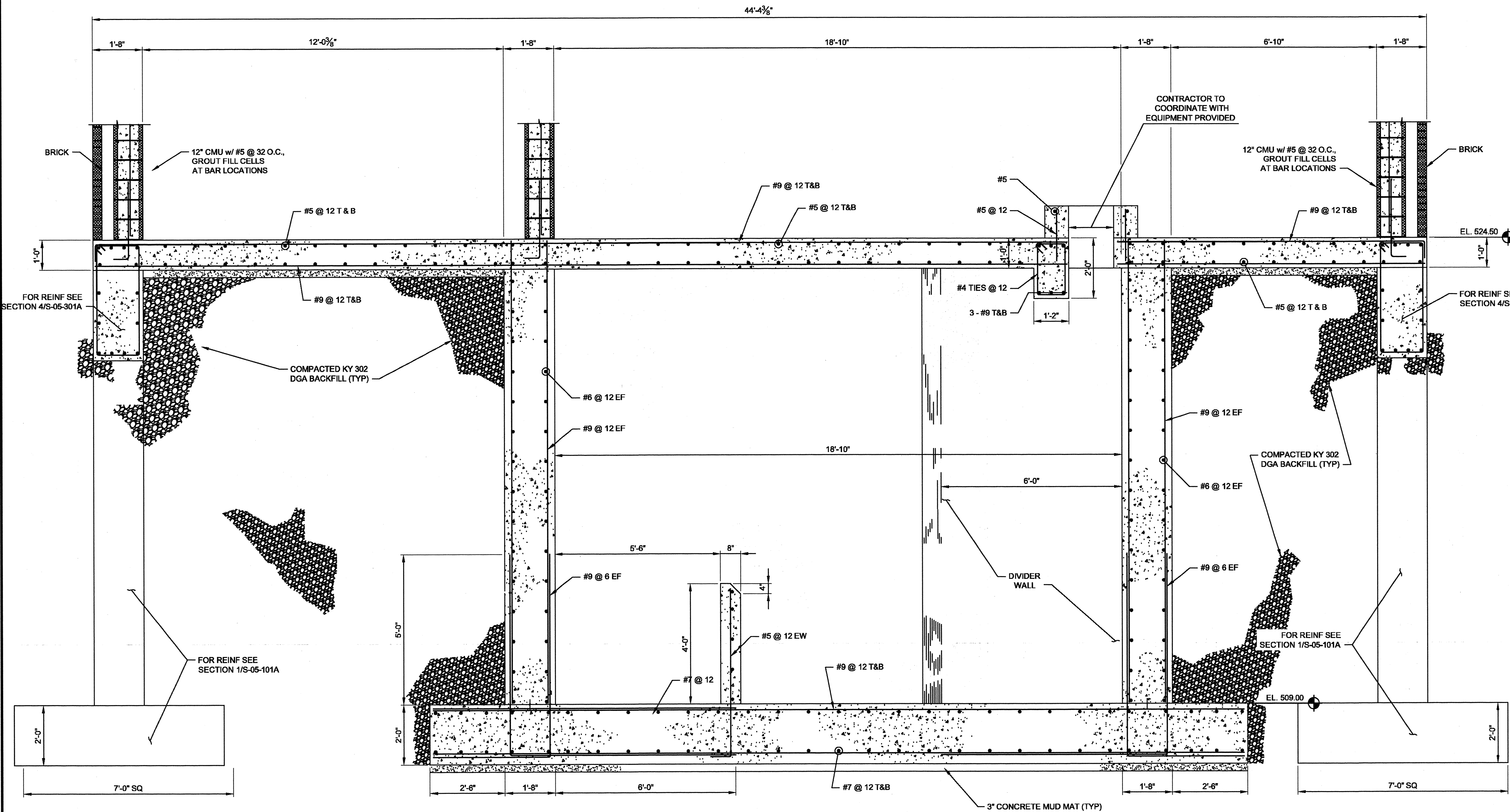
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

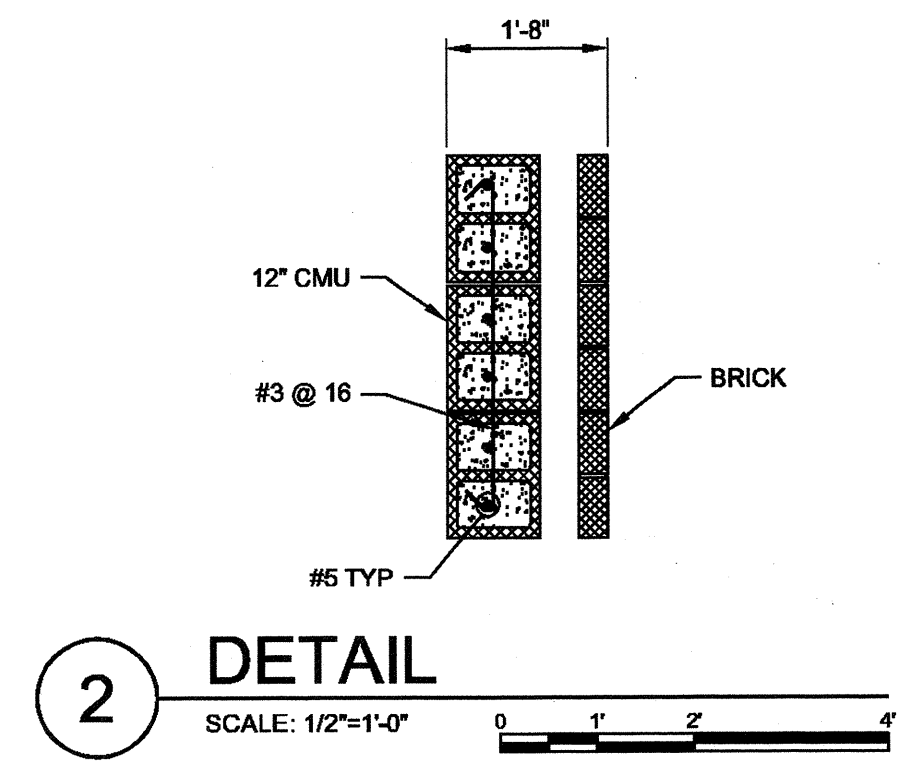
STRUCTURAL
GAC FEED PUMP STATION - ROOF PLAN
ALT. BID No. 1 SKY LIGHT ACCESS
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-103A
CAD REF. NO.: 3789-S-05-103A

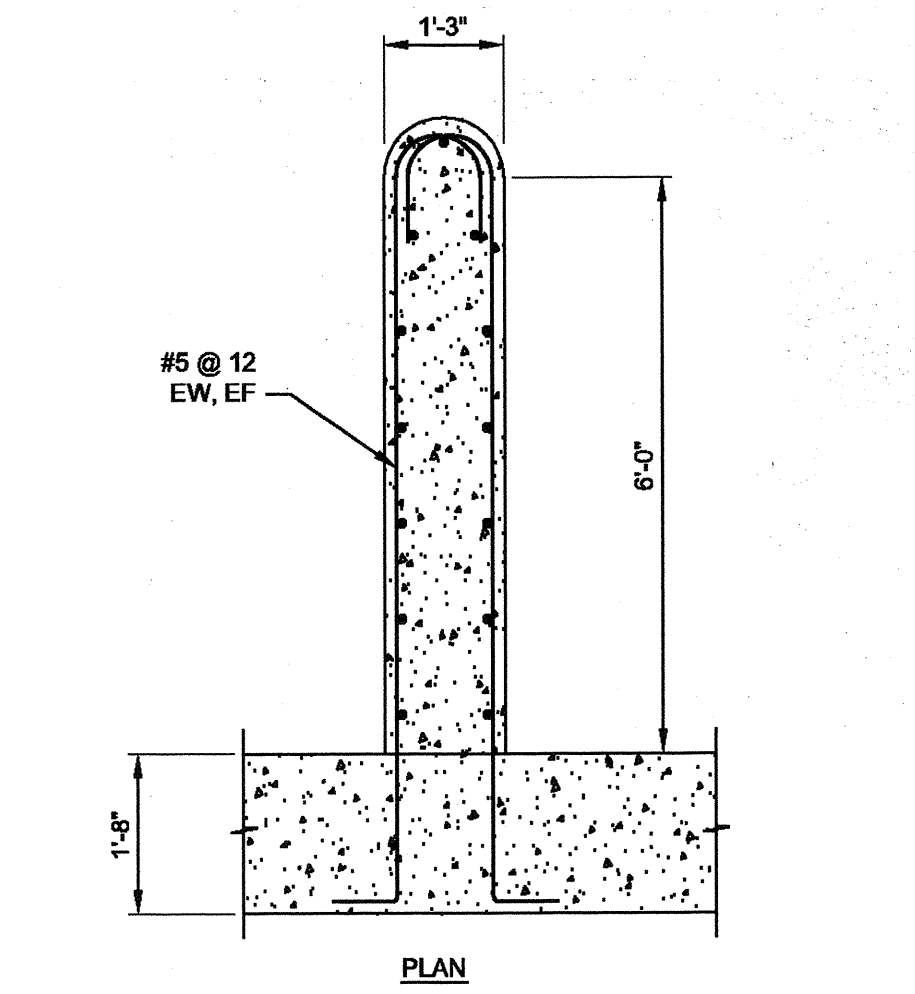
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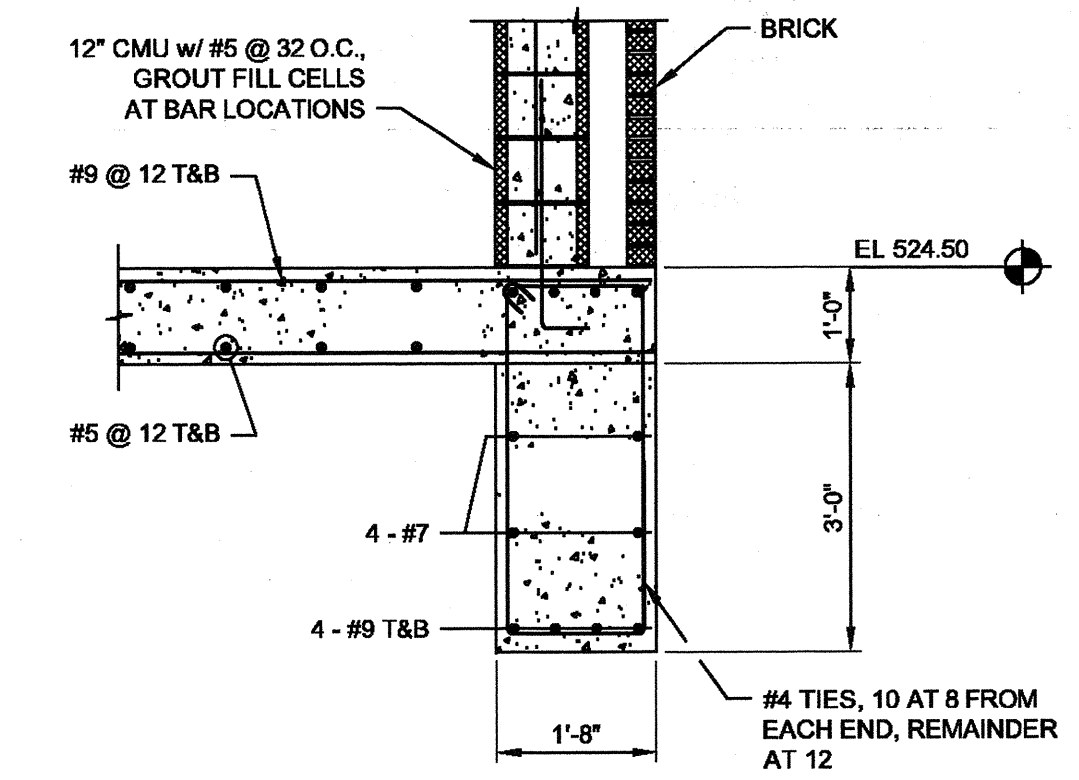
1 SECTION
SCALE: 1/2"=1'-0"



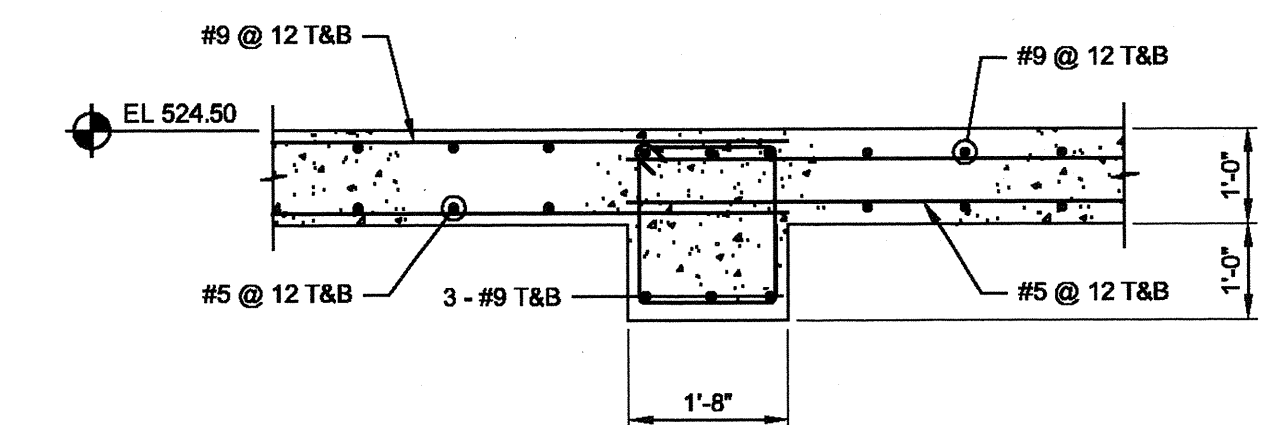
2 DETAIL
SCALE: 1/2"=1'-0"



3 DETAIL
SCALE: 1/2"=1'-0"

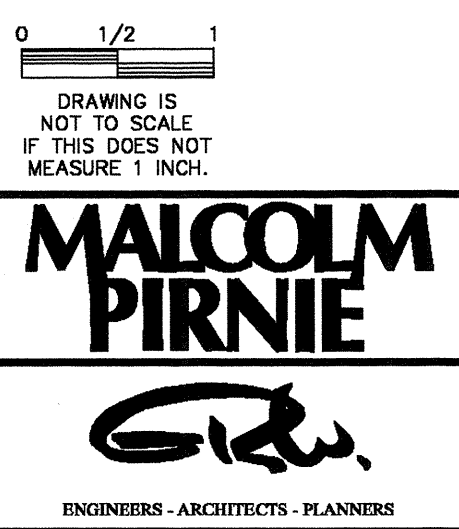


4 SECTION
SCALE: 1/2"=1'-0"



5 SECTION
SCALE: 1/2"=1'-0"

GENERAL NOTE:
1. CONTRACTOR SHALL ALSO BACKFILL EAST SIDE OF GAC FEED PUMP STATION BUILDING WITH COMPACTED KY 302 DGA AND PROVIDE A CLAY CAP, THEN A 6" TOPSOIL CAP.



NO.	BY	DATE	REVISIONS	REMARKS

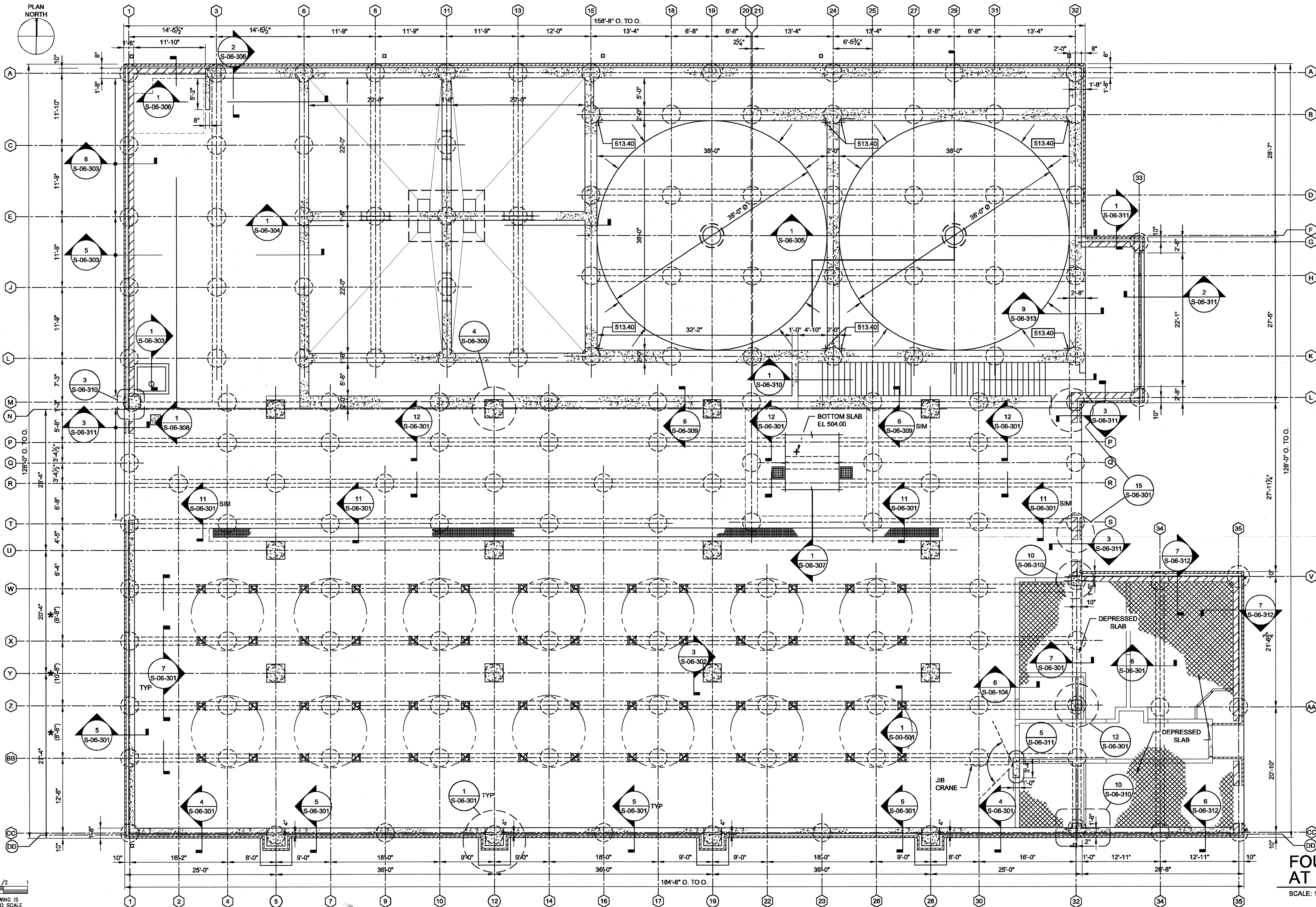
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
GAC FEED PUMP STATION - SECTIONS
ALT. BID No. 1 - SKYLIGHT ACCESS
SCALE: AS NOTED

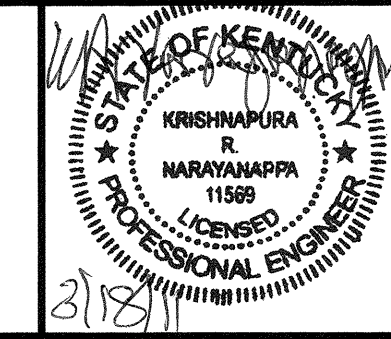
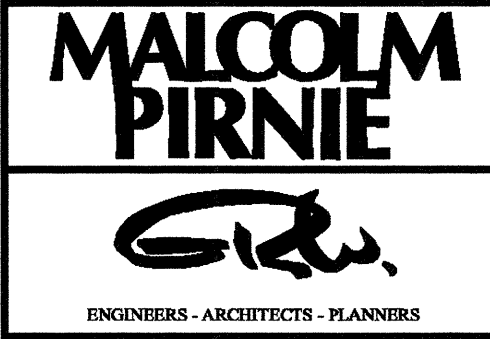
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-05-301A
CAD REF. NO.: 3789-S-05-301A

User: \\BOND-Spec:Pirnie STANDARD File: \\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\TFLC3789-S-06-101.DWG Scale: 1:36 Sheet Date: 11/20/2011 Time: 15:19 Plot Date: 03/10/2011 09:42 Layout: S-06-101



- NOTES:**
- ★ - CONTRACTOR TO COORDINATE THE CENTERLINES OF VESSEL SUPPORTS WITH CENTERLINE OF GRADE BEAMS AND DRILLED PIERS.
 - # — INDICATES COLUMN LINE
 - ⊕ — INDICATES DRILLED PIER LINE

**FOUNDATION PLAN
AT EL 524.00**
SCALE: 1/8" = 1'-0"



REVISIONS		NO.	BY	DATE	REMARKS

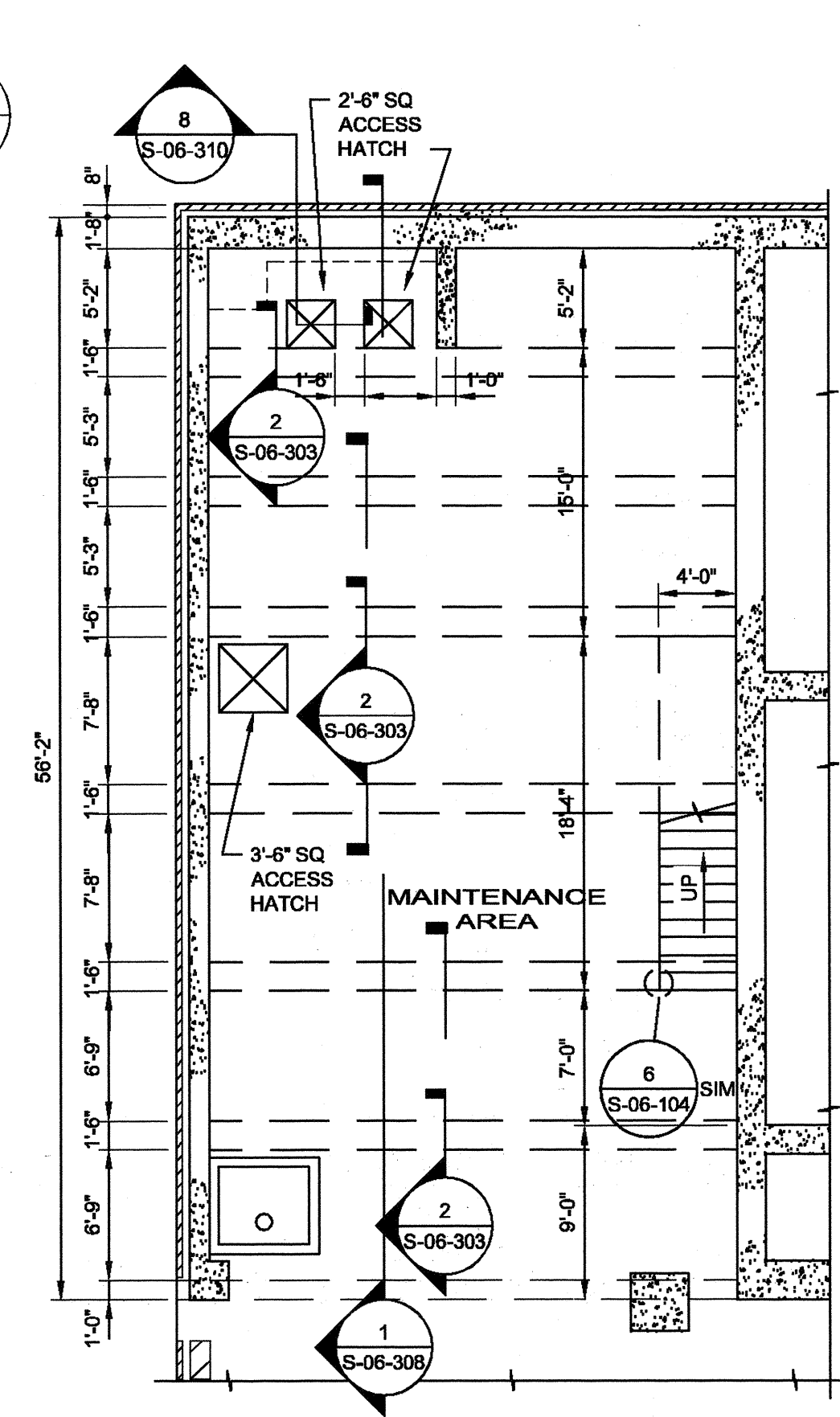
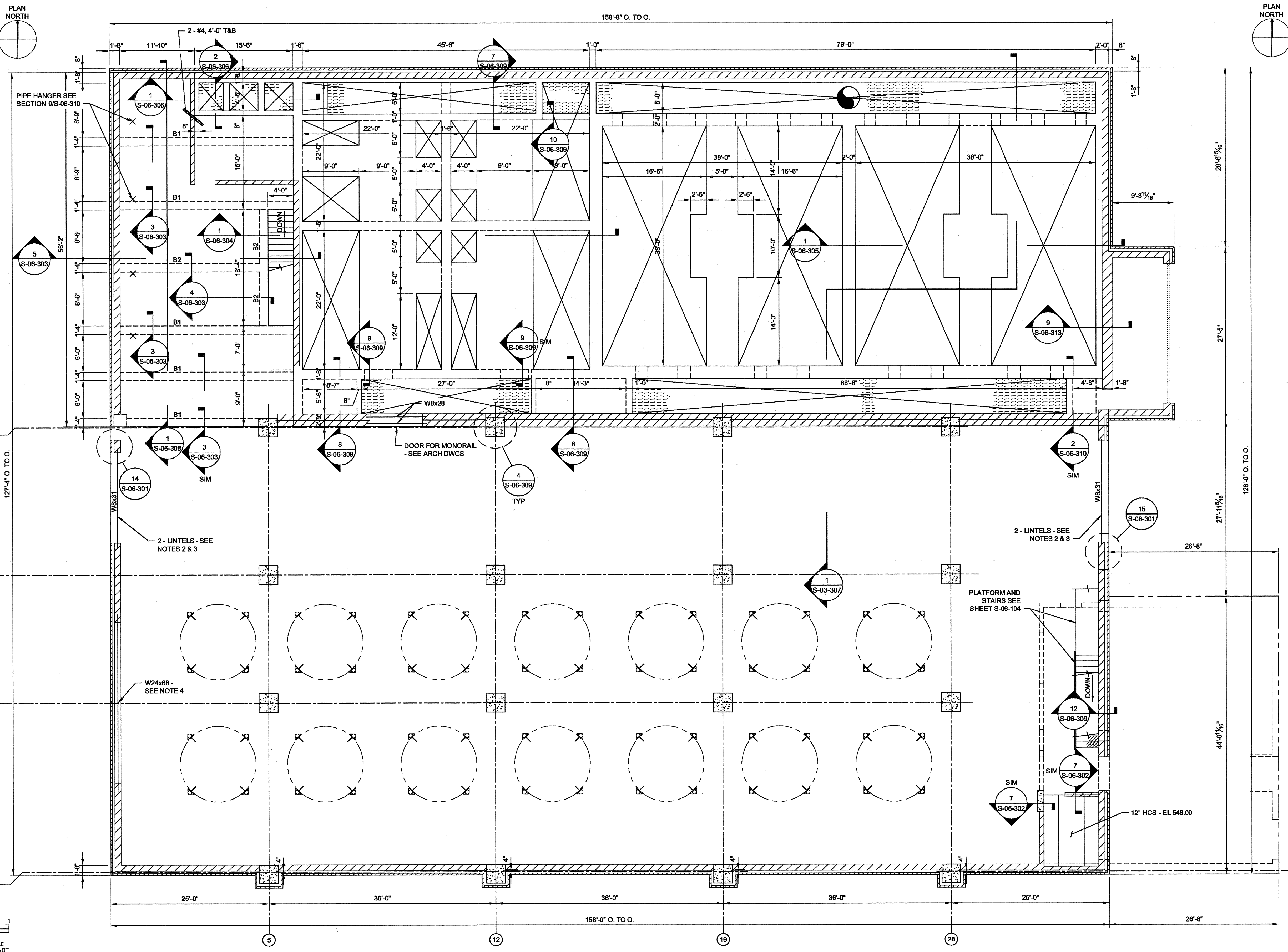
DES STAFF
DWN STAFF
CKD KRN

**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**STRUCTURAL
PT / GAC BUILDING
FOUNDATION PLAN AT EL. 524.00**
SCALE: 1/8" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-101
CAD REF. NO.: 3789-S-06-101

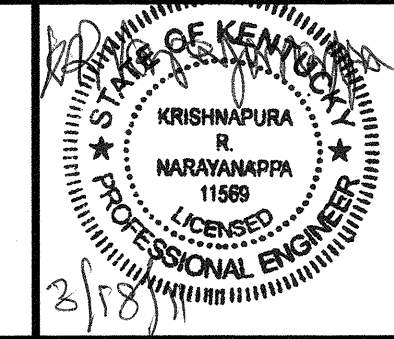
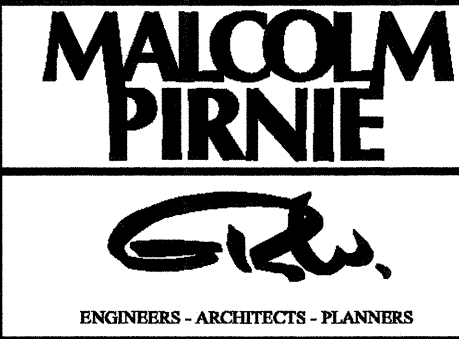
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**MAINTENANCE AREA
PARTIAL PLAN AT EL. 524.00**
SCALE: 1/8" = 1'-0"

- NOTES:**
1. FOR LINTELS - SEE DOOR AND WINDOW SCHEDULE - SHEET S-00-501.
 2. LINTEL AT T.O.S. EL 551.00 SHALL BE W16x40 w/ PLATE 5/16x17, 1/4" STIFFENER AT 32". SEE LINTEL BEARING DETAIL SHEET S-00-501.
 3. LINTEL AT T.O.S. EL 538.00 SHALL BE W8x31.
 4. LINTEL AT T.O.S. EL 551.00 SHALL BE W24x68 w/ PLATE 1/4"x17", STIFFENERS AT 32", SEE LINTEL BEARING AND OTHER DETAILS ON SHEET S-00-501.

PLAN AT EL 537.00
SCALE: 1/8" = 1'-0"



NO.		BY	DATE	REVISIONS	REMARKS

DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
**ADVANCED TREATMENT
IMPROVEMENTS**

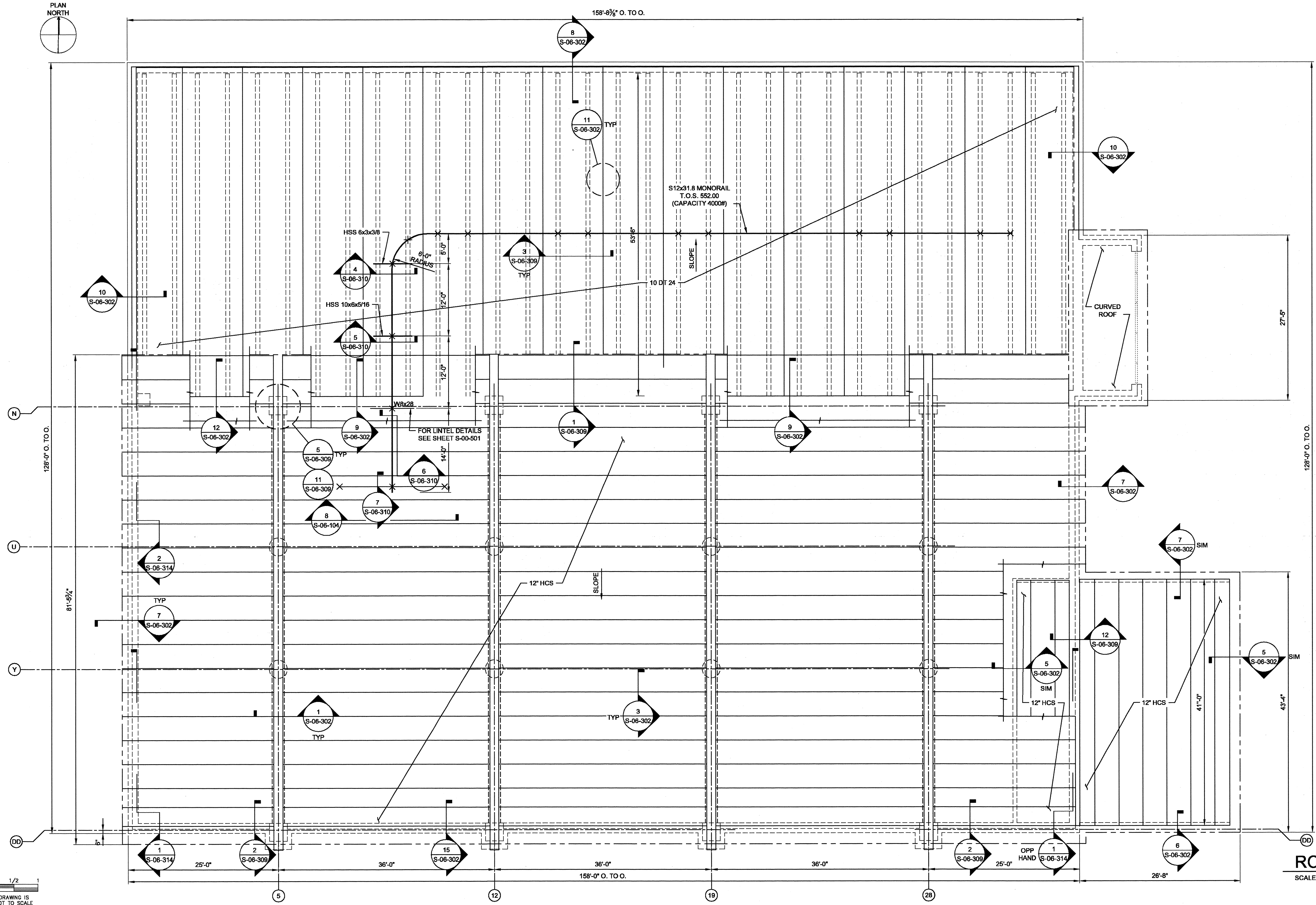
STRUCTURAL
**PT / GAC BUILDING
PLAN AT EL. 537.00**
SCALE: 1/8" = 1'-0"

ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-102
CAD REF. NO.:	3789-S-06-102

DESIGN LOADS

HOLLOW CORE SLABS	
12' HOLLOW CORE SLAB	68 psf
VEGETATION	35 psf
MECHANICAL + ELECTRICAL	10 psf
SNOW	30 psf
WALKWAY CONCRETE PLANKS 2" THICK (FOR LOCATION SEE SHEET A-06-106)	25 psf
TOPPING	25 psf
STAIRS (S-06-102, S-06-104)	1500 lb
LIVE LOAD	50 psf

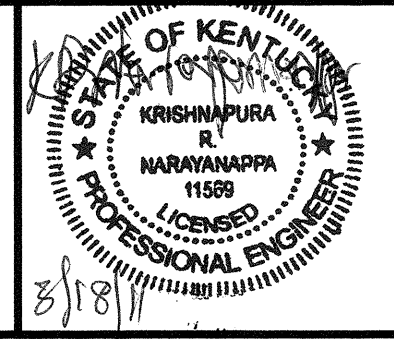
DOUBLE TEES	
DOUBLE TEE	57 psf
STANDING SEAM ROOF	5 psf
MECHANICAL + ELECTRICAL	10 psf
LIVE LOAD	30 psf
MONORAIL (FOR LOCATION SEE SHEET S-06-103)	4000 lb



ROOF FRAMING PLAN
SCALE: 1/8"=1'-0"

User: BOND Spec: FIRM STANDARD File: U:\3786-ANKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STLUC3786-S-06-103.DWG Scale: 1:38 Sheet Date: 2/28/2011 Time: 10:20 Plot Date: 3/1/2011 09:43 Layout: S-06-103

**MALCOLM
PIRNIE**
ENGINEERS - ARCHITECTS - PLANNERS



REVISIONS		REMARKS
NO.	BY	DATE

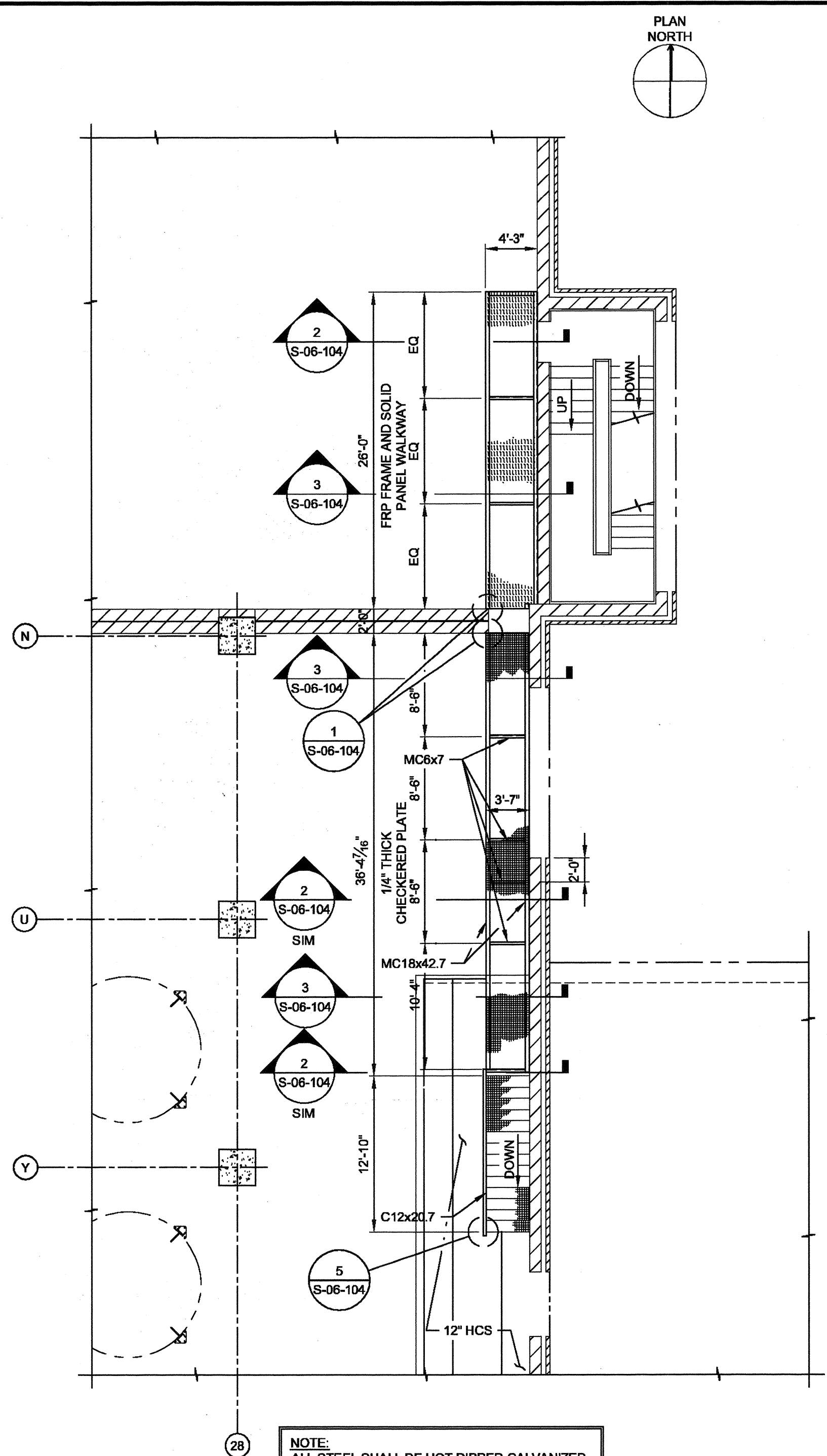
DES STAFF
DWN STAFF
CKD KRN

**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**STRUCTURAL
PT/ GAC BUILDING
ROOFING FRAMING PLAN**
SCALE: AS NOTED

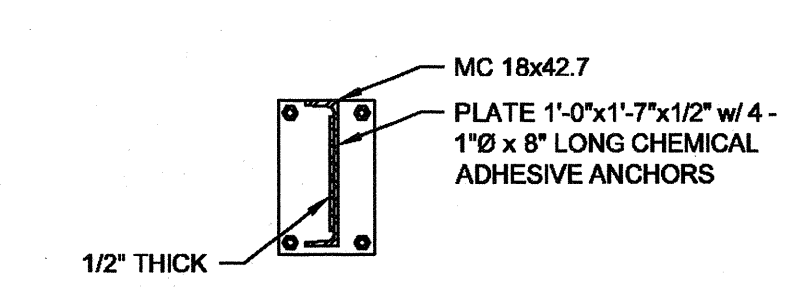
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-103
CAD REF. NO.: 3789-S-06-103

User: BOUND Spec: PRNIE STANDARD File: U:\3785-NKWD TAYLOR MILL WORKING DRAWINGS\STRUCT\3785-S-06-104.DWG Scale: 1:38 Saved Date: 2/22/2011 Time: 10:19 Pld Date: Barn, Jeff: 3/10/2011: 09:43 Layout: S-06-104

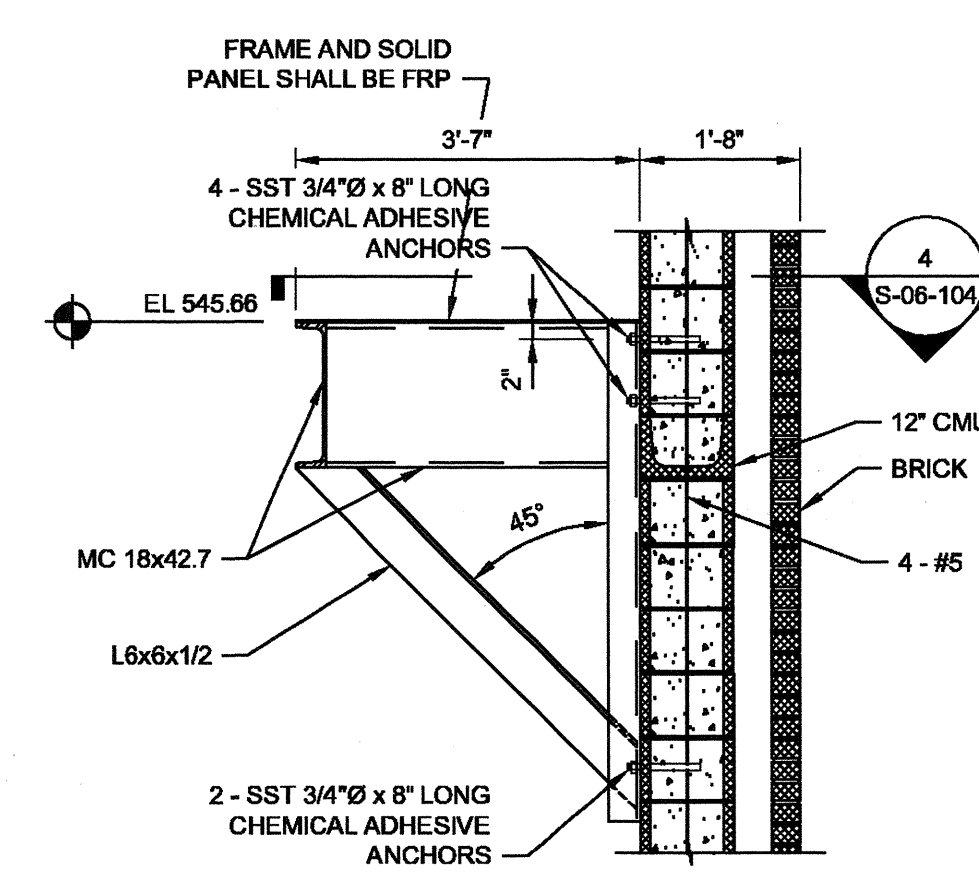


PLATFORM FRAMING PLAN
SCALE: 1/8"=1'-0"

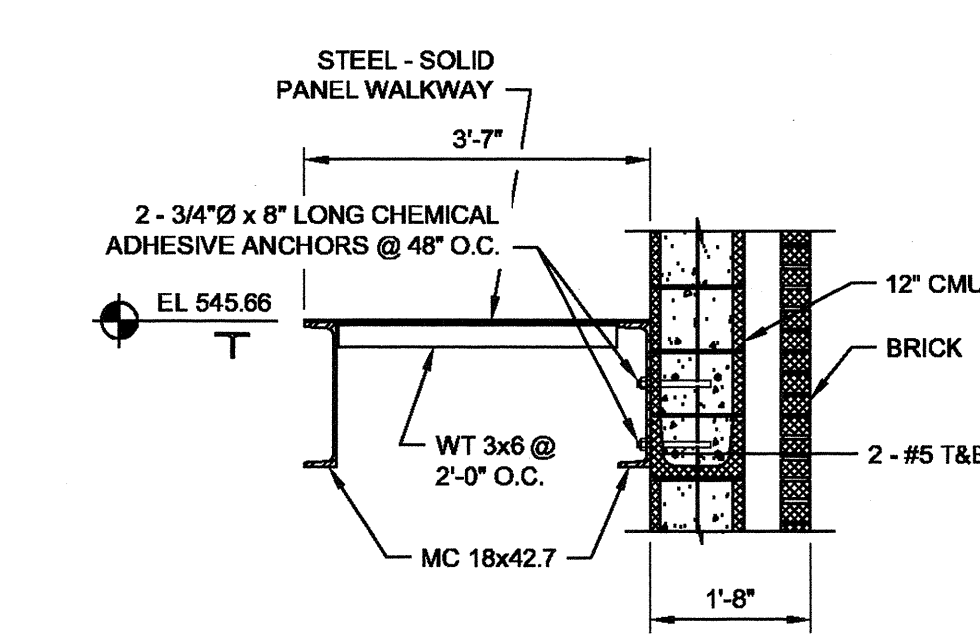
NOTE:
ALL STEEL SHALL BE HOT DIPPED GALVANIZED.



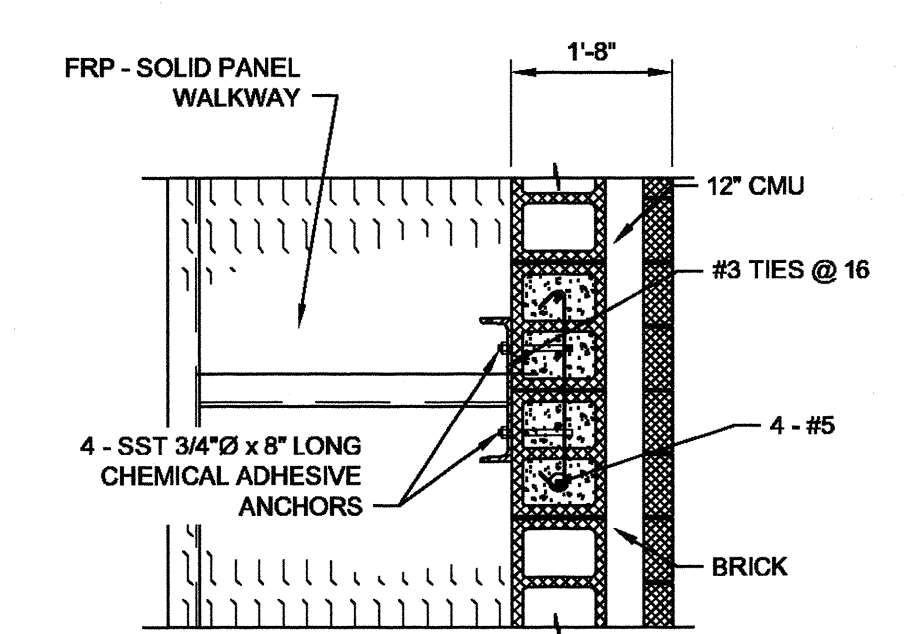
1 DETAIL
SCALE: 1/2"=1'-0"



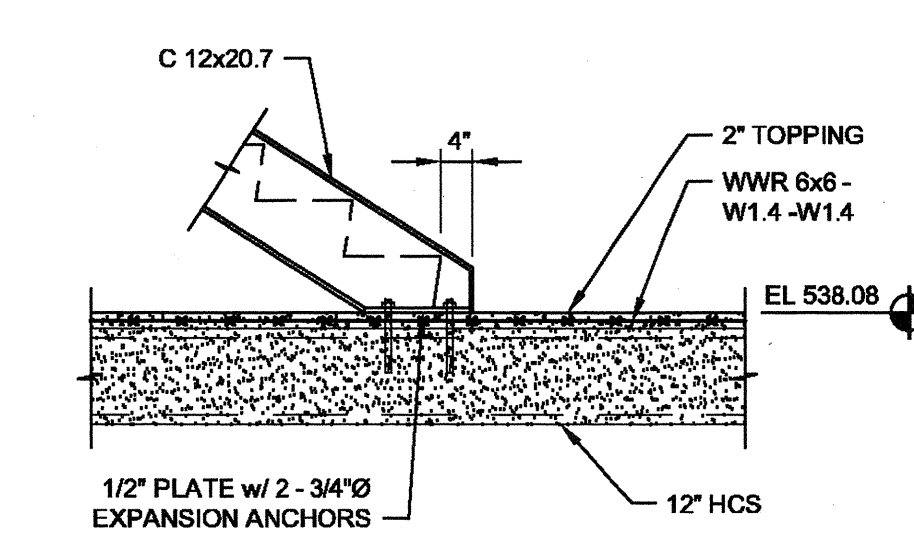
2 SECTION
SCALE: 1/2"=1'-0"



3 SECTION
SCALE: 1/2"=1'-0"

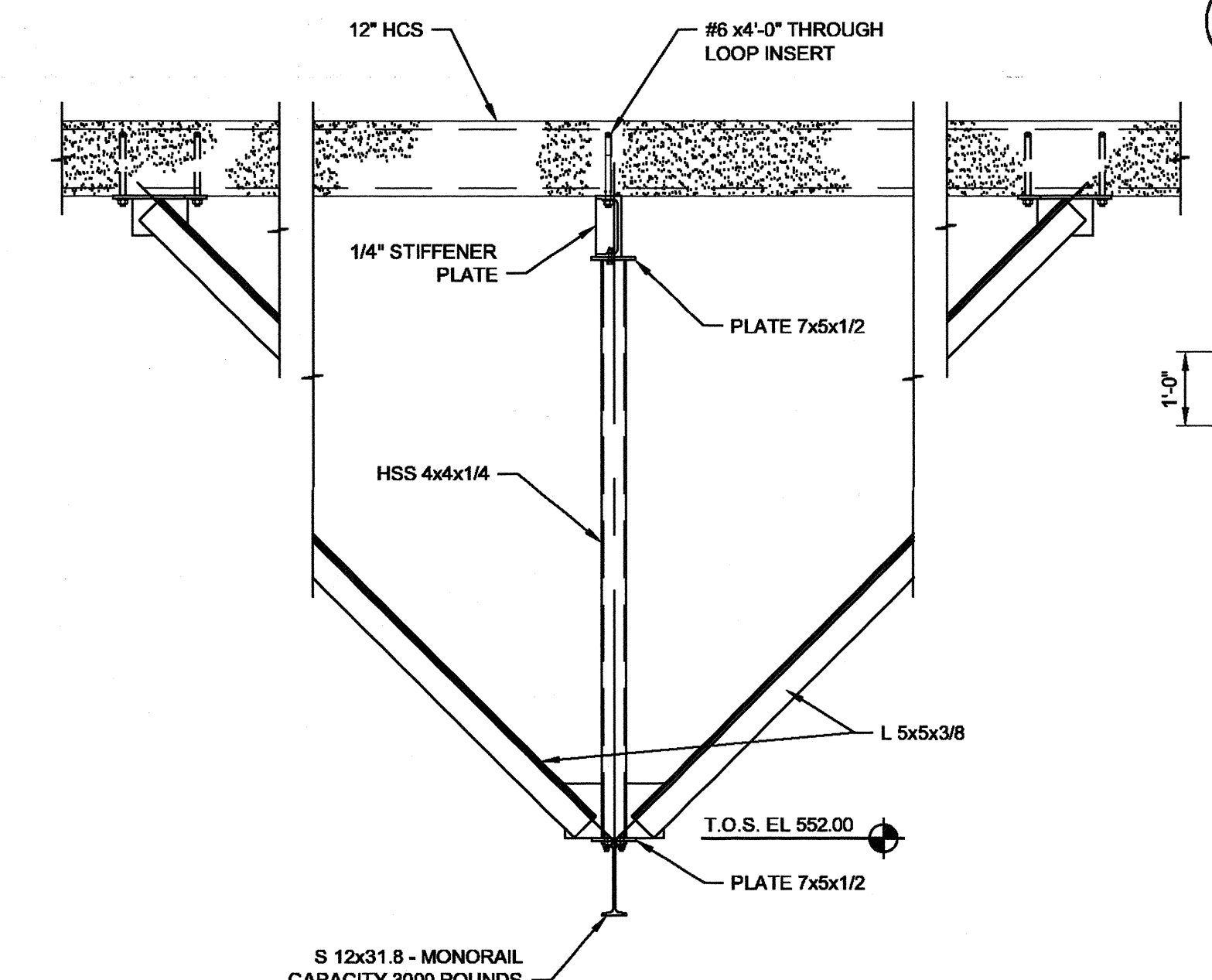


4 SECTION
SCALE: 1/2"=1'-0"

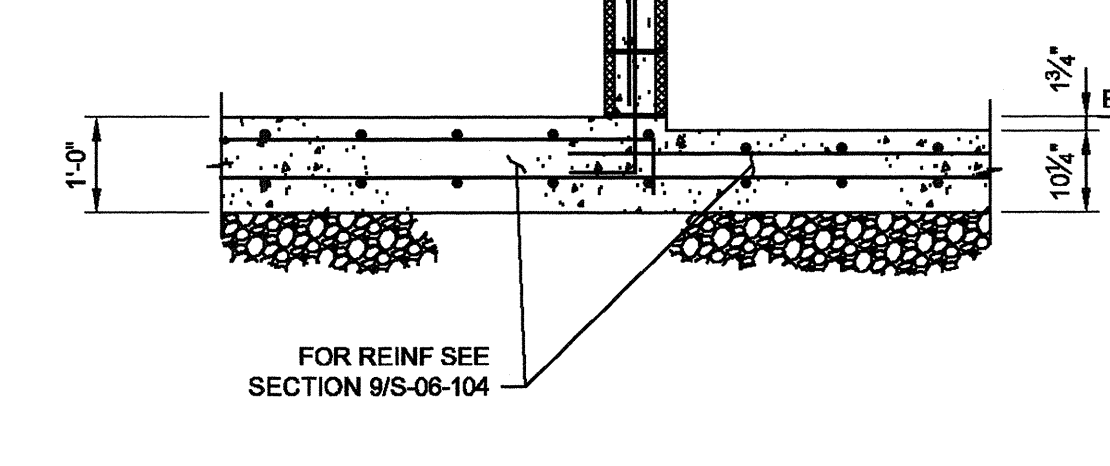


5 DETAIL
SCALE: 1/2"=1'-0"

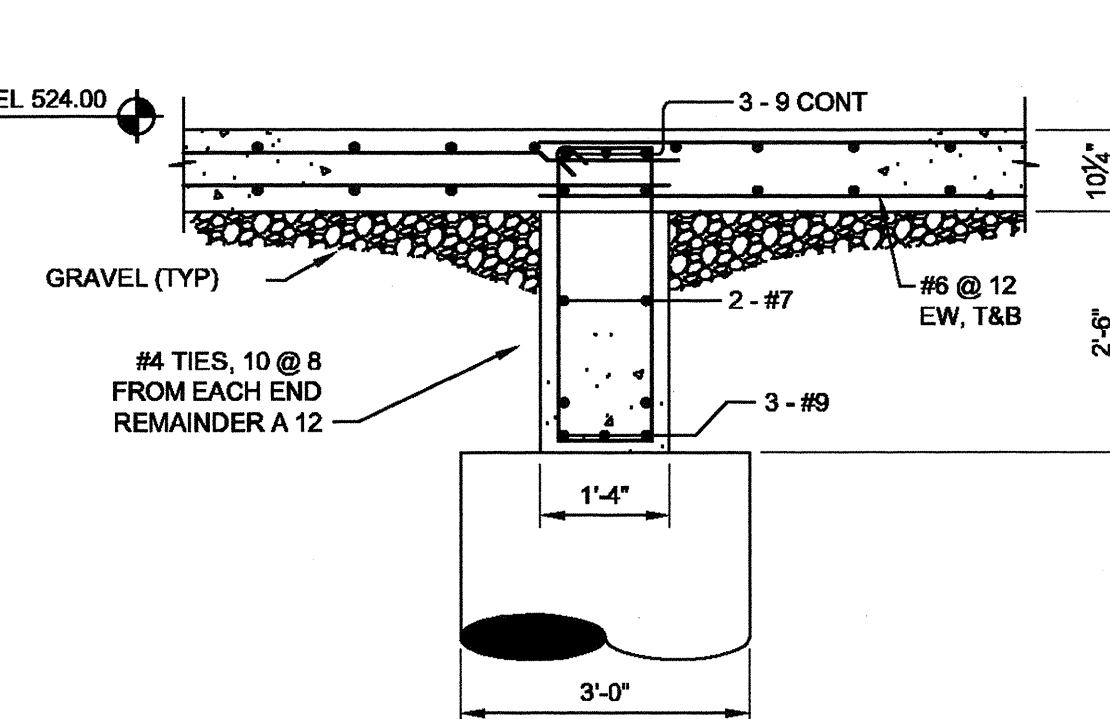
NOTE:
ALL STEEL SHALL BE HOT DIPPED GALVANIZED.



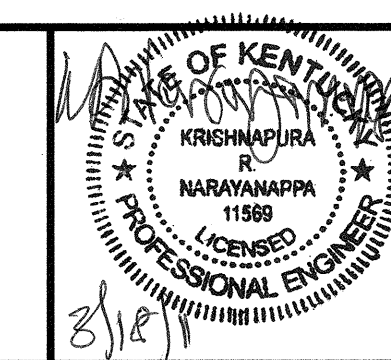
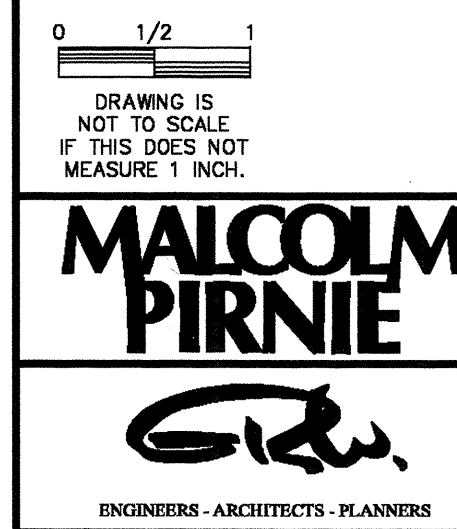
8 SECTION
SCALE: 1/2"=1'-0"



6 SECTION
SCALE: 1/2"=1'-0"



7 SECTION
SCALE: 1/2"=1'-0"



REVISIONS		NO.	BY	DATE	REMARKS

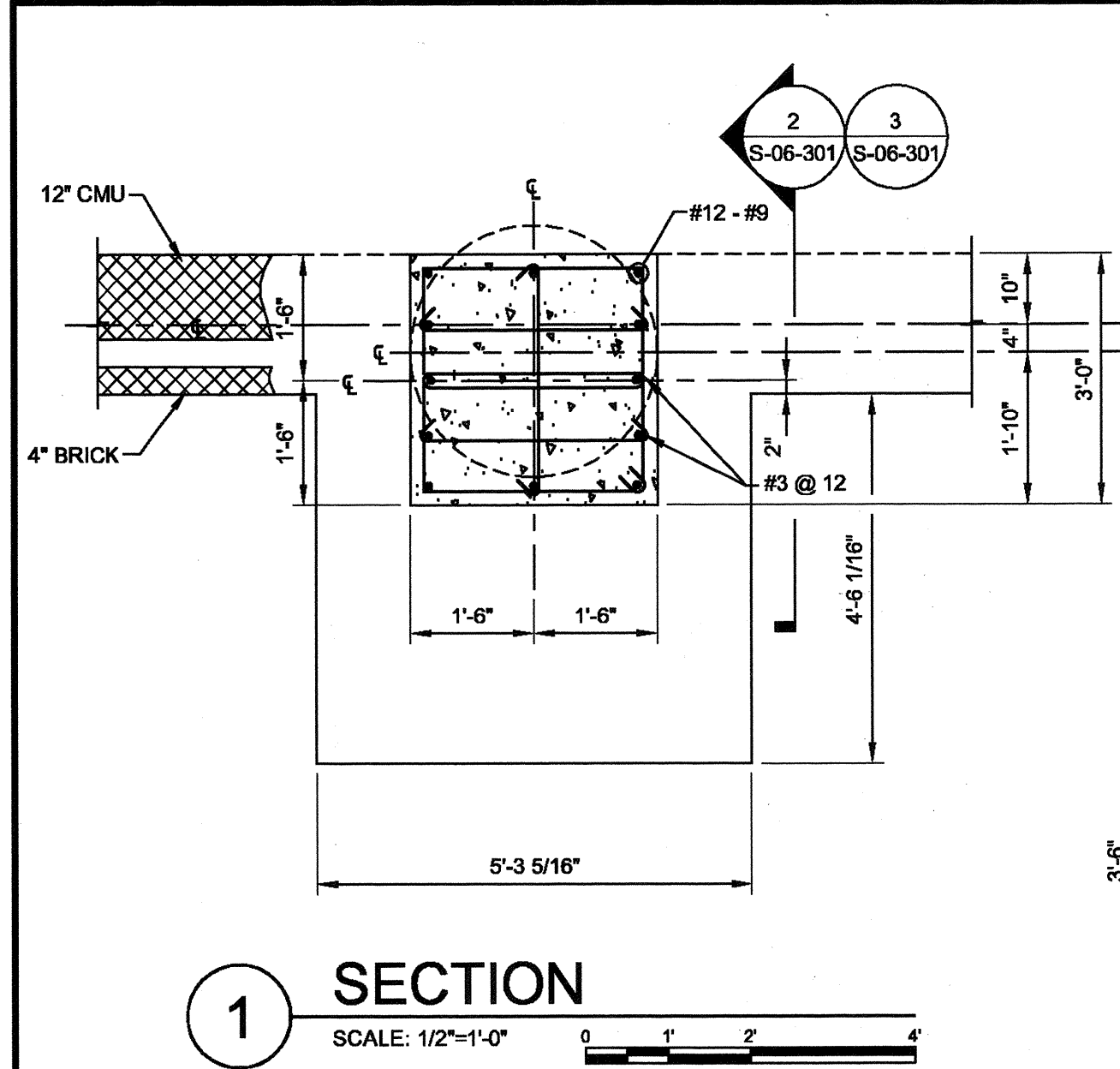
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

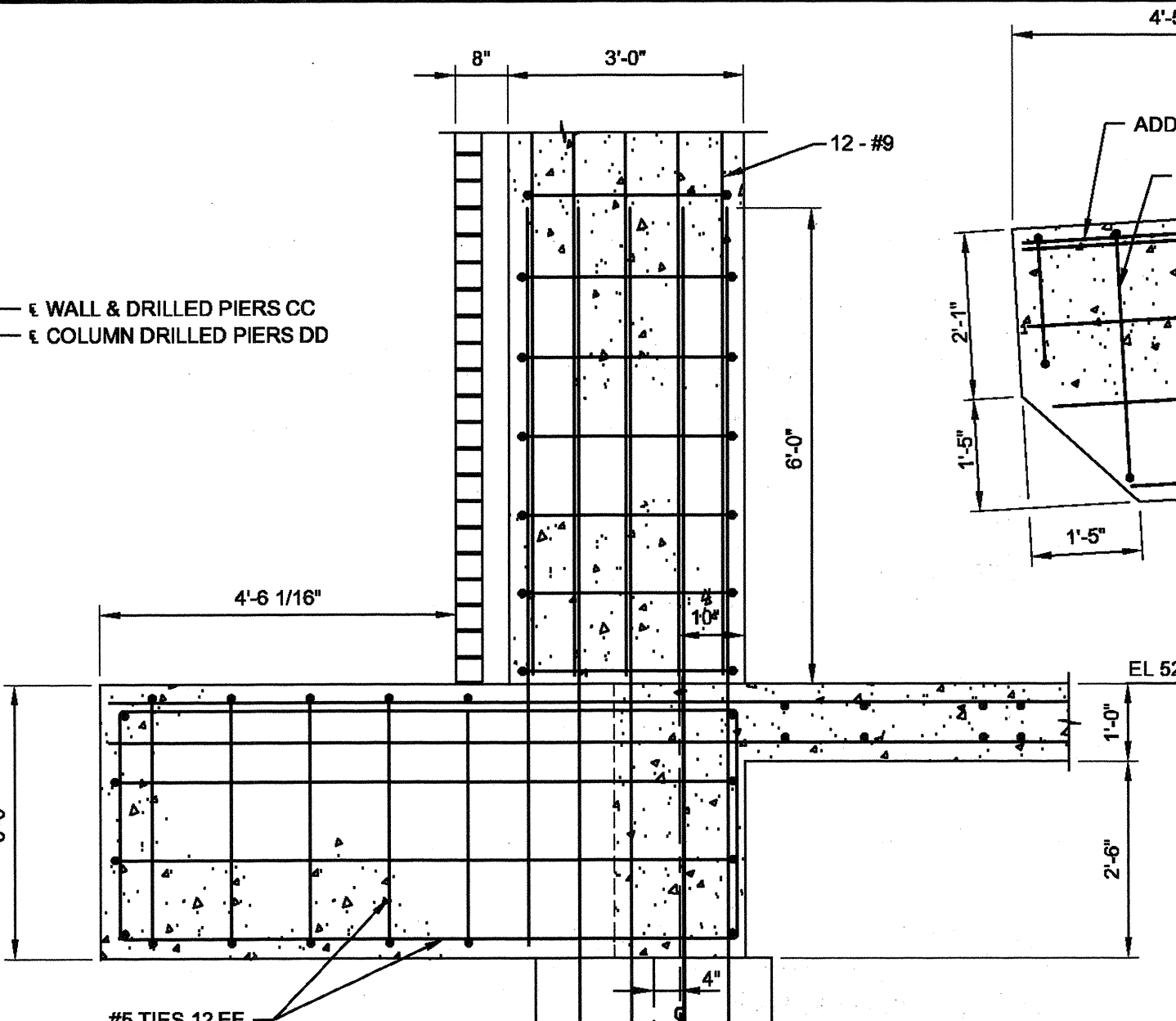
STRUCTURAL
PT/ GAC BUILDING
PLATFORM FRAMING PLAN
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-104
CAD REF. NO.:	3789-S-06-104

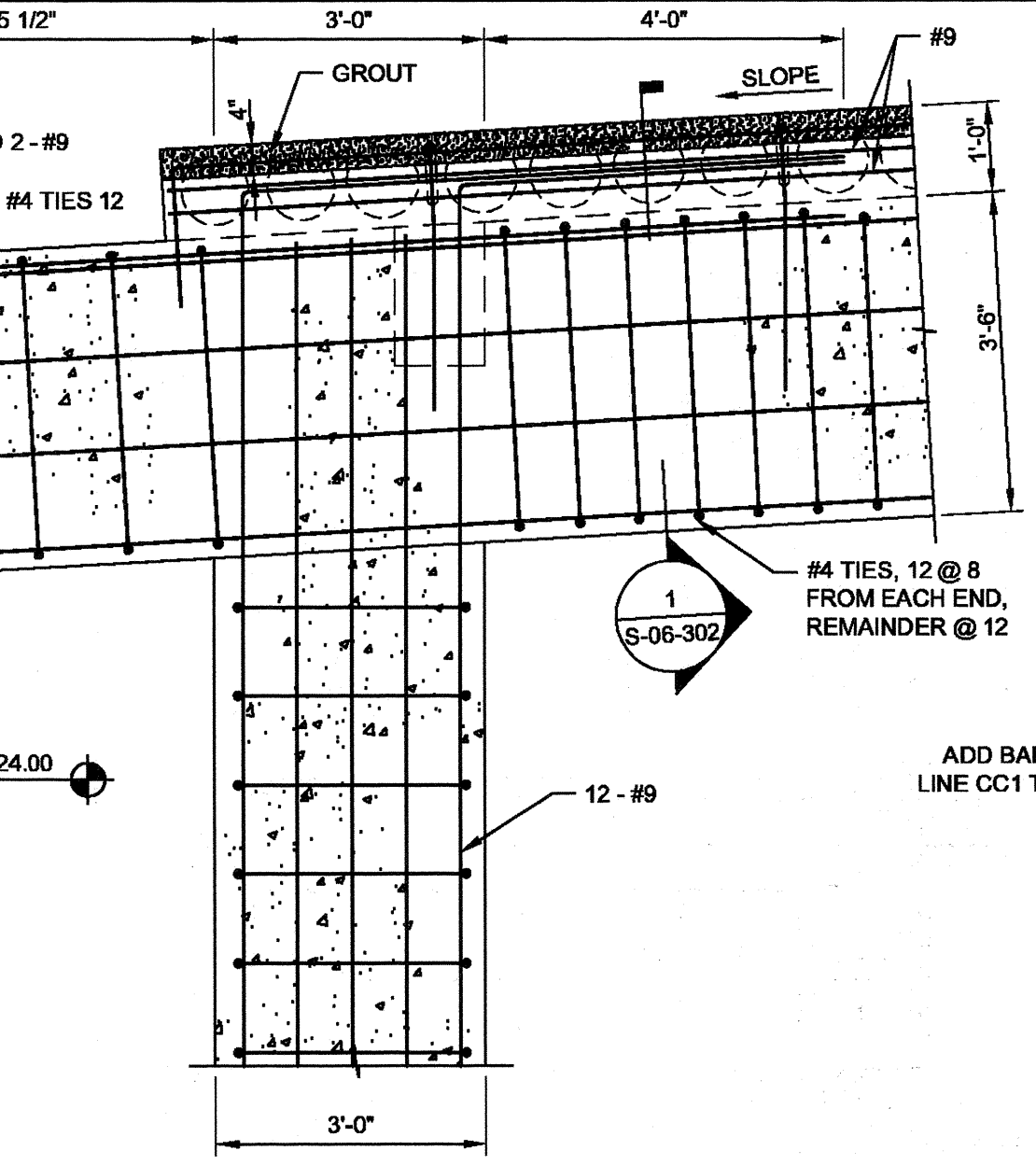
User: BOND Spec: PIRNIE STANDARD File: J:\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-06-301.DWG Scale: 1/8"=1'-0" Time: 15:25 Plot Date: Wed, 3/1/2011 09:43 Layout: S-06-301



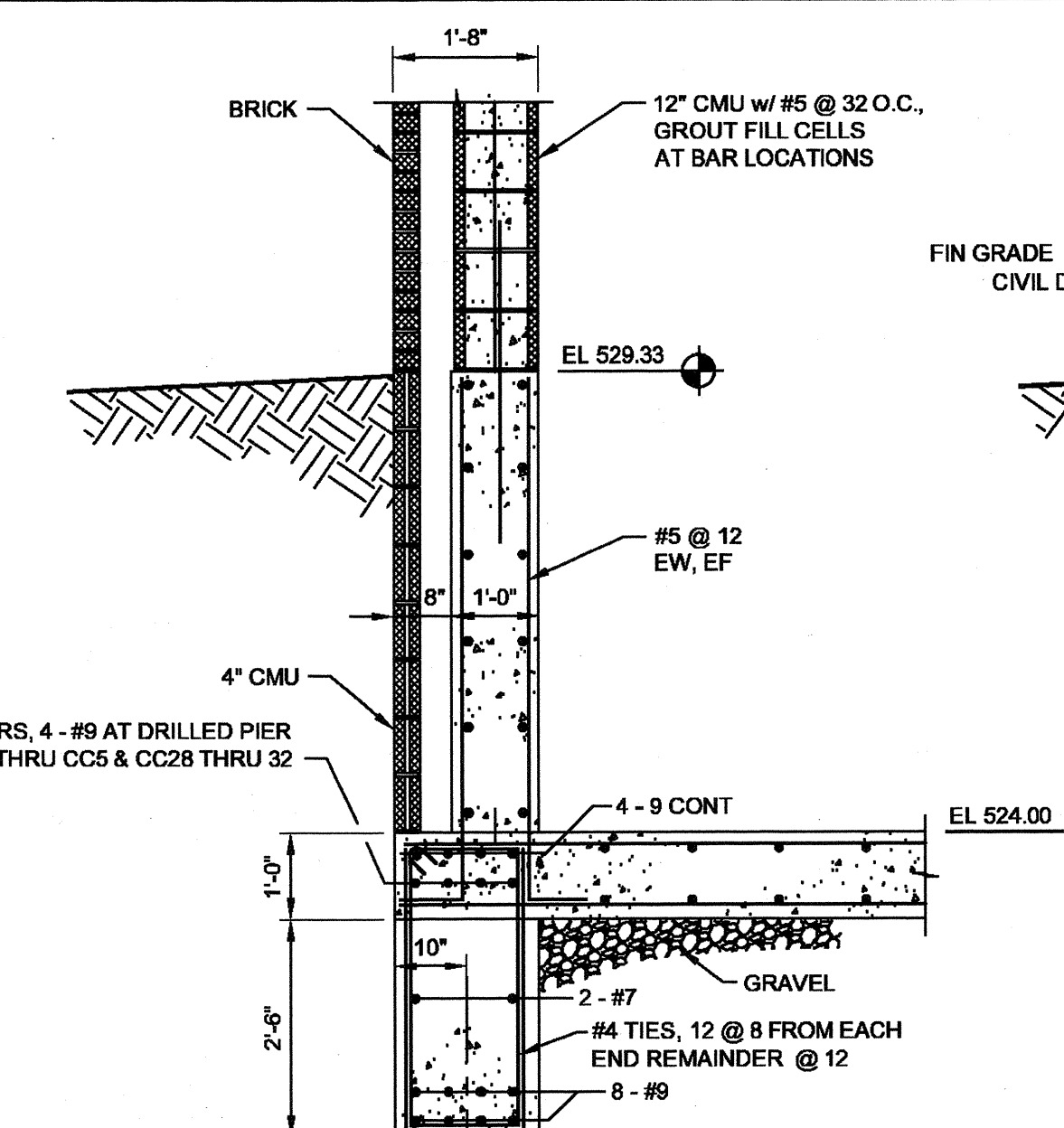
1 SECTION
SCALE: 1/2"=1'-0"



