

SOUTHEAST BOOSTER PUMP STATION

STANDBY POWER GENERATION

C.O.W. PROJECT NO. 448-2021-004719

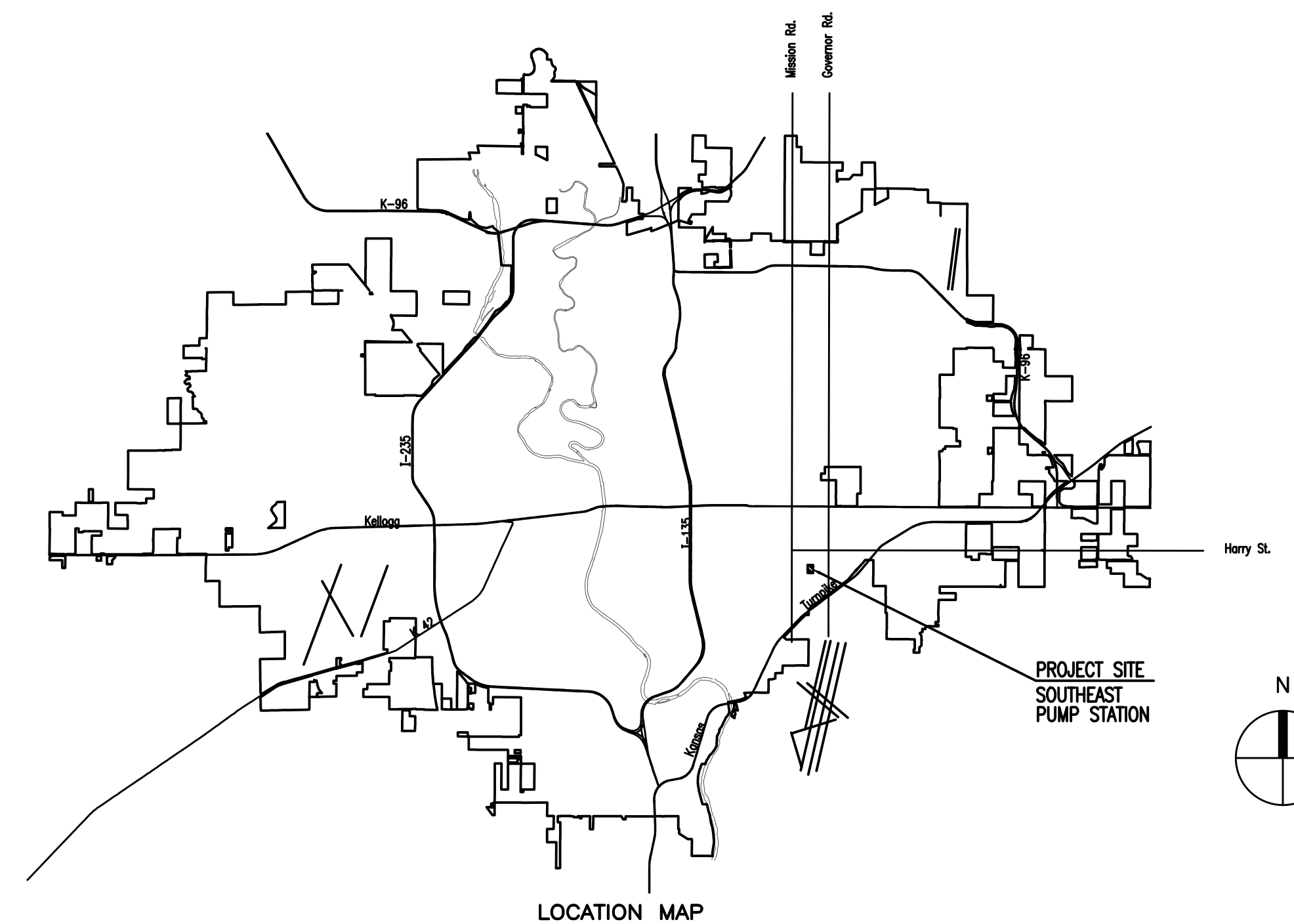
O.R.G. NO. 54251508

CITY OF WICHITA, KANSAS

GARY JANZEN, P.E. - CITY ENGINEER

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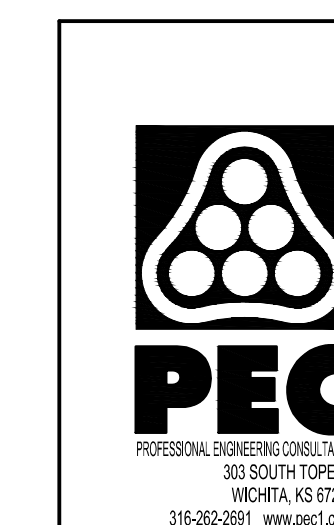
Location SEB
 Plant Equipment 5716
 Site 7516
 Bldg 7516-100
 Rooms
 7516-100-01-101 - Pump Room
 7516-100-01-102 - Restroom



MARCH 2021

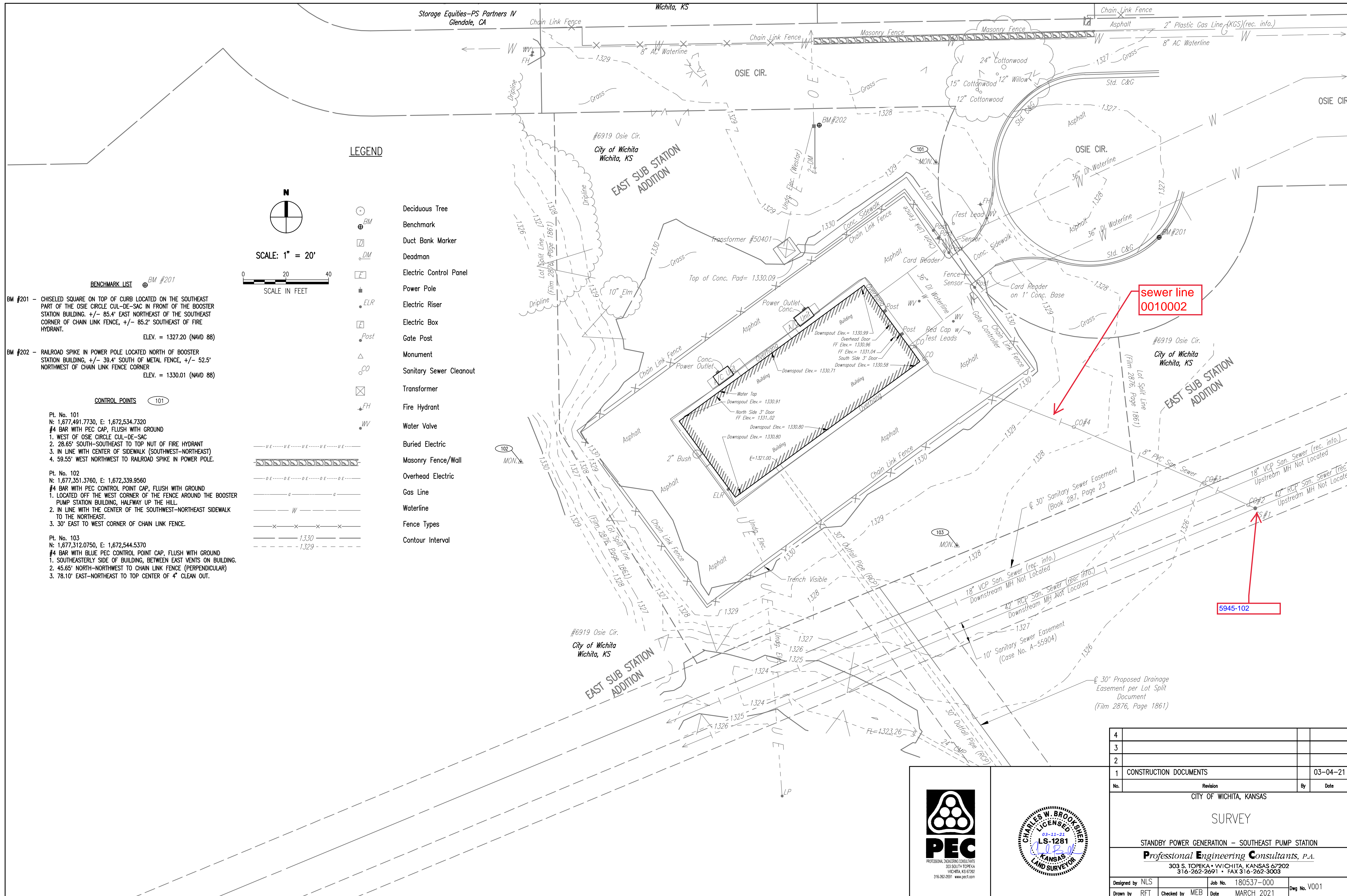
PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 ENGINEERS
 WICHITA, KANSAS

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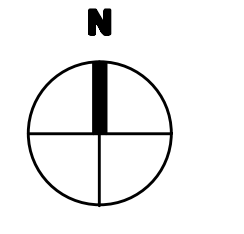
4			
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2			
1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
COVER SHEET			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	G000

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LEGEND

- Deciduous Tree
- Benchmark
- Duct Bank Marker
- Deadman
- Electric Control Panel
- Power Pole
- Electric Riser
- Electric Box
- Gate Post
- Monument
- Sanitary Sewer Cleanout
- Transformer
- Fire Hydrant
- Water Valve
- Buried Electric
- Masonry Fence/Wall
- Overhead Electric
- Gas Line
- Waterline
- Fence Types
- Contour Interval



SCALE: 1" = 20'
 SCALE IN FEET

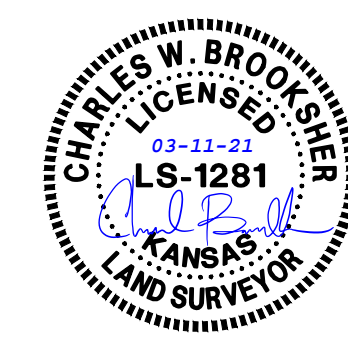
BENCHMARK LIST

- BM #201** - CHISELED SQUARE ON TOP OF CURB LOCATED ON THE SOUTHEAST PART OF THE OSIE CIRCLE CUL-DE-SAC IN FRONT OF THE BOOSTER STATION BUILDING, +/- 85.4' EAST NORTHEAST OF THE SOUTHEAST CORNER OF CHAIN LINK FENCE, +/- 85.2' SOUTHEAST OF FIRE HYDRANT.
 ELEV. = 1327.20 (NAVD 88)
- BM #202** - RAILROAD SPIKE IN POWER POLE LOCATED NORTH OF BOOSTER STATION BUILDING, +/- 39.4' SOUTH OF METAL FENCE, +/- 52.5' NORTHWEST OF CHAIN LINK FENCE CORNER
 ELEV. = 1330.01 (NAVD 88)

CONTROL POINTS

- Pt. No. 101**
 N: 1,677,491.7730, E: 1,672,534.7320
 #4 BAR WITH PEC CAP, FLUSH WITH GROUND
 1. WEST OF OSIE CIRCLE CUL-DE-SAC
 2. 28.65° SOUTH-SOUTHEAST TO TOP NUT OF FIRE HYDRANT
 3. IN LINE WITH CENTER OF SIDEWALK (SOUTHWEST-NORTHEAST)
 4. 59.55° WEST NORTHWEST TO RAILROAD SPIKE IN POWER POLE.
- Pt. No. 102**
 N: 1,677,351.3760, E: 1,672,339.9560
 #4 BAR WITH PEC CONTROL POINT CAP, FLUSH WITH GROUND
 1. LOCATED OFF THE WEST CORNER OF THE FENCE AROUND THE BOOSTER PUMP STATION BUILDING, HALFWAY UP THE HILL.
 2. IN LINE WITH THE CENTER OF THE SOUTHWEST-NORTHEAST SIDEWALK TO THE NORTHEAST.
 3. 30' EAST TO WEST CORNER OF CHAIN LINK FENCE.
- Pt. No. 103**
 N: 1,677,312.0750, E: 1,672,544.5370
 #4 BAR WITH BLUE PEC CONTROL POINT CAP, FLUSH WITH GROUND
 1. SOUTHEASTERLY SIDE OF BUILDING, BETWEEN EAST VENTS ON BUILDING.
 2. 45.65° NORTH-NORTHWEST TO CHAIN LINK FENCE (PERPENDICULAR)
 3. 78.10° EAST-NORTHEAST TO TOP CENTER OF 4" CLEAN OUT.

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2			
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STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A.			
303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	V001



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GENERAL NOTES - (DEMOLITION)

1. PAVEMENT DEMOLITION SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
2. BASE MATERIALS UNDER DEMOLISHED PAVEMENT SHALL BE REMOVED OFF-SITE.
3. ELECTRIC, COMMUNICATION AND MECHANICAL DEMOLITION ARE NOT SHOWN ON CIVIL SHEETS. REFERENCE SITE ELECTRICAL AND MECHANICAL PLANS FOR ELECTRICAL, COMMUNICATION, AND MECHANICAL DEMOLITION.
4. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO DEMOLITION TO DETERMINE DEMOLITION ITEMS THAT ARE TO BE SALVAGED TO THE OWNER. SALVAGEABLE ITEMS ARE TO BE DELIVERED TO THE OWNER AT LOCATIONS DIRECTED BY THE OWNER. ALL NON-SALVAGED ITEMS ARE TO BE DISPOSED OFF-SITE BY THE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE NECESSARY MEANS TO PROTECT THE PUBLIC AND TO PROHIBIT ACCESS TO CONSTRUCTION SITE WHILE MAINTAINING ACCESS TO EXISTING FACILITIES.
6. CONTRACTOR SHALL COORDINATE ALL DEMOLITION ACTIVITIES WITH OWNER AND UTILITY COMPANIES. CONTRACTOR SHALL VERIFY UTILITIES ARE OUT OF SERVICE/ABANDONED BEFORE DEMOLITION.
7. CONTRACTOR SHALL PROVIDE NEAT SAW CUTS AT ALL EXISTING CONCRETE AND ASPHALT ABUTTING NEW PAVEMENT AND WHERE EXISTING PAVEMENT IS REMAINING IN PLACE. SAW CUTS IN CONCRETE PAVEMENT SHALL BE AT JOINT LOCATIONS.
8. EXISTING SITE FEATURES (PAVING, UTILITIES, CURBS, SIDEWALK, DRAINAGE, IRRIGATION AND LANDSCAPING) DAMAGED BY CONSTRUCTION AND NOT SHOWN TO BE REMOVED SHALL BE REPLACED TO MATCH EXISTING OR BETTER CONDITIONS PRIOR TO DISTURBANCE.
9. UNLESS OTHERWISE NOTED ON PLANS OR SPECIFICATIONS, ALL DEMOLISHED UTILITIES SHALL BE CAPPED AT THE MAIN CONNECTION. ALL ABANDONED PIPE ENDS SHALL BE PLUGGED.
10. MANHOLES SHALL BE REMOVED WHERE LOCATED WITHIN PROPOSED BUILDING LIMITS. MANHOLES SHALL BE REMOVED WHERE A NEW MANHOLE IS INDICATED ON THE UTILITY PLANS.
11. ALL OTHER MANHOLES SHOWN FOR DEMOLITION SHALL BE REMOVED TO MINIMUM OF 3 FEET BELOW EXISTING GROUND OR PROPOSED CUT GRADES WHICHEVER IS LOWER. THE REMAINING PORTIONS OF THE ABANDONED MANHOLE SHALL HAVE ALL PIPE PENETRATIONS PLUGGED, BOTTOM DESTROYED AND FILLED AND COMPACTED WITH GRANULAR MATERIALS.
12. CONTRACTOR SHALL COORDINATE PAVEMENT REMOVAL AND REPLACEMENT WITH PROPOSED UTILITIES CONSTRUCTION. REFERENCE SITE UTILITY PLAN AND CONTACT KANSAS GAS SERVICE FOR PROPOSED UTILITY LOCATIONS. ALL PAVEMENT REMOVAL AND REPLACEMENT SHALL BE SUBSIDIARY TO THE GMP IN THE AGREEMENT.
13. ALL ITEMS LOCATED IN DEMOLITION LIMITS NOT SHOWN SHALL BE IDENTIFIED AND COORDINATED WITH THE OWNER PRIOR TO DEMOLITION.

GENERAL NOTES - (SITE)

1. THE CONTRACTOR SHALL ADHERE TO THE LATEST ADA REGULATIONS. ANY DISCREPANCIES WITH GRADES SHOWN SHALL BE REPORTED TO THE ENGINEER FOR RESOLUTION PRIOR TO PLACEMENT OF PAVEMENT, INCLUDING CONCRETE WALKS. THE CONTRACTOR SHALL COMPLY TO THE FOLLOWING GRADING REQUIREMENTS FOR ADA ACCESSIBLE ROUTES:

CURB RAMPS: SLOPE NOT TO EXCEED 1:12 MAX. LENGTH = 6 FEET W/MAX. ROISE OF 6 INCHES.

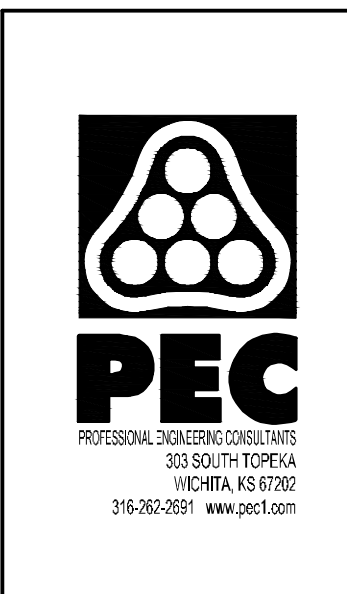
CONCRETE WALKS: LONGITUDINAL SLOPE NOT TO EXCEED 5%. TRANSVERSE SLOPE NOT TO EXCEED 2%.

LANDING AREAS: SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS. 5' LANDING AREA REQUIRED AT DOOR ENTRANCES AND CURB RAMPS.
2. ALL FILL MATERIAL SHALL BE PLACED BLADED SMOOTH AND SLOPED TO DRAIN.
3. THE CONTRACTOR SHALL APPLY TOPSOIL SALVAGED FROM THE SITE TO ALL DISTURBED AREA OUTSIDE OF THE LIMITS OF PAVEMENT PRIOR TO SEEDING.
4. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATER OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
5. ALL TREES WITHIN THE LIMITS OF THE PROPOSED GRADING SHALL BE REMOVED. ALL ROOTS TWO INCHES (2") OR LARGER SHALL BE REMOVED TO A DEPTH OF TWENTY-FOUR INCHES (24") BELOW THE BOTTOM OF THE PROPOSED PAVEMENT IN AREAS WITHIN THE LIMITS OF PAVEMENT; AND EIGHTEEN INCHES (18") BELOW THE BOTTOM OF THE PROPOSED GRADES.
6. COORDINATE ALL SITE CONSTRUCTION WITH ELECTRICAL, MECHANICAL, LANDSCAPING, AND ARCHITECTURAL PLANS, AS WELL AS PRIVATE UTILITY COMPANIES.
7. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED "SEQUENCE OF CONSTRUCTION & DEMOLITION PLAN". THE PLAN MUST BE APPROVED BY THE OWNER. THE CONTRACTOR SHALL SUBMIT REQUEST TO THE OWNER IF ADDITIONAL REMOVAL NOT SHOWN ON THE DEMOLITION PLANS IS DEEMED NECESSARY. ALL ADDITIONAL DEMOLITION IS SUBSIDIARY TO THE GMP IN THE AGREEMENT.

GENERAL NOTES

1. ALL ELEVATIONS SHOWN ARE NAVD88 DATUM. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL RE-ESTABLISH CONTROL POINTS AND BENCH MARKS AND VERIFY THEIR ACCURACY.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF WICHITA STANDARDS AND SPECIFICATIONS, UNLESS OTHERWISE NOTED IN THE PLANS OR INCLUDED IN THE PROJECT SPECIAL PROVISIONS. THE PLANS SHALL OVERRIDE CITY OF WICHITA SPECIFICATIONS AND THE SPECIAL PROVISIONS SHALL OVERRIDE THE PLANS.
3. AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT DIG-SAFE, A UTILITY LOCATION SERVICE, AT 1-800-344-7233. ADDITIONAL UTILITY CONTACT INFORMATION AS WELL AS EMERGENCY UTILITY CONTACTS CAN BE FOUND ON THIS SHEET.
4. THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION AT THE CONTRACTORS EXPENSE.
5. THE CONTRACTOR SHALL EXPOSE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF EXISTING UTILITIES THAT ARE WITHIN THE LIMITS OF CONSTRUCTION. THE UTILITY LOCATES SHALL BE PERFORMED PRIOR TO THE START OF CONSTRUCTION AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
6. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION WAS OBTAINED FROM RECORD DRAWINGS OR FIELD LOCATION. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND UTILITIES, SHOWN ON THE PLANS OR DISCOVERED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHOULD EXERCISE EXTREME CAUTION IN MAKING EXCAVATIONS FOR STRUCTURES AND PIPELINES. ANY LINES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED AT THE CONTRACTOR'S EXPENSE.
7. ALL WORK SHALL BE CONFINED WITHIN THE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, UNLESS OTHERWISE NOTED ON THE PLANS. ANY DAMAGE TO ADJACENT PROPERTIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS. ALL COSTS FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
9. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING. STAKING AND BENCH MARKS DESTROYED DURING CONSTRUCTION OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL MAINTAIN UNINTERRUPTED UTILITY SERVICE TO ADJACENT FACILITIES DURING CONSTRUCTION.
12. WRITTEN REQUEST TO THE OWNER WILL BE REQUIRED 5 CALENDAR DAYS PRIOR TO A SCHEDULED UTILITY OUTAGE. THE FIRE DEPARTMENT MUST BE NOTIFIED OF ANY FIRE HYDRANTS OR WATER MAINS TAKEN OUT OF SERVICE.

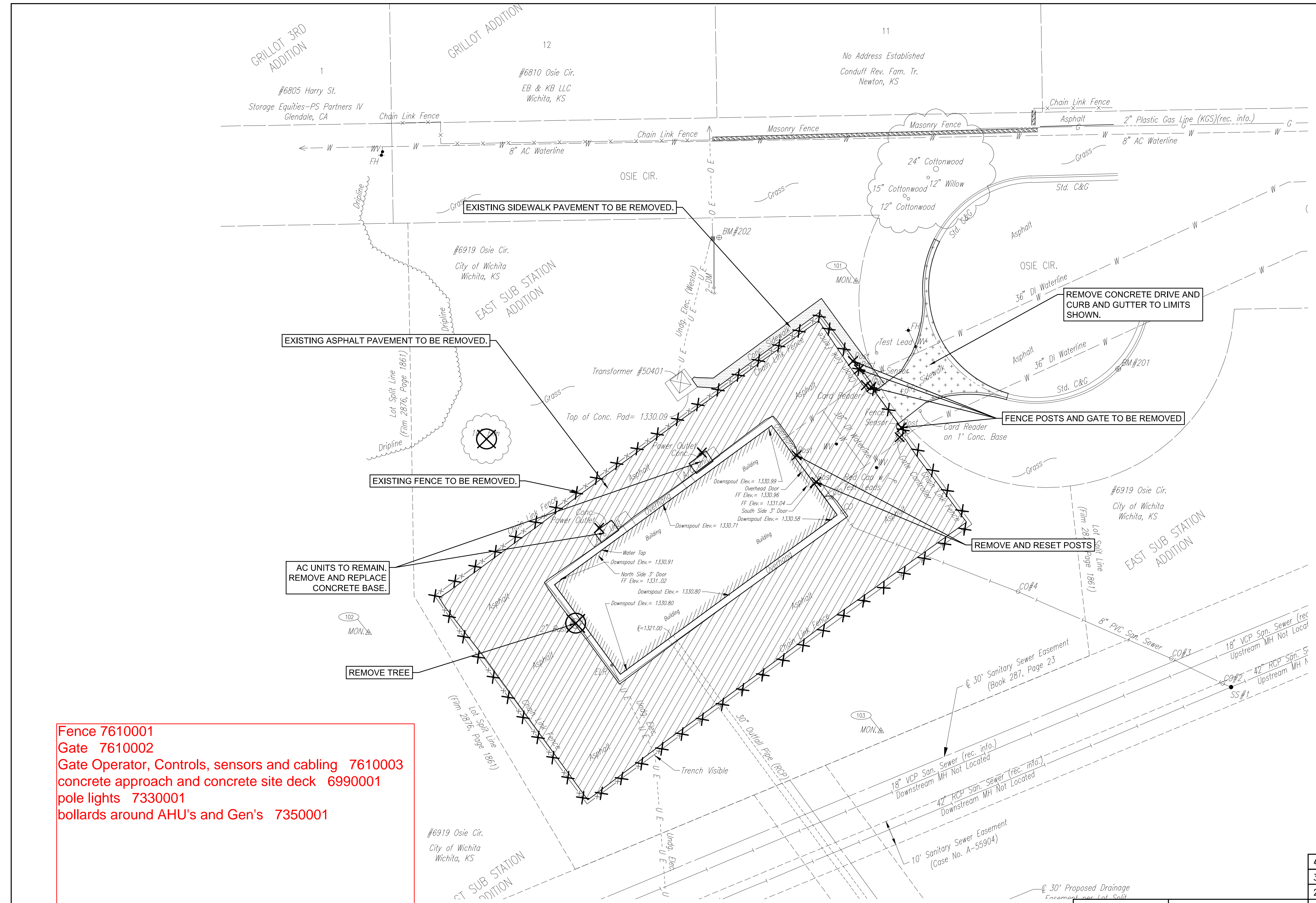
13. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL VALVE BOXES AND MANHOLES UNLESS OTHERWISE NOTED.
14. THE SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AS INDICATED ON THE GRADING PLANS. UNDER NO CIRCUMSTANCES WILL PONDING BE ALLOWED UNLESS DESIGNATED AS A TEMPORARY SEDIMENT BASIN ON THE EROSION CONTROL PLAN. THE CONTRACTOR SHALL REPORT ANY GRADING DISCREPANCIES TO THE ENGINEER FOR RESOLUTION.
15. THE CONTRACTOR SHALL ADJUST ALL MANHOLES, INLETS, VALVE BOXES, METERS, MONITORING WELLS, ETC. TO MATCH NEW GRADES.
16. ALL GRASSED AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLANTED WITH GRASS AND FERTILIZER IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. EXISTING GRASSED AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLANTED WITH THE SAME TYPE OF GRASS AS WAS REMOVED.
17. THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH TEMPORARY RYE GRASS. RYE GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF SIX (6) POUNDS PER ONE THOUSAND (1,000) SQUARE FEET. THIS TEMPORARY SEEDING MAY BE OMITTED ONLY IF PERMANENT SEEDING/SODDING IS APPLIED. TEMPORARY SEEDING OR PERMANENT SEEDING/SODDING SHALL BE APPLIED WITHIN 14 DAYS AFTER THE AREA HAS BEEN DISTURBED. ALL COSTS FOR TEMPORARY RYE GRASS SEEDING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
24. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING BEST MANAGEMENT PRACTICES FOR EROSION CONTROL PER EROSION CONTROL PLAN TO MINIMIZE POLLUTANTS IN STORM WATER DISCHARGES AND TO CONFORM TO THE REQUIREMENTS OF KDHE NPDES PERMIT. ADDITIONAL SEDIMENT BARRIERS MAY BE REQUIRED AT THE DIRECTION OF KDHE OR THE OWNER. ALL FINES IMPOSED ON THE OWNER BY THE STATE, DUE TO NON-CONFORMANCE TO THE NPDES PERMIT, SHALL BE REIMBURSED BY THE CONTRACTOR.
25. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES INCLUDING ANY TREES REMOVED, TREE TRIMMINGS, AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR. THESE SITES SHALL ALSO BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS MAY REQUIRE ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED DISPOSAL LOCATION.



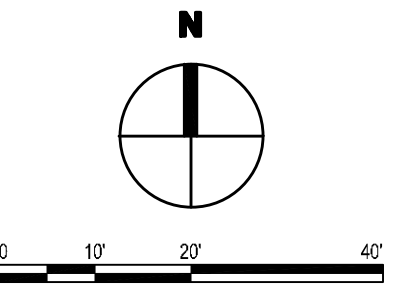
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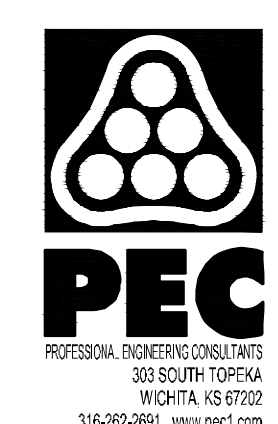
Fence 7610001
Gate 7610002
Gate Operator, Controls, sensors and cabling 7610003
concrete approach and concrete site deck 6990001
pole lights 7330001
bollards around AHU's and Gen's 7350001

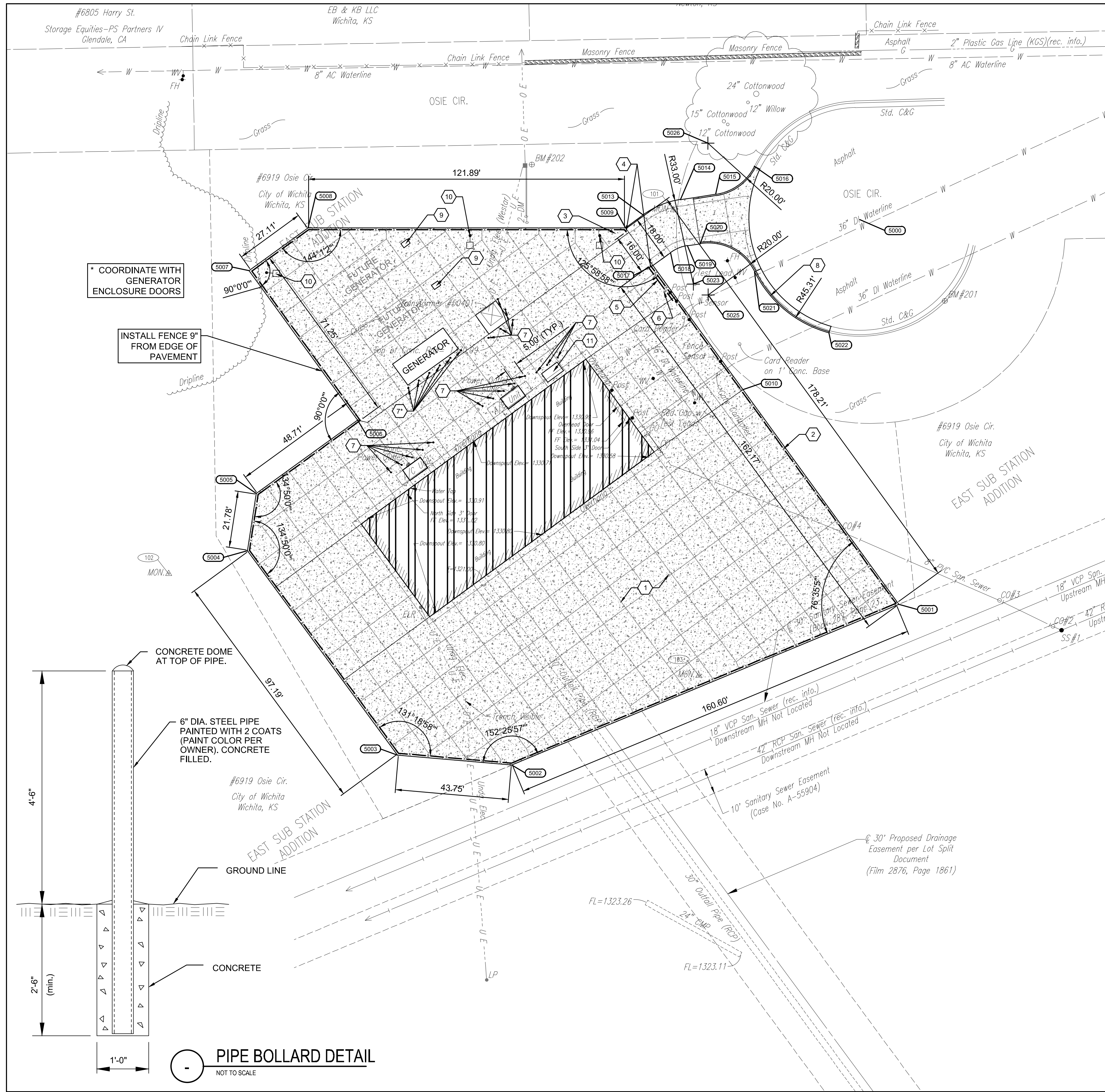


- DEMOLITION LEGEND**
- DENOTES ASPHALT PAVEMENT REMOVAL
 - DENOTES CONCRETE PAVEMENT REMOVAL
 - DENOTES SIDEWALK REMOVAL
 - DENOTES ITEM DEMOLITION
 - DENOTES ITEM DEMOLITION
 - DENOTES ITEM ABANDONMENT
 - DENOTES UTILITY CAP OR PLUG
 - DENOTES TREE REMOVAL



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Designed by NLS	Job No. 180537-000	Dwg No. CD101	
Drawn by RFT	Checked by MEB	Date MARCH 2021	





* COORDINATE WITH GENERATOR ENCLOSURE DOORS

INSTALL FENCE 9" FROM EDGE OF PAVEMENT

CONCRETE DOME AT TOP OF PIPE.

6" DIA. STEEL PIPE PAINTED WITH 2 COATS (PAINT COLOR PER OWNER). CONCRETE FILLED.

GROUND LINE

CONCRETE

PIPE BOLLARD DETAIL

NOT TO SCALE

COORDINATE LIST

POINT	NORTHING	EASTING
5000	1,677,488.0897	1,672,606.5293
5001	1,677,339.6058	1,672,621.7025
5002	1,677,277.5348	1,672,472.3486
5003	1,677,281.3931	1,672,428.2477
5004	1,677,360.2297	1,672,370.3022
5005	1,677,382.3621	1,672,373.7485
5006	1,677,410.7237	1,672,412.8094
5007	1,677,468.3787	1,672,370.9470
5008	1,677,484.8934	1,672,393.6919
5009	1,677,484.8934	1,672,516.2114
5010	1,677,422.4506	1,672,561.5502
5013	1,677,489.8314	1,672,523.0122
5014	1,677,495.7437	1,672,537.3799
5015	1,677,497.8408	1,672,551.0014
5016	1,677,508.6706	1,672,565.8502
5017	1,677,470.3279	1,672,526.7871
5018	1,677,475.2659	1,672,533.5879
5019	1,677,477.9533	1,672,540.1187
5020	1,677,478.7108	1,672,545.0391
5021	1,677,467.8690	1,672,565.9802
5022	1,677,444.3446	1,672,594.7194
5023	1,677,463.1280	1,672,542.4011
5025	1,677,458.9437	1,672,548.0822
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GENERAL SHEET NOTES

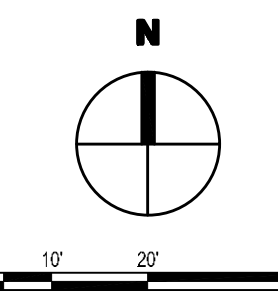
- ALL DISTURBED AREAS SHALL BE SEEDED AND OR SODDED IN ACCORDANCE WITH THE EROSION CONTROL PLANS.
- SEE SHEET V001 FOR ZONING DATA AND ADDITIONAL SITE INFORMATION.
- COORDINATE POINTS ARE TO THE EDGE OF PAVEMENT OR BACK OF CURB UNLESS OTHERWISE NOTED.

KEYNOTES

- INSTALL 6" CONCRETE PAVEMENT. REF. JOINTING PLAN, SHEET CP-101
- INSTALL CHAIN LINK FENCE 8' BLACK PVC COATED CHAINLINK WITH DOUBLE ROW OF BARB WIRE - ONE ROW FACING IN, ONE ROW OUT. INSTALL PER CITY OF WICHITA DETAILS. SEE FENCE NOTES, THIS SHEET.
- RESET CARD READER.
- RESET GATE SENSORS.
- INSTALL 16' WIDE CANTILEVER GATE.
- RESET GATE CONTROLLER
- INSTALL BOLLARD. SEE DETAIL, THIS SHEET.
- INSTALL 38.3" OF CURB AND GUTTER PER CITY OF WICHITA STANDARDS.
- ELECTRICAL HANDHOLE. REFERENCE ELECTRICAL PLANS.
- LIGHT POLE. REFERENCE ELECTRICAL PLANS.
- PROPOSED CONDENSING UNIT. REFERENCE MECHANICAL PLANS.

FENCE NOTES:

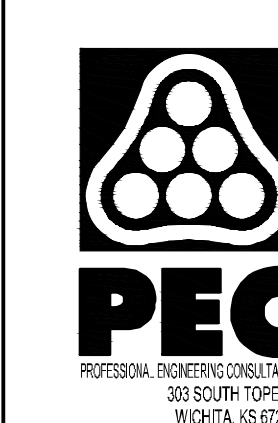
- FENCE GUIDELINE IS GALVANIZED STEEL CHAIN-LINK FENCE POST WITH AN 8-FOOT HEIGHT.
- FENCE FABRIC SHALL BE ONE PIECE AND SHOULD BE PVC OVER ZINC-COATED STEEL. (BLACK).
- FABRIC WIRE GAUGE SHALL BE NO.8 GAUGE AND SELECT MESH PATTERNS LESS THAN 1-INCH ACROSS.
- POST STRENGTH AND STIFFNESS SHALL MEET ASTM F1043, "STANDARD SPECIFICATION FOR STRENGTH AND PROTECTIVE COATINGS ON STEEL INDUSTRIAL CHAIN LINK FENCE FRAMEWORK," GROUP 1A REQUIREMENTS (ASTM 2005C) FOR HEAVY INDUSTRIAL FENCES.
- THE AVERAGE DIMENSION BETWEEN LINE POSTS FOR CHAIN LINK FENCES IS RECOMMENDED TO BE NO MORE THAN 10 FEET WHEN MEASURED CENTER-TO-CENTER BETWEEN POSTS AND PARALLEL TO THE FENCE GRADE.
- POST HOLE DEPTH SHALL BE 36-INCHES. THE HOLE SHOULD BE BACKFILLED WITH 2500 PSI CONCRETE.
- USE DOUBLE Y-STYLE OUTRIGGERS WITH 3-STRAND BARBED WIRE.
- FOR ANCHORAGE OF FABRIC, THE BOTTOM FENCE FABRIC SHOULD BE SECURED TO A BOTTOM AND TOP RAIL AND SECURELY ANCHORED AT THE MIDPOINT BETWEEN THE FENCE POSTS ALONG THE FENCE LINE.