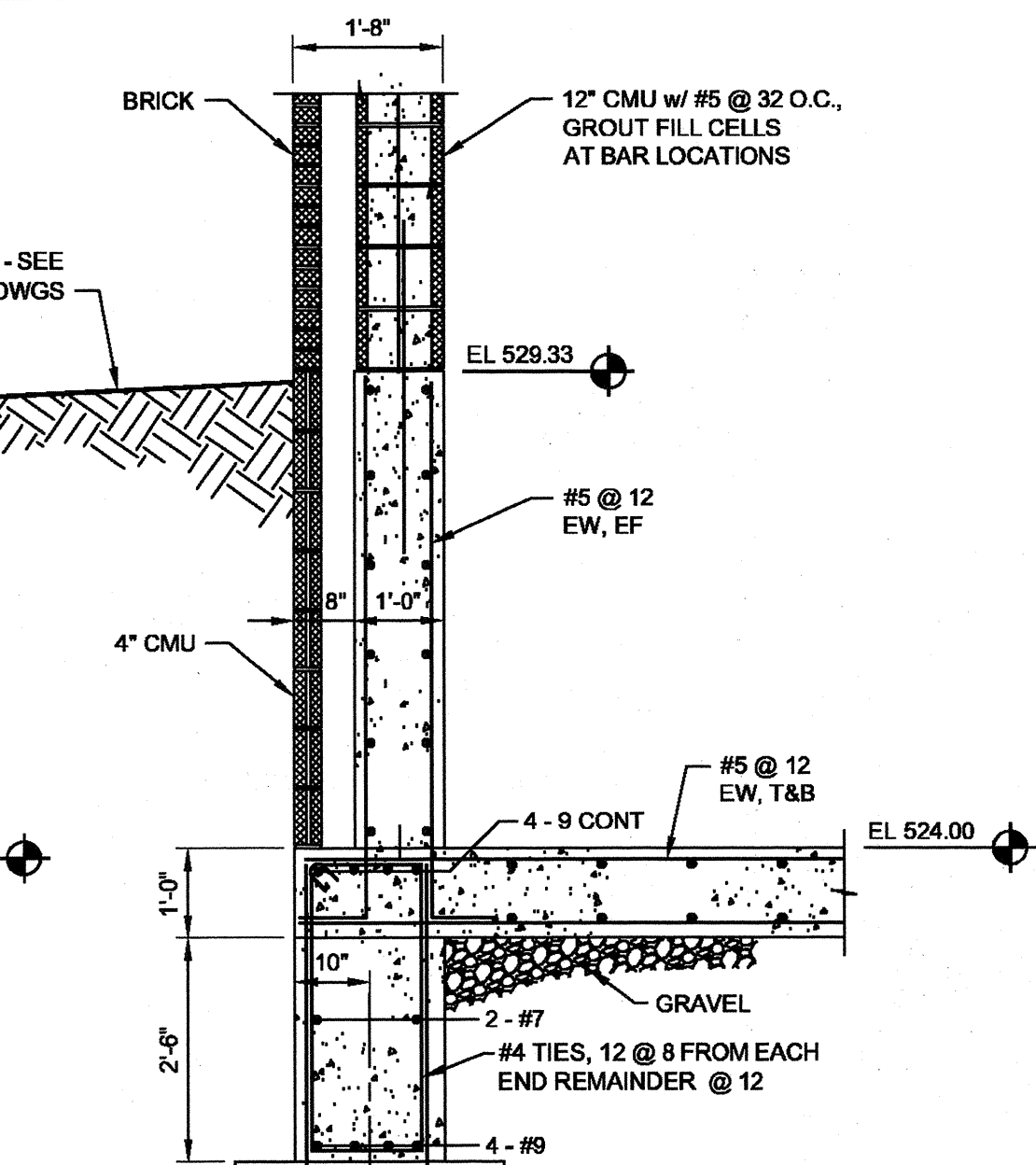
2 SECTION
SCALE: 1/2"=1'-0"



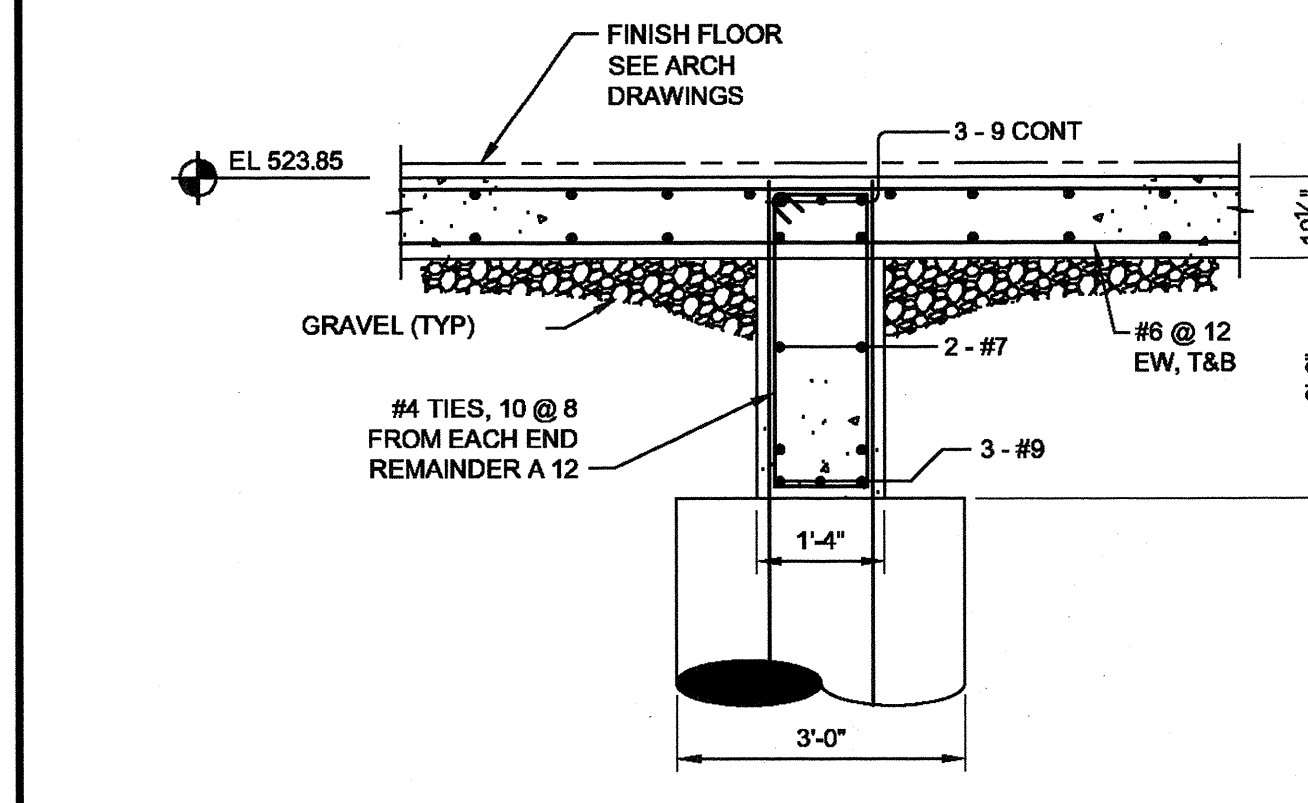
3 SECTION
SCALE: 1/2"=1'-0"



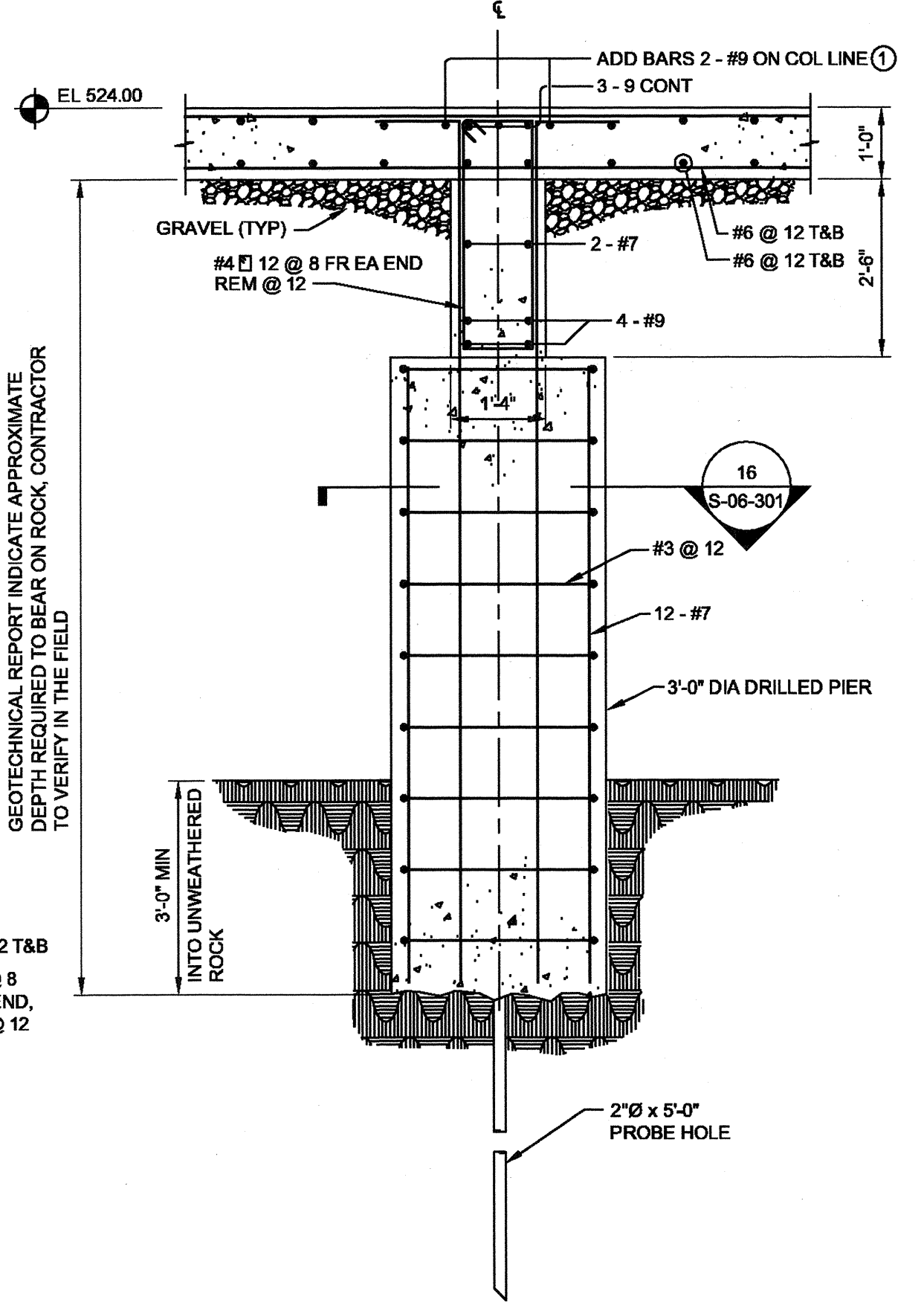
4 SECTION
SCALE: 1/2"=1'-0"



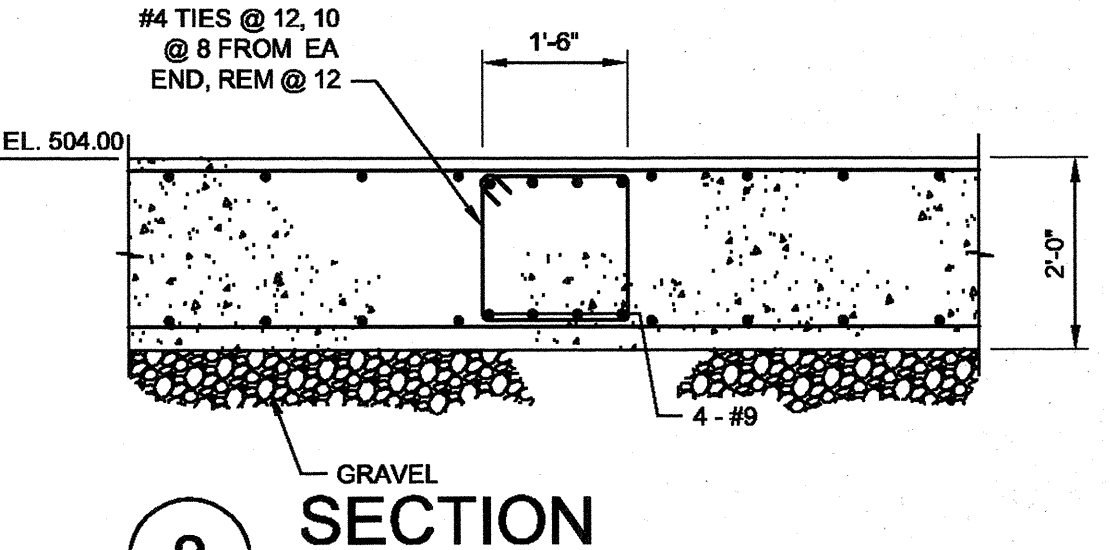
5 SECTION
SCALE: 1/2"=1'-0"



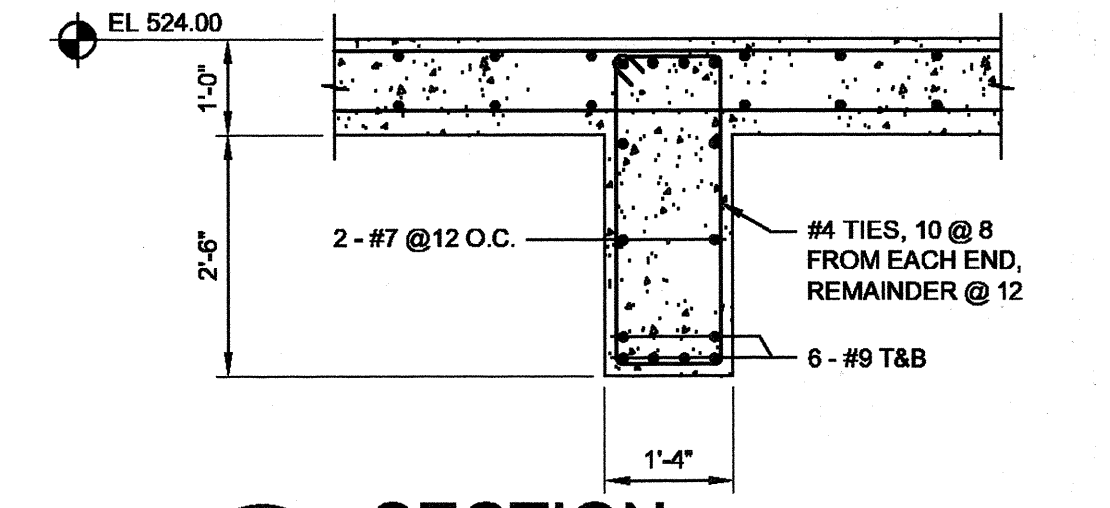
6 SECTION
SCALE: 1/2"=1'-0"



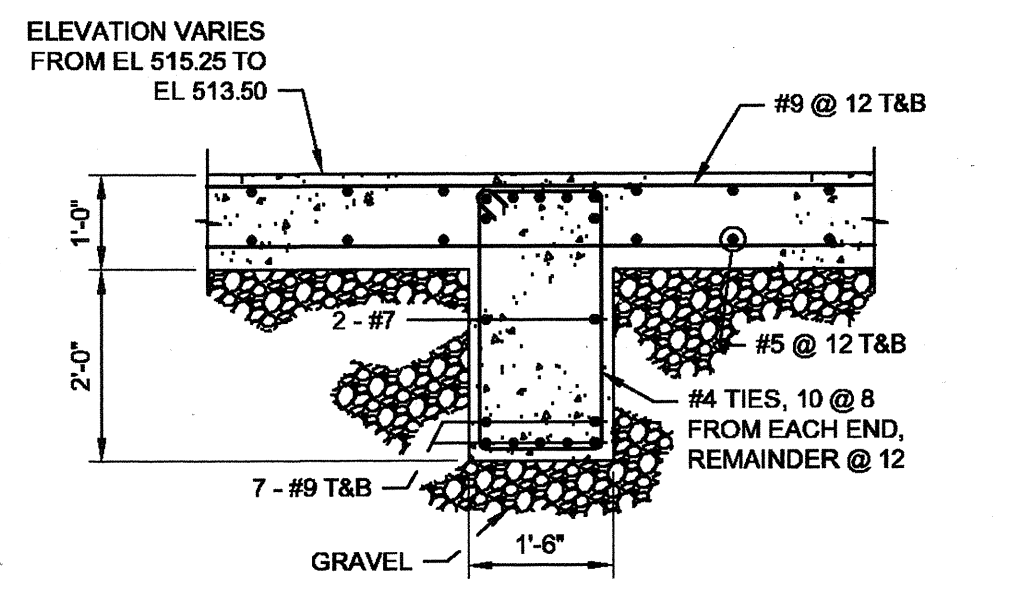
7 TYPICAL SECTION
SCALE: 1/2"=1'-0"



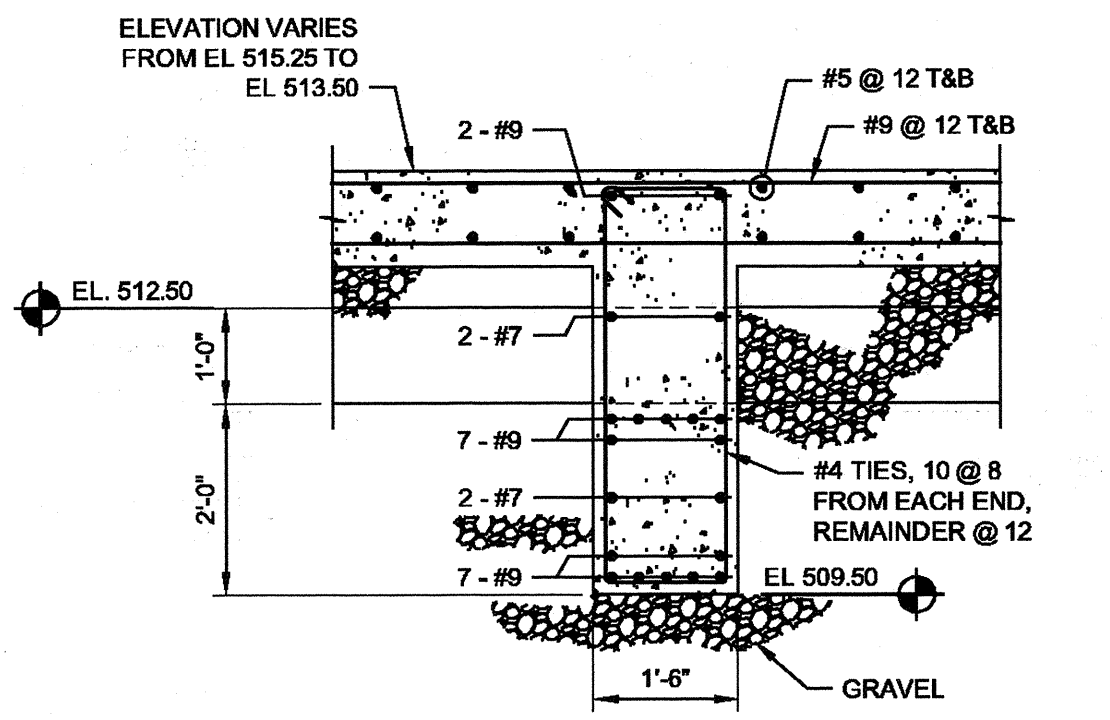
8 SECTION
SCALE: 1/2"=1'-0"



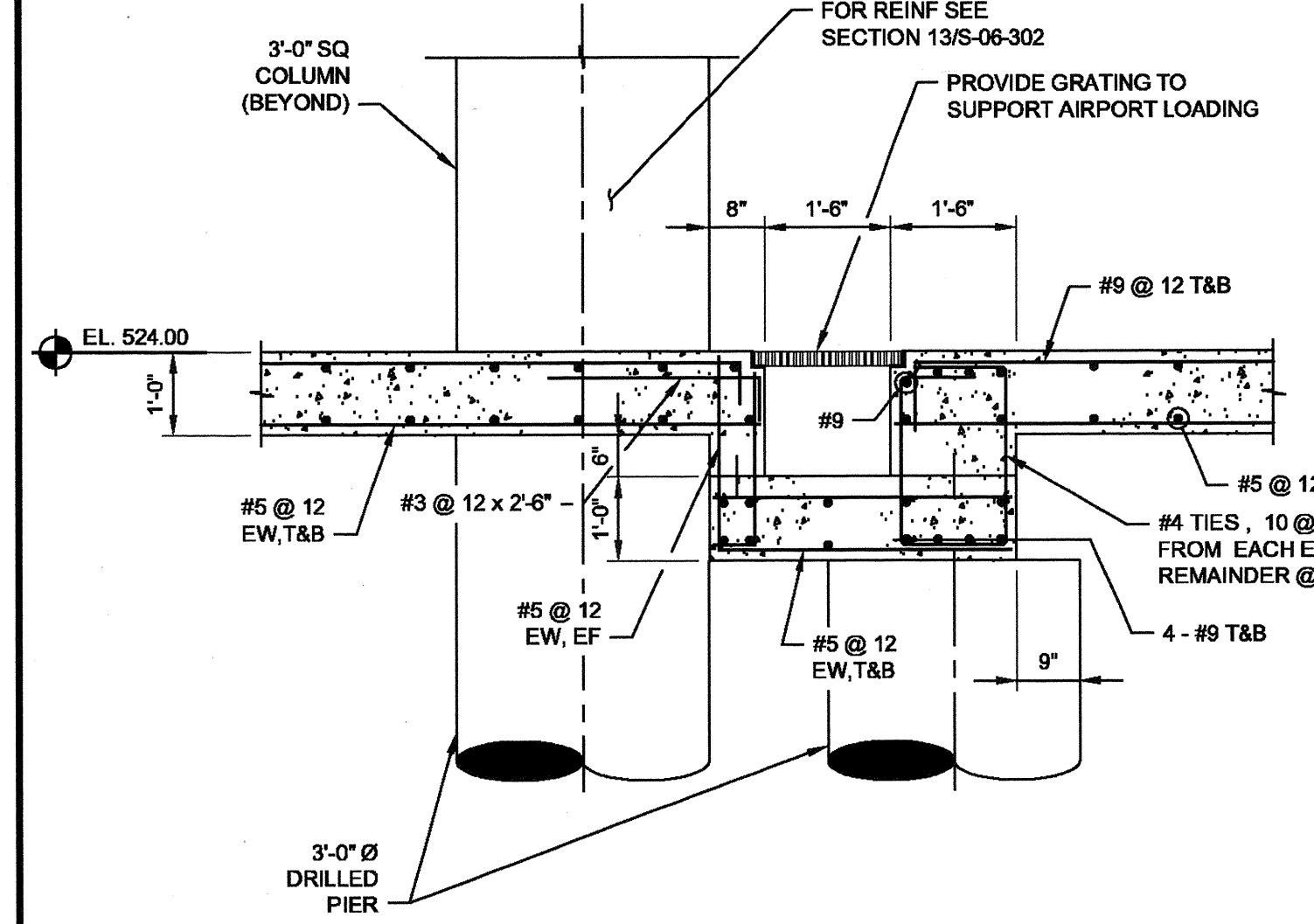
9 SECTION
SCALE: 1/2"=1'-0"



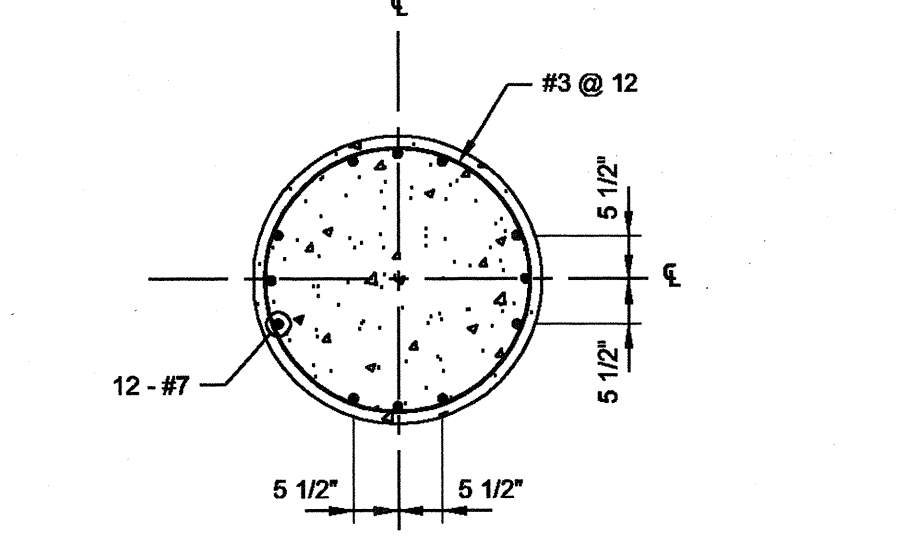
10 SECTION
SCALE: 1/2"=1'-0"



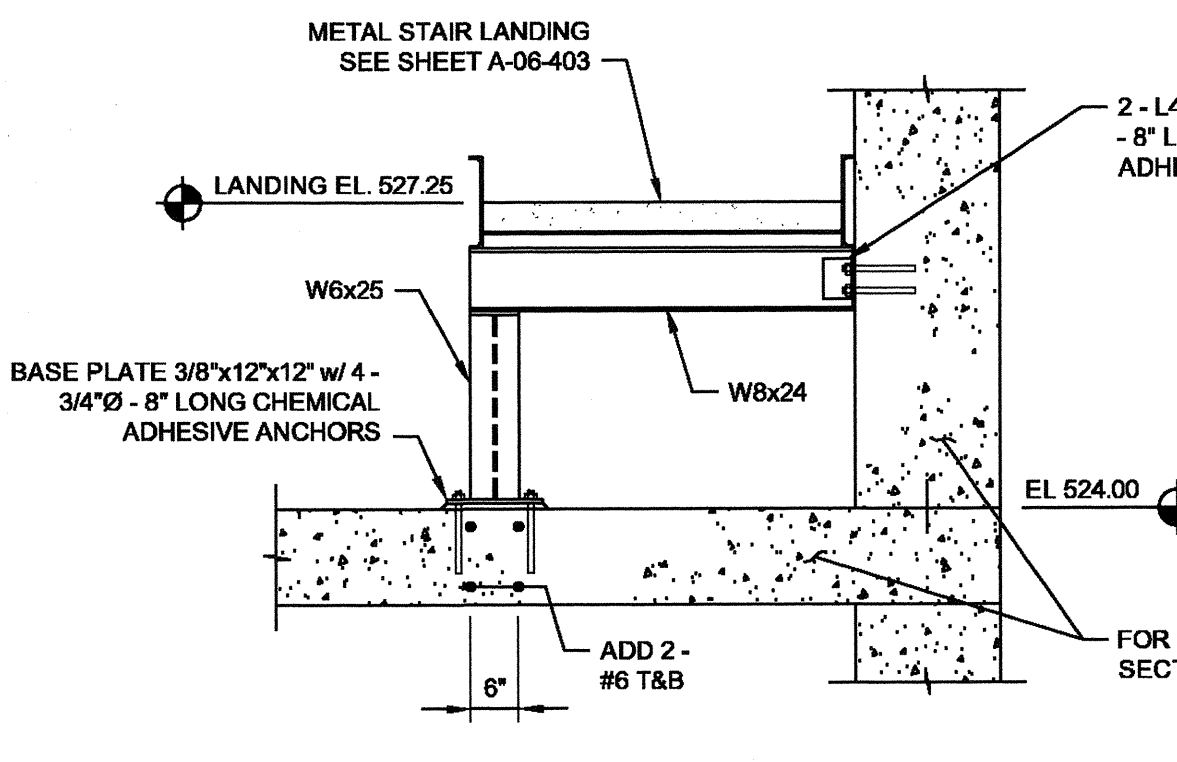
11 SECTION
SCALE: 1/2"=1'-0"



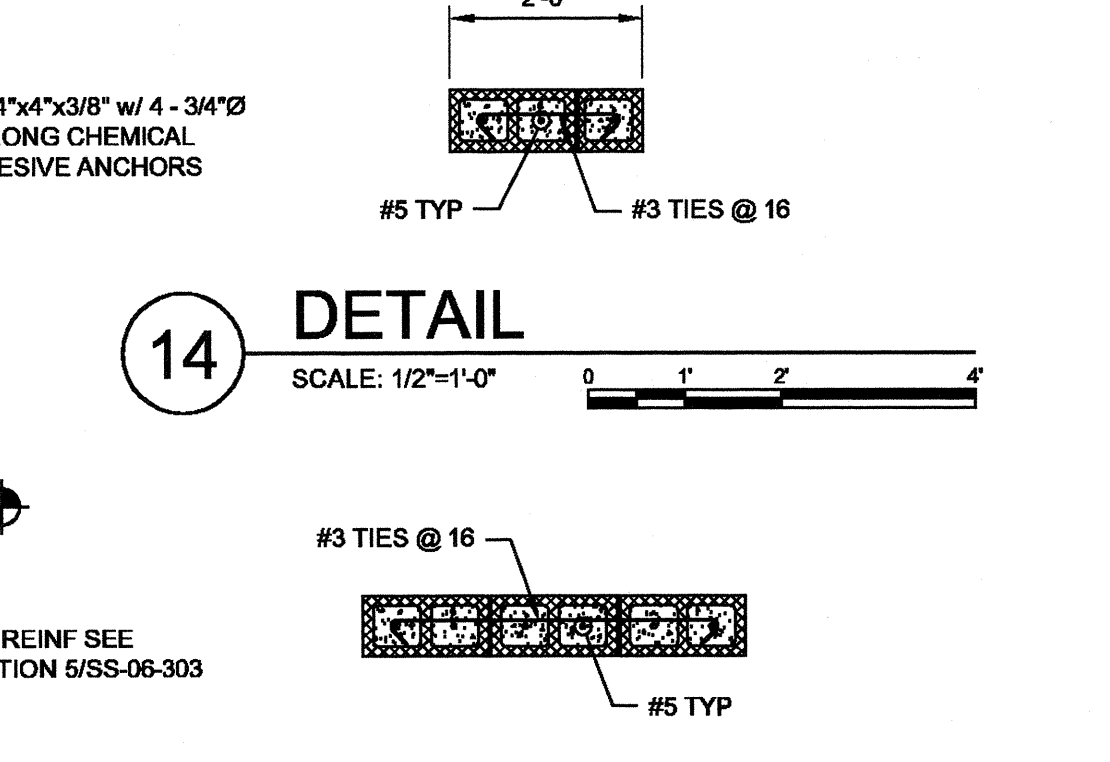
12 SECTION
SCALE: 1/2"=1'-0"



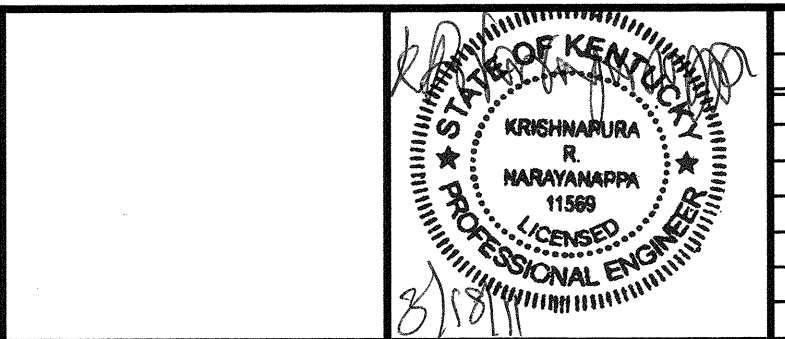
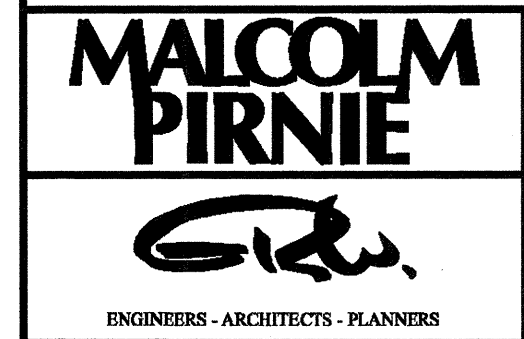
13 SECTION
SCALE: 1/2"=1'-0"



14 SECTION
SCALE: 1/2"=1'-0"



15 DETAIL
SCALE: 1/2"=1'-0"



REVISIONS			
NO.	BY	DATE	REMARKS

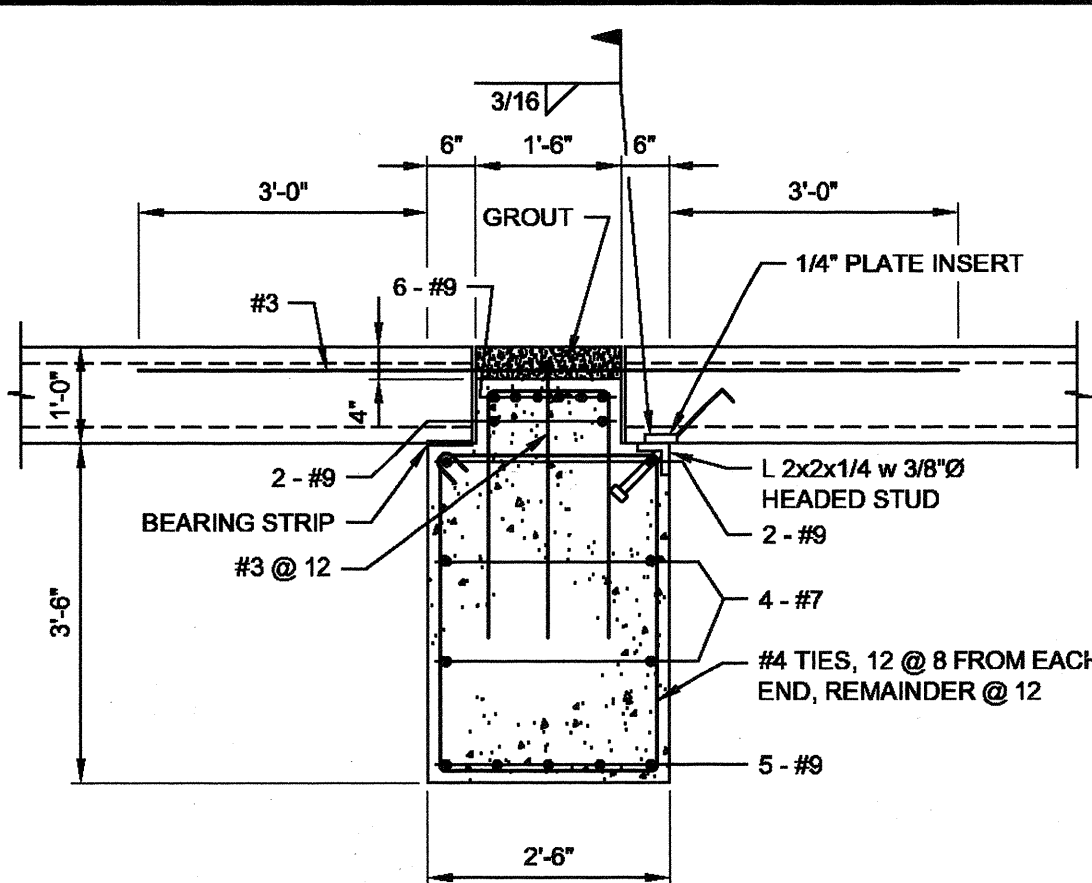
DES	STAFF
DWN	STAFF
CRD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

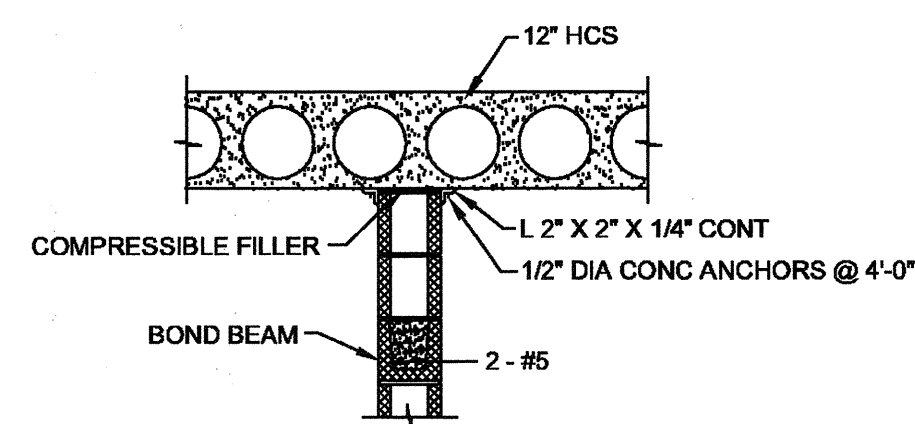
STRUCTURAL
PT / GAC BUILDING
SECTIONS I
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-301
CAD REF. NO.:	3789-S-06-301

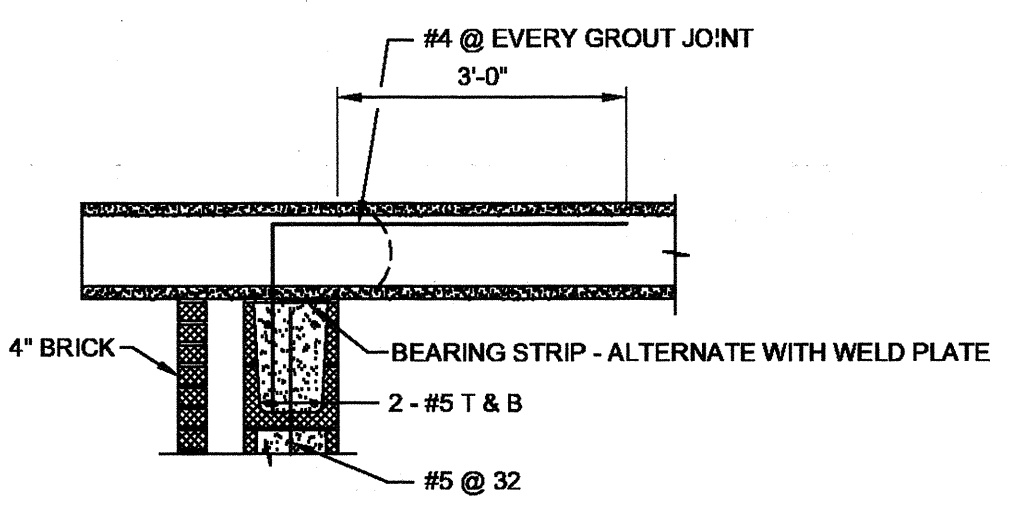
User: BOND Spec: PIRNIE STANDARD File: I:\3788-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\3788-S-06-302.DWG Scale: 1/8 Saved Date: 1/7/2011 Time: 09:12 Plot Date: Bond_Jef, 3/10/2011: 09:43 Layout: S-06-302



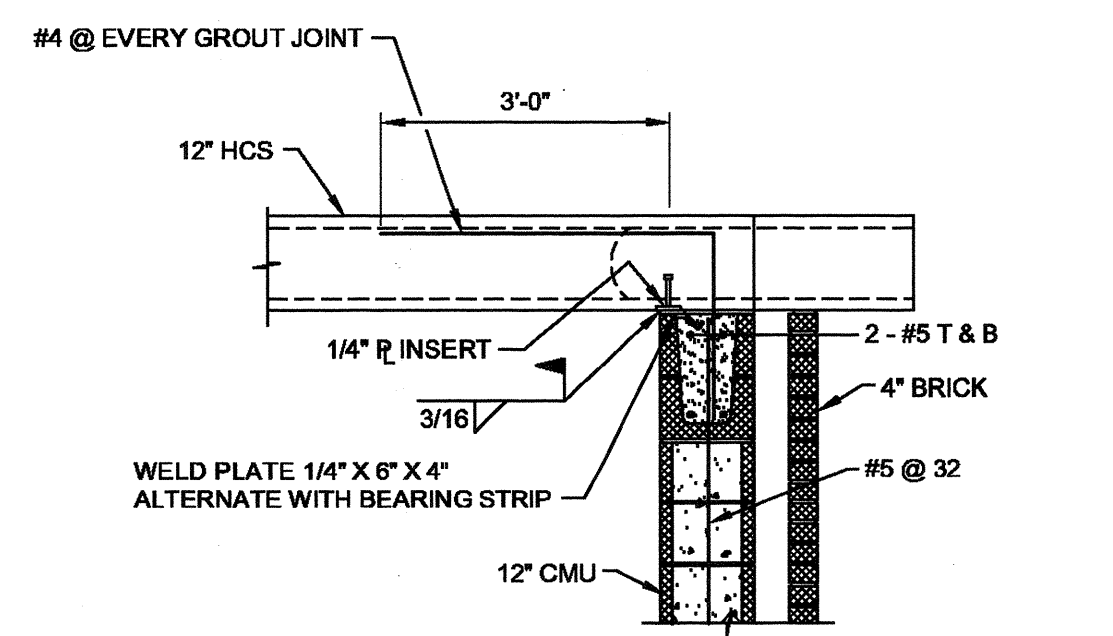
1 SECTION
SCALE: 1/2"=1'-0"



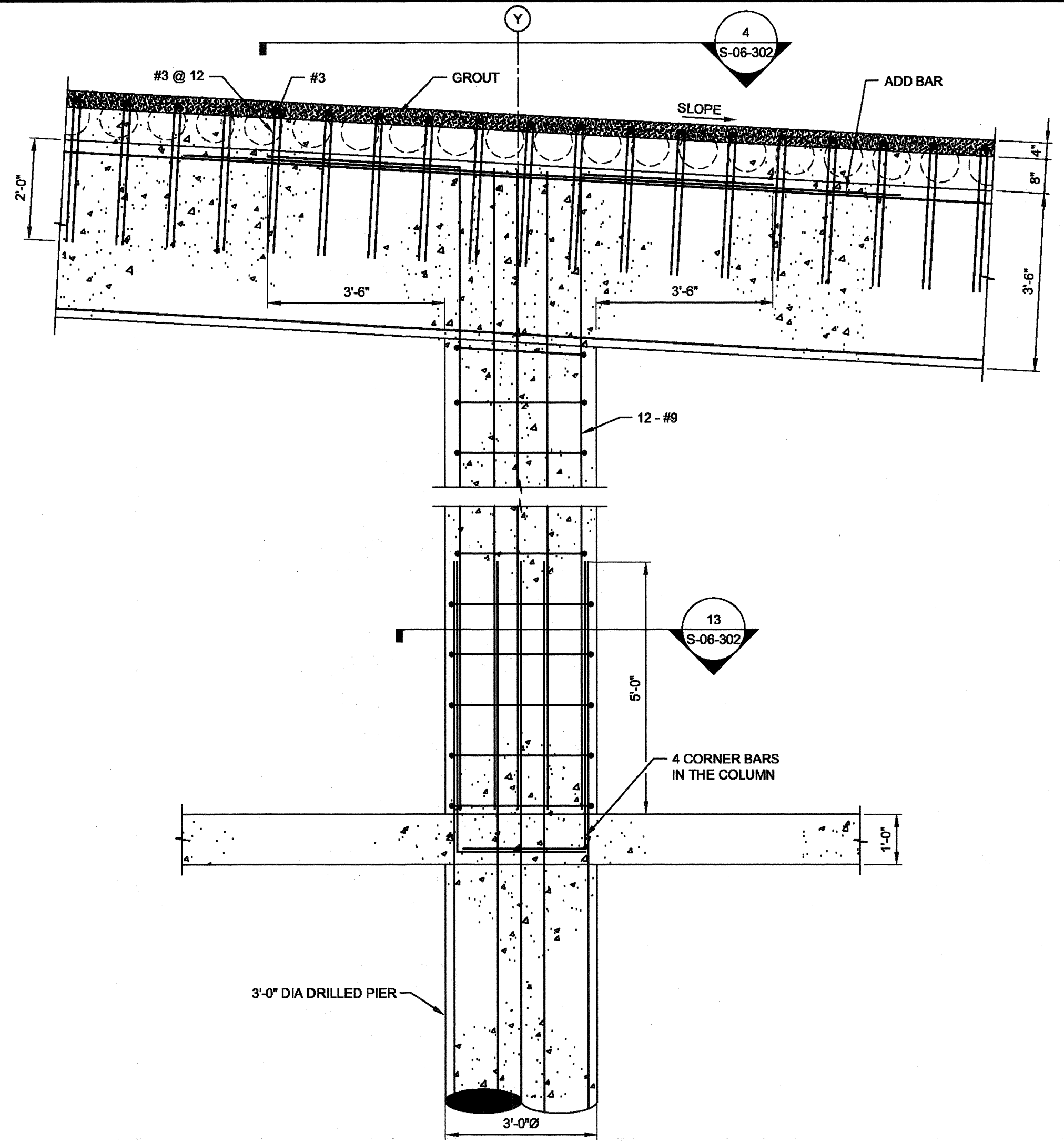
2 SECTION
SCALE: 1/2"=1'-0"



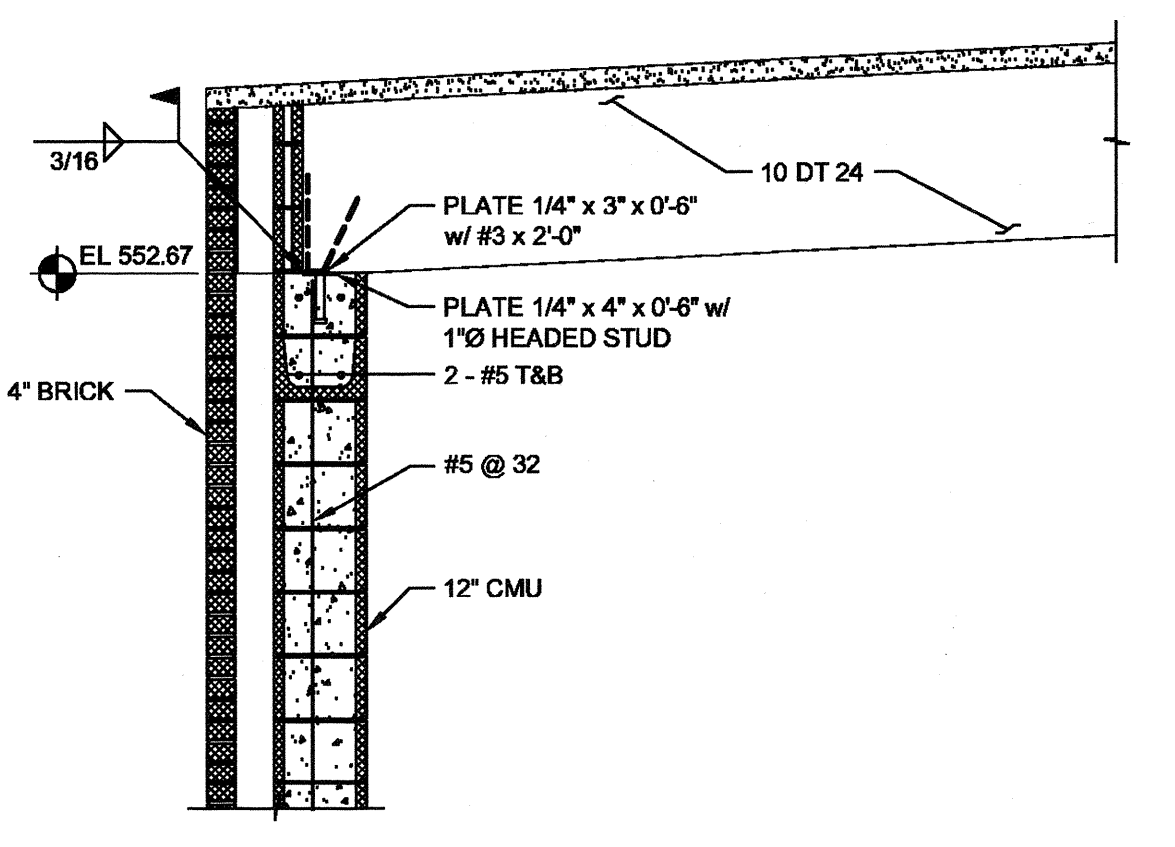
6 SECTION
SCALE: 1/2"=1'-0"



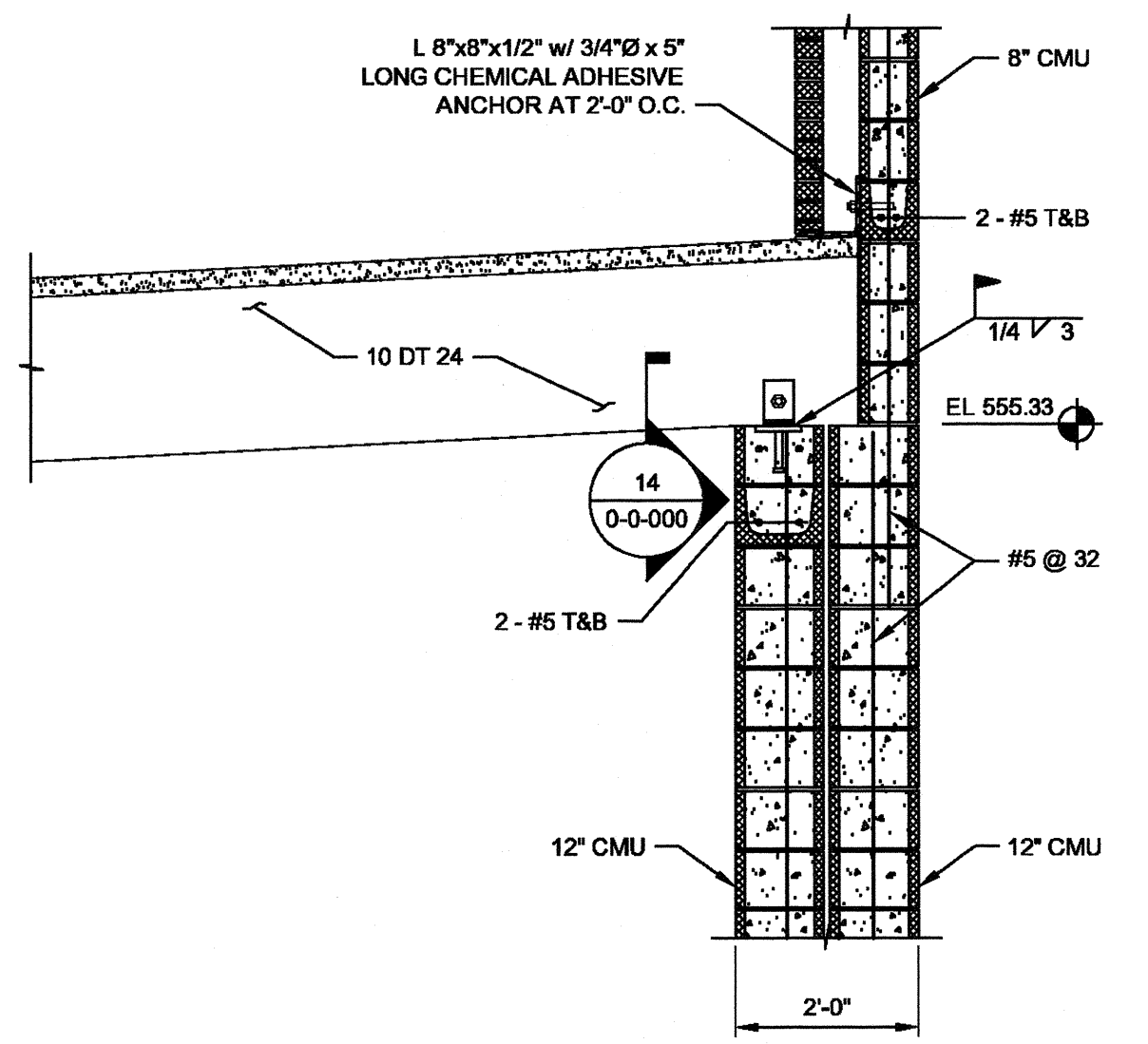
7 SECTION
SCALE: 1/2"=1'-0"



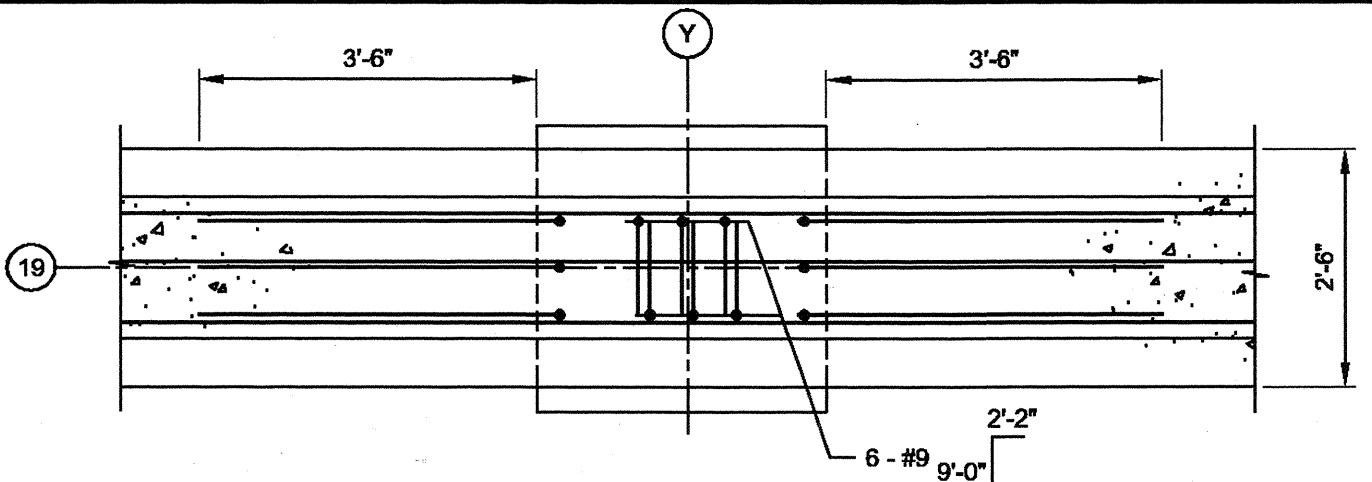
3 TYPICAL SECTION
SCALE: 1/2"=1'-0"



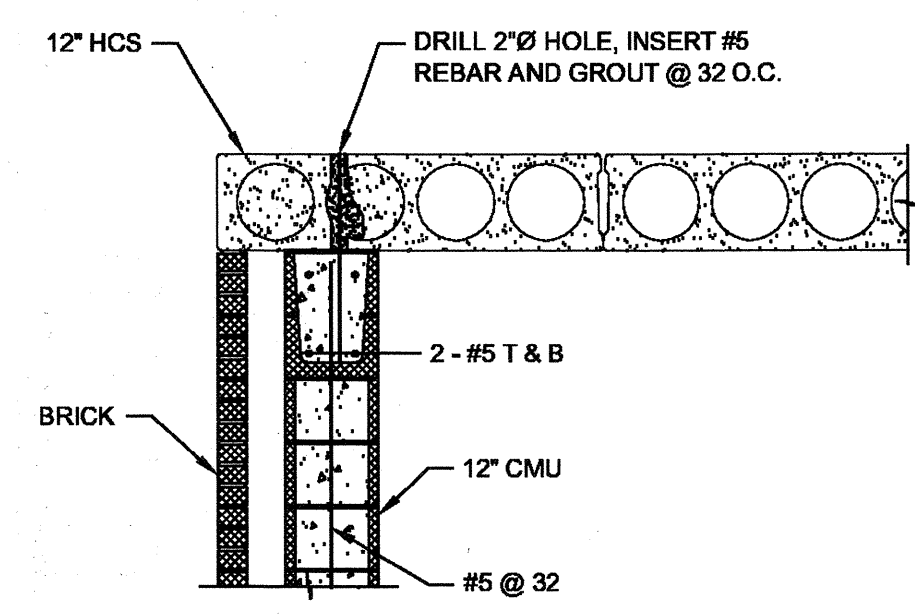
8 SECTION
SCALE: 1/2"=1'-0"



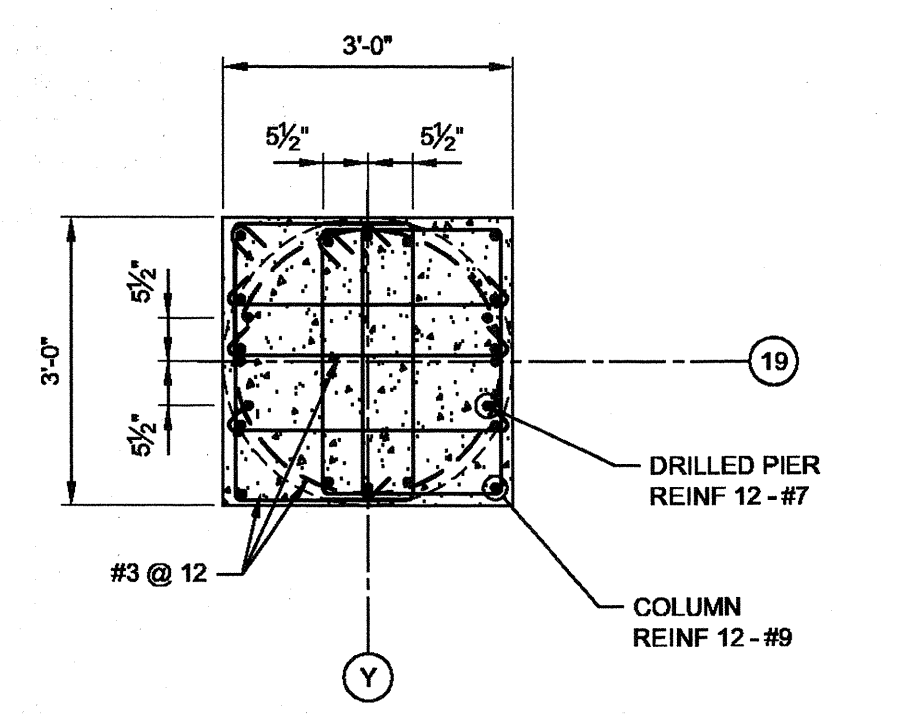
9 SECTION
SCALE: 1/2"=1'-0"



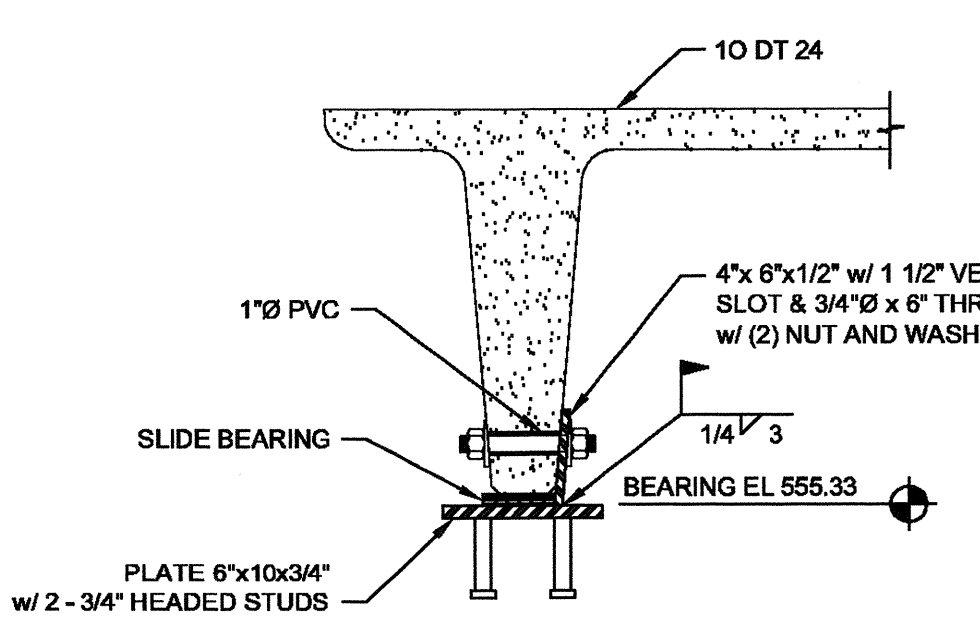
4 SECTION
SCALE: 1/2"=1'-0"



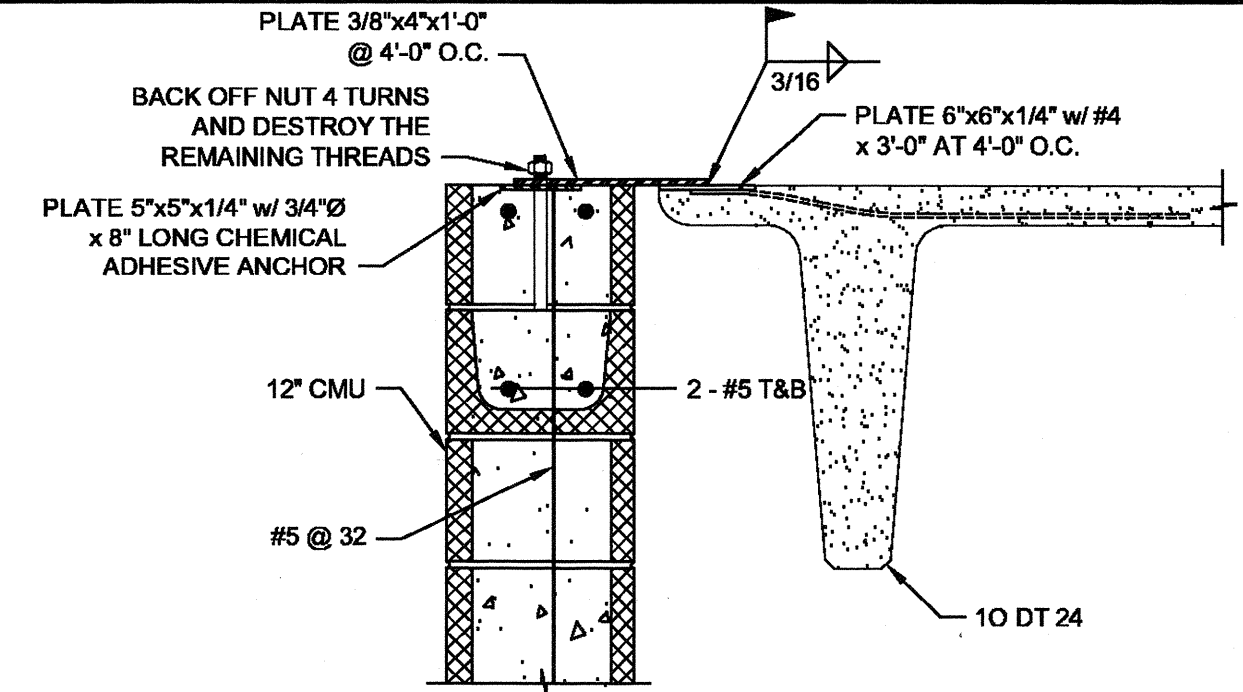
5 SECTION
SCALE: 1/2"=1'-0"



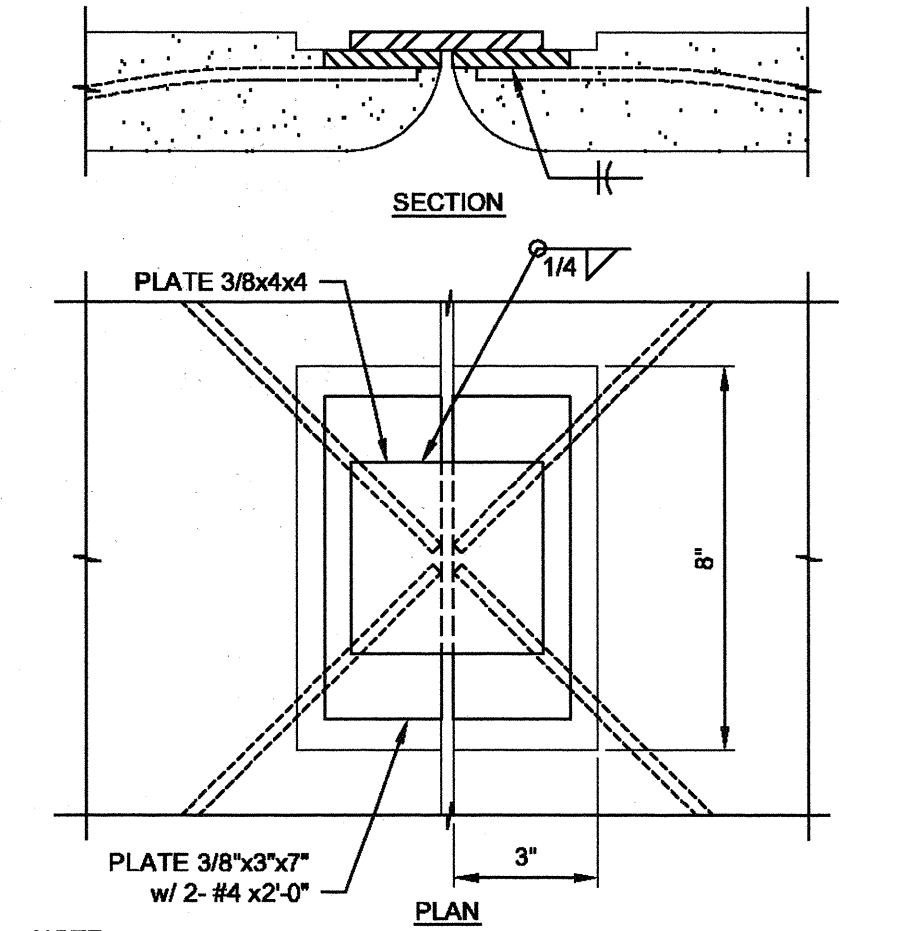
13 SECTION
SCALE: 1/2"=1'-0"



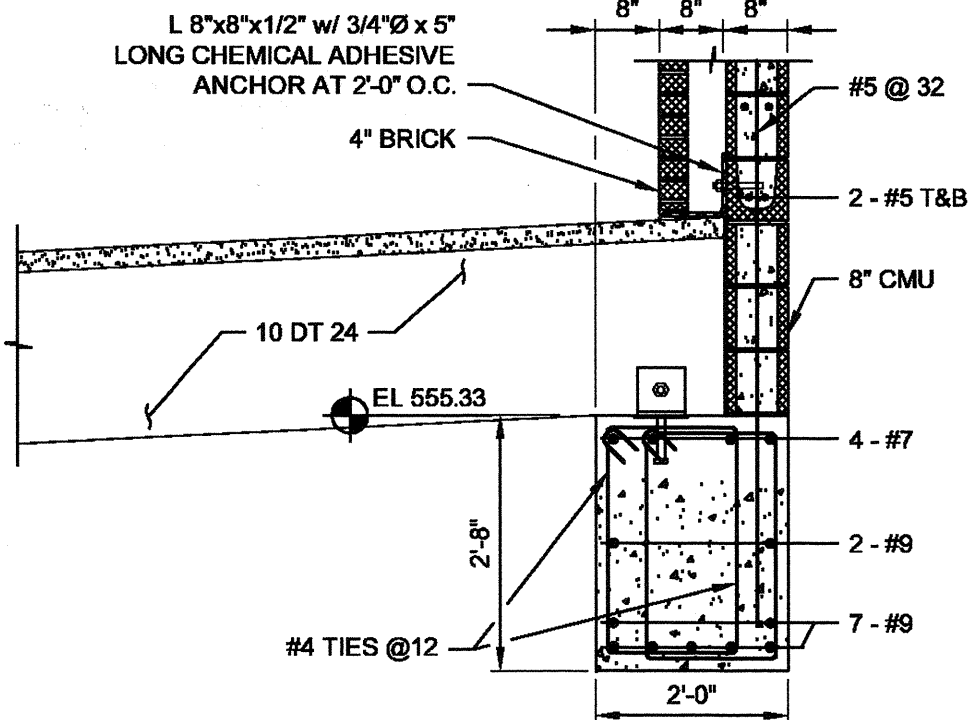
14 SECTION
SCALE: 1"=1'-0"



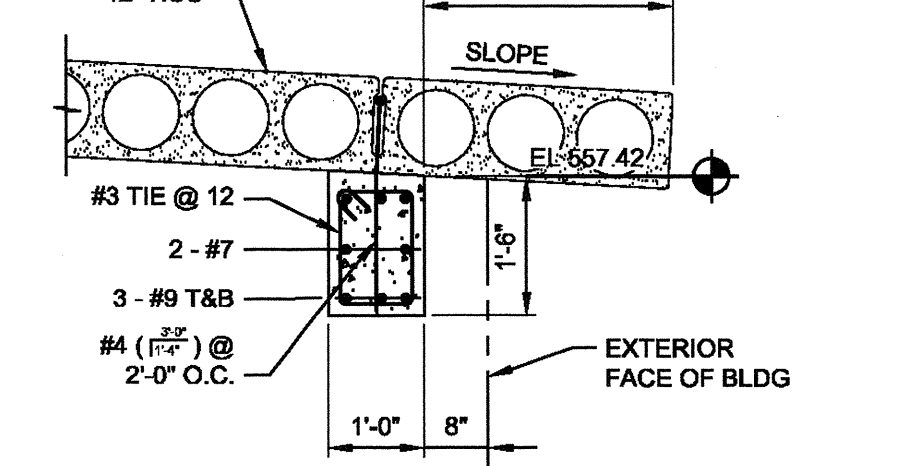
10 SECTION
SCALE: 1"=1'-0"



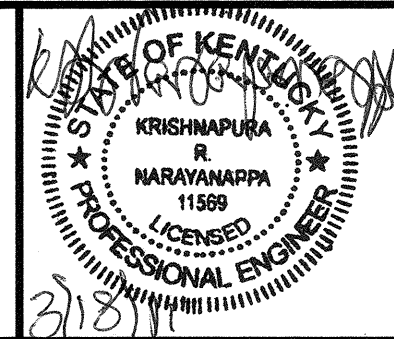
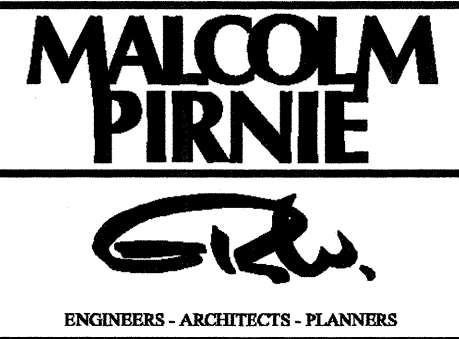
11 TYPICAL DETAIL
SCALE: 3"=1'-0"



12 SECTION
SCALE: 1/2"=1'-0"



15 SECTION
SCALE: 1/2"=1'-0"



REVISIONS			
NO.	BY	DATE	REMARKS

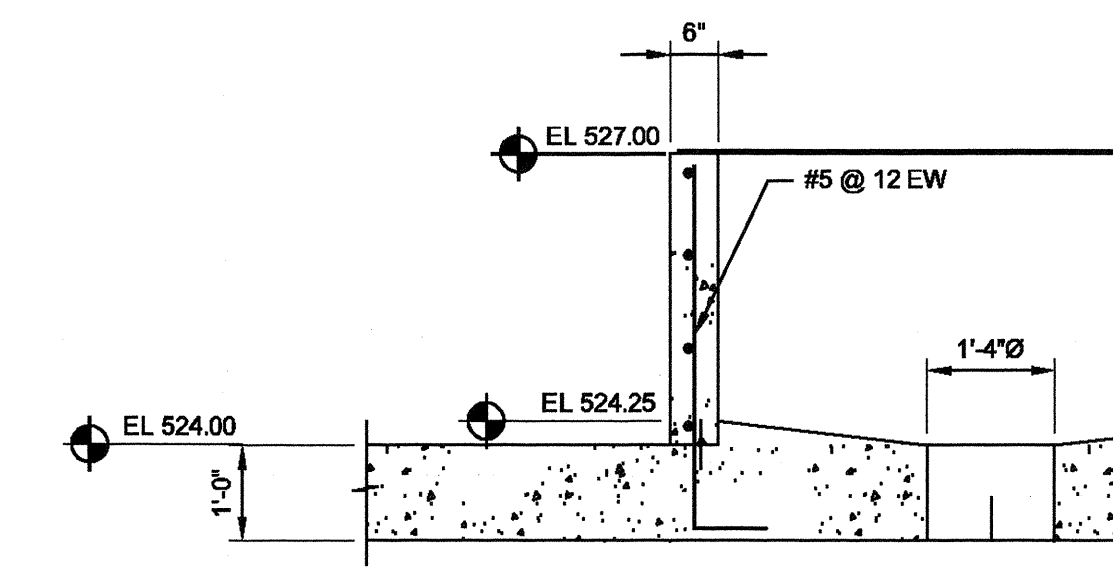
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

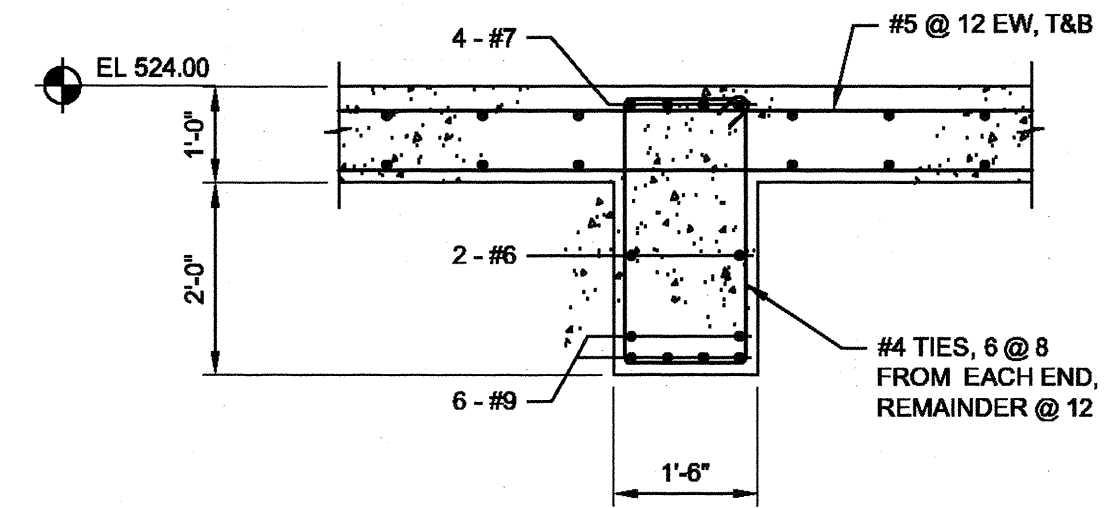
STRUCTURAL
PT / GAC BUILDING
SECTIONS II
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-302
CAD REF. NO.: 3789-S-06-302

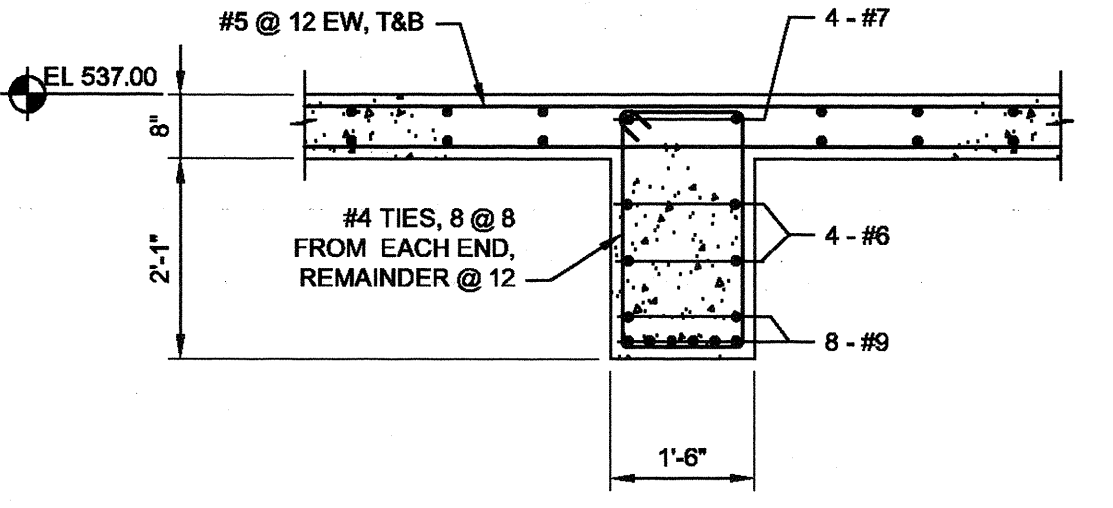
User: JBCND Spc: PIRNIE STANDARD File: J3788-KRW-Taylor Mill Working Drawings\DESIGN DRAWINGS\STRUCTURE\S-06-303.DWG Scale: 1/8"=1'-0" Date: 2/28/2011 11:09:43 AM Job: 31102011-08-08 Layout: S-06-303



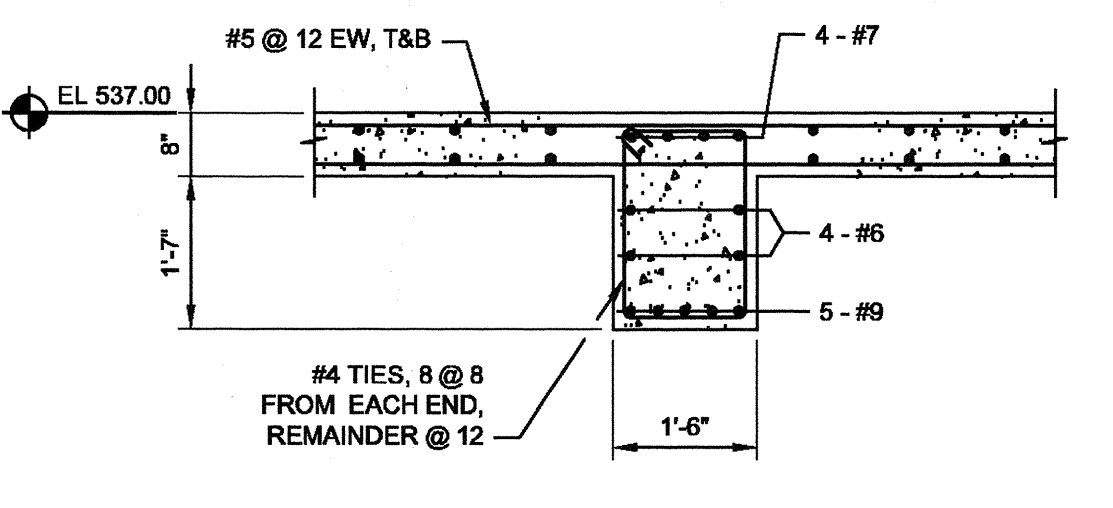
1 SECTION
SCALE: 1/2"=1'-0"



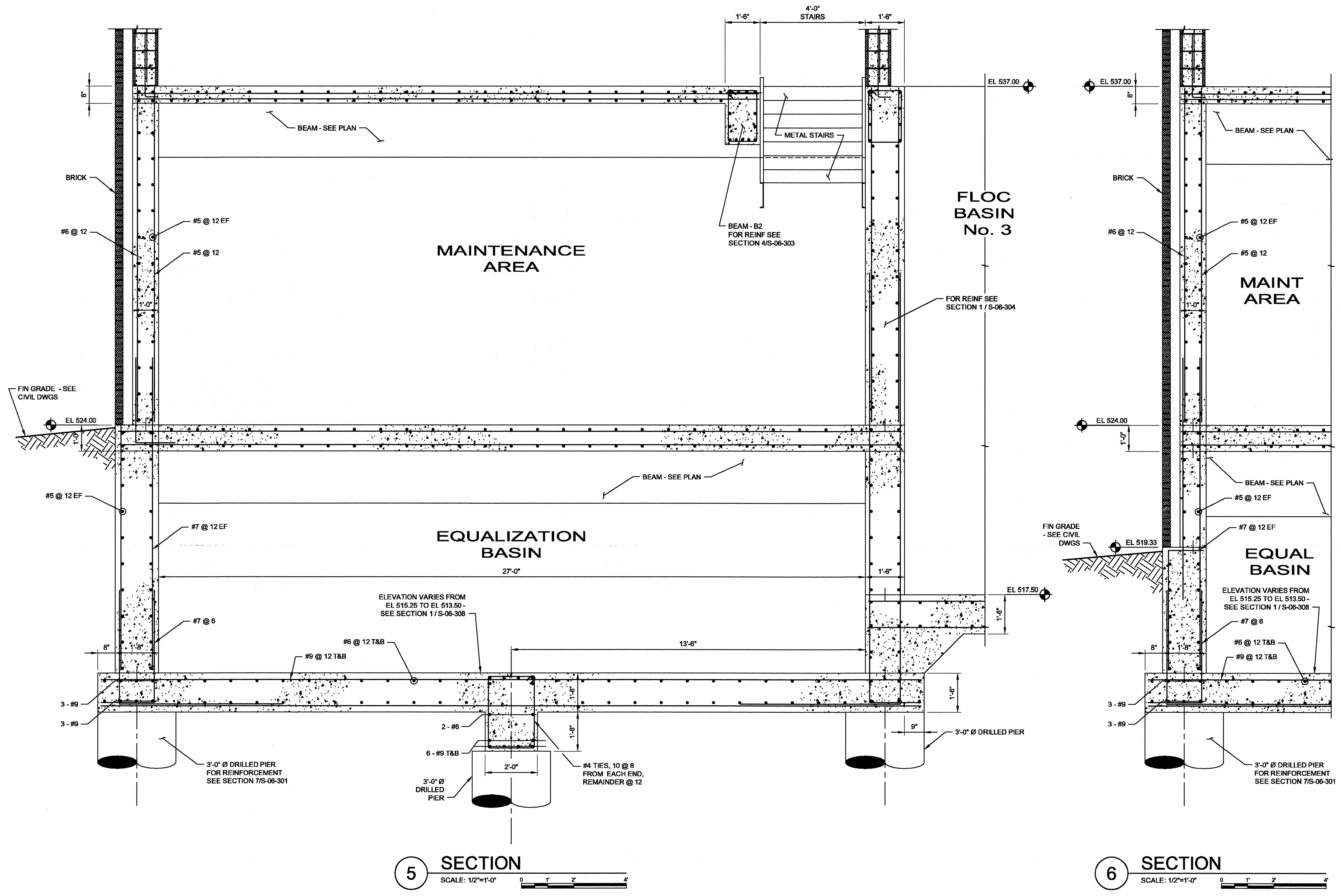
2 SECTION
SCALE: 1/2"=1'-0"



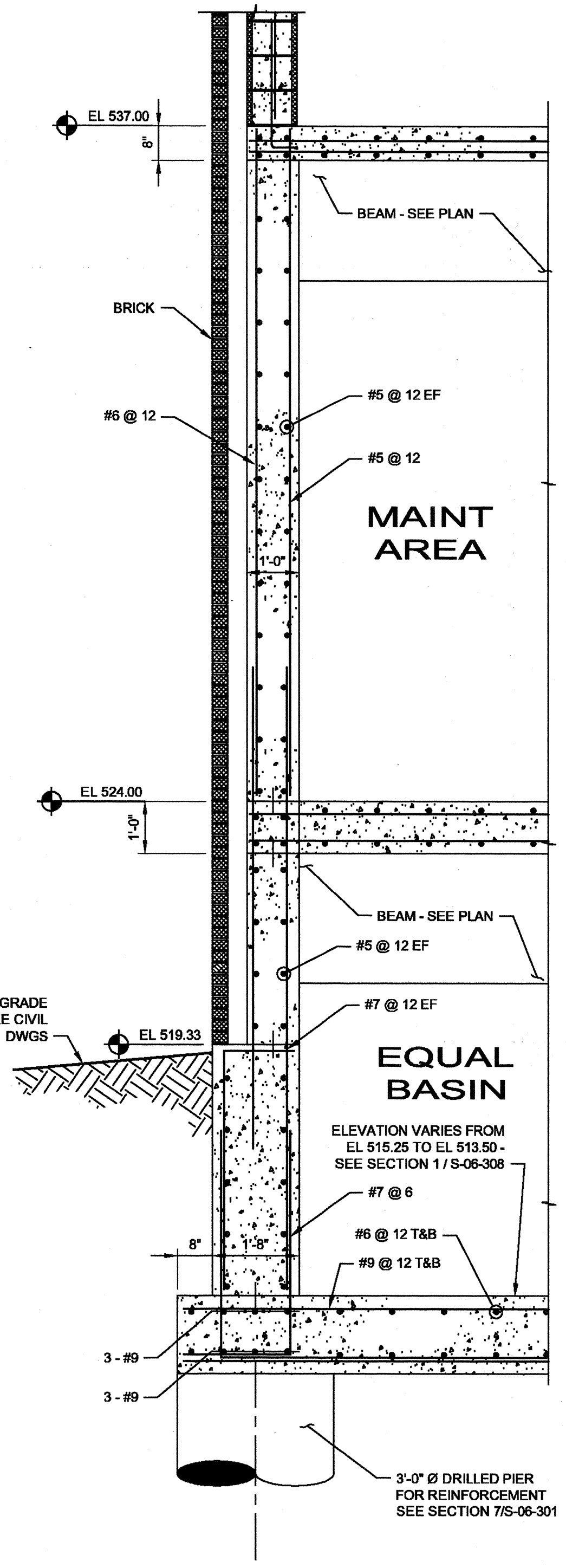
3 SECTION - BEAM B1
SCALE: 1/2"=1'-0"



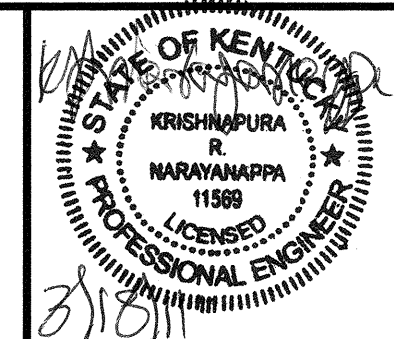
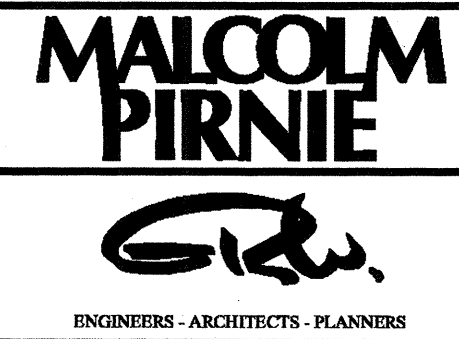
4 SECTION - BEAM B2
SCALE: 1/2"=1'-0"



5 SECTION
SCALE: 1/2"=1'-0"



6 SECTION
SCALE: 1/2"=1'-0"



REVISIONS		DATE	REMARKS
NO.	BY	DATE	REMARKS

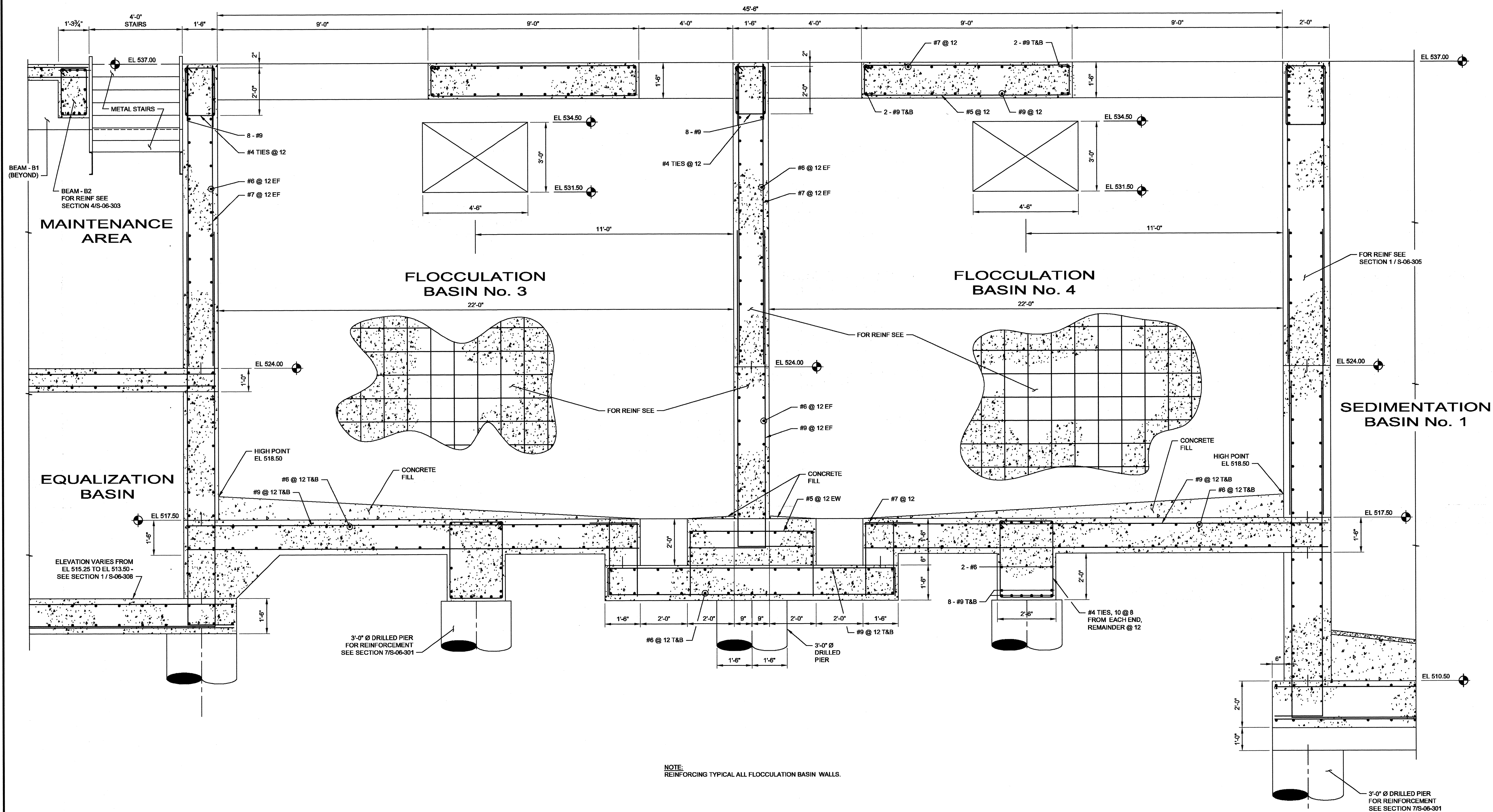
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING
SECTIONS III
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-303
CAD REF. NO.:	3789-S-06-303

User: BOND Spec: PIRNIE STANDARD File: L:\3789-NKWD-Taylor Mill Working Drawings\DESIGN DRAWINGS\STRUCTURE\S-06-304.DWG Scale: 1/8 Saved Date: 16/02/11 Time: 13:12 Plot Date: Bond, Jeff, 30/02/2011, 09:44 Layout: S-06-304



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

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
KRISHNAPUR R
NARAYANAPPA
11989
LICENSED PROFESSIONAL ENGINEER

REVISIONS		REMARKS
NO.	BY	DATE

DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

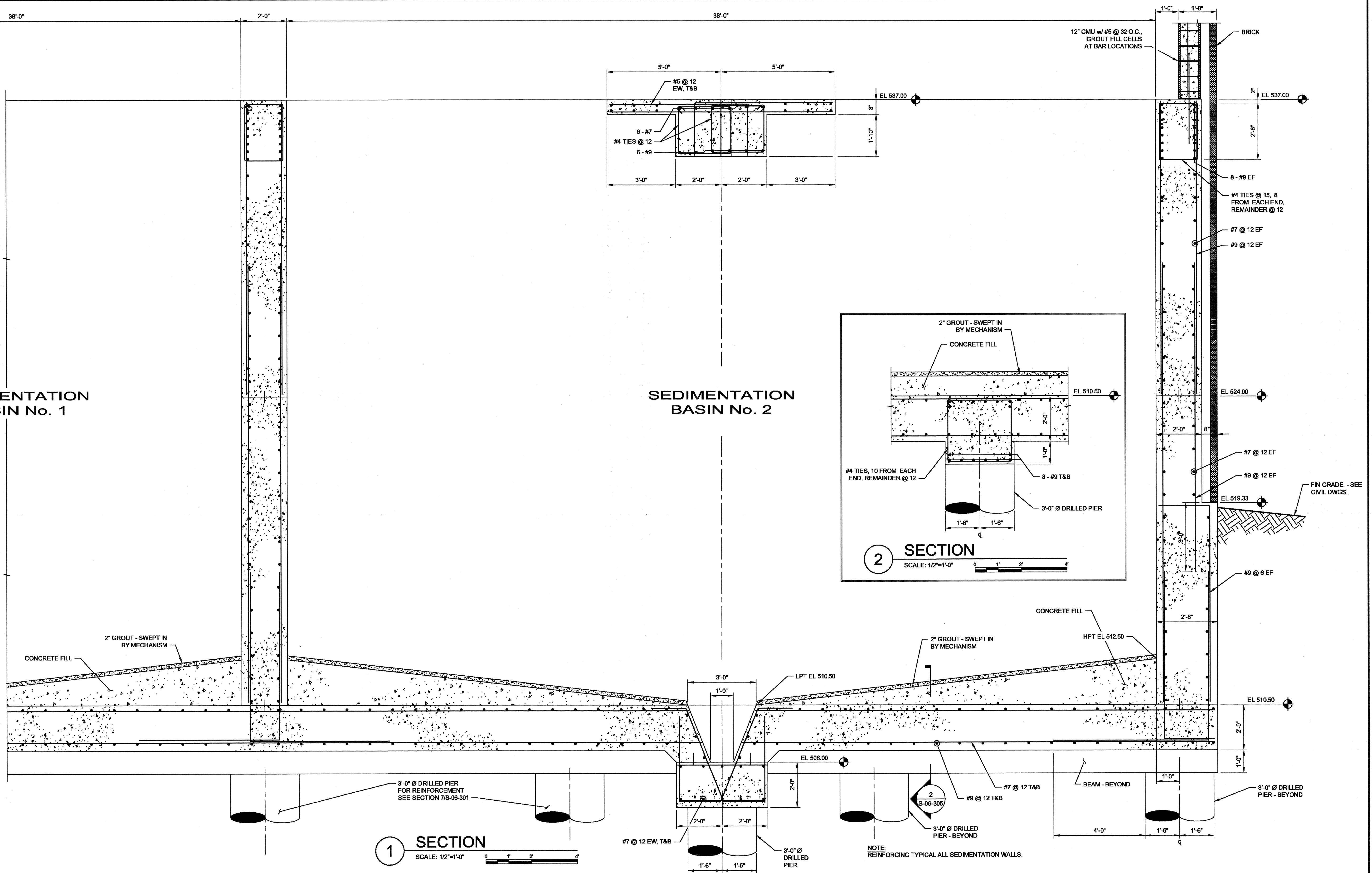
STRUCTURAL
PT / GAC BUILDING
SECTIONS IV
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-304
CAD REF. NO.:	3789-S-06-304

User: BOND Spec: PIRNIE STANDARD File: I:\3786-KRW\TAYLOR MILLWORKING DRAWINGS\STRUCT\3789-S-06-305.DWG Scale: 1:9 SavedDate: 11/19/2010 Time: 15:28 Plot Date: Bond, Jeff, 3/10/2011, 09:41, Layout: S-06-305

SEDIMENTATION BASIN No. 1

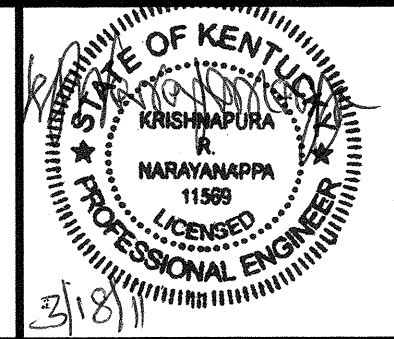
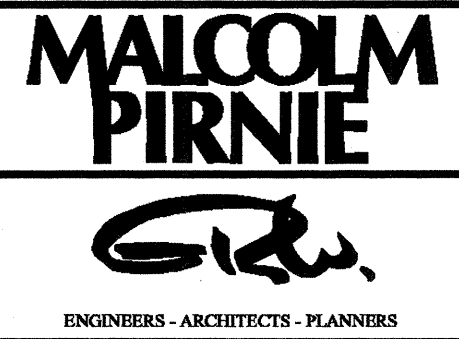
SEDIMENTATION BASIN No. 2



1 SECTION
SCALE: 1/2"=1'-0"
0 1' 2' 4'

2 SECTION
SCALE: 1/2"=1'-0"
0 1' 2' 4'

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

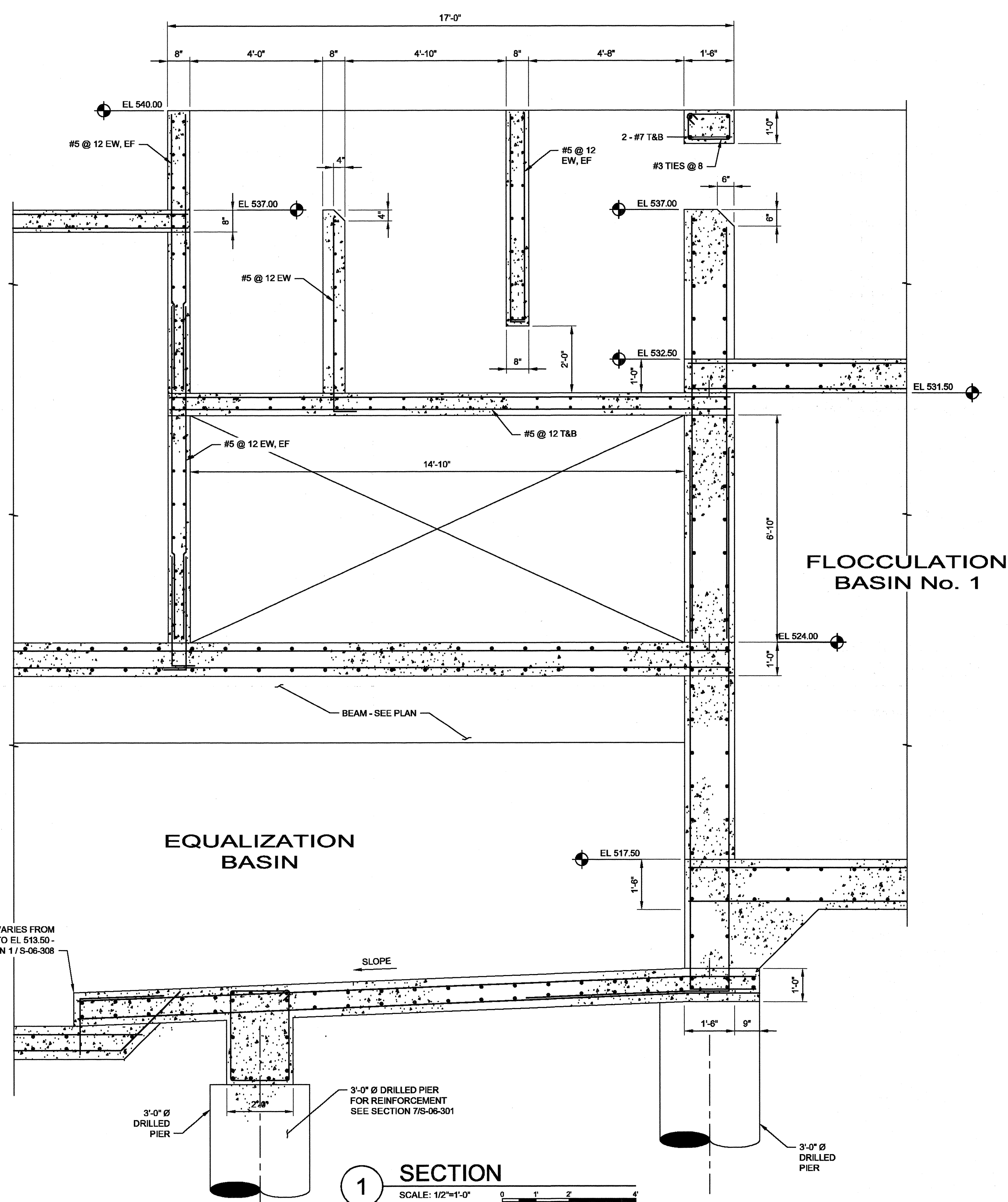
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

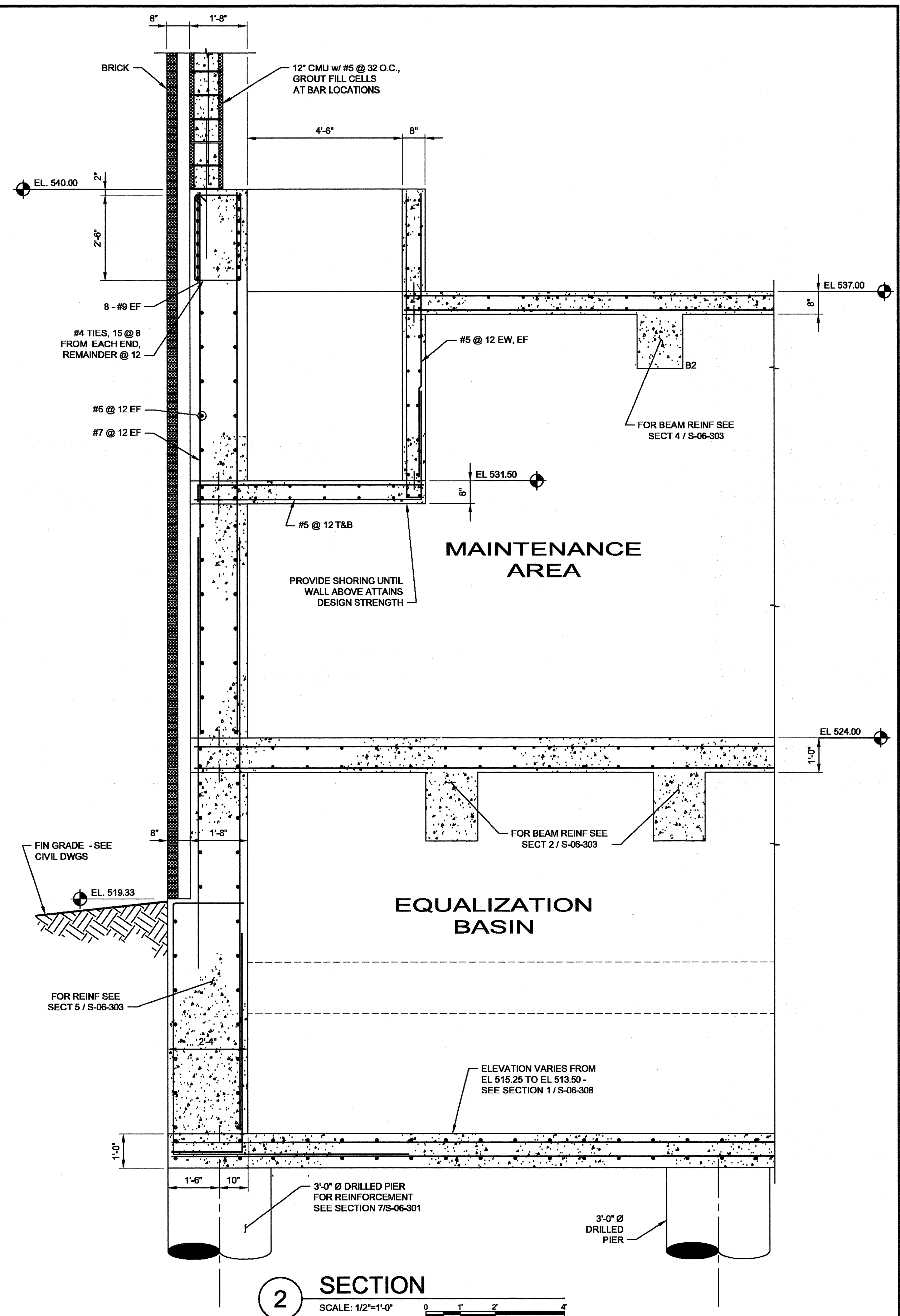
STRUCTURAL
PT / GAC BUILDING
SECTIONS V
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-305
CAD REF. NO.: 3789-S-06-305

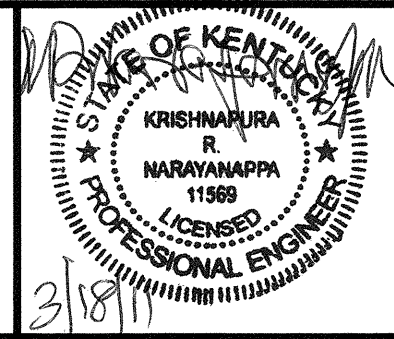
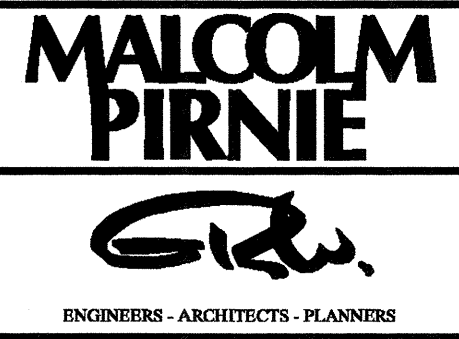
J:\LIC-BOND Spec-PIRNE STANDARD FILE\3788-KRWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\3788-S-06-306.DWG Scale: 1/8 Served Date: 11/19/2010 Time: 15:28 Plot Date: Bond: Jeff, 3/10/2011, 06:41 Layout: S-06-306



1 SECTION
 SCALE: 1/2"=1'-0"
 0 1 2 4



2 SECTION
 SCALE: 1/2"=1'-0"
 0 1 2 4



REVISIONS		REMARKS
NO.	BY	DATE

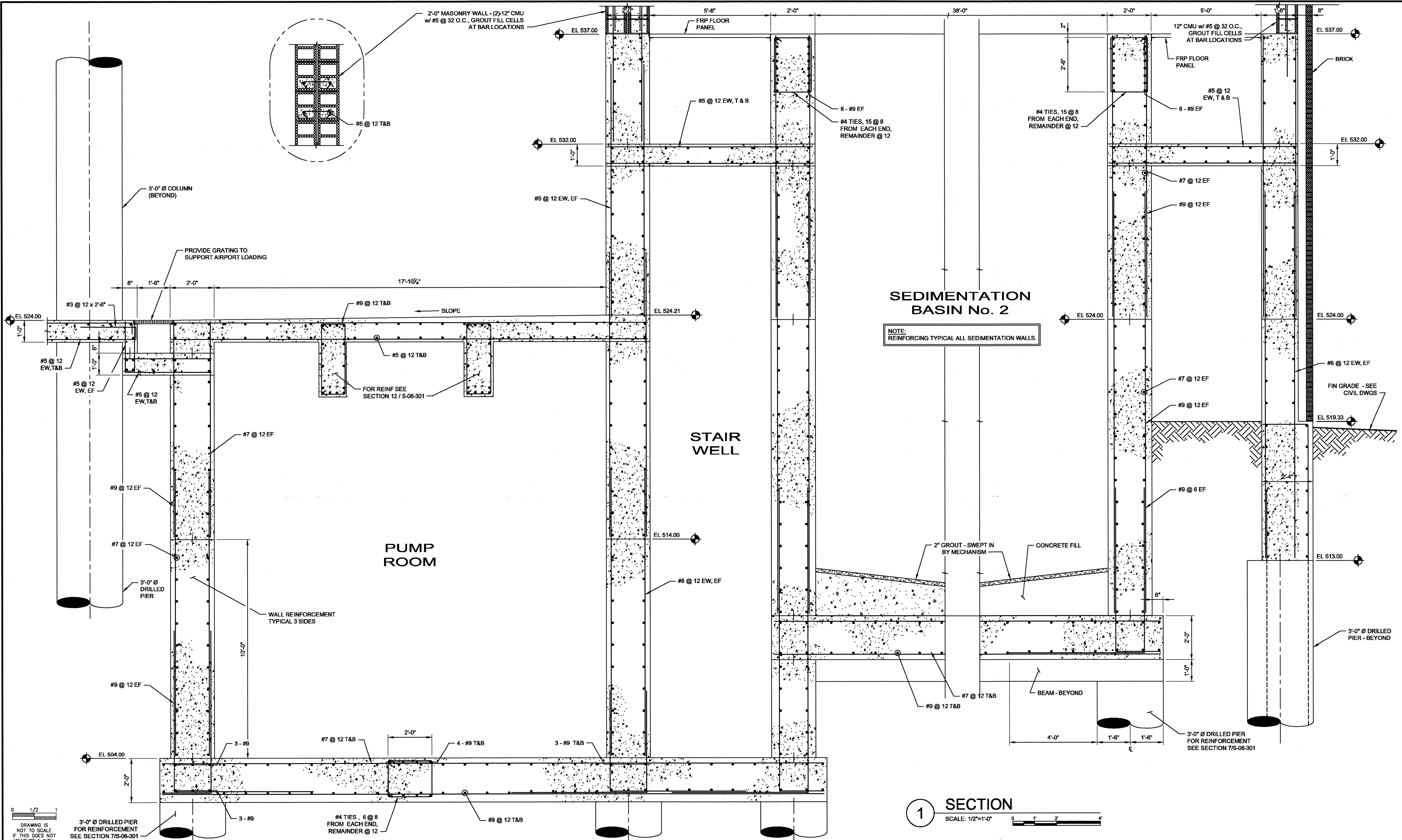
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING SECTIONS VI
 SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE	MARCH, 2011
SHEET	S-06-306
CAD REF. NO.	3788-S-06-306

User: I:\BOND Spec\PIRNE STANDARD File\13788-KNWD TAYLOR MILLWORKING DRAWINGS\STRUCT\3788-S-06-307.DWG Scale: 1/2"=1'-0" Time: 15:29 Pld Date: Bond, Jeff, 3/10/2011, 09:44 ; Layout: S-06-307



SEDIMENTATION BASIN No. 2

NOTE:
REINFORCING TYPICAL ALL SEDIMENTATION WALLS.

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

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
KRISHNAPURA
HARAHANAPPA
11989
LICENSED PROFESSIONAL ENGINEER

REVISIONS			
NO.	BY	DATE	REMARKS

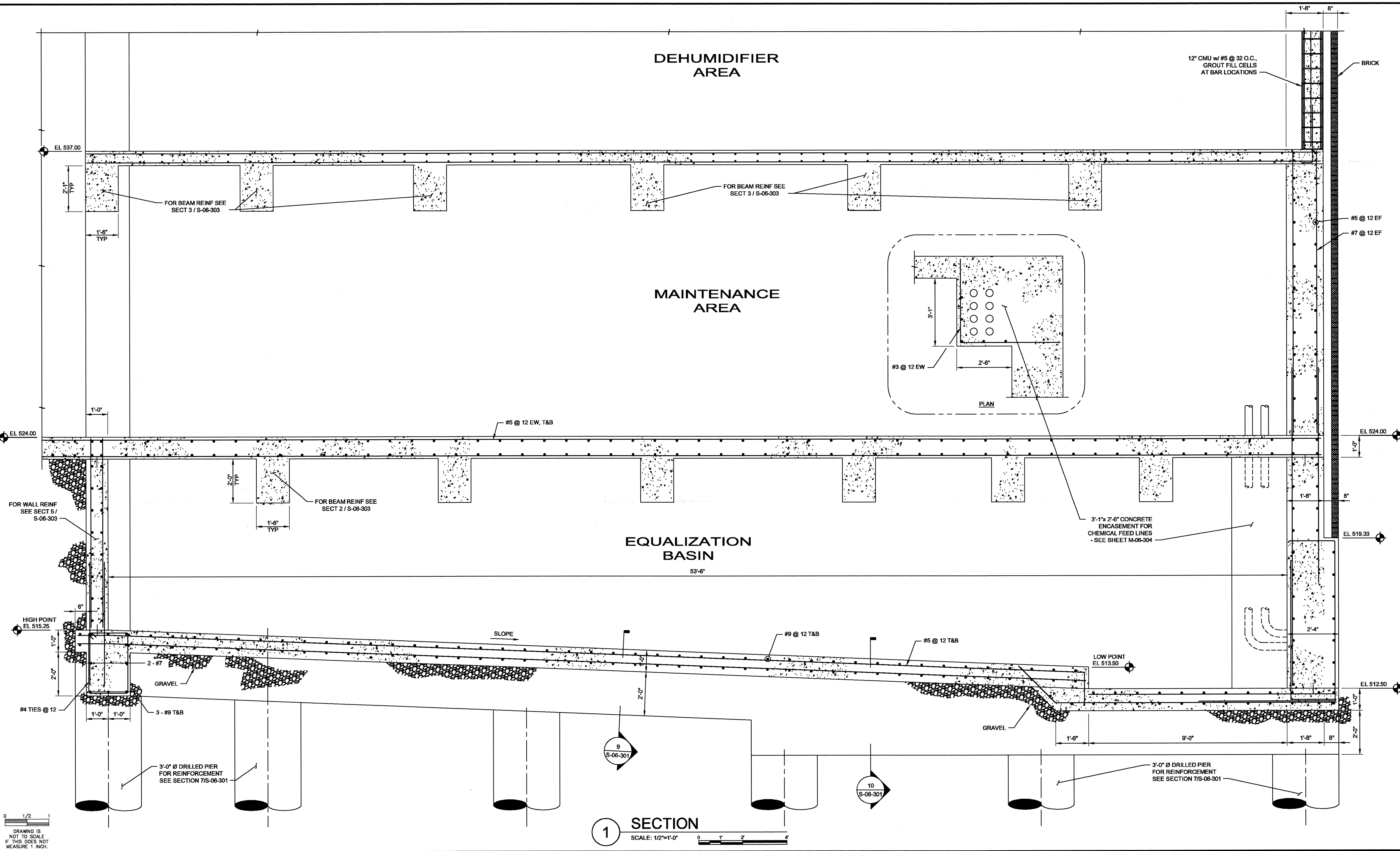
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

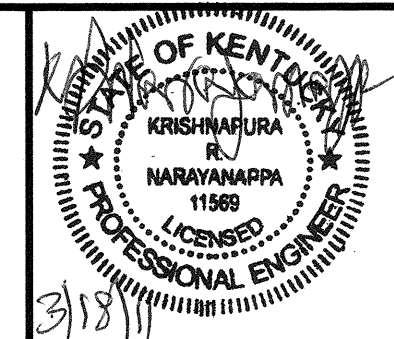
STRUCTURAL
PT / GAC BUILDING
SECTIONS VII
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-307
CAD REF. NO. 3789-S-06-307

User: JBOOND Spec: PIRNIE STANDARD File: L33789-KWD-TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCTURE\3789-S-06-308.DWG Scale: 1:19 Sawed Date: 12/17/2010 Time: 10:24 Plot Date: Bond: Jeff: 3/1/2011: 09:44 Layout: S-06-308



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



NO.		BY	DATE	REVISIONS	REMARKS

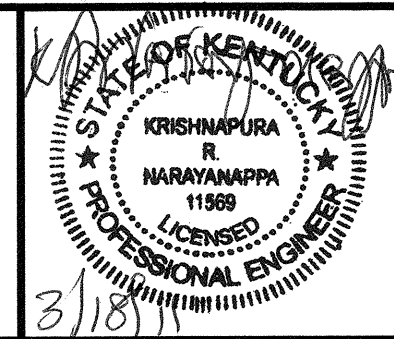
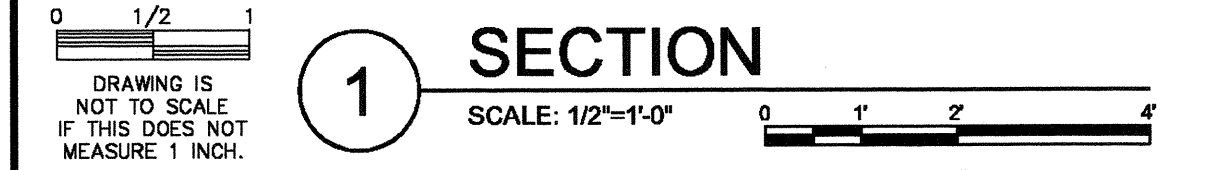
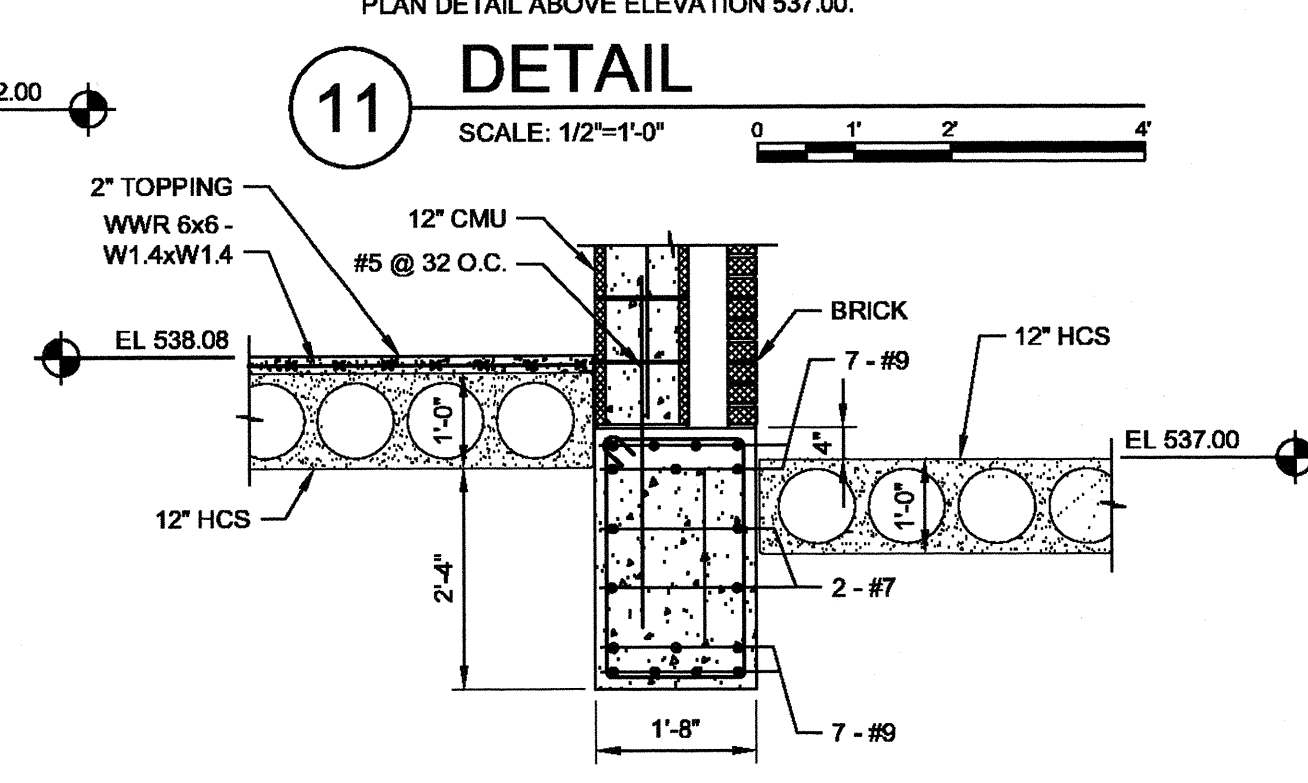
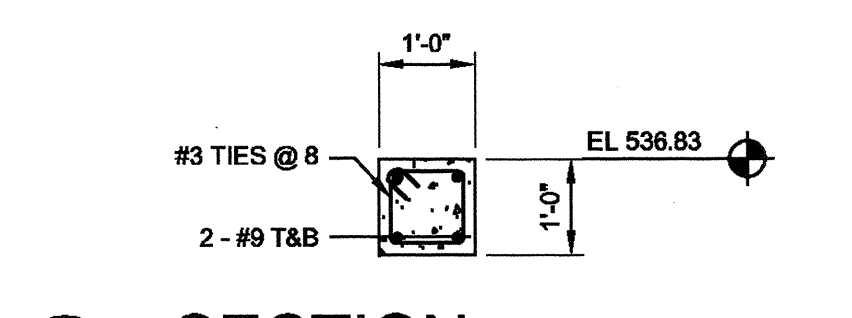
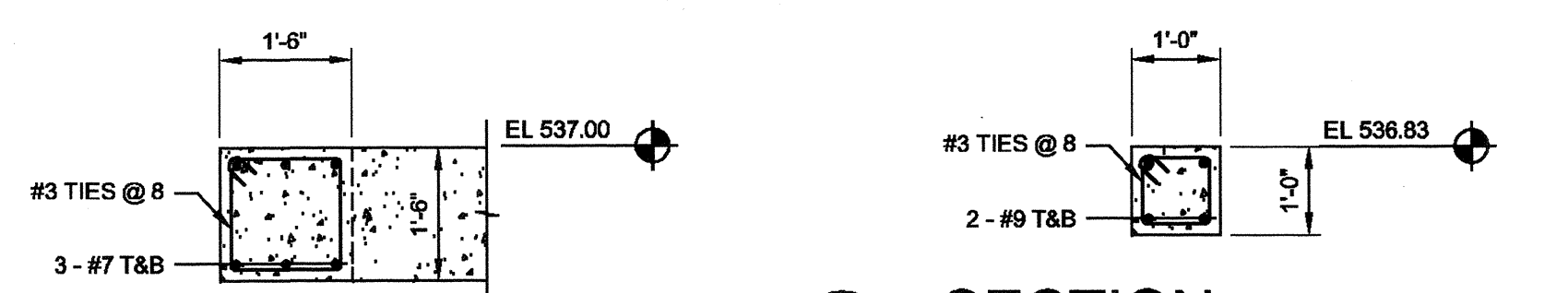
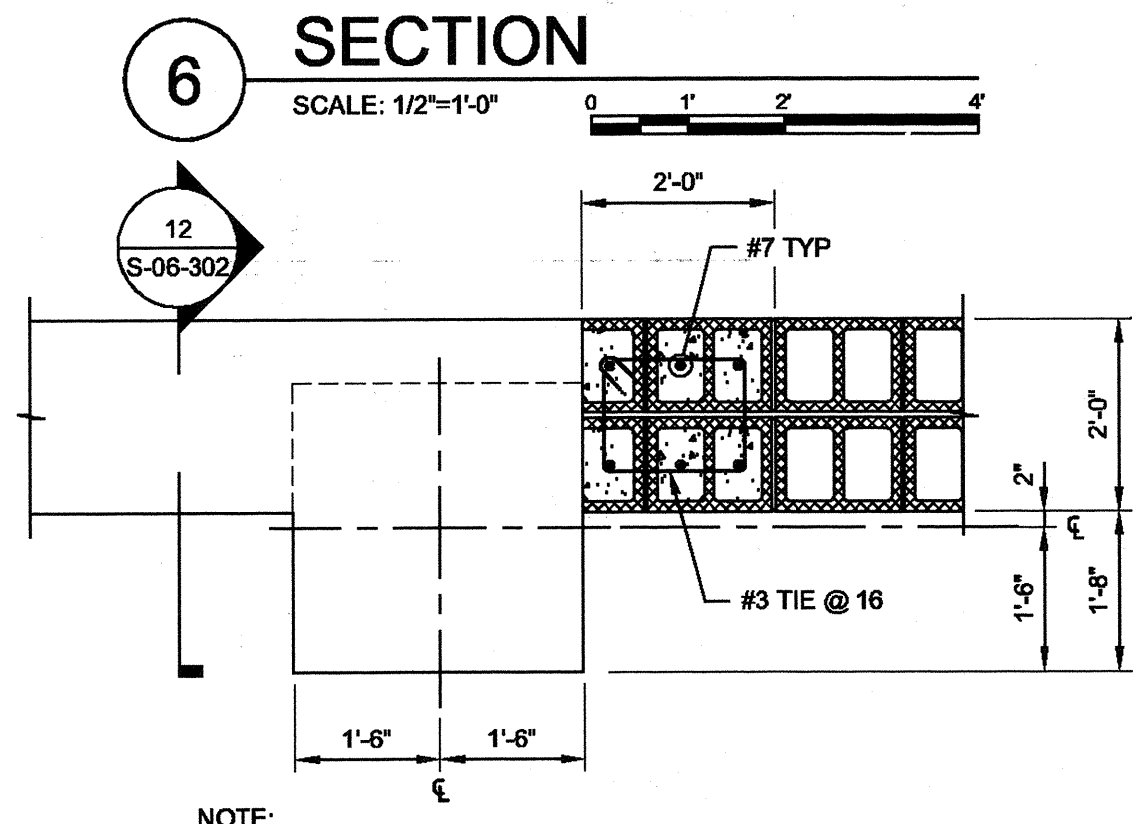
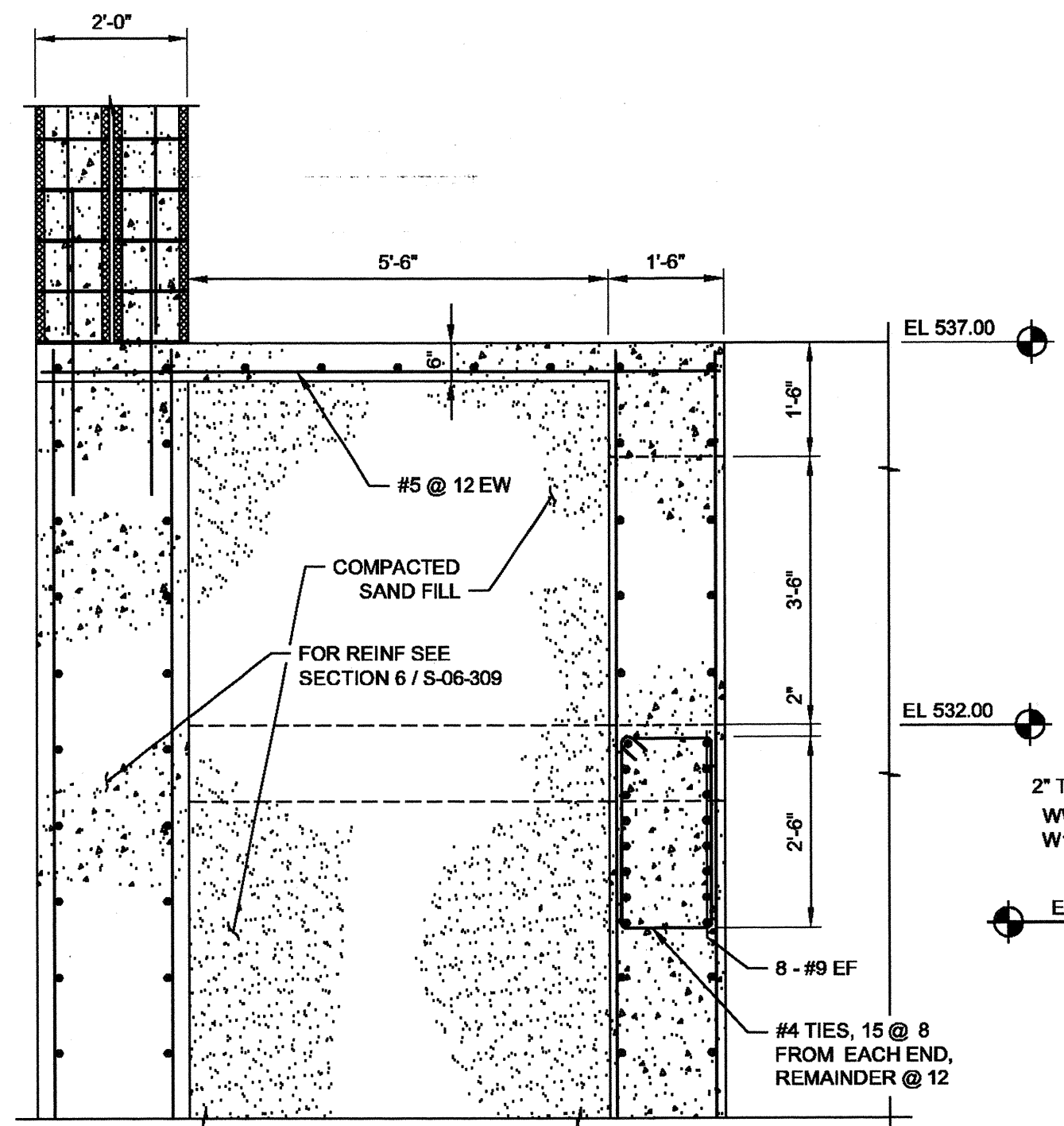
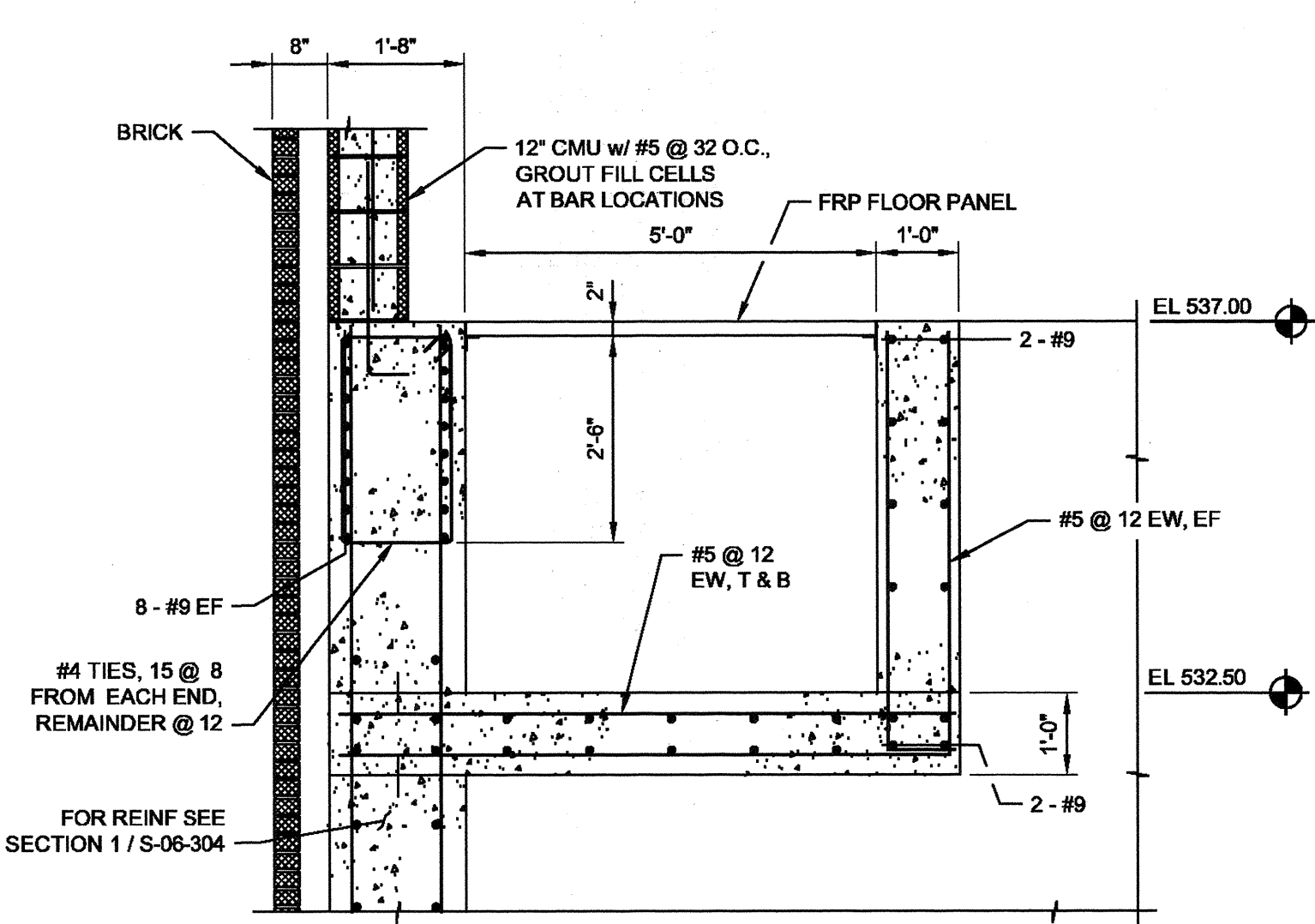
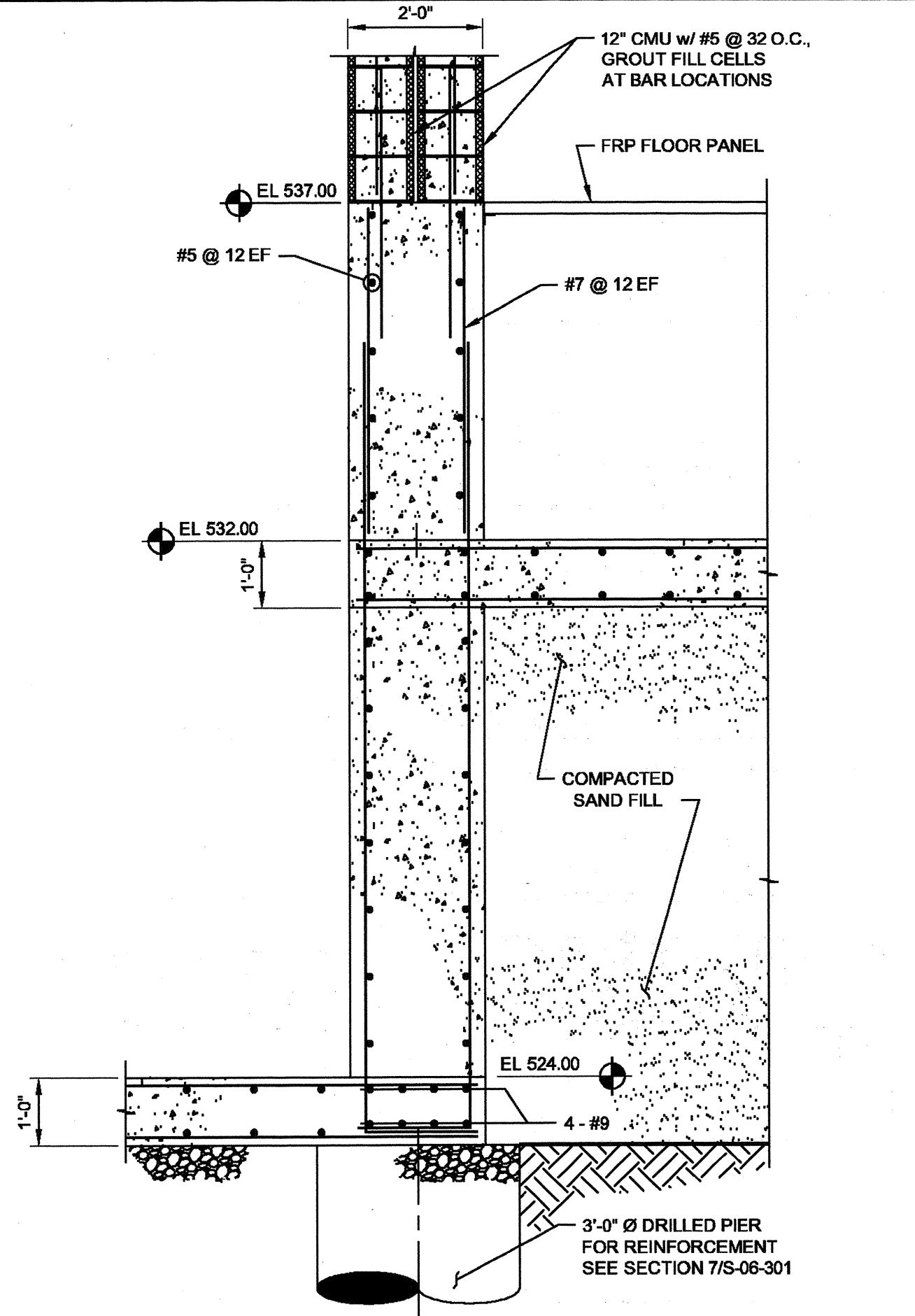
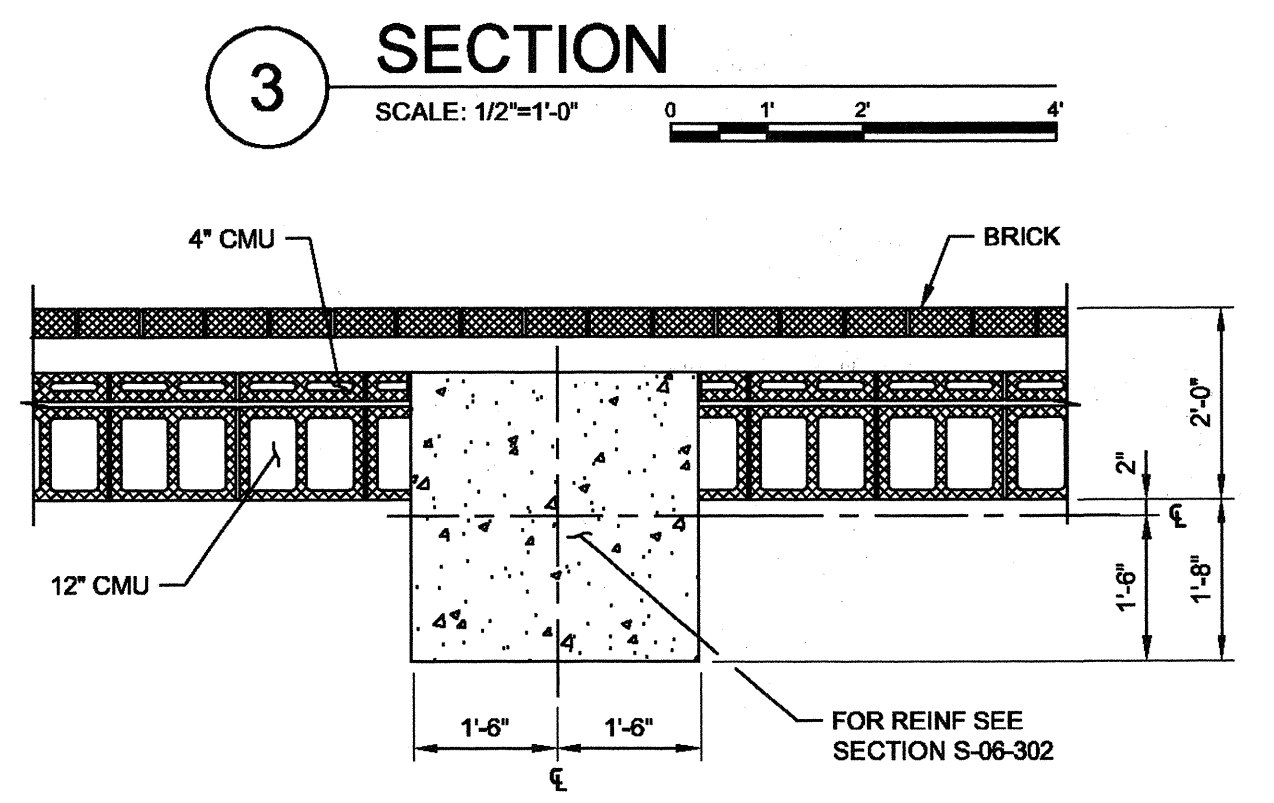
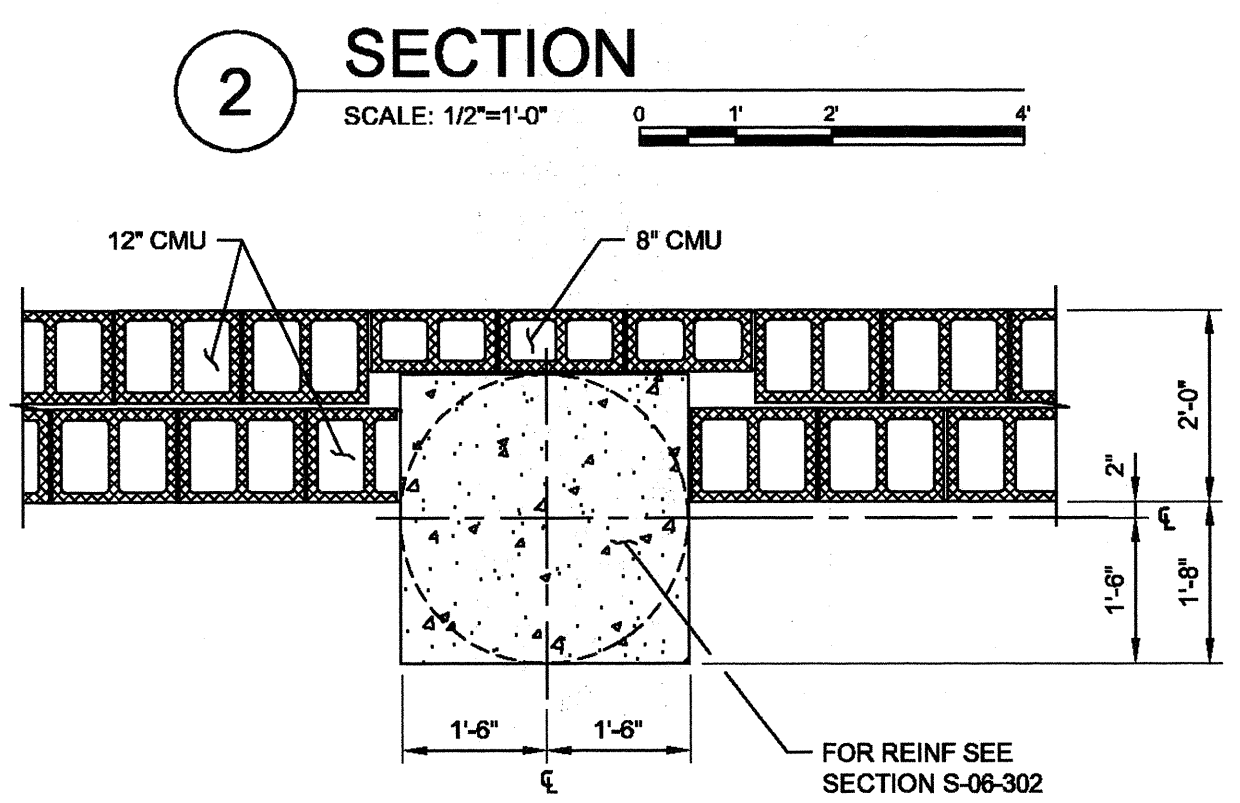
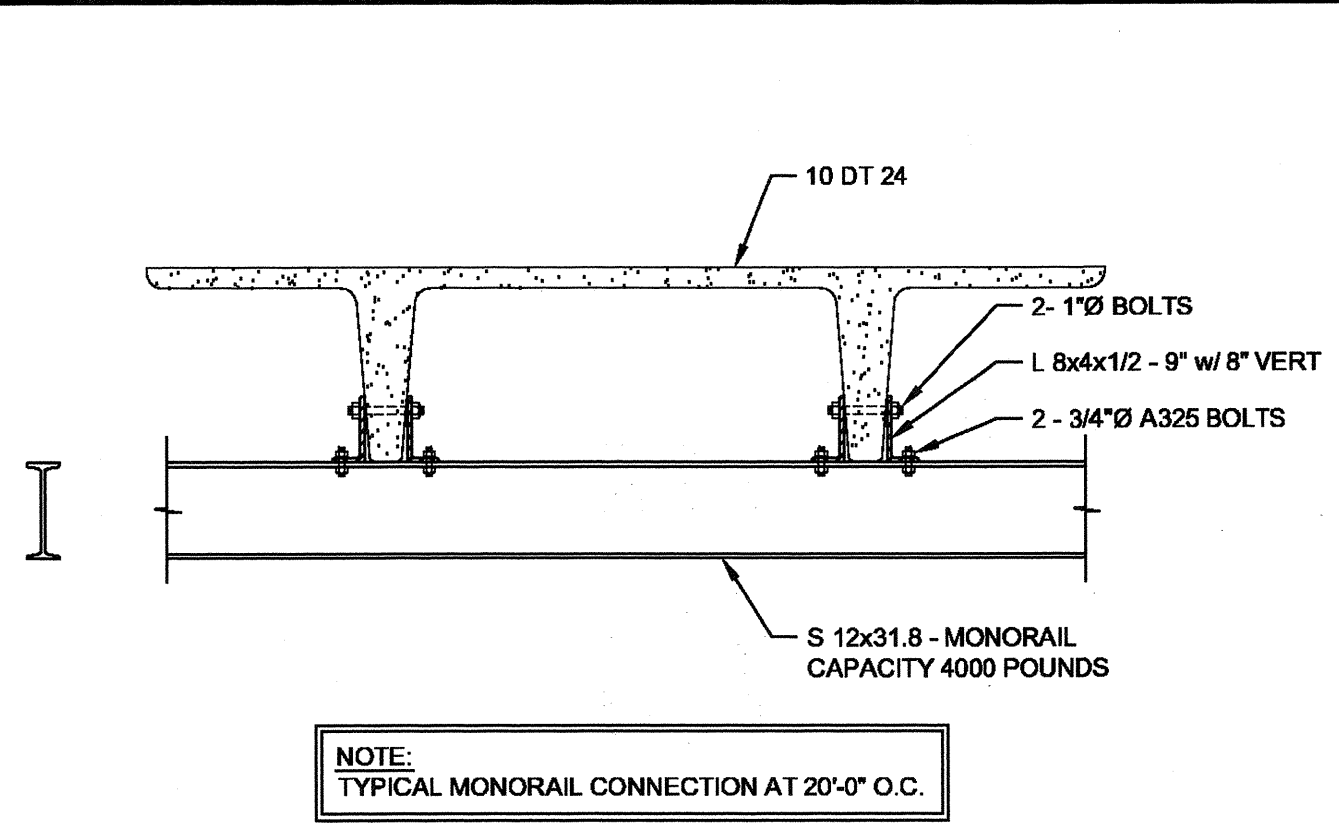
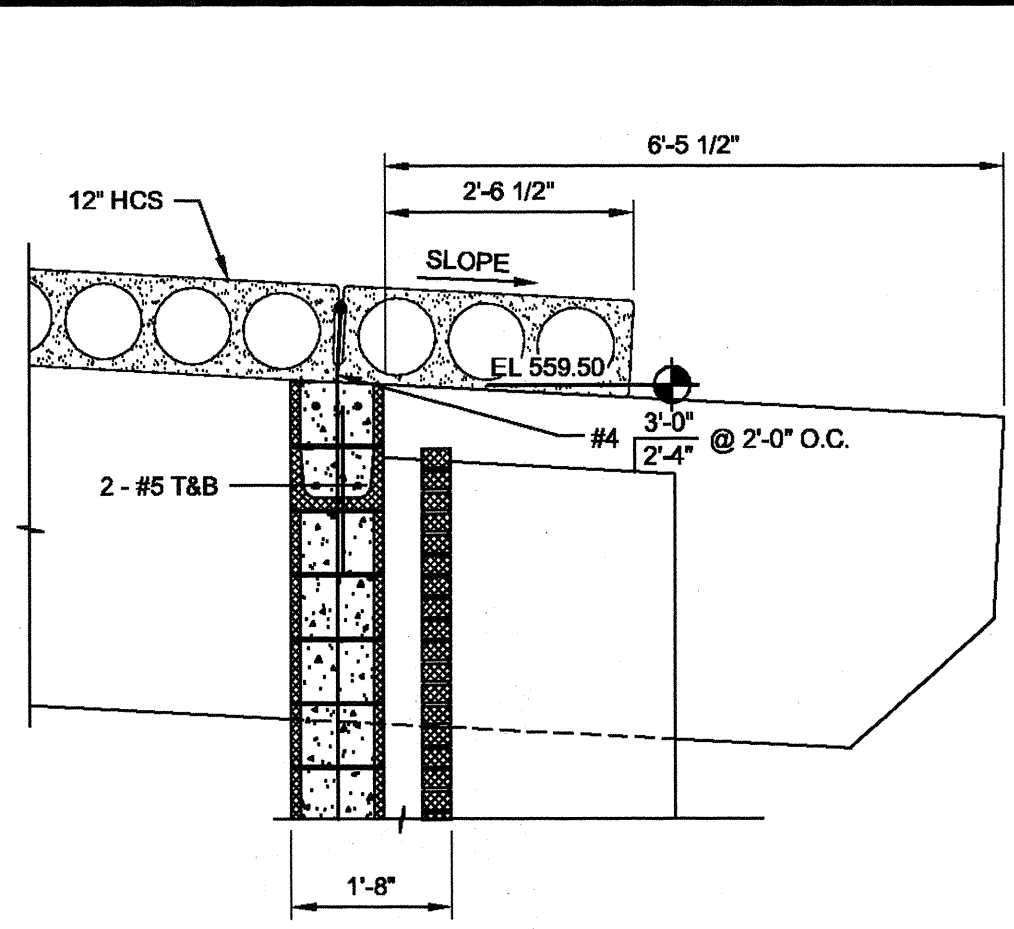
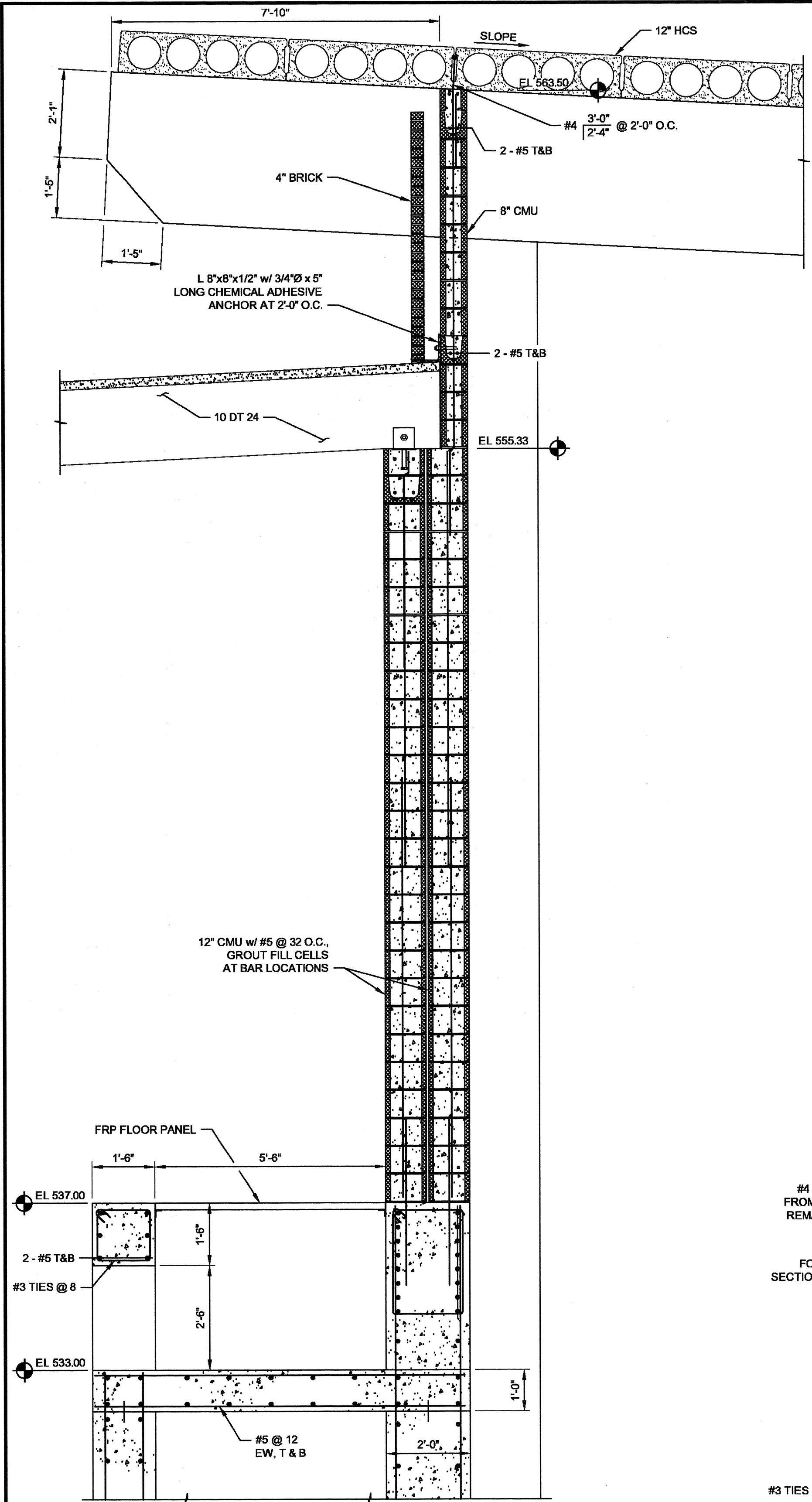
DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING
SECTIONS VIII
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-308
CAD REF. NO.: 3789-S-06-308