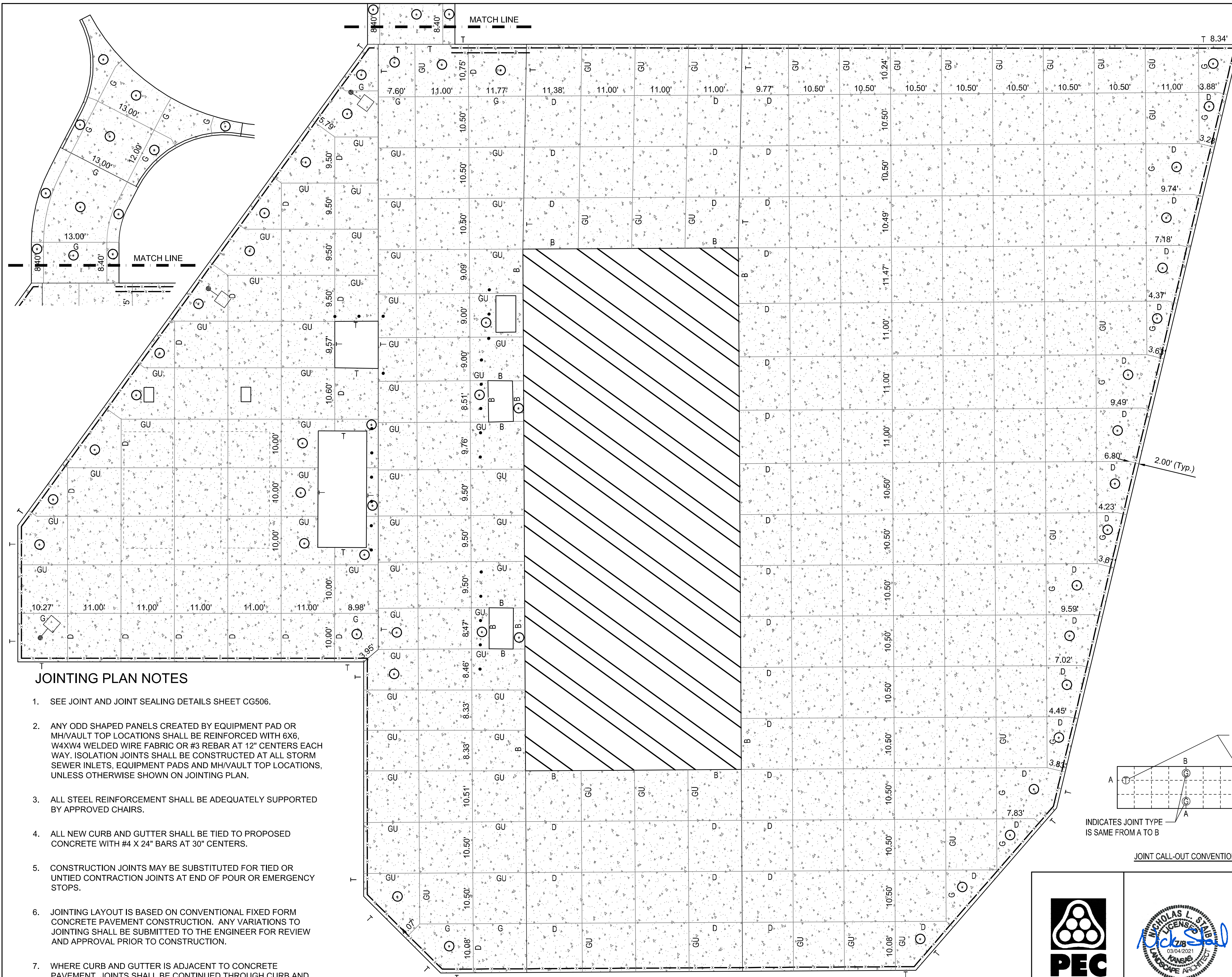
PAVING LEGEND

- PROPOSED CONCRETE PAVEMENT
- EXISTING BUILDING

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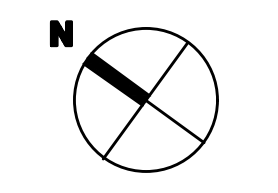
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1	CONSTRUCTION DOCUMENTS		03-04-21
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CITY OF WICHITA, KANSAS			
SITE PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
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Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CS101



JOINTING PLAN NOTES

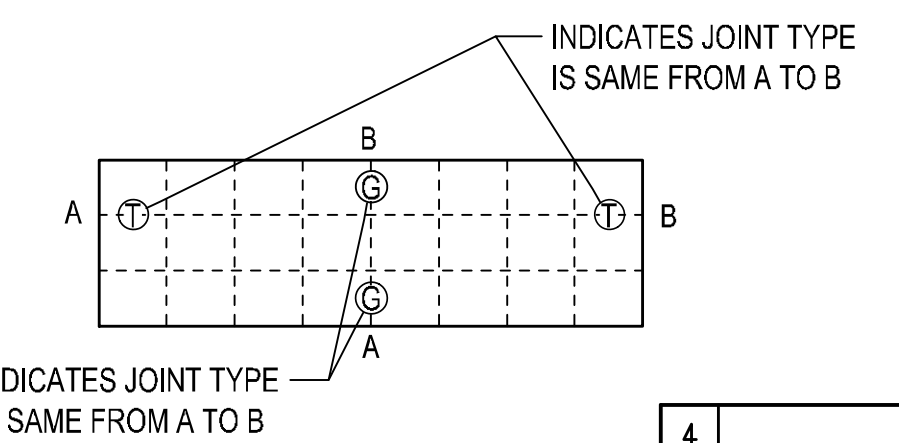
1. SEE JOINT AND JOINT SEALING DETAILS SHEET CG506.
2. ANY ODD SHAPED PANELS CREATED BY EQUIPMENT PAD OR MH/VAULT TOP LOCATIONS SHALL BE REINFORCED WITH 6X6, W4XW4 WELDED WIRE FABRIC OR #3 REBAR AT 12" CENTERS EACH WAY. ISOLATION JOINTS SHALL BE CONSTRUCTED AT ALL STORM SEWER INLETS, EQUIPMENT PADS AND MH/VAULT TOP LOCATIONS, UNLESS OTHERWISE SHOWN ON JOINTING PLAN.
3. ALL STEEL REINFORCEMENT SHALL BE ADEQUATELY SUPPORTED BY APPROVED CHAIRS.
4. ALL NEW CURB AND GUTTER SHALL BE TIED TO PROPOSED CONCRETE WITH #4 X 24" BARS AT 30" CENTERS.
5. CONSTRUCTION JOINTS MAY BE SUBSTITUTED FOR TIED OR UNTIED CONTRACTION JOINTS AT END OF POUR OR EMERGENCY STOPS.
6. JOINTING LAYOUT IS BASED ON CONVENTIONAL FIXED FORM CONCRETE PAVEMENT CONSTRUCTION. ANY VARIATIONS TO JOINTING SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
7. WHERE CURB AND GUTTER IS ADJACENT TO CONCRETE PAVEMENT, JOINTS SHALL BE CONTINUED THROUGH CURB AND GUTTER.
8. ALL JOINTS SHALL BE SEALED.

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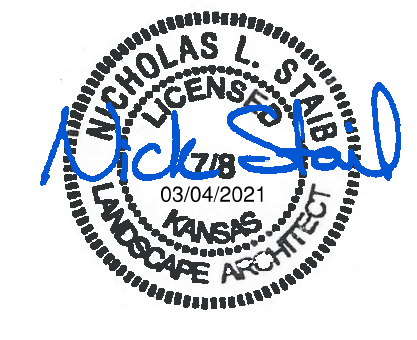
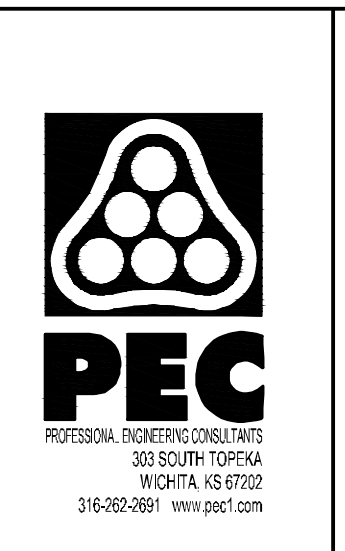


PAVEMENT JOINT LEGEND

T	THICKENED EDGE JOINT
B	BUTT JOINT
D	DOWELED CONSTRUCTION JOINT
G	SAWED CONTRACTION JOINT (TIED)
GU	SAWED CONTRACTION JOINT (UNTIED)
—	EXPANSION JOINT
- - -	PAVEMENT JOINT
⊘	OMIT DOWEL OR TIE BAR
⊙	PANEL TO BE REINFORCED



JOINT CALL-OUT CONVENTIONS



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JOINTING PLAN			
STANDBY POWER GENERATION – SOUTHEAST PUMP STATION			
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Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CP101

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Stormwater Certification:

New Development or Redevelopment (Circle One)

Stormwater Permit # _____

NOI State Permit # _____

NOI Federal Permit # _____

These construction plans were prepared in accordance with the current Stormwater management Regulations as set forth in the City of Wichita's Stormwater Management Ordinance 16.32 and the policies/guidelines presented in the Wichita/Sedgwick County Stormwater Manual.

Site Area (Acres) = _____

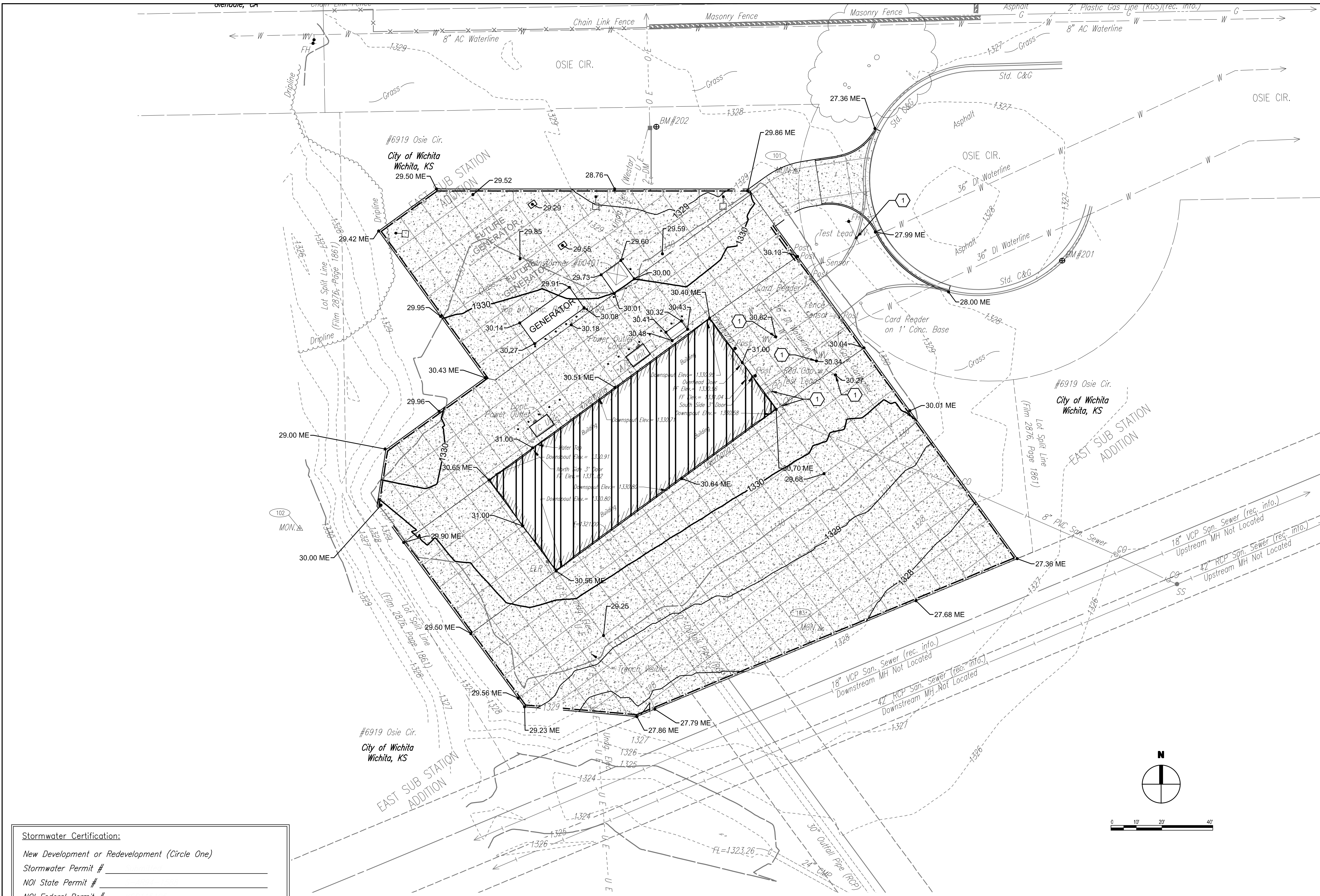
Disturbed Area (Acres) = _____

Water Quality Treatment: _____

Downstream Channel Protection: _____

Detention: _____

The BMP used for this development is _____



KEYNOTES

1. ADJUST TOP TO MATCH FINAL GRADE ELEVATION.

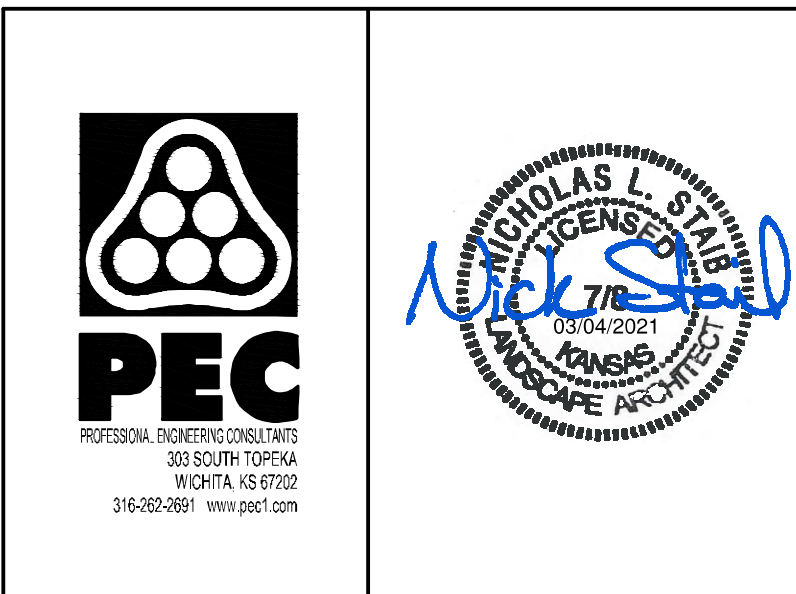
GRADING LEGEND

- 1300 — EXISTING MAJOR CONTOUR
- - - 1301 - - - EXISTING MINOR CONTOUR
- 1300 — PROPOSED MAJOR CONTOUR
- - - 1301 - - - PROPOSED MINOR CONTOUR
- — — PROPOSED GRADING LIMITS
- - - PROPOSED RIDGE LINE
- — — PROPOSED DITCH CENTER LINE
- 0.150 PROPOSED SPOT ELEVATION
- 1.00% PROPOSED SLOPE
- PROPOSED FLOW DIRECTION
- PROPOSED RIP-RAP

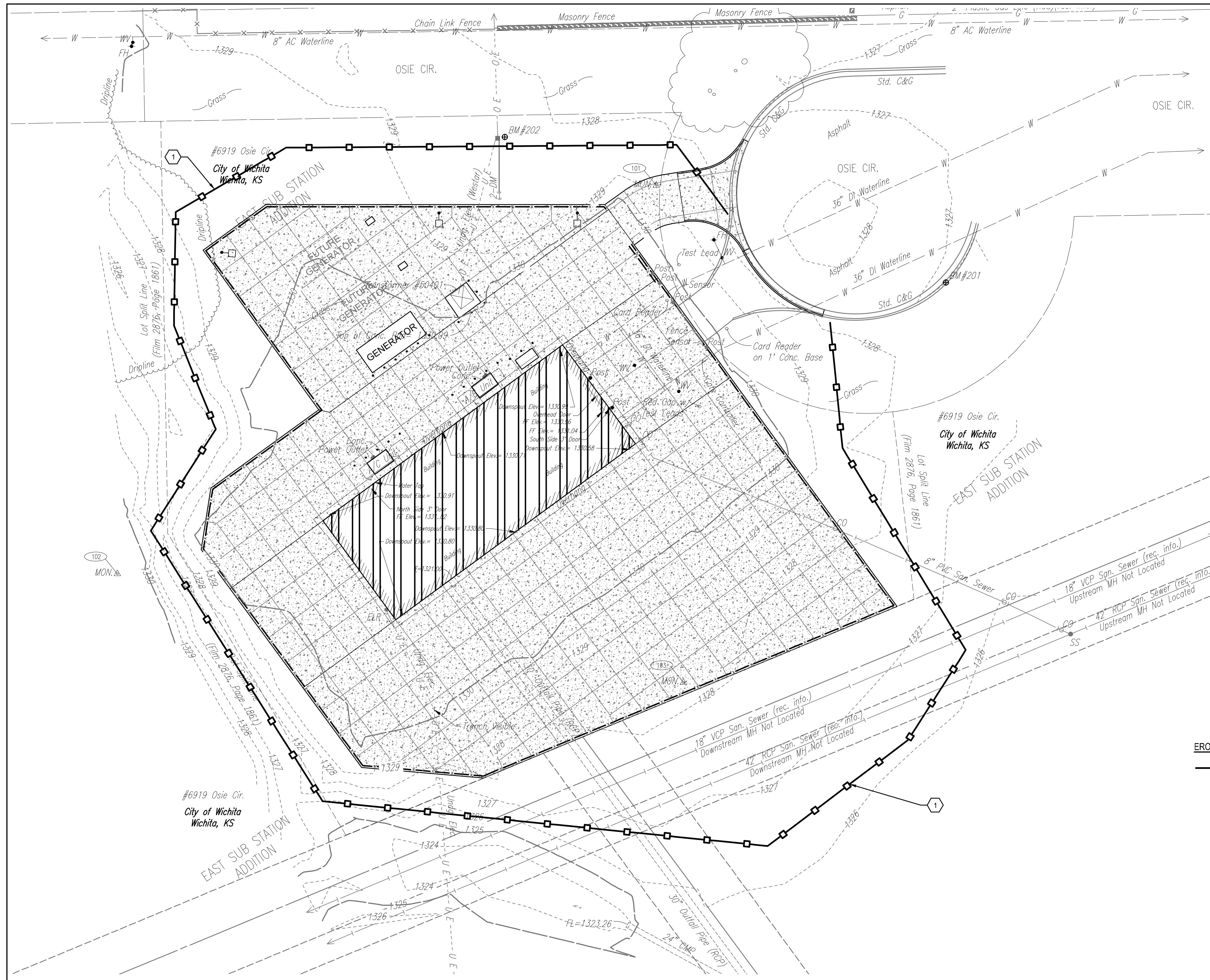
GRADING ABBREVIATIONS

- ME MATCH EXISTING
- TC TOP OF CURB
- FL FLOW LINE
- HP HIGH POINT
- TW TOP OF WALL

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1	CONSTRUCTION DOCUMENTS		03-04-21
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CITY OF WICHITA, KANSAS			
GRADING PLAN			
STANDBY POWER GENERATION – SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
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Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG101



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- KEYNOTES**
- INSTALL SILT FENCE

- GENERAL SHEET NOTES**
- THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED MINIMUM STANDARDS. WHENEVER SEDIMENT ENTERS THE STREETS, STORM SEWERS, DITCHES, OR PONDS, CONTRACTOR WILL INSTALL ADDITIONAL DEVICES, AS NEEDED, TO CORRECT THE PROBLEM.
 - THE EROSION CONTROL DEVICES SHOWN HEREON MUST BE IN PLACE AT ALL TIMES DURING CONSTRUCTION UNTIL SUCH TIME AS THE SITE IS REESTABLISHED WITH PAVING OR GRASS. TEMPORARY OR PERMANENT SEEDING AND MULCH WILL BE INSTALLED WHEN EARTHWORK ACTIVITIES CEASE IN AN AREA FOR 14 DAYS OR MORE.
 - ANY MUD INADVERTENTLY TRACKED ONTO ANY STREET SHALL BE CLEANED UP BY THE CONTRACTOR, AT THE END OF EACH DAY'S WORK, OR AS DIRECTED BY THE FIELD ENGINEER.
 - CONTRACTOR TO FURNISH A TRUCK WASH-OUT PIT TO BE PLACED AT A CONVENIENT LOCATION THAT DOES NOT CONFLICT WITH CONSTRUCTION. CONTRACTOR SHALL CLEAN OUT AND BACKFILL PIT PRIOR TO FINAL INSPECTION. LOCATION SHALL BE APPROVED BY THE FIELD ENGINEER.
 - SEE EROSION CONTROL DETAILS: CG501 - CG505.
 - THE CONTRACTOR SHALL SEED ALL AREAS DISTURBED DURING CONSTRUCTION. MATERIALS FOR SEEDING SHALL BE AS LISTED BELOW:

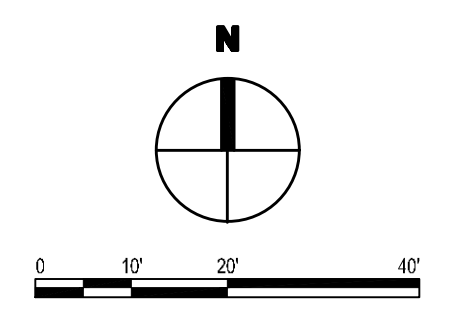
GRASS SEED - BROME GRASS SEED SHALL BE PLANTED AT A MINIMUM RATE OF 20 LBS. PLS (PURE LIVE SEED) PER ACRE.

SEASONAL INFO:
 FALL AUG. 15-SEP. 20
 WINTER DEC. 1-FEB. 15
 SPRING FEB. 15-APR. 1

FERTILIZER - FERTILIZER SHALL CONTAIN A MINIMUM OF 12% NITROGEN, 24% PHOSPHORUS, AND 12% POTASSIUM. FERTILIZER SHALL BE DISTRIBUTED AT A MINIMUM RATE OF 200 LBS PER ACRE.

MULCH - MULCH SHALL BE APPLIED TO ALL AREAS WITH SLOPES GREATER THAN 3 TO 1. APPLY MULCHING AT THE RATE OF 2 TONS PER ACRE. MULCH TYPE SHALL BE PRAIRIE HAY.

PRIOR TO SEEDING, THE CONTRACTOR SHALL INSTALL OR VERIFY THAT A MIN. 8" TOPSOIL EXISTS.



- EROSION CONTROL LEGEND**
- PROPOSED SILT FENCE
 - PROPOSED INLET PROTECTION
 - PROPOSED DITCH CHECK
 - PROPOSED FLOW DIRECTION
 - PROPOSED RIP-RAP
 - PROPOSED TURF REINFORCEMENT MAT
 - PROPOSED STABILIZED CONSTRUCTION ENTRANCE
 - PROPOSED EROSION CONTROL BLANKET
 - PROPOSED SEED/SOD AREA

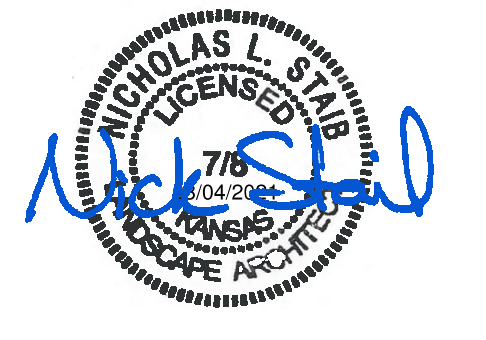
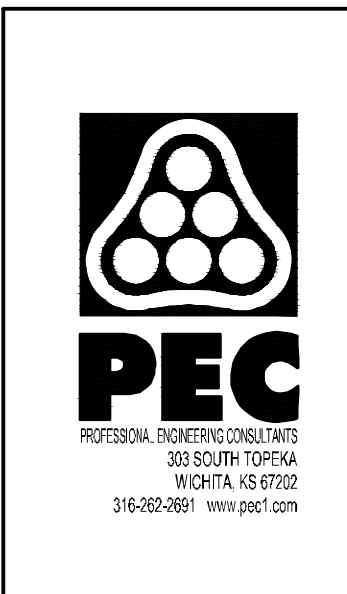
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1	CONSTRUCTION DOCUMENTS		03-04-21
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CITY OF WICHITA, KANSAS

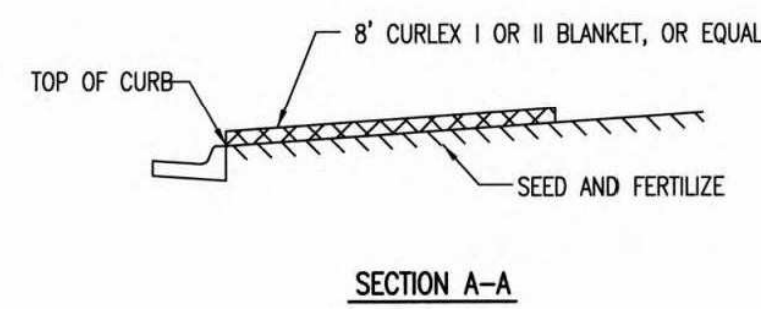
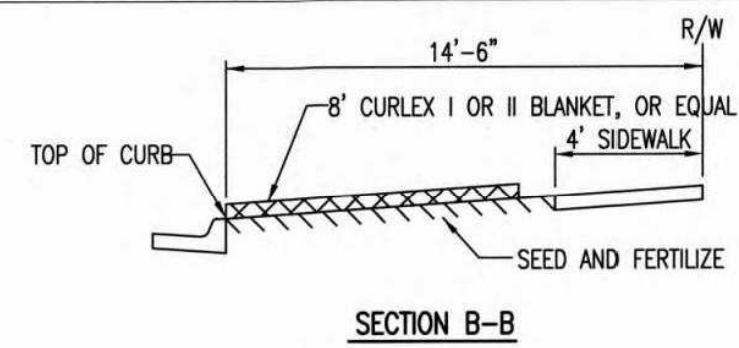
EROSION CONTROL PLAN

STANDBY POWER GENERATION - SOUTHEAST PUMP STATION

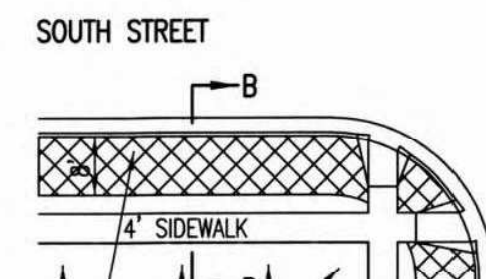
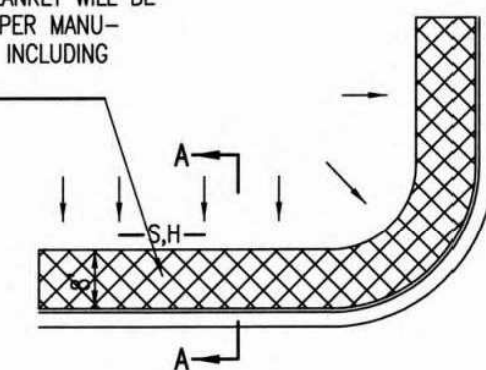
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Drawn by	RFT	Checked by	MEB	Date	MARCH 2021



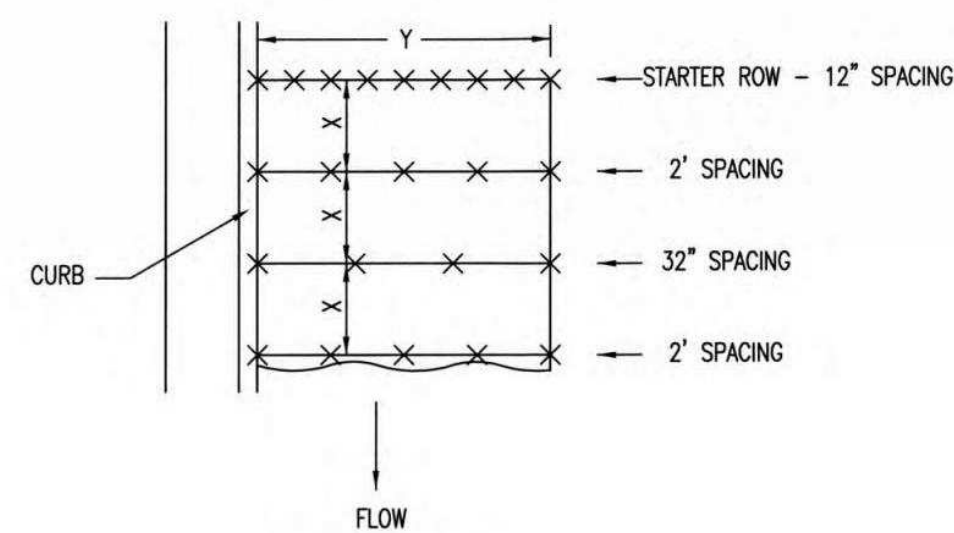
INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



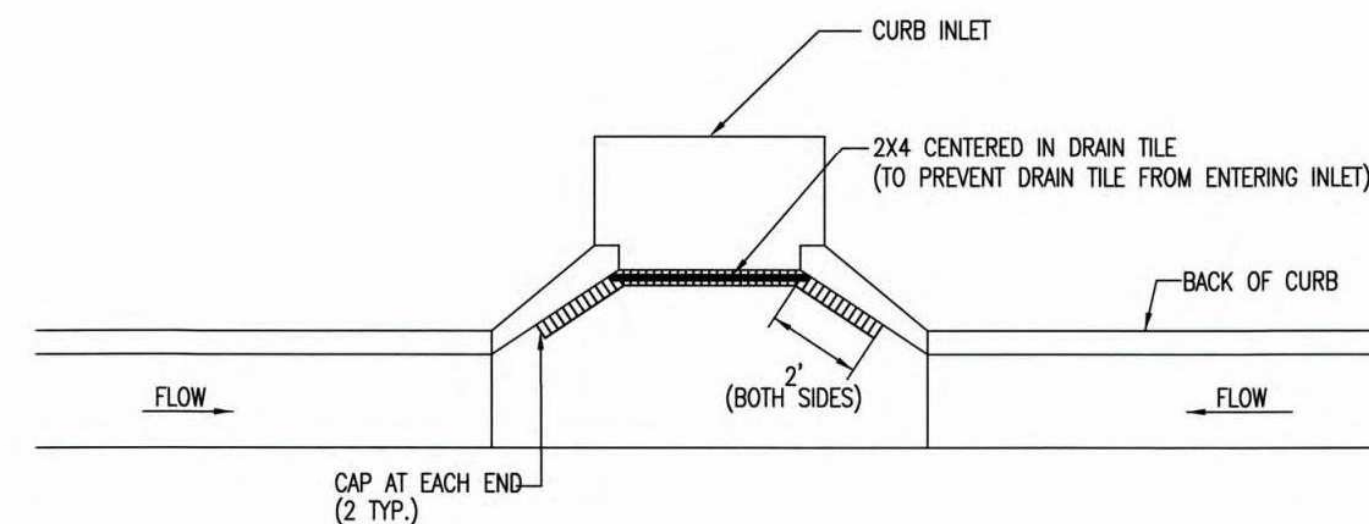
INSTALL 8" WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURER'S RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

- GENERAL NOTES**
- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
 - EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
 - AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

BACK OF CURB PROTECTION DETAIL

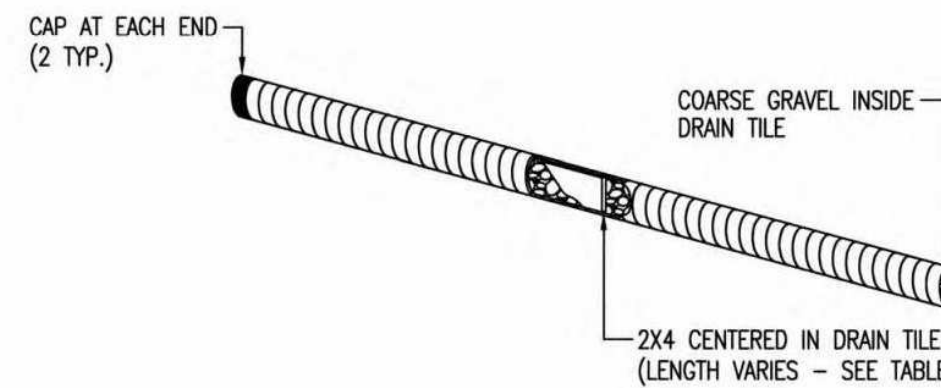


STAPLE PATTERN
 NOTES: USE 6" SEAM OVERLAP
 (X & Y = RECOMMENDED BY MANUFACTURE)
DETAILS FOR APPROVED EROSION CONTROL MAT

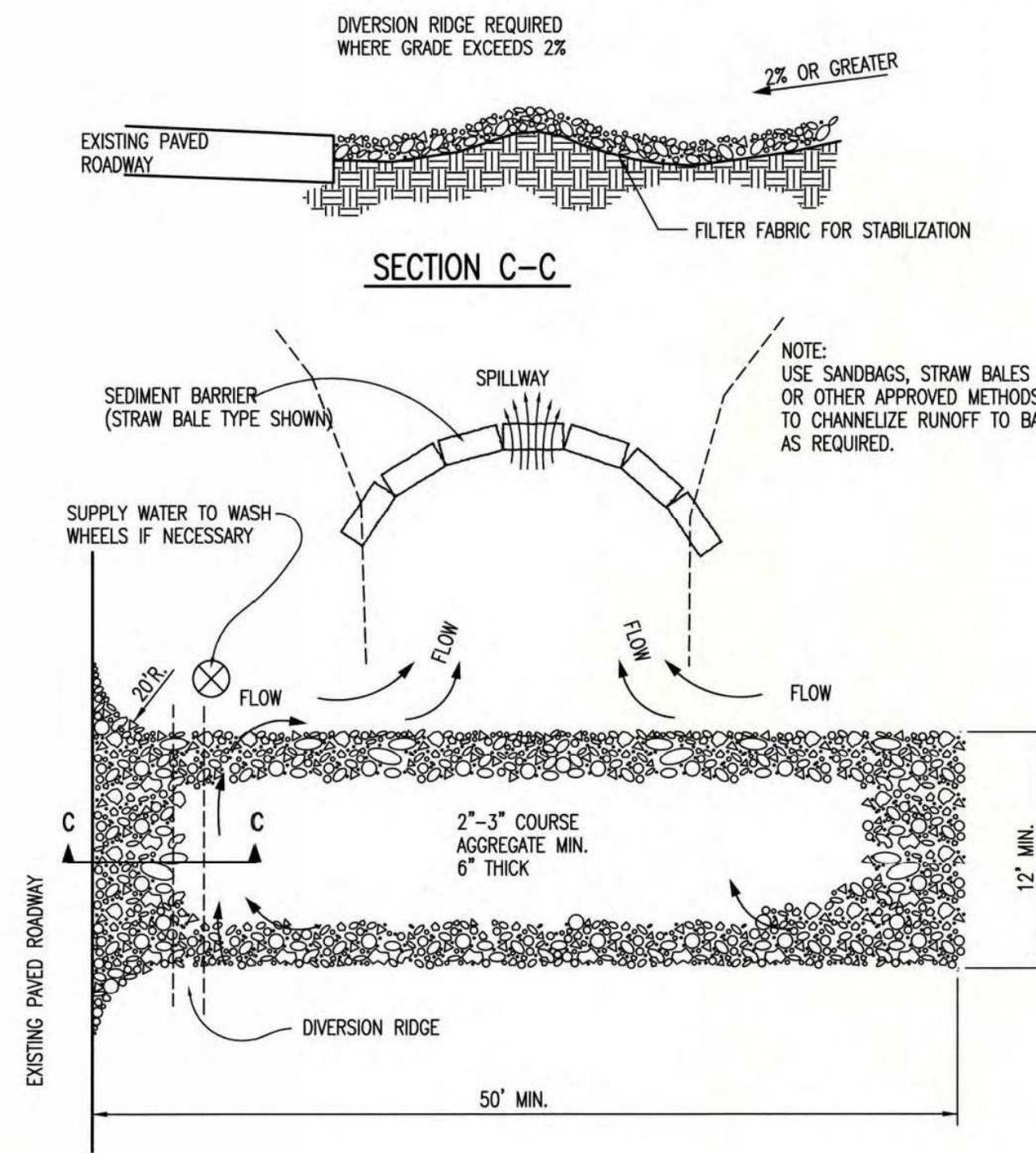


NOTE: PLACE 4" PERFORATED PVC PIPE, FILLED WITH 1/2"-1" DIA. GRAVEL, IN FRONT OF CURB INLET AS SHOWN.