User: IBCOND Spec: PIRNIE STANDARD File: U:\3789\AKWTD TAYLOR MILLWORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-06-309.DWG Scale: 1/8 Saved Date: 1/6/2011 Time: 1:16:17 Plot Date: Bond_Lefr 3/10/2011 09:45 Layout: S-06-309



REVISIONS		REMARKS
NO.	BY	DATE

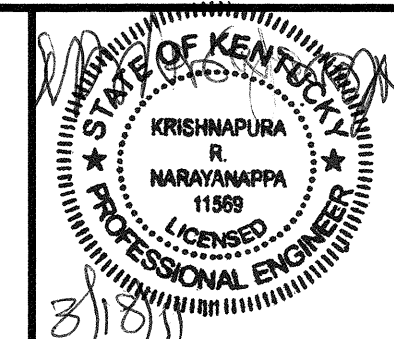
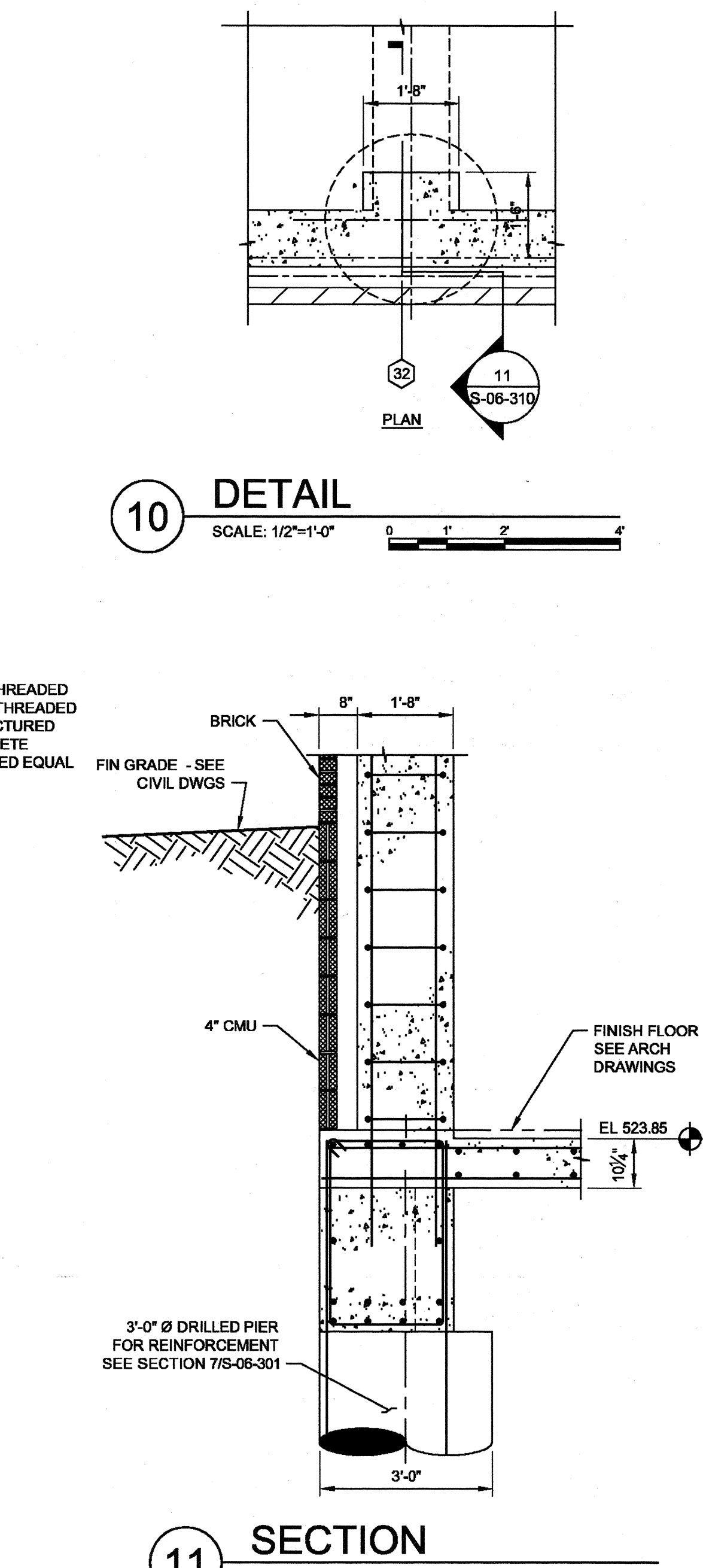
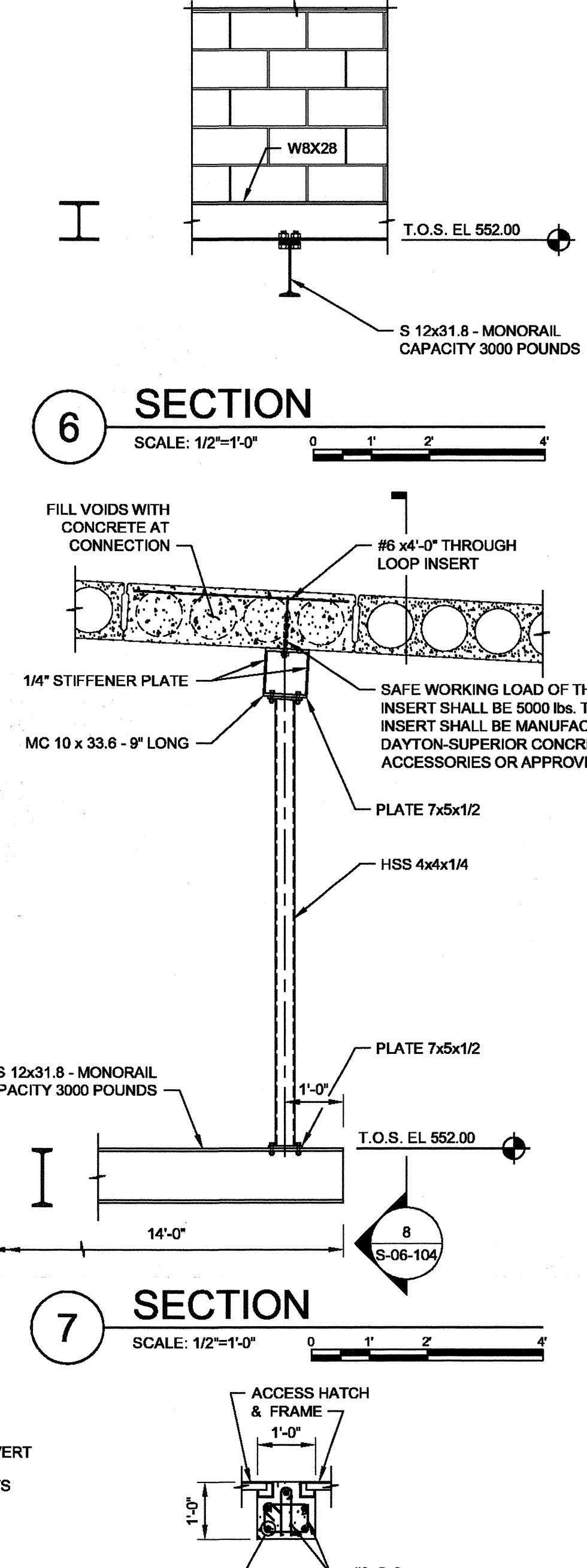
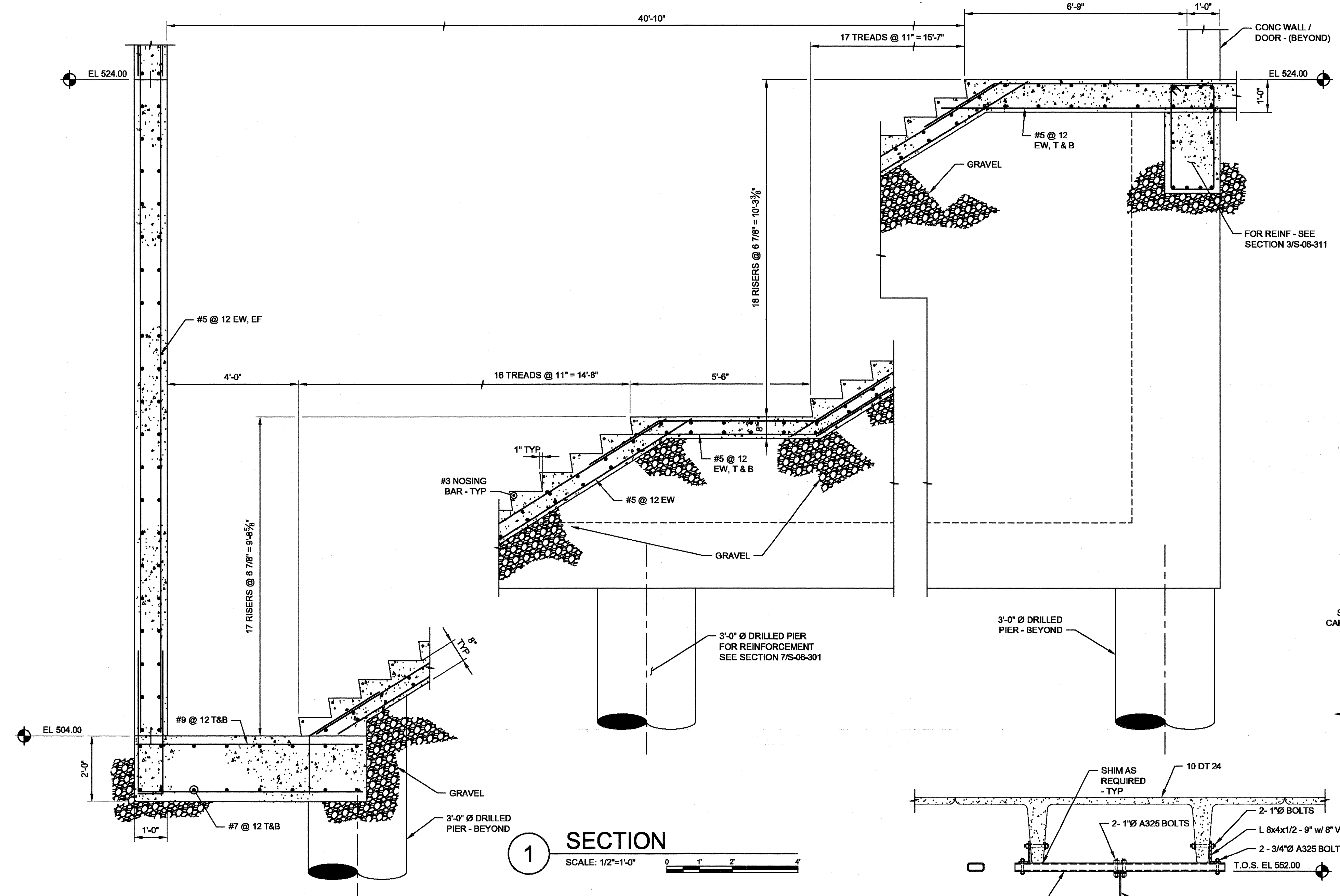
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING SECTIONS IX
 SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE	MARCH, 2011
SHEET	S-06-309
CAD REF. NO.	3789-S-06-309

User: J:\BOND Spec\PIRNE STANDARD File\1378\ANKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCTURE\S-06-310.DWG Scale: 1:9 Sawed\Bar: 2/9/2011 Time: 10:20 Plot Date: Bond_Jan: 3/10/2011: 08:45 Layout: S-06-310



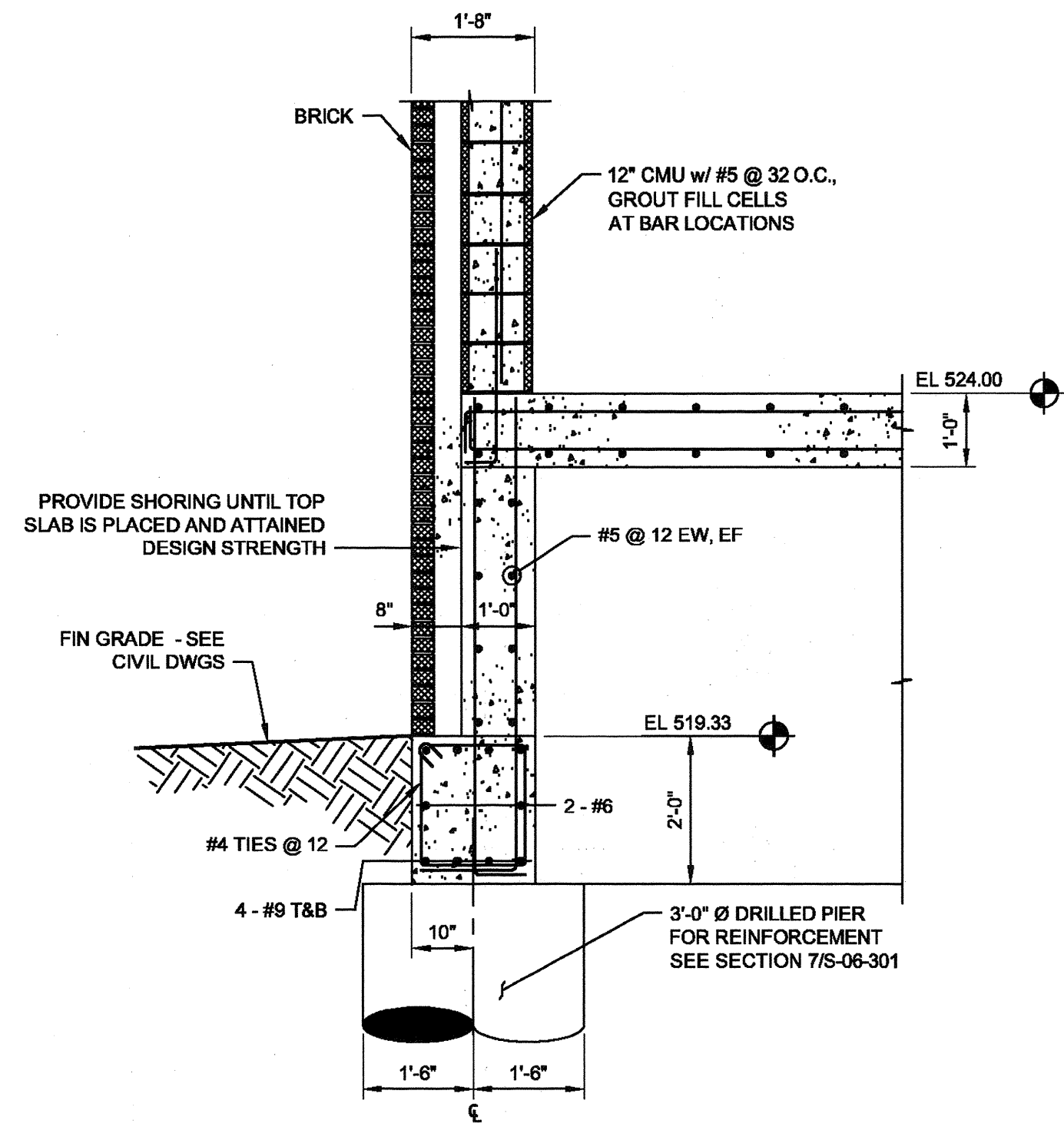
REVISIONS				DES. STAFF
NO.	BY	DATE	REMARKS	

DES. STAFF
DWN. STAFF
C/O. KRN

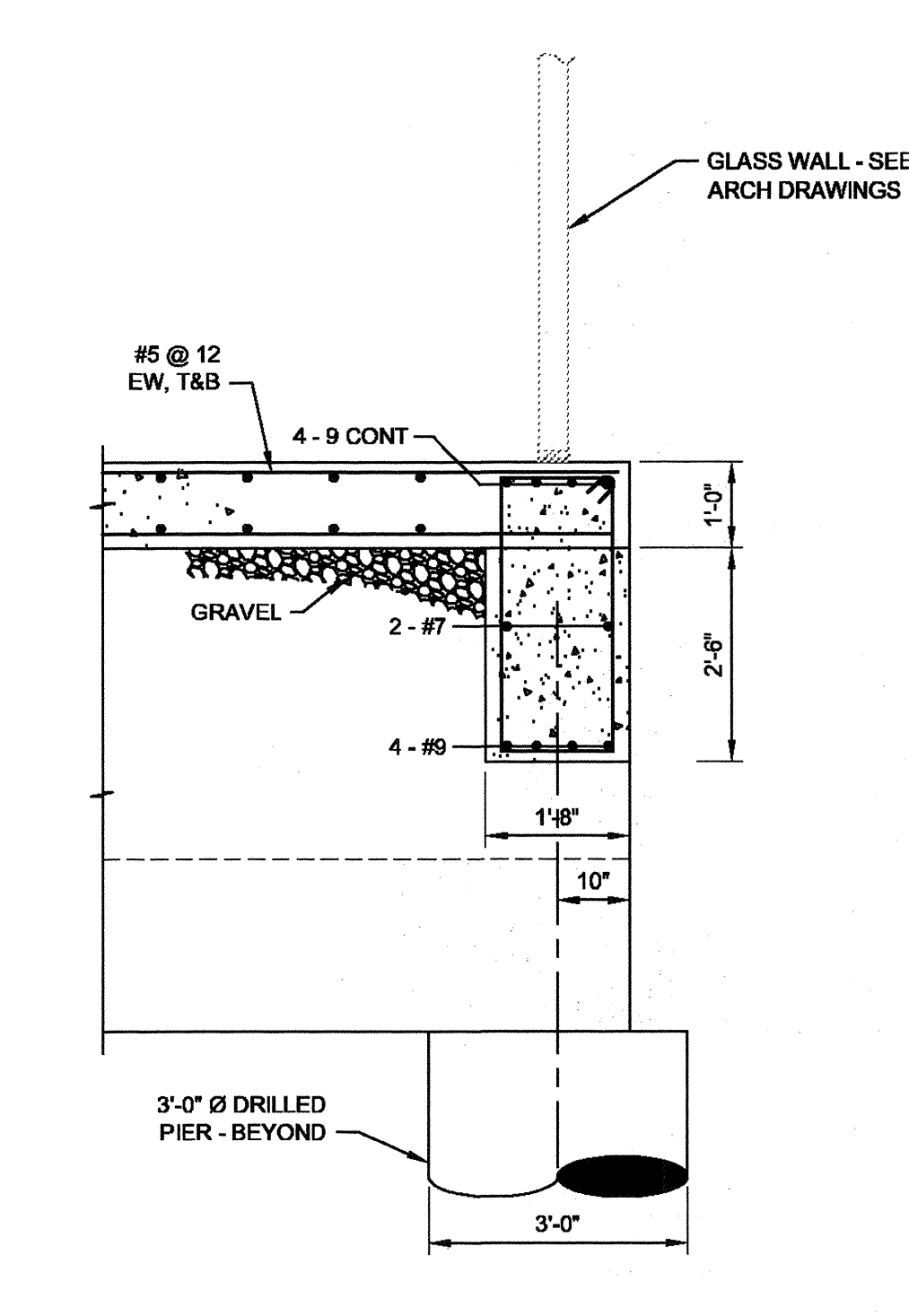
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING
SECTIONS X
SCALE: AS NOTED

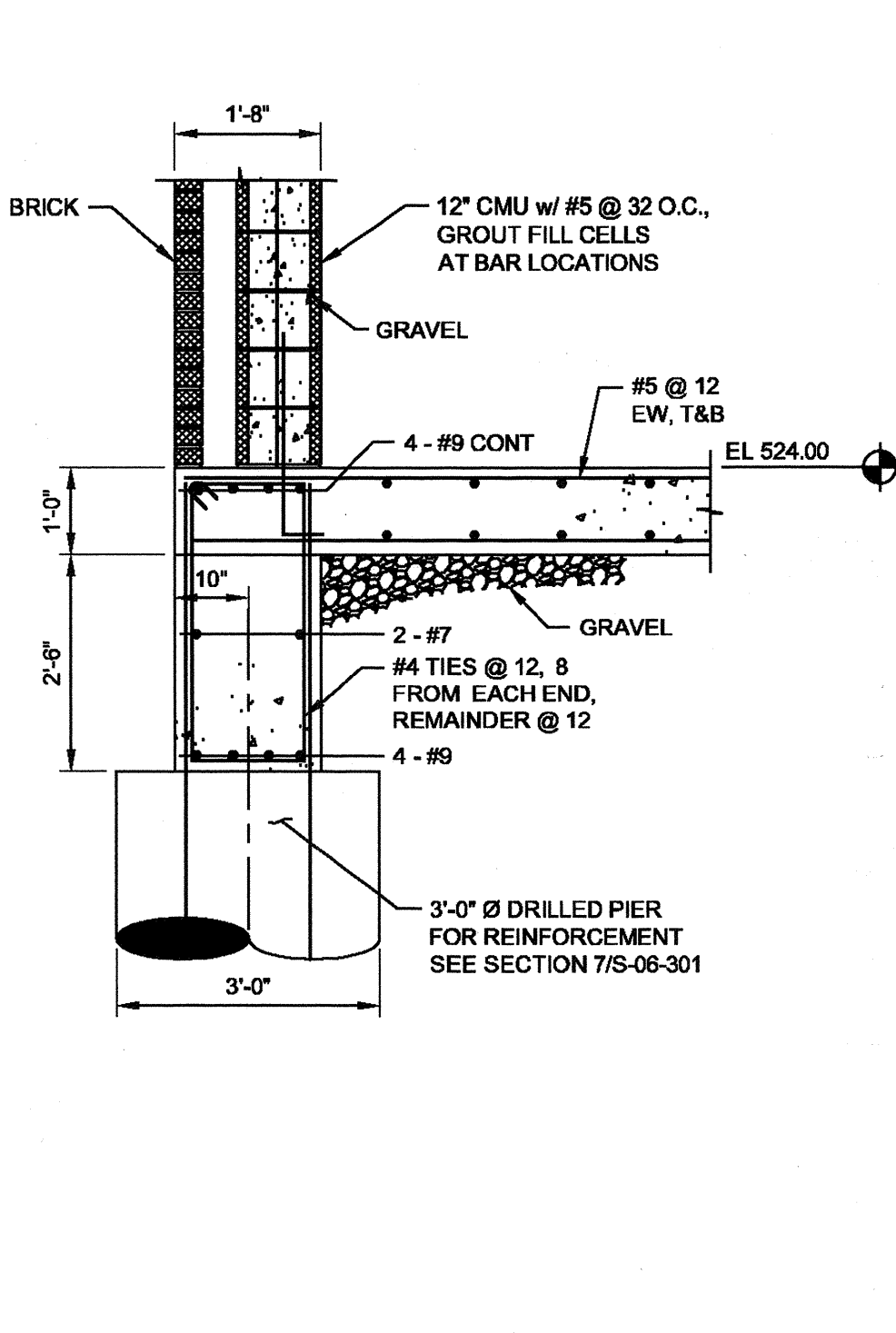
ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	S-06-310
CAD REF. NO.:	3789-S-06-310



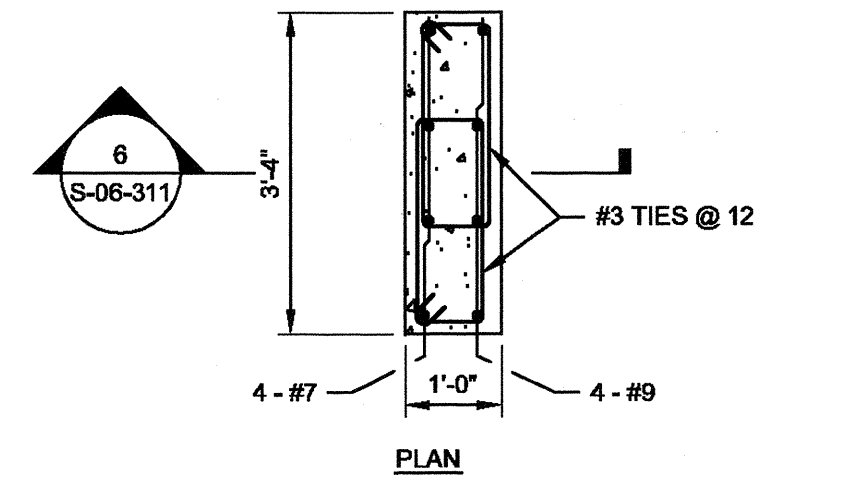
1 SECTION
SCALE: 1/2"=1'-0"



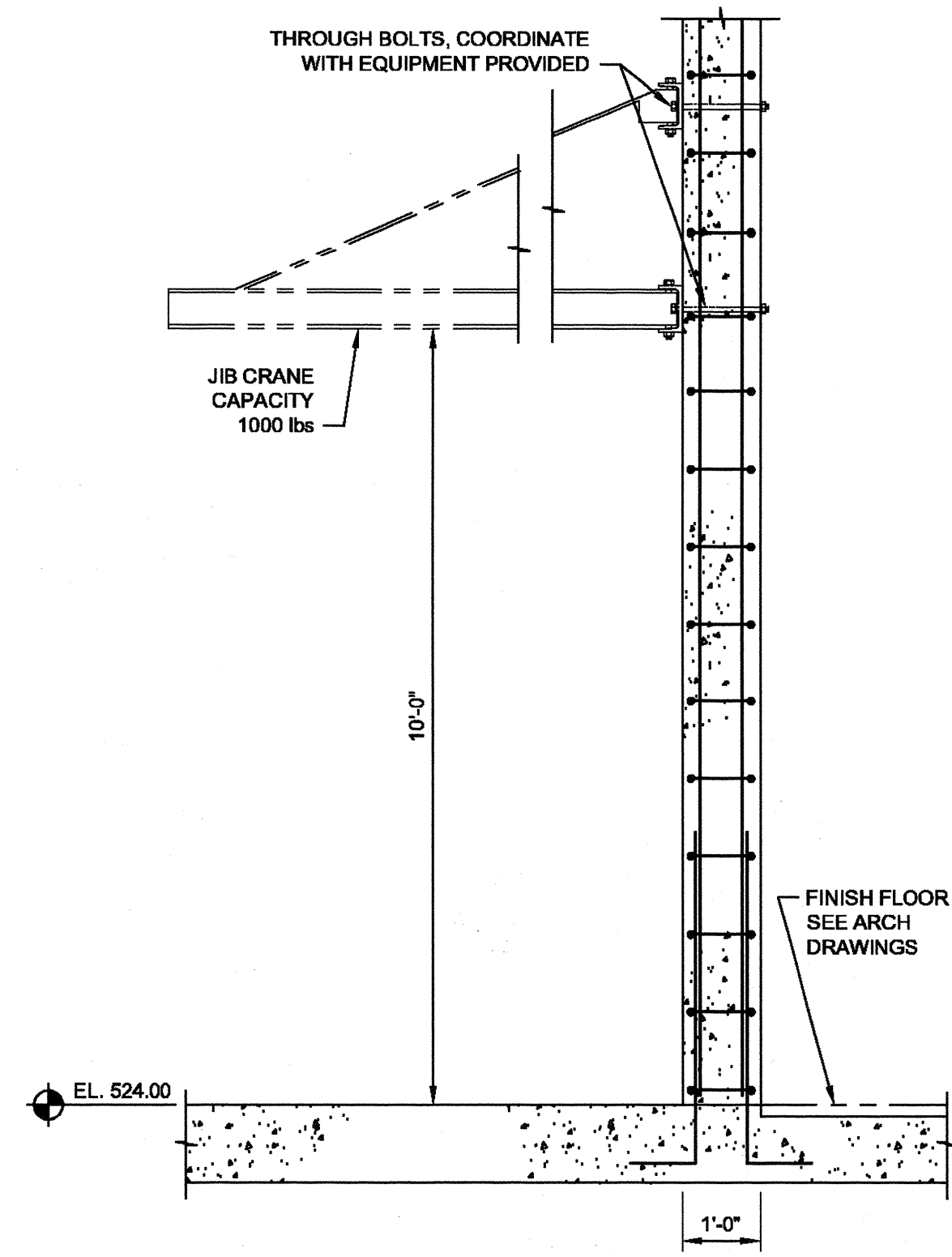
2 SECTION
SCALE: 1/2"=1'-0"



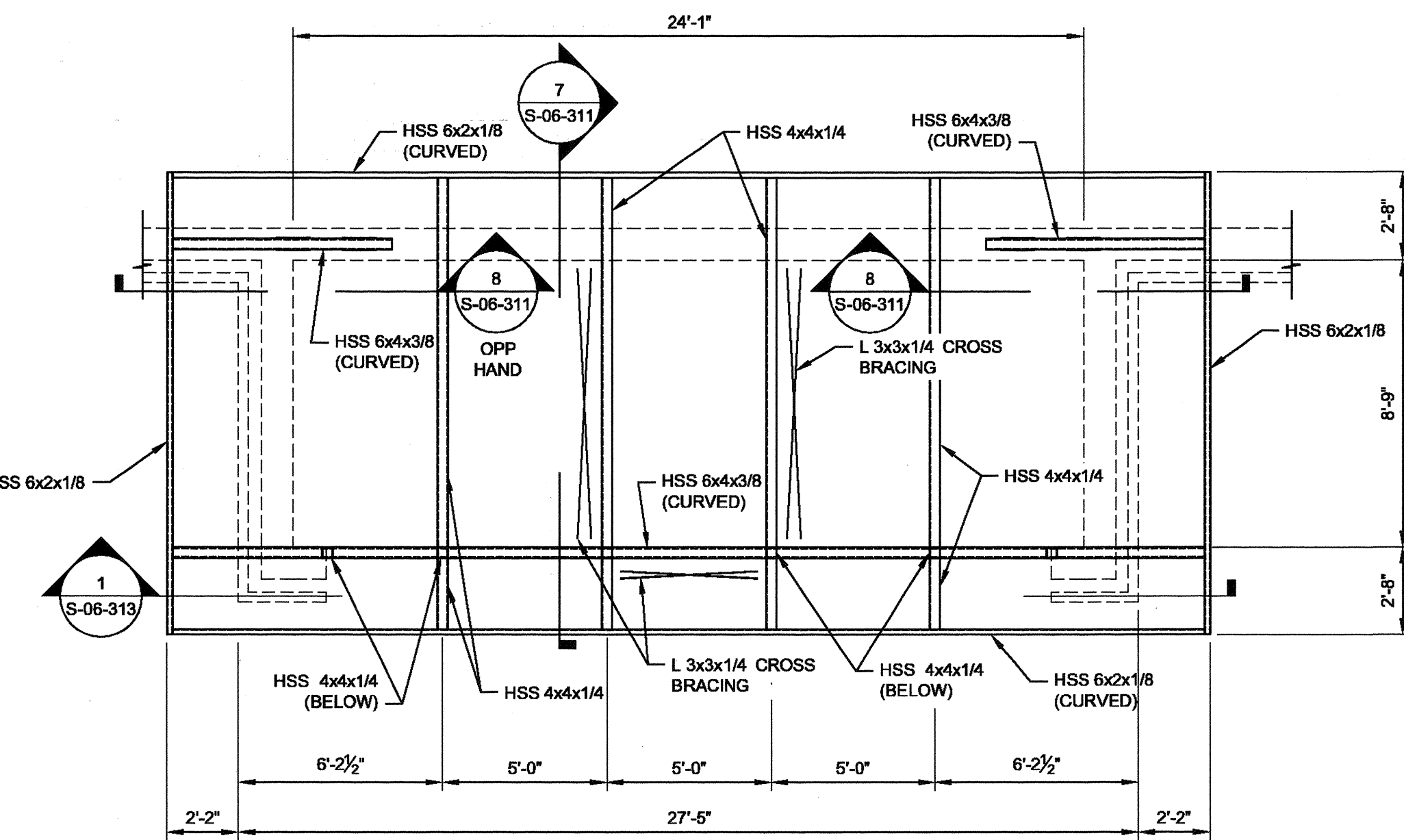
3 SECTION
SCALE: 1/2"=1'-0"



5 DETAIL
SCALE: 1/2"=1'-0"



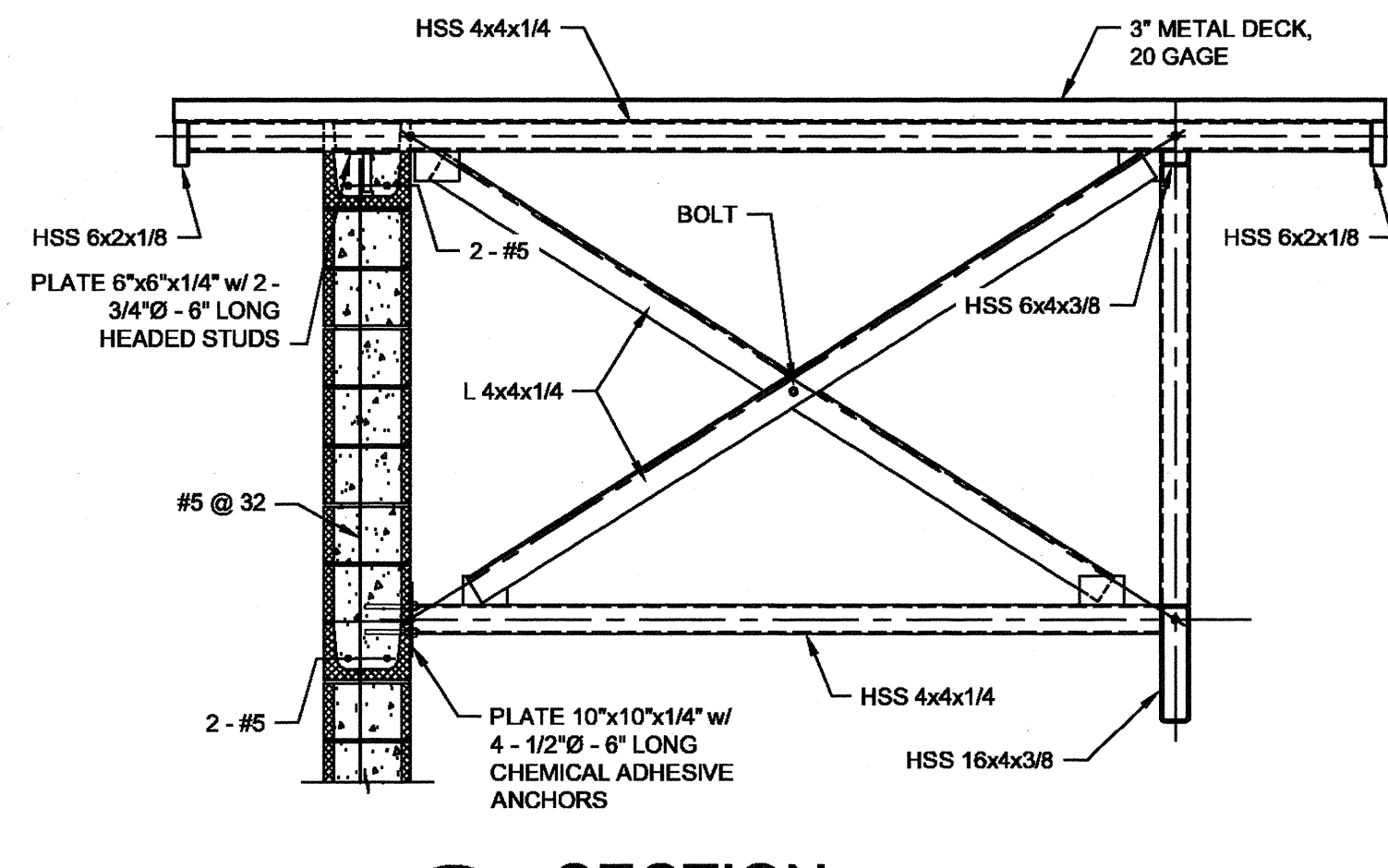
6 SECTION
SCALE: 1/2"=1'-0"



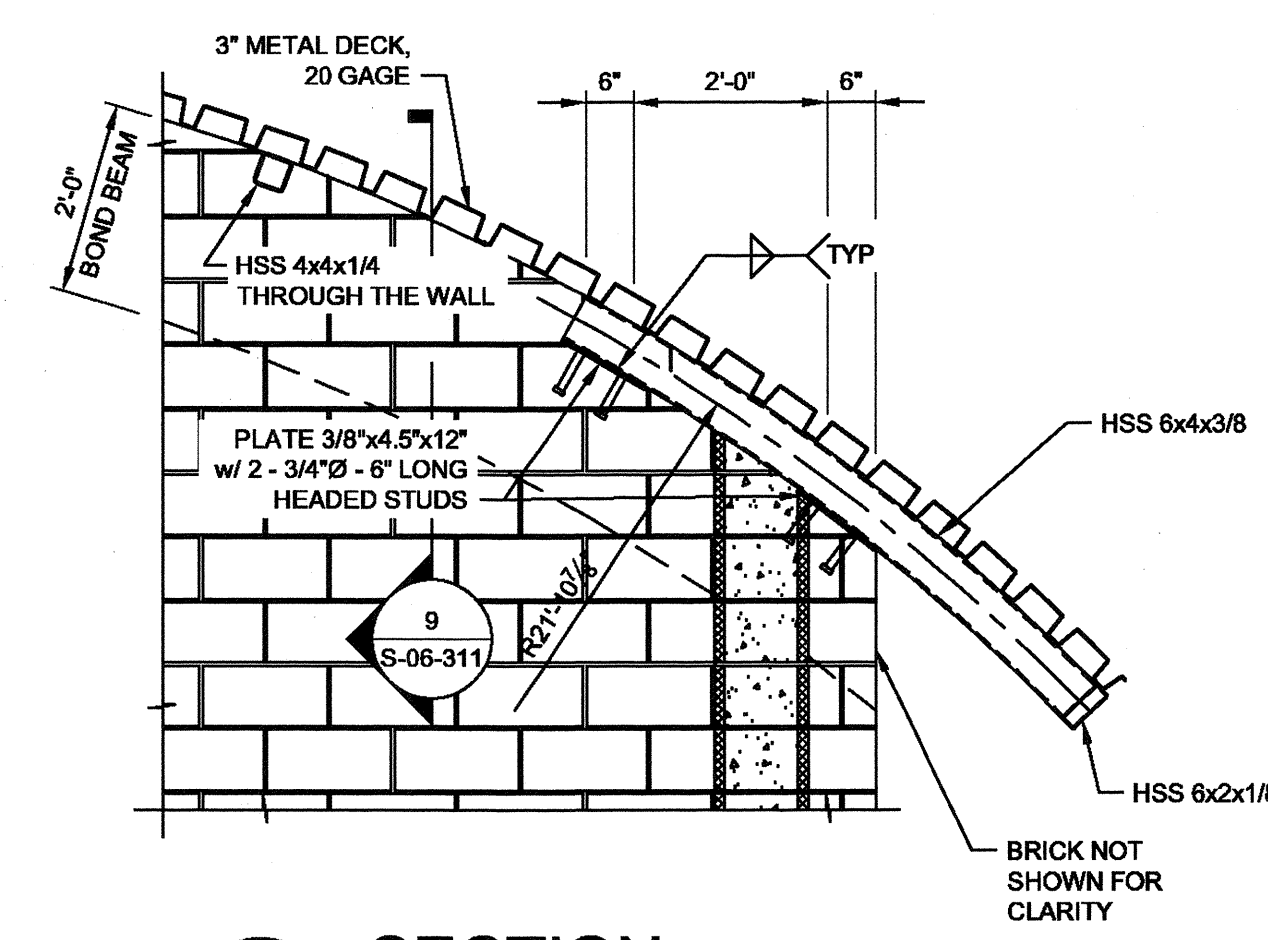
NOTE:
1. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DETAILS.
2. FOR ADDITIONAL DETAILS SEE SHEET S-06-313.

**STAIR TOWER
ROOF FRAMING PLAN**

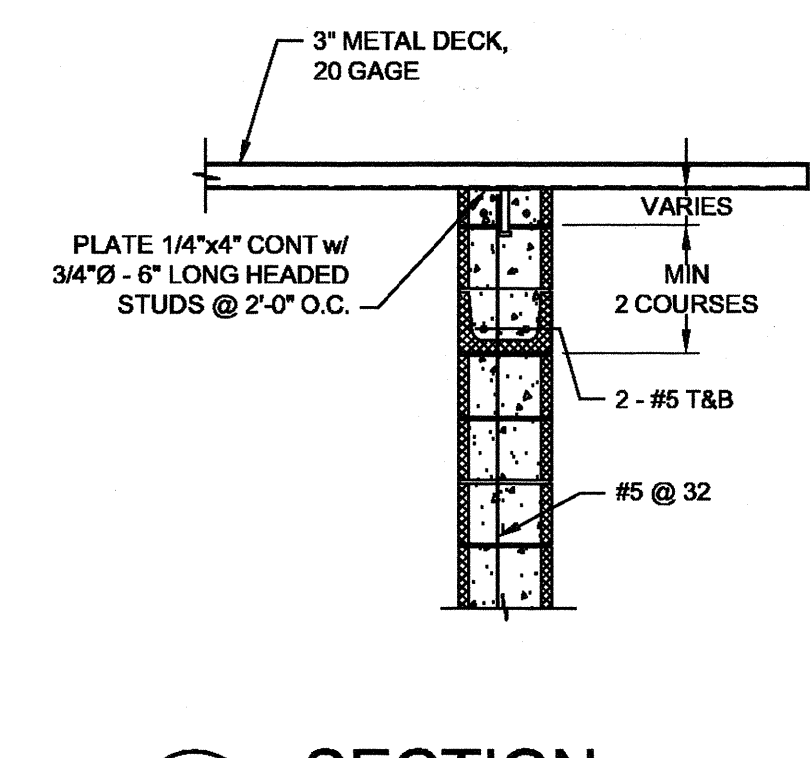
SCALE: 1/4"=1'-0"



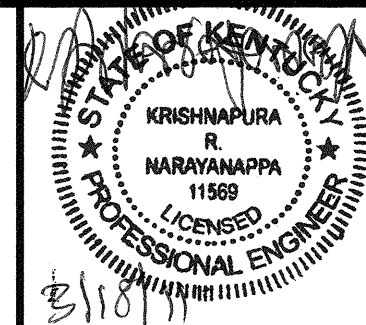
7 SECTION
SCALE: 1/2"=1'-0"



8 SECTION
SCALE: 1/2"=1'-0"



9 SECTION
SCALE: 1/2"=1'-0"



REVISIONS		REMARKS
NO.	BY	DATE

DES STAFF
DWN STAFF
CKD KRN

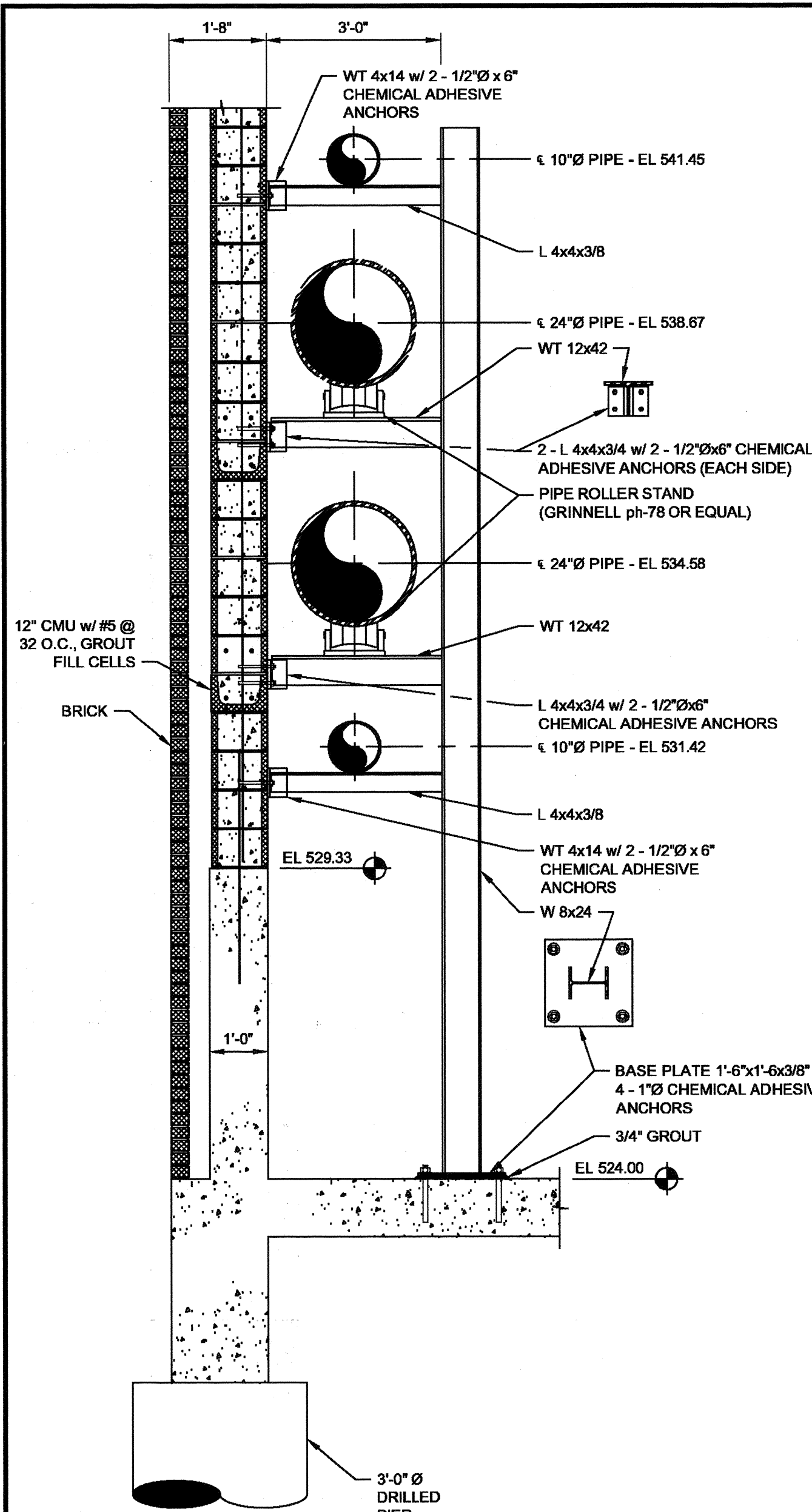
**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**STRUCTURAL
PT / GAC BUILDING
SECTIONS XI
SCALE: AS NOTED**

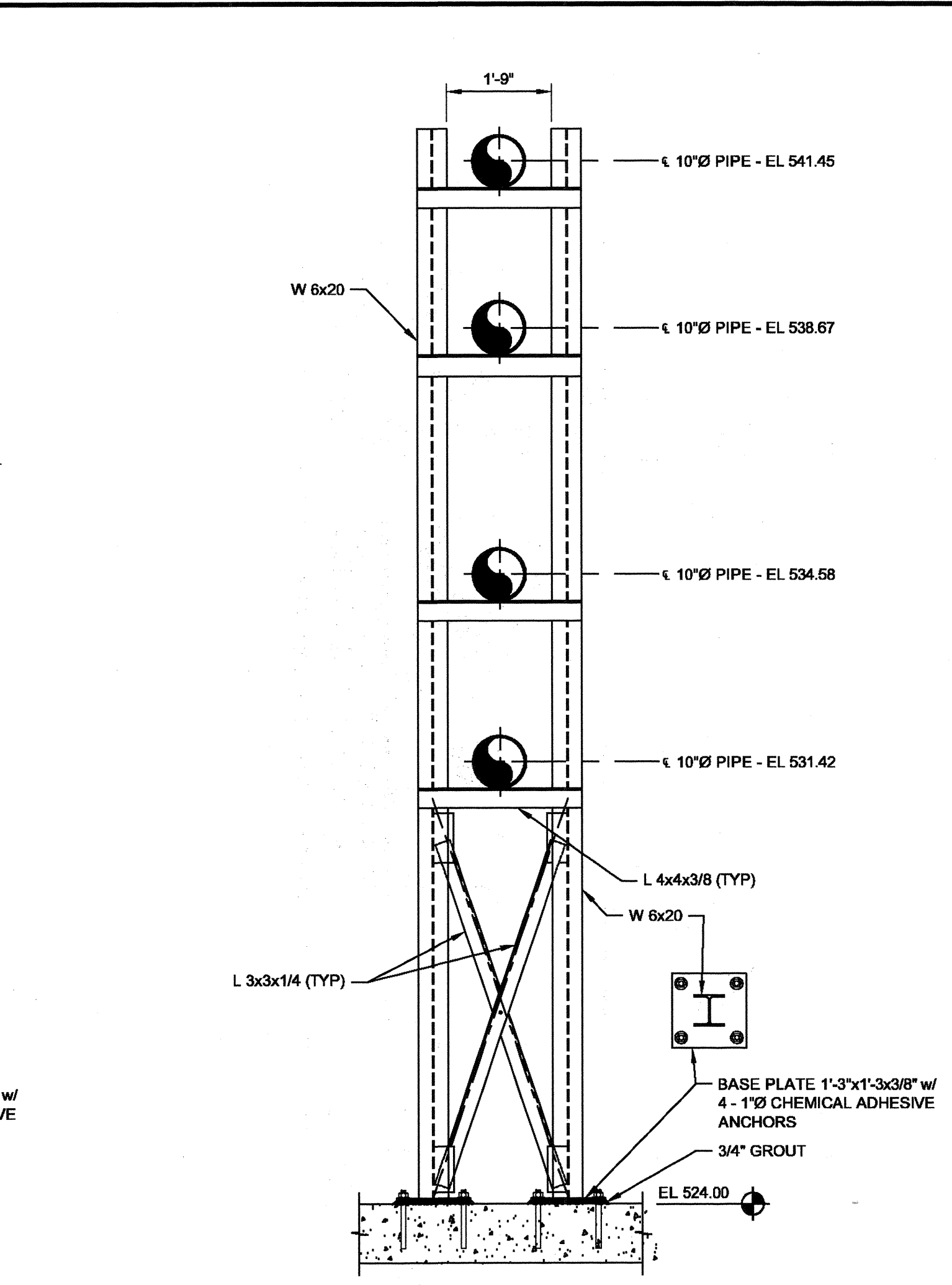
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-311
CAD REF. NO.: 3789-S-06-311

User: JBOOND Spec: PIRNIE STANDARD File: U:\3789-KRWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\RUC3789-S-06-311.DWG Scale: 1/8 Saved Date: 11/19/2010 Time: 15:38 Plot Date: Bond: Jeff, 3/10/2011, 09:45 Layout: S-06-311

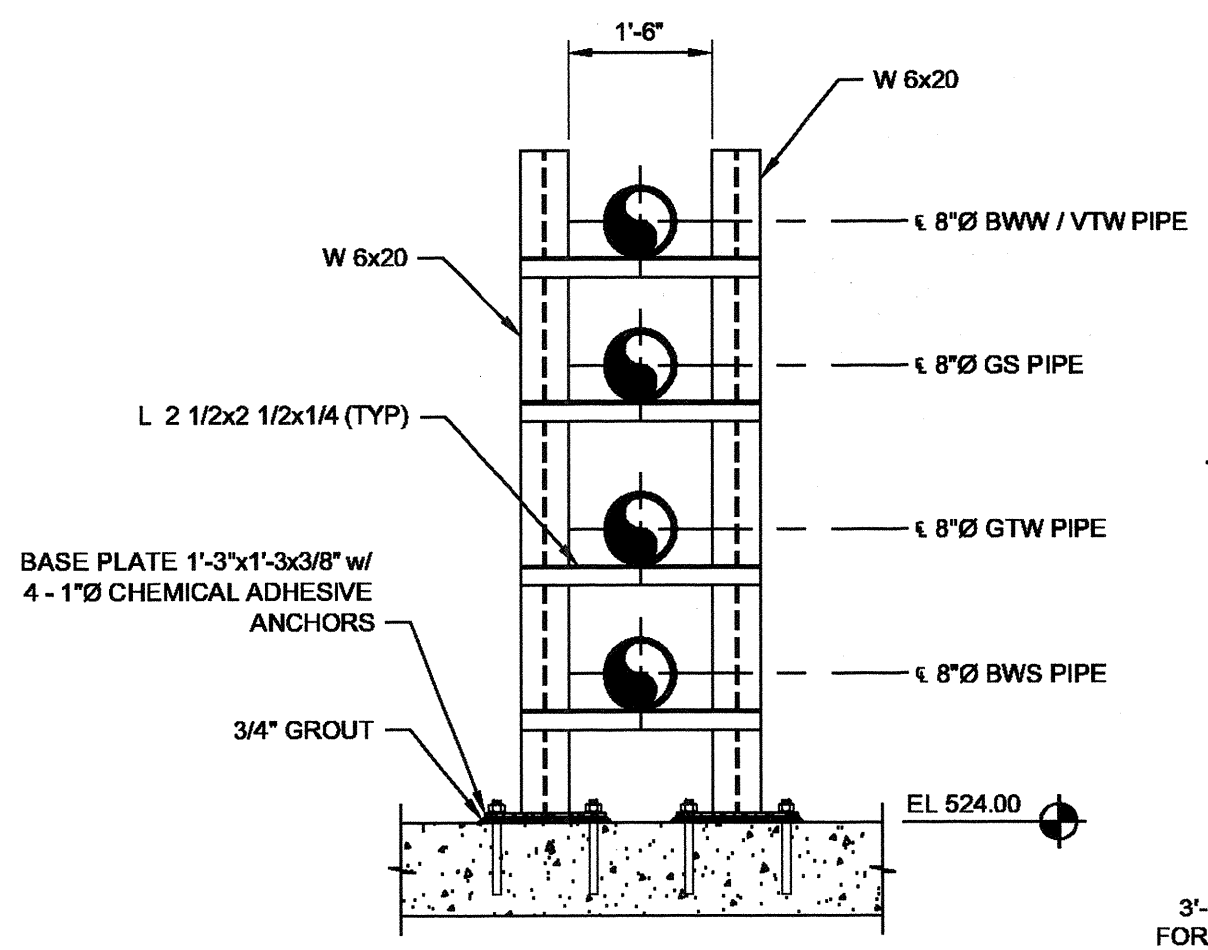
User: I:\BOND Spec-PIRNE STANDARD File\113788-ANKWD-TAYLOR MILLWORKING DRAWINGS\STRUCT\788-S-06-312.DWG Scale: 1:18 SavedDate: 11/19/2010 Time: 15:36 Plot Date: 3/10/2011 08:45 Layout: S-06-312



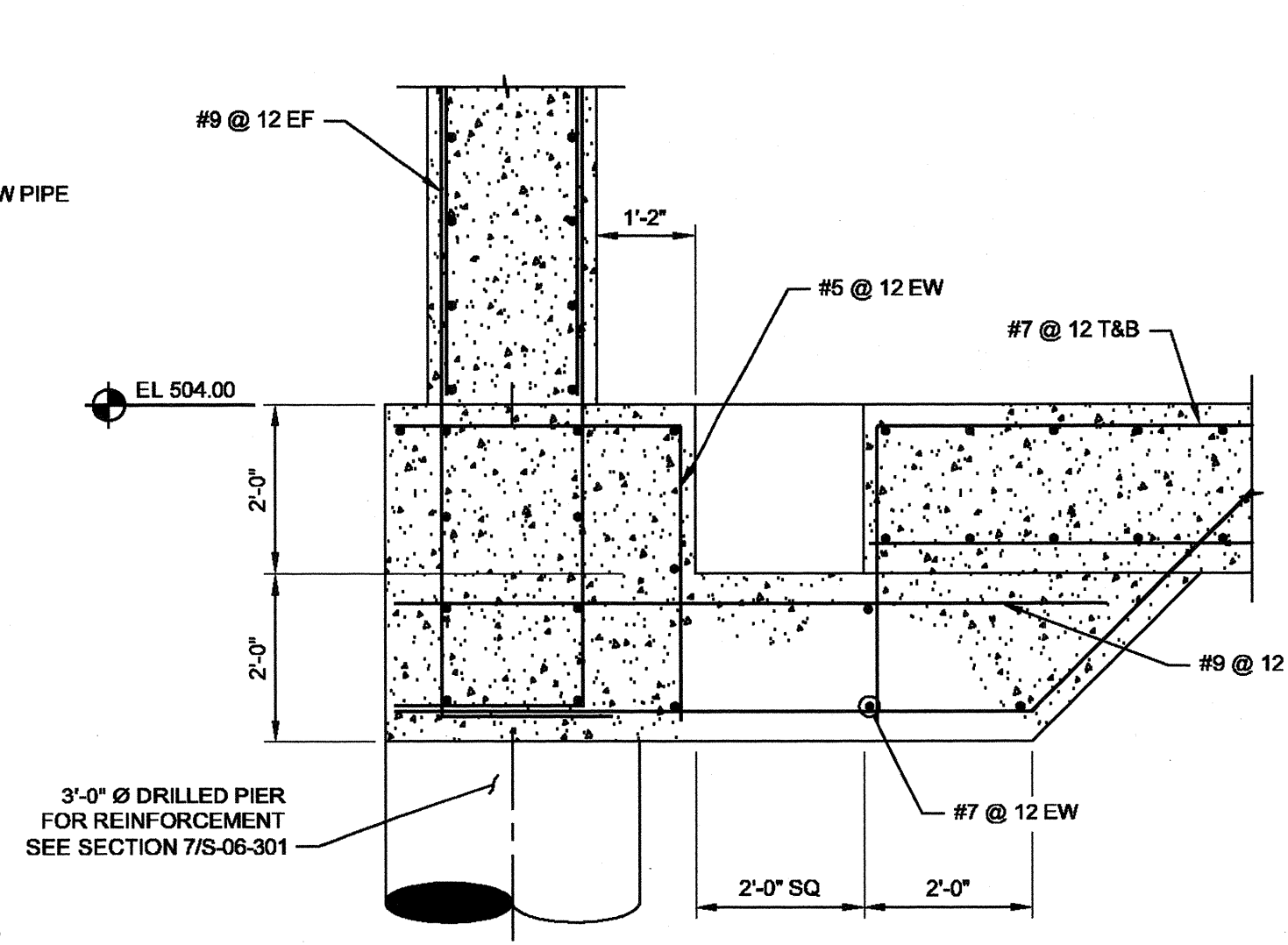
1 SECTION
SCALE: 1/2"=1'-0"



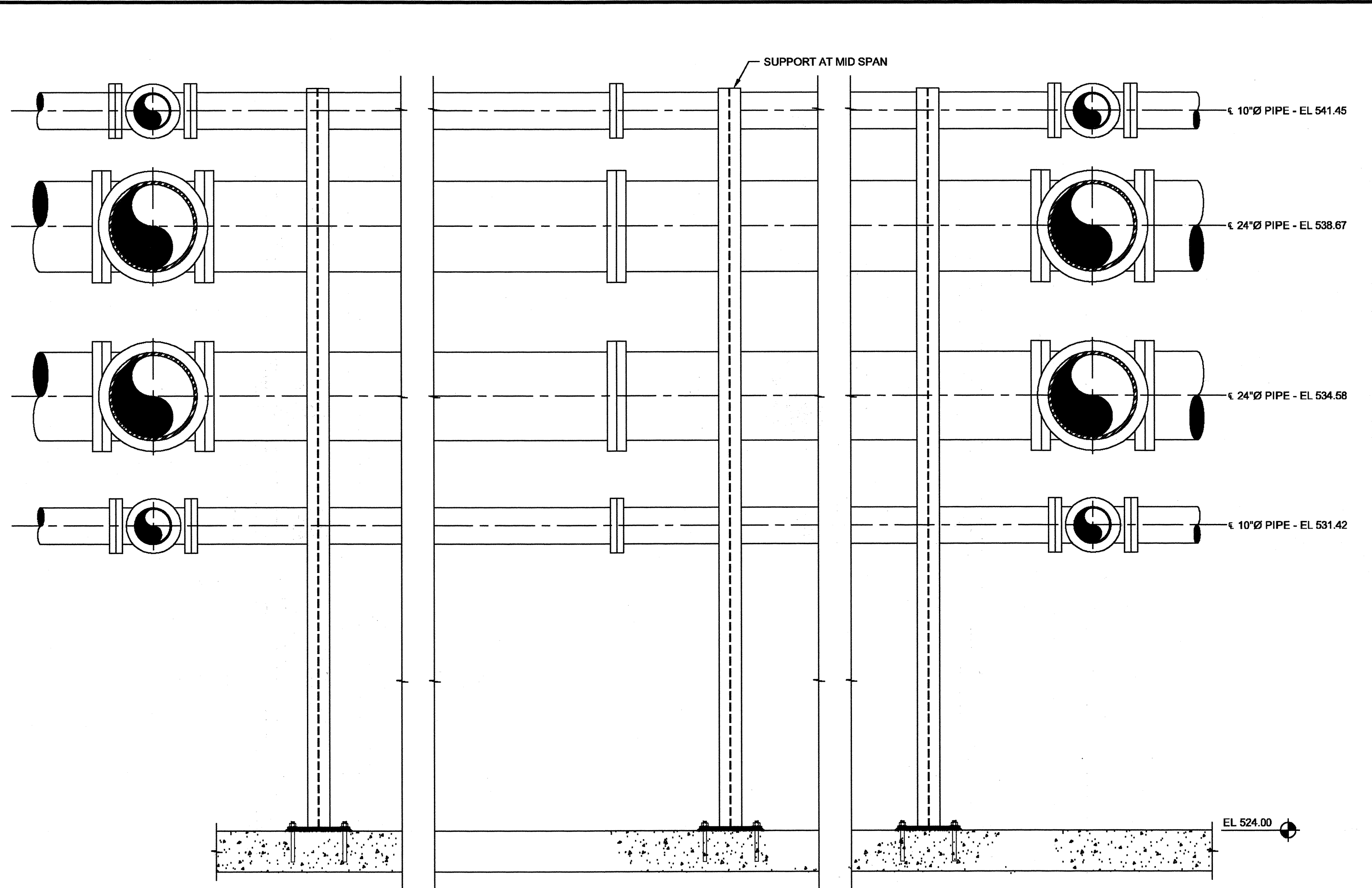
2 SECTION
SCALE: 1/2"=1'-0"



4 SECTION
SCALE: 1/2"=1'-0"

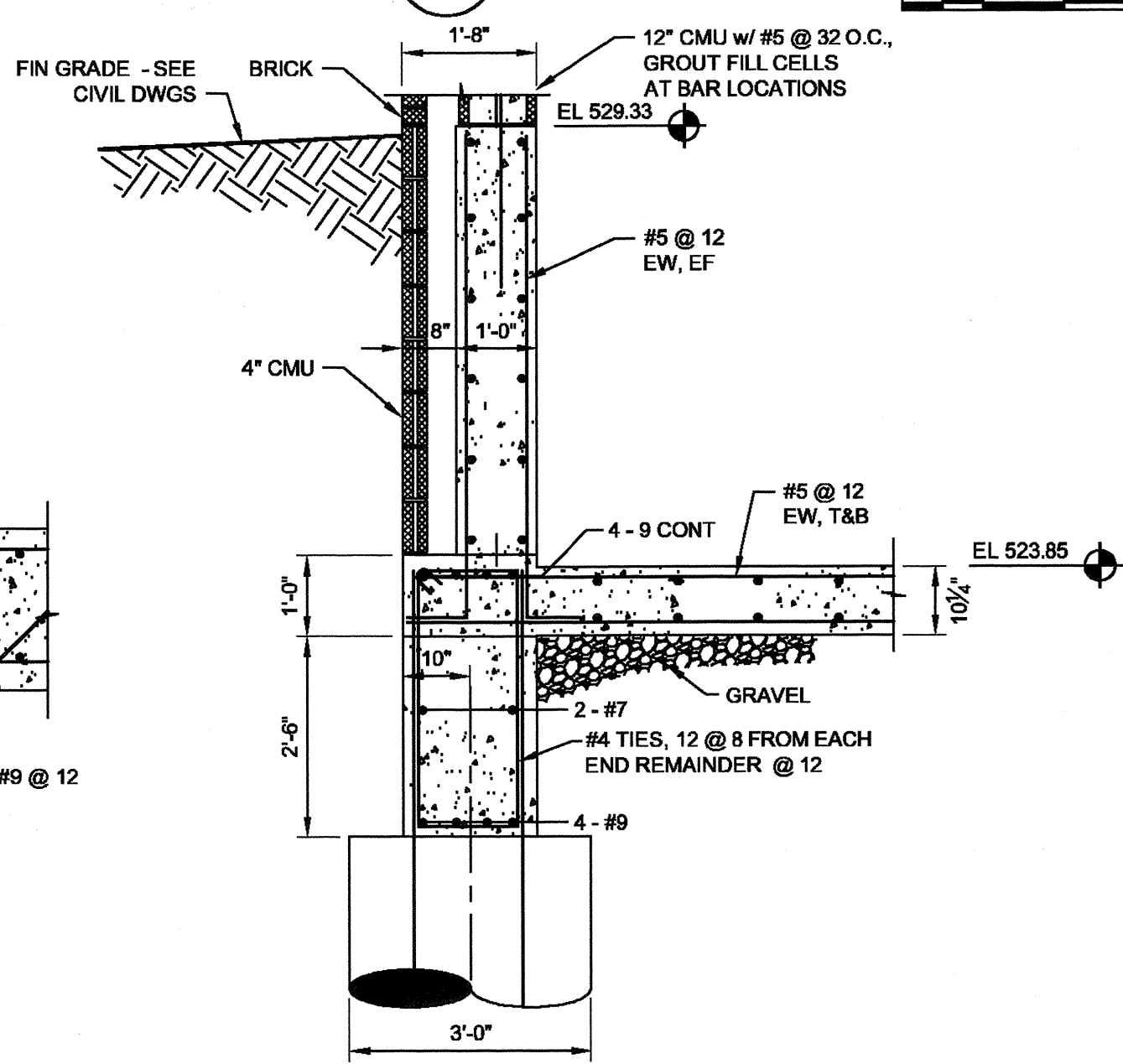


5 SECTION
SCALE: 1/2"=1'-0"

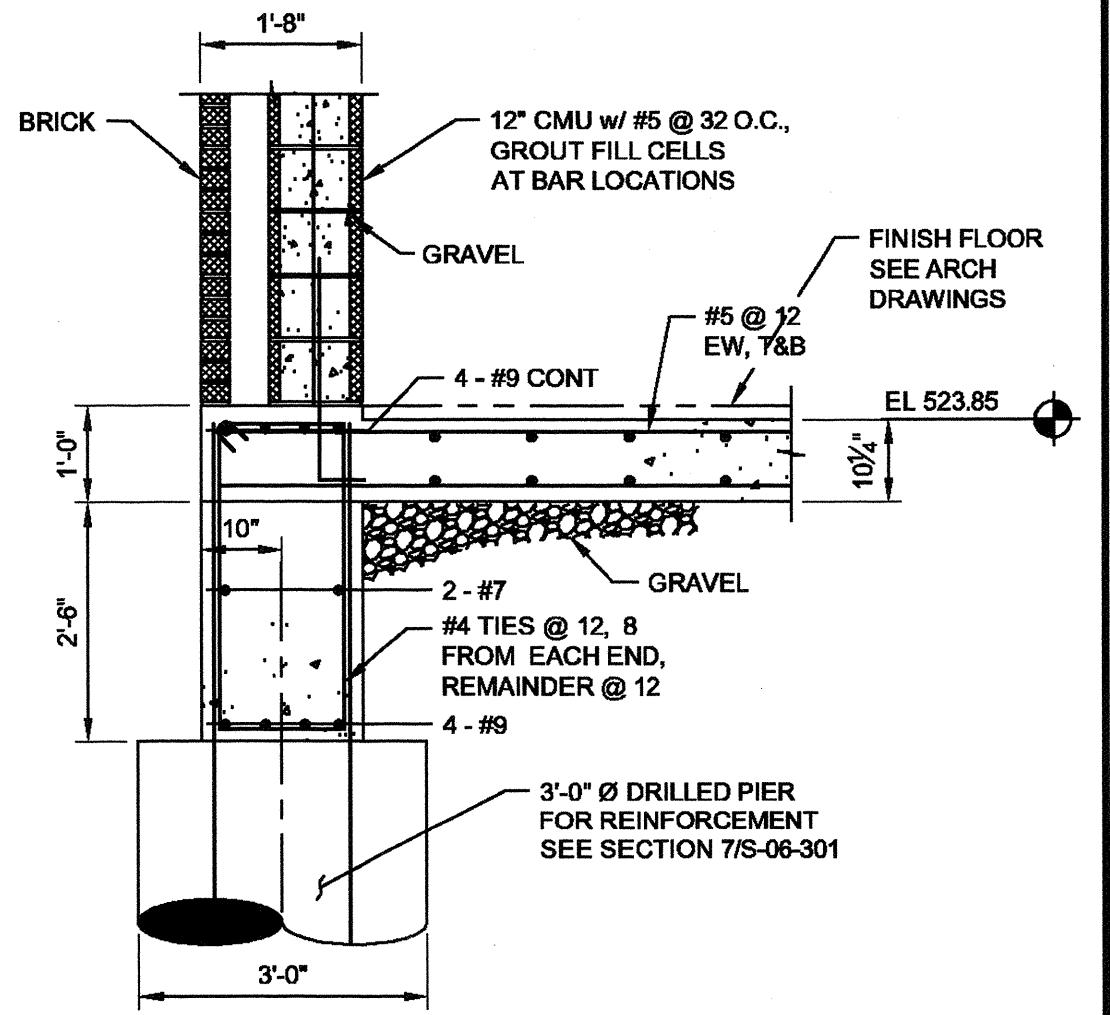


3 TYPICAL PIPE SUPPORT
SCALE: 1/2"=1'-0"

NOTE: GENERAL PIPE SUPPORT LOCATIONS SHOWN. PIPE SUPPORTS SHALL BE LOCATED IN ACCORDANCE WITH THE SPECIFICATION 15055.



6 SECTION
SCALE: 1/2"=1'-0"



7 SECTION
SCALE: 1/2"=1'-0"

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

NOTE: EXACT CENTERLINE ELEVATIONS SHALL BE COORDINATED WITH THE SELECTED GAC VESSEL MANUFACTURER.

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
K. KRISHNAPURA
K. NARAYANAPPA
11589
PROFESSIONAL ENGINEER

REVISIONS		REMARKS
NO.	BY	DATE

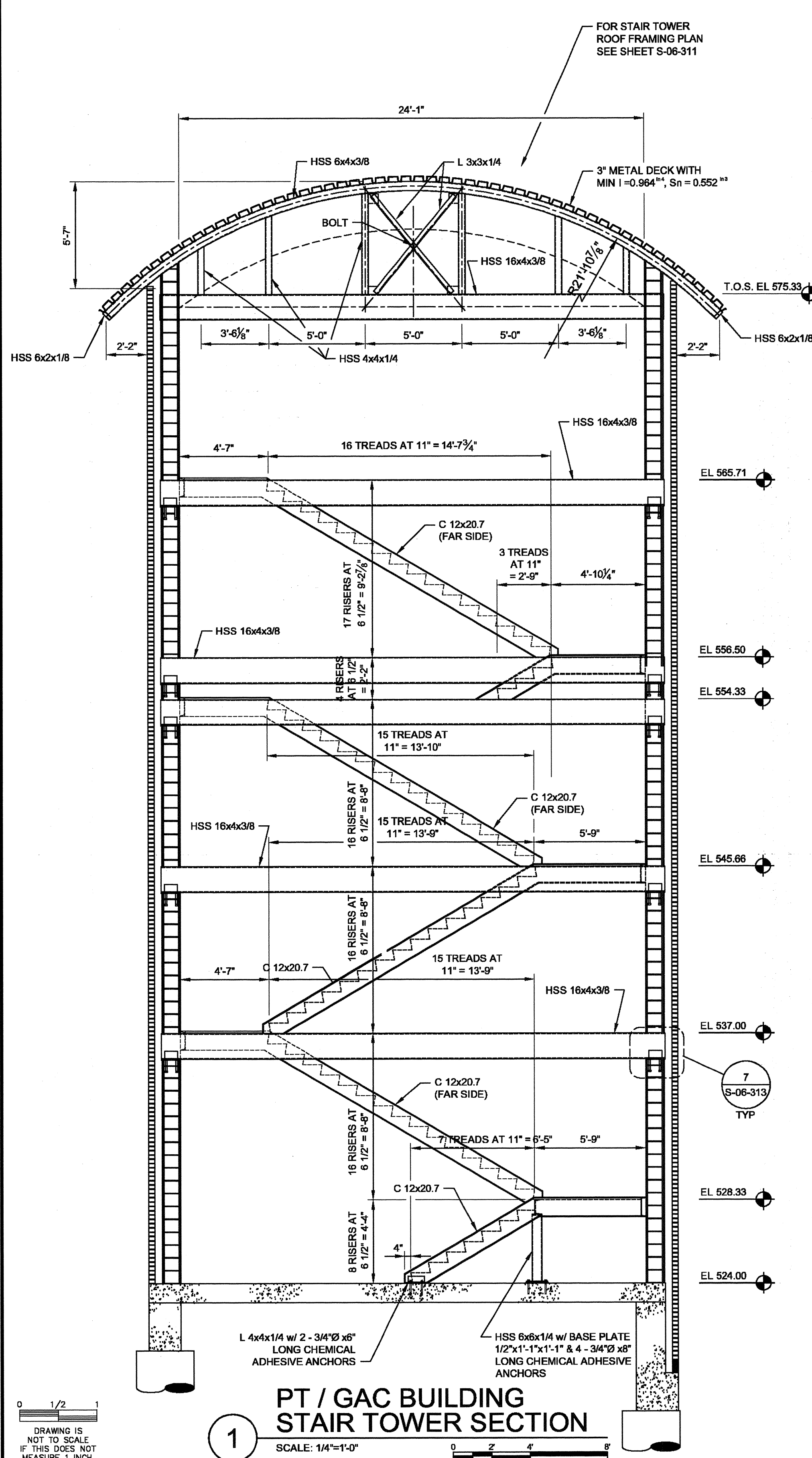
DES STAFF
OWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

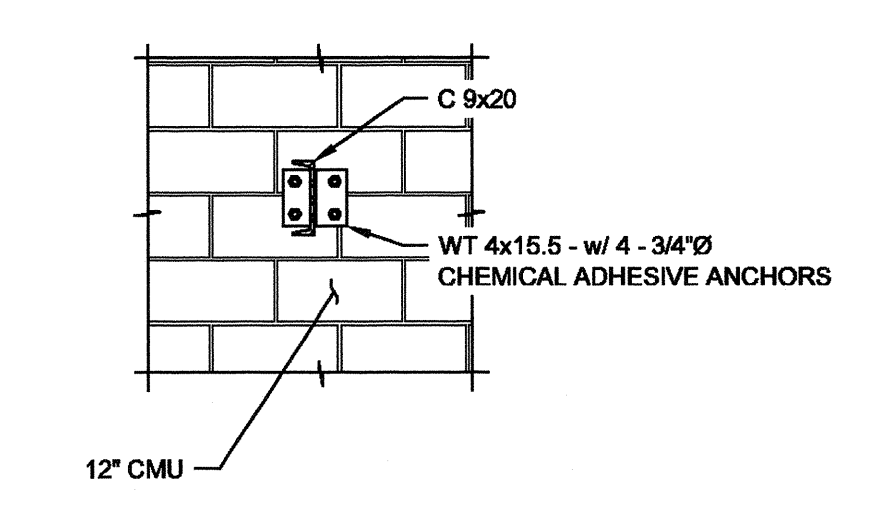
STRUCTURAL
PT / GAC BUILDING
SECTIONS XII
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET S-06-312
CAD REF. NO. 3789-S-06-312

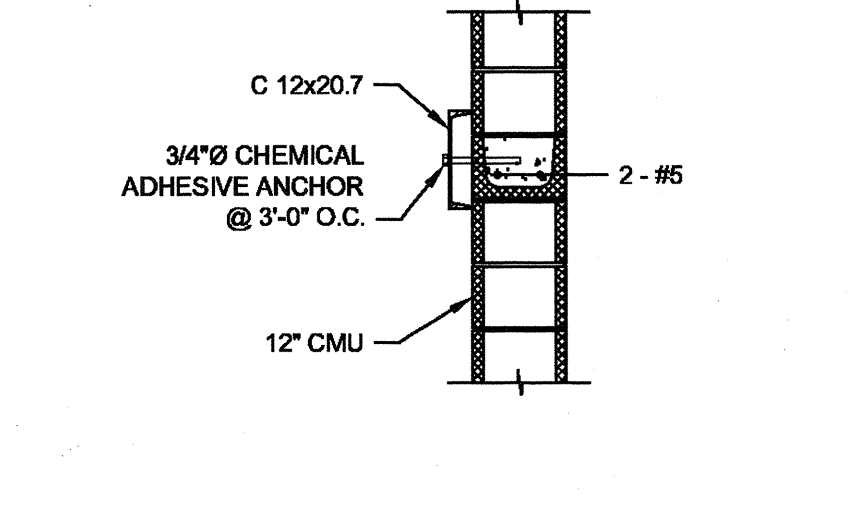
User: JBOOND Spec: PIRNIE STANDARD File: U:\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-06-313.DWG Scale: 1/8 Saved: Date: 12/02/2010 Time: 10:52 Plot Date: 03/01/2011 08:46 Layout: S-06-313



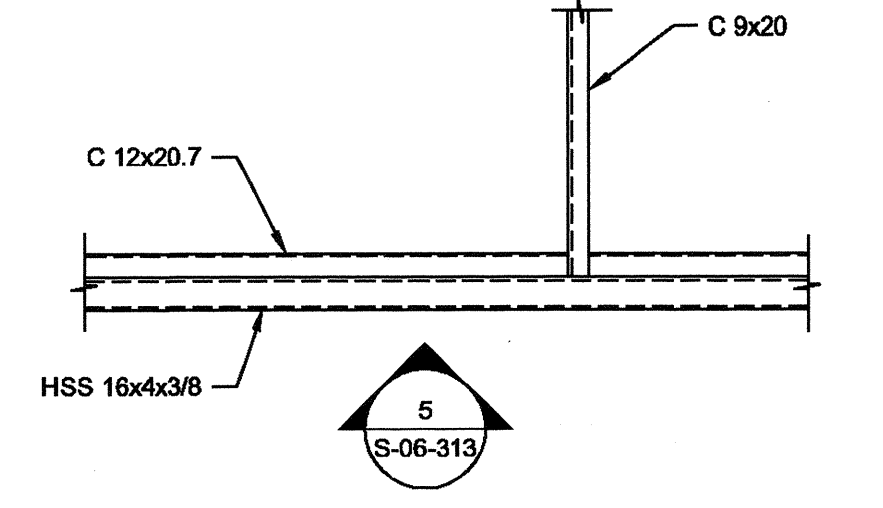
1 PT / GAC BUILDING STAIR TOWER SECTION
SCALE: 1/4"=1'-0"



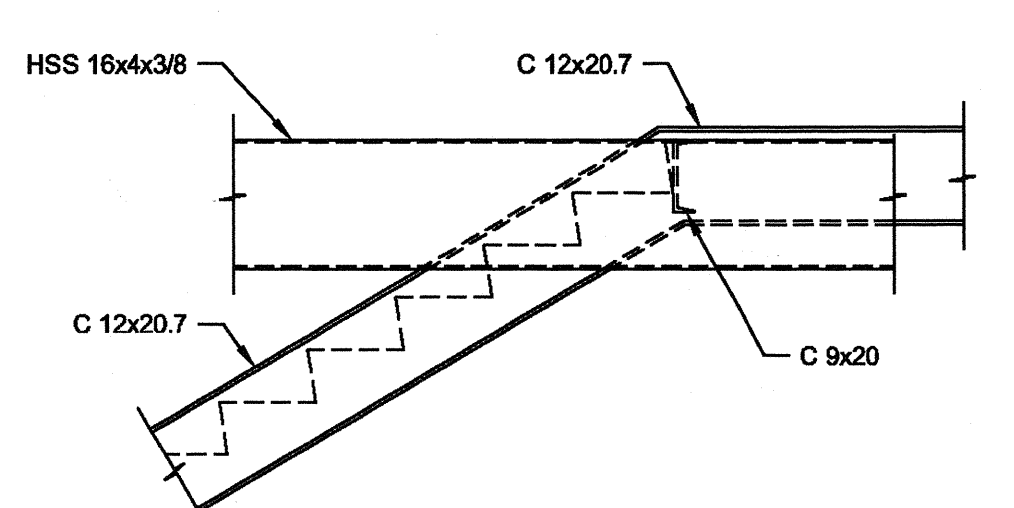
2 SECTION
SCALE: 1/2"=1'-0"



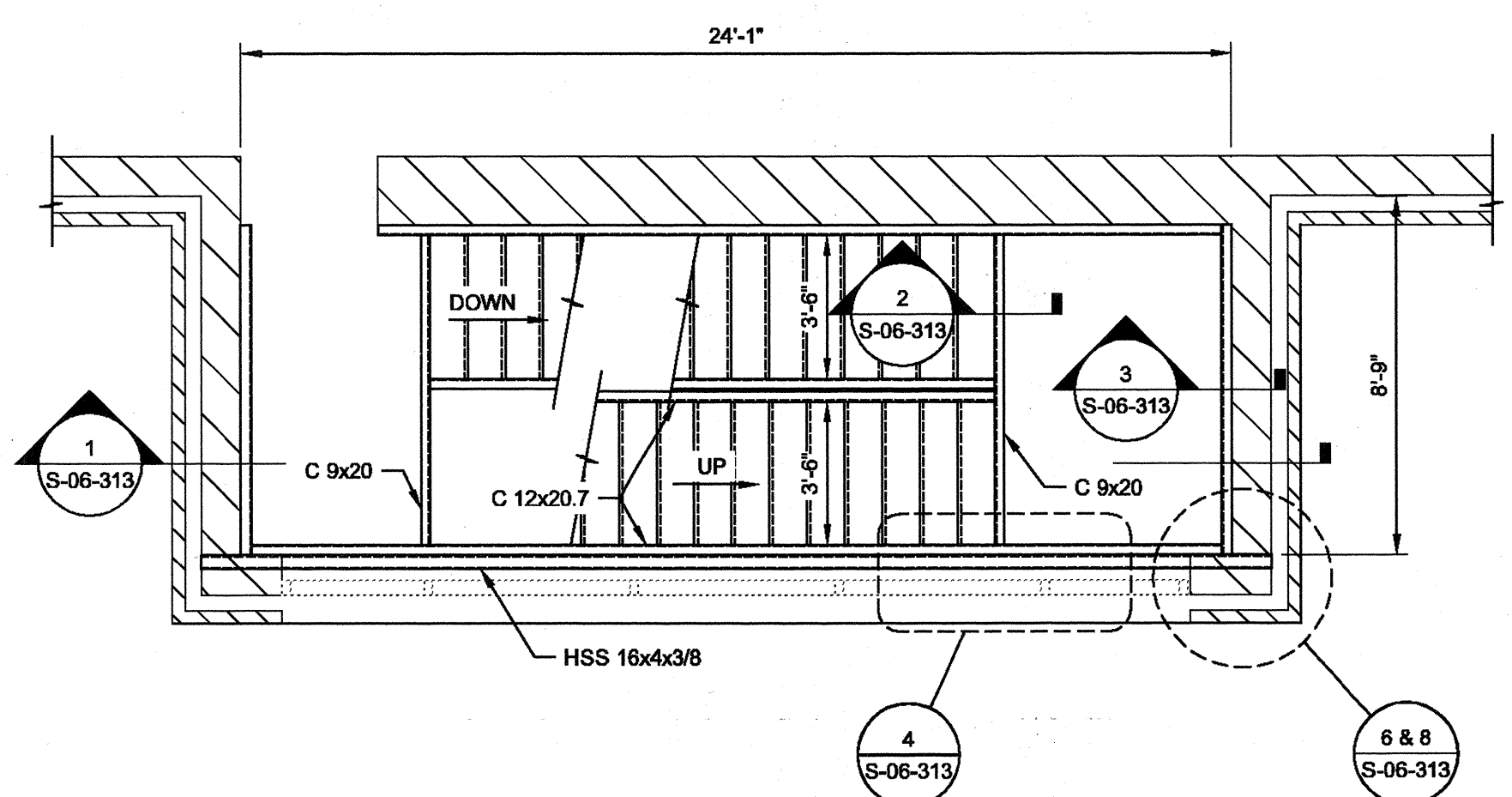
3 SECTION
SCALE: 1/2"=1'-0"



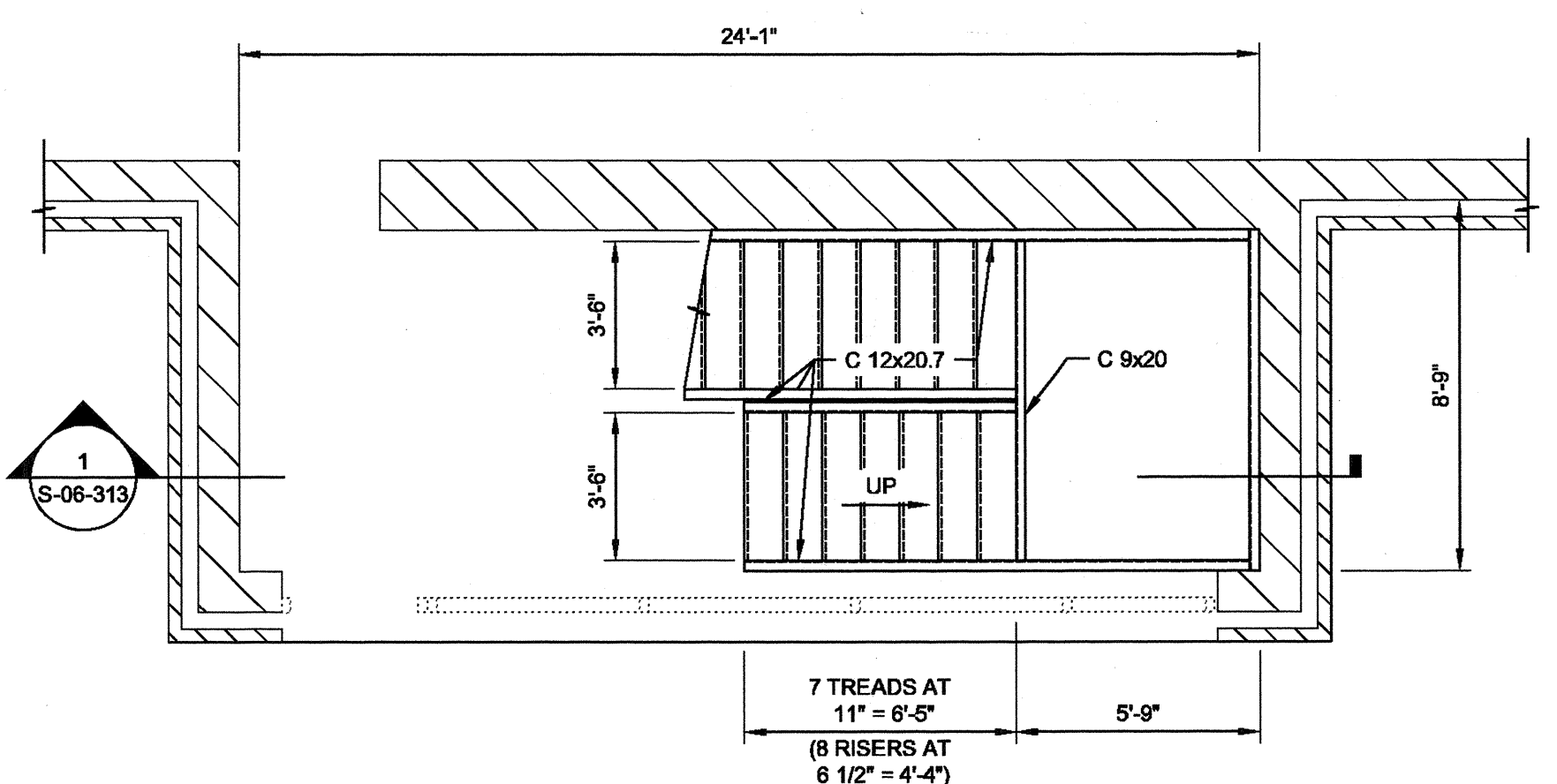
4 DETAIL
SCALE: 1/2"=1'-0"



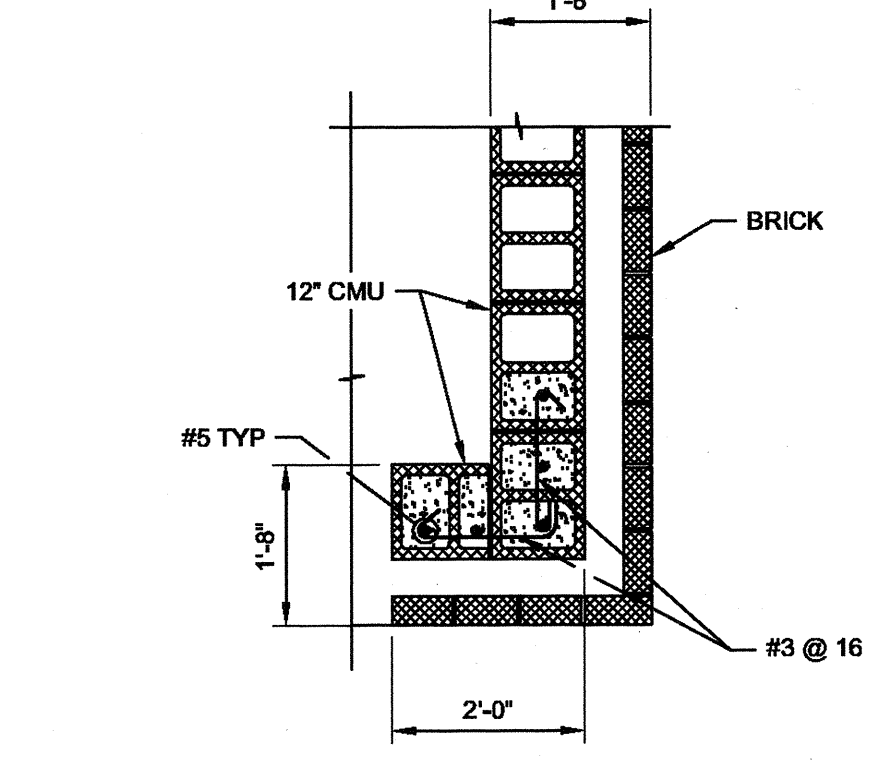
5 ELEVATION
SCALE: 1/2"=1'-0"



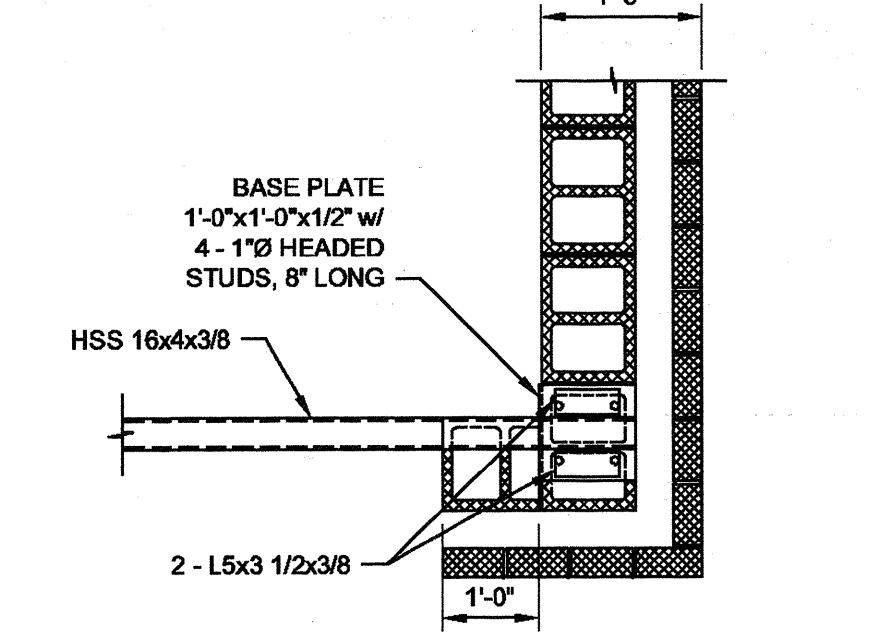
NOTE: SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DETAILS.
PT / GAC BUILDING TYPICAL STAIR PLAN
SCALE: 1/4"=1'-0"



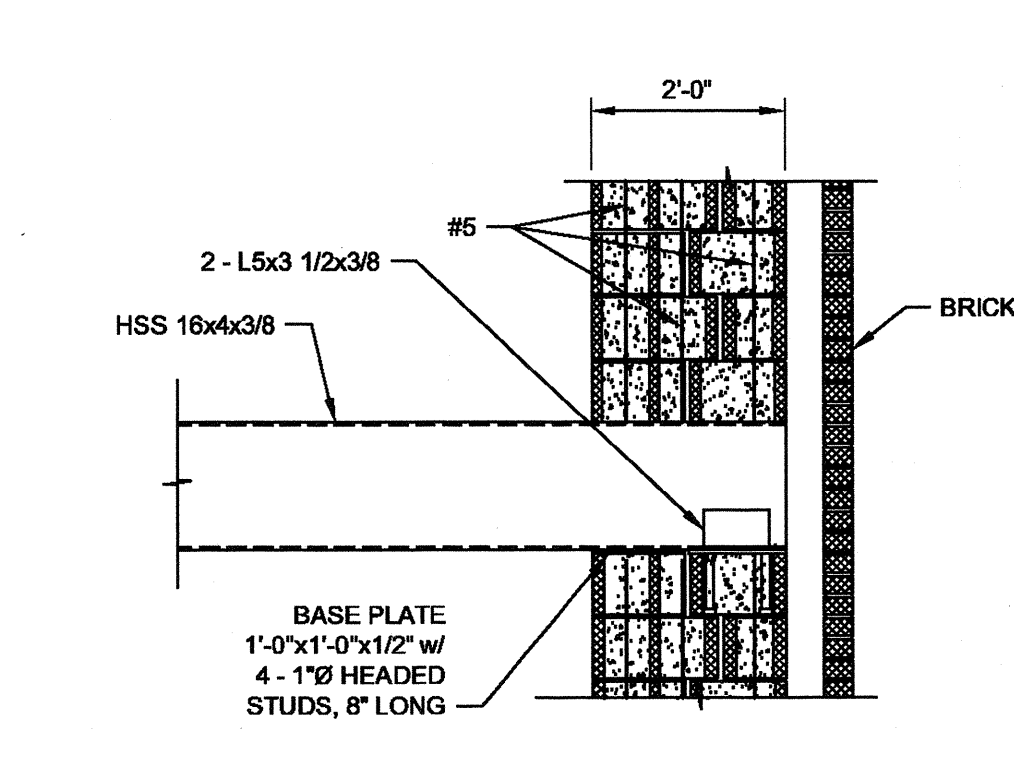
PT / GAC BUILDING STAIR PLAN AT EL 524.00
SCALE: 1/4"=1'-0"



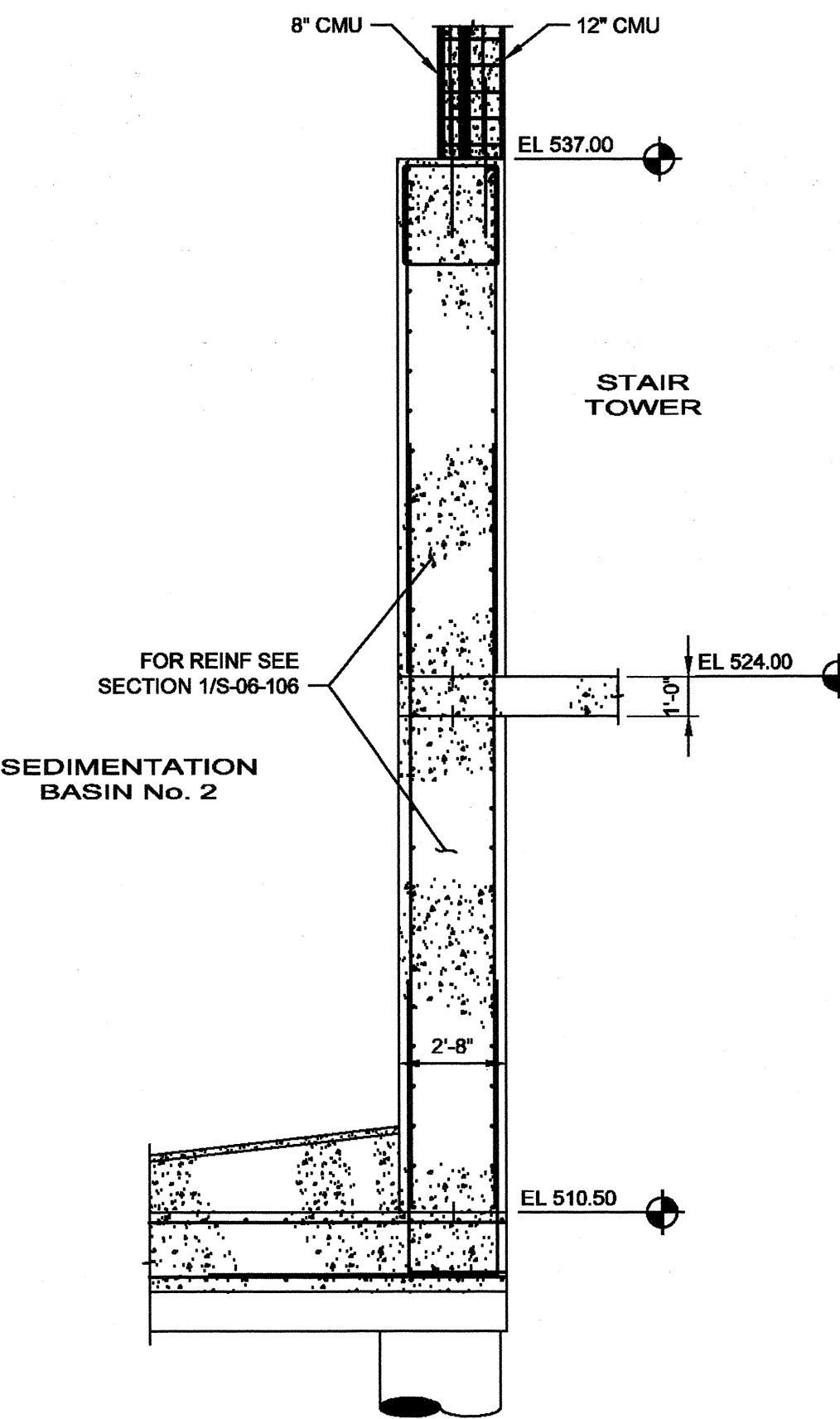
6 DETAIL
SCALE: 1/2"=1'-0"



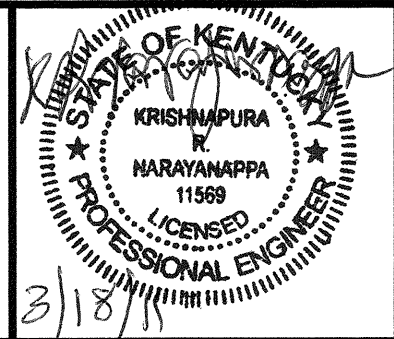
8 DETAIL
SCALE: 1/2"=1'-0"



7 SECTION
SCALE: 1/2"=1'-0"



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



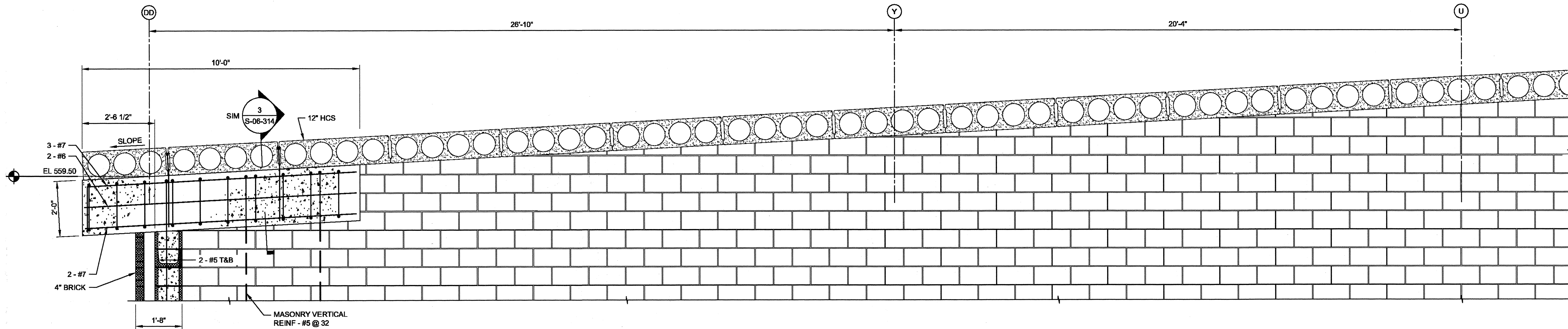
REVISIONS		REMARKS
NO.	BY	DATE

DES STAFF
DWN STAFF
CKD KRN

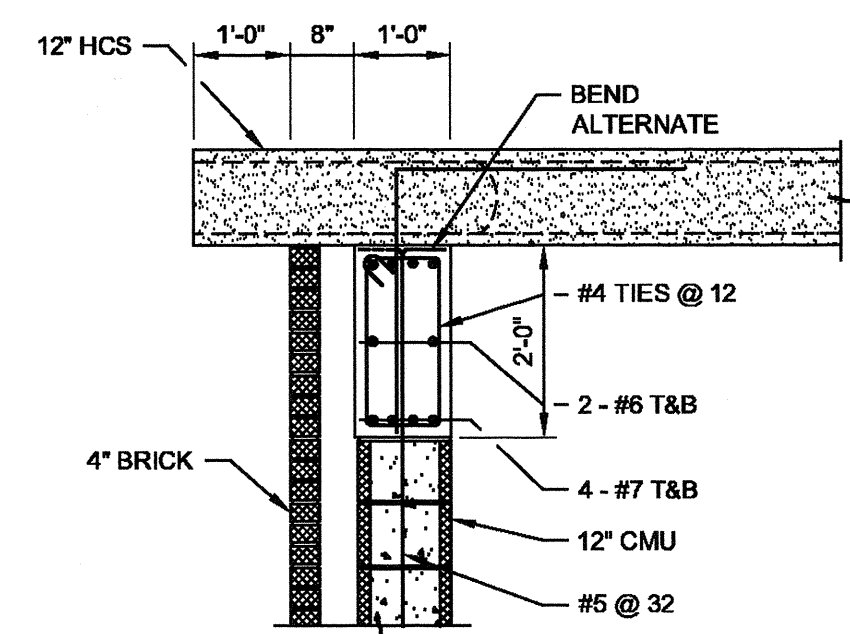
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING SECTIONS XIII
SCALE: AS NOTED

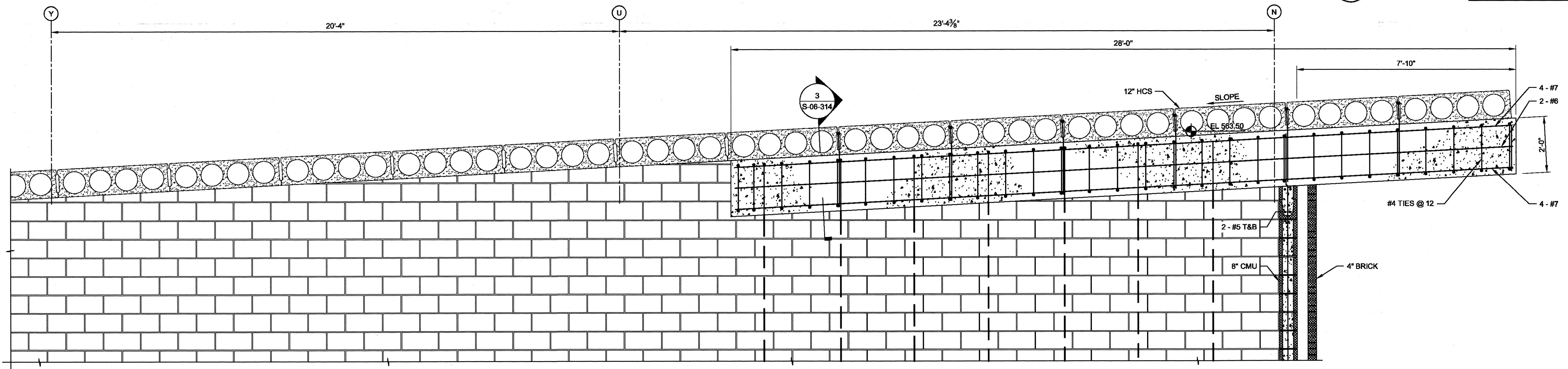
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-313
CAD REF. NO.: 3789-S-06-313



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

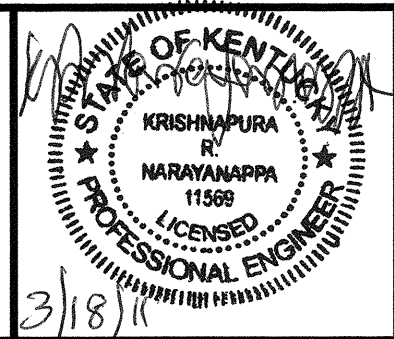
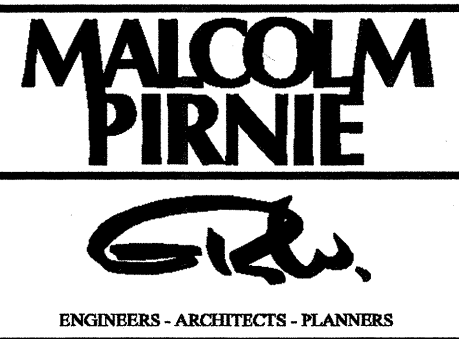


3 SECTION
SCALE: 1/2"=1'-0"



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

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES STAFF
DWN STAFF
CKD KRN

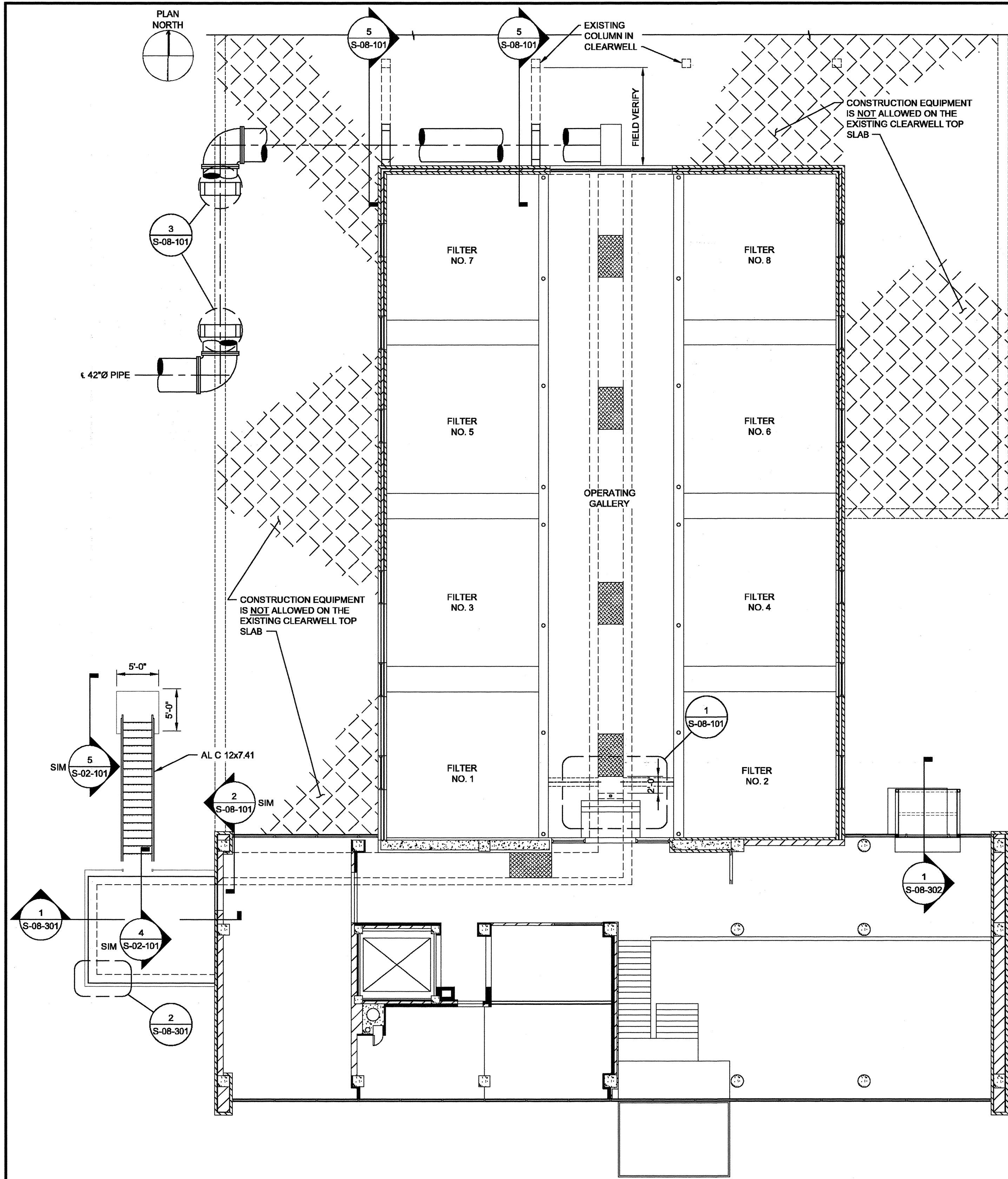
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

STRUCTURAL
PT / GAC BUILDING
SECTIONS X IV
SCALE: AS NOTED

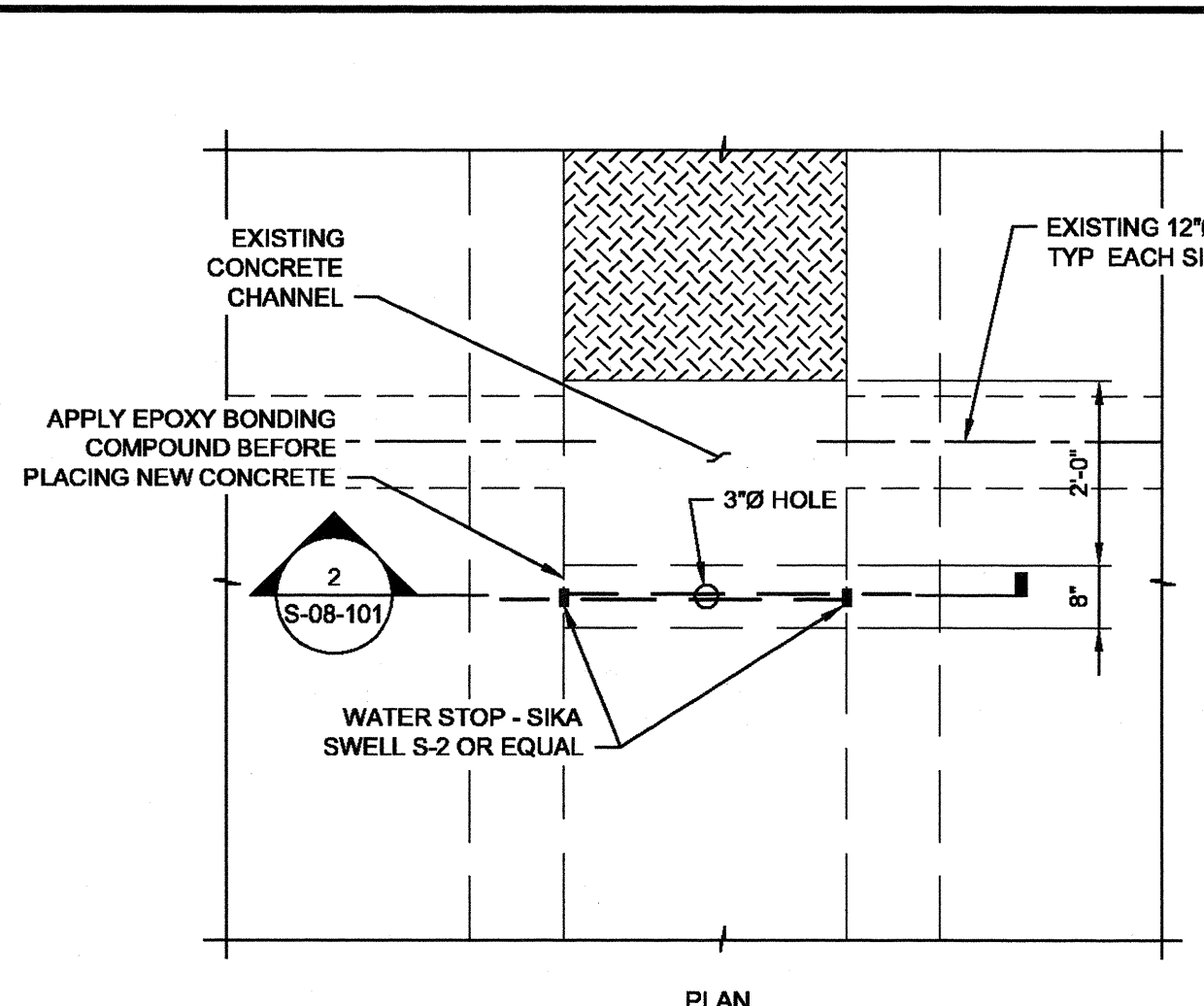
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-06-314
CAD REF. NO.: 3789-S-06-314

User: BOND Spec: PIRNIE STANDARD File: U:\3789-NKWD TAYLOR MILLWORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-06-314.DWG Scale: 1:19 SavedDate: 2/29/2011 Time: 09:42 Plot Date: Bond, Jeff, 3/10/2011, 09:46 Layout: S-06-314

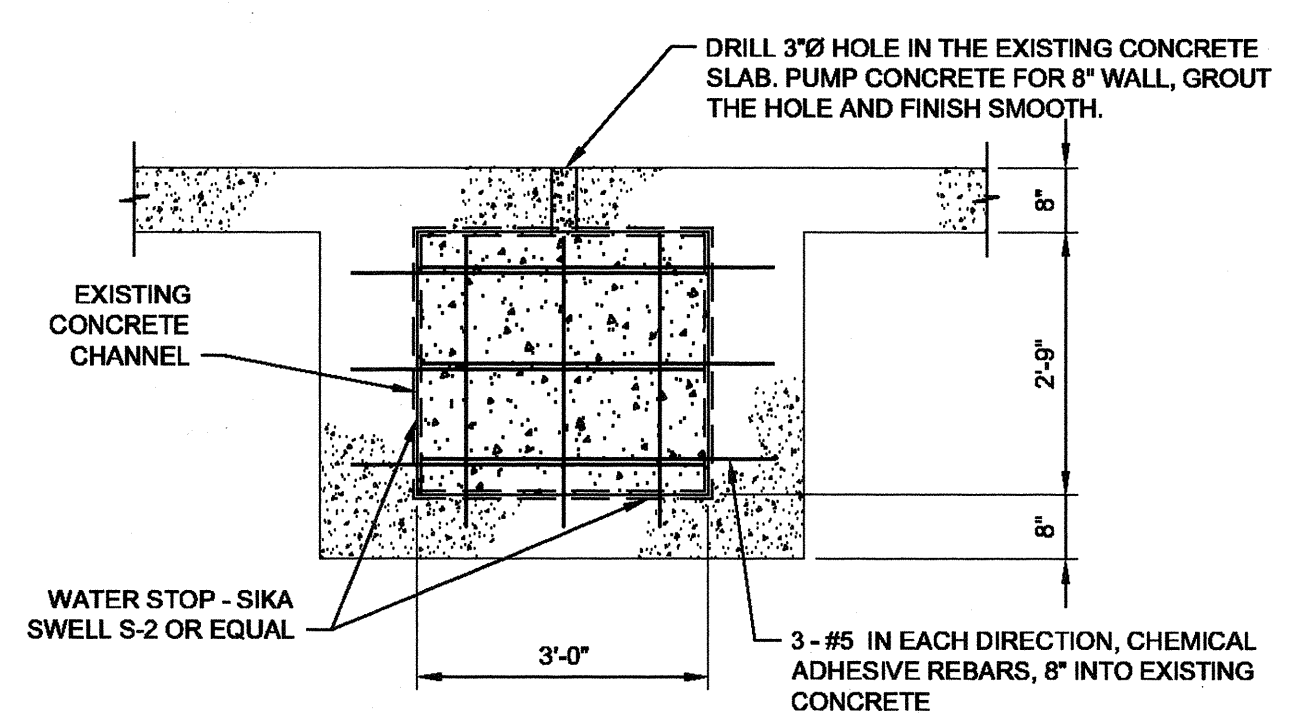
User: I:\BOND Spec\PIRNE STANDARD File\13768-KNWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-08-01.DWG Scale: 1:36 Saved Date: 2/22/2011 Time: 11:15 Pld Date: Barch, Jeff: 3/10/2011: 08:46 Layout: S-08-01



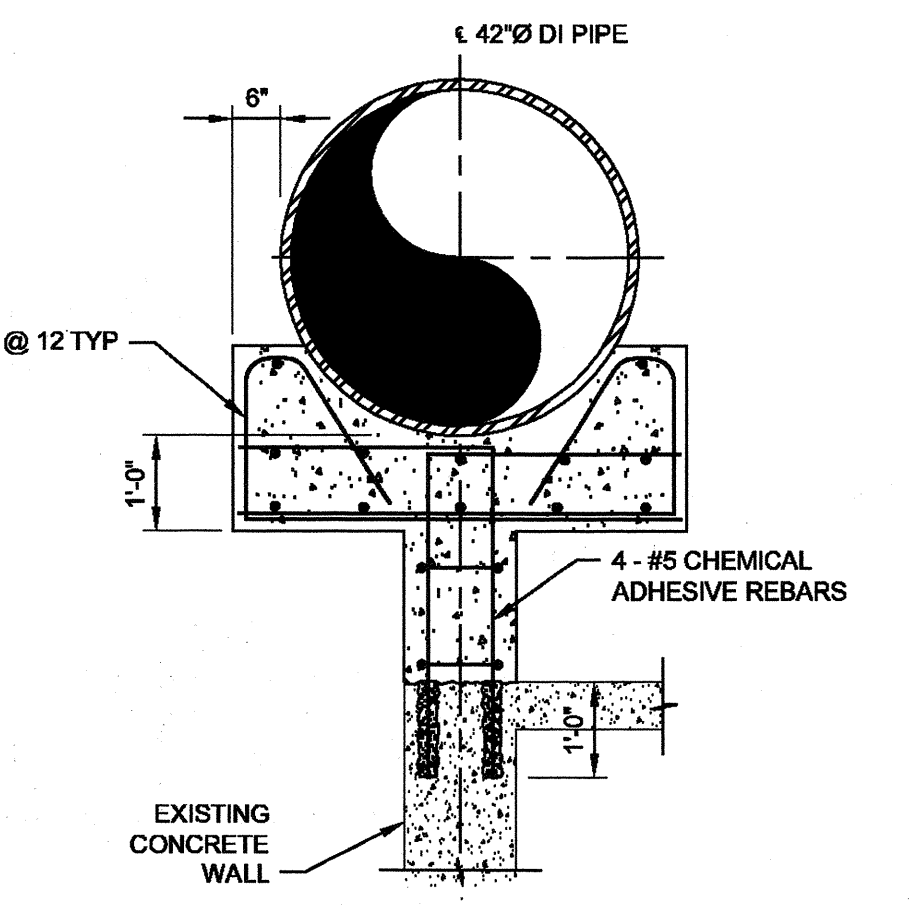
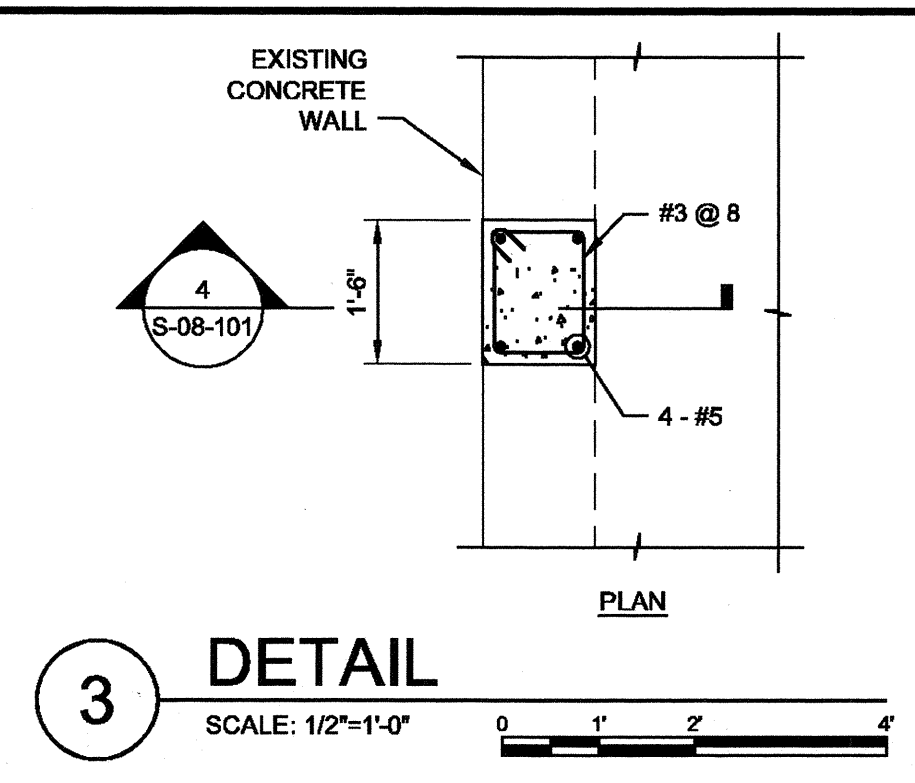
PLAN AT EL 535.00
SCALE: 1/8" = 1'-0"



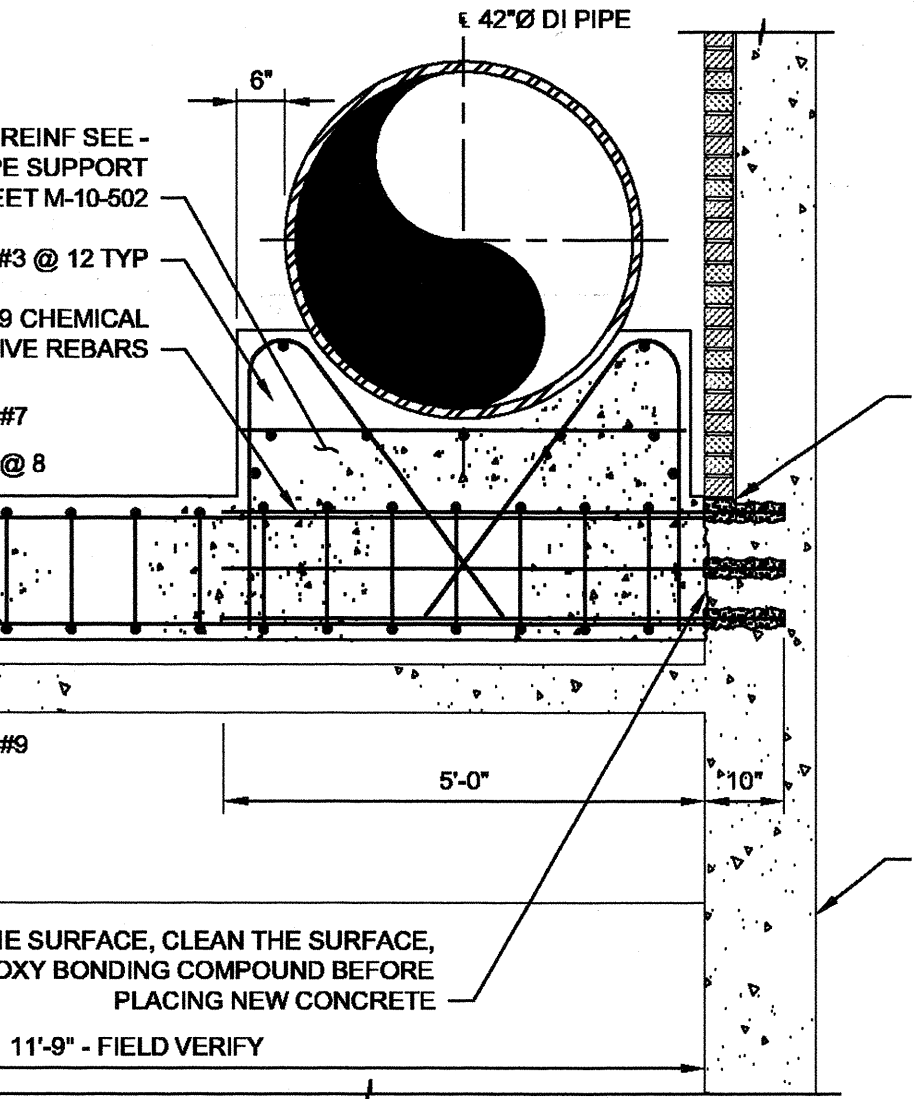
1 DETAIL
SCALE: 1/2" = 1'-0"



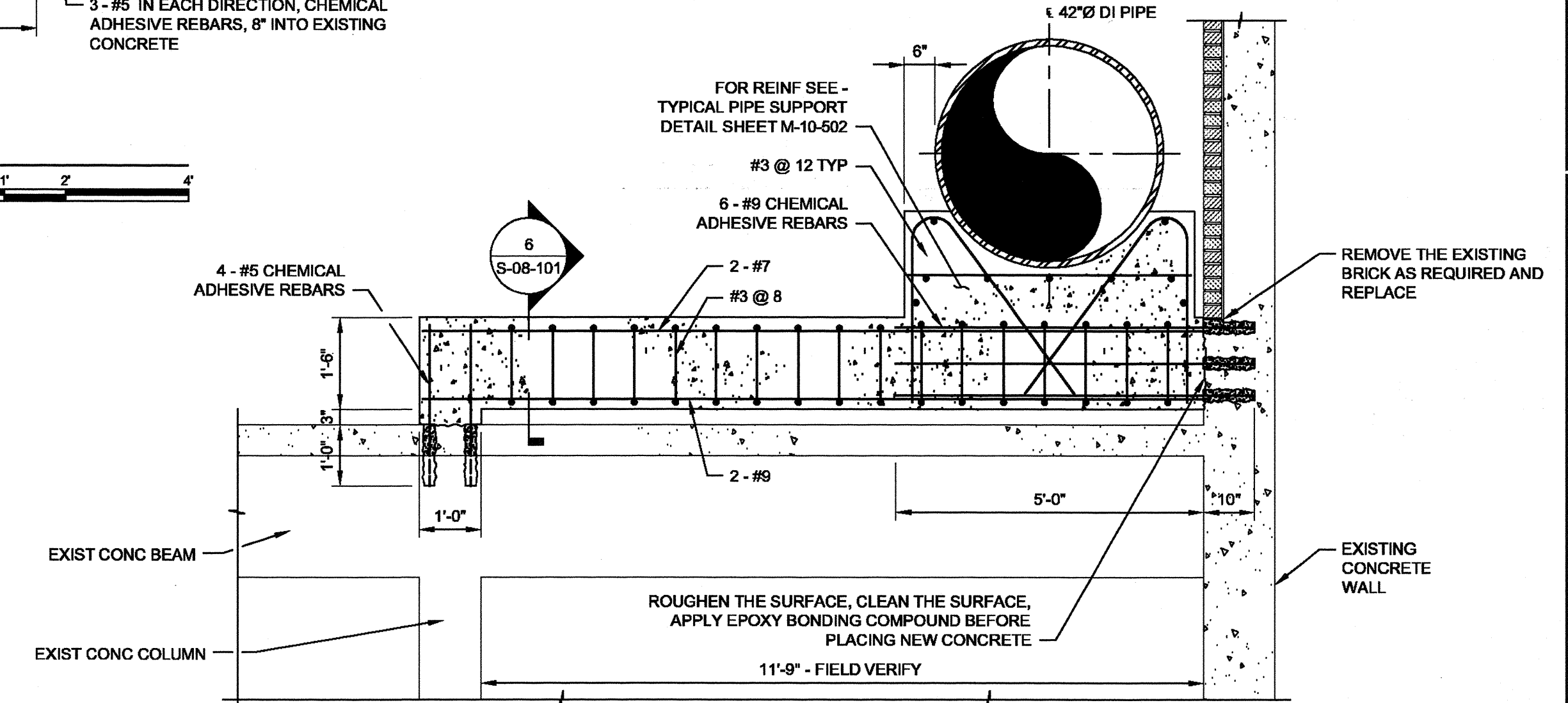
2 SECTION
SCALE: 1/2" = 1'-0"



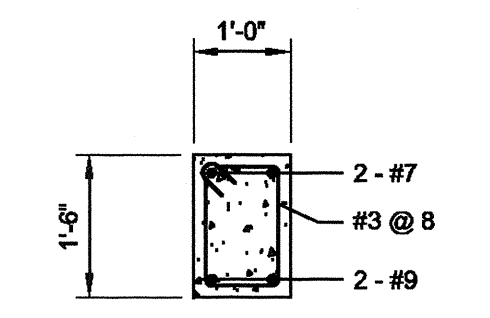
3 DETAIL
SCALE: 1/2" = 1'-0"



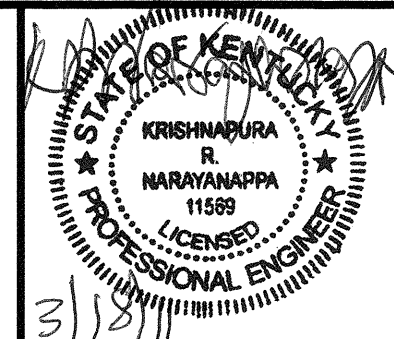
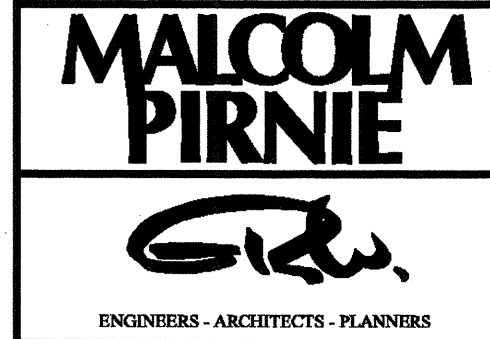
4 SECTION
SCALE: 1/2" = 1'-0"



5 SECTION
SCALE: 1/2" = 1'-0"



6 SECTION
SCALE: 1/2" = 1'-0"



REVISIONS		NO.	BY	DATE	REMARKS

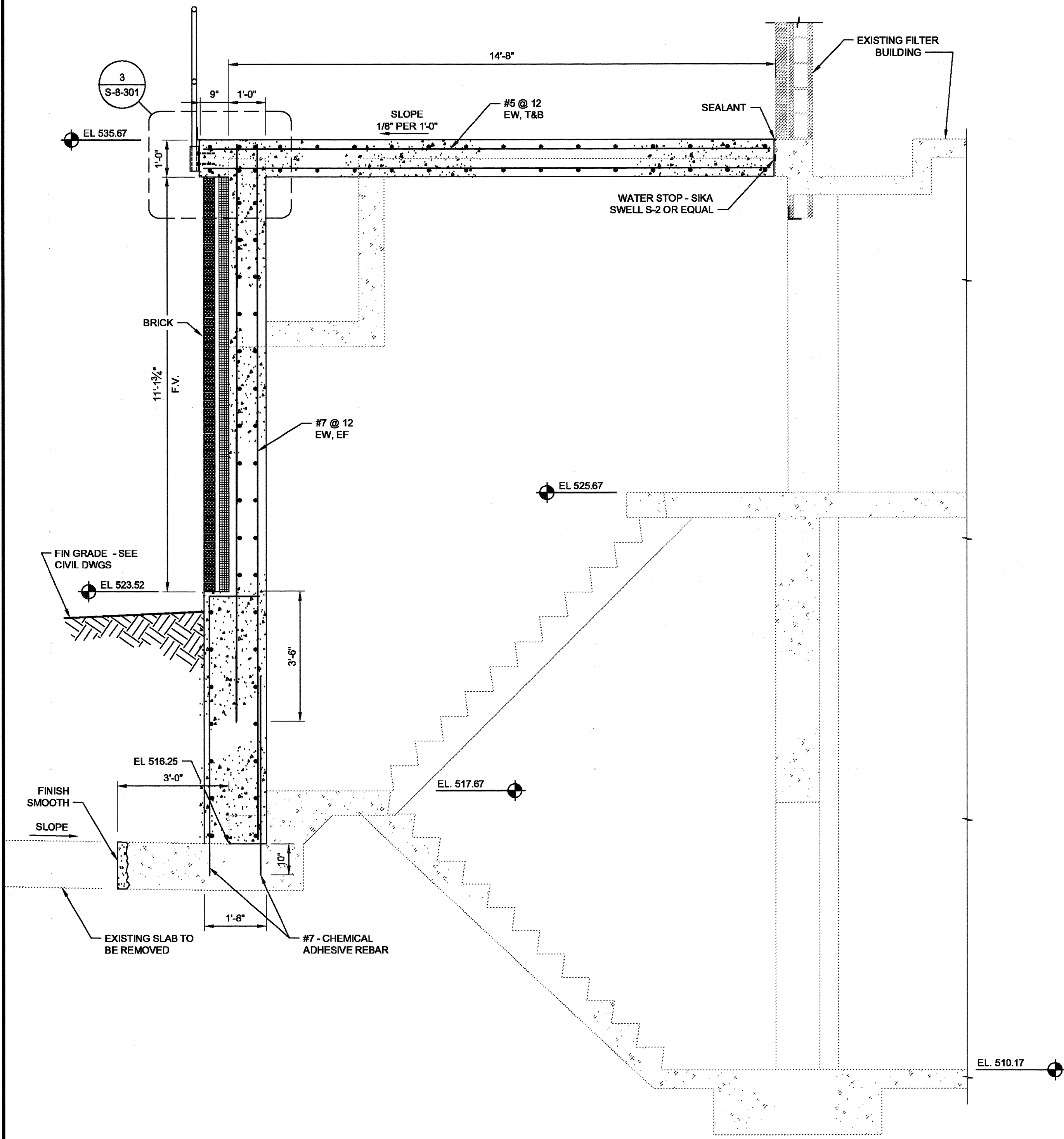
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

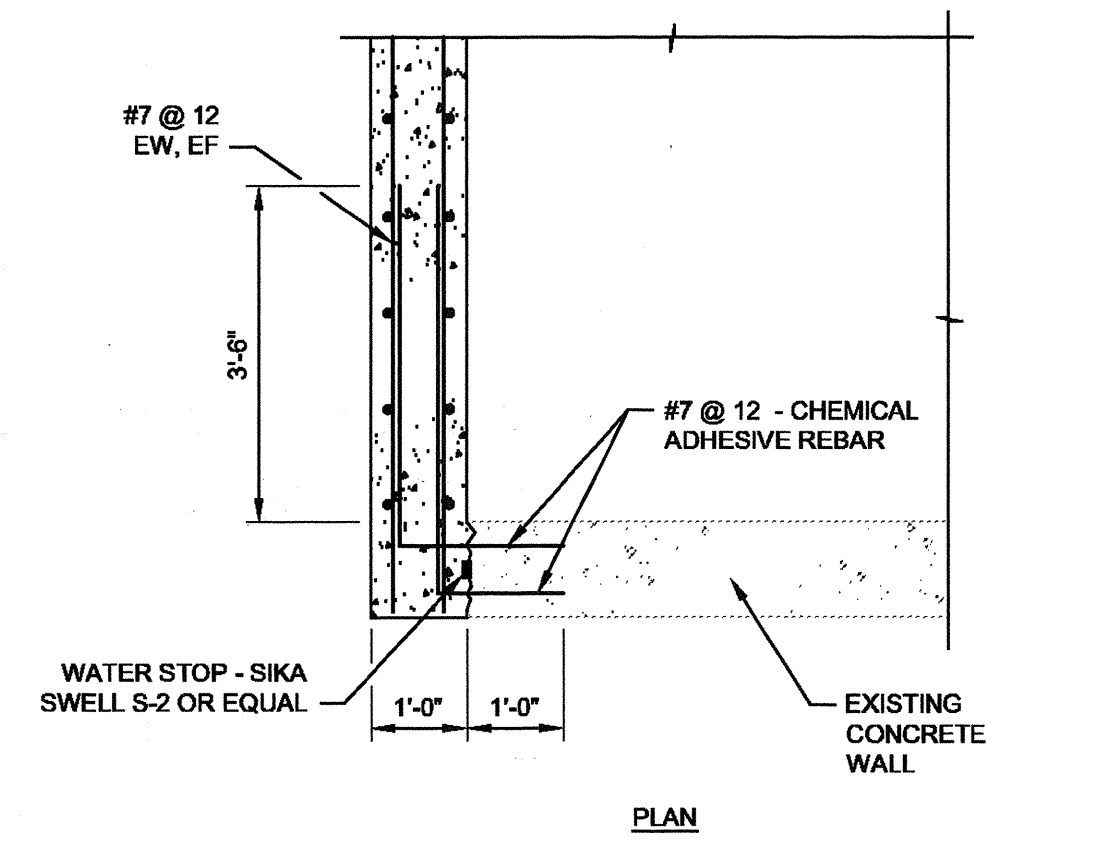
STRUCTURAL
EXISTING FILTER BUILDING
PLAN AT EL. 535.00
SCALE: 1/8" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: S-08-101
CAD REF. NO.: 3789-S-08-101

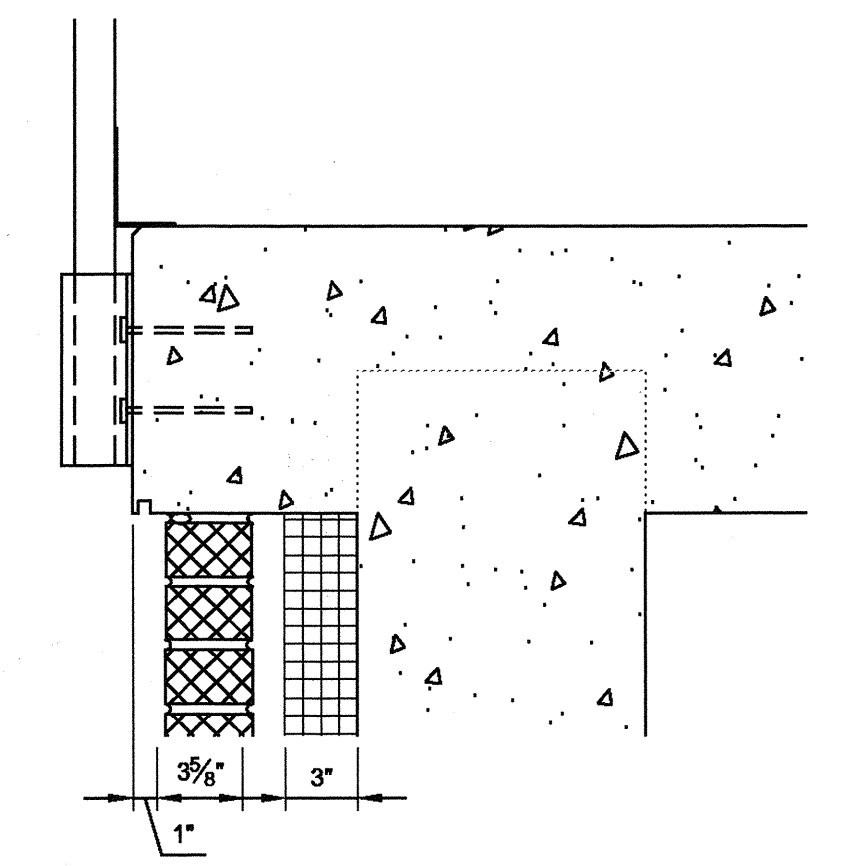
User: JBOND Spec: PIRNIE STANDARD File: L13788-NKWD-TAYLOR MILL WORKING DRAWINGS\STRUCT\3788-S-08-301.DWG Scale: 1/2"=1'-0" Date: 3/7/2011 Time: 09:22 Plot Date: Bond_Jeff, 3/10/2011, 09:46 Layout: S-08-301



1 SECTION
SCALE: 1/2"=1'-0" 0 1 2 4



2 DETAIL
SCALE: 1/2"=1'-0" 0 1 2 4



3 DETAIL
SCALE: 1 1/2"=1'-0" 0 1/2 1 1 1/2

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
K. KRISHNAPPA
NARAYANAPPA
11569
LICENSED PROFESSIONAL ENGINEER

NO.		BY	DATE	REVISIONS	REMARKS

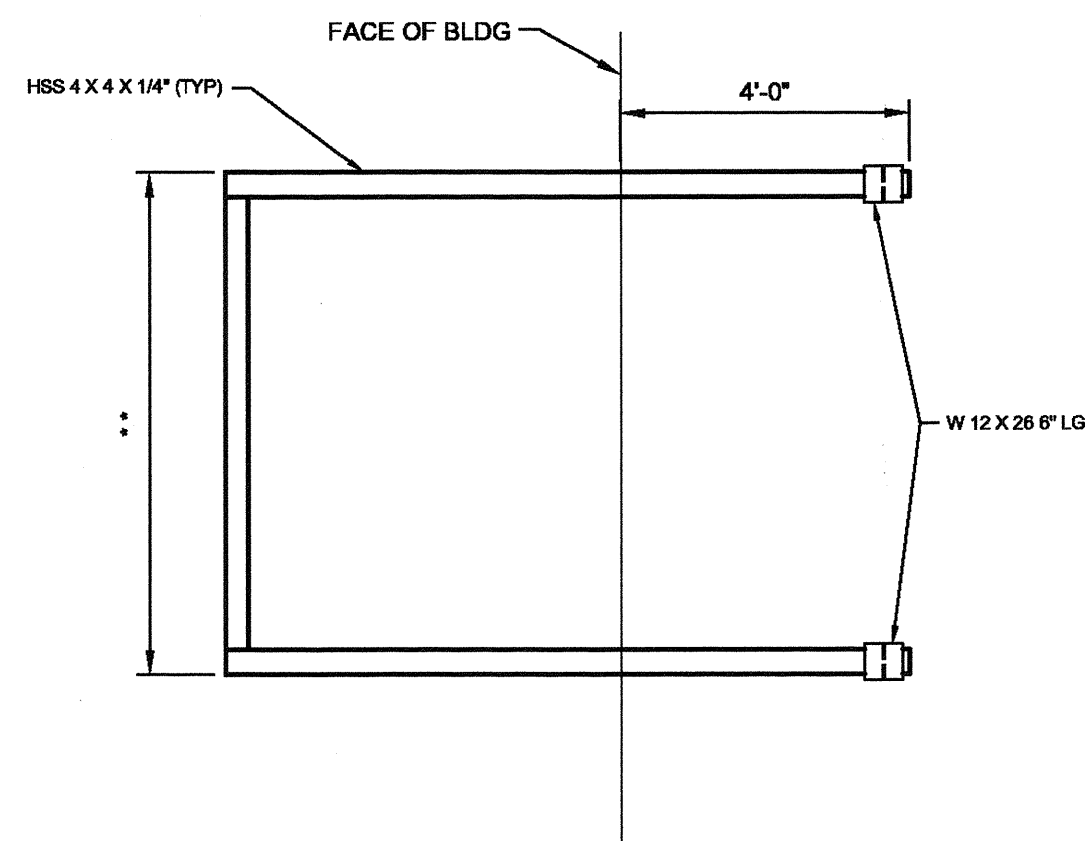
DES	STAFF
DWN	STAFF
CKD	KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

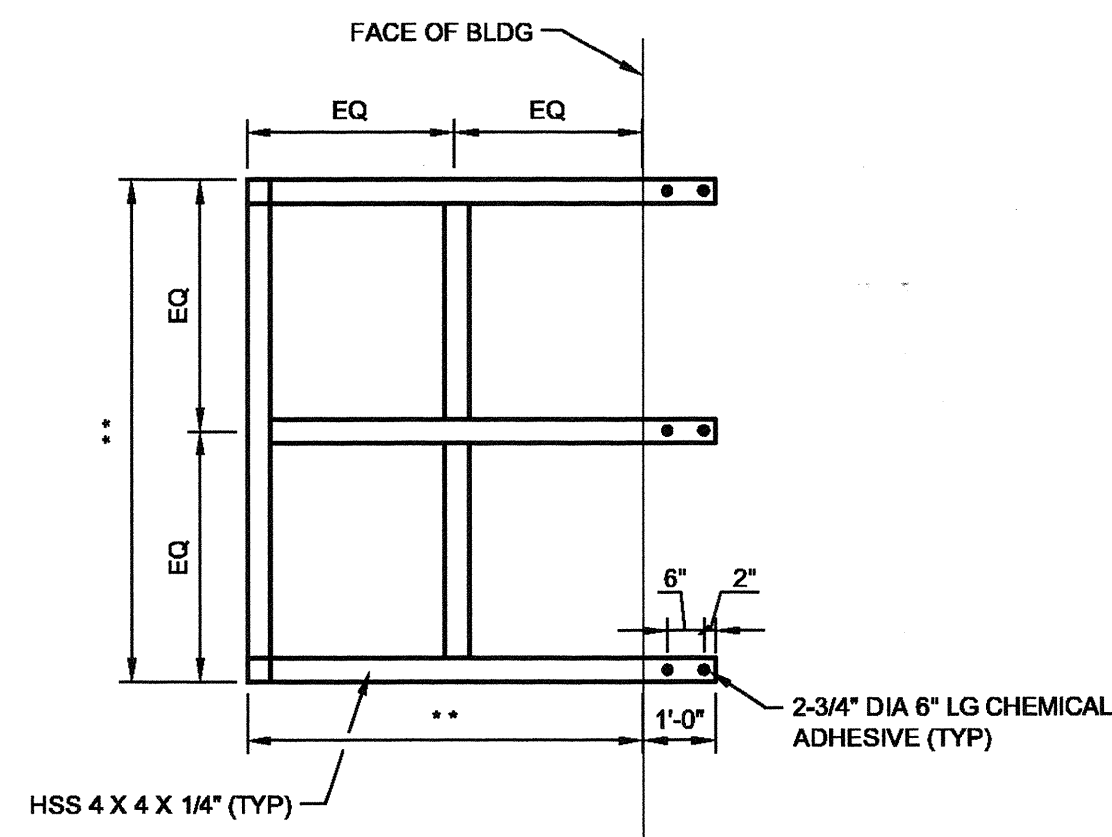
STRUCTURAL
EXISTING FILTER BUILDING
SECTIONS I
SCALE: AS NOTED

ISSUED STATUS:	BID SET
DATE	MARCH, 2011
SHEET	S-08-301
CAD REF. NO.	3788-S-08-301

User: J:\BOND Spec: PIRNIE STANDARD File: U:\3789-NKWD: TAYLOR MILLWORKING DRAWINGS\DESIGN DRAWINGS\STRUCT\3789-S-08-302.DWG Scale: 1:8 Saved Date: 2/21/2011 Time: 14:31 Plot Date: Band: Jmf: 3/10/2011: 09:46 Layout: S-08-302

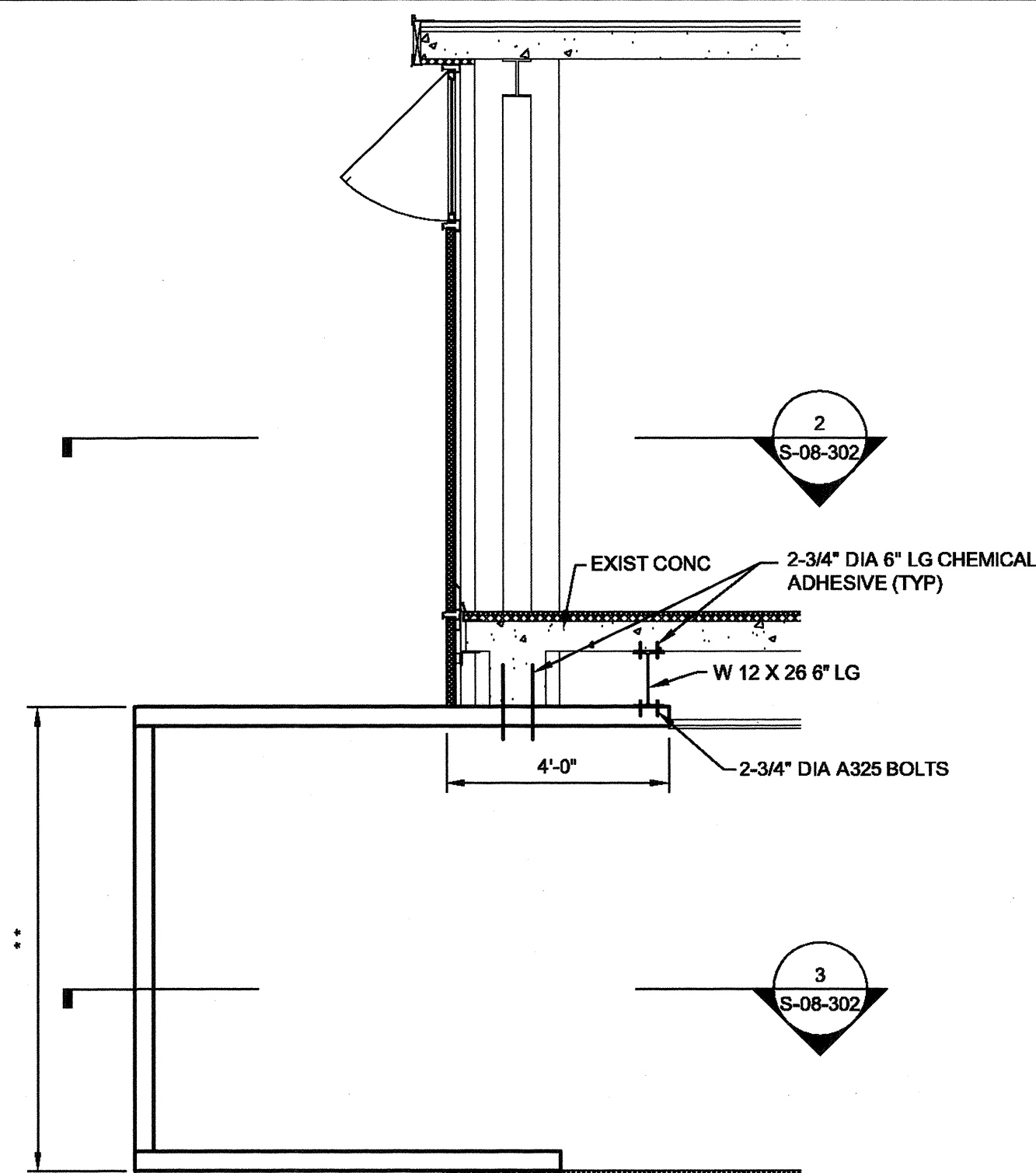


2 TOP FRAMING PLAN
SCALE: 3/8"=1'-0"

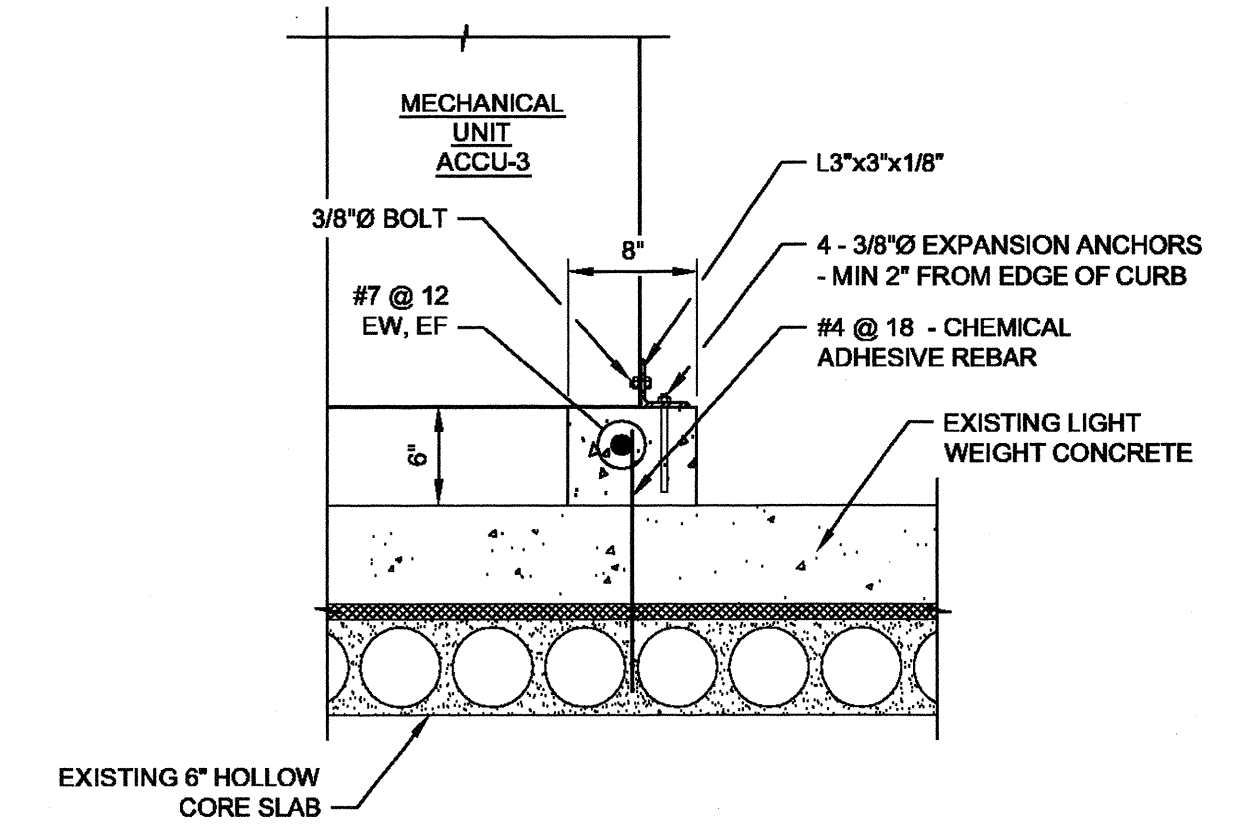


3 BOTTOM FRAMING PLAN
SCALE: 3/8"=1'-0"

NOTE:
EQ - FOR DIMENSIONS CONTRACTOR TO
COORDINATE WITH EQUIPMENT PROVIDED
FOR ADDITIONAL INFORMATION SEE SHEET
H-08-103



1 EXISTING FILTER BUILDING WALL SECTION
SCALE: 3/8"=1'-0"



NOTE:
CURB SECTION FOR MECHANICAL UNIT ACCU-3, FOR LOCATION
SEE PARTIAL ROOF PLAN, SHEET H-08-104

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

0 1/2 1
DRAWING IS
NOT TO SCALE
IF THIS DOES NOT
MEASURE 1 INCH.