2X4 LENGTH	INLET TYPE	INLET OPENING
5'-6"	1-A	5'-0"
10'-6"	1-A	10'-0"
15'-6"	1-A	15'-0"



CURB INLET PROTECTION
 4" PERFORATED PIPE W/ GRAVEL



STABILIZED CONSTRUCTION ENTRANCE

- GENERAL NOTES**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
 - DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

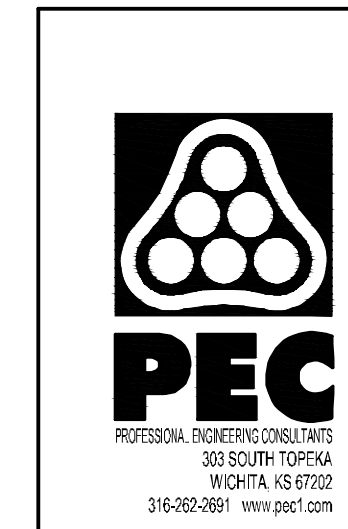
REVISION DATE: MAY 2013



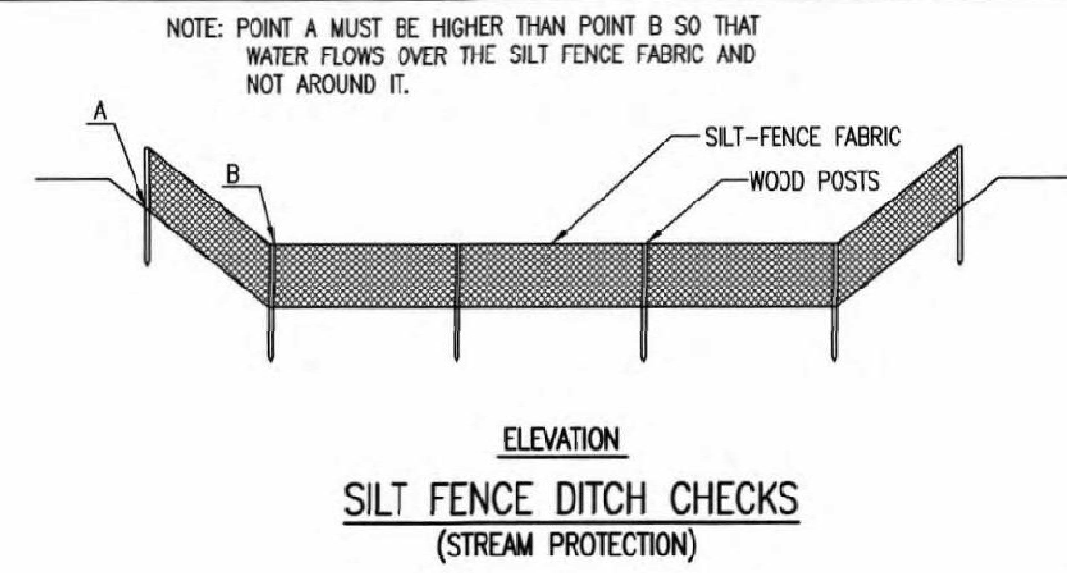
BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE
 CITY ENGINEER
GARY JANZEN, P.E.
 PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____
 CITY ENGINEER'S OFFICE
 CITY HALL - SEVENTH FLOOR
 455 NORTH MAIN STREET
 WICHITA, KANSAS 67202-1620
 (316) 268-4301
 SHEET: _____ of _____

SW-501

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EROSION CONTROL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
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Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG501



SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

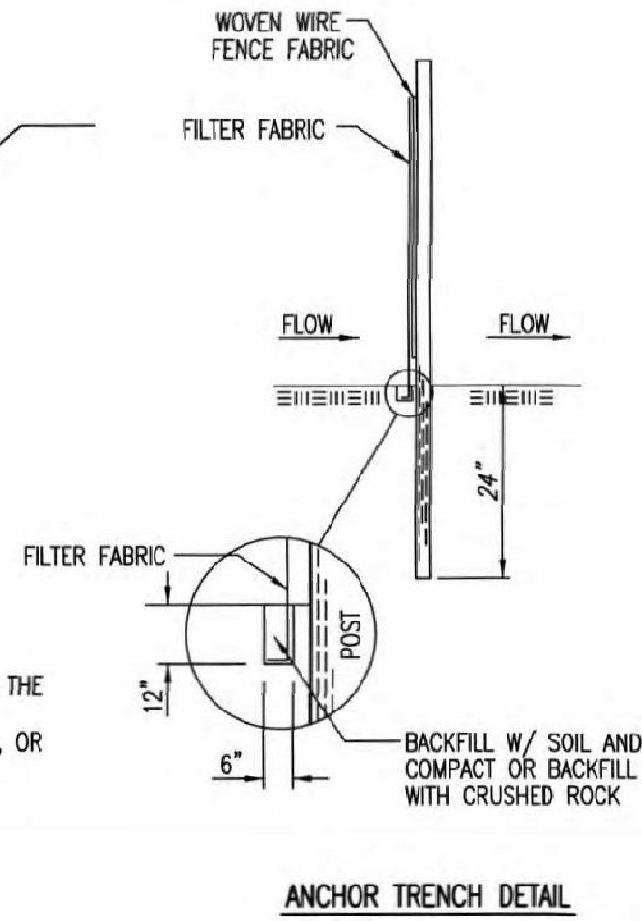
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSTREAM SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FALL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

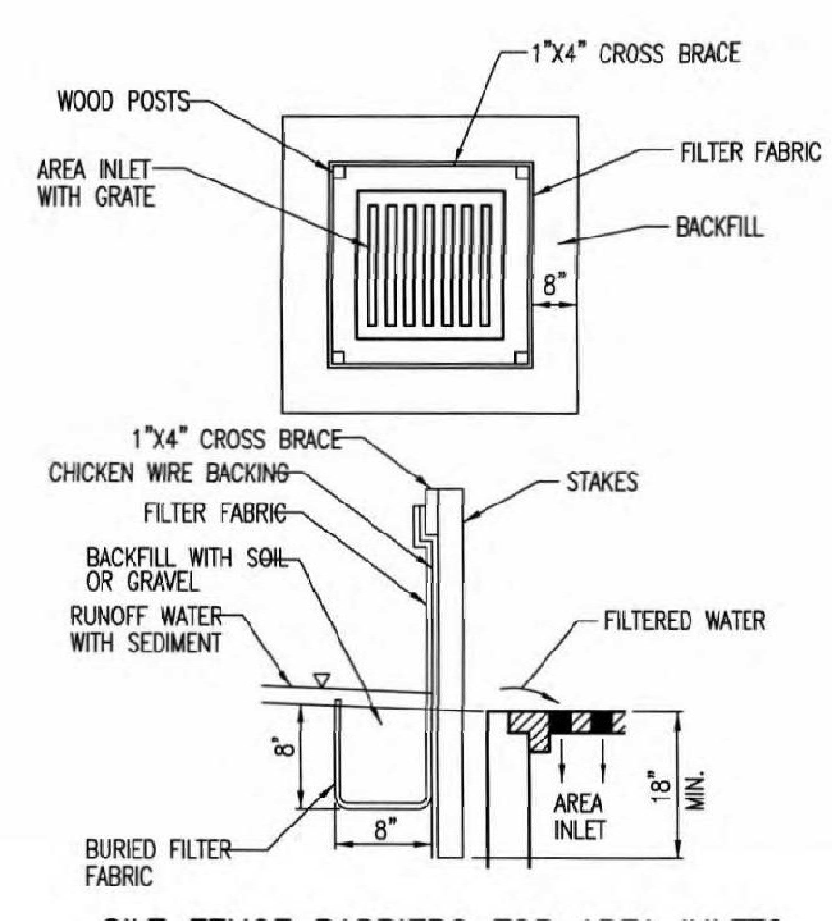
INSPECTION AND MAINTENANCE:

SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRastically REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED.

ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

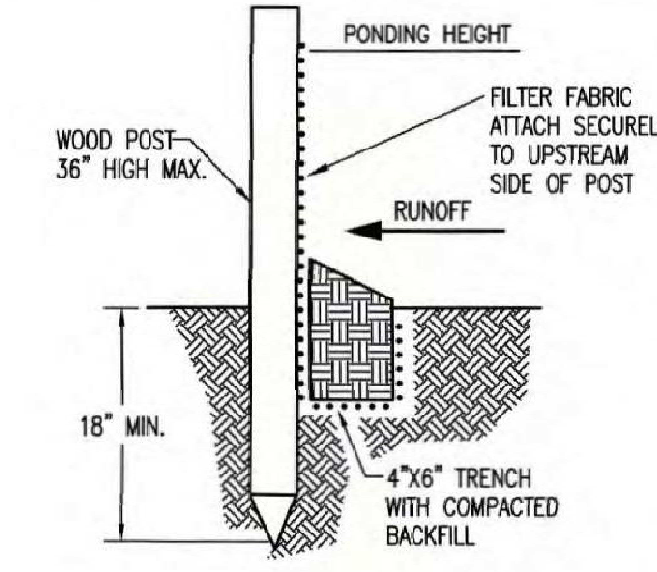
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FALL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:

SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE SILT FENCE?
- DOES THE SILT FENCE SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:

SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:


WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FALL. DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

INSPECTION AND MAINTENANCE:

SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DO THE SILT FENCES SAG EXCESSIVELY?
- HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013



CITY OF WICHITA
PUBLIC WORKS & UTILITIES
ENGINEERING DIVISION

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

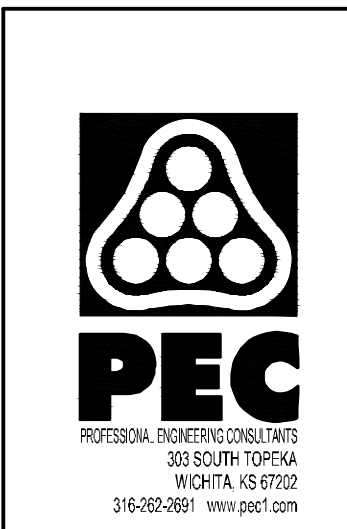
PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

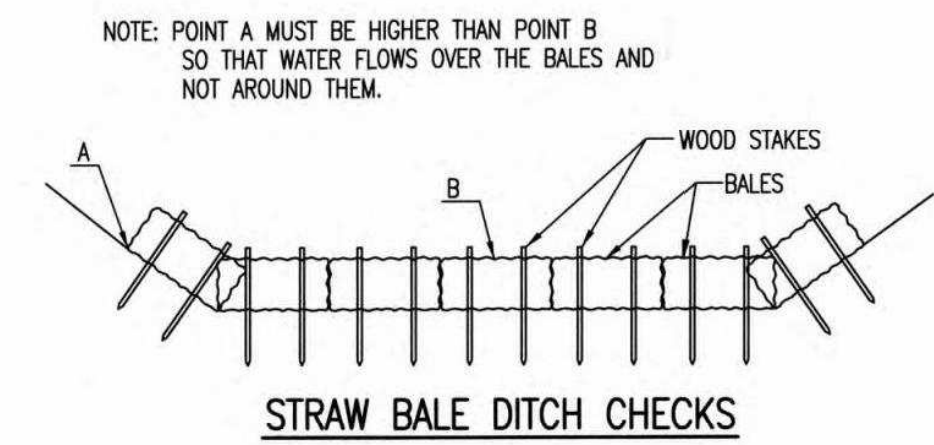
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
EROSION CONTROL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG502



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:
 BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG.
 OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE.
 OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

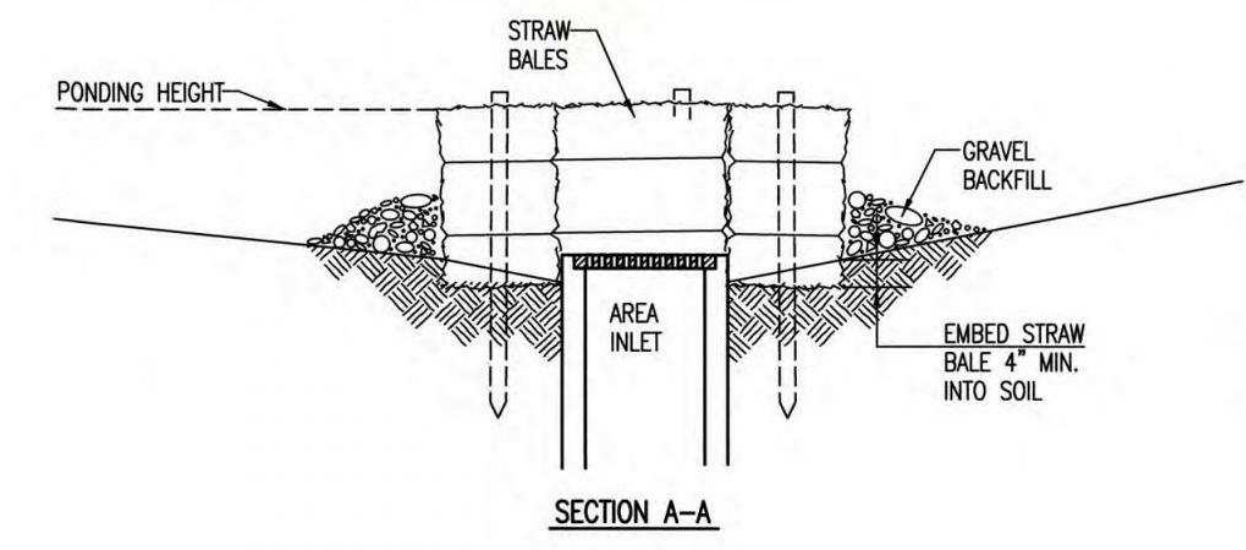
PLACEMENT:
 BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK.
 STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD.
 BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.
 THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

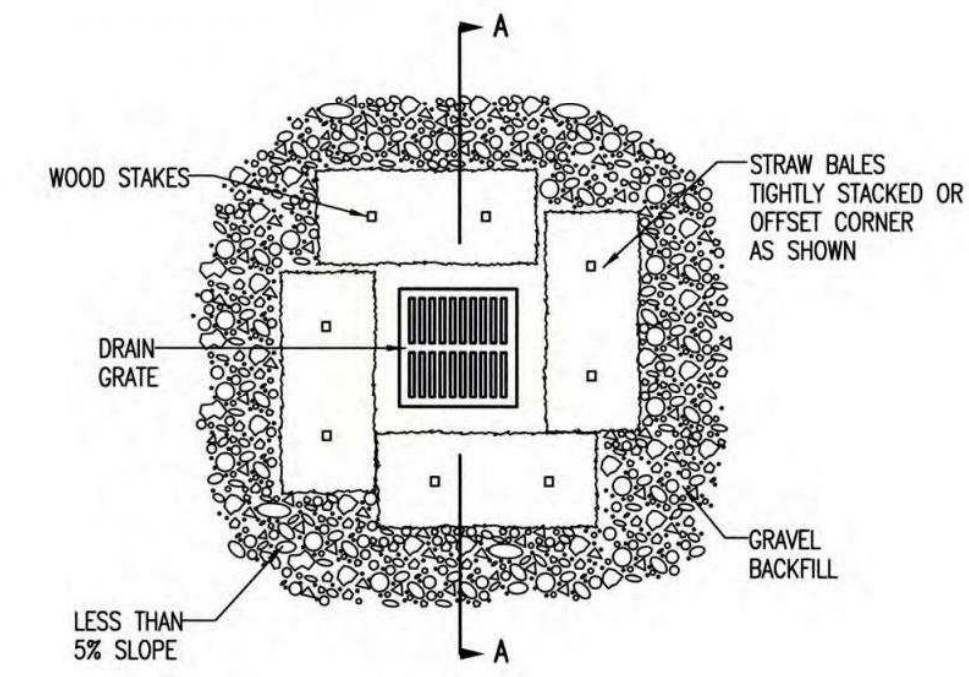
PROPER INSTALLATION METHOD:
 EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER.
 OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.
 PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
 ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
 DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.
 DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.
 FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS.
 DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.
 DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.
 BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

INSPECTION AND MAINTENANCE:
 BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
 DOES WATER FLOW AROUND THE DITCH CHECK?
 DOES WATER FLOW UNDER THE DITCH CHECK?
 DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
 ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
 ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
 DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

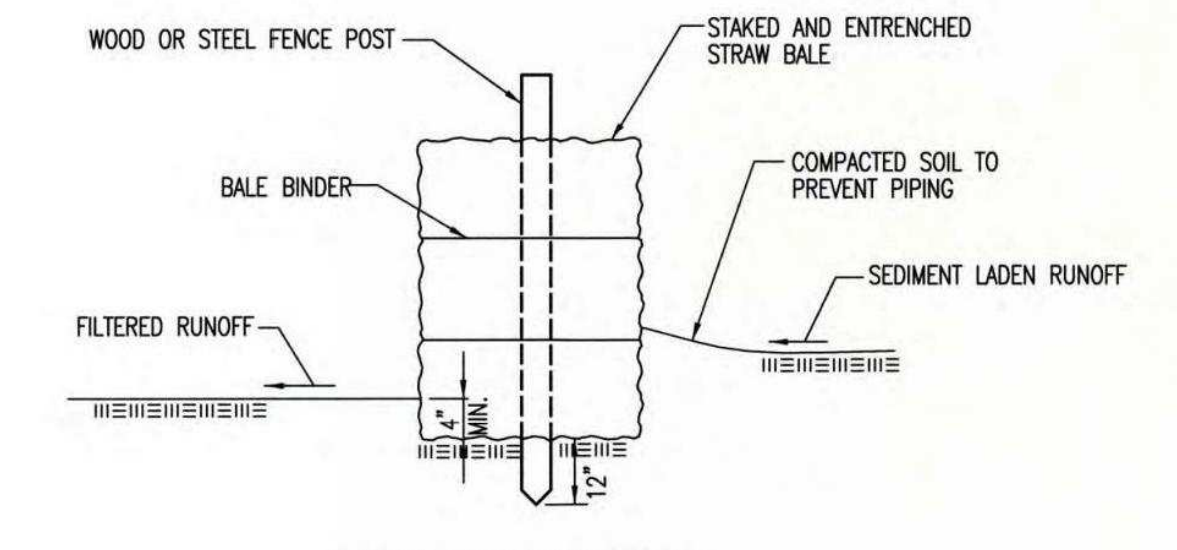
MATERIAL SPECIFICATION:
 BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG.
 TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:
 BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRAMATICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:
 EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE.
 PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS.
 STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
 ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.
 NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
 BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:
 BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
 DOES WATER FLOW UNDER THE AREA INLET BARRIER?
 DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
 ARE ANY BALES DISLODGED?
 ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
 DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:
 BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4" LONG.
 TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:
 A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT.
 WHEN PRACTICABLE, BALE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.
 BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:
 EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE.
 PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.
 ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
 WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS.
 DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.
 BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:
 BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
 ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
 DOES WATER FLOW UNDER THE SLOPE BARRIER?
 DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
 ARE ANY BALES DISLODGED?
 ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
 DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?



REVISION DATE: MAY 2013

STRAW BALE DITCH CHECK AND BARRIER DETAILS

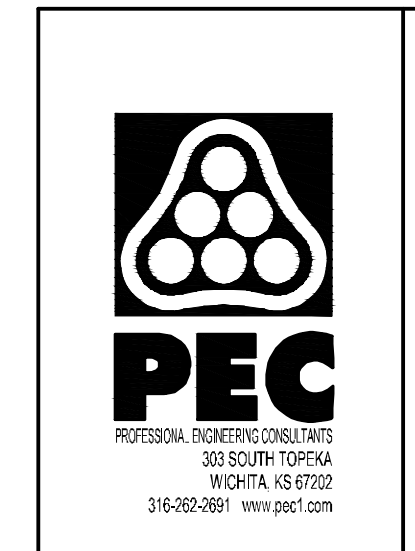
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
 CITY HALL - SEVENTH FLOOR
 455 NORTH MAIN STREET
 WICHITA, KANSAS 67202-1620
 (316) 268-4501

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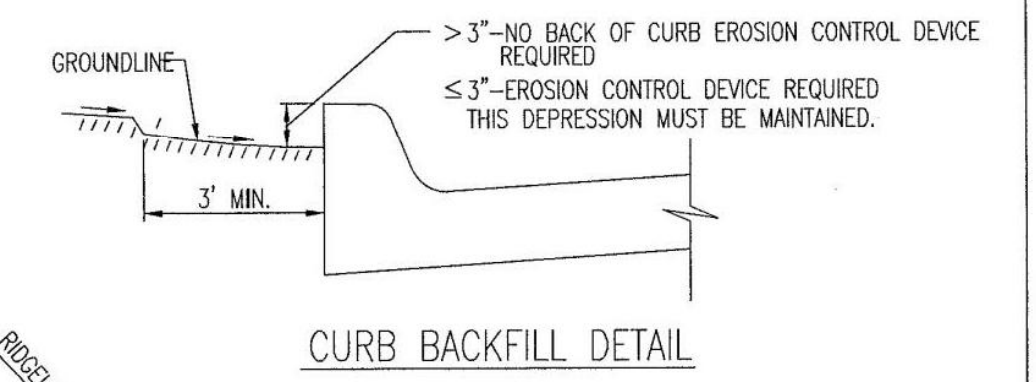
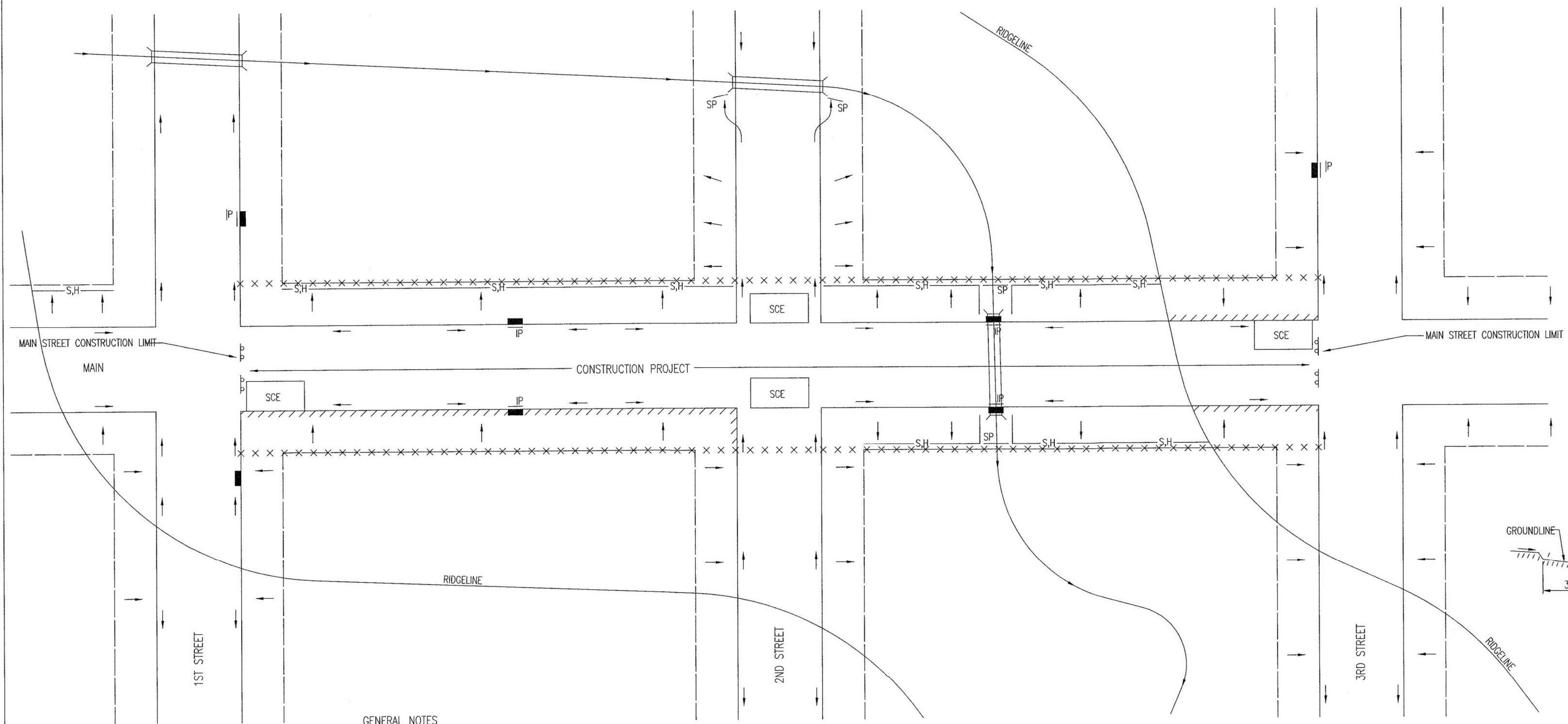
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
EROSION CONTROL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG503

GENERAL NOTES

- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
- IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
- FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
- FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.



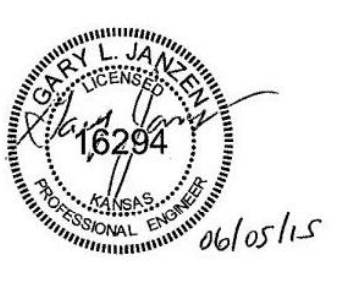
THIS IS A TEMPORARY MEASURE ONLY. WHEN APPROVED BY THE PROJECT ENGINEER, THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

LEGEND

---	R-O-W LIMITS
→	DRAINAGE FLOW PATH
x x x x x	R/W LIMIT WITHIN CONSTRUCTION LIMIT
IP	INLET PROTECTION
S.H.	SILT FENCE OR HAY BALE BARRIER
SP	STREAM PROTECTION
SCE	STABILIZED CONSTRUCTION ENTRANCE
////	BACK OF CURB PROTECTION

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMP'S MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)



REVISION: JUNE, 2015

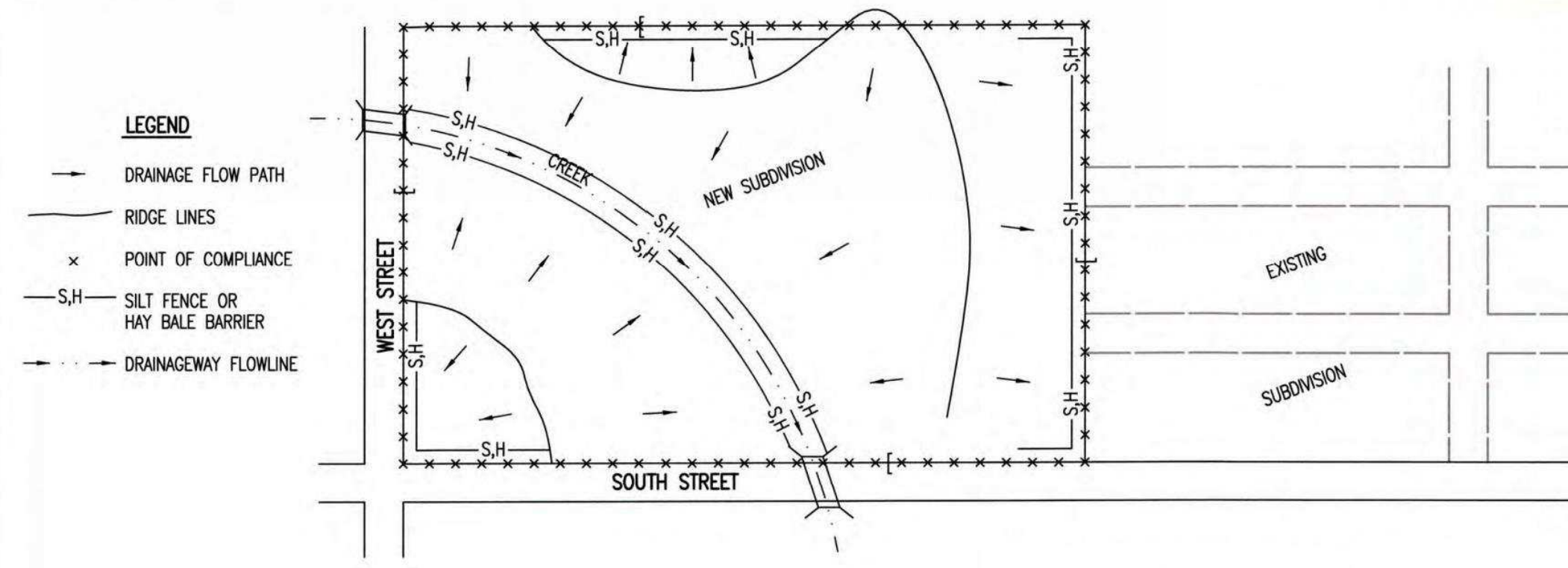
STREET IMPROVEMENT PROJECTS		
CITY ENGINEER		
GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE	SHEET	
CITY HALL - SEVENTH FLOOR	C601	
455 NORTH MAIN STREET		
WICHITA, KANSAS 67202-1620		
(316) 268-4501		

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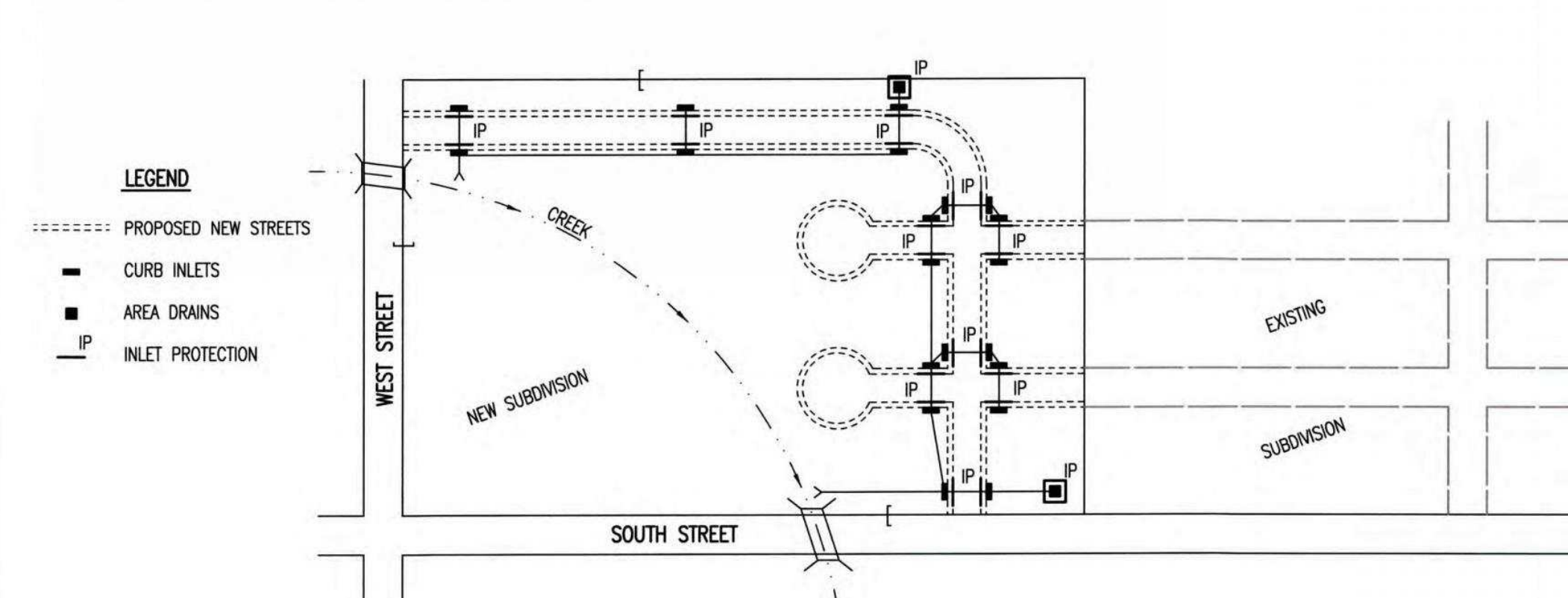
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
EROSION CONTROL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A.			
303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by NLS	Job No. 180537-000		
Drawn by RFT	Checked by MEB	Date MARCH 2021	Dwg No. CC504

PHASE 1 – INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



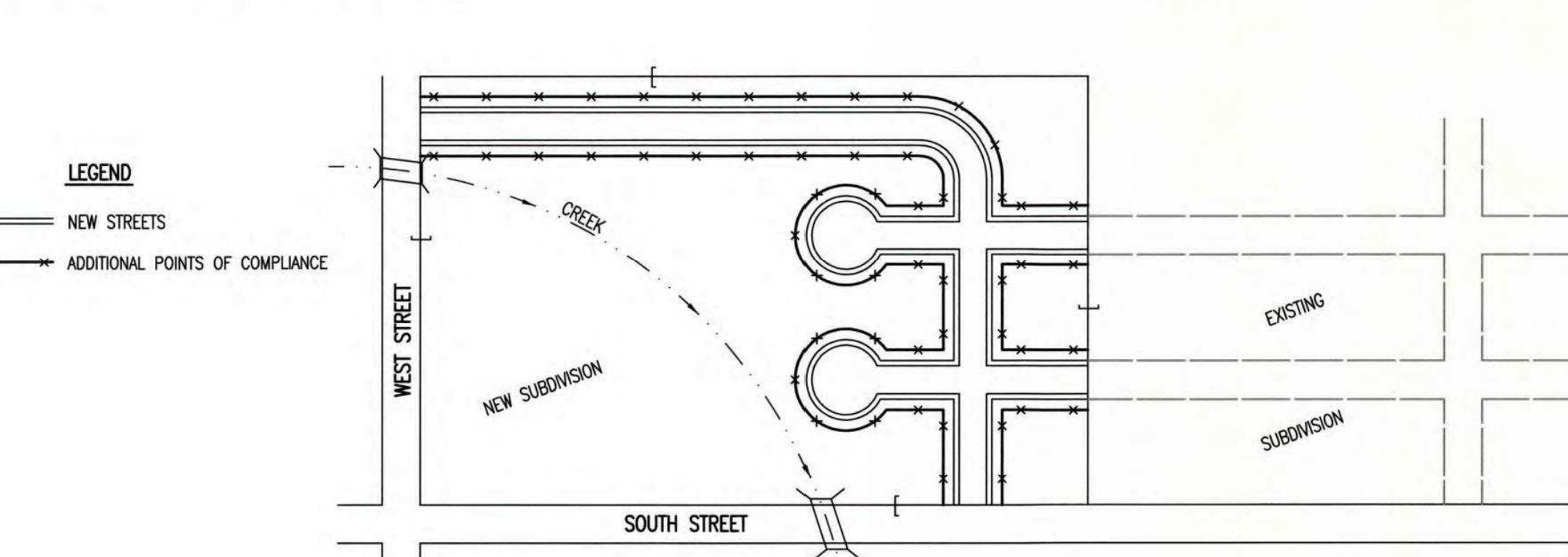
- LEGEND**
- DRAINAGE FLOW PATH
 - RIDGE LINES
 - x POINT OF COMPLIANCE
 - S.H. SILT FENCE OR HAY BALE BARRIER
 - DRAINAGEWAY FLOWLINE
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
 2. HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
 3. SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
 4. ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
 5. CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
 6. UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
 7. IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
 8. WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

PHASE 2 – INSTALLATION OF STORM SEWER



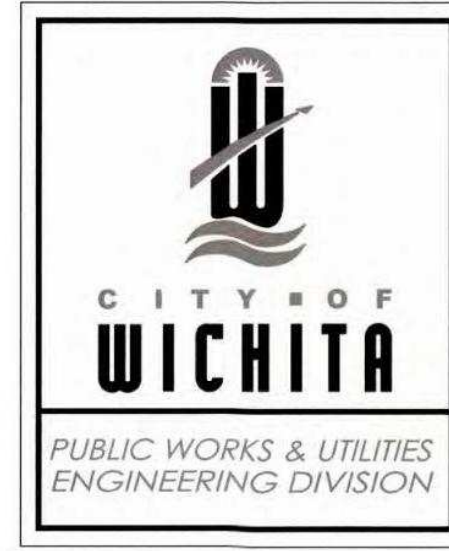
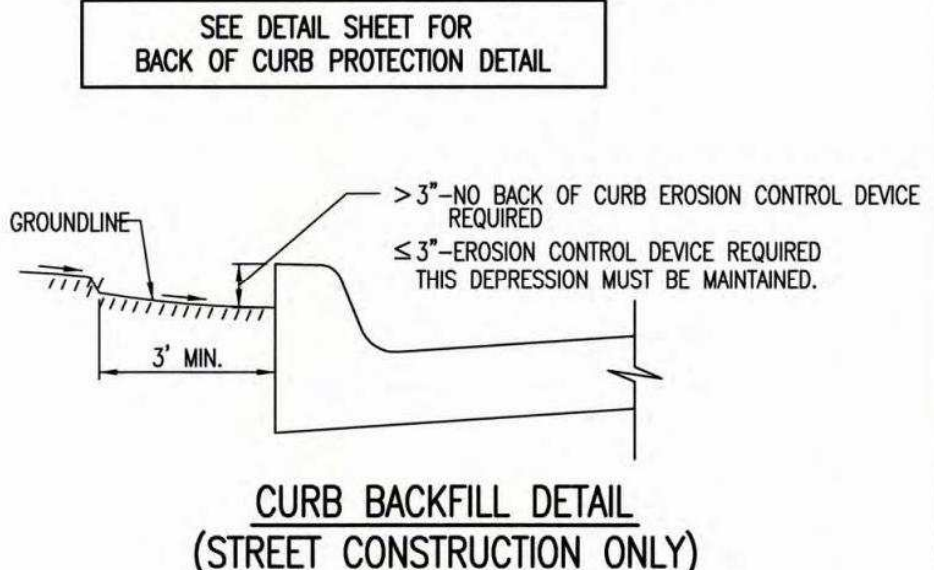
- LEGEND**
- PROPOSED NEW STREETS
 - CURB INLETS
 - AREA DRAINS
 - IP INLET PROTECTION
1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
 2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
 3. AREA DRAINS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
 4. CURB OPENING INLETS – AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 – STREET CONSTRUCTION.
 5. THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
 6. THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
 7. ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
 8. ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

PHASE 3 – STREET CONSTRUCTION



- LEGEND**
- NEW STREETS
 - x ADDITIONAL POINTS OF COMPLIANCE
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
 2. CURB OPENING INLET PROTECTION:
 - A. SUMP AREAS – INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
 - B. NON-SUMP LOCATIONS – PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
 3. EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
 4. SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
 5. THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
 6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
 7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

- GENERAL NOTES**
1. THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER DRAINAGE FEATURE.
 2. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
 3. EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
 4. PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
 5. THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
 6. FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
 7. FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
 8. THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
 9. A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.