**MALCOLM
PIRNIE**
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
RISHNAPURU
R.
NARAYANAPPA
11559
LICENSED
PROFESSIONAL ENGINEER

NO.	BY	DATE	REVISIONS	REMARKS

DES STAFF
DWN STAFF
CKD KRN

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS

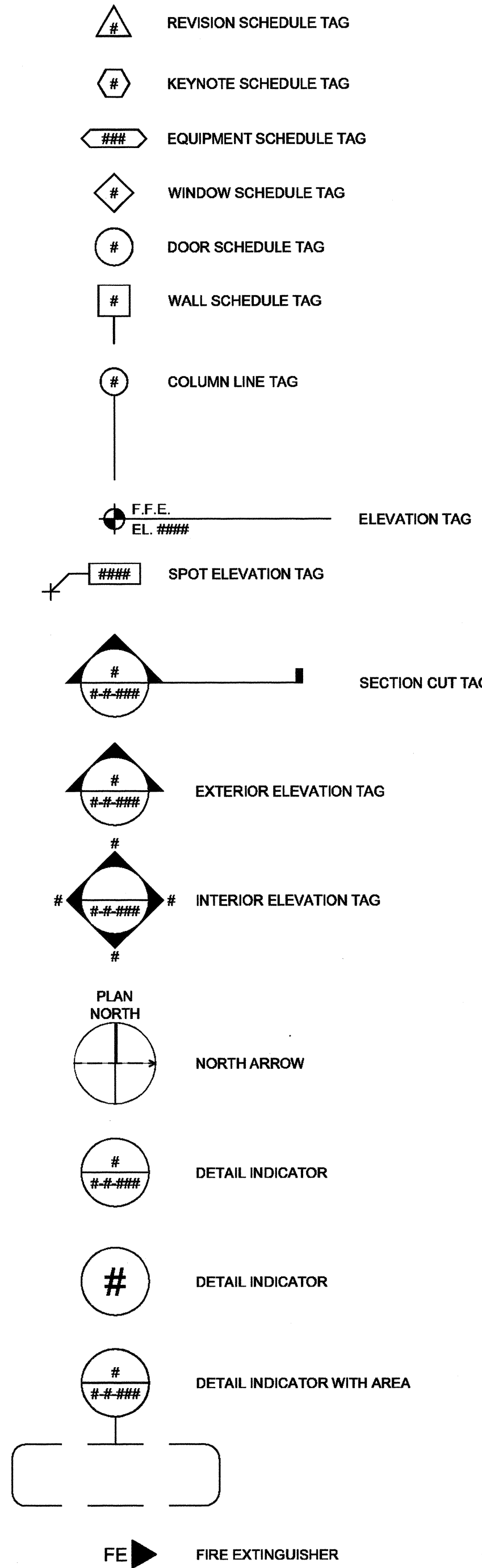
STRUCTURAL
EXISTING FILTER BUILDING
MEZZANINE - SECTIONS II
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET S-08-302
CAD REF. NO. 3789-S-08-302

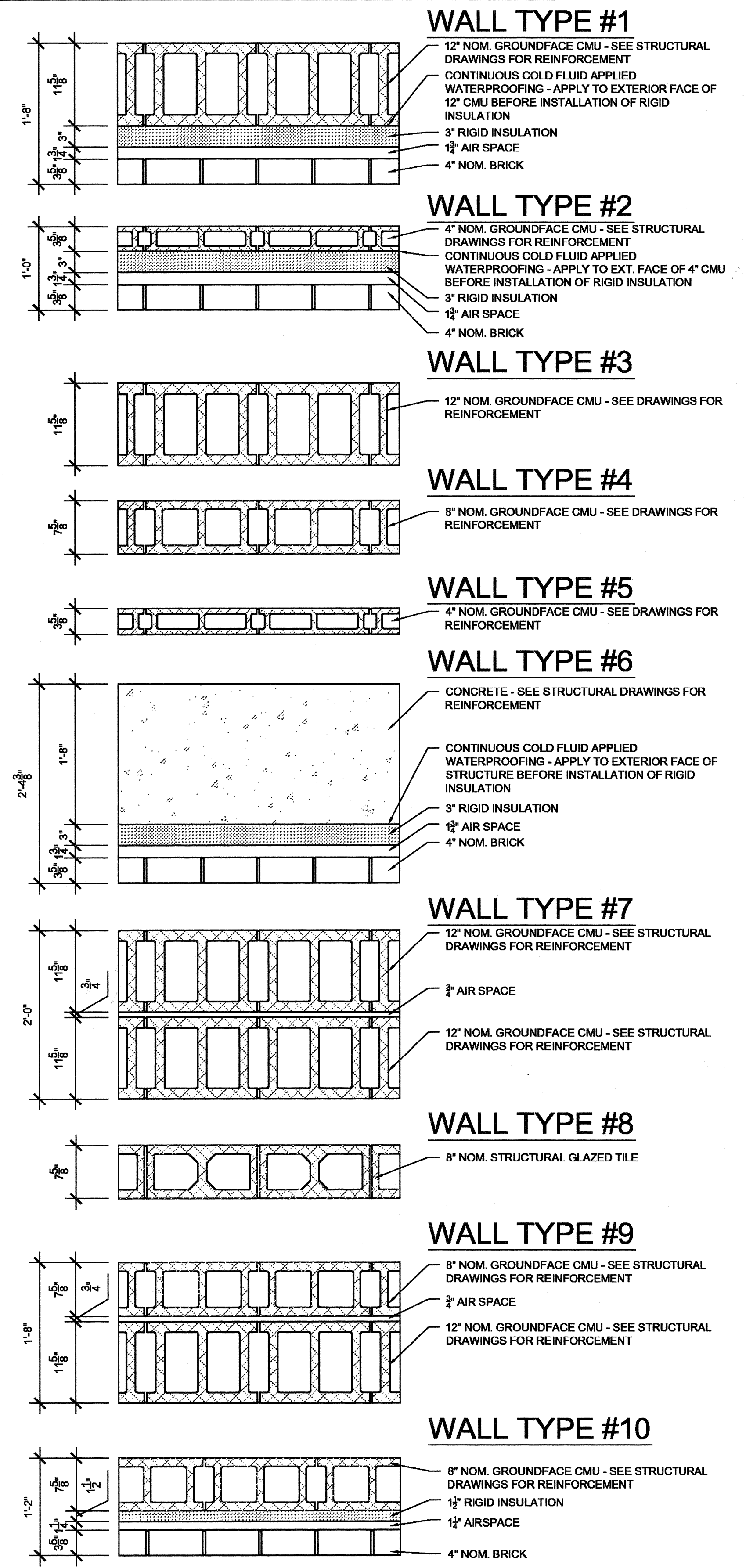
GENERAL ARCHITECTURAL NOTES:

1. SEE FLOOR PLANS FOR CONTROL / EXPANSION JOINT LOCATIONS IN MASONRY WALLS.

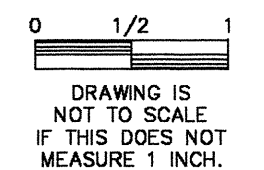
ARCHITECTURAL SYMBOL KEY:



ARCHITECTURAL WALL TYPES SCHEDULE:



User: J:\BOND Spine\PIRNE STANDARD File\13786\KMD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-00-001.DWG Scale: 1:1 Saved Date: 12/22/2010 Time: 10:05 Pld Date: Band, Jrf: 31/02/2011, 08:59 Layout: A-00-001



DRAWING IS NOT TO SCALE. IF THIS DOES NOT MEASURE 1 INCH.

MALCOLM PIRNIE

 ENGINEERS - ARCHITECTS - PLANNERS

JAMES K. PIPER, JR.
 REGISTERED ARCHITECT
 COMMUNITY HEALTH
 ARCHITECTS

NO.		BY	DATE	REVISIONS	REMARKS

DES. JKP
 DWN. TMCH
 CKD. SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
 TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GENERAL NOTES
 SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
 DATE: MARCH, 2011
 SHEET: A-00-001
 CAD REF. NO.: A-00-001

BUILDING CODE REVIEW

2006 INTERNATIONAL BUILDING CODE (IBC)
2007 KENTUCKY BUILDING CODE (KBC) AMENDMENTS REVISED OCT. 2009.

NEW PRELIMINARY TREATMENT / GRANULAR ACTIVATED CARBON BUILDING

USE GROUP - CHAPTER 3:
USE GROUP DESIGNATION: F-2
DESCRIPTION: FACTORY INDUSTRIAL, LOW HAZARD, PROCESSING BEVERAGES

BUILDING HEIGHT / AREA - CHAPTER 5:
(TYPE II B CONSTRUCTION)
ALLOWABLE HEIGHT: 3 STORIES
ACTUAL HEIGHT: 1 STORY
ALLOWABLE AREA: 23,000 SF
ACTUAL AREA: 21,743 SF

TYPE OF CONSTRUCTION - CHAPTER 6:
(602.2) II B NON-COMBUSTIBLE MATERIALS
TABLE 601 - NO ELEMENTS FOR TYPE II B CONSTRUCTION HAVE FIRE-RESISTANCE RATING REQUIREMENTS.

FIRE RESISTANT CONSTRUCTION - CHAPTER 7:
FIRE STAIR SEPARATION: 1 HR RATED

INTERIOR FINISHES - CHAPTER 8:
CORRIDORS, ROOMS, AND ENCLOSED SPACES: CLASS C

FIRE PROTECTION SYSTEMS - CHAPTER 9:
NO REQUIREMENTS

MEANS OF EGRESS - CHAPTER 10:
OCCUPANCY LOAD:
ACTUAL AREA: 21,743 SF
BASIN AREA: - 6770 SF
VESSELS: - 1582 SF
HABITABLE AREA: 13,391 SF

HABITABLE AREA / 100 SF PER PERSON (INDUSTRIAL AREAS) = 134 PERSONS OCCUPANT LOAD
EXITS REQUIRED: 2
TABLE 1016.1 MAXIMUM EXIT TRAVEL DISTANCE: 300 FT
ACTUAL LONGEST TRAVEL DISTANCE: 160 FT

ACCESSIBILITY - CHAPTER 11:
EQUIPMENT AREAS ARE NOT REQUIRED TO BE ACCESSIBLE PER 1103.2 WITH THE EXCEPTION OF THE ADMIN. AND LAB AREA.

NEW GRANULAR ACTIVATED CARBON FEED PUMP STATION

USE GROUP - CHAPTER 3:
USE GROUP DESIGNATION: F-2
DESCRIPTION: FACTORY INDUSTRIAL, LOW HAZARD, PROCESSING BEVERAGES

BUILDING HEIGHT / AREA - CHAPTER 5:
(TYPE II B CONSTRUCTION)
ALLOWABLE HEIGHT: 3 STORIES
ACTUAL HEIGHT: 1 STORY
ALLOWABLE AREA: 23,000 SF
ACTUAL AREA: 2,588 SF

TYPE OF CONSTRUCTION - CHAPTER 6:
(602.2) II B NON-COMBUSTIBLE MATERIALS
TABLE 601 - NO ELEMENTS FOR TYPE II B CONSTRUCTION HAVE FIRE-RESISTANCE RATING REQUIREMENTS.

FIRE RESISTANT CONSTRUCTION - CHAPTER 7:
NO REQUIREMENTS

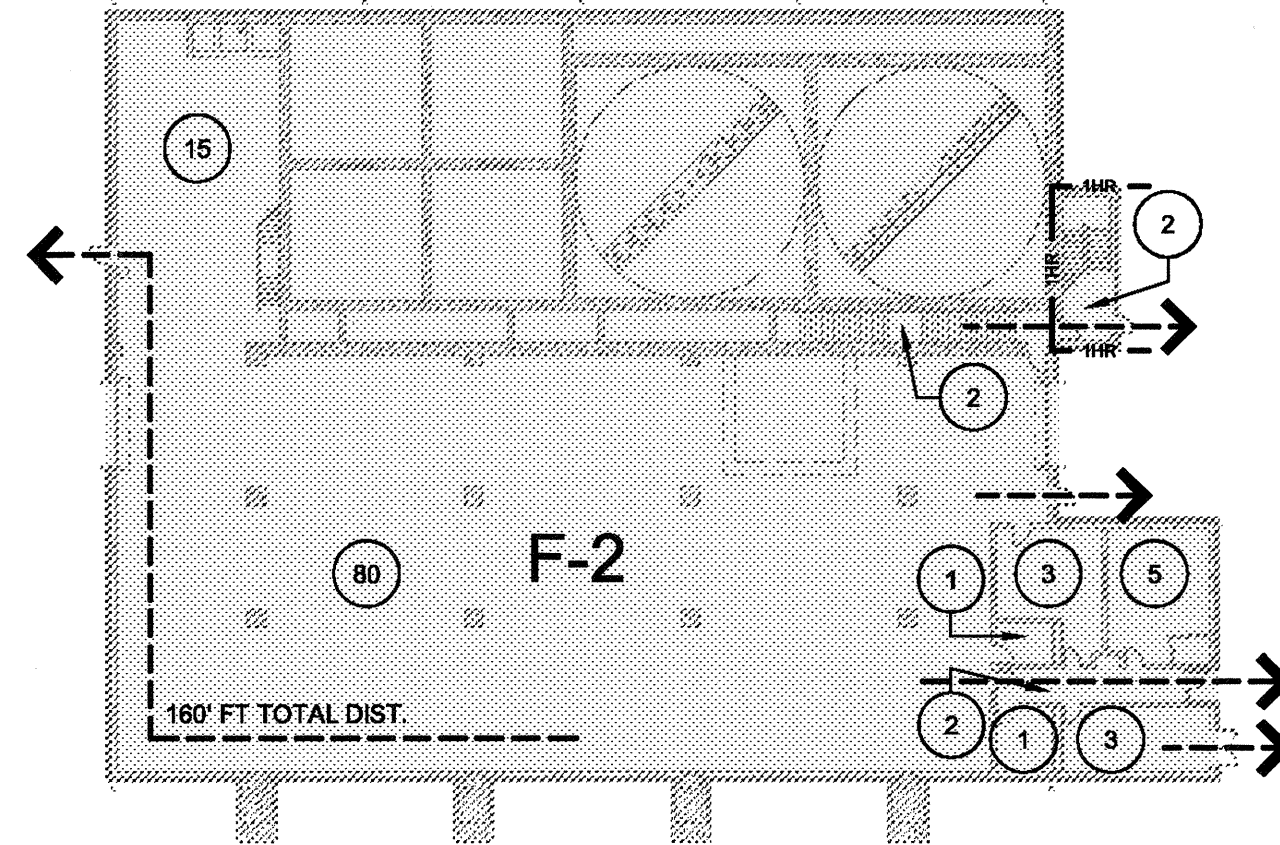
INTERIOR FINISHES - CHAPTER 8:
CORRIDORS, ROOMS, AND ENCLOSED SPACES: CLASS C

FIRE PROTECTION SYSTEMS - CHAPTER 9:
NO REQUIREMENTS

MEANS OF EGRESS - CHAPTER 10:
OCCUPANCY LOAD:
HABITABLE AREA: 2,588 SF

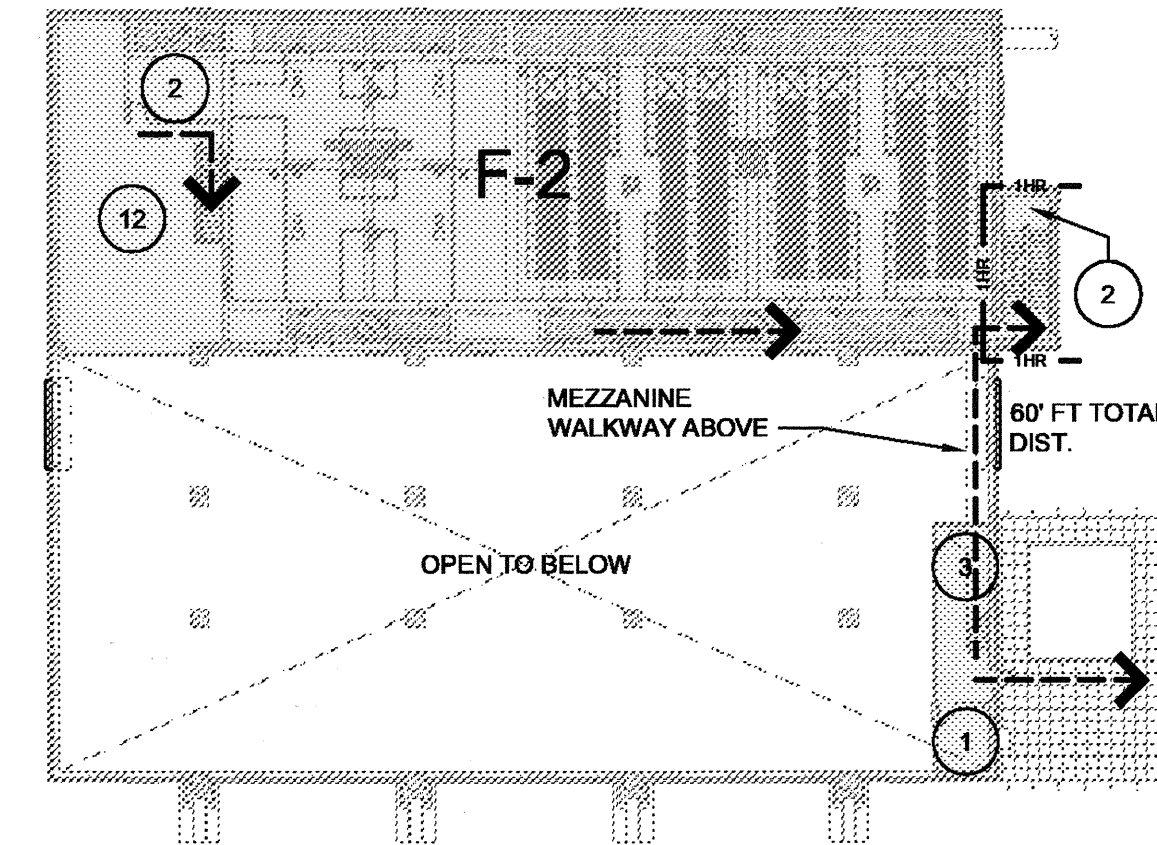
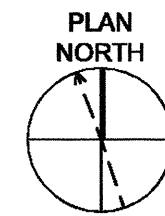
HABITABLE AREA / 100 SF PER PERSON (INDUSTRIAL AREAS) = 26 PERSONS OCCUPANT LOAD
(1015) EXITS REQUIRED: 2
TABLE 1016.1 MAXIMUM EXIT TRAVEL DISTANCE: 300 FT
ACTUAL LONGEST TRAVEL DISTANCE: 68 FT

ACCESSIBILITY - CHAPTER 11:
EQUIPMENT AREAS ARE NOT REQUIRED TO BE ACCESSIBLE PER 1103.2.



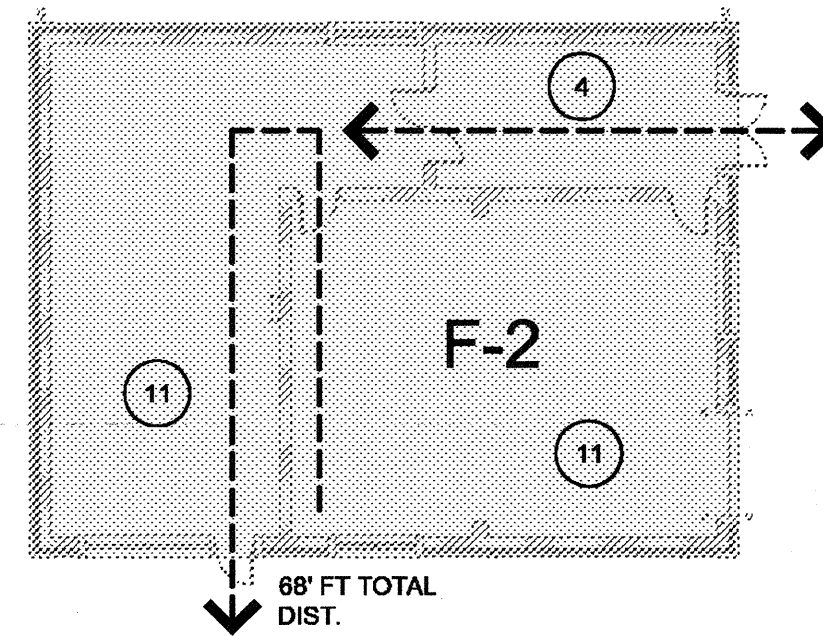
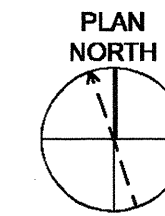
1 PT/GAC BUILDING
PLAN EL. AT 524.00

SCALE: 1/32"=1'-0" 0 16' 32' 64'



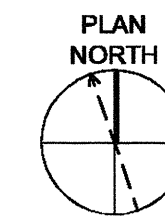
2 PT/GAC BUILDING
PLAN EL. AT 537.00

SCALE: 1/32"=1'-0" 0 16' 32' 64'



3 GAC FEED PUMP STATION
PLAN EL. AT 524.50

SCALE: 1/16"=1'-0" 0 6' 12' 24' 36'

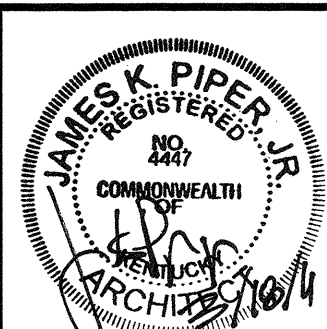


LEGEND:

- 1HR — 1HR — 1 - HOUR RATED CONSTRUCTION
- ← — — — MAJOR EXIST EGRESS
- ⊙ # OCCUPANT LOAD

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES: JKP
DWN: TMCH
CKD: SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
CODE AND LIFE SAFETY
INFORMATION I
SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-00-002
CAD REF. NO.: A-00-002

BUILDING CODE REVIEW

2006 INTERNATIONAL BUILDING CODE (IBC)
2007 KENTUCKY BUILDING CODE (KBC) AMENDMENTS REVISED OCT. 2009.

EXISTING CHEMICAL BUILDING

EXISTING BUILDING - NEW DEMOLITION PATCHING AT WALLS, MECHANICAL AND ELECTRICAL WORK ONLY. DEMOLITION WORK WILL DECREASE MAXIMUM EXIT TRAVEL DISTANCE.

1987 KENTUCKY BUILDING CODE (KBC) - FROM ORIGINAL CONSTRUCTION DOCUMENTS.

USE GROUP - CHAPTER 3:
USE GROUP DESIGNATION
DESCRIPTION

H-4
HIGH HAZARD, BUILDINGS THAT CONTAIN HEALTH HAZARDS

BUILDING HEIGHT / AREA - CHAPTER 5:
(TYPE II B CONSTRUCTION)

ALLOWABLE HEIGHT 3 STORIES
ACTUAL HEIGHT 18'-0" STORY
ALLOWABLE AREA 17,500 SF
ACTUAL AREA 5,800 SF

TYPE OF CONSTRUCTION - CHAPTER 6:
II B NON-COMBUSTIBLE PROTECTED

TABLE 601 - NO ELEMENTS FOR TYPE II B CONSTRUCTION HAVE FIRE-RESISTANCE RATING REQUIREMENTS.

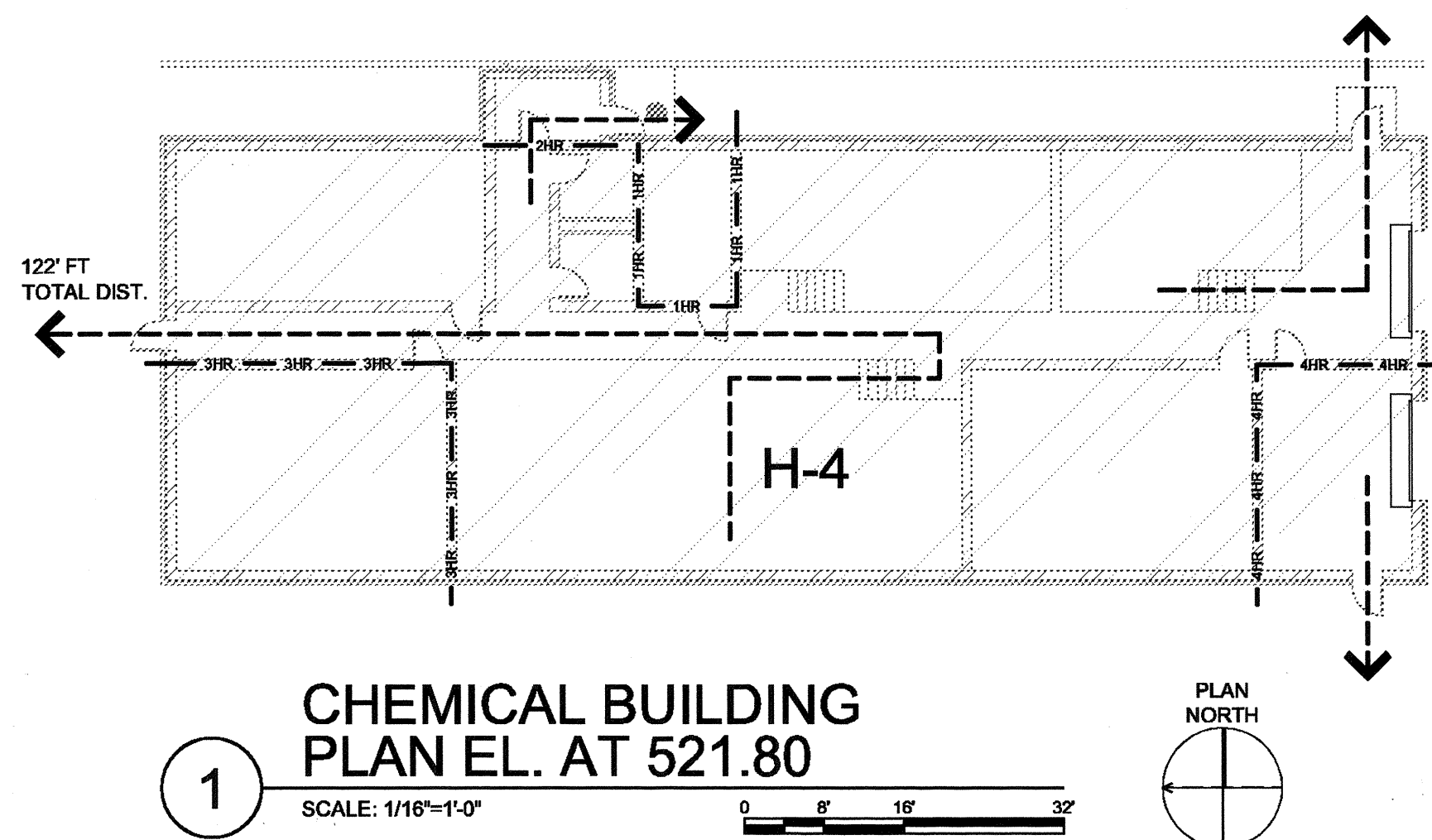
FIRE PROTECTION SYSTEMS - CHAPTER 9:
FULLY SUPPRESSED SYSTEM

MEANS OF EGRESS CHAPTER 10:

OCCUPANCY LOAD: 3 MAX
TABLE 1016.1 MAXIMUM EXIT TRAVEL DISTANCE 175 FT
ACTUAL LONGEST TRAVEL DISTANCE 122 FT

ACCESSIBILITY - CHAPTER 11:

EQUIPMENT AREAS ARE NOT REQUIRED TO BE ACCESSIBLE PER 1103.2.



CHEMICAL BUILDING
PLAN EL. AT 521.80

1 SCALE: 1/16"=1'-0"

EXISTING FILTER BUILDING

EXISTING BUILDING - NEW DEMOLITION PATCHING AT WALLS, MECHANICAL AND ELECTRICAL WORK ONLY. DEMOLITION WORK WILL DECREASE MAXIMUM EXIT TRAVEL DISTANCE.

CONSTRUCTED APPROX 1953 - NO CODE INFORMATION AVAILABLE

USE GROUP - CHAPTER 3:
USE GROUP DESIGNATION
DESCRIPTION

F-2
FACTORY INDUSTRIAL, LOW
HAZARD, PROCESSING BEVERAGES

BUILDING HEIGHT / AREA - CHAPTER 5:
(TYPE II B CONSTRUCTION)

ALLOWABLE HEIGHT 3 STORIES
ACTUAL HEIGHT 3 STORIES
ALLOWABLE AREA 23,000 SF
ACTUAL AREA 24,472 SF

TYPE OF CONSTRUCTION - CHAPTER 6:
(602.2) II B NON-COMBUSTIBLE MATERIALS

TABLE 601 - NO ELEMENTS FOR TYPE II B CONSTRUCTION HAVE FIRE-RESISTANCE RATING REQUIREMENTS.

FIRE RESISTANT CONSTRUCTION - CHAPTER 7:
FIRE WALL SEPARATION

3 HR RATED

INTERIOR FINISHES - CHAPTER 8:
CORRIDORS, ROOMS, AND ENCLOSED SPACES

CLASS C

FIRE PROTECTION SYSTEMS - CHAPTER 9:
NO REQUIREMENTS

MEANS OF EGRESS - CHAPTER 10:

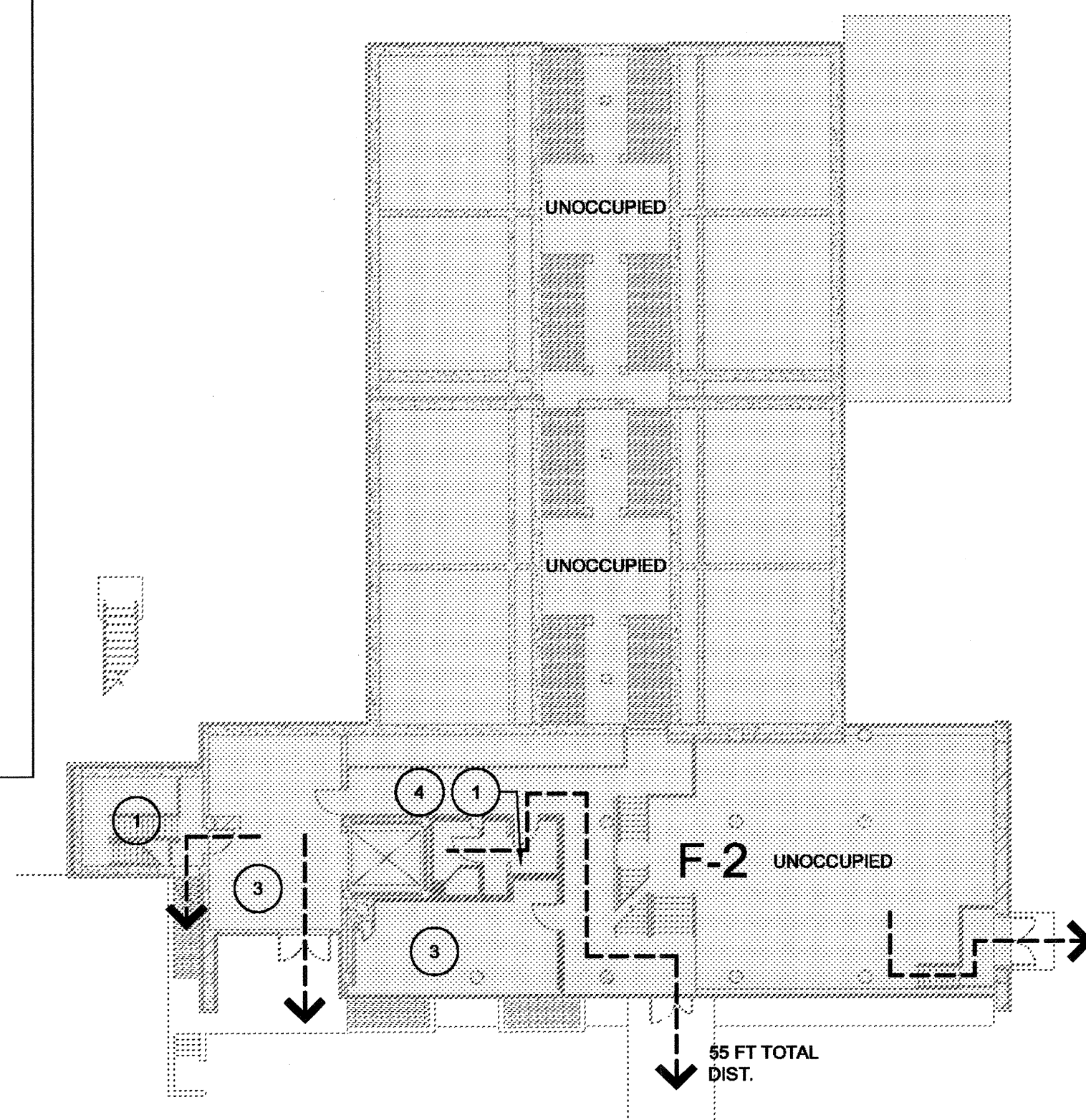
OCCUPANCY LOAD:
ACTUAL AREA 24,472 SF
PIPE GALLERIES -16,657 SF
HABITABLE AREA 7,815 SF

HABITABLE AREA / 100 SF PER PERSON (INDUSTRIAL AREAS) = 78 PERSONS OCCUPANT LOAD

EXITS REQUIRED 2
TABLE 1016.1 MAXIMUM EXIT TRAVEL DISTANCE 300 FT
ACTUAL LONGEST TRAVEL DISTANCE 156 FT

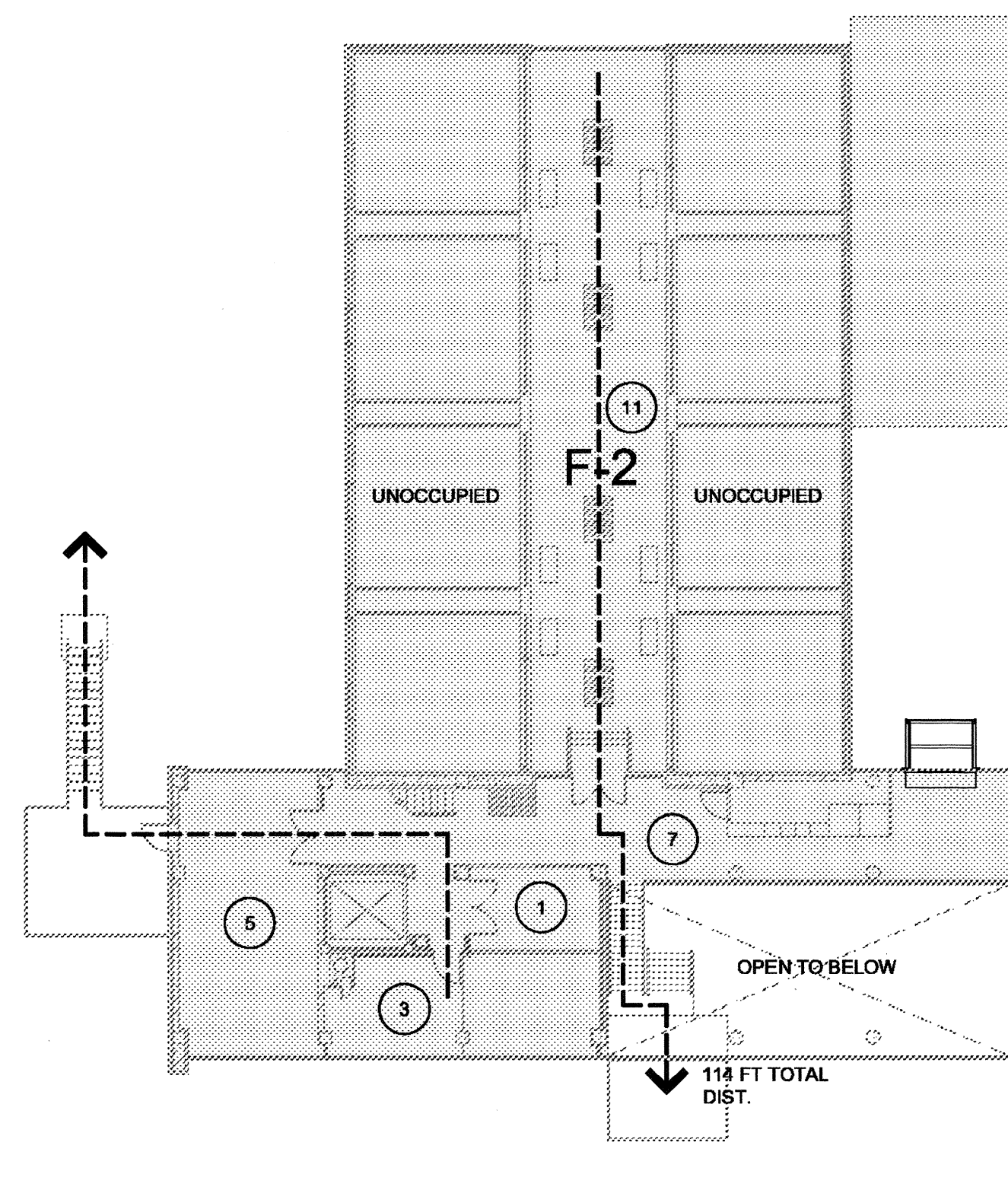
ACCESSIBILITY - CHAPTER 11:

EQUIPMENT AREAS ARE NOT REQUIRED TO BE ACCESSIBLE PER 1103.2.



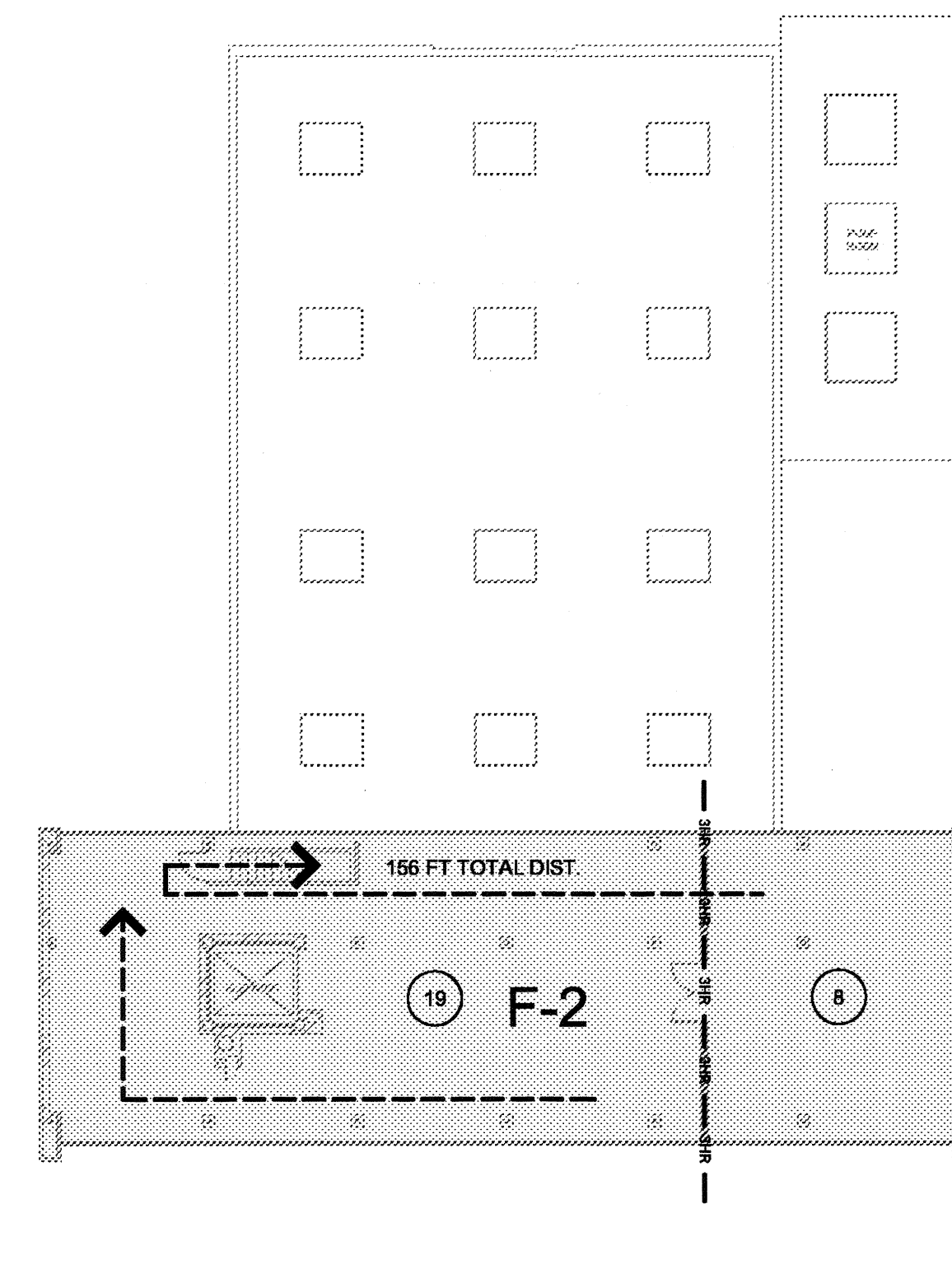
FILTER BUILDING
PLAN EL. AT 525.50

2 SCALE: 1/16"=1'-0"



FILTER BUILDING
PLAN EL. AT 535.00

3 SCALE: 1/16"=1'-0"



FILTER BUILDING
PLAN EL. AT 545.00

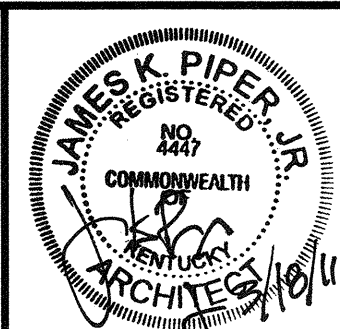
4 SCALE: 1/16"=1'-0"

LEGEND:

- 1HR --- 1 - HOUR RATED CONSTRUCTION
- 2HR --- 2 - HOUR RATED CONSTRUCTION
- 3HR --- 3 - HOUR RATED CONSTRUCTION
- 4HR --- 4 - HOUR RATED CONSTRUCTION
- MAJOR EXIST EGRESS
- # OCCUPANT LOAD

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
OWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
CODE AND LIFE SAFETY
INFORMATION II
SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET A-00-003
CAD REF. NO. A-00-003

User: JBRND Spoc: PIRNIE STANDARD File: U:\3789-NKWD TAYLOR MILL\WORKING DRAWINGS\ARCHA-00-003.DWG Scale: 1/16"=1'-0" Time: 1:23 Plot Date: Bond: Jeff: 3/10/2011 09:00 Layout: A-00-003

GENERAL NOTES:

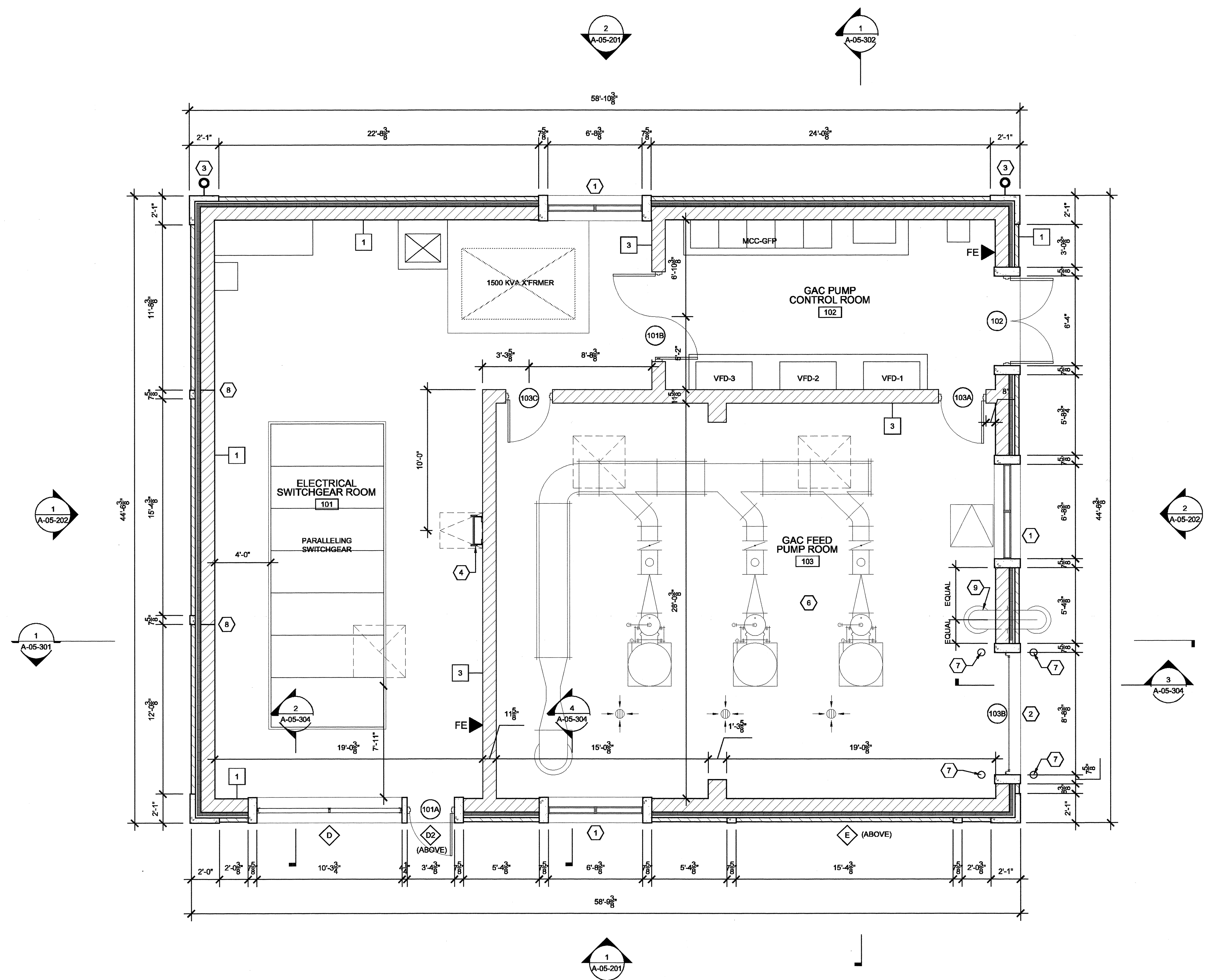
1. CEILINGS ARE TO BE PAINTED. SEE DIVISION 9 SPECIFICATION FOR TYPE.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

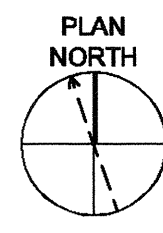
KEYNOTES:

1. COMBINATION LOUVER/DAMPER W/ ACTUATOR SEE MECHANICAL DRAWINGS 1" SHEETS.
2. OVERHEAD DOOR 8'-0" W CLEAR X 12'-0" CLEAR. COORDINATE ROUGH OPENING REQUIREMENTS WITH PRECAST MANUFACTURER.
3. 6" DIA. DOWNSPOUT W/ BOOTS - MOUNT W/ STAINLESS STEEL STANDOFFS CENTER ON VERTICAL PRECAST.
4. ROOF ACCESS LADDER AND HATCH ABOVE SEE A-05-300 SHEETS FOR DETAILS.
5. NOT USED
6. DASHED LINE INDICATES BRIDGECRANE AND SUPPORT RAILS
7. 8" PIPE BOLLARD - SEE 3/C-01-501 - ALIGN WITH EDGE OF OPENING 1'-0" FROM FACE OF WALL.
8. ELASTOMERIC EXPANSION JOINT IN CMU - SEE ELEVATIONS FOR EXPANSION JOINTS IN BRICK VENEER
9. CENTER VENT PIPE AND PRECAST SURROUND BETWEEN JAMB OF PRECAST DOOR 1035 AND JAMB OF LOUVER LV-13B.

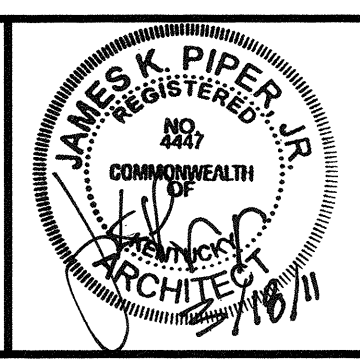


**GAC FEED PUMP STATION
PLAN AT EL. 524.50**

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



0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES: JKP
DWN: TMCH
CKD: SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

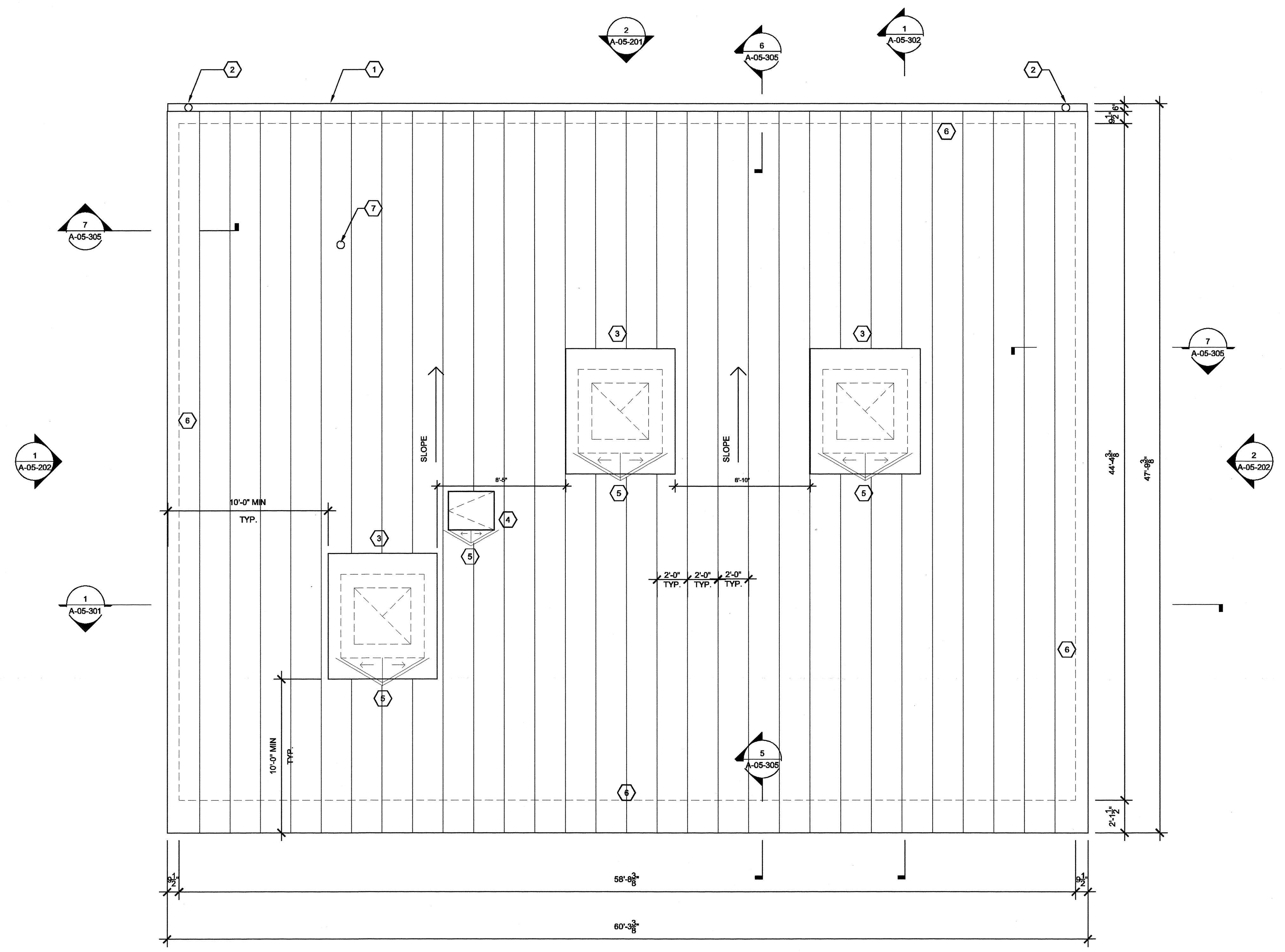
ARCHITECTURAL
**GAC FEED PUMP STATION
BRIDGECRANE - PLAN AT EL. 524.50**
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-101
CAD REF. NO.: A-05-101

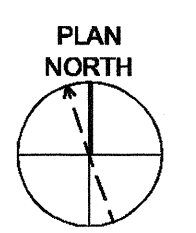
User: JBOND Spc:PIRNIE STANDARD File:U:\3789-NKWD TAYLOR MILL WORKING DRAWINGS\ARCH\A-05-101.DWG Scale:1:48 SavedDate:2/22/2011 Time:08:33 Plot Date: Bond_Jeff: 3/10/2011: 09:00 Layout:A-05-101

User: I:\BOND Space\PIRNE STANDARD File\13798-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-05-102.DWG Scale: 1/4"=1'-0" Time: 16:23 Plot Date: Bond, Jeff, 3/10/2011, 08:09 Layout: A-05-102

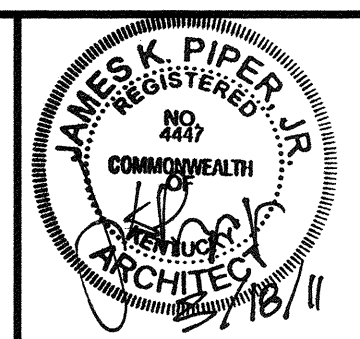
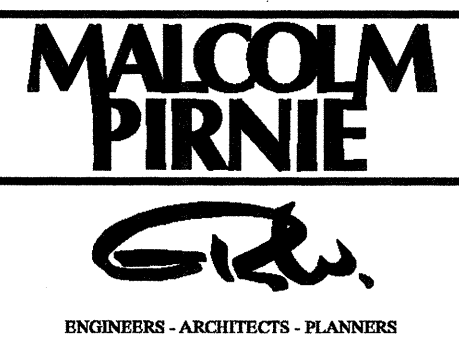
- GENERAL NOTES:**
1. PROVIDE ROOF CURBS FOR ALL ROOF MOUNTED EQUIPMENT.
 2. NO ROOFTOP EQUIPMENT MAY BE INSTALLED WITHIN 10'-0" FROM THE EDGE OF ROOF.
 3. PROVIDE STANDING SEAM METAL ROOF - SEE DIVISION 7 SPECIFICATION.
-
- SYMBOL KEY:**
1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.
-
- KEYNOTES:**
1. 6" GUTTER
 2. 6" DOWNSPOUT (CENTERED ON PRECAST CORNER - SEE SHEET C-02-312 FOR DOWNSPOUT BOOT CONNECTION)
 3. ROOF MNT. EXHAUST HOOD SEE 'H' SHEETS FOR DETAILS
 4. ROOF HATCH 3'-0" x 2'-6" R.O.
 5. PREFORMED METAL CRICKETS
 6. DASHED LINE INDICATES EDGE OF BRICK VENEER BELOW.
 7. PLUMBING VENT. SEE PLUMBING. PROVIDE ROOF MANUFACTURER'S STD. PIPE BOOT AT VENT PENETRATIONS. SEE SPECIFICATIONS FOR ADDITIONAL INFO.



1 GAC FEED PUMP STATION
ROOF PLAN
SCALE: 1/4"=1'-0"



0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
BRIDGECRANE-ROOF PLAN
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-102
CAD REF. NO.: A-05-102

GENERAL NOTES:

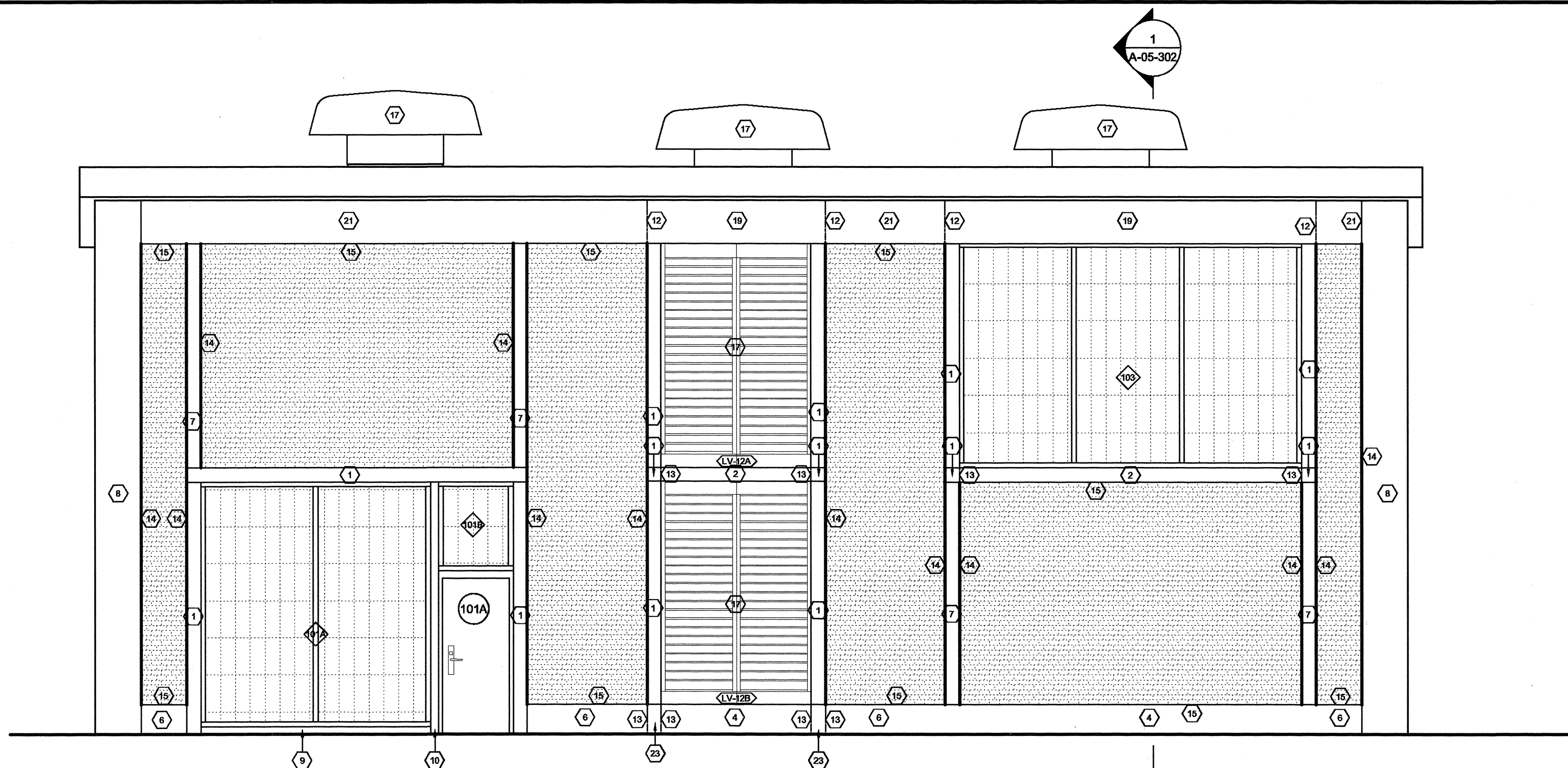
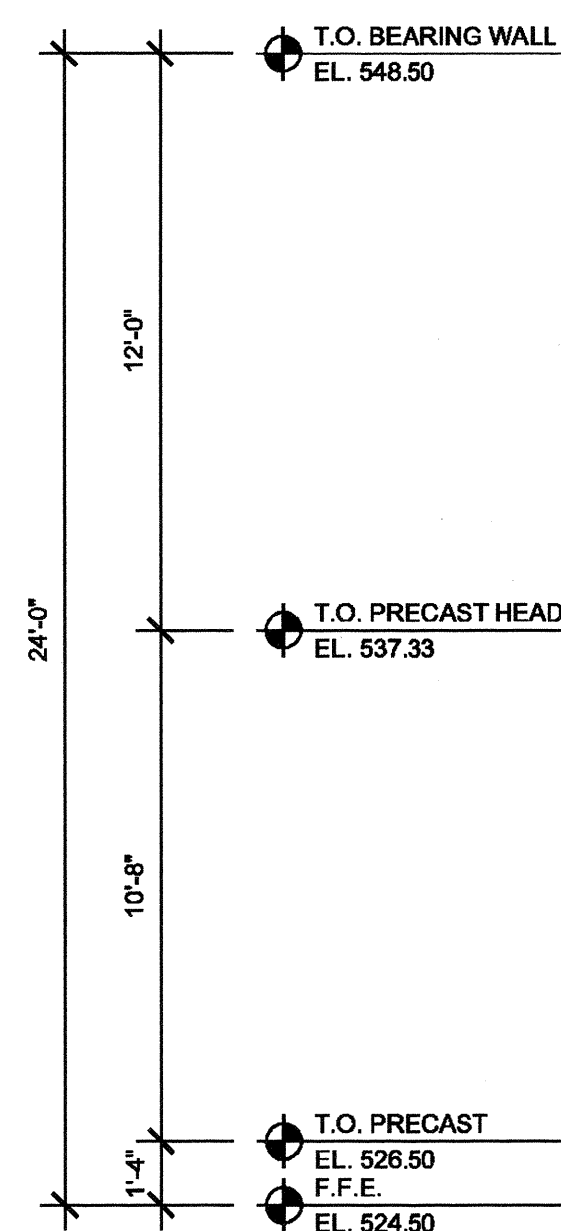
- COORDINATE MECHANICAL OPENINGS WITH APPROVED EQUIPMENT MANUFACTURER.