SUBDIVISION DEVELOPMENT PROCESS

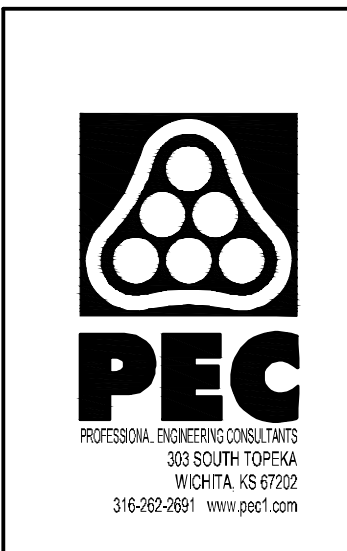
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER: _____ OCA NUMBER: _____ DATE: _____

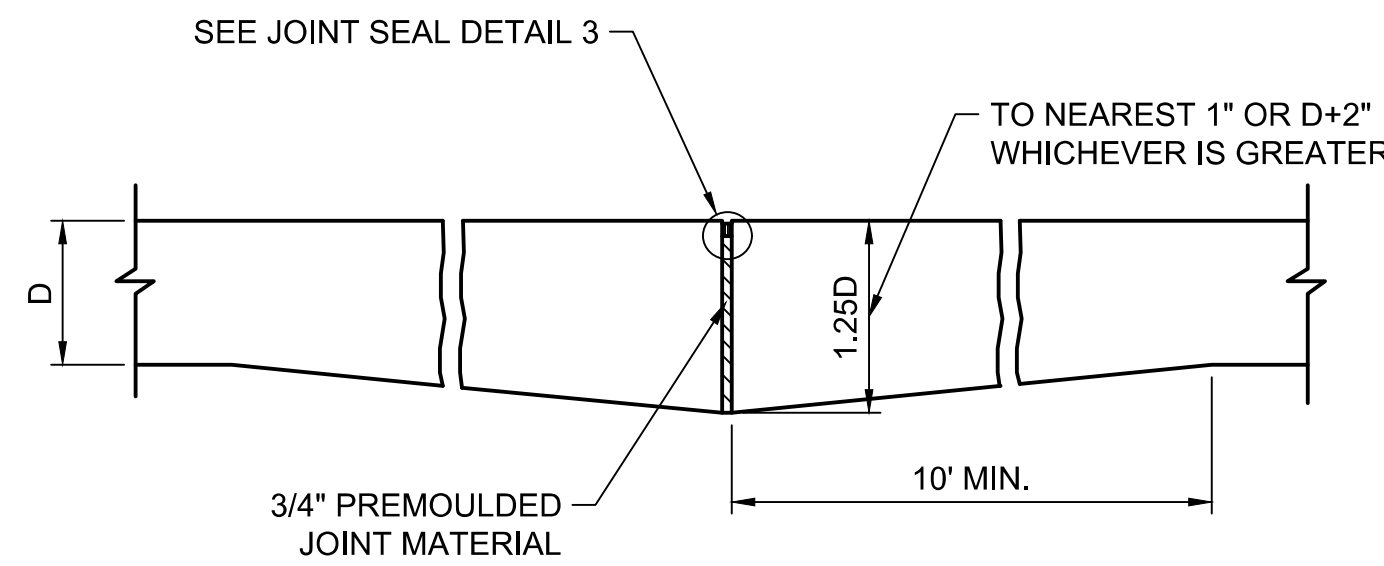
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET _____ OF _____

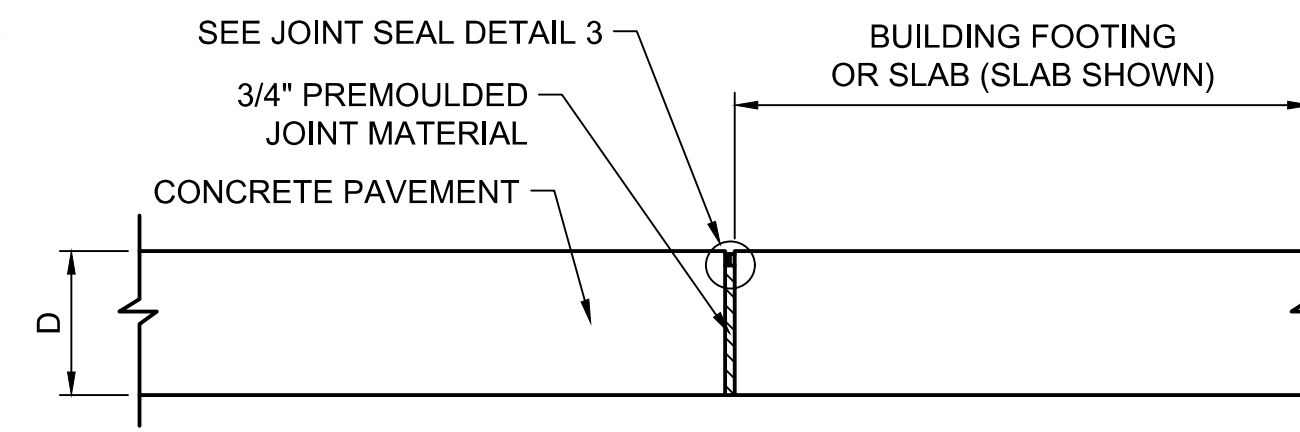
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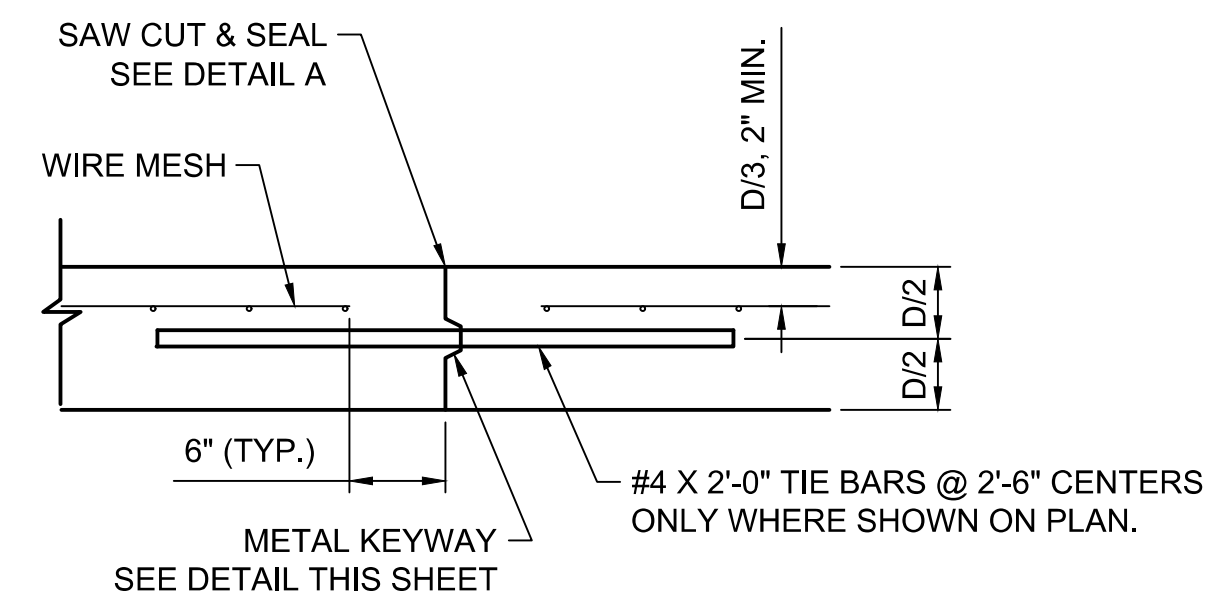
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
EROSION CONTROL DETAILS			
STANDBY POWER GENERATION – SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG505



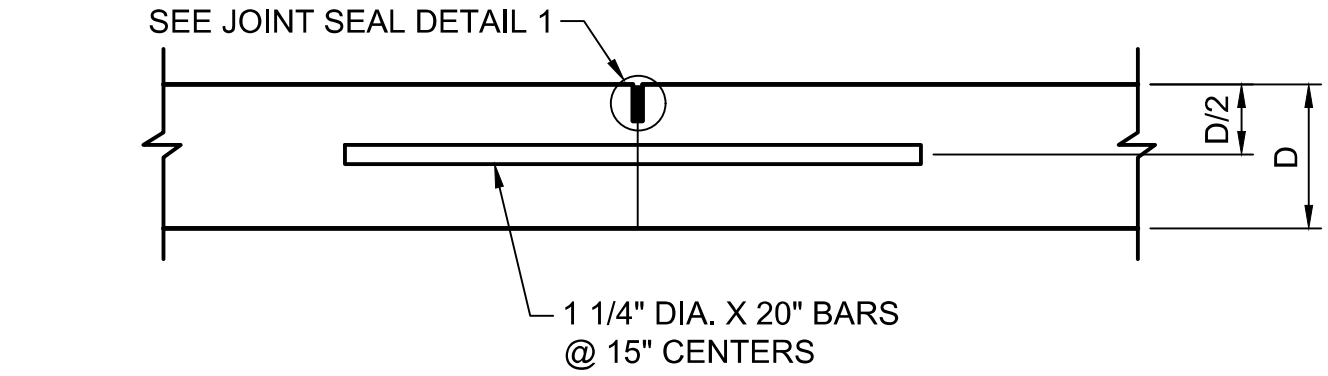
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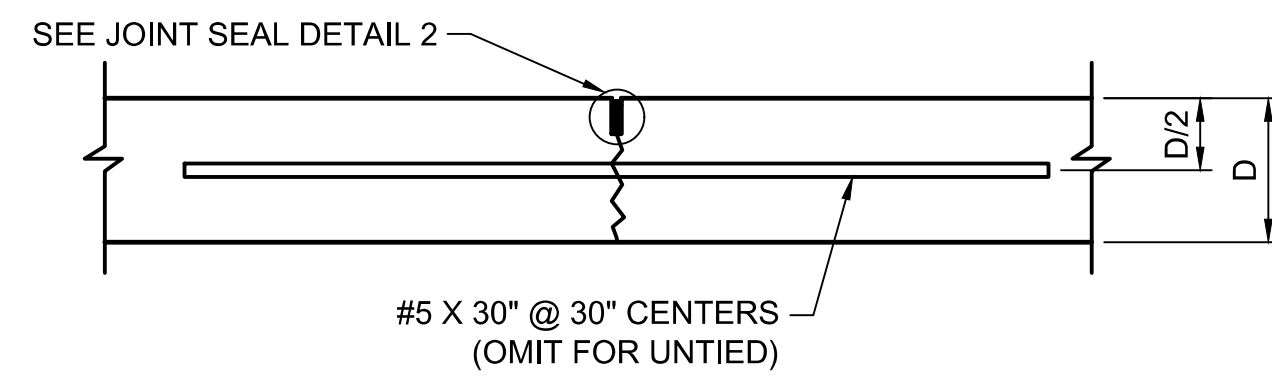
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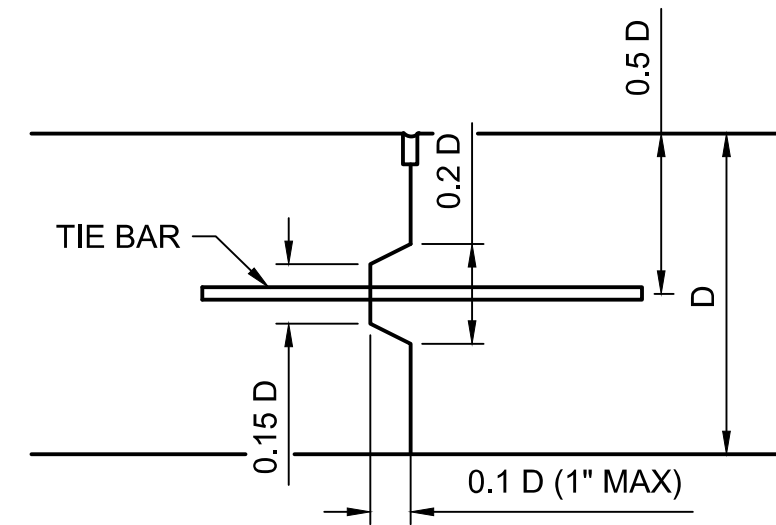
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DOWELED CONSTRUCTION JOINT DETAIL (D)
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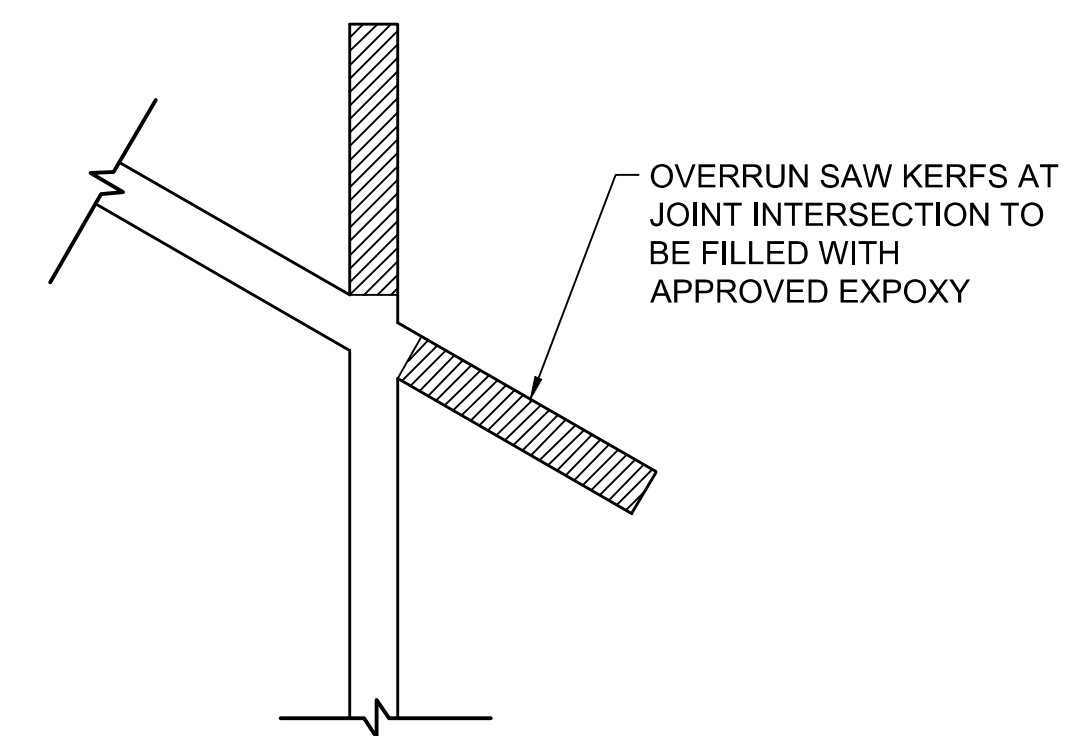


SAWED CONTRACTION JOINT DETAIL (G, GU)
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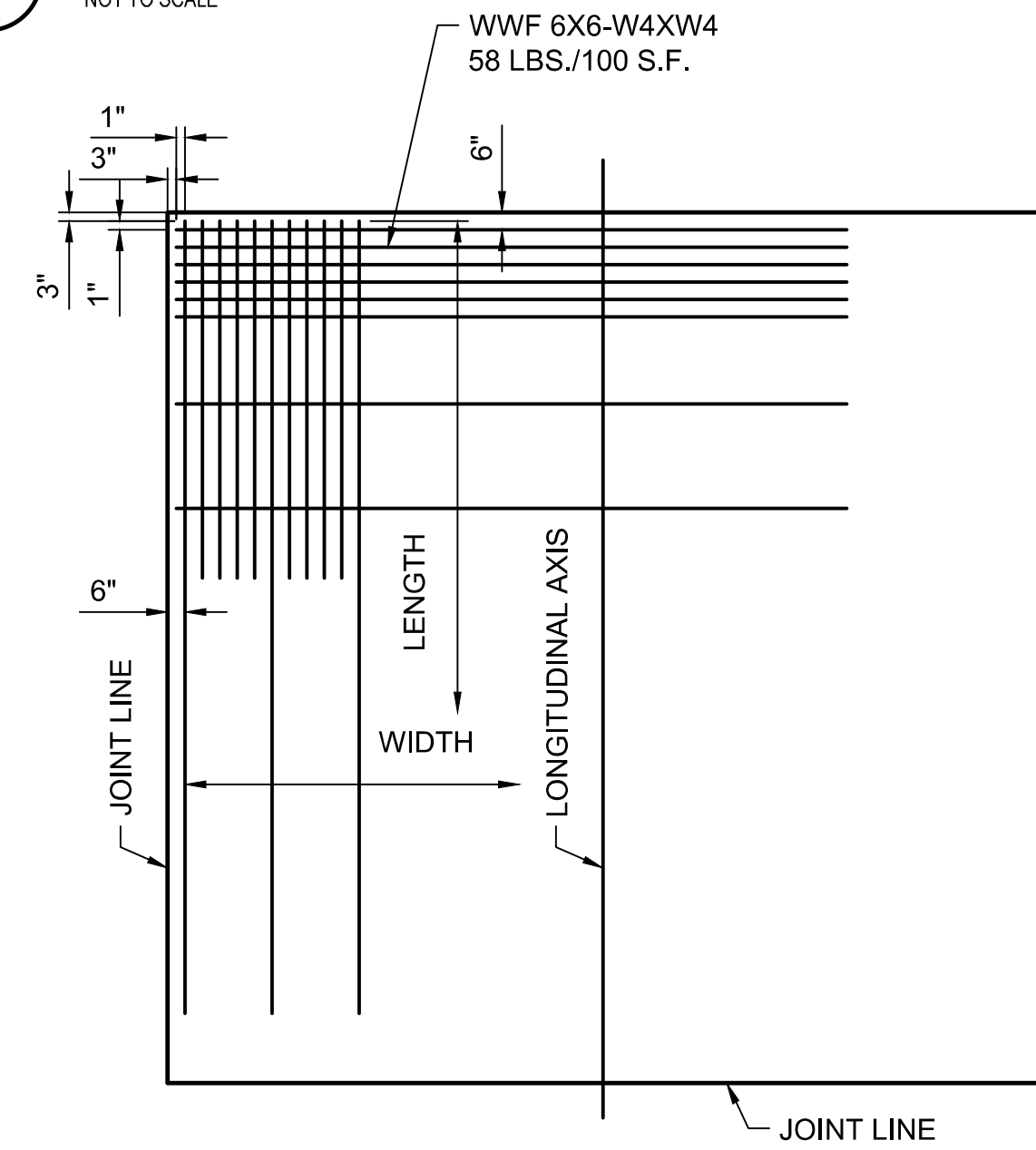


NOTE: SNAP-IN LEG OR OTHER APPROVED DESIGNS MAY BE USED IN LIEU OF WELDED LEG.

METAL KEYWAY DETAIL
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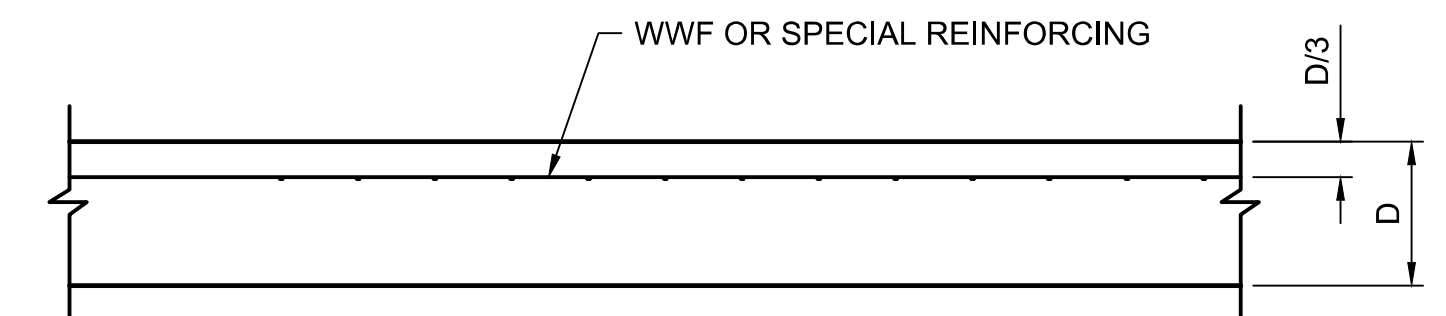


KERF DETAIL
NOT TO SCALE

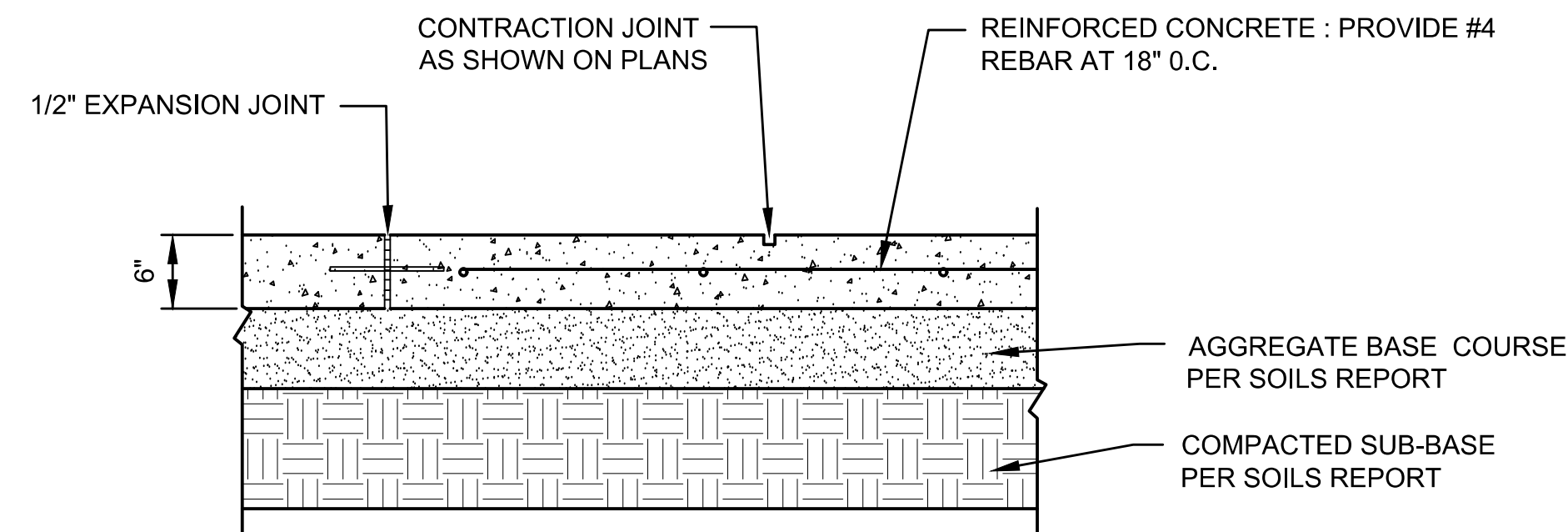


WELDED WIRE FABRIC NOTES

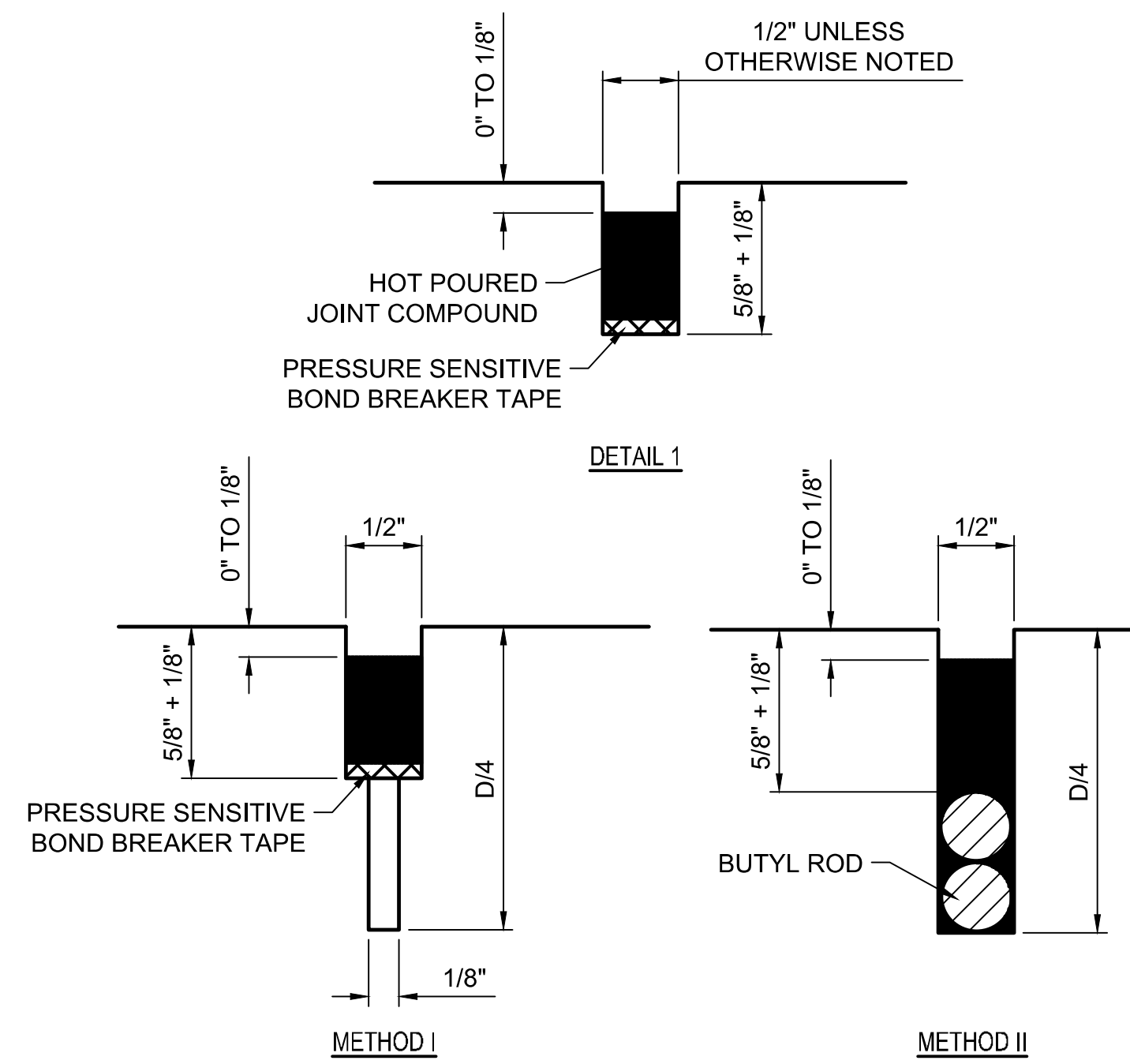
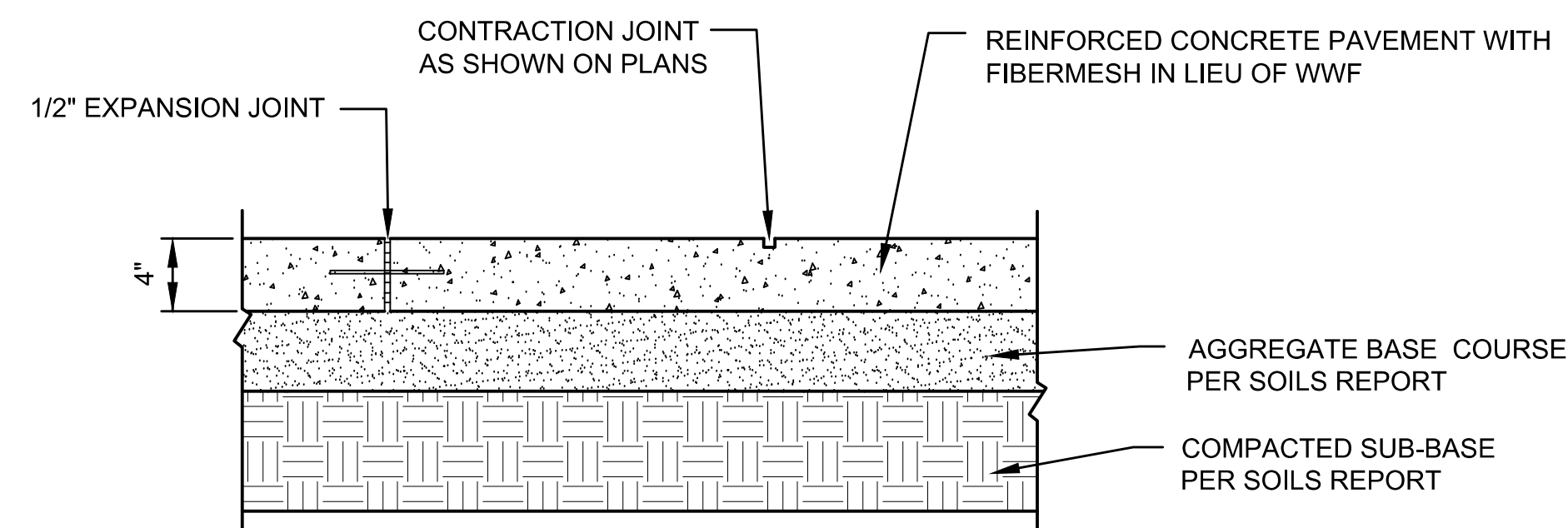
1. REINFORCING FABRIC SHALL BE FURNISHED IN SHEETS. THE CONTRACTOR MAY PROVIDE A DIFFERENT PATTERN OF FABRIC AS LONG AS MINIMUM OF 0.08 SQ. IN./FT. OF REINFORCING IS PROVIDED IN EACH DIRECTION.
2. WELDED WIRE FABRIC SHALL BE CUT IN THE FIELD AS REQUIRED TO CONFORM TO THE SHAPE OF THE PANEL TO BE REINFORCED.
3. FABRIC SHEETS SHALL BE OVERLAP SPLICED AS APPLICABLE AND AS DETAILED BELOW.



TYPICAL SLAB REINFORCING DETAIL
NOT TO SCALE



NOTE: CONSTRUCT SIDEWALKS PER CITY OF WICHITA STANDARD SPECIFICATIONS



JOINT SEAL DETAILS
NOT TO SCALE

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
SITE DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A.			
303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	NLS	Job No.	180537-000
Drawn by	RFT	Checked by	MEB
Date	MARCH 2021	Dwg No.	CG506



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#6805 Harry St.
Storage Equities-PS Partners IV
Glendale, CA

EB & KB LLC
Wichita, KS

PLANT SCHEDULE:

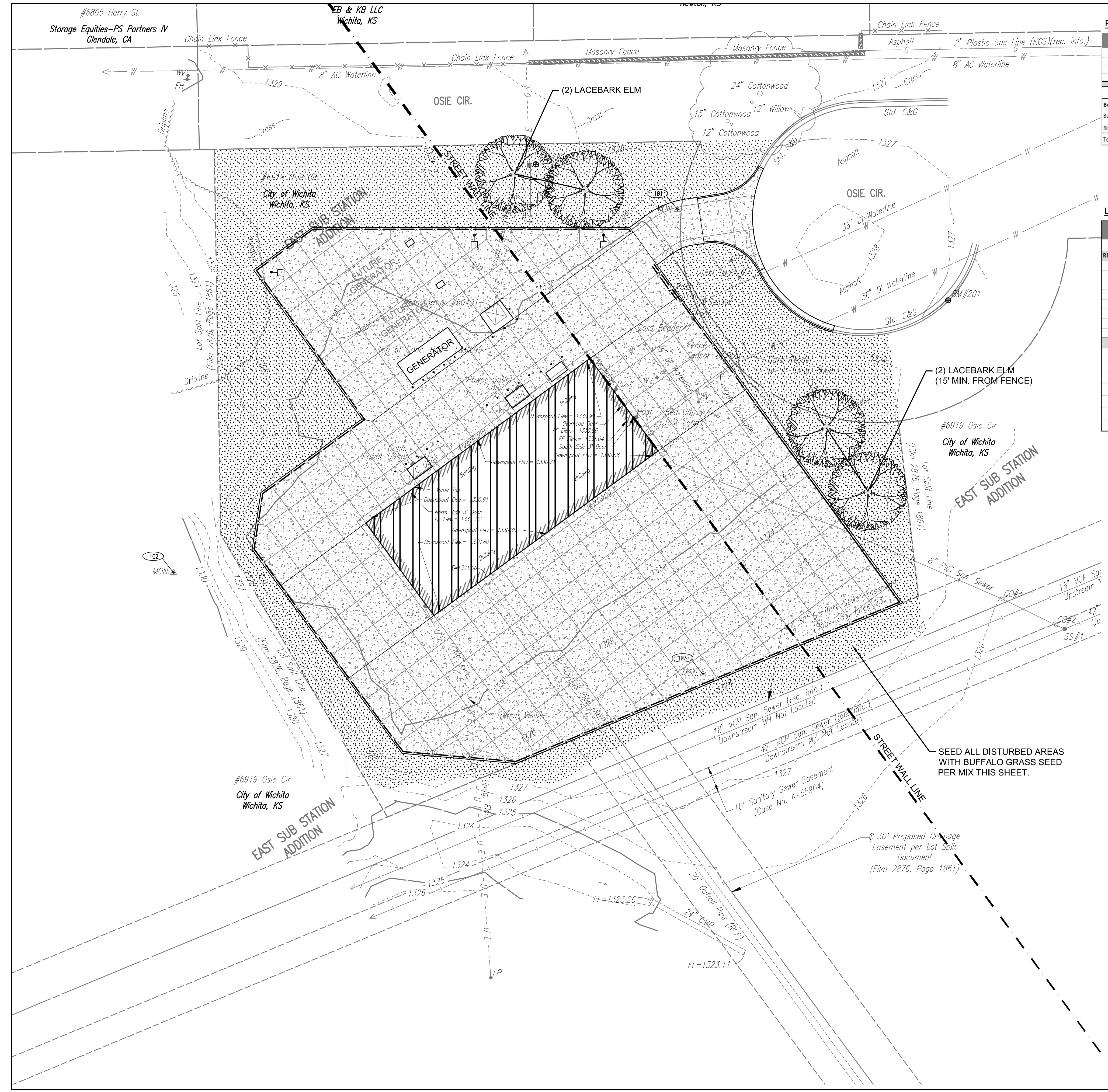
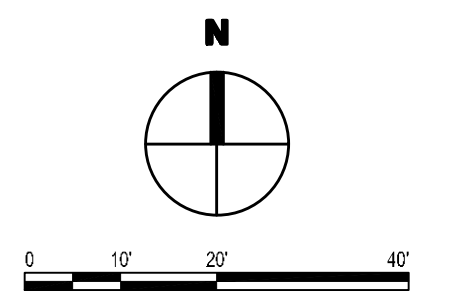
Botanical Name	Common Name	Plant Size	Container Size	Condition	Remarks
TREES					
<i>Ulmus parvifolia</i>	Lacebark Elm	3" Cal.	b&b		full and healthy
Buffalo Grass Seed Mix					
Buffalograss Cody Primed w/ KNO3 2.5					
Blue Grama Alma. Hachita 0.5 at a rate below					
Total = 3.0 lbs/1,000 S.F.					

LANDSCAPE ORDINANCE CALCULATIONS:

Planting Ordinance Calculations	
REQUIRED LANDSCAPED STREET/ARD - method 2 used	
Osie Cir.	
142' X 10' = 1,420 SF required	
5,050 SF provided	
1,620/500 = 4 trees required	
Parking Lot Screening	
solid screen of shrubs provided along frontage to Osie Cir.	
Required Parking Lot Trees	
required: 1 tree per 20 spaces	
0 parking spaces provided / 20 = 0 trees required	

LANDSCAPE PLANTING LEGEND

-  SHADE TREE
-  BUFFALO GRASS SEED

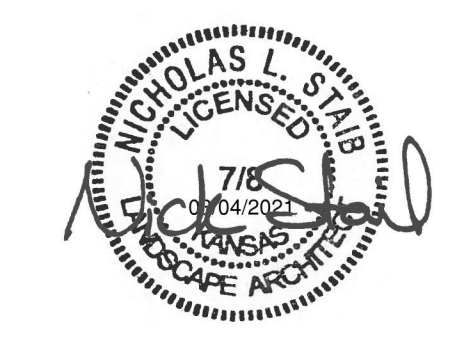
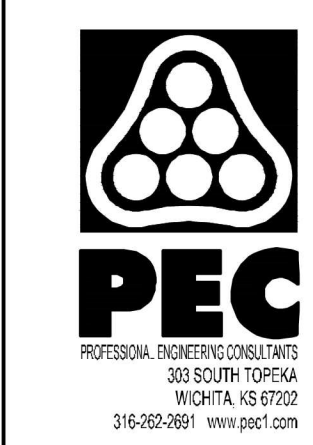


(2) LACEBARK ELM
(15' MIN. FROM FENCE)

#6919 Osie Cir.
City of Wichita
Wichita, KS

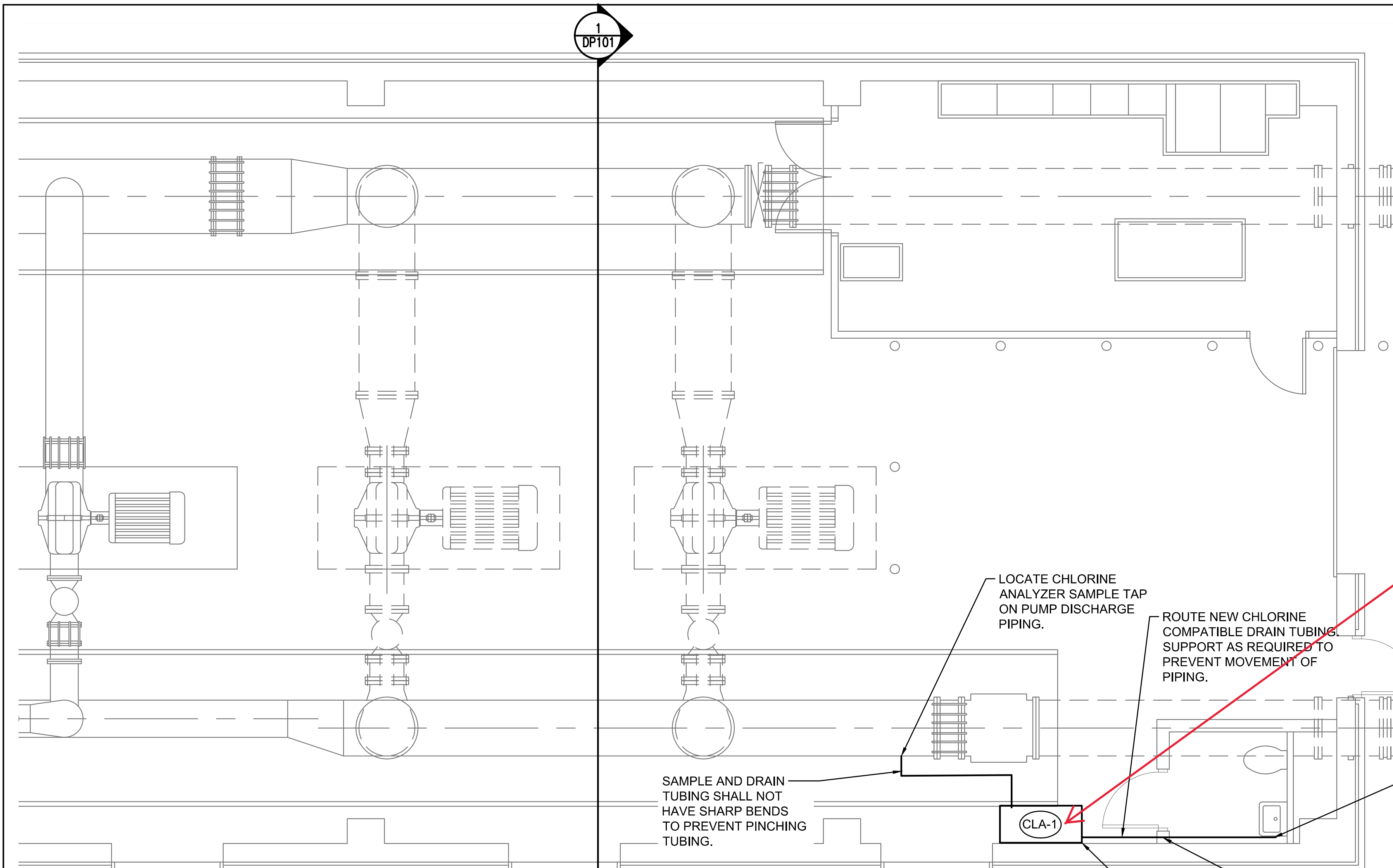
SEED ALL DISTURBED AREAS
WITH BUFFALO GRASS SEED
PER MIX THIS SHEET.

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1	CONSTRUCTION DOCUMENTS		03-04-21
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Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by NLS	Job No. 180537-000		
Drawn by RFT	Checked by MEB	Date MARCH 2021	Dwg No. LP101

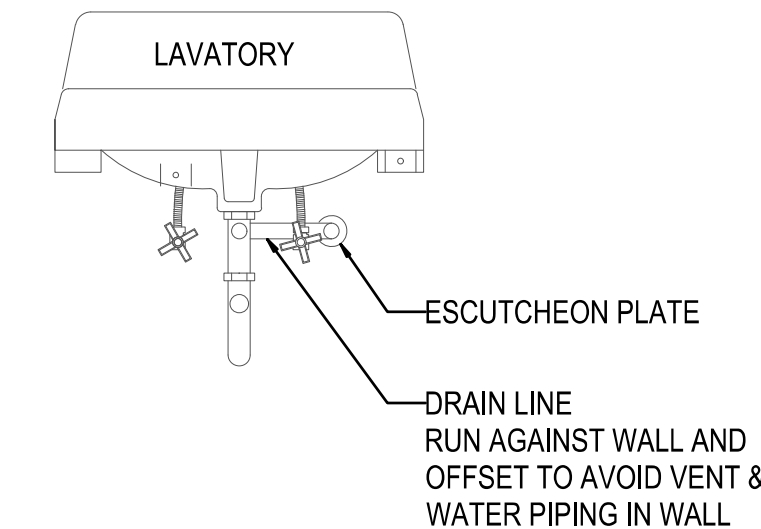
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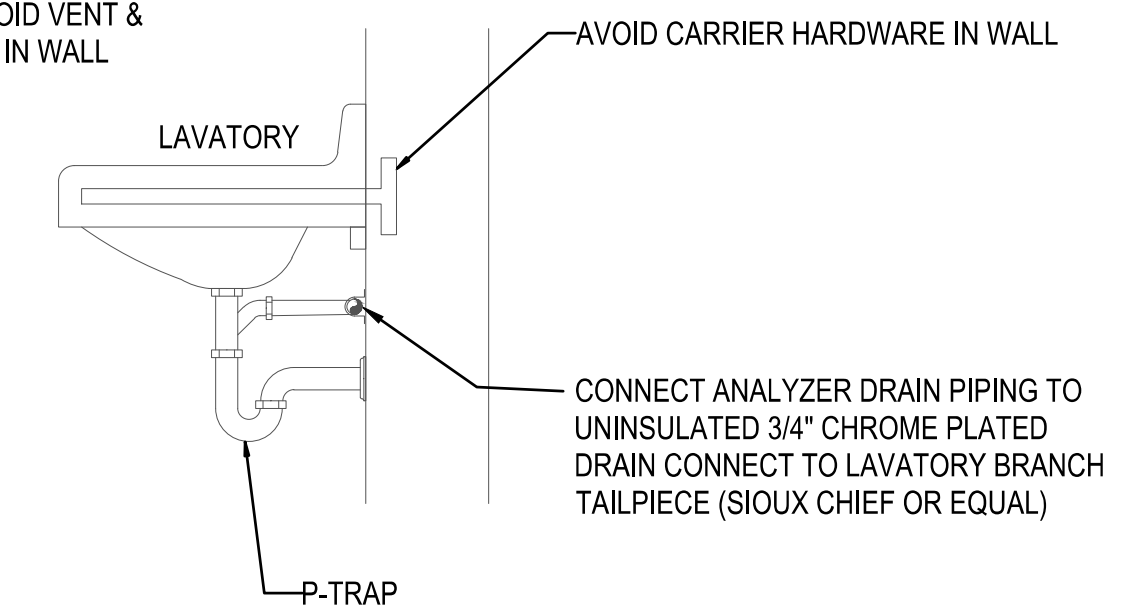
chlorine analyzer
4570001

DISCHARGE PIPE
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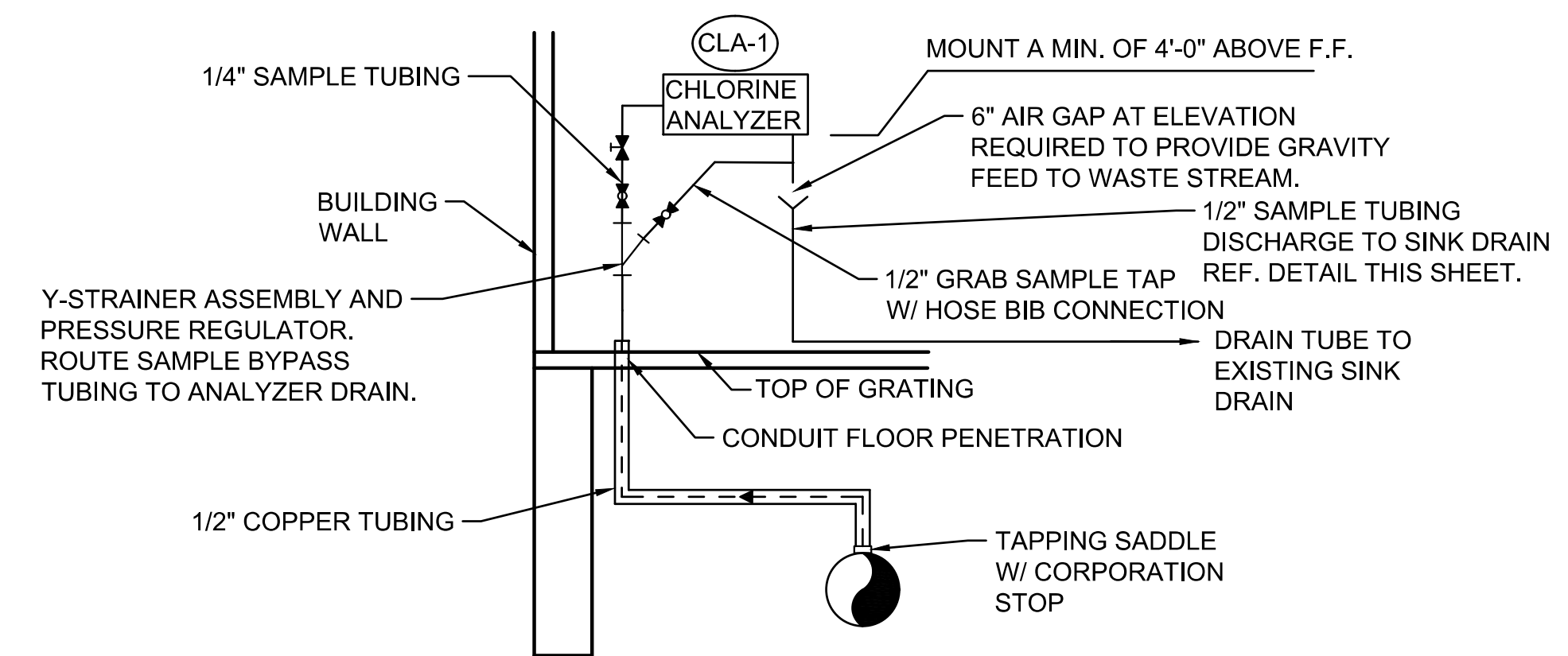
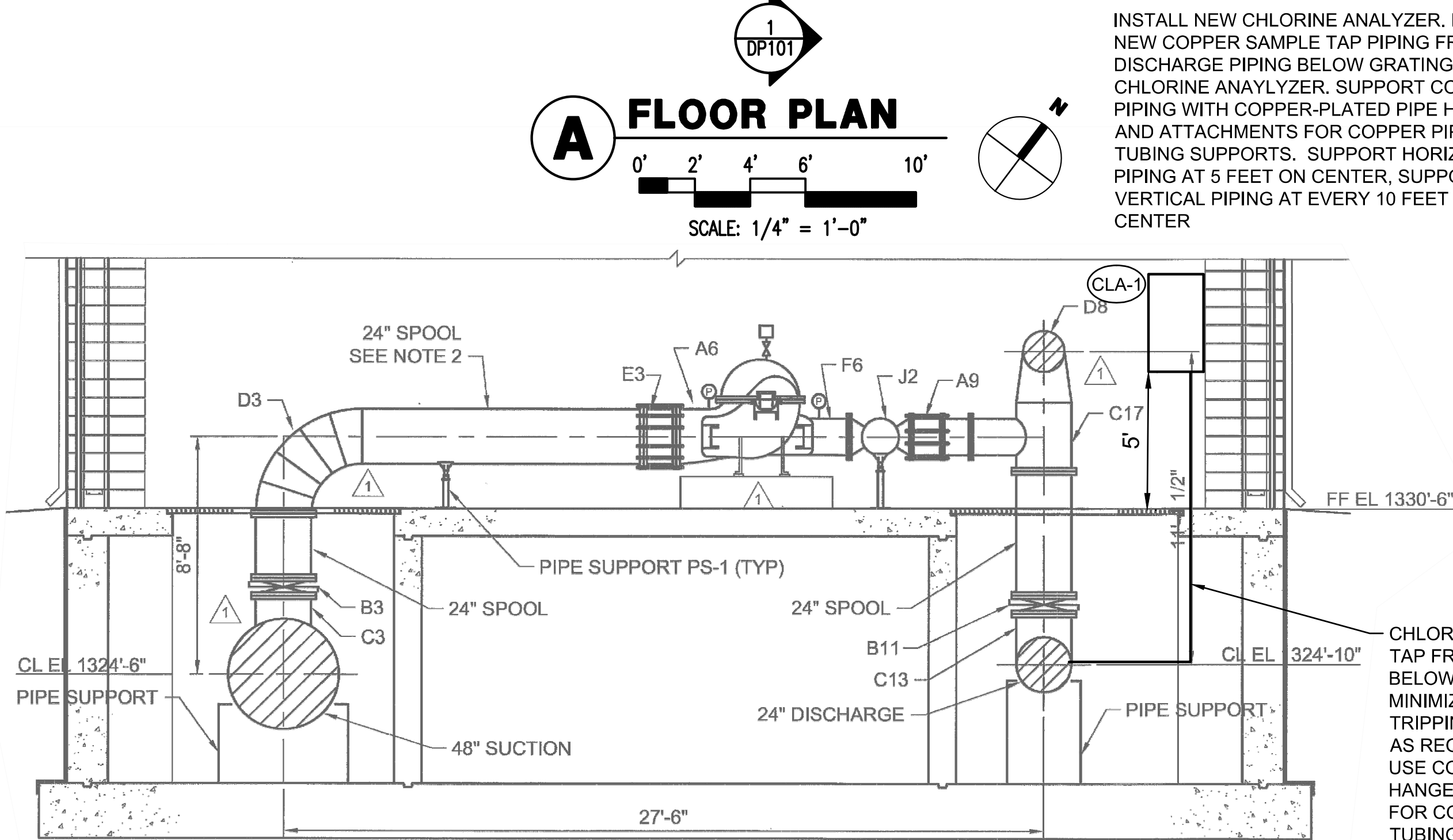
DRAIN TUBING SHALL NOT HAVE SHARP BENDS TO PREVENT PINCHING TUBING. ROUTE TO MINIMIZE ACCESS AND TRIPPING HAZARDS. SUPPORT AS REQUIRED TO PREVENT MOVEMENT OF PIPING.



FRONT VIEW
SCALE: N.T.S.



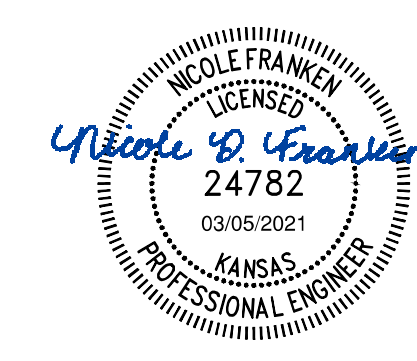
SIDE VIEW
SCALE: N.T.S.



CHLORINE ANALYZER SCHEMATIC
SCALE: N.T.S.

LEGEND

- BALL VALVE
- NEEDLE VALVE
- IN LINE STRAINER



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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
CHLORINE ANALYZER PLAN & SECTION			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	SCU	Job No.	180537-000
Drawn by	CAE	Checked by	MDK
Date	MARCH 2021	Dwg No.	DP101

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DESIGN CRITERIA

- BUILDING CODE:
INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION, INCLUDING LOCAL SUPPLEMENTS.
THE STRUCTURE IS CLASSIFIED AS A RISK CATEGORY IV FACILITY.
- DEAD AND LIVE LOADS:

LOCATION	UNIFORM LIVE LOAD	CONCENTRATED LIVE LOAD	TOTAL DEAD LOAD*
ELECTRICAL ROOM CEILING	60 PSF	-----	10 PSF

* TOTAL DEAD LOAD INCLUDES WEIGHT OF STRUCTURAL ELEMENTS.
- SEISMIC:

SITE CLASS:	D
SEISMIC DESIGN CATEGORY:	C
SEISMIC IMPORTANCE FACTOR:	1.5
Ss:	0.142
S1:	0.057
Sds:	0.151
Sd1:	0.091

CONCRETE

- ALL CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 318 AND THE BUILDING CODE, AND IN CONFORMANCE WITH THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE."
- THE CONCRETE REQUIREMENTS ARE:
 - CEMENT SHALL BE TYPE I OR II CONFORMING TO ASTM C150. FLY ASH CONFORMING TO ASTM C618 TYPE C OR F MAY BE USED TO REPLACE A MAXIMUM OF 20% OF THE CEMENT BY WEIGHT.
 - FINE AGGREGATE FOR LIGHTWEIGHT AND NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33.
 - COARSE AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33, GRADE 67 OR LARGER. COARSE AGGREGATES SHALL BE NO LESS THAN 50% OF THE TOTAL AGGREGATE BY WEIGHT, UNLESS APPROVED BY THE ENGINEER PRIOR TO MIX DESIGN SUBMITTAL.
- MIX REQUIREMENTS ARE:

LOCATION	MIN. F _c (PSI)	MIN. CEM. (PCY)	MAX. W/C RATIO	AIR CONTENT (%)	SLUMP (IN.) *
FOUNDATIONS	4000	470	0.45	5%±1%	2-5
LEAN CONC. FILL	250	N/A	N/A	5%±2%	N/A

* PRIOR TO THE ADDITION OF WATER REDUCING ADMIXTURES, IF APPROVED BY ENGINEER, AFTER ADDITION THE SLUMP MAY NOT EXCEED 8".

F_c SPECIFIED IS BASED ON THE 28 DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH ACI 318 ACCEPTANCE CRITERIA.
- ADMIXTURES, HARDENERS, & CURING COMPOUNDS
 - ALL CONCRETE ADMIXTURES SHALL, WHEN MIXED INTO CONCRETE, BE NON-CHLORIDE AND NON-CHLORIDE FORMING.
 - ALL ADMIXTURES MUST CONFORM TO ASTM C-494 AND C-260.
 - CONCRETE CURING COMPOUND AND SEALERS SHALL MEET ASTM C-309 TYPE 1 OR 1D.
 - USE OF "SELF CONSOLIDATING" CONCRETE MUST BE SUBMITTED FOR APPROVAL WITH THE CONCRETE MIX DESIGN.
- MISCELLANEOUS CONCRETE DETAILS:
 - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" INSIDE THE FORMS OR TOOLED TO 3/4" RADIUS UNLESS NOTED OTHERWISE.
 - SLABS ON GRADE SHALL HAVE CONSTRUCTION JOINTS AND/OR CONTROL JOINTS (SAWN JOINTS) TO DIVIDE THE SLAB INTO PANELS, NOT TO EXCEED 256 SQUARE FEET. THE LONG DIMENSION SHALL NOT EXCEED THE SHORT DIMENSION BY MORE THAN 20%. CONTRACTOR TO SUBMIT PROPOSED LOCATIONS FOR APPROVAL.
 - NO ALUMINUM SHALL BE EMBEDDED IN CONCRETE. CONDUITS AND PIPING EMBEDDED IN CONCRETE WALLS, SLABS, OR BEAMS SHALL BE SPACED A MINIMUM OF FOUR DIAMETERS AND THE OUTSIDE DIAMETER SHALL BE LESS THAN 30% OF THE MEMBER THICKNESS AND PLACED BETWEEN LAYERS OF REINFORCING.

CONCRETE REINFORCING

- MATERIALS

	ASTM	GRADE
PLATE & ANGLE:	A36	---
REINFORCING STEEL:	A615	60
ANCHOR RODS (BOLTS):	F1554	36
- DETAILS:
 - WELDING OF REINFORCING STEEL IS PROHIBITED UNLESS NOTED OTHERWISE.
 - SHOP DRAWINGS SHALL BE SUBMITTED WITH REINFORCING STEEL IN ACCORDANCE WITH ACI 315.
- PLACEMENT:
 - ALL REINFORCING AND EMBEDMENTS SHALL BE SUPPORTED ON CHAIRS/BOLSTERS TO THE DESIGN DIMENSIONS. SPACING SHALL BE SUFFICIENTLY CLOSE TO PREVENT DISPLACEMENT OR PERMANENT DEFORMATION DUE TO CONCRETE PLACEMENT, FOOT TRAFFIC, OR VIBRATION. "PUDDLING IN" OR "PULLING UP" REINFORCING IS NOT AN ACCEPTABLE METHOD FOR PLACING REINFORCING. CHAIRS/BOLSTERS SHALL HAVE PLASTIC COATED FEET OR BE MADE OF STAINLESS STEEL. CHAIRS/BOLSTERS IN CONTACT WITH EARTH SHALL HAVE BOTTOM PLATES AND BE COATED TO PREVENT CORROSION. ANCHOR RODS SHALL BE HELD IN PLACE WITH TEMPLATES SUFFICIENTLY STRONG TO PREVENT DISPLACEMENT OR TILTING.
 - MAINTAIN ACI CLEAR COVER ON REINFORCING AS LISTED BELOW UNLESS NOTED OTHERWISE.

CAST AGAINST EARTH (BOTTOM OR SIDES):	3"
FORMED - EXPOSED TO SOIL, WEATHER OR LIQUIDS:	2"
SLABS ON GRADE (FROM TOP OF SLAB):	1.5"
 - PROVIDE CORNER BARS OF THE SAME SIZE AND SPACING AS ADJACENT REINFORCING.
 - OPENINGS IN SLABS SHALL BE REINFORCED WITH (2)-#5 MIN. ON ALL SIDES. EXTEND REINFORCING BEYOND OPENING 12" MIN.].
 - REINFORCING STEEL SHALL BE LAPPED PER TABLE A.

COLD-FORMED STEEL FRAMING

- ALL COLD-FORMED STEEL STUDS & JOISTS SHALL BE GALVANIZED PER AISI STANDARDS.
- THIS STRUCTURE IS DESIGNED AS CONVENTIONAL FIELD FRAMED CONSTRUCTION. SHOULD PANELIZED CONSTRUCTION BE USED, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL ENGINEERING, COORDINATION WITH ALL OTHER BUILDING SYSTEMS, AND REVIEW OF SHOP DRAWINGS. COORDINATION AND REVIEW OF PANELIZED CONSTRUCTION SHOP DRAWINGS ARE NOT INCLUDED IN THE ENGINEER OF RECORD'S SCOPE OF SERVICES FOR THIS PROJECT. REQUESTS FOR INFORMATION PERTAINING TO, OR DIRECTLY ASSOCIATED WITH, PANELIZED CONSTRUCTION WILL NOT BE REVIEWED.
- PRODUCTS SHALL BE FORMED FROM STEEL MEETING THE REQUIREMENTS OF AISI, SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, UNLESS NOTED OTHERWISE.
- STUD TRACK SECTIONS SHALL MEET OR EXCEED THICKNESS OF STUD MEMBERS, UNLESS NOTED OTHERWISE.
- ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS.
- PROVIDE ALL ACCESSORIES INCLUDING, BUT NOT LIMITED TO, TRACKS, CLIPS, WEB STIFFENERS, FASTENERS, ANCHORAGE DEVICES, CONNECTION ANGLES, BRIDGING, AND MISCELLANEOUS HARDWARE REQUIRED TO COMPLETE ALL CONNECTIONS AND INSTALLATION.
- FASTENING OF FRAMING COMPONENTS SHALL BE WITH SELF-TAPPING SCREWS OR WELDING OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION.
- COLD-FORMED STEEL STUD PRODUCTS SHALL BE MANUFACTURED BY A CURRENT MEMBER OF THE STEEL STUD MANUFACTURER ASSOCIATION (SSMA) OR THE STEEL FRAMING INDUSTRY ASSOCIATION (SFIA).
 - THE PHYSICAL AND STRUCTURAL PROPERTIES SHALL BE EQUIVALENT TO THOSE LISTED BY THE SSMA "PRODUCT TECHNICAL INFORMATION" AND ICC-ES ER-3064P FOR "S" AND "T" SECTIONS.
 - PROVIDE WALL STUD BRIDGING SPACES AT 4'-0" O.C., MAX. IN ALL EXTERIOR WALLS AND INTERIOR, LOAD BEARING WALLS.
 - ATTACH STUDS TO TRACK WITH A MINIMUM OF ONE SCREW IN EACH STUD FLANGE, UNLESS NOTED OTHERWISE.

STRUCTURAL WOOD

- MANUFACTURED WOOD PRODUCTS SHALL BE BY I-LEVEL UNLESS NOTED OTHERWISE.
- THE DESIGN OF THE STRUCTURE IS BASED UPON THE USE OF THE FOLLOWING WOOD PRODUCTS:
 ALL MEMBERS SHALL BE SURFACED DRY AND HAVE A MAXIMUM MOISTURE CONTENT OF 19%. STRESS INCREASE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NDS.
 - ROOF SHEATHING SHALL BE 1/2" (1/2" FOR 32" O.C. SPACING OF FRAMING) APA RATED PLYWOOD OR ORIENTED STRAND BOARD, 32/16 (40/20 FOR 32" O.C. SPACING OF FRAMING) SPAN RATING, EXPOSURE 1, LAID IN A CONTROLLED RANDOM STAGGERED PATTERN, WITH EDGE CLIPS BETWEEN SUPPORTS, LONG PANEL DIMENSION PERPENDICULAR TO THE FRAMING MEMBERS, AND CONTINUOUS OVER A MINIMUM OF THREE SUPPORTS. ALLOW FOR 1/8" GAP AT ALL PANEL EDGE AND END JOINTS UNLESS OTHERWISE RECOMMENDED BY MANUFACTURER.
 - WALL SHEATHING SHALL BE 1/2" APA RATED PLYWOOD OR ORIENTED STRAND BOARD, EXPOSURE 1. PROVIDE SOLID BLOCKING AT ALL PANEL EDGES IN SHEAR WALLS. ALLOW FOR 1/8" GAP AT ALL PANEL EDGE AND END JOINTS UNLESS OTHERWISE RECOMMENDED BY MANUFACTURER.

MISCELLANEOUS METALS

- ALL CONNECTIONS SHALL BE COMPATIBLE WITH MATERIALS BEING CONNECTED UNLESS FULLY ISOLATED WITH A DI-ELECTRIC MATERIAL.

POST INSTALLED ANCHORING SYSTEMS

- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPI) AND THE EVALUATION REPORT (ER/ESR) SPECIFIED INCLUDING HOLE PREPARATION, TEMPERATURE AND MOISTURE CONDITIONS.
- ADHESIVE ANCHORS:
 - ADHESIVE ANCHORS SHALL BE USED IN CONJUNCTION WITH THE APPROPRIATE ADHESIVE SYSTEM. STANDARD REINFORCING STEEL ANCHORED IN CONCRETE SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
 - APPROVED ADHESIVE ANCHORS FOR PREVIOUSLY CAST CONCRETE:

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI HIT-HY200 SSS* WITH HIT-Z ROD	ICC-ES ESR-3187
HILTI HIT-HY200 SSS* WITH HOLLOW BIT & HAS-E ROD	ICC-ES ESR-3187
HILTI HIT-HY200 SSS* WITH HOLLOW BIT & STEEL REINFORCING	ICC-ES ESR-3187
*SAFE SET SYSTEM	
SIMPSON STRONG-TIE SET-XP WITH SPEED CLEAN DXS SYSTEM	ICC-ES ESR-2508
SIMPSON STRONG-TIE AT-XP WITH SPEED CLEAN DXS SYSTEM	IAPMO-UES ER-263
- APPROVED ADHESIVE ANCHORS FOR HOLLOW MASONRY

MANUFACTURER/PRODUCT	REPORT NUMBER
HILTI HIT-HY 270 SAFE SET SYSTEM WITH HAS-E ROD	ICC-ES ESR-4143
SIMPSON STRONG-TIE SET	ICC-ES ESR-1772
SIMPSON STRONG-TIE AT	ICC-ES ESR-1958
- POWDER ACTUATED FASTENERS
 - WHEN CALLED FOR ON THE PLANS, THE APPROVED ANCHORS ARE:

MANUFACTURER AND PRODUCT	USE	REPORT NUMBER
HILTI X-GN (1" EMBED)	MTL STUD TRACK TO CONCRETE	ICC-ES ESR-1752
HILTI X-EGN	MTL STUD TRACK TO STEEL	ICC-ES ESR-1752
SIMPSON STRONG-TIE PDPA	MTL STUD TRACK TO CONCRETE	ICC-ES ESR-2138
SIMPSON STRONG-TIE PDPA	MTL STUD TRACK TO STEEL	ICC-ES ESR-2138

* ALL FASTENERS SHALL MEET THE MINIMUM FULLY SEATED DEPTH INDICATED BY THE MANUFACTURER'S DEPTH GAUGE. NO EXCEPTIONS WILL BE APPROVED.

CONTRACT/CONSTRUCTION DOCUMENTS

- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN A FULL SET OF THE MOST RECENT REVISIONS OF EACH DOCUMENT INCLUDING ALL PLANS, SPECIFICATIONS, ADDENDA, AND SUPPLEMENTAL INSTRUCTIONS.
- THE CONTRACTOR SHALL REVIEW THE DOCUMENTS PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY MATERIALS FOR CONFLICTS. IF CONFLICTS OCCUR THE CONTRACTOR SHALL USE THE MOST STRINGENT REQUIREMENT OR REQUEST A CLARIFICATION THROUGH A REQUEST FOR INFORMATION (RFI).
- THE DOCUMENTS MAY NOT BE REPRODUCED IN WHOLE OR IN PART FOR USE ON PROJECTS OTHER THAN IDENTIFIED IN THE TITLE BLOCK. SHOULD THE CONTRACTOR USE THE DOCUMENTS AS A PORTION OF A SHOP DRAWING SUBMITTAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONSEQUENCES RESULTING FROM ERRORS IN THE REPRODUCED DOCUMENTS.
- DETAILS LABELED TYPICAL ARE INTENDED TO REPRESENT A CONDITION THAT OCCURS AT SEVERAL LOCATIONS IN THE PLANS WHETHER OR NOT THE DETAIL IS REFERENCED.
- DO NOT SCALE THE PLANS AND DETAILS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS.

CONTRACTOR'S RESPONSIBILITY

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL SUB-CONTRACTOR SUBMITTALS AND NOTING ALL DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTING TO THE ENGINEER FOR REVIEW.
- SUBSTITUTION REQUESTS SHALL BE SUBMITTED IN WRITING WITH THE COST REDUCTION AMOUNT AND THE SCHEDULE IMPACT FOR THE OWNER (SUBMITTALS WITHOUT THE COST AND SCHEDULE IMPACT WILL NOT BE REVIEWED). A COMPARISON OF THE DATA WITH THE MATERIAL SPECIFIED INCLUDING CODE APPROVALS SHALL BE PROVIDED.
- DEFECTIVE WORK REPORT (DWR) SHALL BE SUBMITTED TO THE ENGINEER. THE DWR SHALL REPORT THE DEFECT AND PROPOSE A REMEDIATION OF THE DEFECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REMEDIATION OF THE DEFECT INCLUDING ENGINEERING COSTS, IF ANY.
- WHEN THE CONTRACTOR BECOMES AWARE OF WHAT MAY BE AN UNFORESEEN CONDITION THAT COULD AFFECT COST OR SCHEDULE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
- THE CONTRACTOR'S SCHEDULE MUST PROVIDE A REASONABLE TIME ALLOWANCE FOR THE ENGINEERING REVIEW AND APPROVAL.

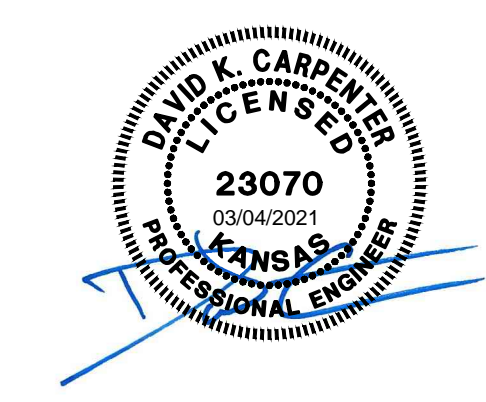
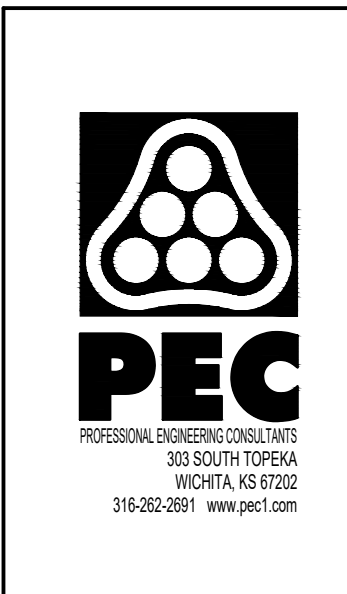
CONSTRUCTION MEANS AND METHODS ISSUES

- SLAB ON GRADE AND ELEVATED SLABS ARE NOT DESIGNED TO SUPPORT CRANES, FORKLIFTS, TRUCKS, MANLIFTS, OR OTHER CONSTRUCTION RELATED EQUIPMENT UNLESS NOTED AS SUCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF CONSTRUCTION EQUIPMENT CAN BE SAFELY OPERATED ON THESE SLABS AND TO REPAIR ANY DAMAGE THE EQUIPMENT MAY CAUSE.
- THE CONSTRUCTION DOCUMENTS REPRESENT A STABLE STRUCTURE IN THE COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY BRACING AND/OR SHORES TO SAFELY CONSTRUCT THE BUILDING AND PREVENT DAMAGE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION THAT MAY AFFECT THE PROJECT AND REPORT DISCREPANCIES TO THE ENGINEER. ANY DIMENSIONS FOR ELEVATIONS THAT IMPACT NEW WORK SHALL BE VERIFIED PRIOR TO FABRICATION OF ANY MATERIAL. EXISTING BUILDING ELEMENTS THAT ARE TO BE ABANDONED THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
- WHEN A PIECE OF EQUIPMENT (HVAC, ELECTRICAL, KITCHEN, ETC.) IS PROVIDED THAT IS DIFFERENT THAN THE EQUIPMENT THAT THE STRUCTURE WAS DESIGNED FOR EITHER BY SIZE, WEIGHT OR CONFIGURATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REMEDY OF THE SITUATION. THOSE COSTS SHALL INCLUDE THE ENGINEERING COSTS TO REDESIGN PORTIONS OF THE STRUCTURE TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL DESIGN AND MATERIALS FOR ATTACHING NON-STRUCTURAL ELEMENTS TO ANY PORTION OF THE STRUCTURE TO RESIST ALL LOADS, INCLUDING SEISMIC, IN A WAY THAT DOES NOT OVERSTRESS STRUCTURAL MEMBERS. NON-STRUCTURAL ELEMENTS CAN BE FOUND IN EACH OF THE OTHER DISCIPLINES (ARCHITECTURAL, MECHANICAL, ELECTRICAL, ETC.).

STRUCTURAL TESTS, INSPECTIONS, AND QUALITY ASSURANCE

ALL STRUCTURAL TESTS AND INSPECTIONS SHALL BE PERFORMED PER CHAPTER 17 OF THE BUILDING CODE WITH LOCAL SUPPLEMENTS, UNLESS MORE STRINGENT REQUIREMENTS ARE SPECIFIED.

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
STRUCTURAL GENERAL NOTES			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by DKC	Job No. 180537-000	Dwg No. S001	
Drawn by TAJ	Checked by	Date MARCH 2021	



Walk Door
7690002

NEW EQUIP. PAD, REF. 7/S501

STEEL DOOR AND FRAME W/ PANIC HARDWARE,
G.C. TO SUBMIT FOR APPROVAL

400S162-43 33 KSI METAL STUD WALL @ 16" O.C.