SYMBOL KEY:

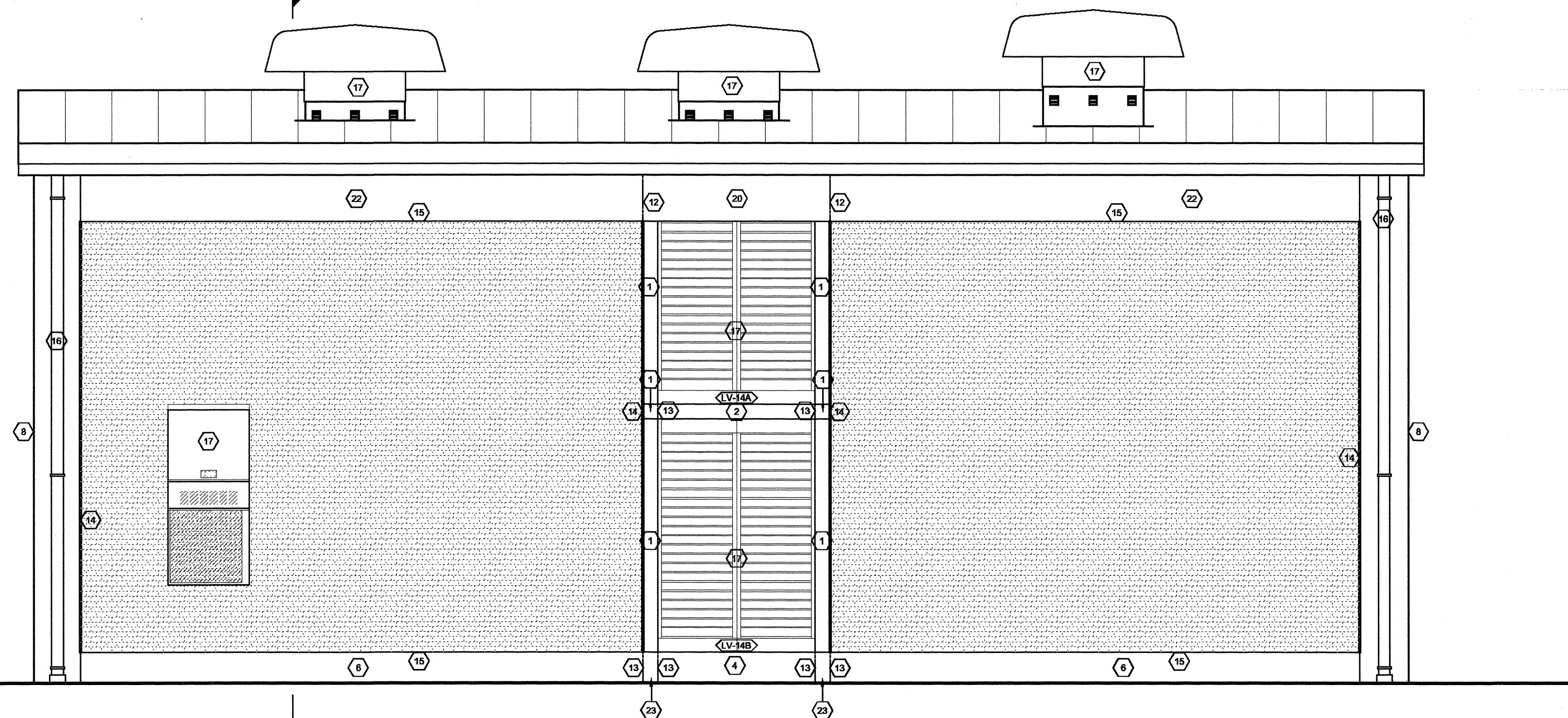
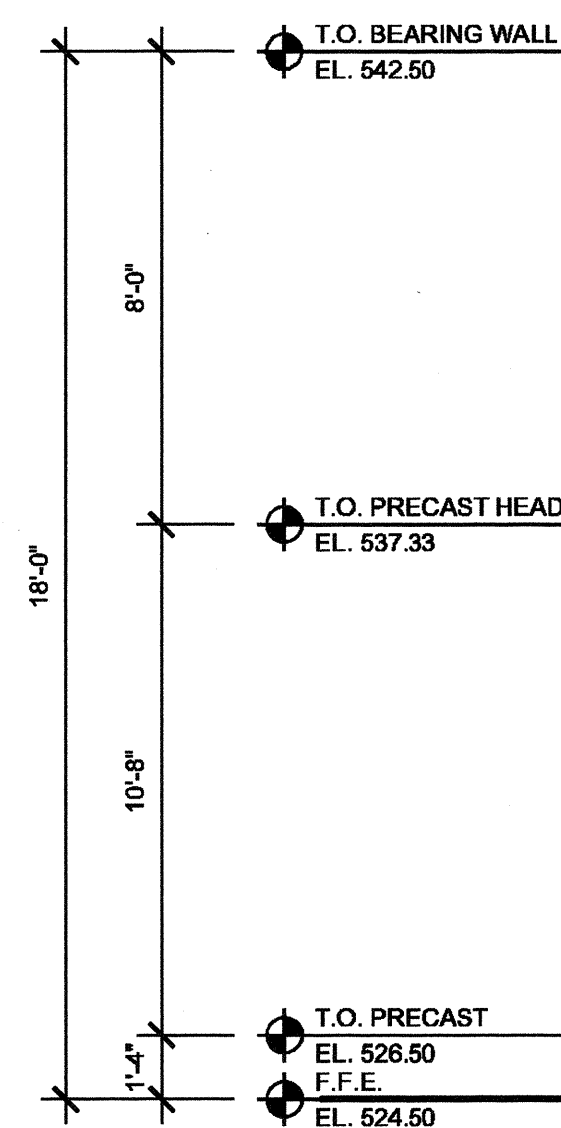
- SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

KEYNOTES:

- SEE DETAIL 1/A-10-531
- SEE DETAIL 2/A-10-531
- SEE DETAIL 3/A-10-531
- SEE DETAIL 4/A-10-531
- SEE DETAIL 5/A-10-531
- SEE DETAIL 6/A-10-531
- SEE DETAIL 7/A-10-531
- SEE DETAIL 8/A-10-531
- SEE DETAIL 9/A-10-531
- SEE DETAIL 10/A-10-531
- SEE DETAIL 11/A-10-531
- DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- PROVIDE ELASTOMERIC SEALANT EXPANSION JOINT
- PROVIDE BOND BREAKER MATERIAL TO PROVIDE A SLIP SHEET BETWEEN PRECAST CONCRETE AND CLAY MASONRY.
- DOWNSPOUT CIRCULAR 6"x.25" MILL FINISH ALUMINUM
- MECHANICAL EQUIPMENT SEE 'H' SHEETS
- NOT USED
- SEE DETAIL 12/A-10-531
- SEE DETAIL 13/A-10-531
- SEE DETAIL 1/A-10-532
- SEE DETAIL 2/A-10-532
- SEE DETAIL 4/A-10-531

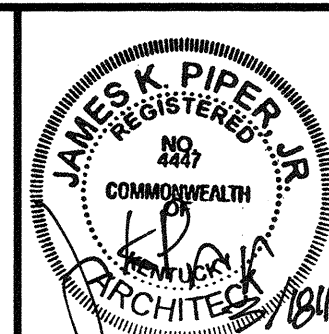
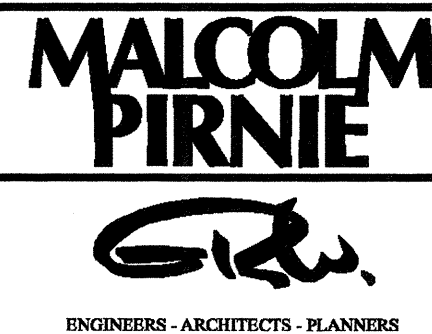


1
GAC FEED PUMP STATION
SOUTH ELEVATION
SCALE: 1/4"=1'-0"



2
GAC FEED PUMP STATION
NORTH ELEVATION
SCALE: 1/4"=1'-0"

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
BRIDGECRANE - ELEVATIONS I
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-201
CAD REF. NO.: A-05-201

GENERAL NOTES:

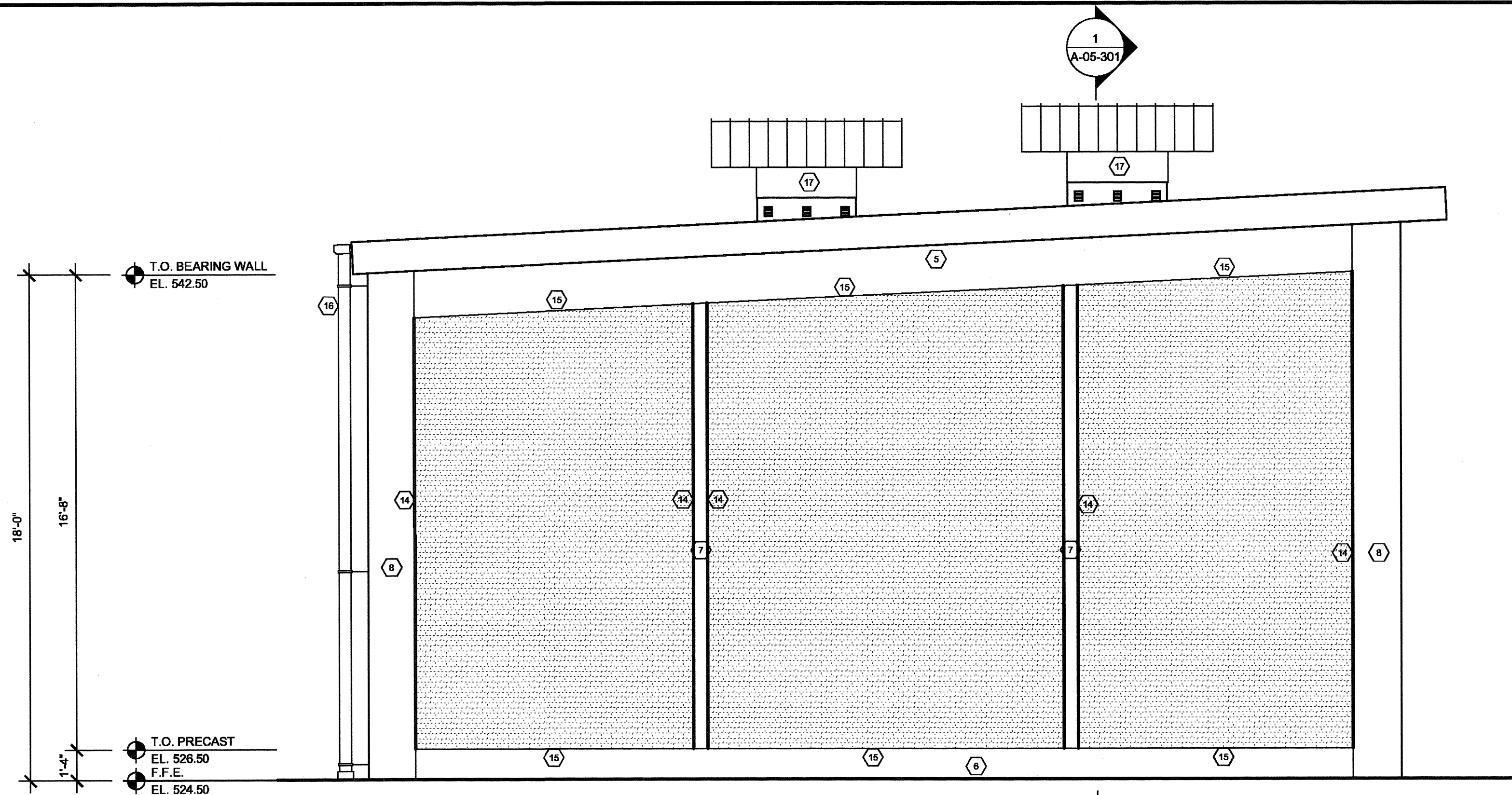
- COORDINATE MECHANICAL OPENINGS WITH APPROVED EQUIPMENT MANUFACTURER.

SYMBOL KEY:

- SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

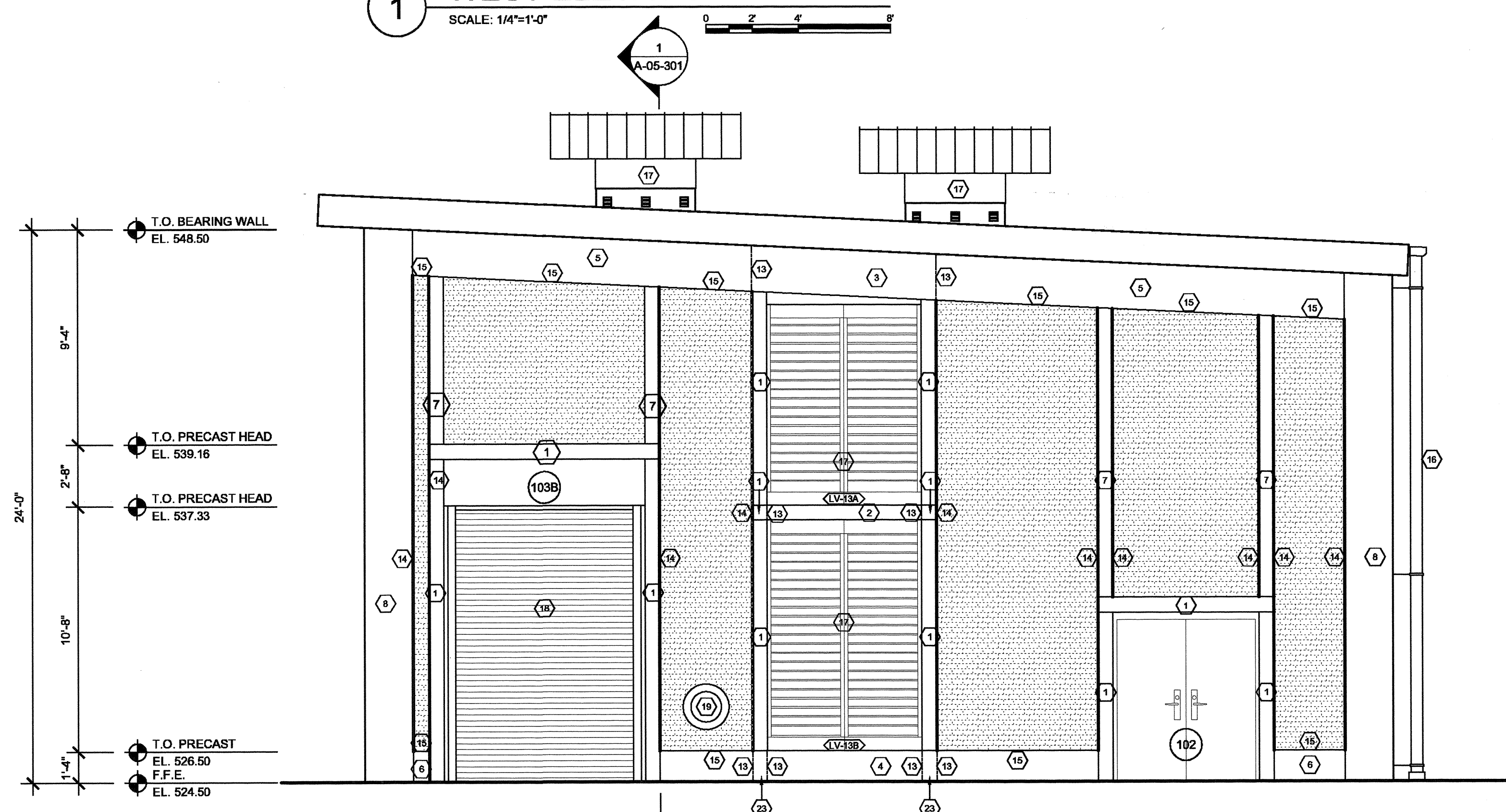
KEYNOTES:

- SEE DETAIL 1/A-10-531
- SEE DETAIL 2/A-10-531
- SEE DETAIL 3/A-10-531
- SEE DETAIL 4/A-10-531
- SEE DETAIL 5/A-10-531
- SEE DETAIL 6/A-10-531
- SEE DETAIL 7/A-10-531
- SEE DETAIL 8/A-10-531
- SEE DETAIL 9/A-10-531
- SEE DETAIL 10/A-10-531
- SEE DETAIL 11/A-10-531
- NOT USED
- DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- PROVIDE ELASTOMERIC SEALANT EXPANSION JOINT
- PROVIDE BOND BREAKER MATERIAL TO PROVIDE A SLIP SHEET BETWEEN PRECAST CONCRETE AND CLAY MASONRY.
- DOWNSPOUT CIRCULAR 6"x25" MILL FINISH ALUMINUM.
- MECHANICAL EQUIPMENT SEE 'H' SHEETS
- COORDINATE PRECAST ELEVATION W/ DOOR MANUFACTURER. ADJUST TO A JAMB MOUNTED 8'-0" W CLEAR x 12'-0" T CLEAR OPENING.
- PRECAST SEE DETAIL 4/A-05-304 - CENTER VENT PIPE AND PRECAST SURROUND BETWEEN JAMB OF PRECAST DOOR 103B AND JAMB OF LOUVER LV-16B. PIPE NOT ILLUSTRATED FOR CLARIT.
- NOT USED.
- NOT USED.
- NOT USED.
- SEE DETAIL 4/A-10-531



**GAC FEED PUMP STATION
WEST ELEVATION**

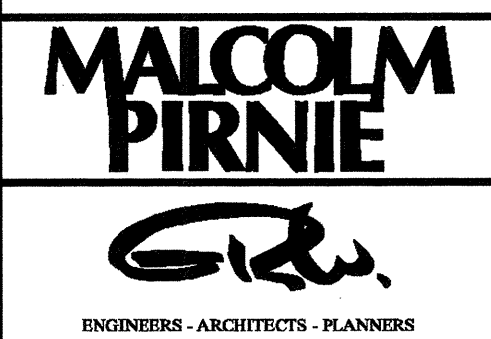
1
SCALE: 1/4"=1'-0"
0 2 4 8



**GAC FEED PUMP STATION
EAST ELEVATION**

2
SCALE: 1/4"=1'-0"
0 2 4 8

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES: JKP
DWN: TMCH
CHK: SL / JKP

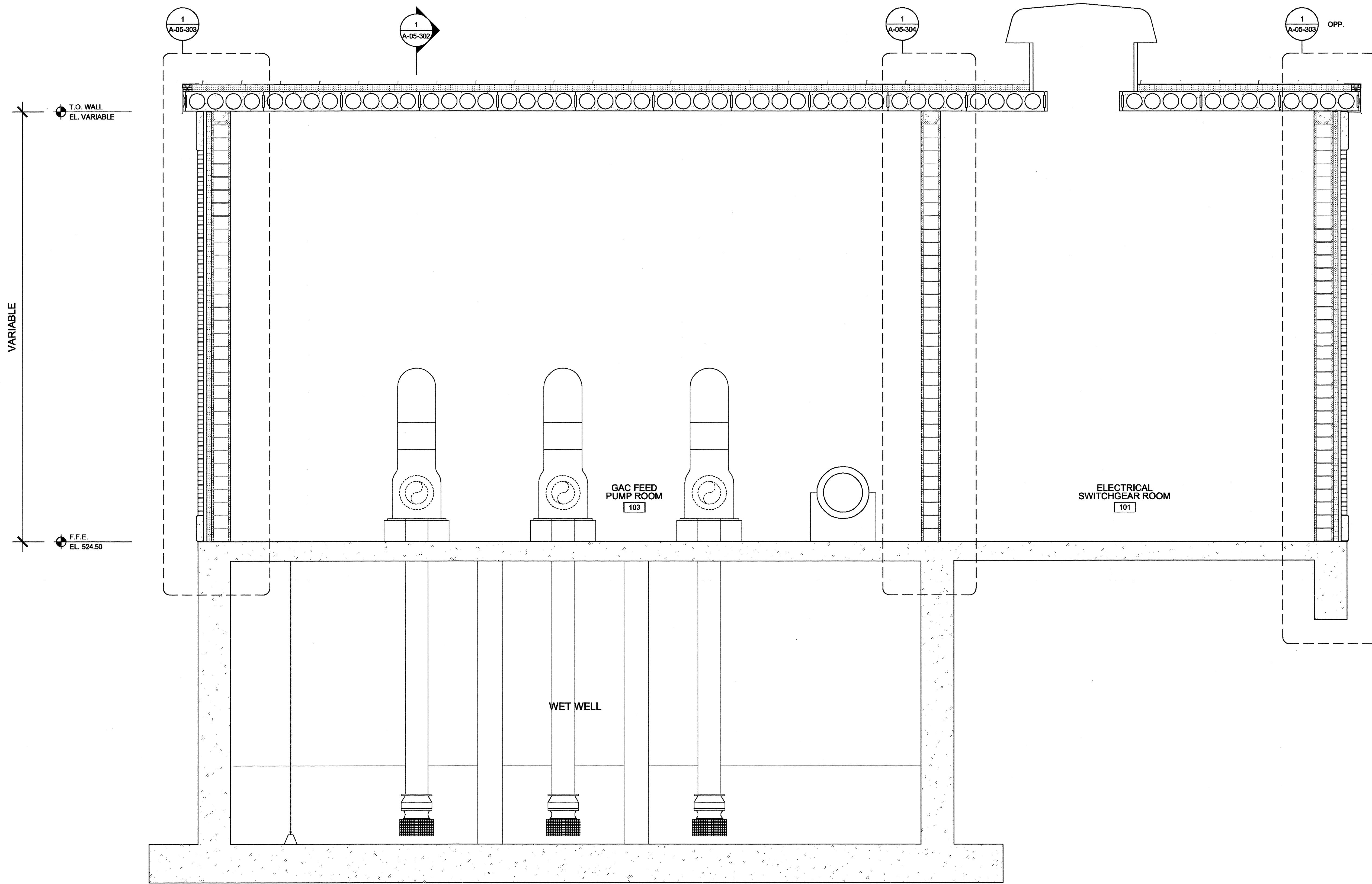
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
**GAC FEED PUMP STATION
BRIDGECRANE - ELEVATIONS II**
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-202
CAD REF. NO.: A-05-202

User: BOND Spc; PIRNIE STANDARD File: U3786-KMWD TAYLOR MILL WORKING DRAWINGS DESIGN DRAWINGS ARCH A-05-202.DWG Scale: 1/4"=1'-0" Date: 3/10/2011 10:00:00 AM Layer: A-05-202

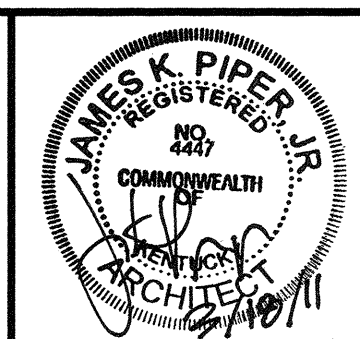
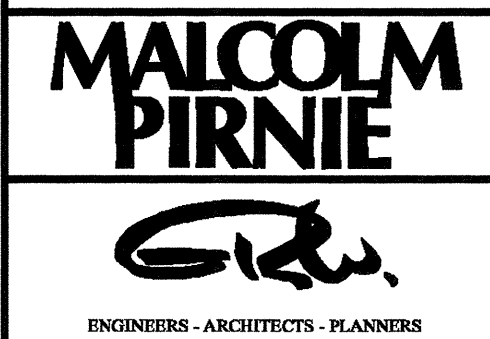
User: JBRND Spec: PIRNIE STANDARD File: L:\3788-NKWD TAYLOR MILL WORKING DRAWINGS\ARCH\A-05-301.DWG Scale: 1:12 Saved Date: 12/7/2010 Time: 10:05 Pld Date: Bond: Jeff: 3/10/2011: 09:01 Layout: A-05-301



1 GAC FEED PUMP BUILDING SECTION
SCALE: 3/8" = 1'-0"

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

0 2 4 6



REVISIONS			
NO.	BY	DATE	REMARKS

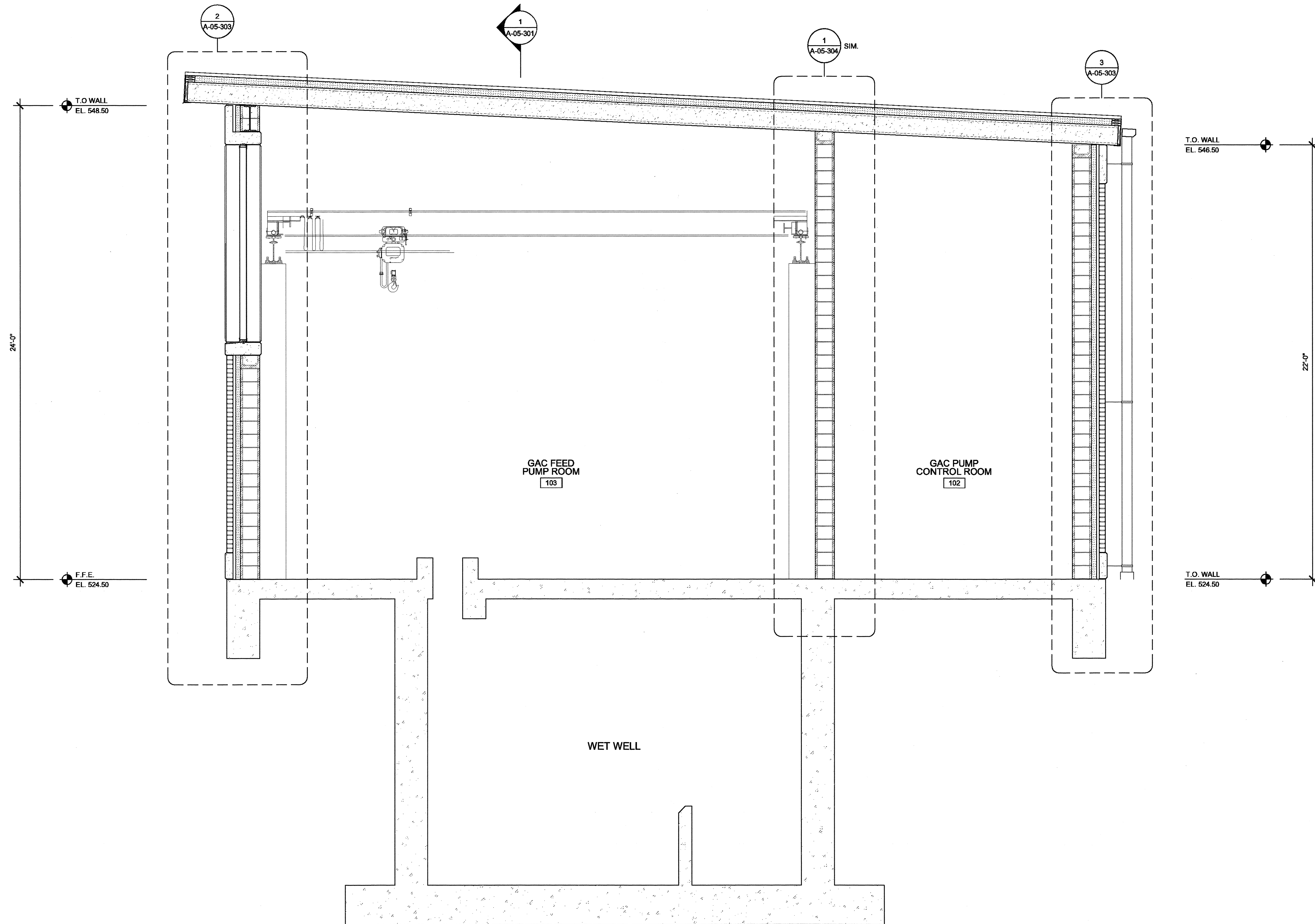
DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
BRIDGECRANE - SECTION I
SCALE: 3/8" = 1'-0"

ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET A-05-301
CAD REF. NO. A-05-301

User: J:\BOND Spec-PIRNE STANDARD File\13786-MKWD TAYLOR MILL WORKING DRAWINGS\ARCH\A-05-302.DWG Scale: 1:12 Saved Date: 11/22/2010 Time: 07:51 Plo Date: Bond, Jeff, 3/10/2011, 08:01, Layout-A-05-302

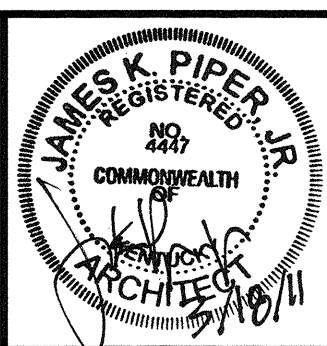


GAC FEED PUMP BUILDING SECTION

SCALE: 3/8" = 1'-0"

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

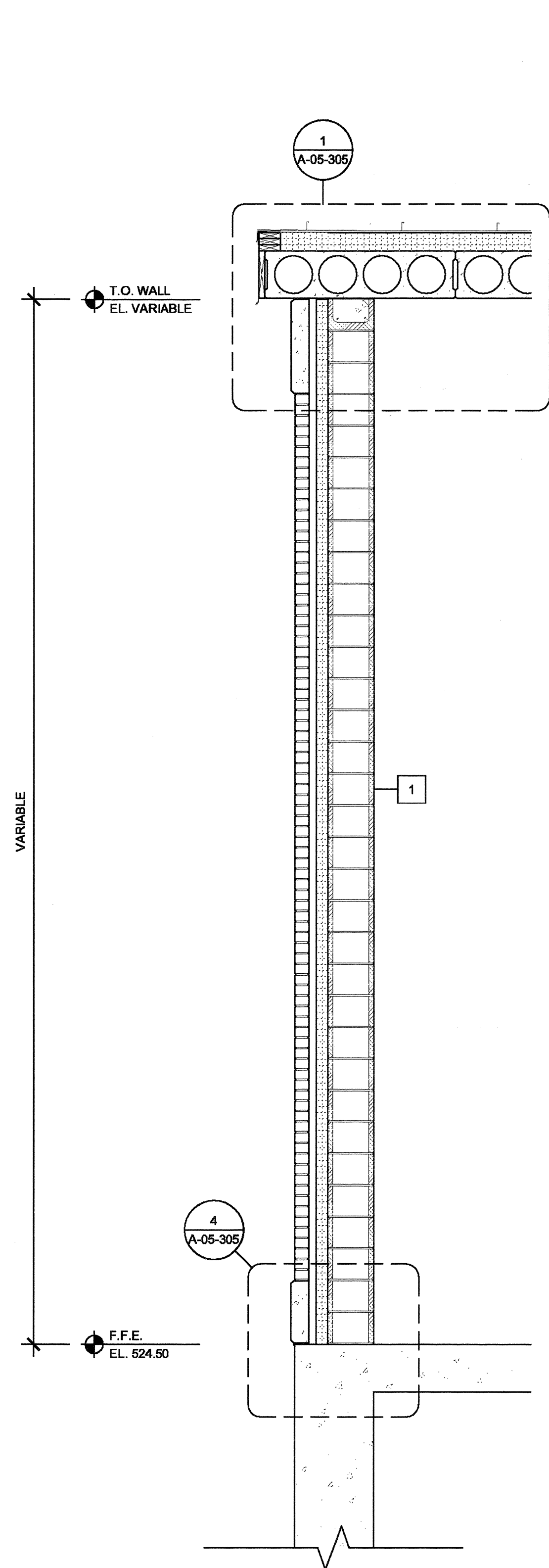
DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

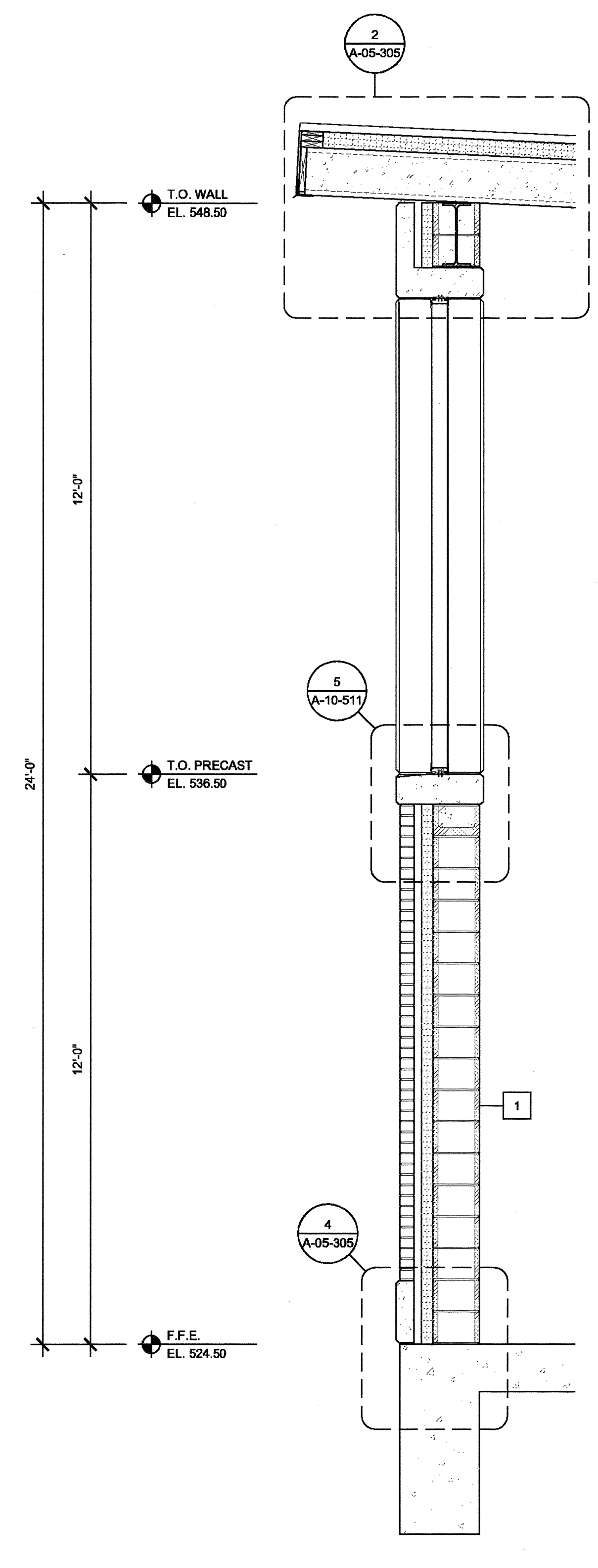
ARCHITECTURAL
GAC FEED PUMP STATION
BRIDGECRANE - SECTIONS II
SCALE: 3/8" = 1'-0"

ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET A-05-302
CAD REF. NO. A-05-302

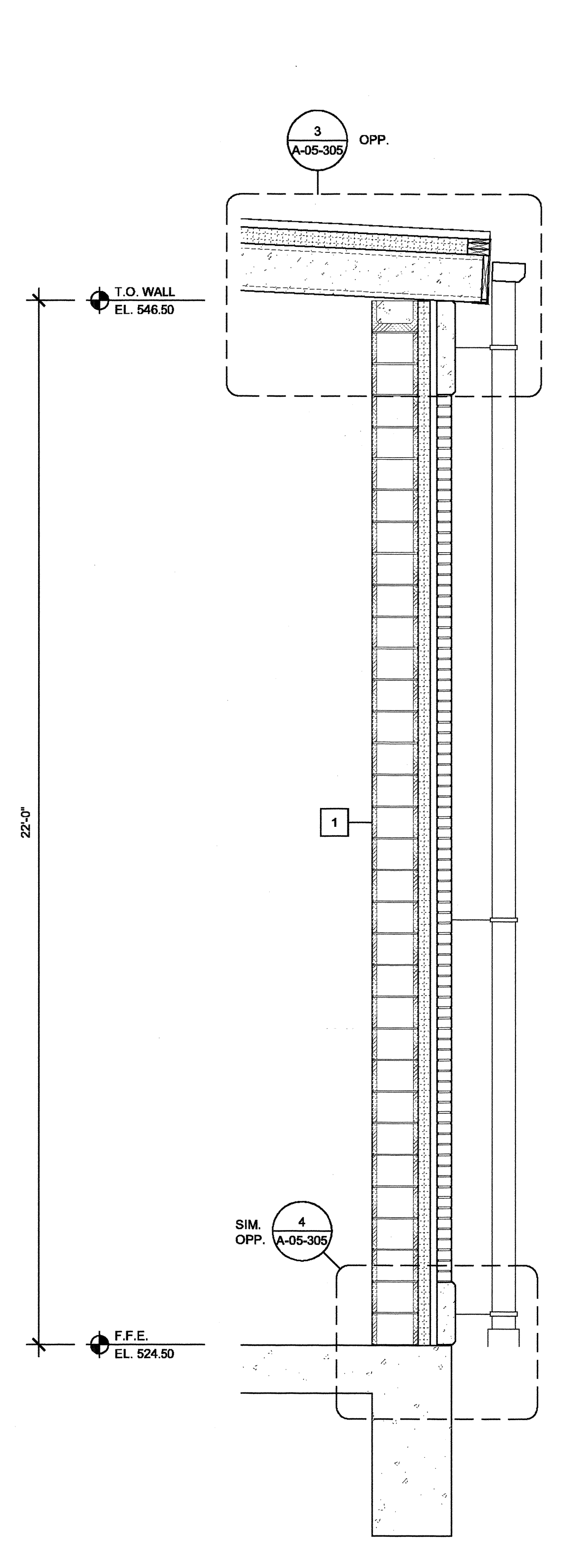
User: BOND Spec: PIRNIE STANDARD File: U3788-NKWD TAYLOR MILL WORKING DRAWINGS ARCH A-05-303.DWG Scale: 1/2"=1'-0" Plot Date: 3/1/2011 10:01:11 AM Plot Path: C:\Users\jkipper\Documents\Projects\2011\1222011\1222011\1222011.dwg



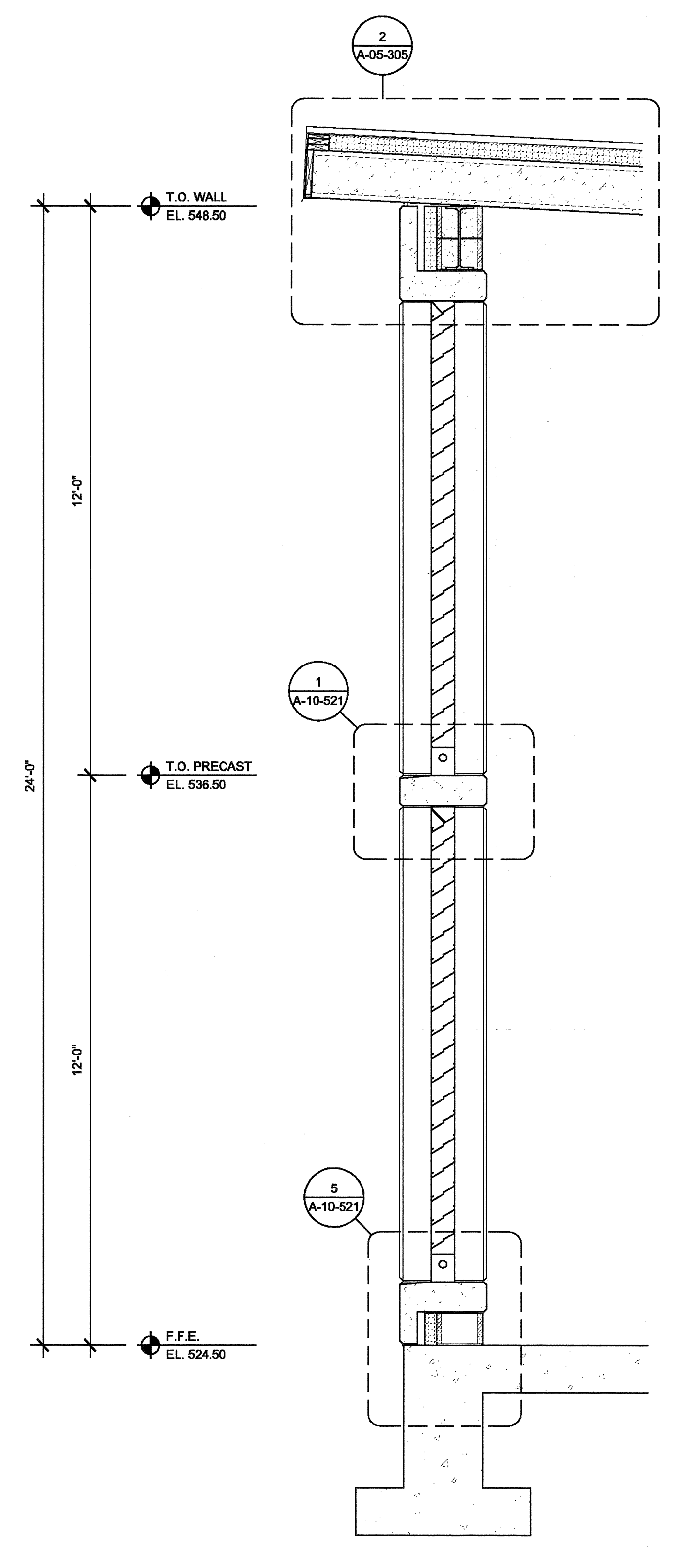
1 EXT. WALL SECTION
SCALE: 1/2"=1'-0"



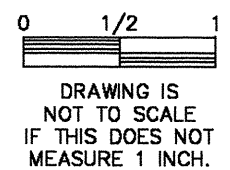
2 EXT. WALL SECTION
SCALE: 1/2"=1'-0"



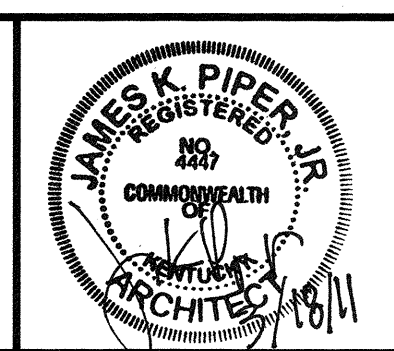
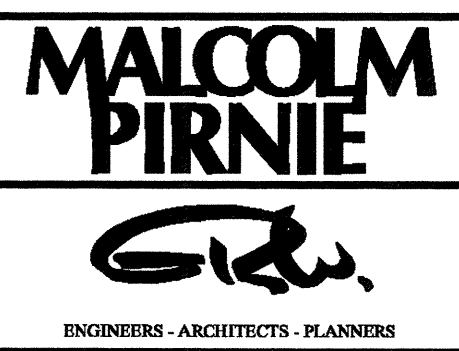
3 EXT. WALL SECTION
SCALE: 1/2"=1'-0"



4 EXT. WALL SECTION
SCALE: 1/2"=1'-0"



DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			REMARKS
NO.	BY	DATE	

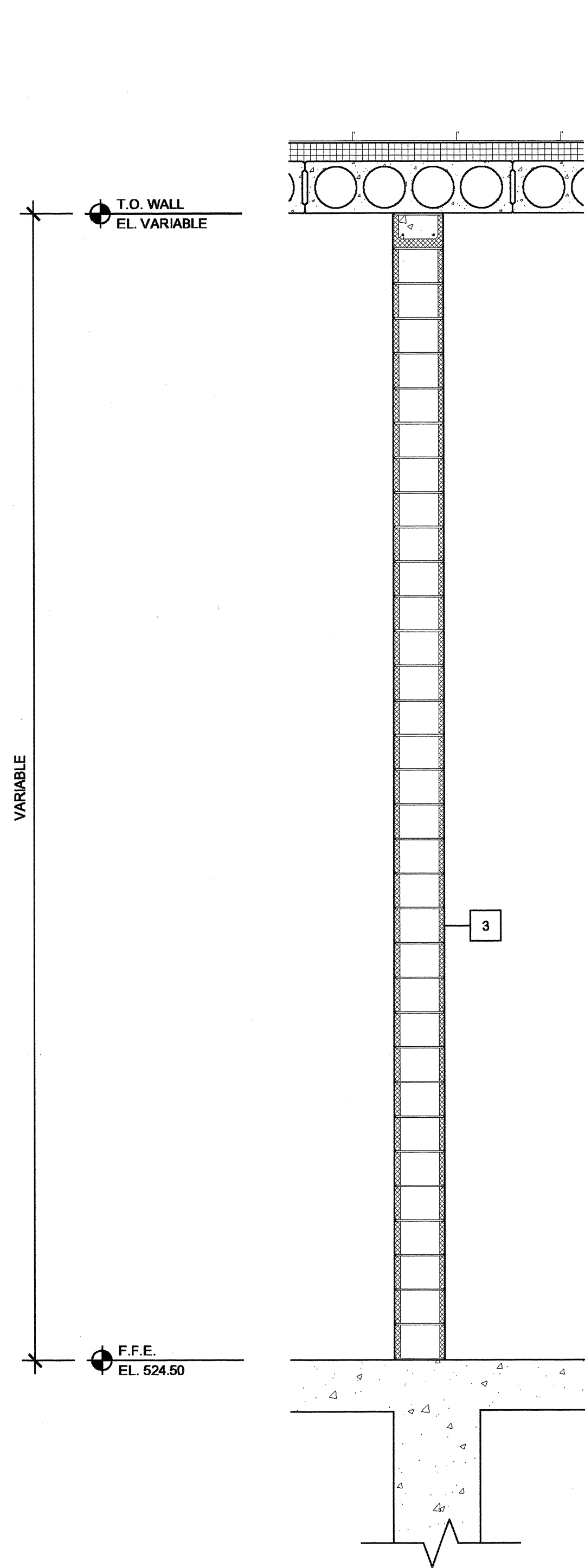
DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

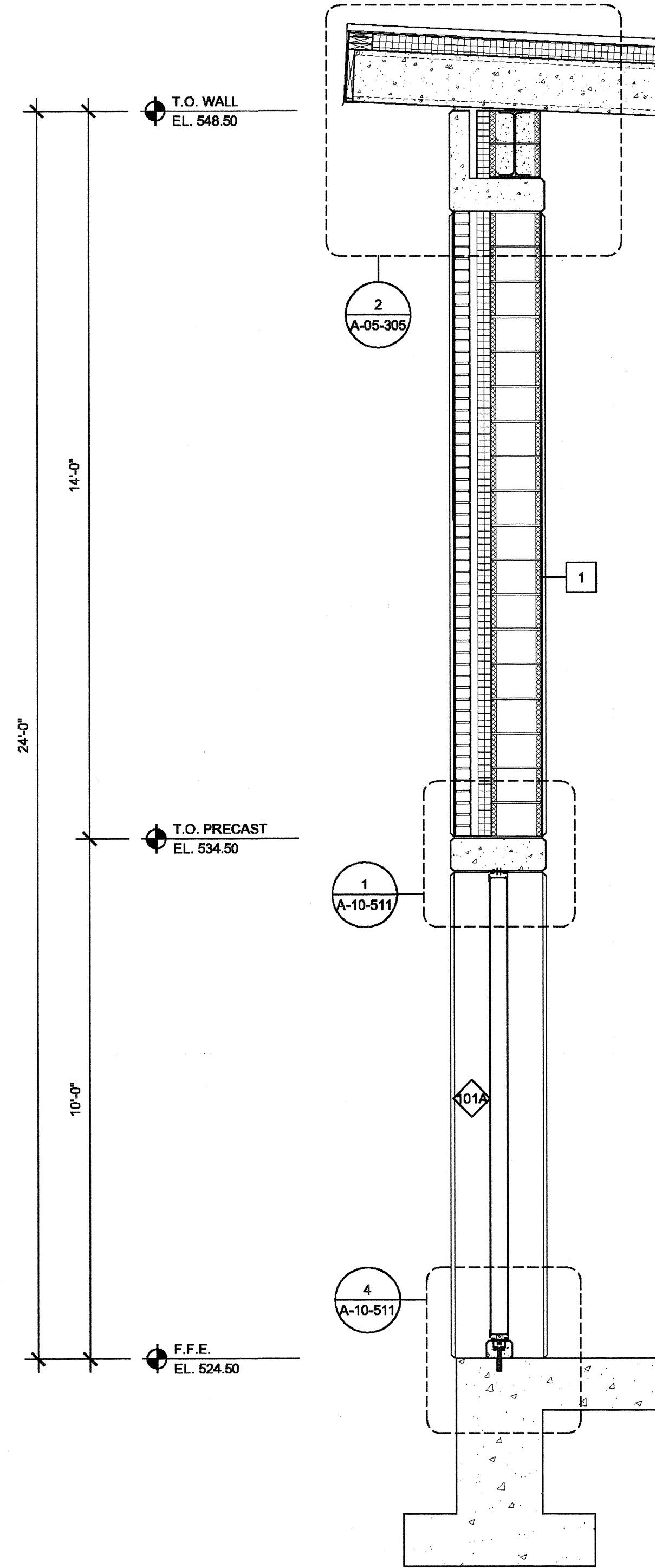
ARCHITECTURAL
GAC FEED PUMP STATION
WALL SECTIONS I
SCALE: 1/2" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-303
CAD REF. NO.: A-05-303

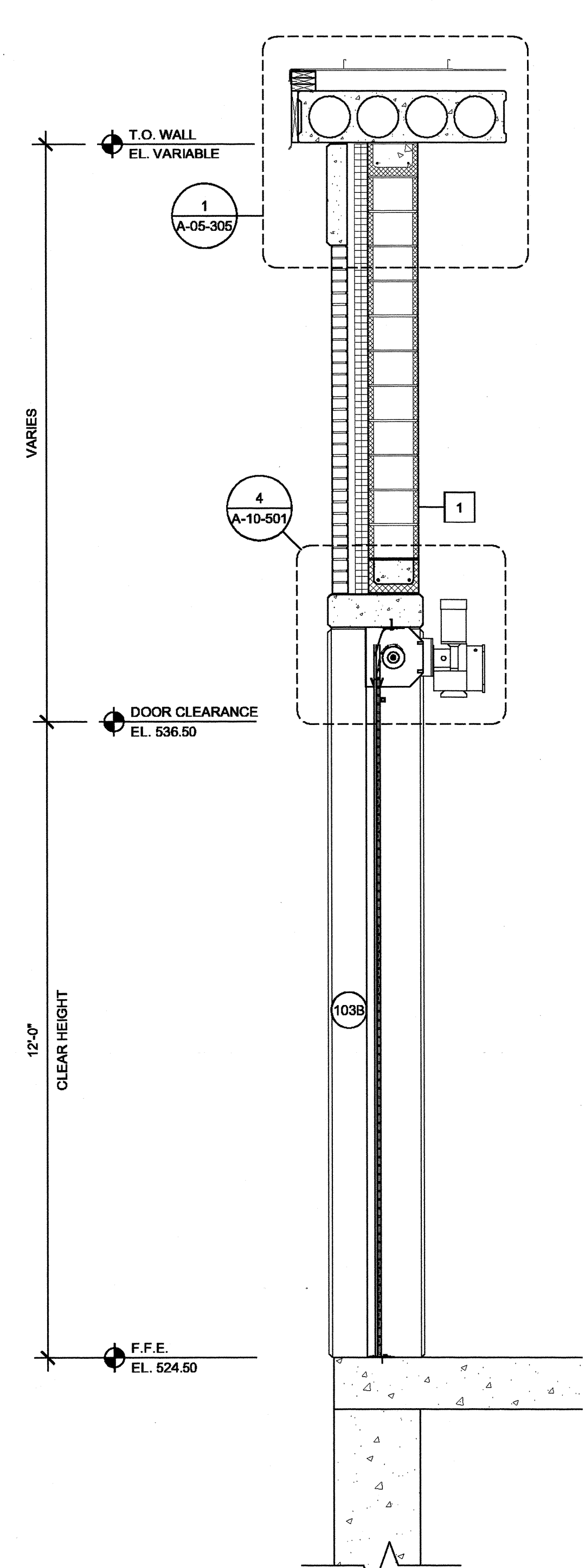
User: \\BOND-Spec-PIRNE STANDARD File: \\3789-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-05-304.DWG Scale: 1/2"=1'-0" Plot Date: Bond, Jeff, 3/1/2011 10:02:11 AM Dwg: A-05-304



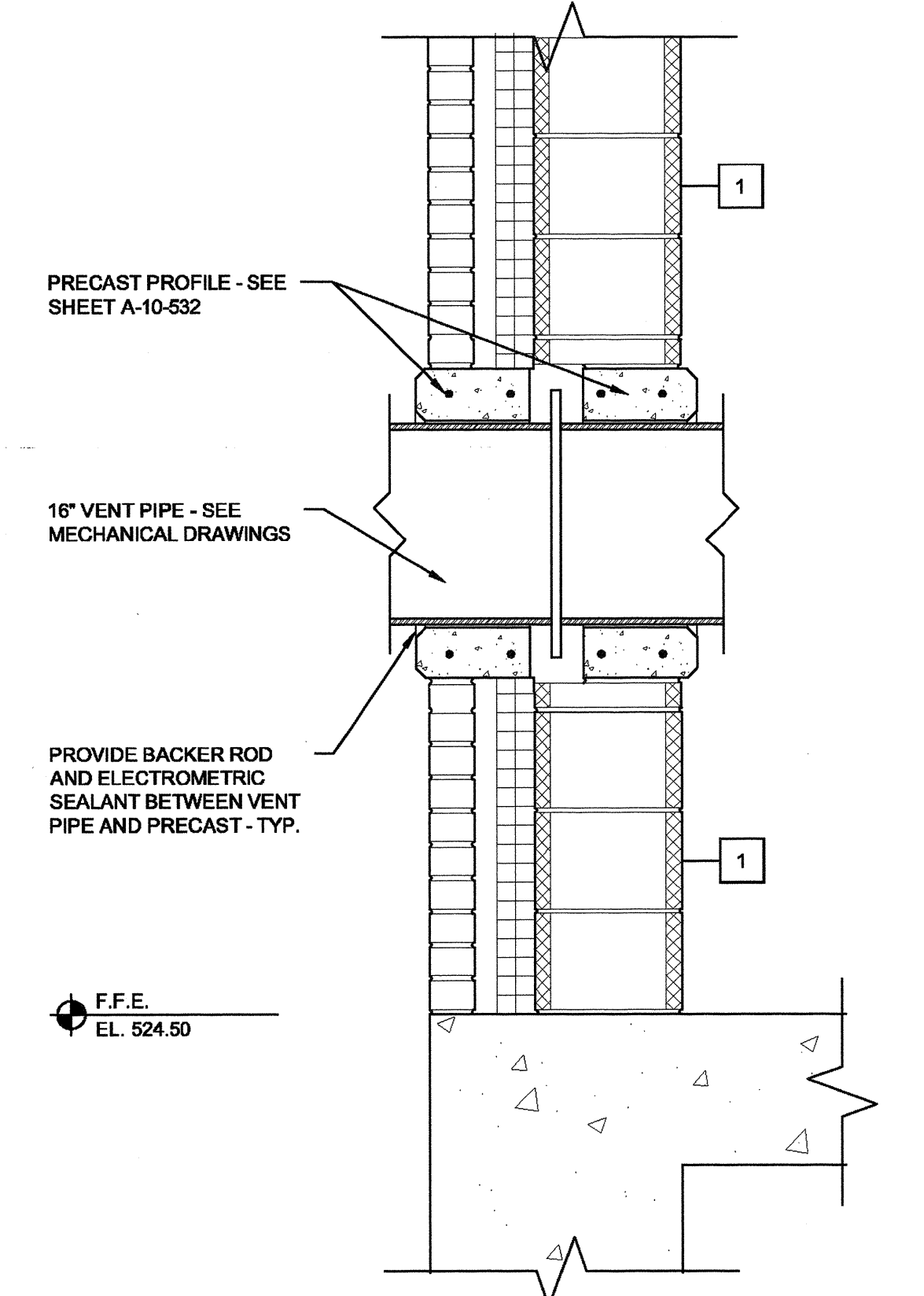
1 INT. WALL SECTION
SCALE: 1/2"=1'-0"



2 EXT. WALL SECTION
SCALE: 1/2"=1'-0"

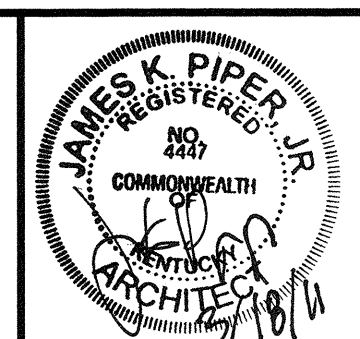
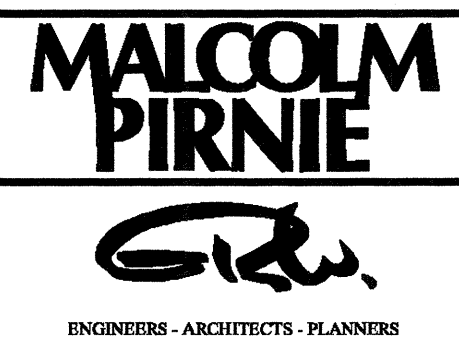


3 EXT. WALL SECTION
SCALE: 1/2"=1'-0"



4 WALL PENETRATION DETAIL
SCALE: 1"=1'-0"

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
WALL SECTIONS II
SCALE: 1/2" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-304
CAD REF. NO.: A-05-304

GENERAL NOTES:

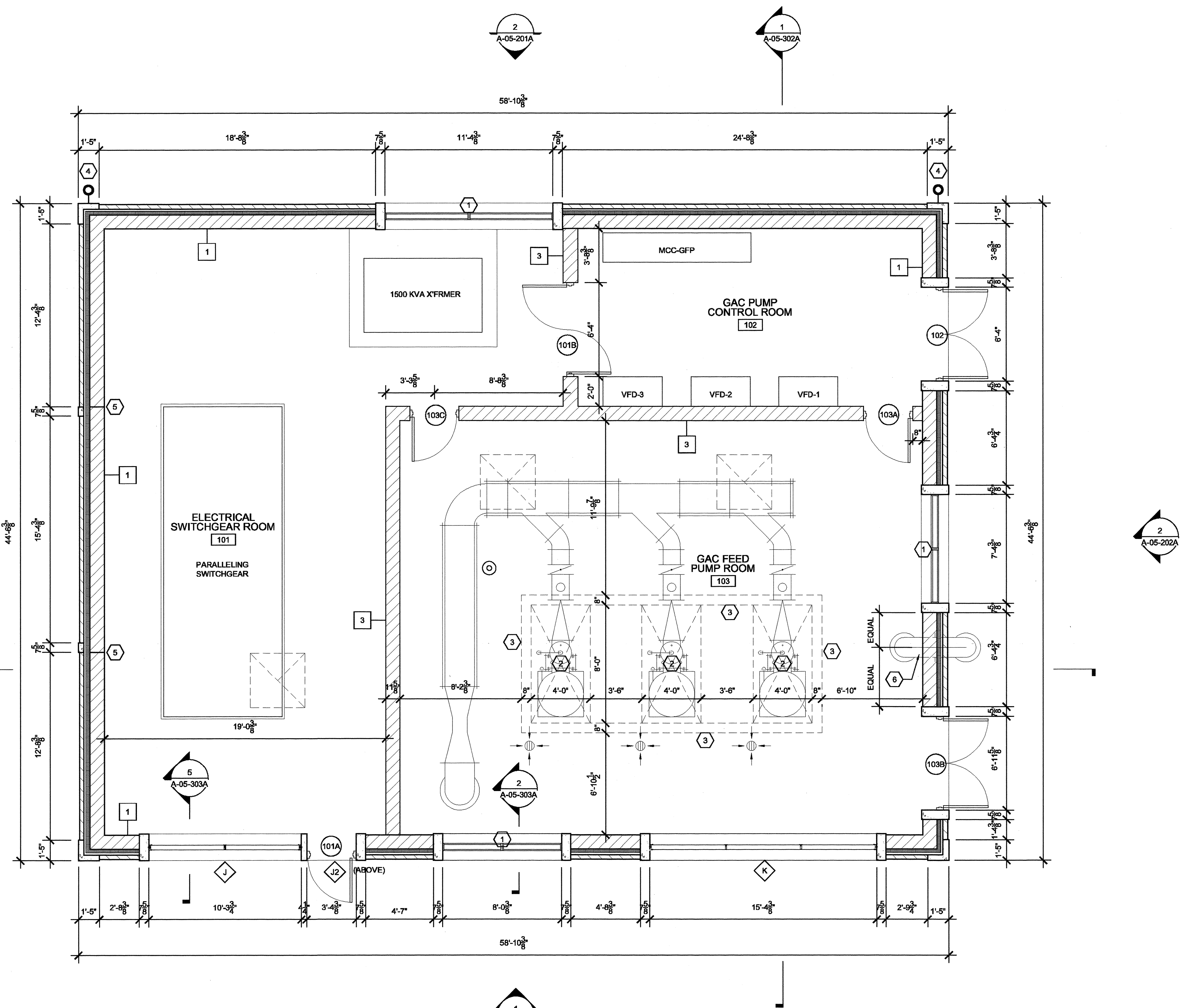
1. CEILINGS ARE TO BE PAINTED. SEE DIVISION 9 SPECIFICATION FOR TYPE.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

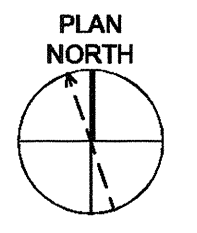
KEYNOTES:

- 1. COMBINATION LOUVER DAMPER W/ ACTUATOR SEE MECHANICAL H SHEETS.
- 2. DASHED LINE INDICATES ROOF PENETRATIONS ABOVE
- 3. DASHED LINE INDICATES 8" ROOF CURB ABOVE
- 4. 6" DIA DOWNSPOUT W/ BOOTS - MOUNT W/ STAINLESS STEEL STANDOFS CENTER ON VERTICAL PRECAST.
- 5. ELASTOMERIC EXPANSION JOINT IN CMU - SEE ELEVATIONS FOR EXPANSION JOINTS IN BRICK VENEER
- 6. CENTER VENT PIPE AND PRECAST SURROUND BETWEEN JAMB OF PRECAST DOOR 1035 AND JAMB OF LOUVER LV-13B.



**GAC FEED PUMP STATION
PLAN AT EL. 524.50**

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



0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

**MALCOLM
PIRNIE**
ENGINEERS - ARCHITECTS - PLANNERS



REVISIONS			
NO.	BY	DATE	REMARKS

DES. JKP
DWN. TMCH
CKD. SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO. 1
SKYLIGHT ACCESS PLAN AT EL. 524.50
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-101A
CAD REF. NO.: A-05-101A

User: J:\BOND Spec\PIRNIE STANDARD File\13788-NKWD TAYLOR MILL\WORKING DRAWINGS\ARCH\A-05-101A.DWG Scale: 1/4" = 1'-0" Plot Date: 3/10/2011 09:21 : Layout: A-05-101A

GENERAL NOTES:

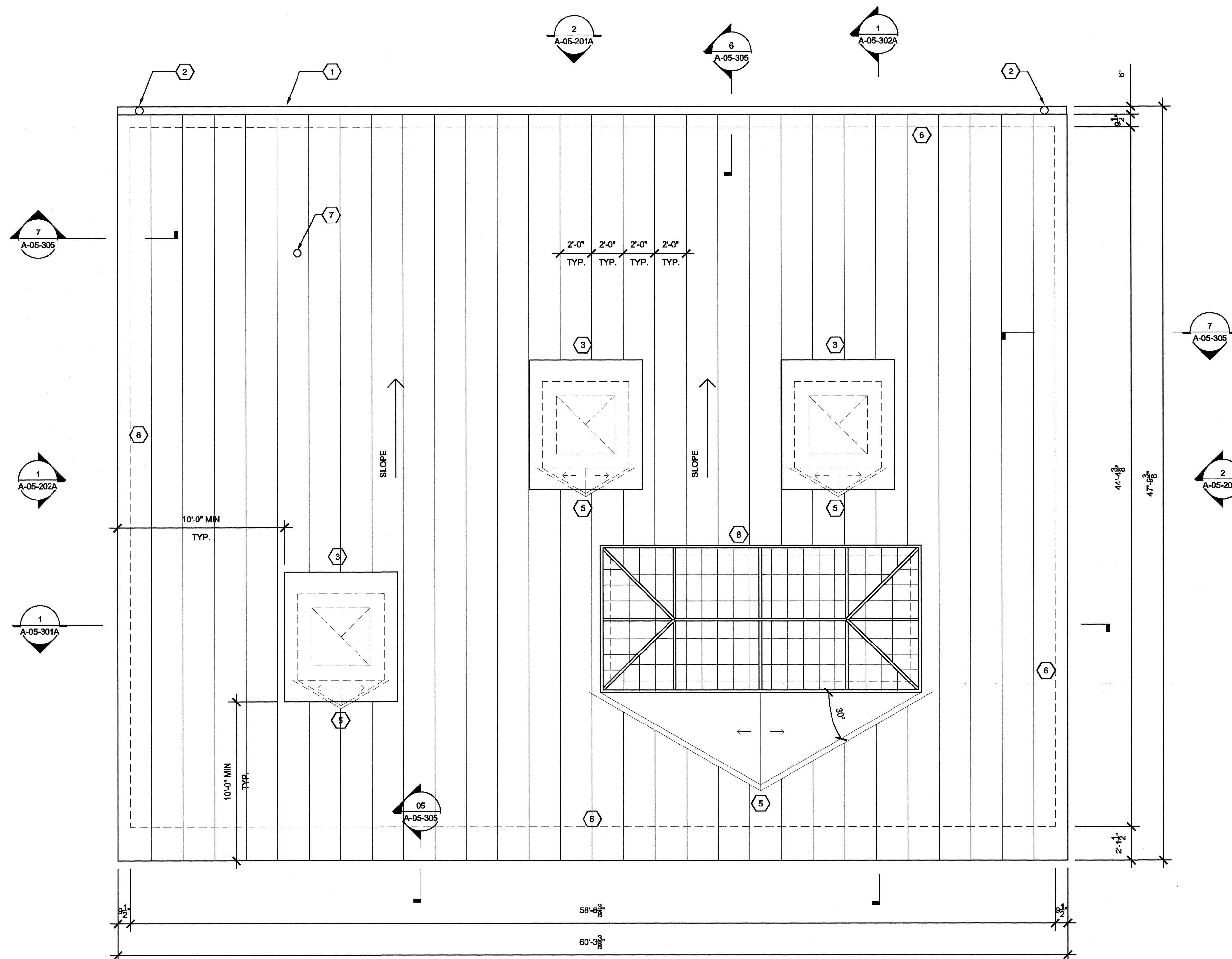
1. PROVIDE ROOF CURBS FOR ALL ROOF MOUNTED EQUIPMENT.
2. NO ROOFTOP EQUIPMENT MAY BE LOCATED WITHIN 10'-0" FROM EDGE OF ROOF.
3. PROVIDE STANDING SEAM METAL ROOF - SEE DIVISION 7 SPECIFICATION.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

KEYNOTES:

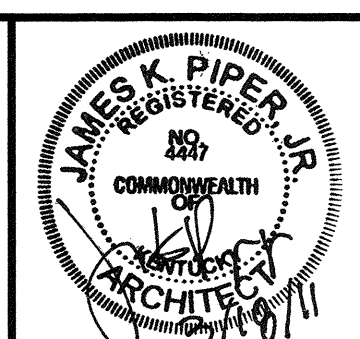
1. 6" GUTTER
2. 6" DOWNSPOUT (CENTERED ON PRECAST CORNER - SEE SHEET C-02-312 FOR DOWNSPOUT BOOT CONNECTION)
3. ROOF MNT. EXHAUST HOOD SEE 'H' SHEETS FOR DETAILS.
4. NOT USED.
5. PREFORMED METAL CRICKETS
6. DASHED LINE INDICATES EDGE OF BRICK VENEER BELOW.
7. PLUMBING VENT. SEE PLUMBING. PROVIDE ROOF MANUFACTURER'S STD. PIPE BOOT AT VENT PENETRATIONS. SEE SPECIFICATIONS FOR ADDITIONAL INFO.
8. REMOVABLE INSULATED TRANSLUCENT PANEL SKYLIGHT.



1 GAC FEED PUMP STATION
ROOF PLAN
SCALE: 1/4" = 1'-0"



0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES: JKP
OWN: TMCH
CKD: SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO. 1
SKYLIGHT ACCESS ROOF PLAN
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-102A
CAD REF. NO.: A-05-102A

User: JIBOND Spec: PIRNIE STANDARD File: U:\3786-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-05-102A.DWG Scale: 1/48 Sheet Date: 1/20/2011 Time: 14:36 Plot Date: Bond: Jeff: 3/10/2011 08:01 : Layout: A-05-102A

GENERAL NOTES:

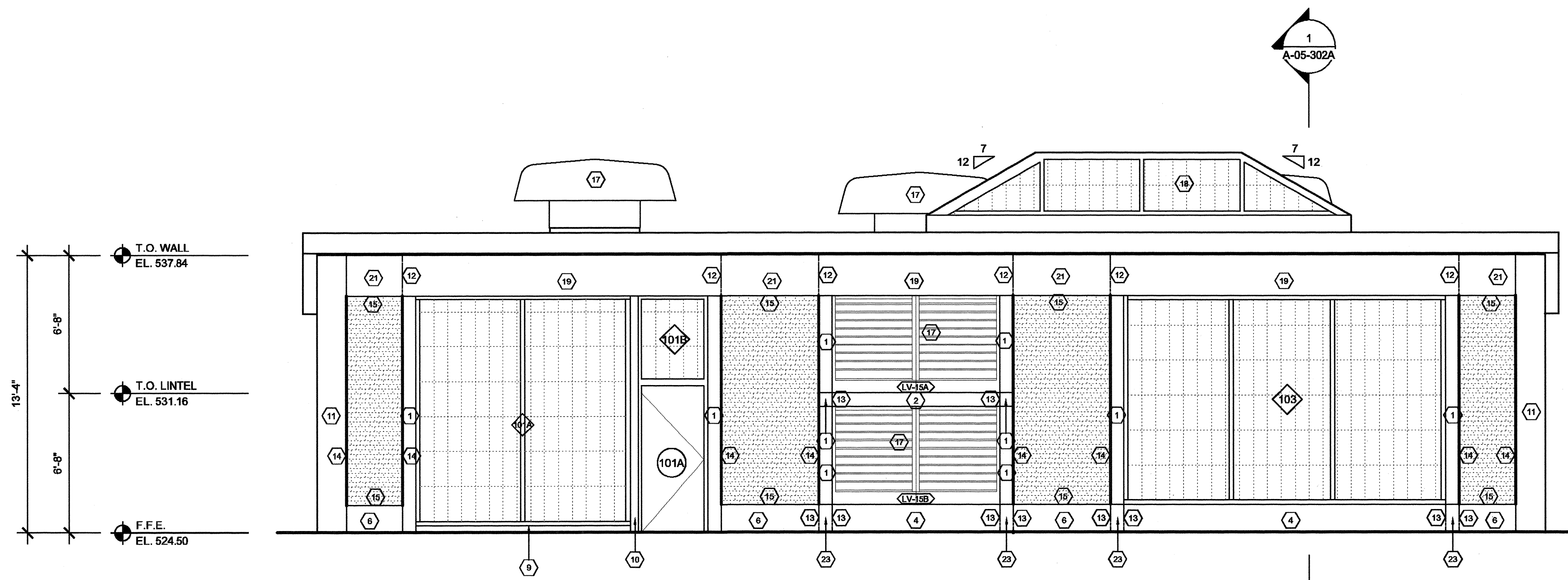
1. COORDINATE MECHANICAL OPENINGS WITH APPROVED EQUIPMENT MANUFACTURER.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

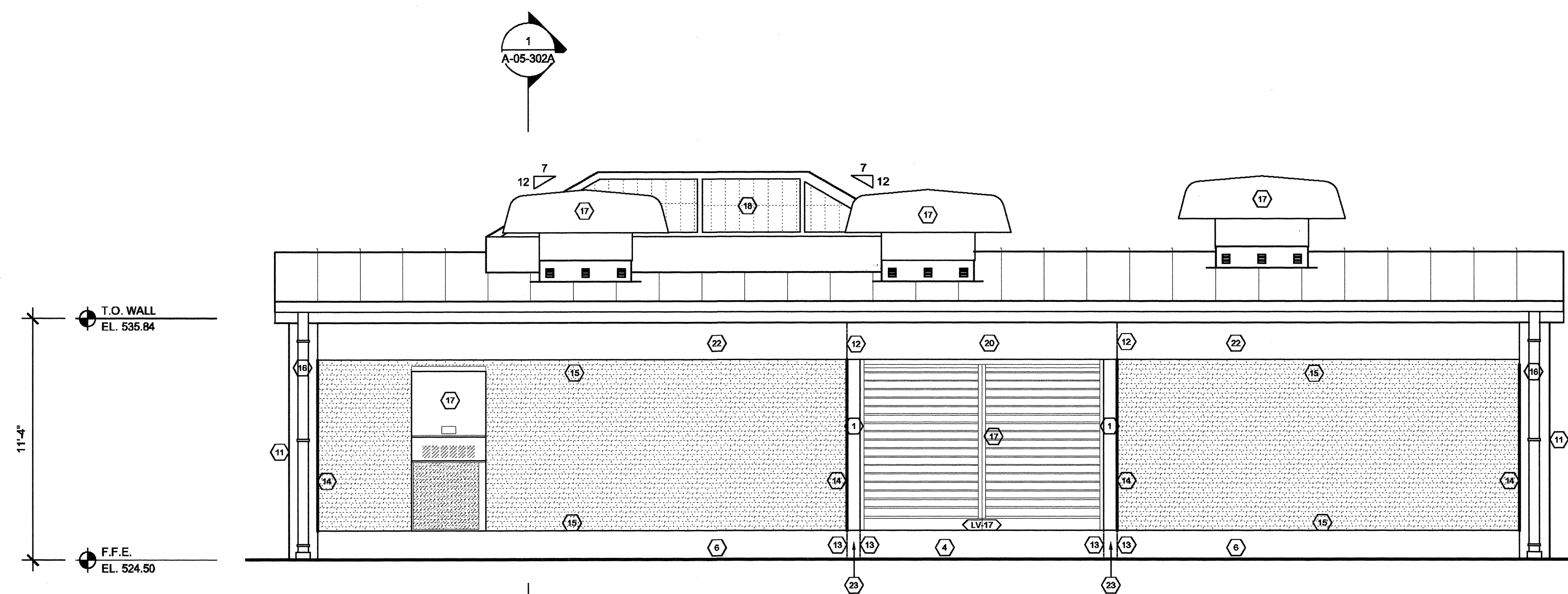
KEYNOTES:

- 1. SEE DETAIL 1/A-10-531
- 2. SEE DETAIL 2/A-10-531
- 3. SEE DETAIL 3/A-10-531
- 4. SEE DETAIL 4/A-10-531
- 5. SEE DETAIL 5/A-10-531
- 6. SEE DETAIL 6/A-10-531
- 7. SEE DETAIL 7/A-10-531
- 8. SEE DETAIL 8/A-10-531
- 9. SEE DETAIL 9/A-10-531
- 10. SEE DETAIL 10/A-10-531
- 11. SEE DETAIL 11/A-10-531
- 12. DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- 13. DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- 14. PROVIDE ELASTOMERIC SEALANT EXPANSION JOINT
- 15. PROVIDE BOND BREAKER MATERIAL TO PROVIDE A SLIP SHEET BETWEEN PRECAST CONCRETE AND CLAY MASONRY.
- 16. DOWNSPOUT CIRCULAR 6"
- 17. MECHANICAL EQUIPMENT SEE 'H' SHEETS
- 18. REMOVABLE TRANSLUCENT PANEL SKYLIGHT - PROVIDE REMOVABLE MOUNTING BRACKETS AND EYEBOLTS FOR CRANE ATTACHMENT.
- 19. SEE DETAIL 12/A-10-531
- 20. SEE DETAIL 13/A-10-531
- 21. SEE DETAIL 1/A-10-532
- 22. SEE DETAIL 2/A-10-532
- 23. SEE DETAIL 4/A-10-531



1 GAC FEED PUMP STATION SOUTH ELEVATION

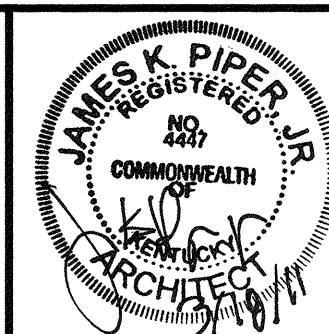
SCALE: 1/4" = 1'-0"



2 GAC FEED PUMP STATION NORTH ELEVATION

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

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



NO.		BY	DATE	REVISIONS	REMARKS

DES. JKP
OWN. TMCH
CKD. SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO. 1
SKYLIGHT ACCESS ELEVATIONS I

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

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-201A
CAD REF. NO.: A-05-201A

User: J:\BOND Spec\PIRNE STANDARD File\13788-NKWD TAYLOR MILL\WORKING DRAWINGS\ARCH\A-05-201A.DWG Scale: 1/4" SavedDate: 2/22/2011 Time: 6:32 Plot Date: Bond_Jeff_3/10/2011_08:01 ; Layout: A-05-201A

SYMBOL KEY:

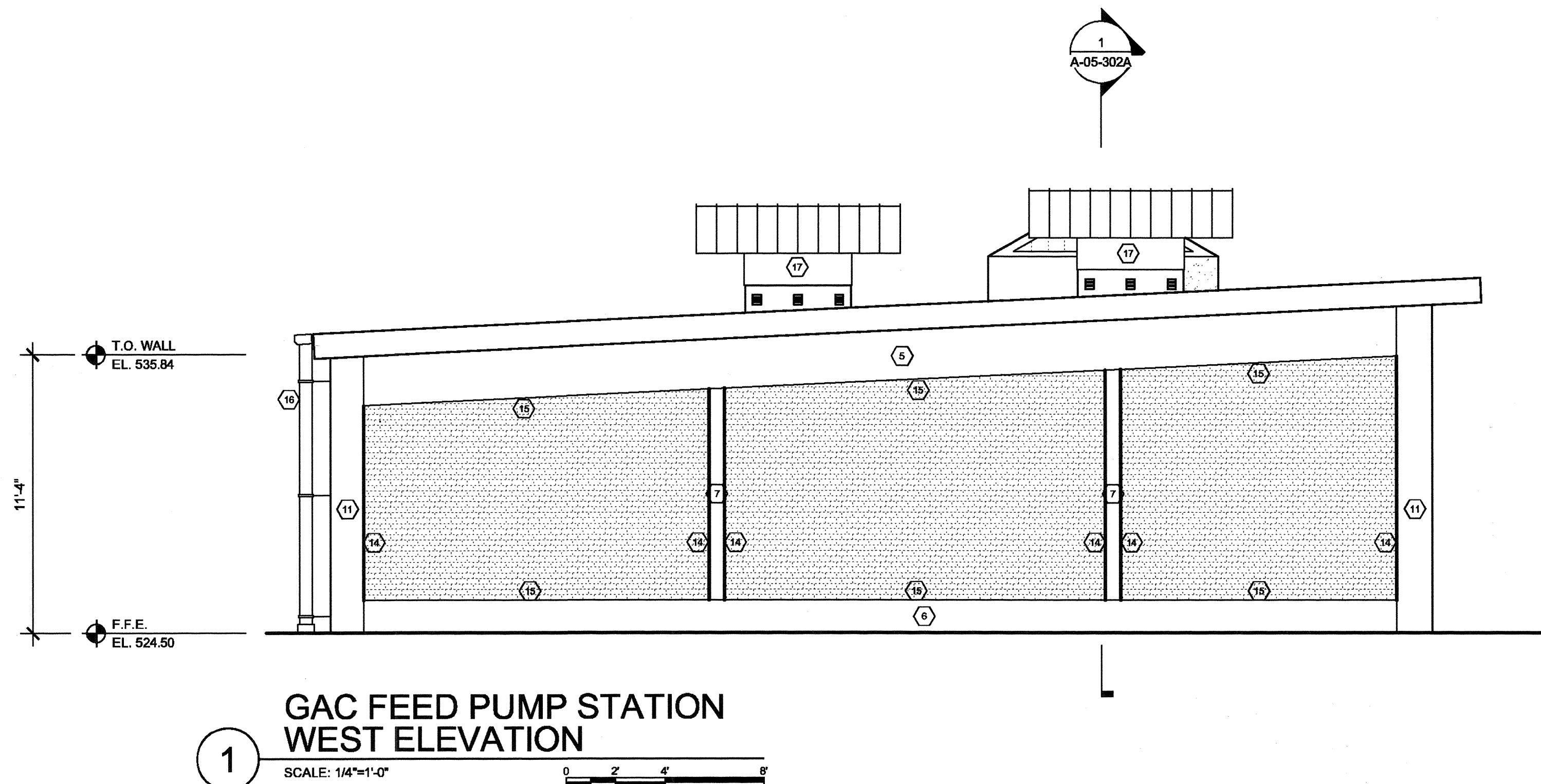
- 1. COORDINATE MECHANICAL OPENINGS WITH APPROVED EQUIPMENT MANUFACTURER.