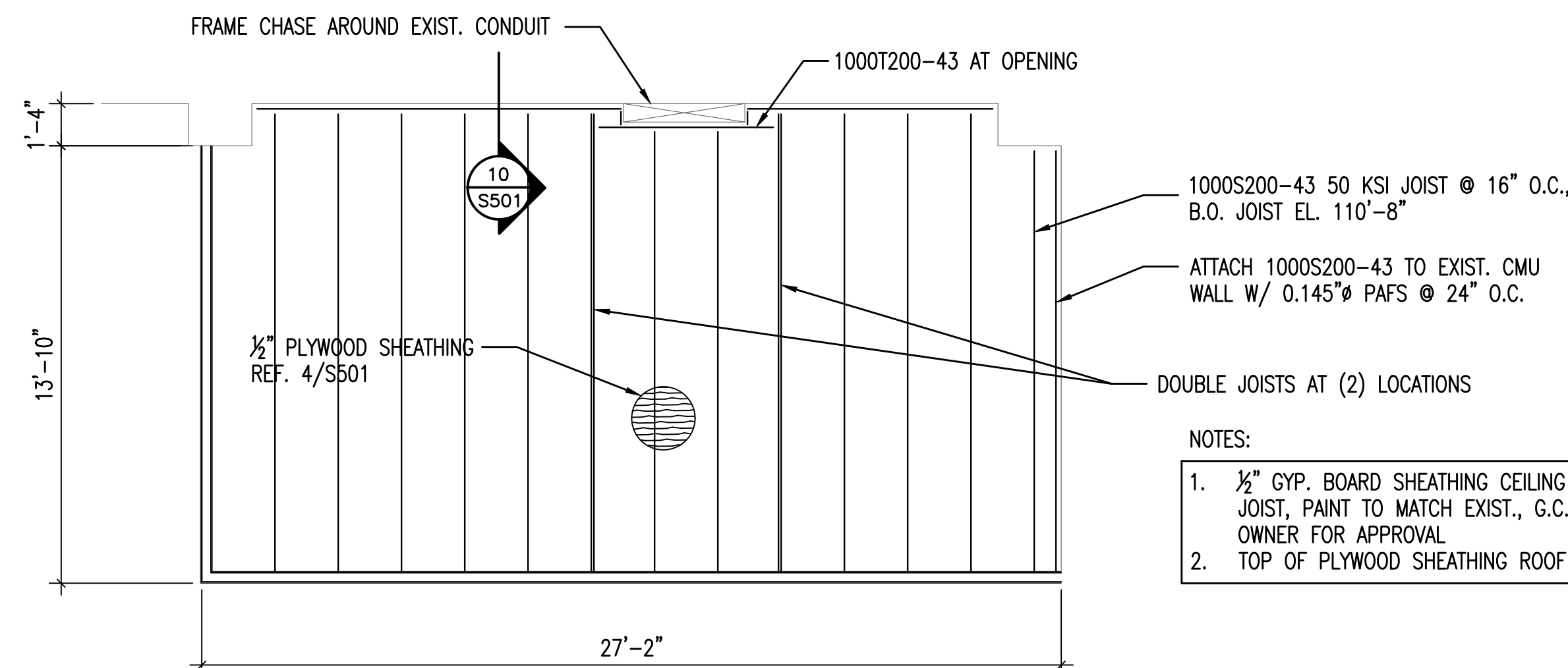
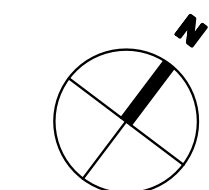
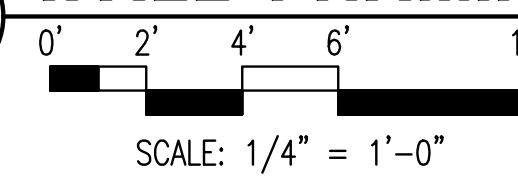
1/2" GYP. BOARD SHEATHING ON
INSIDE OF METAL STUD WALL, PAINT
TO MATCH EXIST., G.C. TO SUBMIT
TO OWNER FOR APPROVAL

PLYWOOD SHEATHING ON OUTSIDE OF METAL
STUD WALL, PAINT TO MATCH EXIST., G.C. TO
SUBMIT TO OWNER FOR APPROVAL

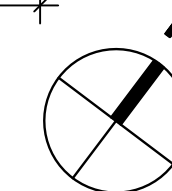
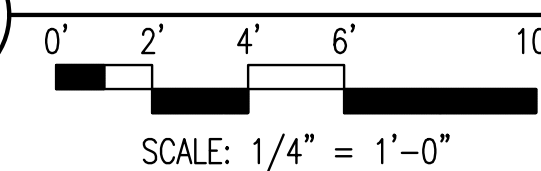
OH Door
7690003

Walk Door
7690001

A WALL FRAMING PLAN



B CEILING FRAMING PLAN



- NOTES:
- 1/2" GYP. BOARD SHEATHING CEILING ATTACHED TO METAL JOIST, PAINT TO MATCH EXIST., G.C. TO SUBMIT TO OWNER FOR APPROVAL
 - TOP OF PLYWOOD SHEATHING ROOF DECK EL. 111'-6 1/2"

MCC Room 7516-100-01-103
walls for MCC room 7540002
single door for MCC room 7690004
double door for MCC Room 7690005

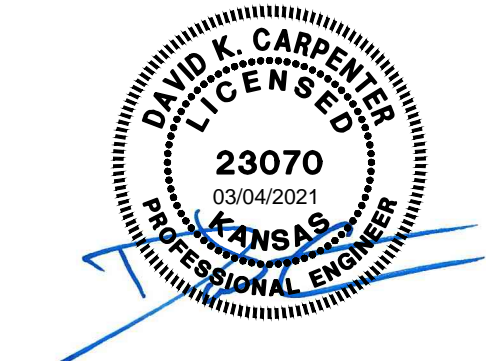
concrete floor and foundation for building 7530001
building exterior walls 7540001
exterior lighting 7340001

Entry Alarm
42900014

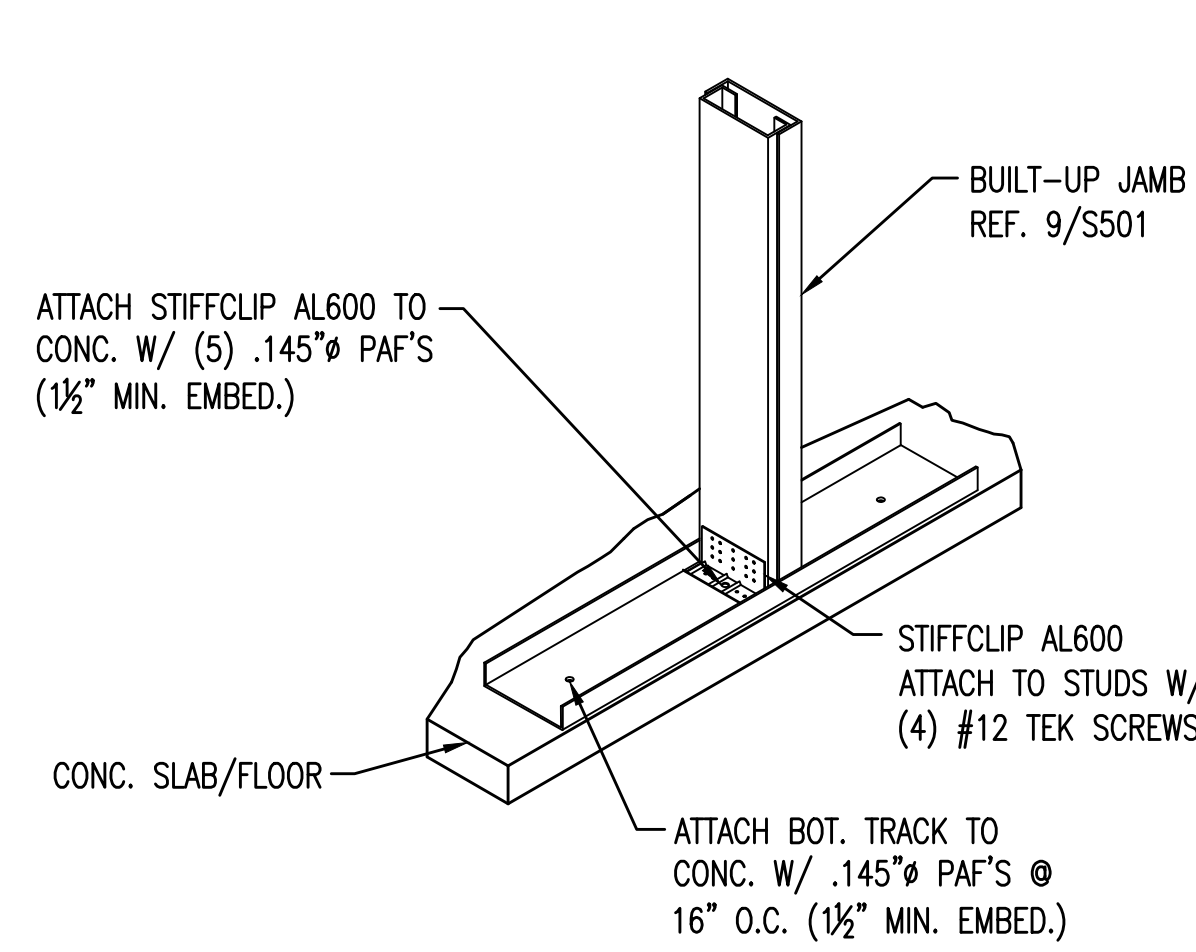
roof and roof
drains
7520001

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Plot Scale: 1:1 03-04-2021 3:36:03 PM by TYLER JACOBS
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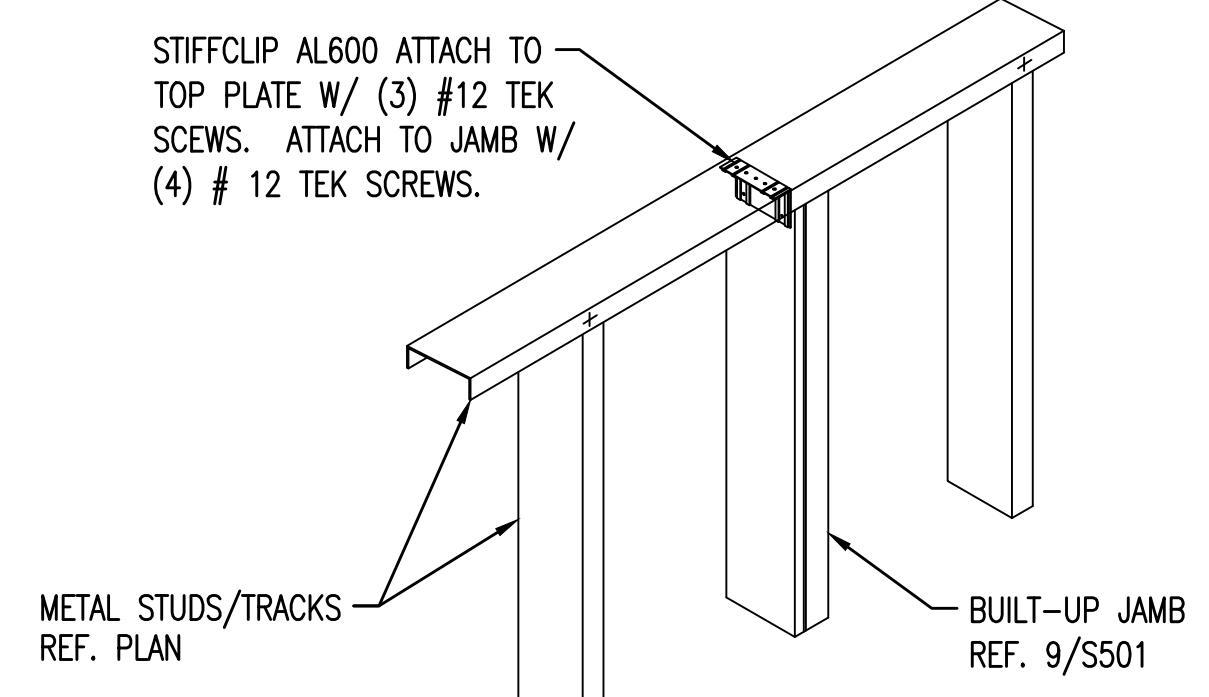
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WICHITA, KS 67202
316-262-2691 www.pect.com



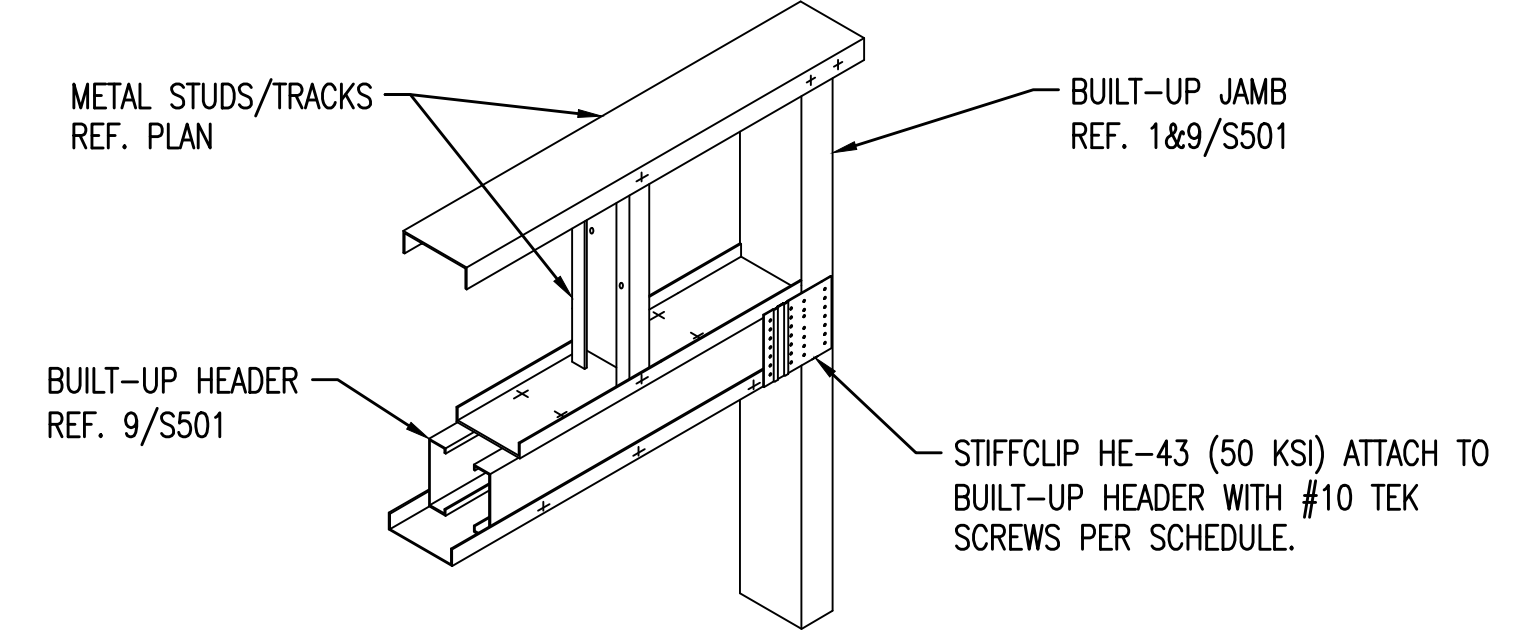
4			
3			
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
FRAMING PLANS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by DKC	Job No. 180537-000	Dwg No. S101	
Drawn by TAJ	Checked by	Date MARCH 2021	



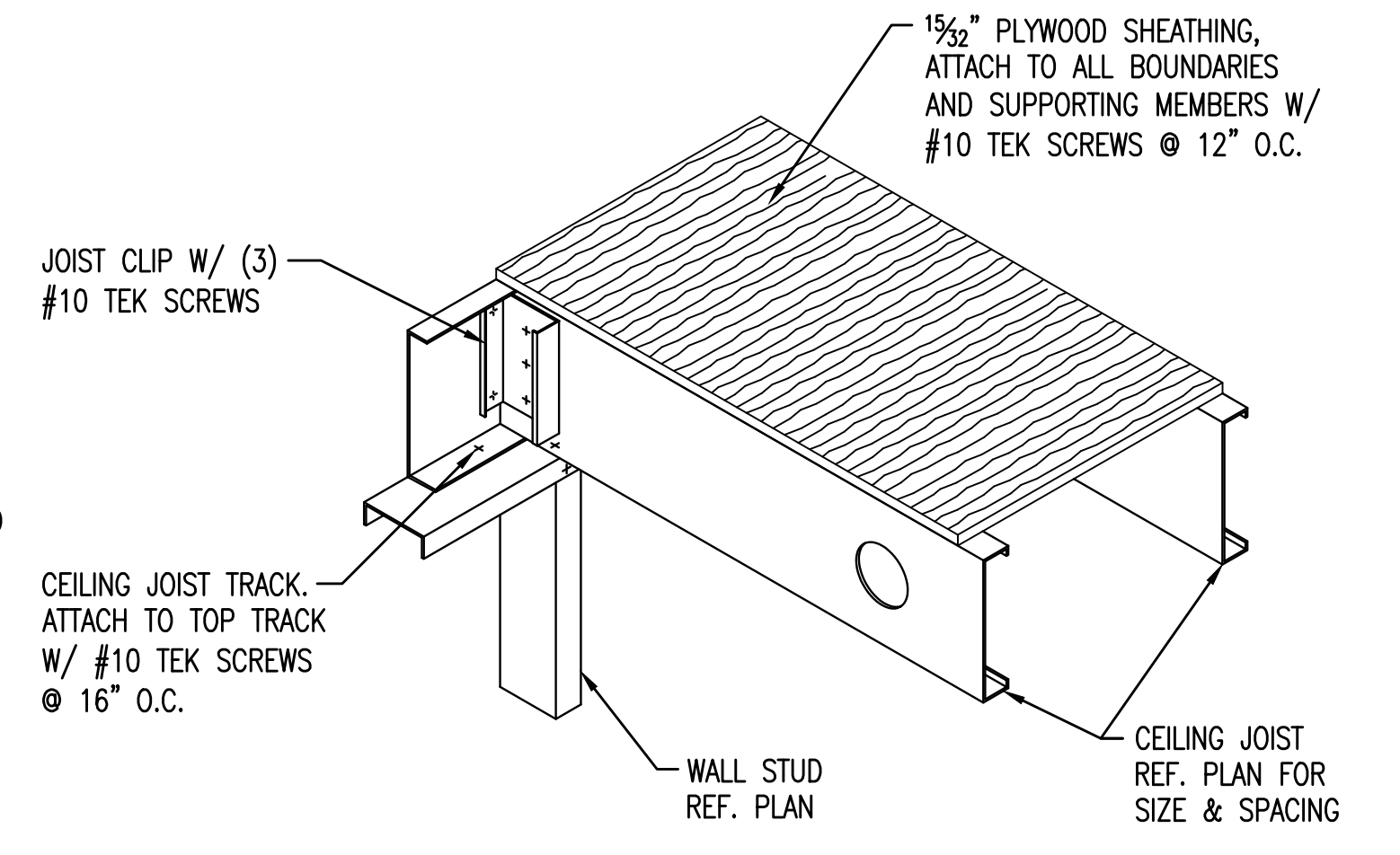
1 TYP. JAMB TO CONC. CONN.
SCALE: NOT TO SCALE



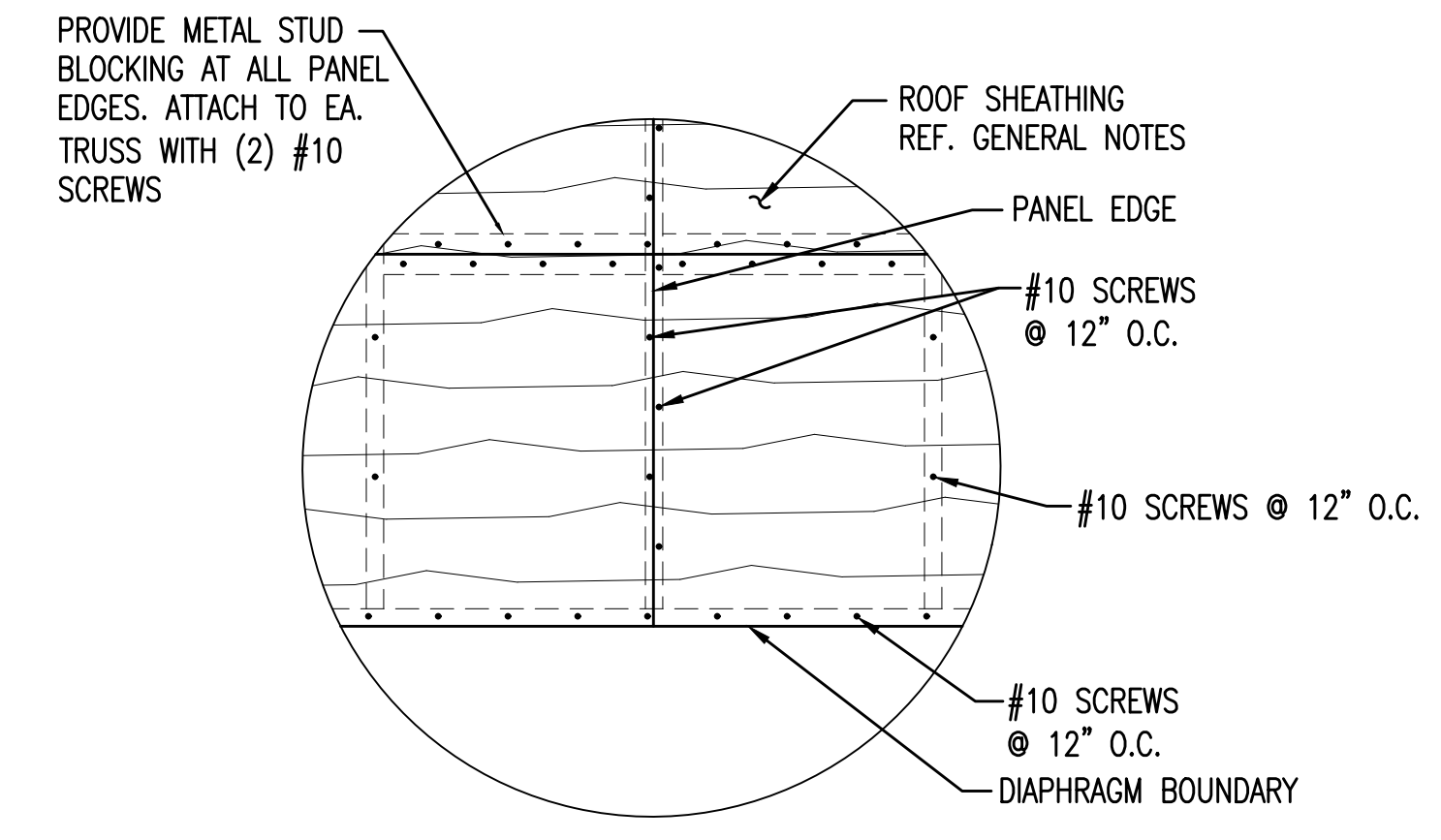
2 TYP. JAMB AT TOP CONN.
SCALE: NOT TO SCALE



3 TYP. HEADER CONN. TO JAMB
SCALE: NOT TO SCALE



4 TYP. JOIST BEARING
SCALE: NOT TO SCALE



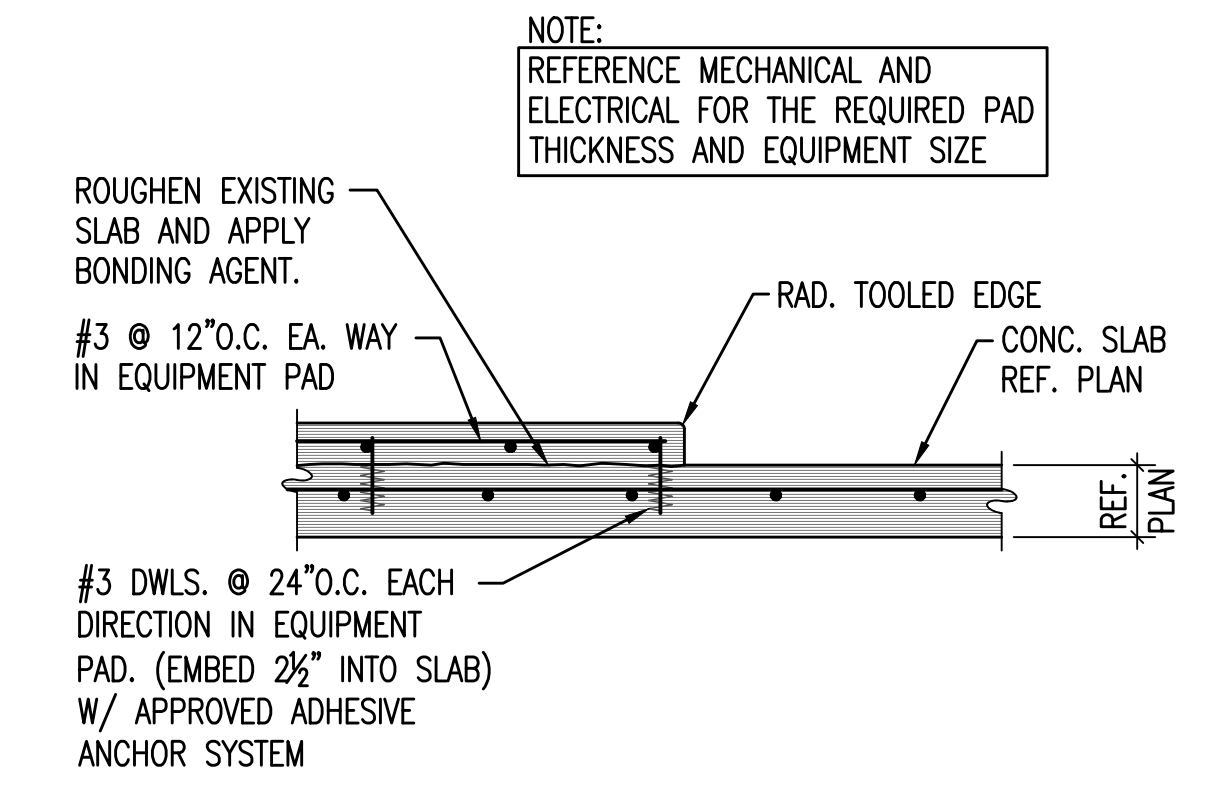
5 TYP. SHEATHING FASTENING
SCALE: NOT TO SCALE

TABLE A - REINFORCEMENT LAPS, EMBEDMENTS, AND HOOK LENGTHS.
fy = 60000 PSI f'c = 4000 PSI

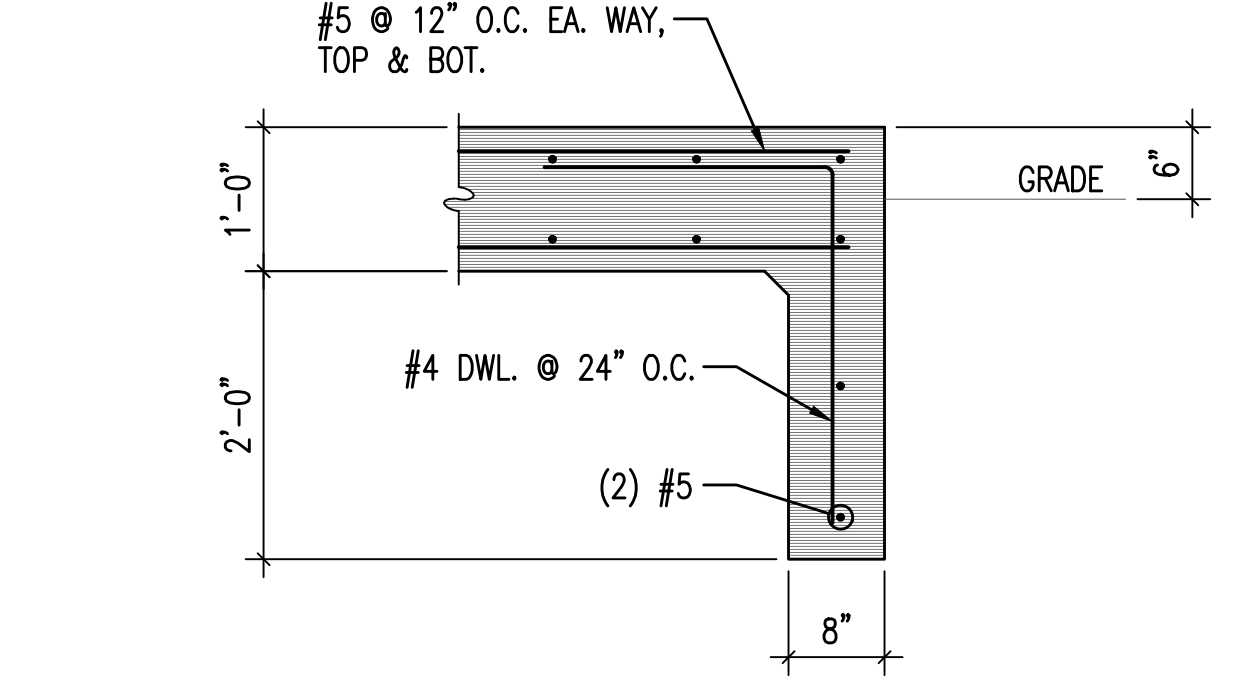
BAR SIZE (d)	CLEAR SPACING (s) (in)			EMBEDMENT & CLASS A LAP (in)				CLASS B LAP (in)				HOOK (in)				
				TOP BAR		OTHER BARS		TOP BAR		OTHER BARS						
	2d	3d	5d	2d < S < 3d	S > 3d	2d < S < 3d	S > 3d	2d < S < 3d	S > 3d	2d < S < 3d	S > 3d					
3	3/4	1 1/8	1 7/8	28	18	12	21	14	12	36	24	14	28	18	12	8
4	1	1 1/2	2 1/2	37	25	15	28	19	12	48	32	19	37	25	15	10
5	1 1/4	1 7/8	3 1/8	46	31	18	36	24	14	60	40	24	46	31	18	12
6	1 1/2	2 1/4	3 3/4	55	37	22	43	28	17	72	48	29	55	37	22	15
7	1 3/4	2 3/8	4 1/8	81	54	32	62	42	25	105	70	42	81	54	32	18
8	2	3	5	92	62	37	71	47	28	120	80	48	92	62	37	20
9	2 1/4	3 3/8	5 3/8	104	70	42	80	54	32	136	90	54	104	70	42	22
10	2.54	3.81	6.35	117	78	47	90	60	36	153	102	61	117	78	47	25
11	2.82	4.23	7.05	130	87	52	100	67	40	170	113	68	130	87	52	27

NOTES:
1. LENGTHS SHOWN CONFORM WITH NON-SEISMIC PROVISIONS OF ACI 318 FOR UNCOATED BARS.
2. BAR CLEAR SPACING IS THE CENTER TO CENTER BAR SPACING MINUS ONE BAR DIAMETER.
3. CLASS A LAP LENGTHS APPLY WHEN BAR LAPS ARE STAGGERED TO LAP HALF THE BARS AT THE SAME LOCATION. USE CLASS B LAP FOR ALL OTHER CASES.
4. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
5. MULTIPLY LAP AND EMBEDMENT LENGTHS GIVEN BY 2.0 FOR BARS WITH CLEAR SPACING OF TWO BAR DIAMETERS OR LESS, OR CONCRETE COVER OF ONE BAR DIAMETER OR LESS.
6. TABLE FOR NORMAL WEIGHT CONCRETE AND UNCOATED REINFORCING BARS ONLY.

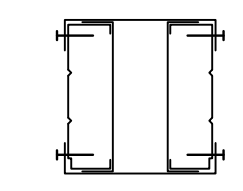
6 TABLE A
SCALE: NOT TO SCALE



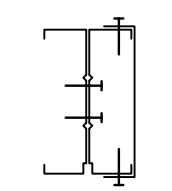
7 EQUIPMENT PAD DETAIL
SCALE: 3/4" = 1'-0"



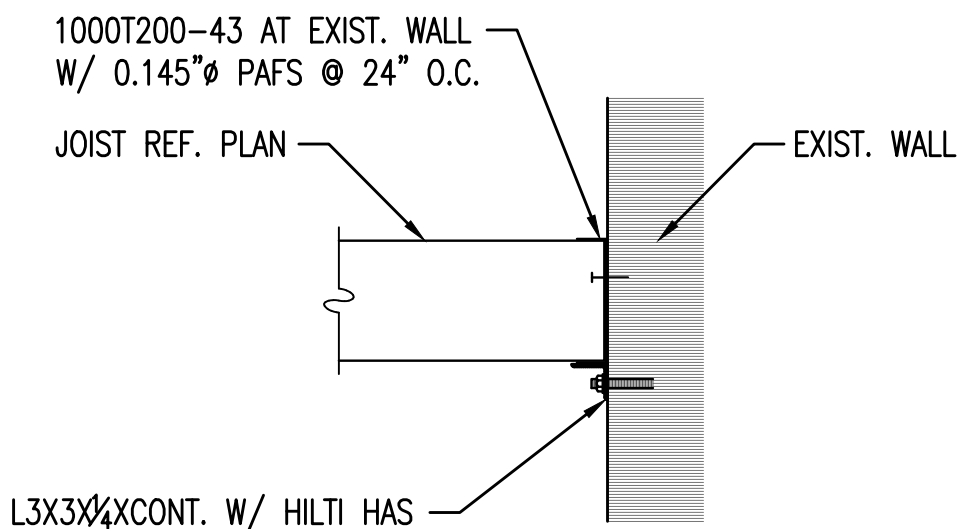
8 GENERATOR PAD DETAIL
SCALE: 3/4" = 1'-0"



HEADER DETAIL
(2) VERT. 400S162-43 W/
(2) VERT. 400T125-43
CAPPED T.&B. W/ 400T125-43



JAMB DETAIL
(2) 400S162-43 W/
(2) #12 TEK SCREWS
@ 24" O.C. VERT., CAPPED
W/ 400T125-43

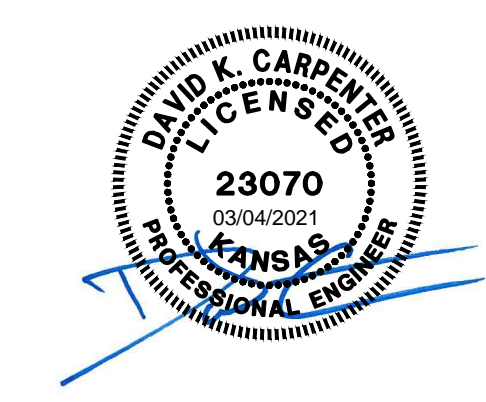
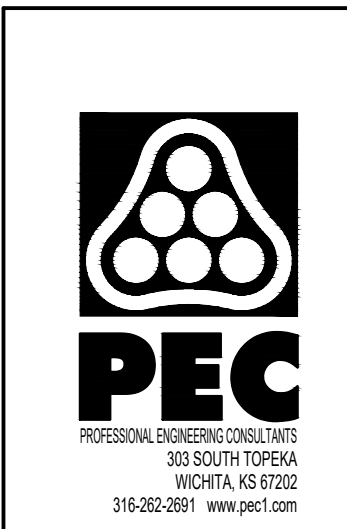


FRAMING AT EXIST. WALL
L3X3X4XCONT. W/ HILTI HAS
RODS & HILTI HIT HY-270 @
24" O.C. DRILL & ADHERE INTO
EXIST. WALL (EMBED 4" MIN.)

9 BUILT-UP SECTION DETAILS
SCALE: NOT TO SCALE

10 FRAMING AT EXIST. WALL
SCALE: 3/4" = 1'-0"

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 U:\wchita-facil\2018\180537\000\Struct\Drawings\CD's\180537 - S501



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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
STRUCTURAL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by DKC	Job No. 180537-000	Dwg No. S501	
Drawn by TAJ	Checked by	Date MARCH 2021	

GENERAL NOTES

1. VERIFY JOB SITE CONDITIONS AND DIMENSIONS BEFORE BEGINNING WORK. PLANS ARE SCHEMATIC IN NATURE. LAYOUT IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS.
2. NO PIPING, DUCTWORK, ETC. SHALL PENETRATE STRUCTURAL MEMBERS.
3. PROVIDE MISCELLANEOUS CUTTING, PATCHING AND REPAIRING OF FINISHES, ROOF, WALLS, ETC., AS REQUIRED TO ACCOMMODATE THE NEW WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXACT LOCATION, CONFIGURATION AND ROUTING OF EXISTING SYSTEMS REQUIRED TO REMAIN IN OPERATION DURING THE PROJECT TO PREVENT DAMAGE DURING DEMOLITION AND PHASING.
5. REMOVE ALL EXISTING EQUIPMENT, DUCTWORK AND PIPING THAT IS NOT REQUIRED FOR A WORKING INSTALLATION.
6. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
7. UNLESS OTHERWISE INDICATED, INSTALL ALL SPACE THERMOSTATS AND OTHER OCCUPANT ADJUSTABLE CONTROL DEVICES SAME HEIGHT AS ADJACENT LIGHT SWITCHES, BUT IN NO CASE HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR PER ADA REQUIREMENTS. COORDINATE EXACT HEIGHT WITH ARCHITECT PRIOR TO INSTALLATION.
8. ALL CUTTING AND PATCHING SHALL BE CLOSELY COORDINATED WITH THE G.C.
9. COORDINATE ROUTING OF PLUMBING, AND HVAC PIPING WITH DUCTWORK, LIGHTS, ARCHITECTURAL CEILING AND STRUCTURAL ELEMENTS. PIPING SHALL RISE AND DROP, JOG OR OFFSET AS REQUIRED TO AVOID CONFLICTS. DUCTWORK SHALL TAKE PRECEDENCE OVER ALL PIPING, EXCEPT WHERE GRADE MUST BE MAINTAINED FOR DRAINAGE. REWORK OF INSTALLED WORK TO RESOLVE CONFLICTS ARISING FROM LACK OF COORDINATION SHALL NOT JUSTIFY AN INCREASE IN THE CONTRACT AMOUNT.
10. DO NOT ROUTE PIPING OR DUCTWORK OVER ELECTRICAL PANELS OR EQUIPMENT. PIPING OR DUCTWORK SHALL NOT BE ROUTED THROUGH ELECTRICAL ROOMS, TELECOM ROOMS OR ELEVATOR EQUIPMENT ROOMS UNLESS SPECIFICALLY SERVING THAT ROOM. COORDINATE WITH E.C. PROVIDE WATERTIGHT DRIP PAN WITH DRAIN TO NEAREST APPROVED RECEPTOR WHERE REQUIRED.
11. COORDINATE SIZE AND LOCATION OF ACCESS DOORS IN CONSTRUCTION REQUIRED FOR ACCESS TO MECHANICAL EQUIPMENT WITH G.C.
12. COORDINATE SIZE AND LOCATION OF MECHANICAL EQUIPMENT PADS WITH G.C.
13. ALL WORK IS TO CONFORM WITH APPLICABLE CODES AND STANDARDS.
14. ALL EQUIPMENT SUPPORT STANDS SHALL BE PRIMED AND PAINTED WITH EPOXY ENAMEL.
15. TEMPERATURE CONTROLS CONTRACTOR (TCC) SHALL FURNISH AND INSTALL ALL LOW VOLTAGE WIRING AND ASSOCIATED CONDUIT REQUIRED FOR MECHANICAL CONTROL SYSTEM. WIRING SHALL BE IN CONDUIT INSIDE WALLS, IN ROOMS WITH EXPOSED CEILINGS, AND ABOVE HARD CEILINGS. LINE VOLTAGE WIRING AND ASSOCIATED CONDUIT SHALL BE PROVIDED AND INSTALLED BY E.C. CONTROL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS.
16. ALL CONTROL DAMPERS SHALL BE FURNISHED BY TCC AND INSTALLED BY THE MC. MOTOR OPERATORS SHALL BE FURNISHED AND INSTALLED BY THE TCC.
17. CONTRACTOR TO INSTALL TEMPORARY FILTERS OVER ALL RETURN AND EXHAUST GRILLES IN WORK AREA DURING CONSTRUCTION.
18. THESE DRAWINGS ARE ACCOMPANIED BY SPECIFICATIONS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.

GENERAL DEMOLITION NOTES

1. VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE ARCHITECT IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
2. CONTRACTOR SHALL PROVIDE PROTECTIVE PLASTIC DROP CLOTHS TO PROTECT THE EXISTING OCCUPIED AREAS AND EQUIPMENT FROM DUST AND DEBRIS DURING THE CONSTRUCTION WORK, AND SHALL CLEAN THE AREAS OF ALL CONSTRUCTION DIRT DAILY, AND UPON COMPLETION OF THE WORK.
3. COORDINATE WITH GENERAL CONTRACTOR THE REMOVAL AND REPLACEMENT OF ALL EXISTING CEILINGS, WALLS, ETC. AS REQUIRED FOR MECHANICAL DEMOLITION WORK.
4. ALL CUTTING AND CHANNELING OF EXISTING BUILDING SHALL BE ACCOMPLISHED IN A NEAT AND WORKMANLIKE MANNER WITHOUT REMOVAL OF EXCESS MATERIALS. THIS CONTRACTOR SHALL PATCH AND REPLACE WITH MATERIAL SIMILAR TO ADJACENT CONSTRUCTION.
5. WHERE EXISTING PIPING AND EQUIPMENT, ETC., THAT ARE TO BE UTILIZED IN THE COMPLETED PROGRAM CONFLICT WITH NEW CONSTRUCTION AND THE REQUIRED DEMOLITION, THEY SHALL BE RELOCATED AND RECONNECTED TO MAINTAIN THE DESIRED SERVICE.
6. PORTIONS OF EXISTING SYSTEMS MAY BE SHOWN FOR CLARITY EVEN THOUGH IT MAY NOT BE NECESSARY TO MODIFY OR REVISE THEM. ALL EXISTING SYSTEMS ARE SHOWN BASED ON ORIGINAL OR REMODEL BUILDING DRAWINGS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS.
7. ALL WORK MUST BE COORDINATED AND SCHEDULED WITH THE OWNER AND OCCUPANTS OF THIS BUILDING SO AS TO PROVIDE THE LEAST AMOUNT OF DISRUPTION OF BUILDING ACTIVITIES AS POSSIBLE. MAINTAIN CONDITIONED SPACE FOR ALL OWNER OCCUPIED AREAS DURING CONSTRUCTION.
8. ALL ACCESSIBLE ABANDONED PIPING AND DUCTWORK SHALL BE REMOVED AND PROPERLY DISPOSED OF.

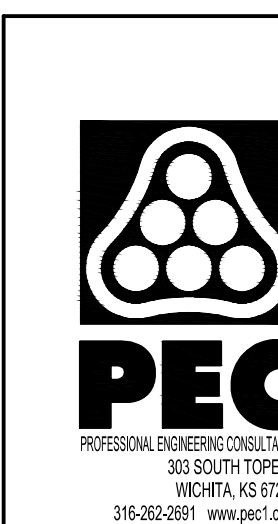
SYMBOL SCHEDULE

Ⓢ	REFER TO PLAN NOTES
(E)	EXISTING EQUIPMENT OR MATERIAL DESIGNATION
—————	EXISTING COMPONENT PEN WEIGHT
-----	DEMOLITION PEN WEIGHT
——— CD ———	COOLING COIL CONDENSATE DRAIN LINE (CD)
CO —H	END OF LINE CLEANOUT
Ⓢ	ELECTRIC OR DDC THERMOSTAT
M.C.	MECHANICAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
DSS	DUCTLESS SPLIT SYSTEM
AHU	AIR HANDLING UNIT
EF	EXHAUST FAN
UH	UNIT HEATER

SHEET INDEX

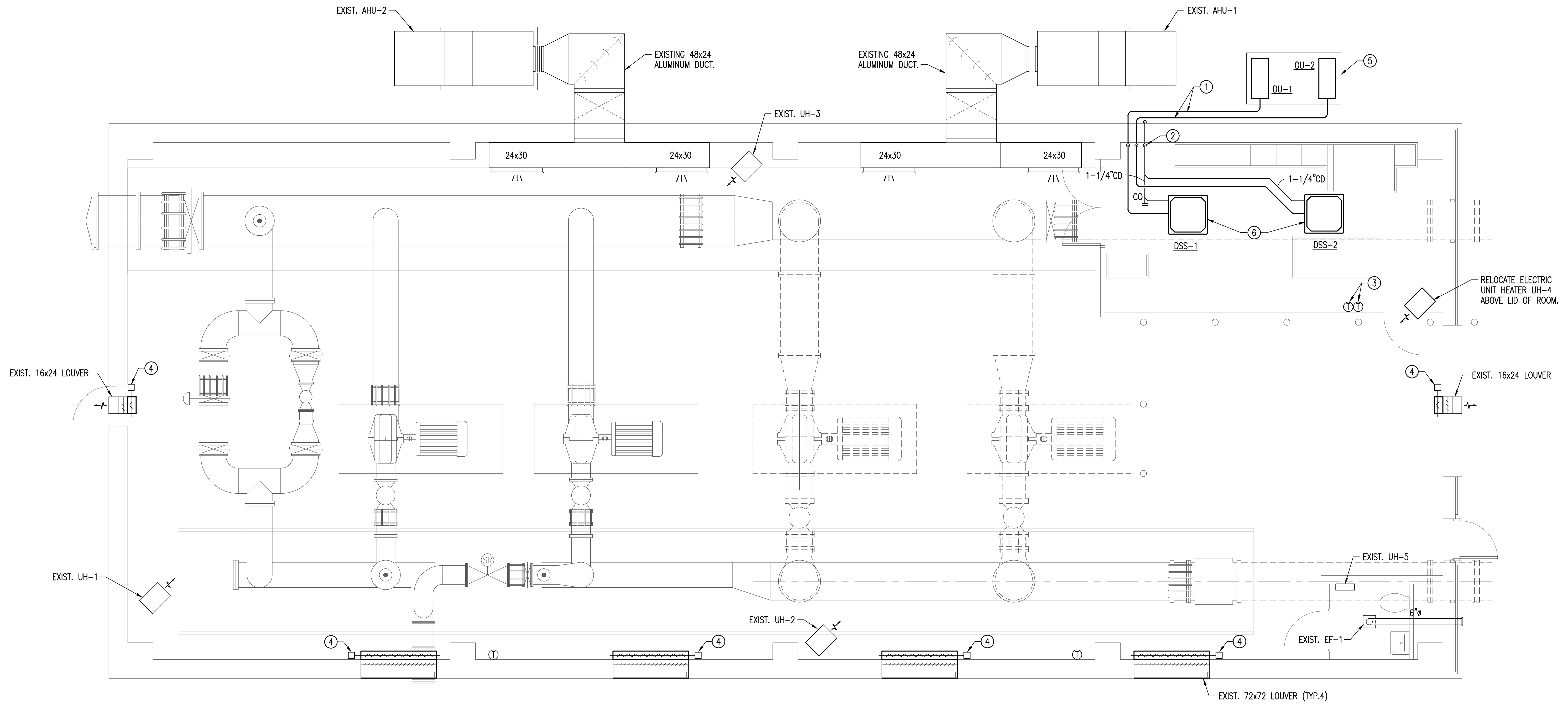
- M001 – MECHANICAL COVER SHEET
- MD101 – MECHANICAL DEMOLITION FLOOR PLAN
- MH101 – MECHANICAL FLOOR PLAN
- M601 – MECHANICAL SCHEDULES

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
MECHANICAL COVER SHEET			
STANDBY POWER GENERATION – SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	CWW	Job No.	180537-000
Drawn by	MHN	Checked by	JBG
Date	MARCH 2021	Dwg No.	M001



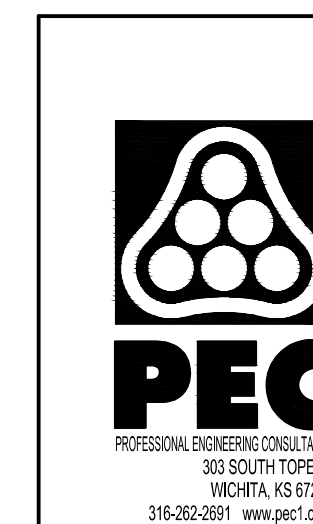
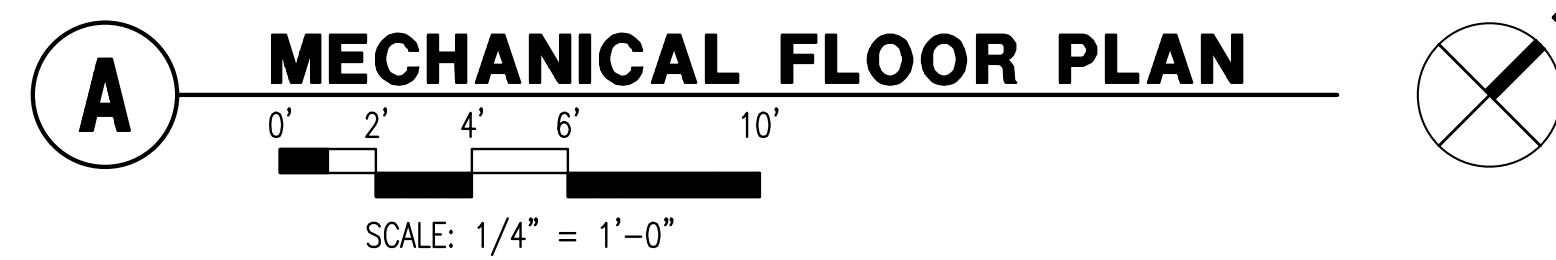
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 U:\Wichita-Facil\2018\180537\000\Mech\Drawings\M-001 MECHANICAL COVER SHEET

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 U:\Wichita-Facil\2018\180537\000\Mech Drawings\WHT01 MECHANICAL FLOOR PLAN



PLAN NOTES:

- ① ROUTE REFRIGERANT LIQUID AND SUCTION PIPING FROM OUTDOOR UNITS TO INDOOR UNITS. SIZE PER MANUFACTURER'S RECOMMENDATIONS. INSULATE WITH 1/2" ELASTOMERIC INSULATION AND COVER EXTERIOR PIPING WITH PROTECTIVE ALUMINUM JACKET. SUPPORT PIPING ALONG WALL.
- ② ROUTE 1-1/4" CONDENSATE DRAIN LINE DOWN ALONG WALL. PENETRATE EXTERIOR WALL, AND ANGLE PIPING DOWN AT 45 DEG ANGLE TO SPILL ONTO SPLASH BLOCK. CONDENSATE PIPING SHALL BE SCH 40 PVC INSULATED WITH 1/2" ELASTOMERIC INSULATION.
- ③ THERMOSTAT FOR DSS-1 AND DSS-2 PROVIDED BY DUCTLESS SYSTEM MANUFACTURER. SET UP PER SEQUENCE ON FOLLOWING SHEET.
- ④ REMOVE EXISTING BACKDRAFT DAMPERS. INSTALL NEW INSULATED, LOW-LEAK MOTORIZED DAMPERS EQUAL TO GREENHECK SERIES VCD. INTERLOCK TO OPEN WITH UPON EXISTING MAKEUP AIR UNIT OPERATION.
- ⑤ 8" THICK CONCRETE EQUIPMENT PAD. SUPPORT CONDENSING UNITS OFF OF PAD WITH STAND. REFER TO DETAIL ON FOLLOWING SHEET.
- ⑥ SUPPORT UNIT FROM JOIST WITH ALL THREAD ROD.



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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
MECHANICAL FLOOR PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	CWW	Job No.	180537-000
Drawn by	MHN	Checked by	JBC
Date	MARCH 2021	Dwg No.	MH101

DUCTLESS SPLIT SYSTEM SCHEDULE

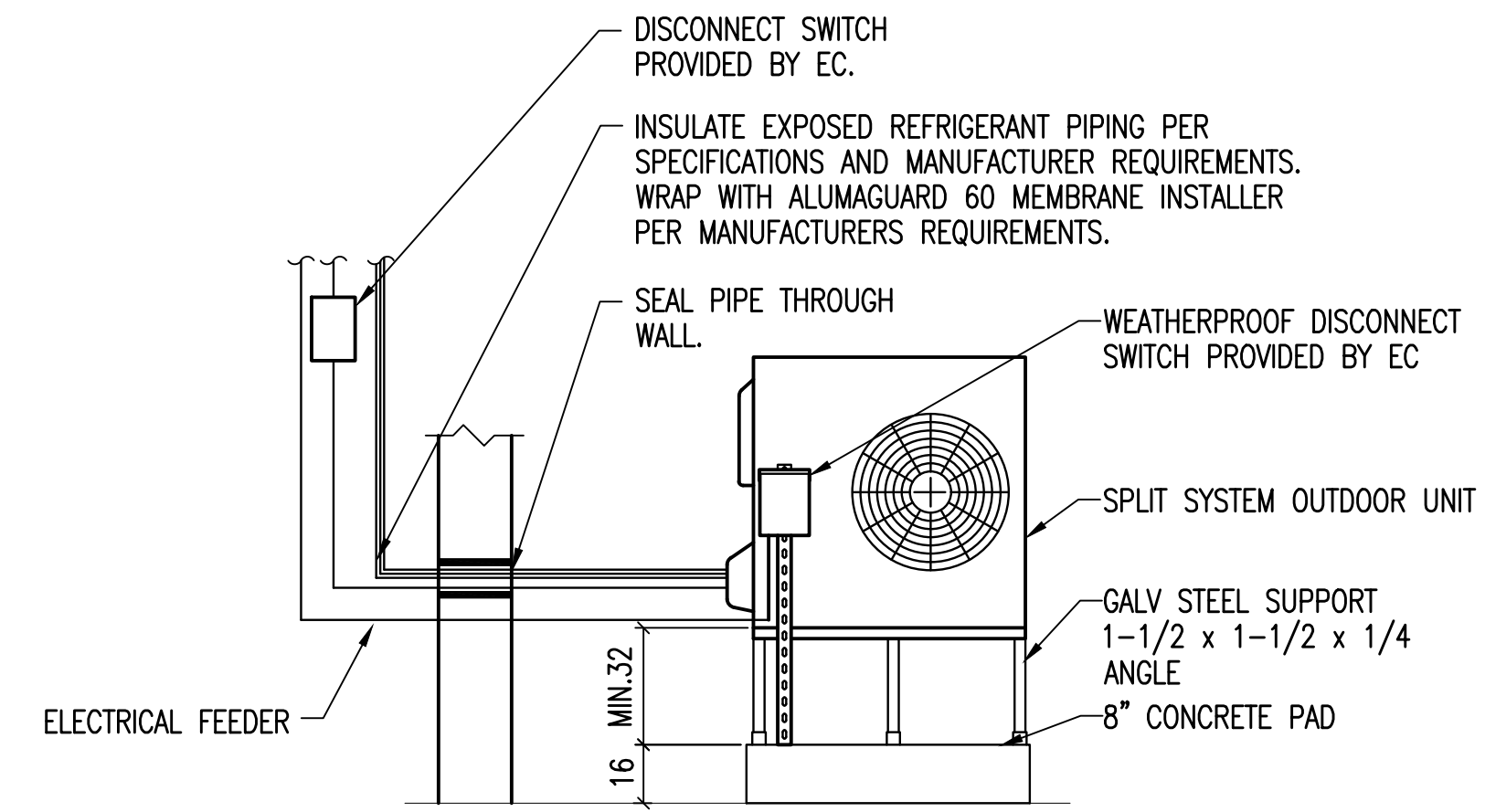
MARK	LOC. AT ROOM	INDOOR UNIT			OUTDOOR UNIT					HEAT			VOLTAGE	REMARKS	ELECT. REF.	
		MNTG.	CFM	EDB/ EWB	MARK	CAPACITY (MBH) RATED	MINIMUM	ODB	SEER	MCA	CAPACITY (MBH) RATED	HSPF				EDB
DSS-1	ELEC	CEILING	600	70/61	OU-1	24	10.8	101	20	20	②	10.5	68	0	208/1	①
DSS-2	ELEC	CEILING	600	70/61	OU-1	24	10.8	101	20	20	②	10.5	68	0	208/1	①

① BASED ON LG CEILING CASSETTE SINGLE ZONE INVERTER WITH VARIABLE SPEED COMPRESSOR, INDEPENDENT CONTROL VANES, FROST CONTROL, CASSETTE GRILLE, LOW AMBIENT WIND BAFFLE, HAIL GUARDS, AND PROGRAMMABLE THERMOSTAT PERMANENTLY MOUNTED TO WALL.

② HEATING CAPACITY AT 17 DEG F AMBIENT TEMPERATURE = 26.0 MBH.
HEATING CAPACITY AT -4 DEG F AMBIENT TEMPERATURE = 20.7 MBH.

DUCTLESS SPLIT SYSTEMS SEQUENCE OF OPERATION:

THE DUCTLESS SPLIT SYSTEMS SHALL BE SUPPLIED WITH 7-DAY PROGRAMMABLE THERMOSTATS WITH AUTO-SWITCHOVER. IN COOLING MODE, THE THERMOSTAT FOR DSS-1 SHALL BE SET TO 70 DEG F AND THE THERMOSTAT FOR DSS-2 SHALL BE SET TO 72 DEG F. IN HEATING MODE, THE THERMOSTAT FOR DSS-1 SHALL BE SET TO 70 DEG F AND THE THERMOSTAT FOR DSS-2 SHALL BE SET TO 68 DEG F.



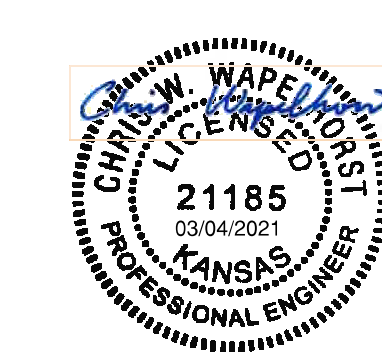
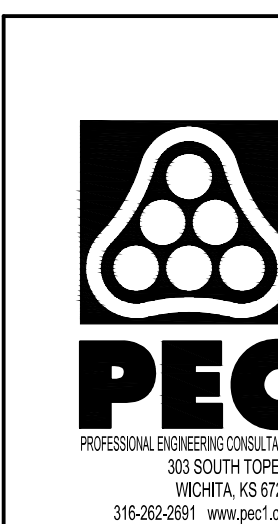
DUCTLESS SPLIT SYSTEM OUTDOOR UNIT DETAIL

SCALE: NONE

In MCC Room
 DSS-1 7740001
 Dss-1 Thermostat 7700003
 Dss-1 outdoor condenser 7170001
 DSS-2 7740002
 Dss-2 thermostat 7700004
 Dss-2 outdoor condenser 7170002

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 U:\Wichita-Facility\2018\180537\000\Mech\Drawings\M-601 MECHANICAL SCHEDULES

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
MECHANICAL SCHEDULES			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	CWW	Job No.	180537-000
Drawn by	MHN	Checked by	JBG
Date	MARCH 2021	Dwg No.	M601



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SYMBOL LIST

SYMBOL	DESCRIPTION	MOUNTING
	LIGHT FIXTURE & FIXTURE LETTER	CEILING
	STRIP LIGHT FIXTURE & FIXTURE LETTER	CEILING
	LIGHT FIXTURE & FIXTURE LETTER	CEILING
	LIGHT FIXTURE & FIXTURE LETTER	WALL
	EXIT LIGHT (SHADING DENOTES EXIT FACE SIDE)	CEIL./WALL
	LIGHT FIXTURE & FIXTURE LETTER	WALL
	FIXTURE W/SHADED LAMP(S) ON EMERG. POWER	CEILING
	EMERGENCY BATTERY LIGHT FIXTURE	CEIL./WALL
	SWITCHES (1-POLE, 2-POLE, 3-WAY, 4-WAY)	46" AFF
	SWITCHES (KEYED, PILOT)	46" AFF
a,b,c	INDICATES SWITCHING SCHEME	
NL	NIGHT LIGHT-WIRE AHEAD OF CONTROLS	
EM	LIGHT FIXTURE ON EMERGENCY POWER	
WP	WEATHERPROOF	
CT	SEE GENERAL NOTE 9	
AFF	ABOVE FINISHED FLOOR	
DF	DRINKING FOUNTAIN	
UON	UNLESS OTHERWISE NOTED	
	SINGLE GROUNDED RECEPTACLE	18" AFF
	DUPLEX GROUNDED RECEPTACLE	18" AFF
	CLG-MTD DUPLEX GROUNDED RECEPT.	CEILING MTD
	DOUBLE DUPLEX GROUNDED RECEPTACLE	18" AFF
	GROUND FAULT DUPLEX RECEPTACLE	18" AFF
	GROUND FAULT DOUBLE DUPLEX RECEPTACLE	18" AFF
	DUPLEX GRD. RECEPT. BOTTOM SWITCHED	18" AFF
	SPECIAL OUTLET (SEE SCHEDULE OR AS NOTED)	FLOOR/WALL
	SPECIAL DEVICE (AS NOTED)	
	JUNCTION BOX	
	FUSTAT BUSS #SSY	
	BRANCH CIRCUIT PANEL & PANEL DESIG.	72" TO TOP
	ELECTRICAL DISTRIBUTION EQUIPMENT	
	EQUIPMENT - SEE EQUIPMENT CONNECTION SCHEDULE	
	CONDUIT SLEEVE (GEN NOTE 12)	
	CABLE TRAY (GEN NOTE 13)	
	FEEDER DESIGNATION	
	EMERGENCY CIRCUIT	CEIL./WALL
	MASTER/SLAVE FIXTURE WHIP	CEILING
	CONDUIT HOME RUN, 1 CIRCUIT. 2#10 & 1#10 GRD. GEN. NOTE 7 & 8	CEIL./WALL
	CONDUIT RUN 2#12 & 1#12 GRD.- 1/2" C.	CEIL./WALL
	CONDUIT RUN 2#12 & 1#12 GRD.- 3/4" C.	EARTH/FLOOR
	CONDUIT HOME RUN, 1 CIRCUIT. 2#12 & 1#12 GRD. 1/2" C.	CEIL./WALL
	CONDUIT HOME RUN, 2 CIRCUITS. 4#12 & 1#12 GRD. 1/2" C.	CEIL./WALL
	CONDUIT HOME RUN, 3 CIRCUITS. 6#12 & 1#12 GRD. 1/2" C.	CEIL./WALL
	CONDUIT RUN PARTIAL CIRCUIT. 2#12 & 1#12 GRD. 1/2" C.	CEIL./WALL
	CONDUIT HOME RUN, 2 CIRCUITS PHASE CONDUCTORS (#12 UON) NEUTRAL CONDUCTOR (#12 UON) SWITCH LEGS (#12 UON) GROUND CONDUCTOR (#12 UON)	CEIL./WALL

GENERAL NOTES

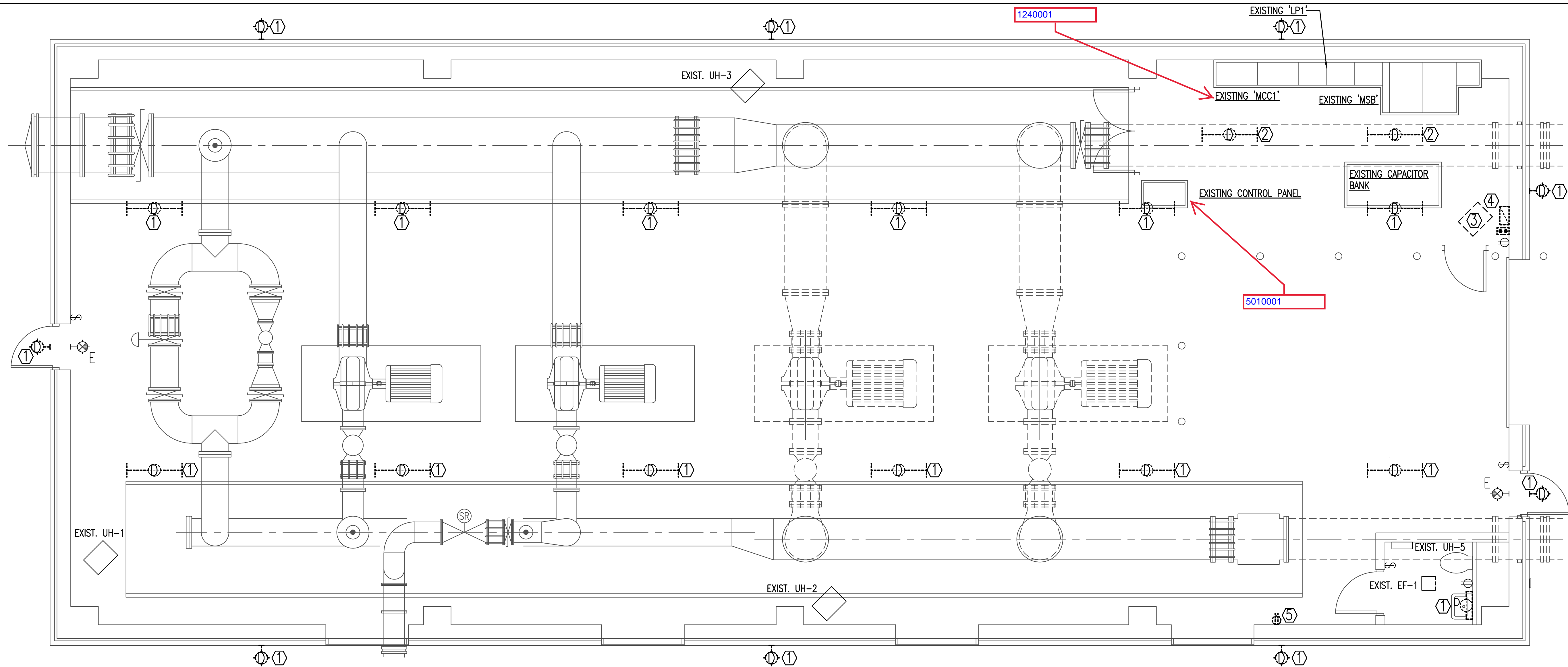
- ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) & THE AMERICANS WITH DISABILITIES ACT (ADA).
- REFER TO RELATED ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS FOR RELATED INFORMATION.
- REFER TO THE SPECIFICATIONS FOR DATA NOT ON THE DRAWINGS.
- E.C. SHALL REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTION OF INTERLOCKING AND CONTROLS OF MECHANICAL UNITS AND THERMOSTAT LOCATIONS.
- COORDINATE OUTLET BOX LOCATIONS WITH MASONRY TO MINIMIZE CUTTING OF BRICK OR BLOCK.
- ALL MOUNTING HEIGHTS TO CENTERLINE OF ITEM UNLESS OTHERWISE NOTED. VERIFY ALL OUTLET LOCATIONS ON THE JOB PRIOR TO ROUGH-IN.
- CONDUIT RUN W/CONDUCTORS AS INDICATED & GROUND WIRE SIZED PER N.E.C. 250.122. CONDUIT SIZE AS REQUIRED.
- WHEN INCREASED CONDUCTOR SIZES ARE SHOWN ON THE PLANS, THE LARGER CONDUCTOR SIZE SHALL BE USED THROUGHOUT THE LENGTH OF THE CIRCUIT, INCLUDING NEUTRAL AND GROUND.
- "CT" INDICATED ADJACENT TO DEVICE INDICATES DEVICE MOUNTED ABOVE BACKSPASH OF COUNTER TOP. VERIFY EXACT HEIGHT WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
- LABEL THE FRONT OF EACH RECEPTACLE COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING CLEAR THERMAL TRANSFER (ELECTRONIC DYMO) LABELS WITH 1/8" HIGH BLACK LETTERS (OR CONTRASTING COLOR IF PLATES ARE BLACK OR BROWN). LABELS SHALL BE SUITABLE FOR INDOOR/OUTDOOR USE. LABEL THE BACK OF EACH LIGHT SWITCH COVERPLATE WITH PANEL DESIGNATION AND CIRCUIT NUMBER USING A FINE BLACK PERMANENT MARKER.
- JUNCTION BOX OR RECEPTACLE FOR DRINKING FOUNTAINS SHALL BE LOCATED BEHIND THE EQUIPMENT SKIRT UNLESS OTHERWISE NOTED. COORDINATE CONNECTION TYPE AND LOCATION WITH EQUIPMENT PROVIDED.
- PROVIDE 18" LONG (MIN.) CONDUIT SLEEVES THRU ALL WALLS WHERE CABLES ARE INDICATED OR REQUIRED TO PASS THRU WALLS. PROVIDE BUSHINGS ON BOTH ENDS. SIZE CONDUIT FOR CABLES INSTALLED. AT CABLE TRAYS, PROVIDE ONE 4" CONDUIT SLEEVE FOR EACH 4" WIDTH OF CABLE TRAY. MAXIMUMS SHALL BE:
 1" C. = 10 CABLES
 2 1/2" C. = 20 CABLES
 3" C. = 30 CABLES
 4" C. = 50 CABLES
- ALL RECEPTACLES ON EMERGENCY POWER SHALL BE RED WITH MATCHING RED COVERPLATES. REFERENCE SPECIFICATION SECTION 262726.

ELECTRICAL SHEET INDEX

SHEET NO.	DESCRIPTION
E001	ELECTRICAL LEAD SHEET
E101	DEMOLITION FLOOR PLAN
E110	ELECTRICAL SITE PLAN
E111	POWER FLOOR PLAN
E121	LIGHTING FLOOR PLAN
E501	ELECTRICAL DETAILS
E601	ELECTRICAL ONE-LINE DIAGRAM DEMOLITION
E602	ELECTRICAL ONE-LINE DIAGRAM PROPOSED
E611	ELECTRICAL SCHEDULES

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL LEAD SHEET			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A.			
303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E001





A DEMOLITION FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0' 2' 4' 6' 10'

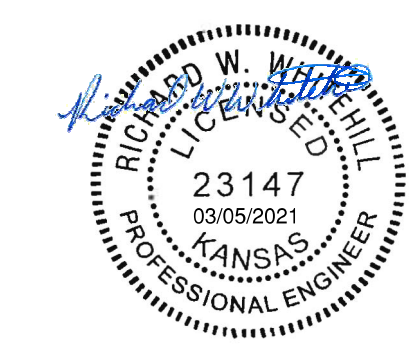
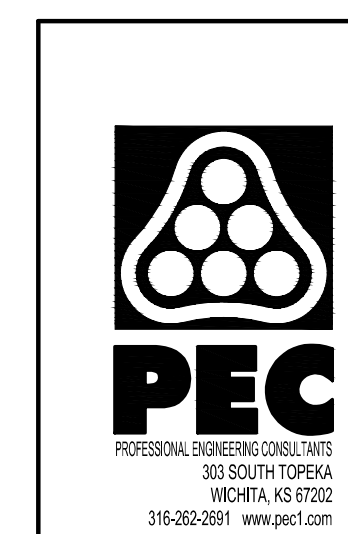
DEMOLITION NOTES:

- DEMOLITION PLANS SHOW THE GENERAL EXTENT OF THE ELECTRICAL DEMOLITION WORK. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT BEING REMOVED, SEE MECHANICAL PLANS. OWNER SHALL HAVE THE OPTION TO RETAIN REUSABLE ITEMS, SUCH AS COVERPLATES, RECEPTACLES, LIGHTS, PANELS, ETC. NOT BEING USED IN THE FINISHED WORK. COORDINATE WITH OWNER PRIOR TO STARTING DEMOLITION. PROPERLY AND LEGALLY DISPOSE OF ALL EQUIPMENT AND MATERIALS BEING REMOVED.
- REMOVE ALL CONDUIT LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS. PLUG BOTH ENDS OF REMAINING CONDUIT IN WALL OR FLOOR WHERE CUT.
- ELECTRICAL OUTLETS, ETC. POSSIBLY CONCEALED BY STORAGE SHELVING, CASEWORK, FURNITURE, ETC. ARE NOT SHOWN AND MAY REQUIRE REMOVAL.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL OPENINGS IN EXISTING CONSTRUCTION AFTER REMOVAL OF EQUIPMENT, RACEWAY SYSTEMS, OUTLET BOXES, ETC.
- WHERE EQUIPMENT AND OTHER DEVICES ARE BEING REMOVED, THE CIRCUITING SHALL BE REMOVED, IF POSSIBLE, BACK TO POINT OF SUPPLY. WHERE REQUIRED, CIRCUITING SHALL BE EXTENDED TO MAINTAIN CONTINUITY OF THE CIRCUIT OR OPERATION OF THE SYSTEM.
- ALL DEVICES SHOWN DASHED ON THE DEMOLITION PLAN(S) SHALL BE REMOVED, UNLESS NOTED OTHERWISE.
- PROVIDE MATCHING BLANK COVERPLATES WHERE DEVICES ARE BEING REMOVED FROM FLUSH-MOUNTED OUTLET BOXES IN EXISTING WALLS TO REMAIN.
- FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO BEGINNING WORK.

KEYED NOTES:

- ① FIXTURE TO BE REMOVED. EXISTING BRANCH CIRCUIT AND CONTROLS TO REMAIN TO CONNECT TO PROPOSED FIXTURE.
- ② FIXTURE TO BE REMOVED. EXISTING CONDUIT AND WIRING SERVING FIXTURE TO BE REMOVED BACK TO POINT OF SUPPLY. CONTRACTOR TO ENSURE CONTINUITY OF CIRCUIT SERVING REMAINING FIXTURES IN SPACE.
- ③ EXISTING UH-4 TO BE RELOCATED. REFER TO POWER PLANS FOR PROPOSED LOCATION.
- ④ EXISTING OVERHEAD DOOR DISCONNECT SWITCH AND PUSH-BUTTON CONTROLS TO BE RELOCATED. CONDUIT AND WIRING TO BE EXTENDED AND REWORKED AS NEEDED. REFER TO POWER PLAN FOR PROPOSED LOCATION.
- ⑤ EXISTING RECEPTACLE TO BE RELOCATED, REFER TO POWER PLAN FOR PROPOSED LOCATION.

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
DEMOLITION FLOOR PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E101

ELECTRICAL SITE PLAN NOTES:

- UNLESS OTHERWISE NOTED, ALL CONDUIT ROUTED ON SITE SHALL BE 1" MINIMUM.
- ALL RISERS SHALL BE PVC COATED RIGID GALVANIZED STEEL (RGS) ALL ELLS BELOW GRADE SHALL BE PVC COATED RIGID GALVANIZED STEEL (RGS). PROVIDE WITH PVC TO STEEL ADAPTER(S) AS NECESSARY. (THIS REQUIREMENT SHALL NOT APPLY TO FIXTURE POLE BASES)
- ALL ELECTRICAL WORK AND FEES ASSOCIATED WITH UTILITIES SHALL BE VERIFIED AND COORDINATED WITH LOCAL SERVICE PROVIDER PRIOR TO BID.
- CONTRACTOR SHALL REFERENCE ALL RELATED CONTRACT DOCUMENTS, SITE SURVEY, AND OTHER RESOURCES FOR POSSIBLE CONFLICTS WITH OTHER UNDERGROUND UTILITIES. AT UTILITY CROSSINGS, CONTRACTOR SHALL VERIFY UTILITY DEPTHS AND COORDINATE CONDUIT ROUTING AS NECESSARY.
- CONTRACTOR SHALL VERIFY AND COORDINATE EXISTING CONDITIONS OF PROJECT SITE PRIOR TO BID.

KEYED NOTES:

- FLUSH MOUNTED PG SERIES QUAZITE BOX (24"x36" MIN.) WITH GASKETED BOLTED COVER. DEPTH AS NEEDED TO INTERCEPT AND EXTEND (3) 6" CONDUITS, (1) 2" CONDUIT FROM EXISTING DUCT BANK AND (3) ADDITIONAL 1" CONDUITS FOR CONTROLS. BOX TO HAVE MOUSE HOLES AND SIT ON 3" BED OF CRUSHED GRAVEL AND BE FILLED WITH AN ADDITIONAL 6" TO ALLOW FOR DRAINAGE.
- PAD MOUNTED GENERATOR, REFERENCE DETAIL-2/E501 AND 1/E611. GENERATOR ENCLOSURES TO HAVE LATCHING SYSTEM ON ALL ENCLOSURE DOORS TO BE USED DURING MAINTENANCE.
- CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT AND CONTROLS. EXTEND CONDUIT AND WIRING AS REQUIRED. UPDATE PANEL DIRECTORY AS REQUIRED.



20FT OVERALL MOUNTING HEIGHT. REFER TO POLE BASE DETAIL 3/E611. (TYPICAL)

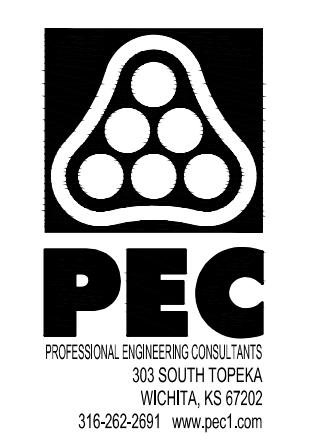
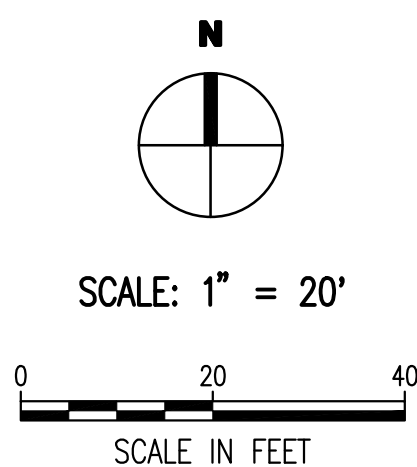
EXISTING DUCT BANK TO BE EXTENDED AS SHOWN. CONTRACTOR TO PROVIDE AN ADDITIONAL (3) 2" CONDUITS FOR CONTROLS IN SAME TRENCH TO EACH FUTURE GENERATOR. FIELD VERIFY LOCATION.

N.E.C. REQUIRED WORKING CLEARANCE. (TYPICAL)

EXISTING UTILITY TRANSFORMER. COORDINATE SITE SHUTOFF WITH EVERGY.

GENERATOR EMERGENCY-PUSH-OFF BUTTON.

A ELECTRICAL SITE PLAN - SOUTHEAST



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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL SITE PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E110

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ELECTRICAL SITE PLAN NOTES:

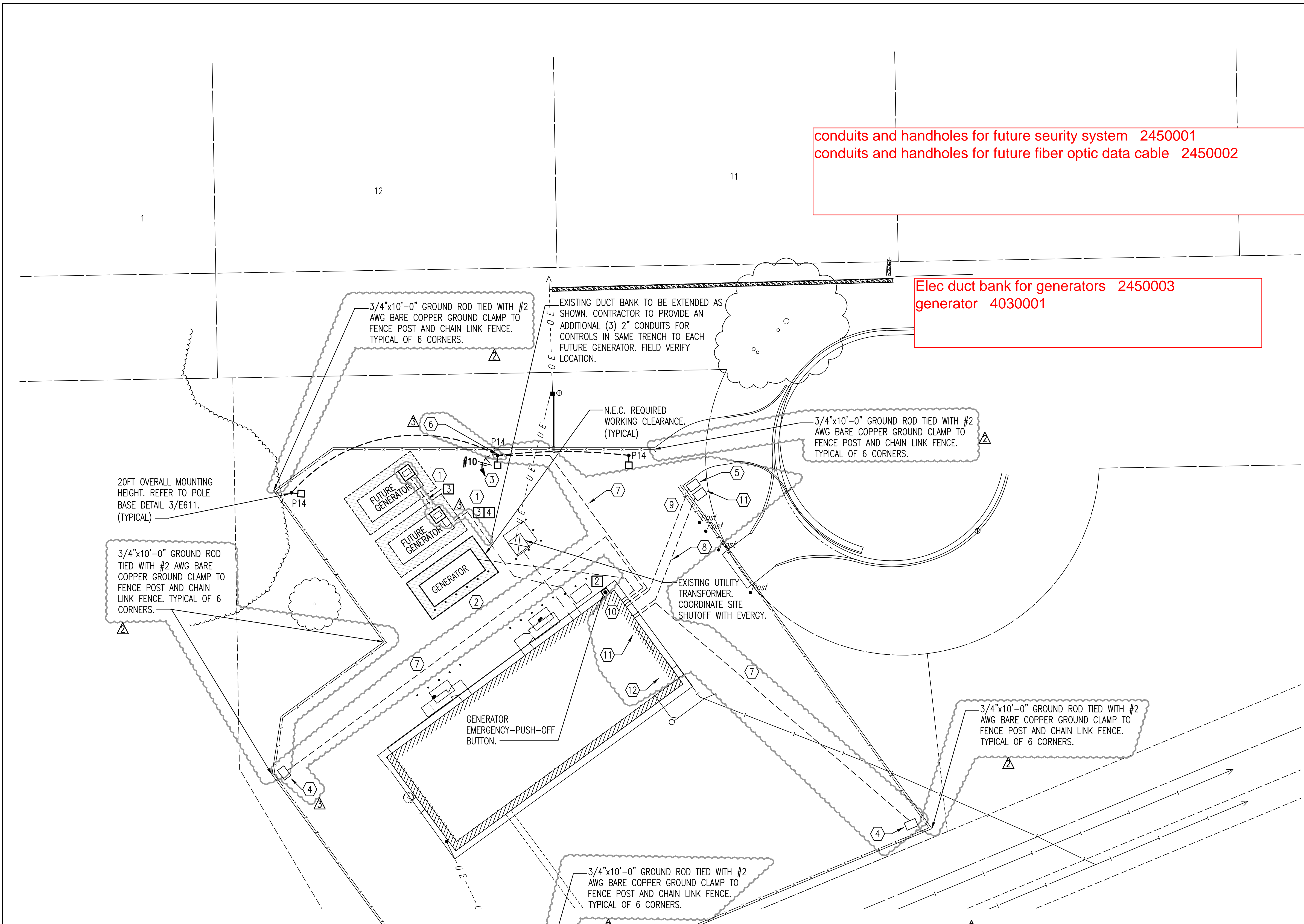
- UNLESS OTHERWISE NOTED, ALL CONDUIT ROUTED ON SITE SHALL BE 1" MINIMUM.
- ALL RISERS SHALL BE PVC COATED RIGID GALVANIZED STEEL (RGS) ALL ELLS BELOW GRADE SHALL BE PVC COATED RIGID GALVANIZED STEEL (RGS). PROVIDE WITH PVC TO STEEL ADAPTER(S) AS NECESSARY. (THIS REQUIREMENT SHALL NOT APPLY TO FIXTURE POLE BASES)
- ALL ELECTRICAL WORK AND FEES ASSOCIATED WITH UTILITIES SHALL BE VERIFIED AND COORDINATED WITH LOCAL SERVICE PROVIDER PRIOR TO BID.
- CONTRACTOR SHALL REFERENCE ALL RELATED CONTRACT DOCUMENTS, SITE SURVEY, AND OTHER RESOURCES FOR POSSIBLE CONFLICTS WITH OTHER UNDERGROUND UTILITIES. AT UTILITY CROSSINGS, CONTRACTOR SHALL VERIFY UTILITY DEPTHS AND COORDINATE CONDUIT ROUTING AS NECESSARY.
- CONTRACTOR SHALL VERIFY AND COORDINATE EXISTING CONDITIONS OF PROJECT SITE PRIOR TO BID.