SYMBOL KEY:

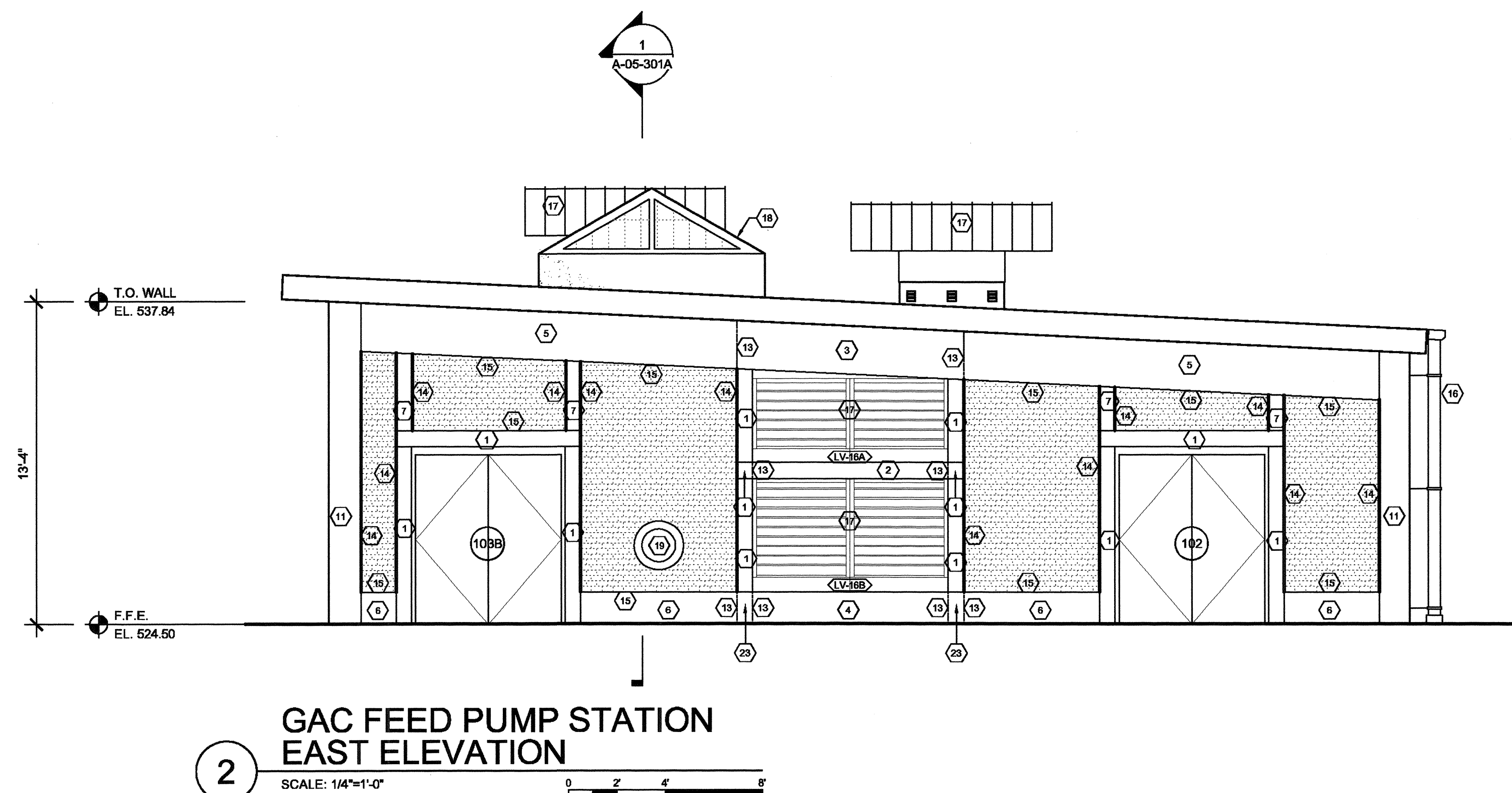
- 1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

KEYNOTES:

- 1. SEE DETAIL 1/A-10-531
- 2. SEE DETAIL 2/A-10-531
- 3. SEE DETAIL 3/A-10-531
- 4. SEE DETAIL 4/A-10-531
- 5. SEE DETAIL 5/A-10-531
- 6. SEE DETAIL 6/A-10-531
- 7. SEE DETAIL 7/A-10-531
- 8. SEE DETAIL 8/A-10-531
- 9. SEE DETAIL 9/A-10-531
- 10. SEE DETAIL 10/A-10-531
- 11. SEE DETAIL 11/A-10-531
- 12. NOT USED.
- 13. DASHED LINE INDICATES CHANGE IN PROFILE OF A CONTINUOUS PRECAST MEMBER.
- 14. PROVIDE ELASTOMERIC SEALANT EXPANSION JOINT
- 15. PROVIDE BOND BREAKER MATERIAL TO PROVIDE A SLIP SHEET BETWEEN PRECAST CONCRETE AND CLAY MASONRY.
- 16. DOWNSPOUT CIRCULAR 6"x.25" MILL FINISH ALUMINUM.
- 17. MECHANICAL EQUIPMENT SEE 'H' SHEETS
- 18. REMOVABLE TRANSLUCENT PANEL SKYLIGHT
- 19. PRECAST SEE DETAIL 4/A-05-304 - CENTER VENT PIPE AND PRECAST SURROUND BETWEEN JAMB OF PRECAST DOOR 103B AND JAMB OF LOUVER LV-10B. PIPE NOT ILLUSTRATED FOR CLARITY.
- 20. NOT USED.
- 21. NOT USED.
- 22. NOT USED.
- 23. SEE DETAIL 4A/A-10-531



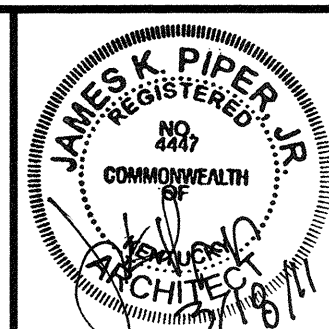
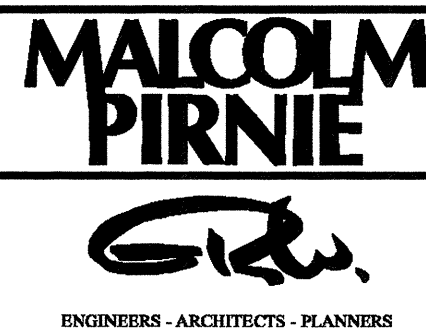
1 GAC FEED PUMP STATION WEST ELEVATION
SCALE: 1/4"=1'-0"



2 GAC FEED PUMP STATION EAST ELEVATION
SCALE: 1/4"=1'-0"

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS		REMARKS
NO.	BY	DATE

DES JKP
DWN TMCH
CKD SL / JKP

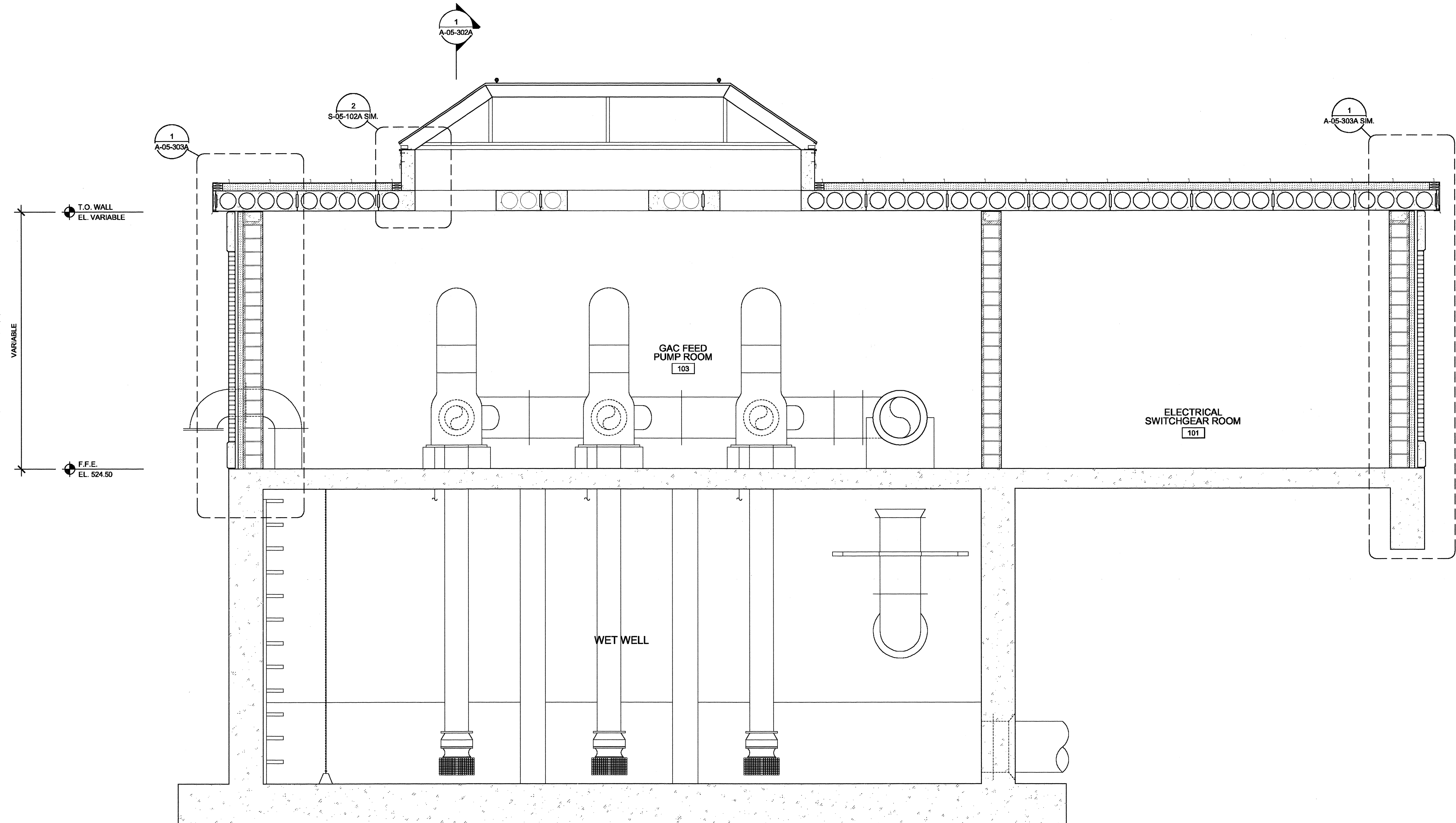
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO.1
SKYLIGHT ACCESS ELEVATIONS II
SCALE: 1/4" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-202A
CAD REF. NO.: A-05-202A

User: JBRND Spec: PIRNIE STANDARD File: J:\3788-NKWD TAYLOR MILL\WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-05-202A.DWG Scale: 1/4"=1'-0" Saved Date: 2/22/2011 Time: 8:38 PM Plot Date: Bond: Jeff. 3/10/2011: 09:02 Layout: A-05-202A

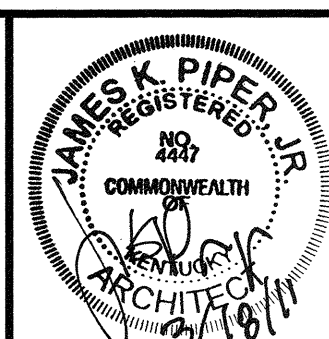
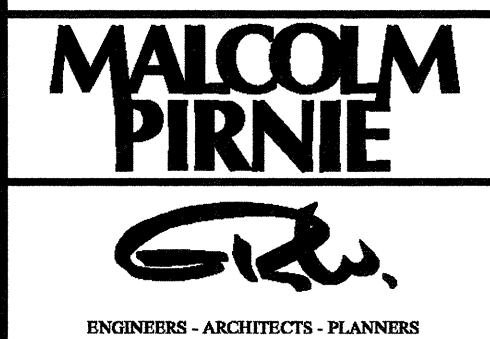
User: J:\BOND Spgs\PIRNE STANDARD File\13788-NKWD TAYLOR MILL WORKING DRAWINGS\ARCH\A-05-301A.DWG Scale: 1:12 Saved Date: 1/20/2011 Time: 14:37 Plot Date: Bond_Leff: 3/10/2011 09:02 ; Layout: A-05-301A



1 GAC FEED PUMP BUILDING SECTION
SCALE: 3/8" = 1'-0"

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

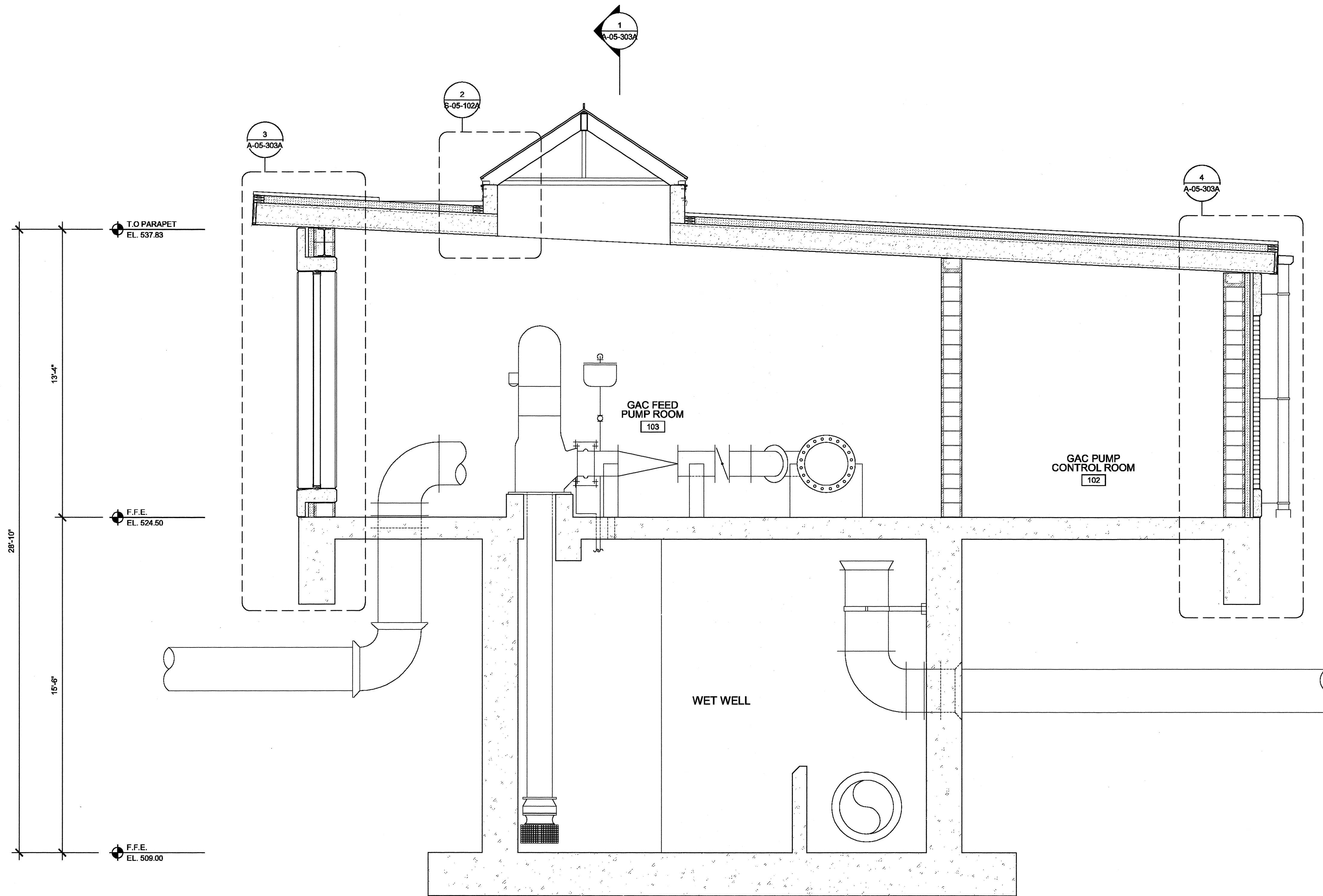
DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO.1
SKYLIGHT ACCESS SECTIONS I
SCALE: 3/8" = 1'-0"

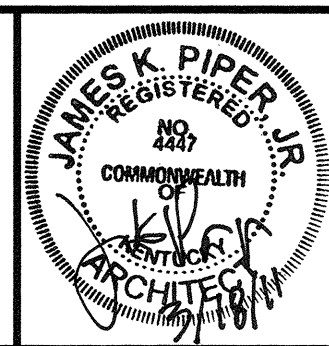
ISSUED STATUS: BID SET
DATE MARCH, 2011
SHEET A-05-301A
CAD REF. NO. A-05-301A

User: \\BOND-Spec-PIRNE\STANDARD File\13786-NKWD TAYLOR MILL\WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-05-302A.DWG Scale: 1:12 SavedDate: 1/20/2011 Time: 14:37 Plot Date: Bond, Jeff, 3/10/2011, 08:02; Layout: A-05-302A



1 GAC FEED PUMP BUILDING SECTION
SCALE: 3/8" = 1'-0"

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

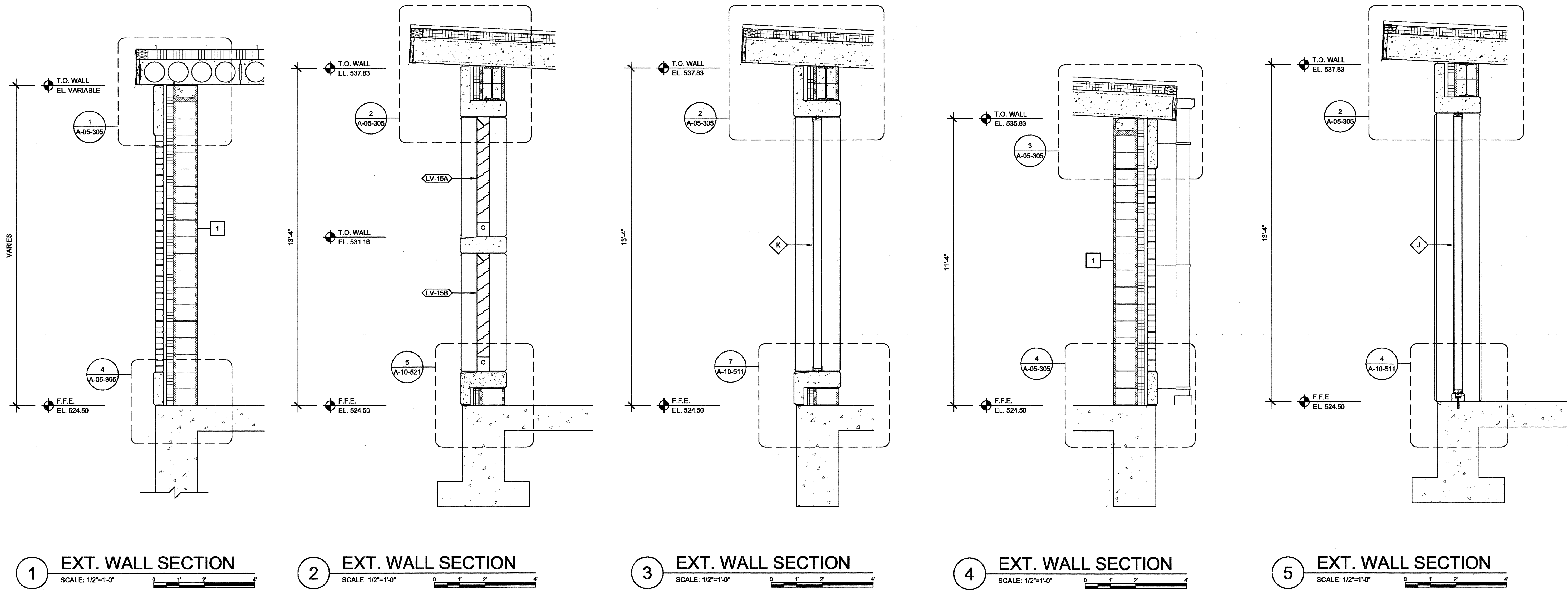
DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

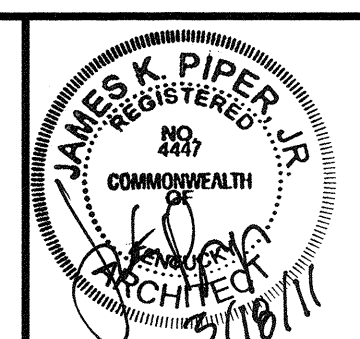
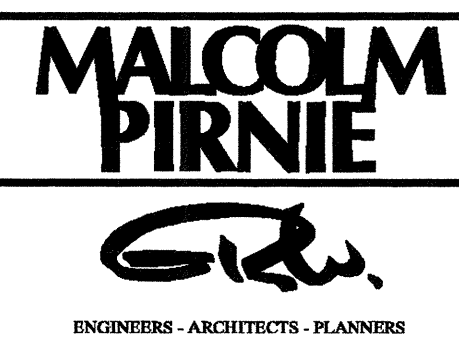
ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO.1
SKYLIGHT ACCESS SECTIONS II
SCALE: 3/8" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-302A
CAD REF. NO.: A-05-302A

User: JBDND Spec: PIRNIE STANDARD File: I:\3786\NKWD TAYLOR MILL WORKING DRAWINGS\ARCH\A-05-303A.DWG Scale: 1/8 Saved Date: 1/20/2011 Time: 14:38 Plt Date: Error: Jeff: 3/10/2011: 08:02 Layout: A-05-303A



0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



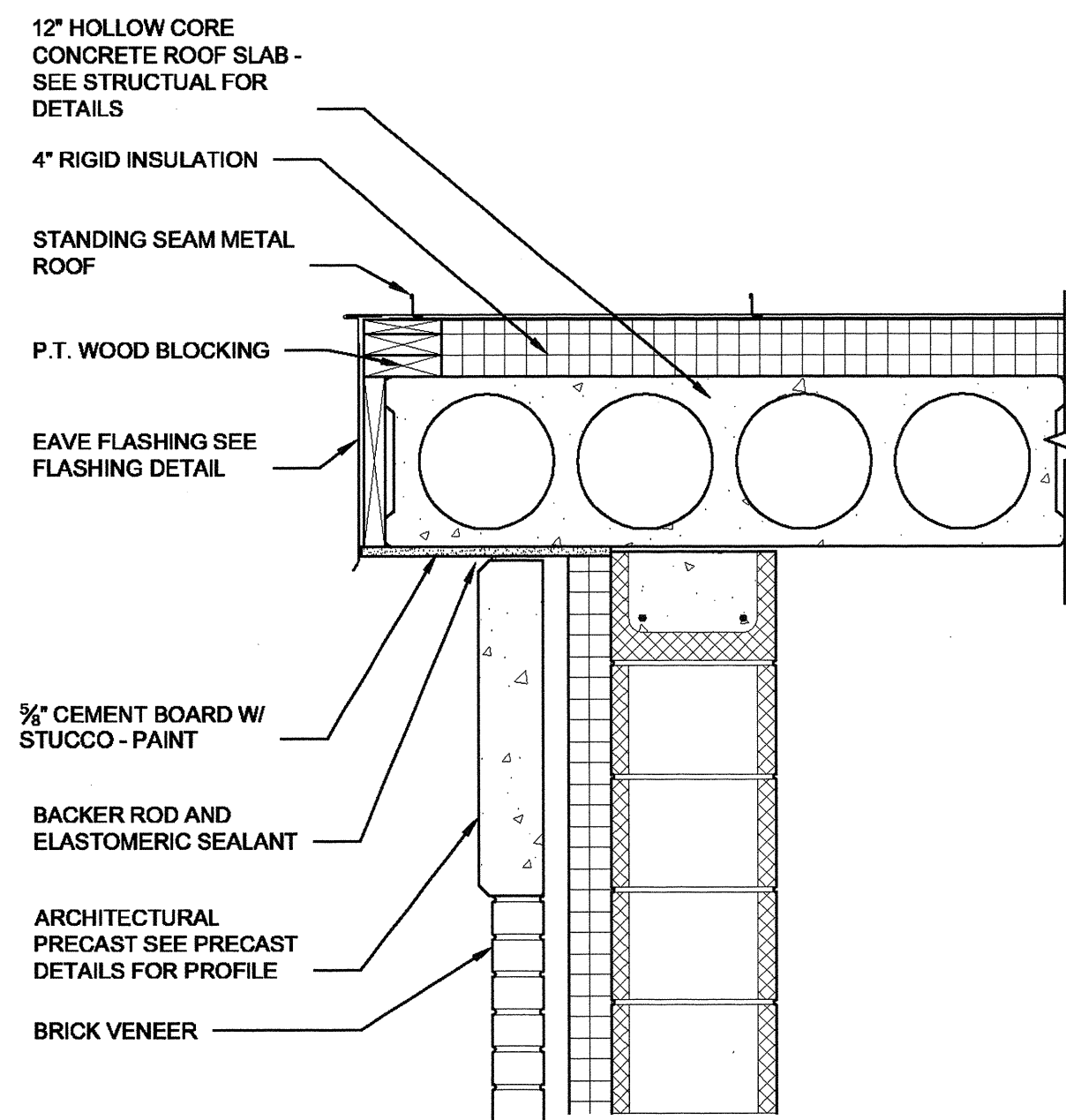
REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
DWN TMCH
CHK SL / JKP

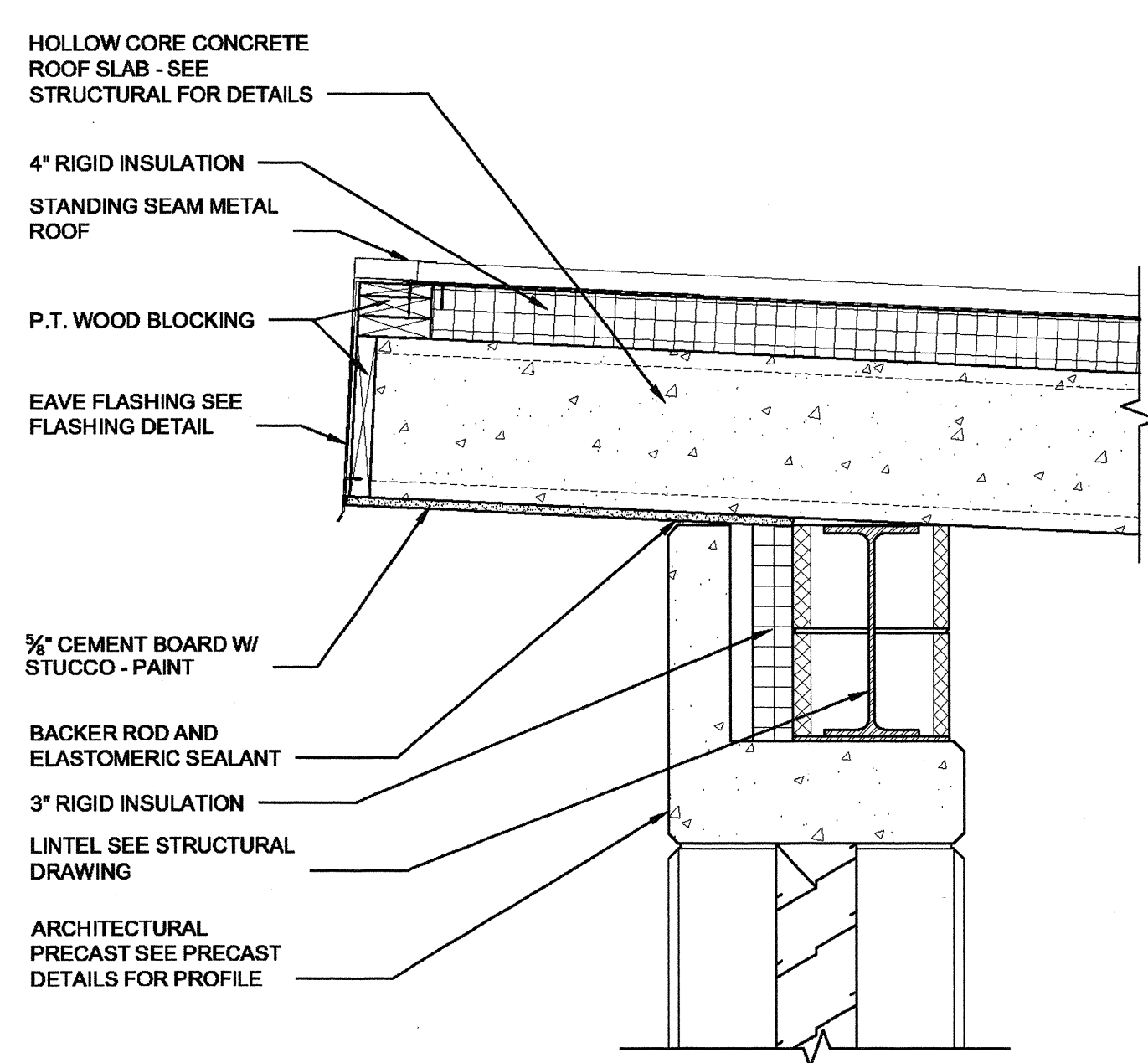
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION - ALT. NO.1
SKYLIGHT ACCESS WALL SECTIONS
SCALE: 1/2" = 1'-0"

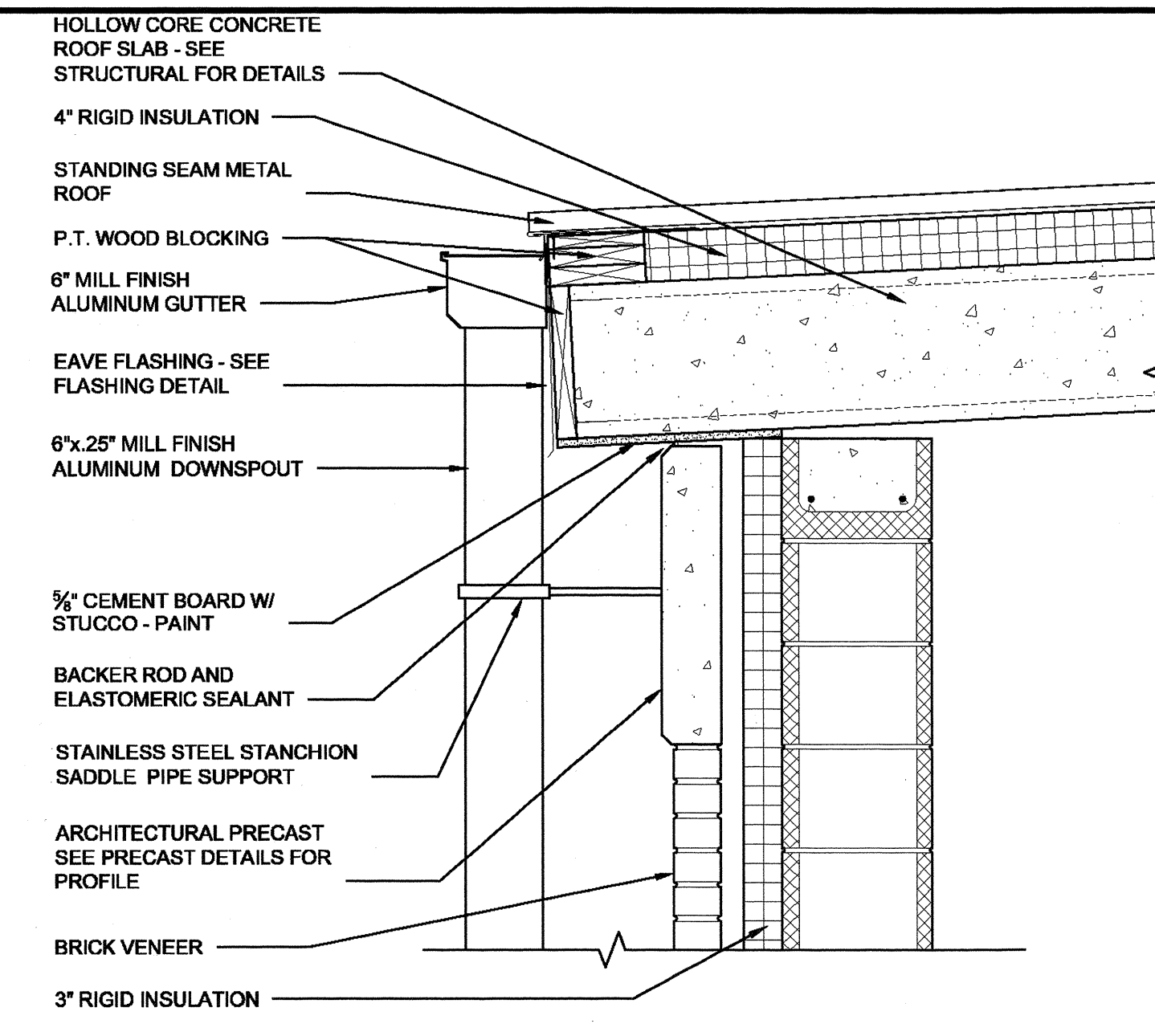
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-303A
CAD REF. NO.: A-05-303A



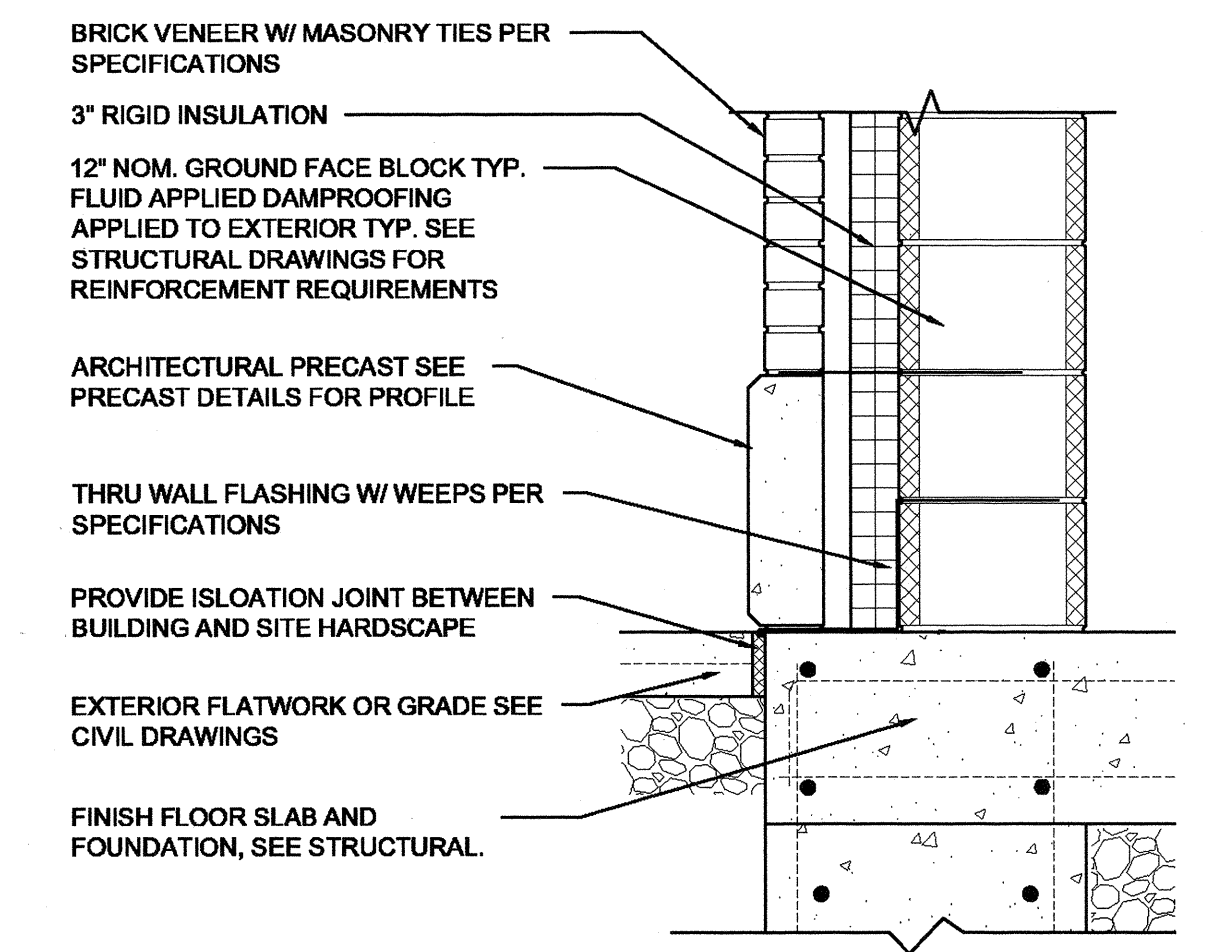
1 EAVE DETAIL
SCALE: 1"=1'-0" 0 1/2 1'



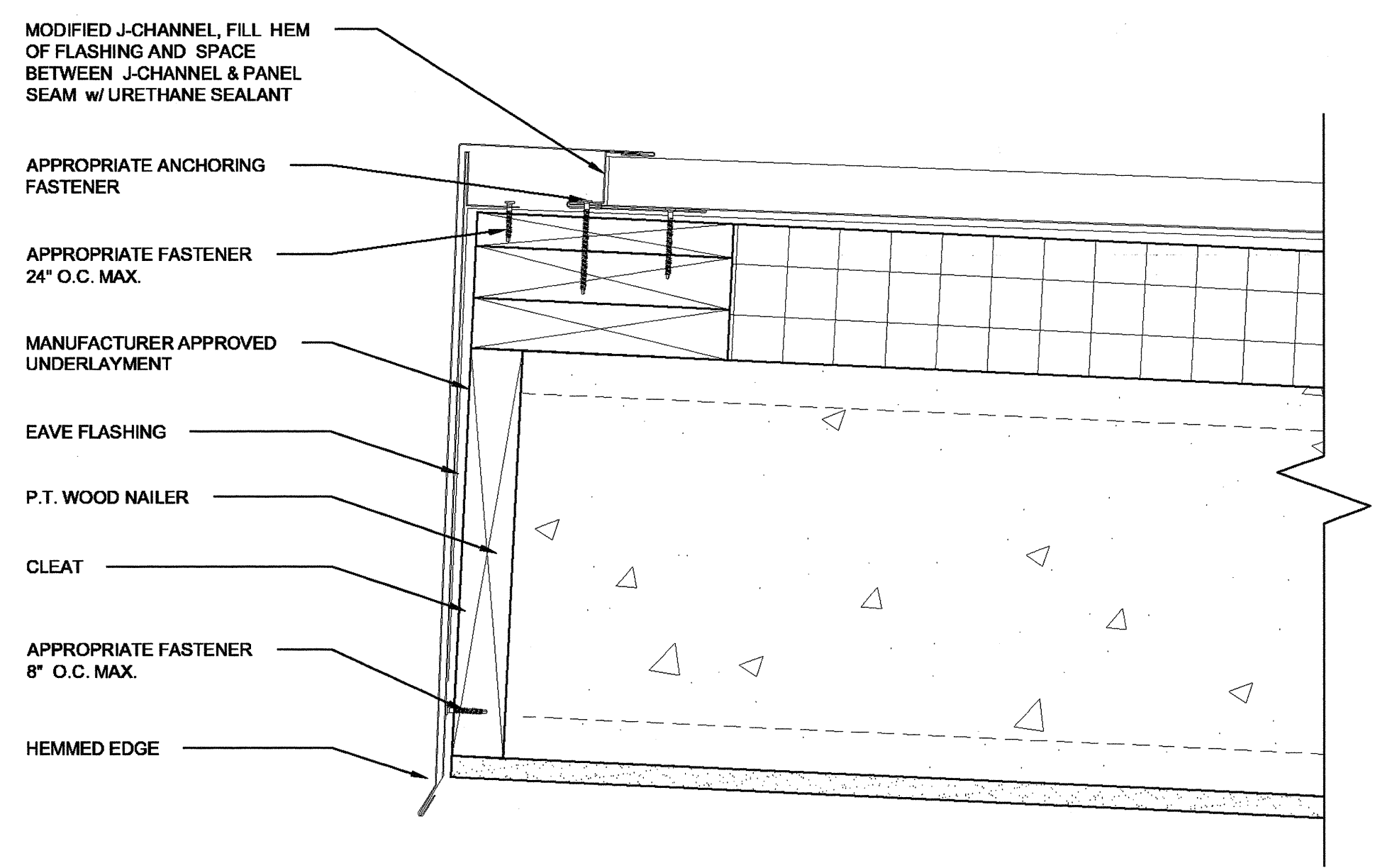
2 EAVE DETAIL
SCALE: 1"=1'-0" 0 1/2 1'



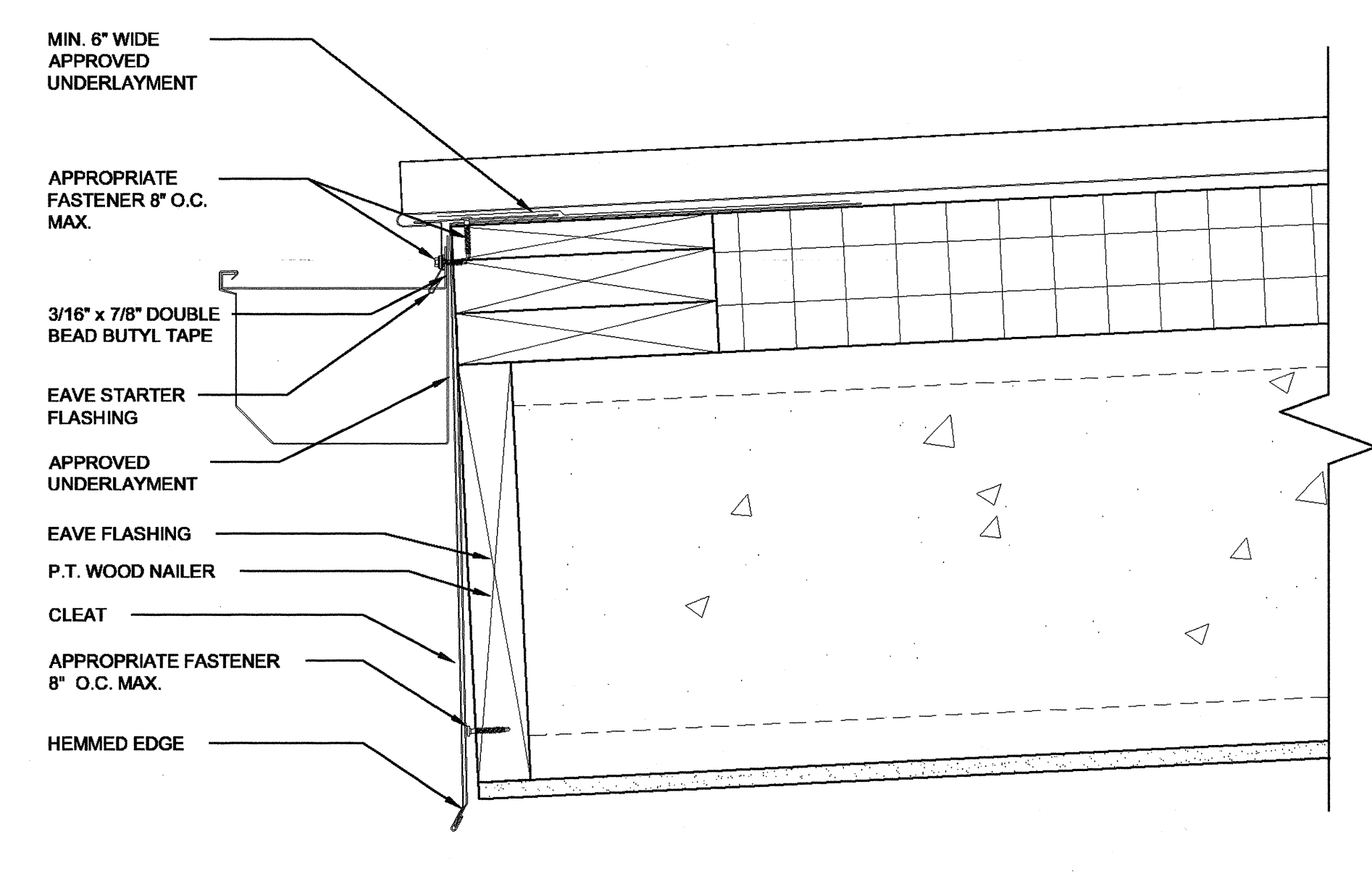
3 EAVE DETAIL
SCALE: 1"=1'-0" 0 1/2 1'



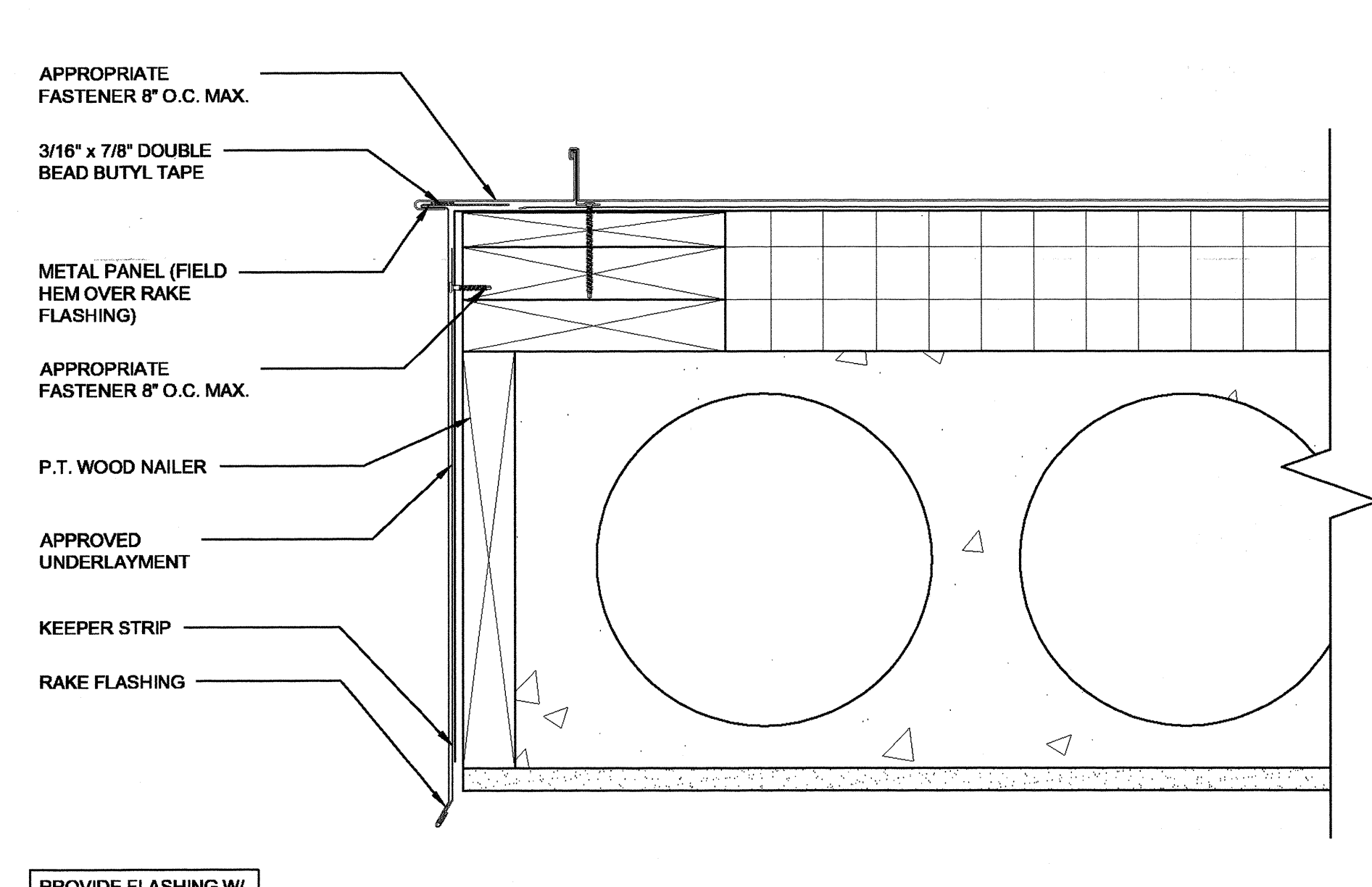
4 BASE OF WALL
SCALE: 1"=1'-0" 0 1/2 1'



5 EAVE FLASHING DETAIL
SCALE: 3"=1'-0" 0 3' 6' 9'



6 EAVE AT GUTTER
SCALE: 3"=1'-0" 0 3' 6' 9'



7 RAKE WITH HEMMED PANEL EDGE
SCALE: 3"=1'-0" 0 3' 6' 9'

**MALCOLM
PIRNIE**
ENGINEERS - ARCHITECTS - PLANNERS

JAMES K. PIRNIE
REGISTERED ARCHITECT
NO. 2317
COMMONWEALTH OF KENTUCKY

REVISIONS		NO.	BY	DATE	REMARKS

DES. JKP
DWN. TMCH
CKD. SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
BUILDING DETAILS
SCALE: AS NOTED

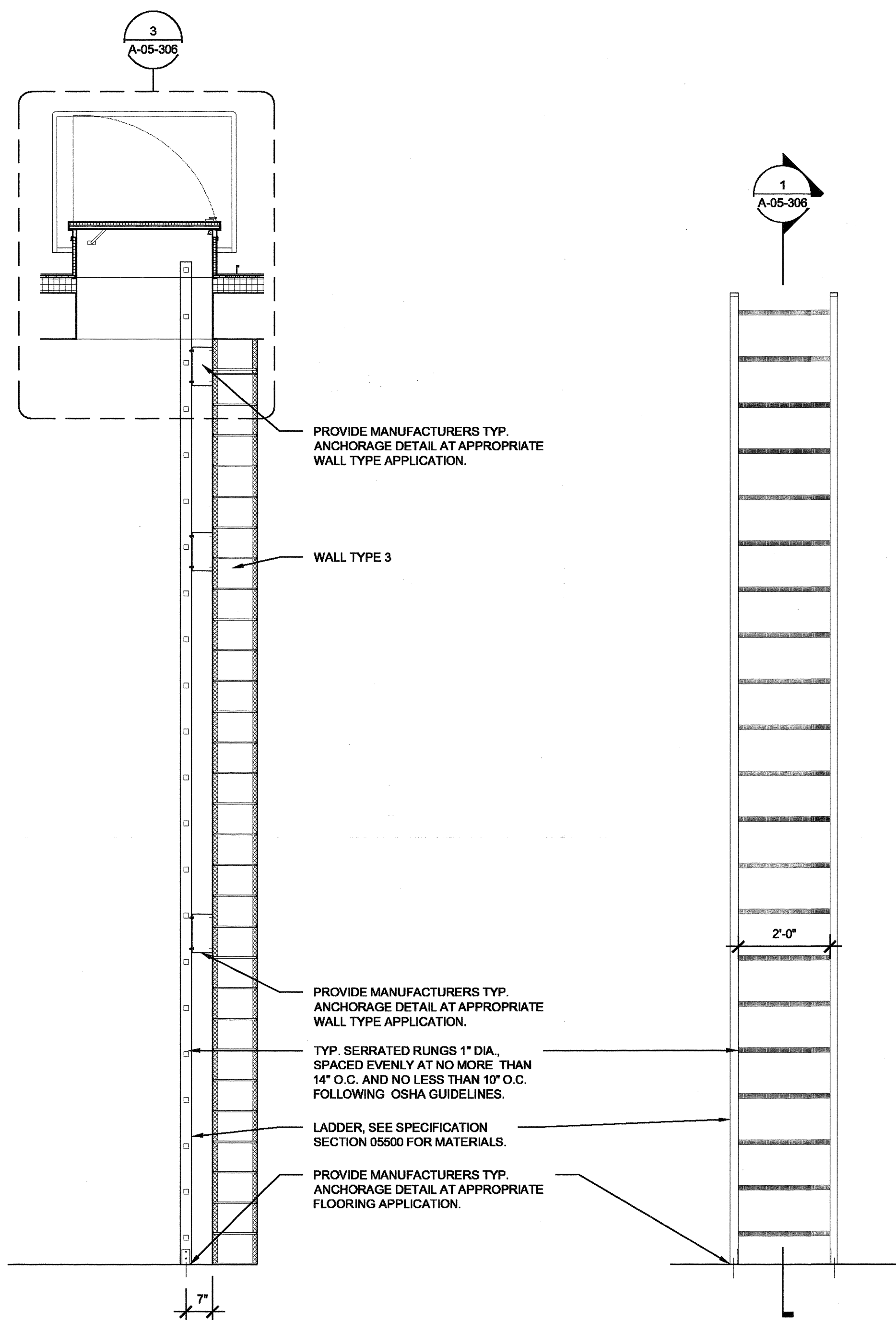
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-305
CAD REF. NO.: A-05-305

User: JBROND Spine: PIRNIE STANDARD File: J:\3788-ANKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCHA-05-305.DWG Scale: 1"=1'-0" Plot Date: 3/10/2011 09:02 Layout: A-05-305

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

GENERAL NOTES:

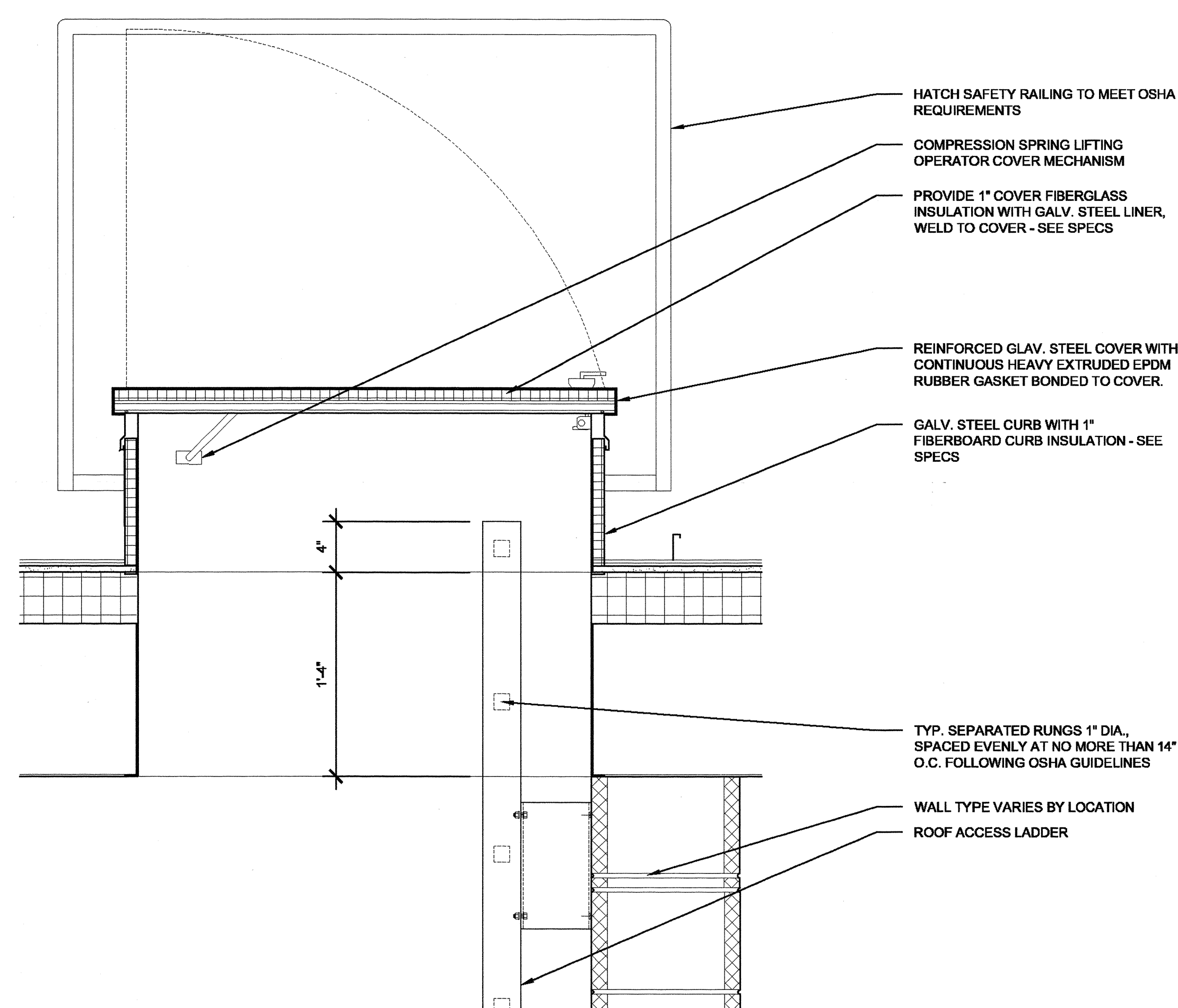
- LADDER IS TO BE EQUIPPED WITH A 50' SELF-RETRACTING LIFELINE EQUAL TO THE MILLER FALCON STEEL CABLE RETRACTABLE. LIFELINE SHALL MEET OSHA STANDARDS.



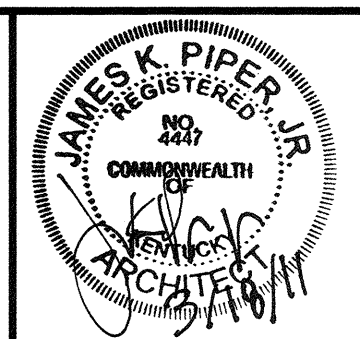
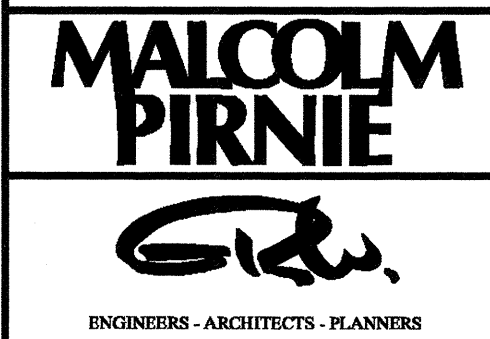
1 ACCESS LADDER SECTION
SCALE: 1/2"=1'-0"

2 LADDER ACCESS ELEVATION
SCALE: 1/2"=1'-0"

3 ACCESS LADDER DETAIL
SCALE: 1 1/2"=1'-0"



DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
GAC FEED PUMP STATION
ROOF ACCESS LADDER / HATCH
SCALE: AS NOTED

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-05-306
CAD REF. NO.: A-05-306

User: J:\BOND Spec\PIRNE STANDARD File\13788\NKWD TAYLOR MILL WORKING DRAWINGS\ARCHA-05-306.DWG Scale: 1:24 SavedDate: 2/22/2011 Time: 1:51 Plot Date: Bond, Jeff, 3/10/2011, 09:03 Layout: A-05-306

GENERAL NOTES:

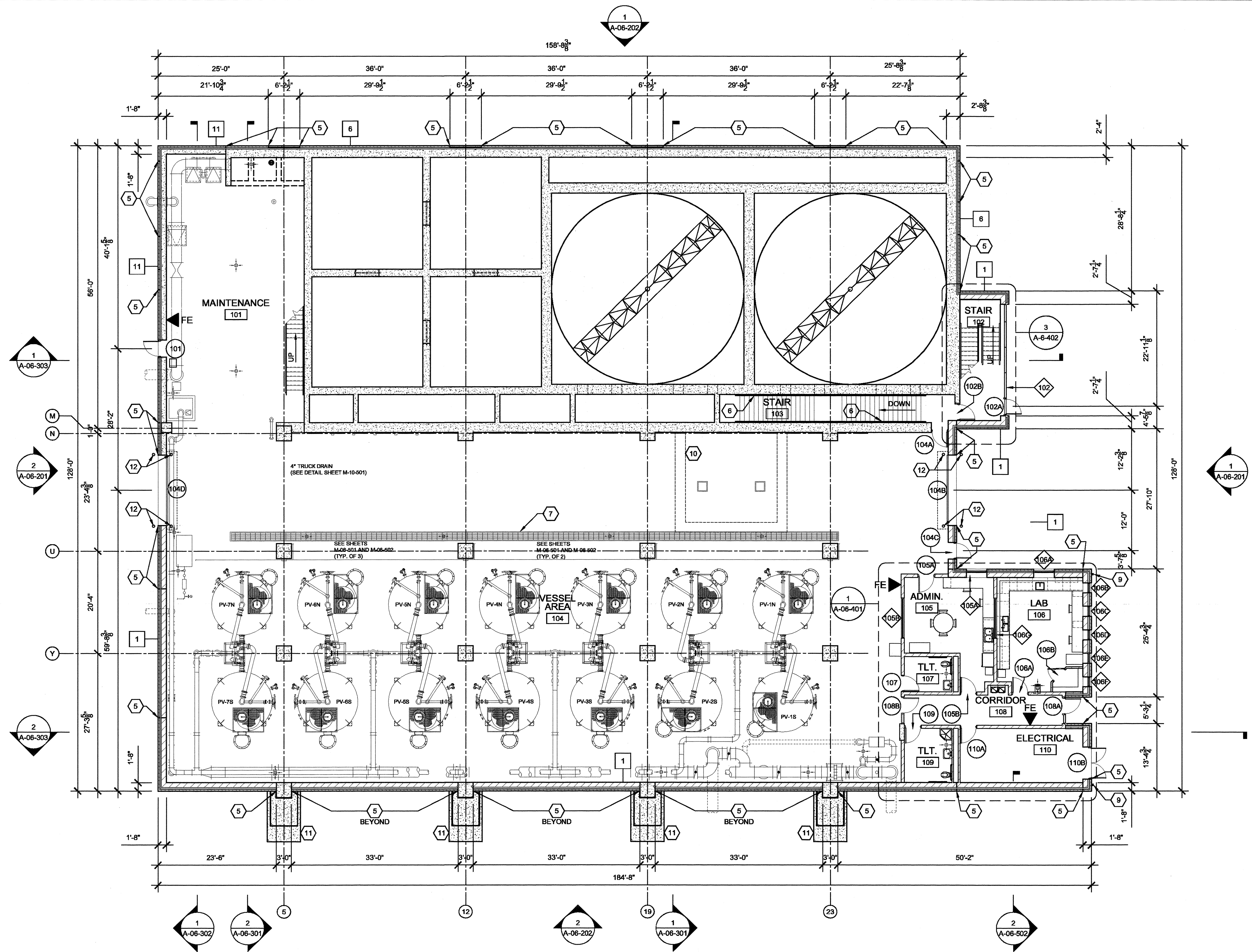
1. SEE A-00-001 FOR WALL TYPES.
2. COORDINATE WORK OF OTHER TRADES.
3. CARBON VESSELS, PRETREATMENT BASINS, AND PIPING SHOWN FOR REFERENCE ONLY. SEE SHEET SPECIFIC TO DESIGN FOR LAYOUT.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

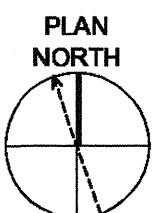
KEYNOTES:

1. NOT USED.
2. NOT USED.
3. NOT USED.
4. NOT USED.
5. MASONRY CONTROL / EXPANSION JOINT. SEE STRUCTURAL GENERAL DETAILS FOR JOINT IN CONCRETE MASONRY. PROVIDE 3/8" COMPRESSIBLE MATERIAL, BACKER ROD, SEALANT AT CLAY MASONRY PORTION OF JOINT. SEALANT TO MATCH MORTAR COLOR.
6. 1 1/2" DIA. GALVANIZED STEEL WALL MOUNTED HANDRAIL AT 36" ABOVE STAIR NOSING.
7. TRENCH DRAIN, SEE STRUCTURAL AND PLUMBING DRAWINGS.
8. NOT USED.
9. DOWN SPOUT LOCATION, SEE ROOF PLAN AND DETAILS 4/A-06-502.
10. DASHED LINES INDICATE PUMP ROOM BELOW, SEE M-06-101, S-06-307.
11. SEE SHEET A-10-533 THRU A-10-535 FOR COLUMN AND PRECAST COLUMN COVER DETAILS.
12. BOLLARD - SEE DETAIL 3/C-01-501. LOCATE 1'-0" OFF FACE OF WALL AND ALIGNED WITH OPENING.



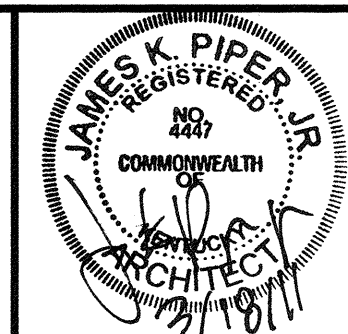
**PT / GAC BUILDING
PLAN AT EL. 524.00**

SCALE: 3/32" = 1'-0"



0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
OWN TMCH
CKD SL / JKP

**NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT
IMPROVEMENTS**

**ARCHITECTURAL
PT / GAC BUILDING
PLAN AT EL. 524.00**
SCALE: 3/32" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-06-102
CAD REF. NO.: A-06-102

User: I:\BOND Spec\PIRNE STANDARD File\13786-NKWD TAYLOR MILL\WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-06-102.DWG Scale: 1:48 Saved Date: 12/2/2010 Time: 16:37 Plot Date: Bond, Jeff, 3/10/2011, 09:03 Layout: A-06-102

GENERAL NOTES:

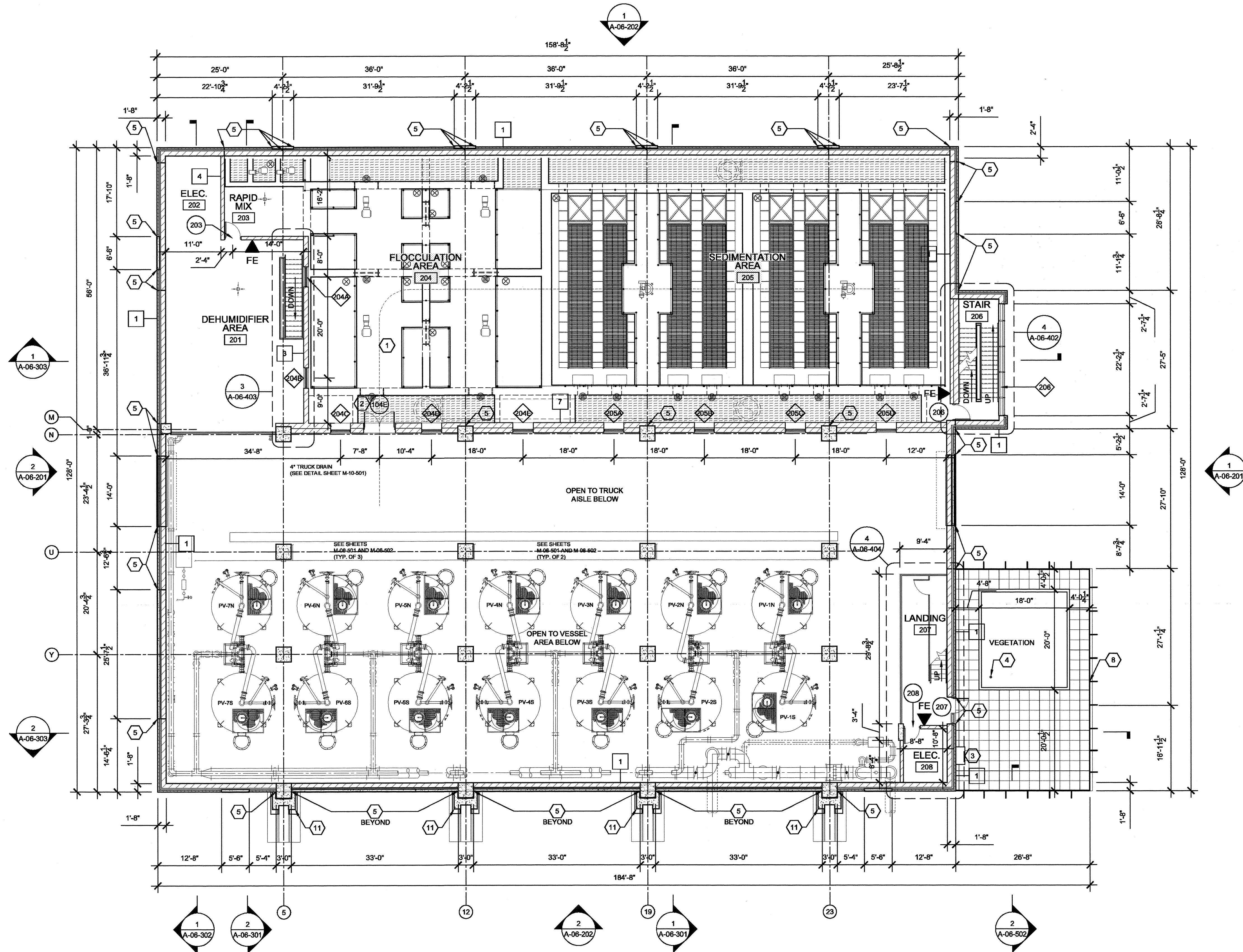
1. SEE A-00-001 FOR WALL TYPES.
2. COORDINATE WORK OF OTHER TRADES.
3. CARBON VESSELS, PRETREATMENT BASINS, AND PIPING SHOWN FOR REFERENCE ONLY. SEE SHEET SPECIFIC TO DESIGN FOR LAYOUT.

SYMBOL KEY:

1. SEE ARCHITECTURAL GENERAL SHEET A-00-001 FOR TYPICAL SYMBOLS.

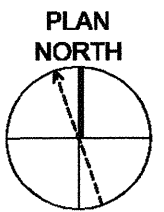
KEYNOTES:

1. DASH LINE INDICATES MONORAIL CRANE ABOVE.
2. SET T.O. DOOR FRAME AT EL. 552.0. COORDINATE WITH MONORAIL CRANE.
3. MECHANICAL EQUIPMENT - SEE 'H' SHEETS.
4. PLUMBING VENT - SEE 'P' SHEETS.
5. MASONRY CONTROL / EXPANSION JOINT. SEE STRUCTURAL GENERAL DETAILS FOR JOINT IN CONCRETE MASONRY. PROVIDE 3" COMPRESSIBLE MATERIAL, BACKER ROD, SEALANT AT CLAY MASONRY PORTION OF JOINT. SEALANT TO MATCH MORTAR COLOR.
6. 1 1/2" DIA. GALVANIZED STEEL WALL MOUNTED HANDRAIL AT 36" ABOVE STAIR NOSING.
7. TRENCH DRAIN, SEE STRUCTURAL AND PLUMBING DRAWINGS.
8. WALL MOUNTED GUARDRAIL, SEE DETAIL A-10-542.
9. NOT USED.
10. NOT USED.
11. SEE SHEET A-10-533 THRU A-10-535 FOR COLUMN AND PRECAST COLUMN COVER DETAILS.
12. NOT USED.

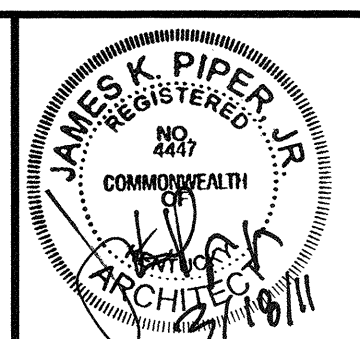
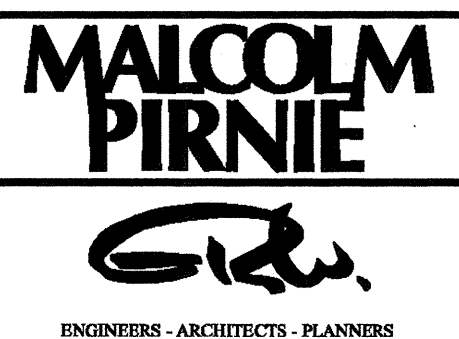


**PT / GAC BUILDING
PLAN AT EL. 537.00**

SCALE: 3/32" = 1'-0"



0 1/2
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.



REVISIONS			
NO.	BY	DATE	REMARKS

DES JKP
DWN TMCH
CKD SL / JKP

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ARCHITECTURAL
PT / GAC BUILDING
PLAN AT EL. 537.00
SCALE: 3/32" = 1'-0"

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: A-06-103
CAD REF. NO.: A-06-103

User: BOND Spec-PIRNE STANDARD File: J:\3768-AKWID TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ARCH\A-06-103.DWG Scale: 1/48 Saved Date: 12/2/2010 Time: 16:37 Plot Date: Bond, Jeff: 3/10/2011: 09:03 Layout: A-06-103