KEYED NOTES:

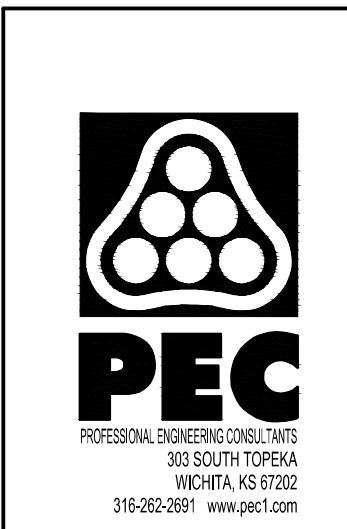
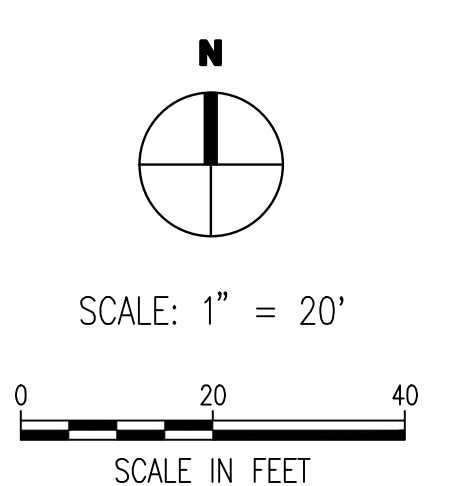
- FLUSH MOUNTED PG SERIES QUATIZE BOX (24"x36" MIN.) ANSI TIER 22 RATED, WITH GASKETED BOLTED COVER. SUBMIT CUT SHEET FOR APPROVAL. DEPTH AS NEEDED TO INTERCEPT AND EXTEND (3) 6" CONDUITS, (1) 2" CONDUIT FROM EXISTING DUCT BANK AND (3) ADDITIONAL 1" CONDUITS FOR CONTROLS. BOX TO HAVE MOUSE HOLES AND SIT ON 3" BED OF CRUSHED GRAVEL AND BE FILLED WITH AN ADDITIONAL 6" TO ALLOW FOR DRAINAGE.
- PAD MOUNTED GENERATOR, REFERENCE DETAIL 2/E501 AND 1/E611. GENERATOR ENCLOSURES TO HAVE LATCHING SYSTEM ON ALL ENCLOSURE DOORS TO BE USED DURING MAINTENANCE.
- CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT AND CONTROLS. EXTEND CONDUIT AND WIRING AS REQUIRED. UPDATE PANEL DIRECTORY AS REQUIRED.
- PROVIDE FLUSH MOUNTED PG SERIES QUATIZE BOX (24"x24" MIN.) ANSI TIER 22 RATED HANDHOLE, WITH GASKETED BOLTED COVER. SUBMIT CUT SHEET FOR APPROVAL. BOX TO HAVE MOUSE HOLES AND SIT ON A BED OF CRUSHED GRAVEL AND BE FILLED WITH AN ADDITIONAL 6" OF CRUSHED GRAVEL TO ALLOW FOR DRAINAGE.
- PROVIDE FLUSH MOUNTED PG SERIES QUATIZE BOX (24"x24" MIN.) ANSI TIER 8 RATED HANDHOLE, WITH GASKETED BOLTED COVER. SUBMIT CUT SHEET FOR APPROVAL. BOX TO HAVE MOUSE HOLES AND SIT ON A BED OF CRUSHED GRAVEL AND BE FILLED WITH AN ADDITIONAL 6" OF CRUSHED GRAVEL TO ALLOW FOR DRAINAGE.
- RUN SPARE CONDUITS UP POLE BASE AND CAP FOR FUTURE SECURITY CAMERAS. PROVIDE STIFFENED POLE AT THIS LOCATION.
- (2) 2" CONDUITS FOR FUTURE SECURITY CAMERAS. RUN TO NEAR FUTURE NETWORK CABINET LOCATION AND CAP.
- (2) 2" CONDUITS FOR FUTURE FIBER CONNECTION. RUN TO NEAR FUTURE NETWORK CABINET LOCATION AND CAP.

conduits and handholes for future security system 2450001
 conduits and handholes for future fiber optic data cable 2450002

Elec duct bank for generators 2450003
 generator 4030001



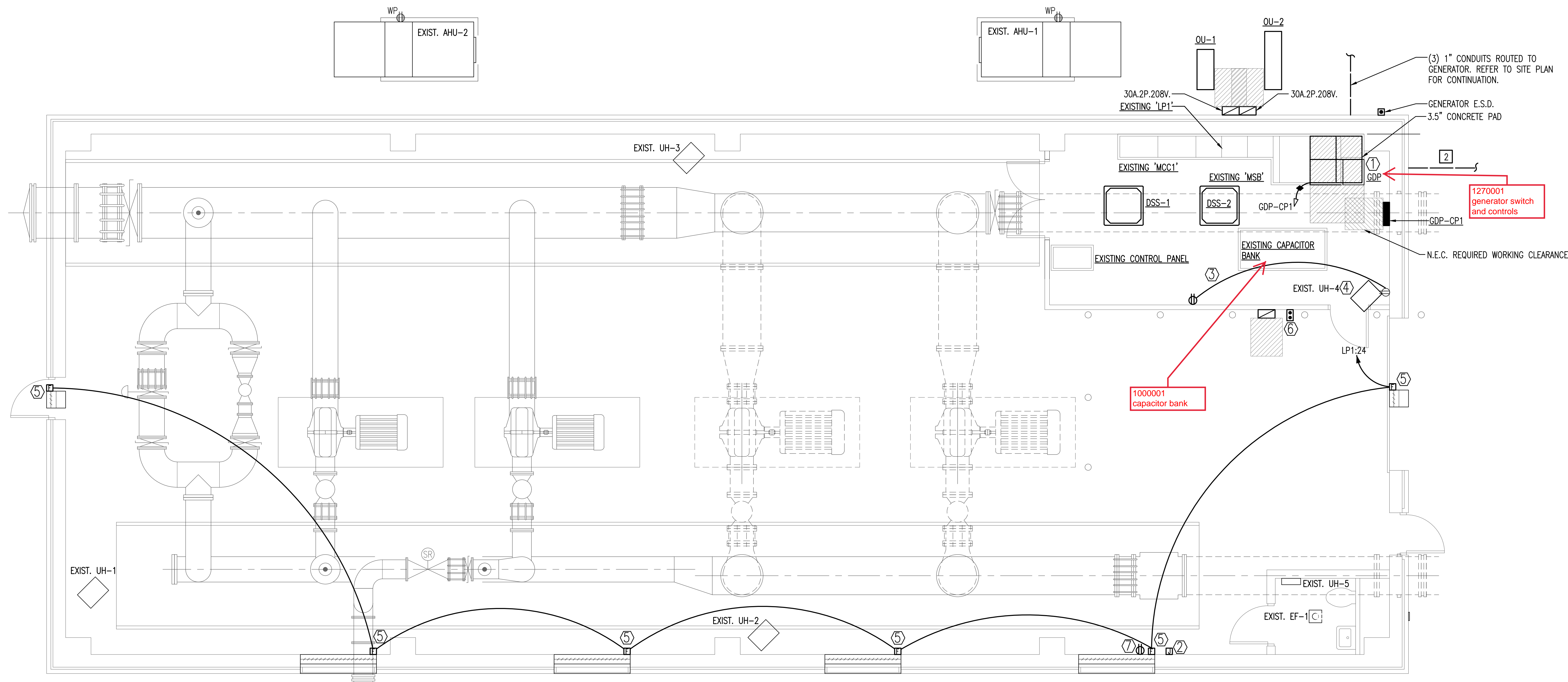
- KEYED NOTES (CONT.):
- (2) 2" CONDUITS FOR FUTURE ACCESS CONNECTION. TERMINATE AT EXISTING SECURITY CABINET.
 - RUN CONDUITS UP WALL TO JUST UNDER EAVE. SEAL PENETRATIONS.
 - FUTURE NETWORK CABINET LOCATION.
 - EXISTING SECURITY CABINET LOCATION.



A ELECTRICAL SITE PLAN - SOUTHEAST

4	ADD CONDUITS FOR FUT SECURITY, ACCESS AND FIBER	RWW	07-19-21
3	ADDENDUM #2		04-29-21
2	ADDENDUM #2		04-29-21
1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL SITE PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A.			
303 S. TOPSIA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E110

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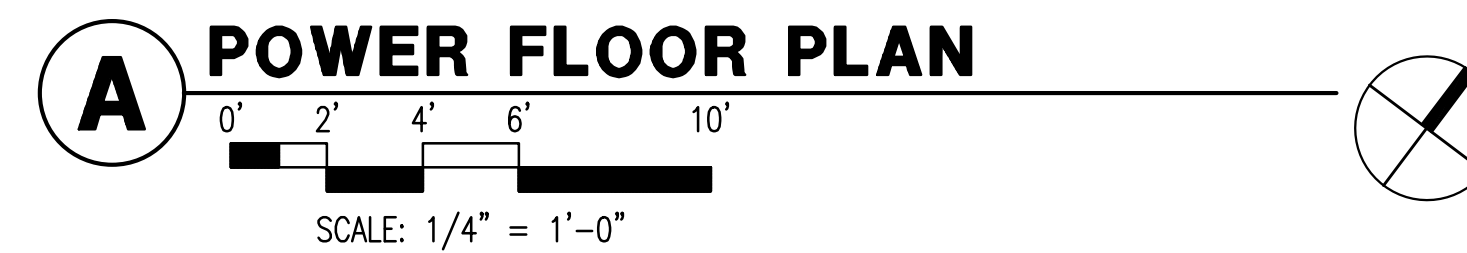


PLAN NOTES:

- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
- A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
- FOR CONNECTION REQUIREMENTS TO MECHANICAL UNITS, SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE.
- FOR ALL PENETRATIONS IN FIRE RATED WALLS AND CEILINGS, PROVIDE AN ASTM E814 COMPLIANT, U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL OR CEILING CONSTRUCTION ASSEMBLY. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE U.L. ASSEMBLY INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN FIRE RATED WALLS OR CEILINGS SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
- OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES OR PROTECTED BY OTHER MEANS ALLOWED BY THE SPECIFIC U.L. ASSEMBLY.

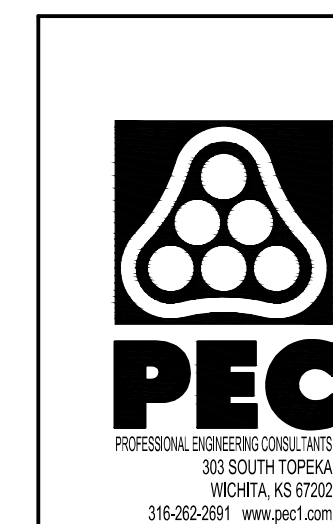
KEYED NOTES:

- GENERATOR SYNCHRONIZATION SWITCHGEAR TO BE SQUARE-D.
- CHLORINE ANALYZER. POWER TO BE SUPPLIED FROM ADJACENT RECEPTACLE. CONTROL POWER TO BE ROUTED AS REQUIRED.
- CONNECT TO EXISTING 120V. RECEPTACLE BRANCH CIRCUIT AS SHOWN ON PLAN.
- EXTEND AND REWORK EXISTING CONDUIT AND WIRING TO PROPOSED LOCATION OF 'UH-4'.
- MOTORIZED LOUVER. PROVIDE FUSTAT FOR CONNECTION TO MOTORIZED LOUVER. COORDINATE MOUNTING LOCATION WITH LOUVER PROVIDED. COORDINATE CONTROLS WITH EXISTING AHUS.
- RELOCATED EXISTING OVERHEAD DOOR DISCONNECT SWITCH AND PUSH-BUTTON CONTROL SWITCH.
- RELOCATED EXISTING RECEPTACLE LOCATION. EXTEND CONDUIT AND WIRING AS REQUIRED.

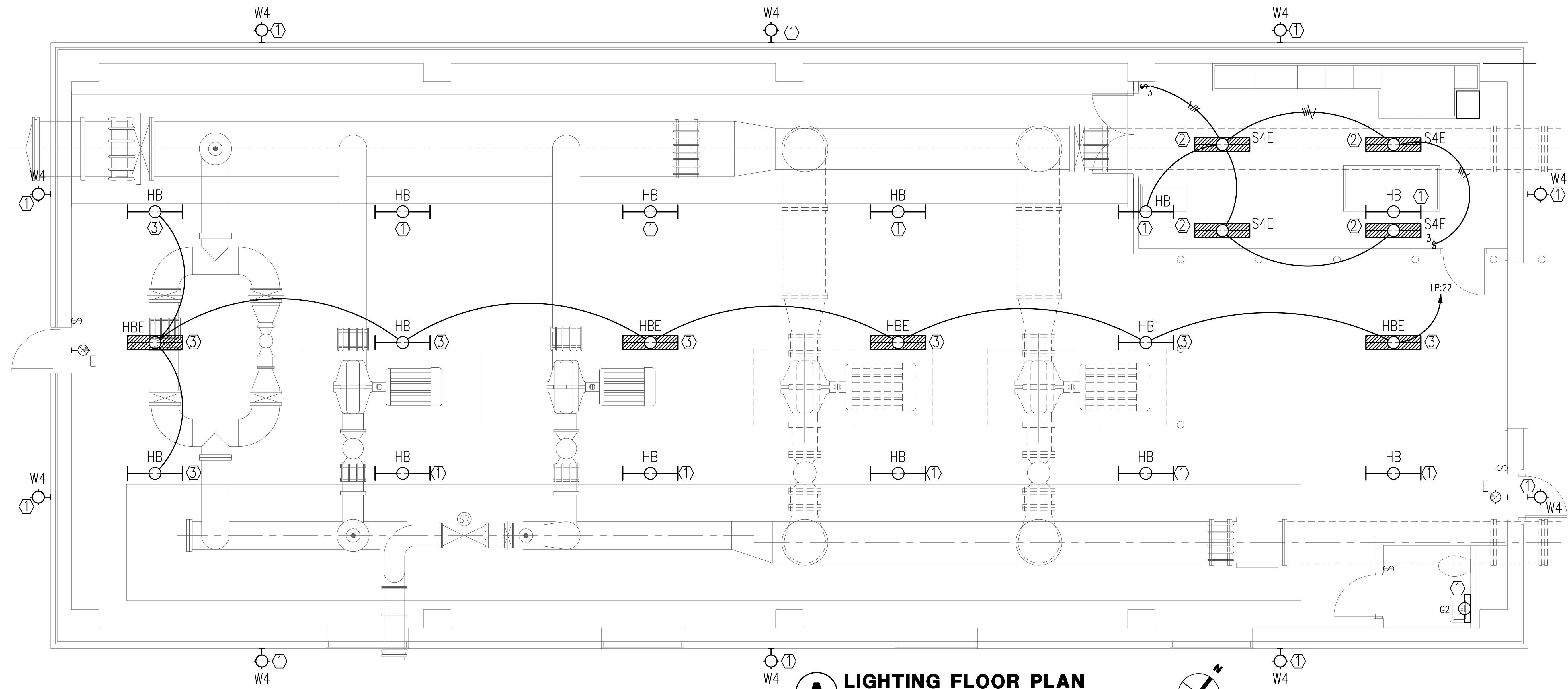


A POWER FLOOR PLAN

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
POWER FLOOR PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E111



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

PLAN NOTES:

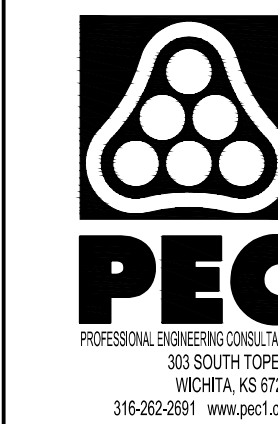
- BRANCH CIRCUITS ARE INDICATED AS ONE CIRCUIT HOME RUNS WITH INDIVIDUAL NEUTRALS. A MAXIMUM OF THREE CIRCUITS (MAXIMUM OF THREE PHASE CONDUCTORS) MAY BE GROUPED IN A SINGLE CONDUIT. WHERE MULTIPLE CIRCUITS ARE LOCATED IN THE SAME RACEWAY, JUNCTION BOX OR ENCLOSURE, NEUTRALS SHALL BE MARKED OR LABELED TO INDICATE WHICH CIRCUIT THEY ARE ASSOCIATED WITH. SEE SPECIFICATION SECTION "LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES" FOR ADDITIONAL INFORMATION.
- A GROUND CONDUCTOR SIZED PER N.E.C. ARTICLE 250 IS REQUIRED IN ALL CONDUITS.
- FOR ALL PENETRATIONS IN FIRE RATED WALLS AND CEILINGS, PROVIDE AN ASTM E814 COMPLIANT, U.L. LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL OR CEILING CONSTRUCTION ASSEMBLY. INSTALL SYSTEM IN STRICT COMPLIANCE WITH THE U.L. ASSEMBLY INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- ALL PIPING, CONDUIT, AND OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) IN FIRE RATED WALLS OR CEILINGS SHALL BE CONSTRUCTED OF NON-COMBUSTIBLE MATERIAL.
- OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES OR PROTECTED BY OTHER MEANS ALLOWED BY THE SPECIFIC U.L. ASSEMBLY.
- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF STC RATED WALLS. OUTLET BOXES (ELECTRIC, TELEPHONE, COMPUTER, ETC.) ON OPPOSITE SIDES OF STC RATED WALLS SHALL BE LIMITED TO TWO OUTLET BOXES PER STUD SPACE AND COVERED WITH "PUTTY PAD" TYPE MOLDABLE FIRE BARRIER.

KEYED NOTES:

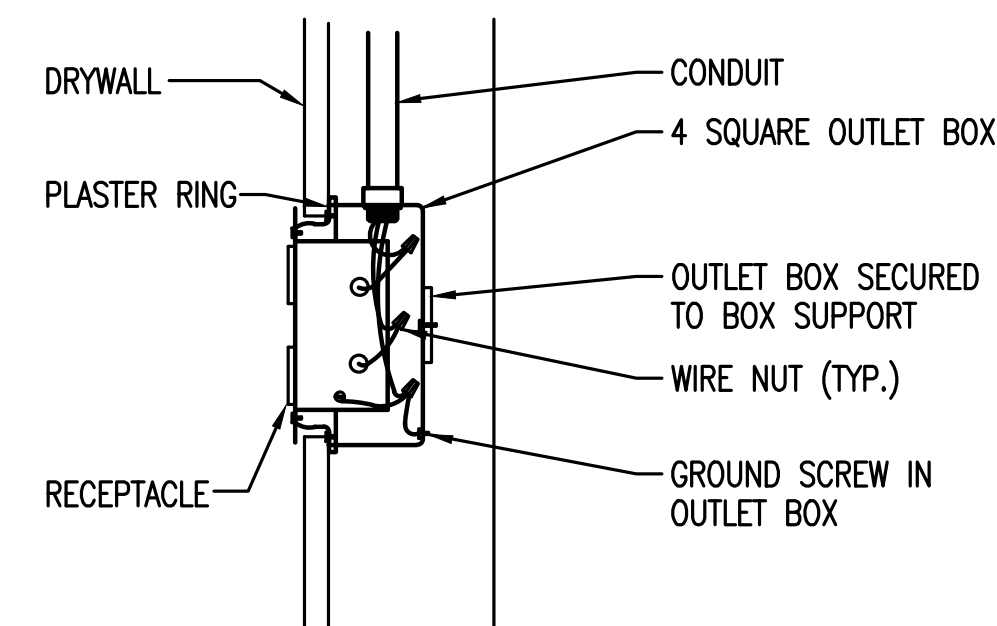
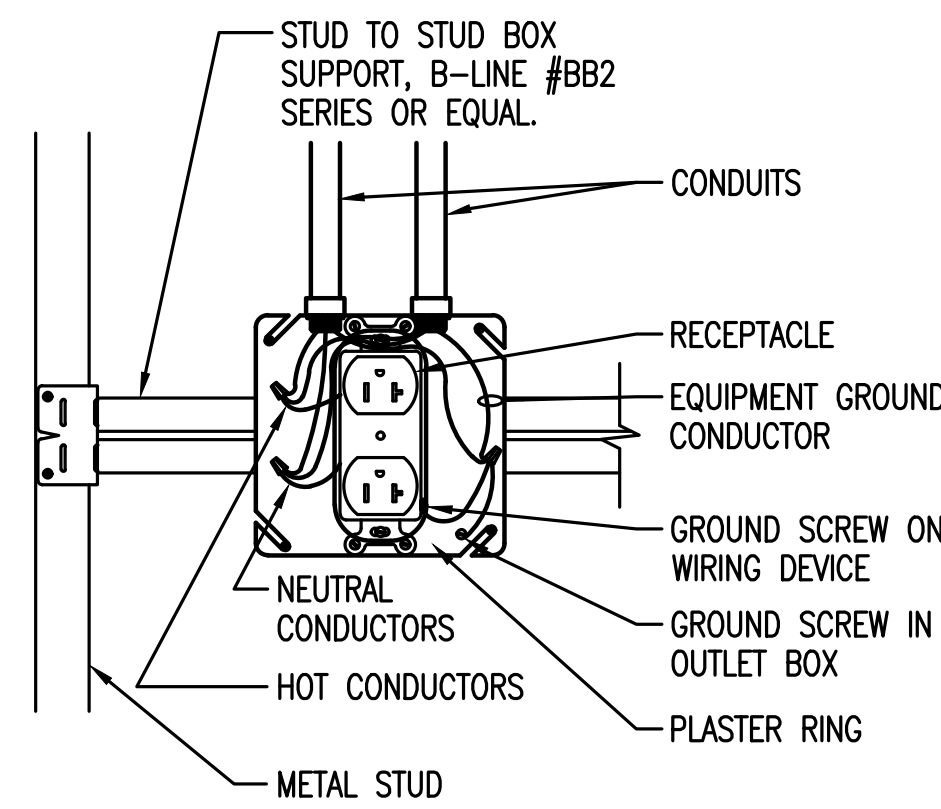
- ① FIXTURE TO BE CONNECTED TO EXISTING LIGHTING BRANCH CIRCUIT AND CONTROLS.
- ② FIXTURE TO BE SUSPENDED FROM BOTTOM OF STRUCTURE SUCH THAT BOTTOM OF FIXTURE IS 9'-0" AFF AND CONNECTED TO EXISTING LIGHTING BRANCH CIRCUIT. PROVIDE CONTROLS AS SHOWN ON PLAN.
- ③ FIXTURE TO BE CONNECTED TO EXISTING LIGHTING CONTROLS SERVING SPACE. FIXTURE TO BE CONNECTED TO PROPOSED LIGHTING CIRCUIT INDICATED ON PLAN.

restroom light - 7310002
 MCC Room lights - 7310003

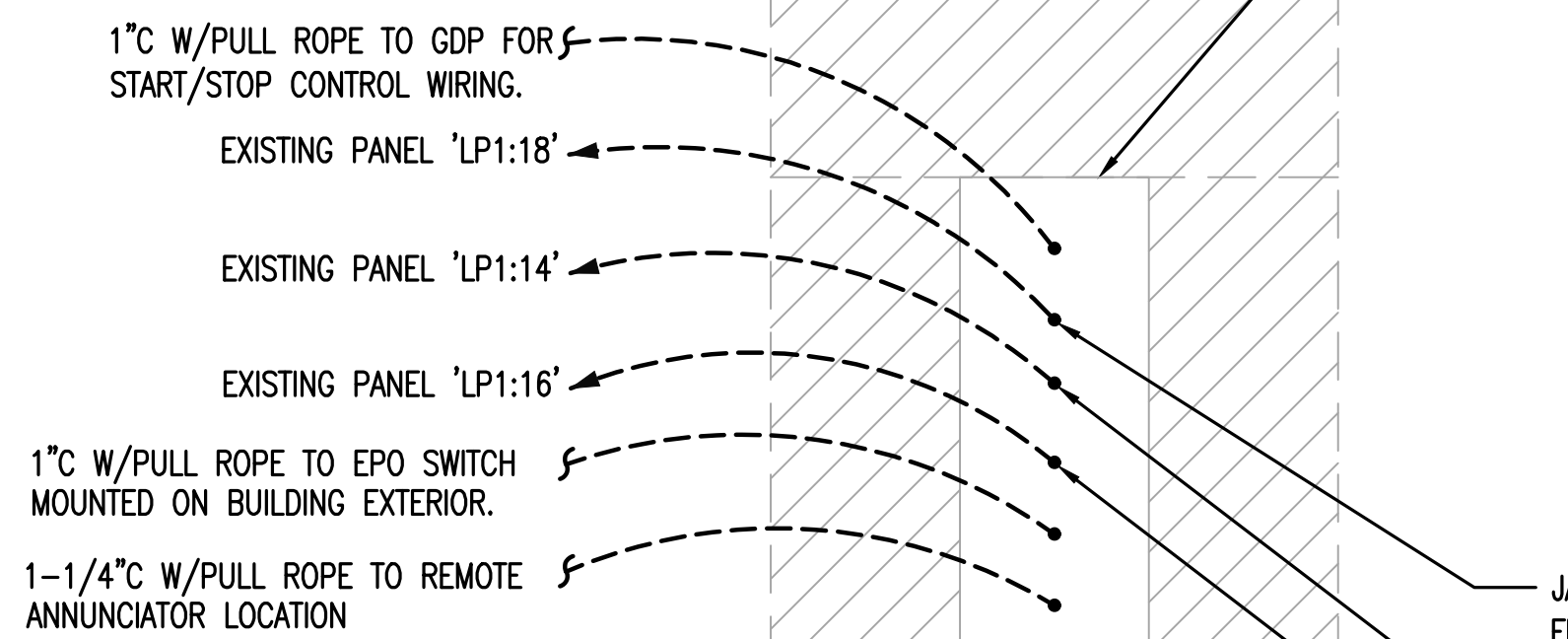
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
LIGHTING FLOOR PLAN			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E121



1 TYPICAL RECEPTACLE MOUNTING DETAIL
NO SCALE

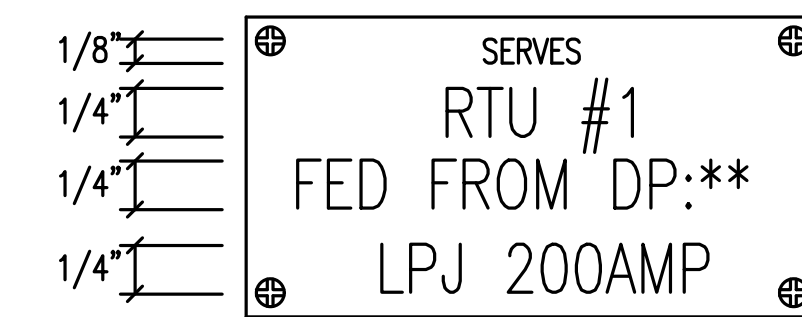


NOTE: ALL CONDUIT SHALL BE 1" MINIMUM UNLESS OTHERWISE NOTED.

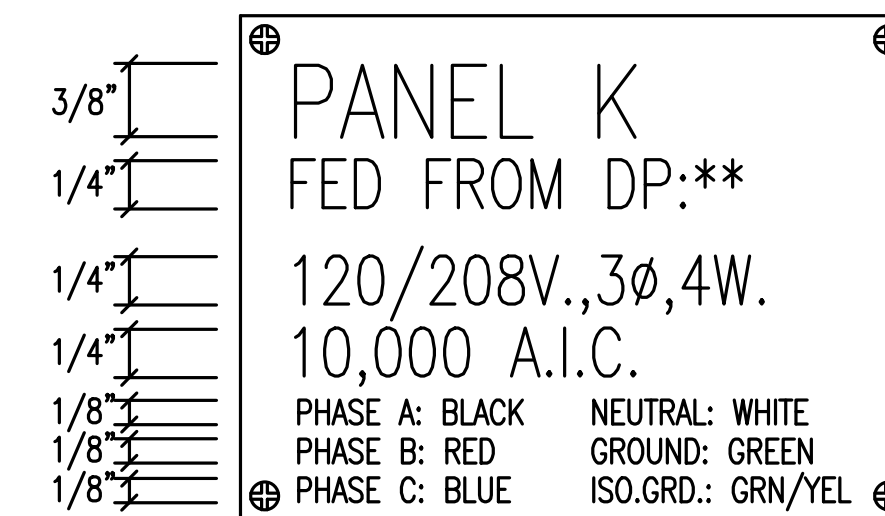
2 ENLARGED GENERATOR DETAIL
NO SCALE



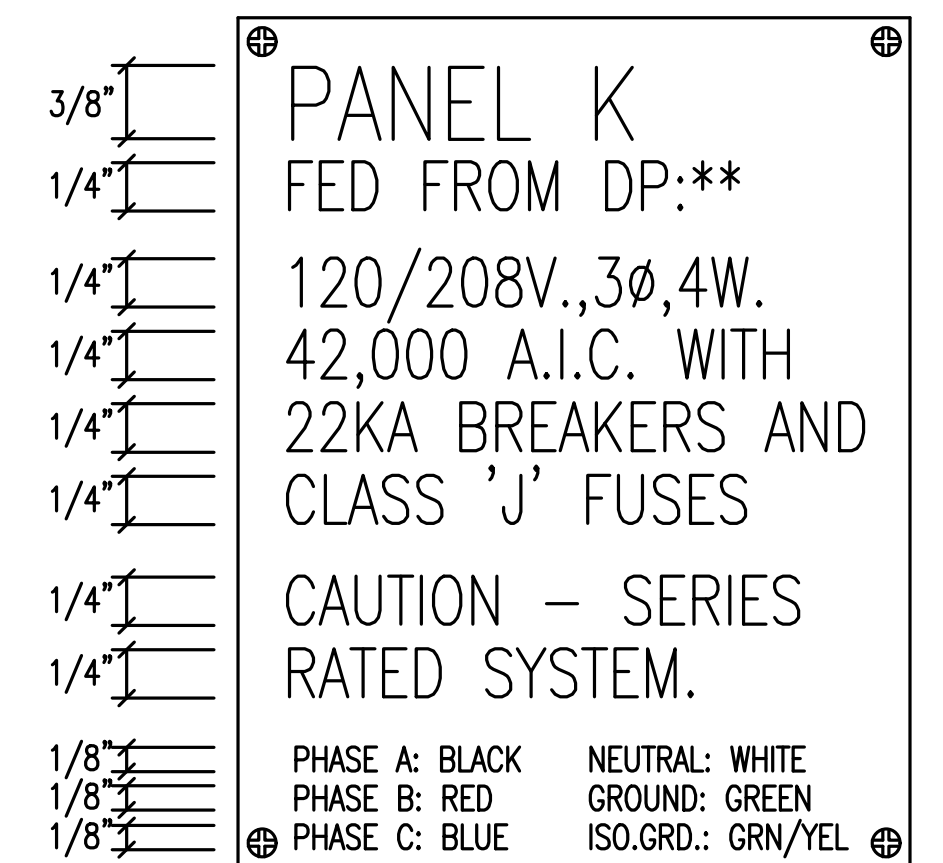
SWITCHBOARD/DISTRIBUTION PANEL/MOTOR CONTROL CENTER BREAKER/SWITCH



DISCONNECT SWITCH



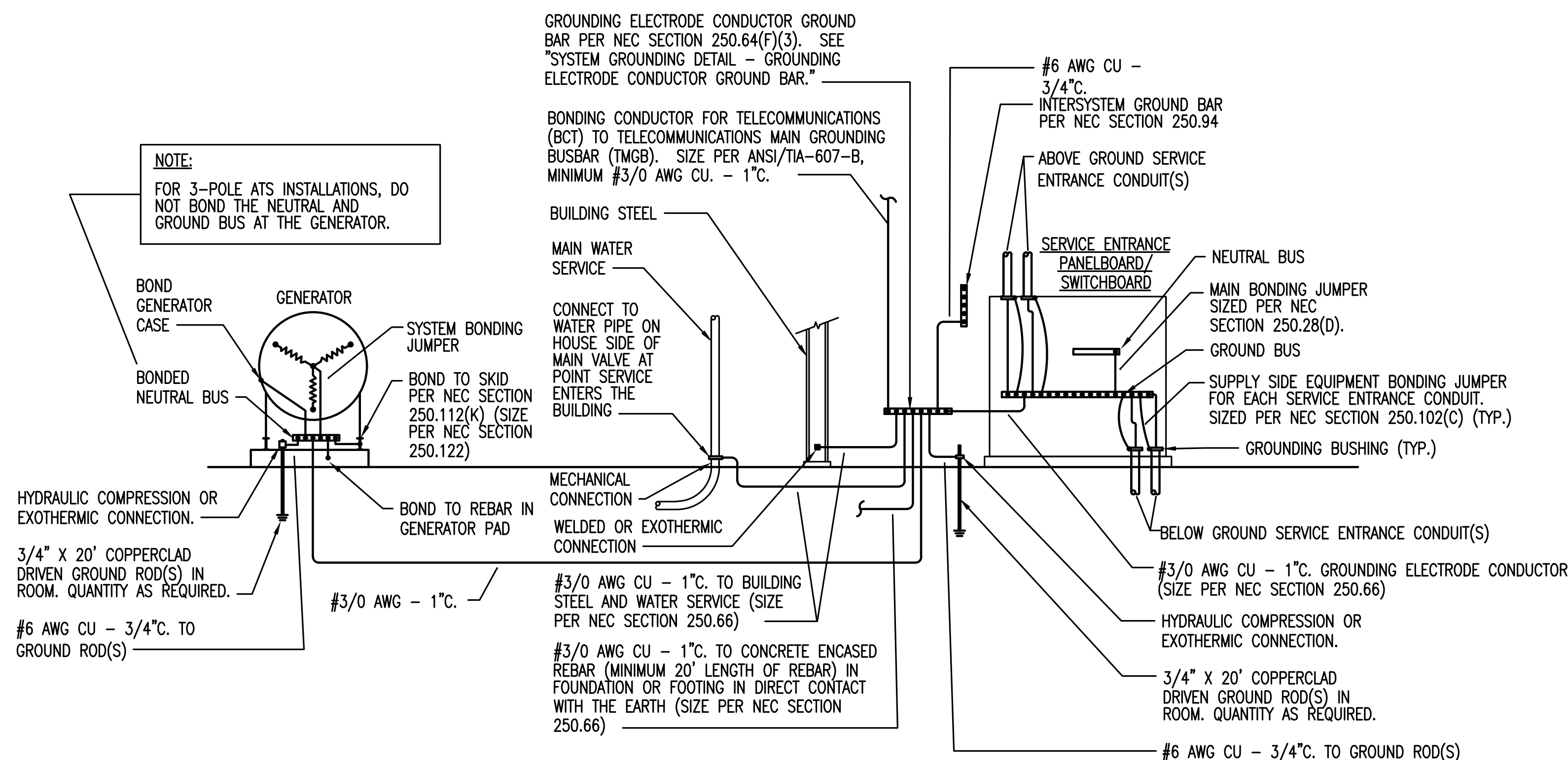
BRANCH CIRCUIT/DISTRIBUTION PANEL



BRANCH CIRCUIT/DISTRIBUTION PANEL SERIES RATED

4 TYPICAL NAME PLATES
NO SCALE

NOTE: SEE SPECIFICATION SECTION 260500 FOR NAME PLATE COLOR REQUIREMENTS.



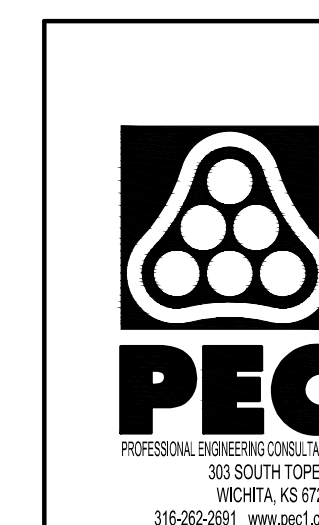
NOTES:

1. PROVIDE OTHER GROUNDING CONNECTIONS AS SPECIFIED IN NEC SECTION 250.50.
2. LABEL EACH GROUNDING ELECTRODE CONDUCTOR AND BONDING JUMPER.
3. WHERE CONDUCTORS ARE ROUTED IN FERROUS CONDUIT, BOND BOTH ENDS OF THE CONDUIT TO THE CONDUCTOR.

3 SYSTEM GROUNDING DETAIL - PANEL WITH 4-POLE ATS
NO SCALE

DESIGNER NOTE: USE WHERE SERVICE HAS GROUND FAULT PROTECTION.

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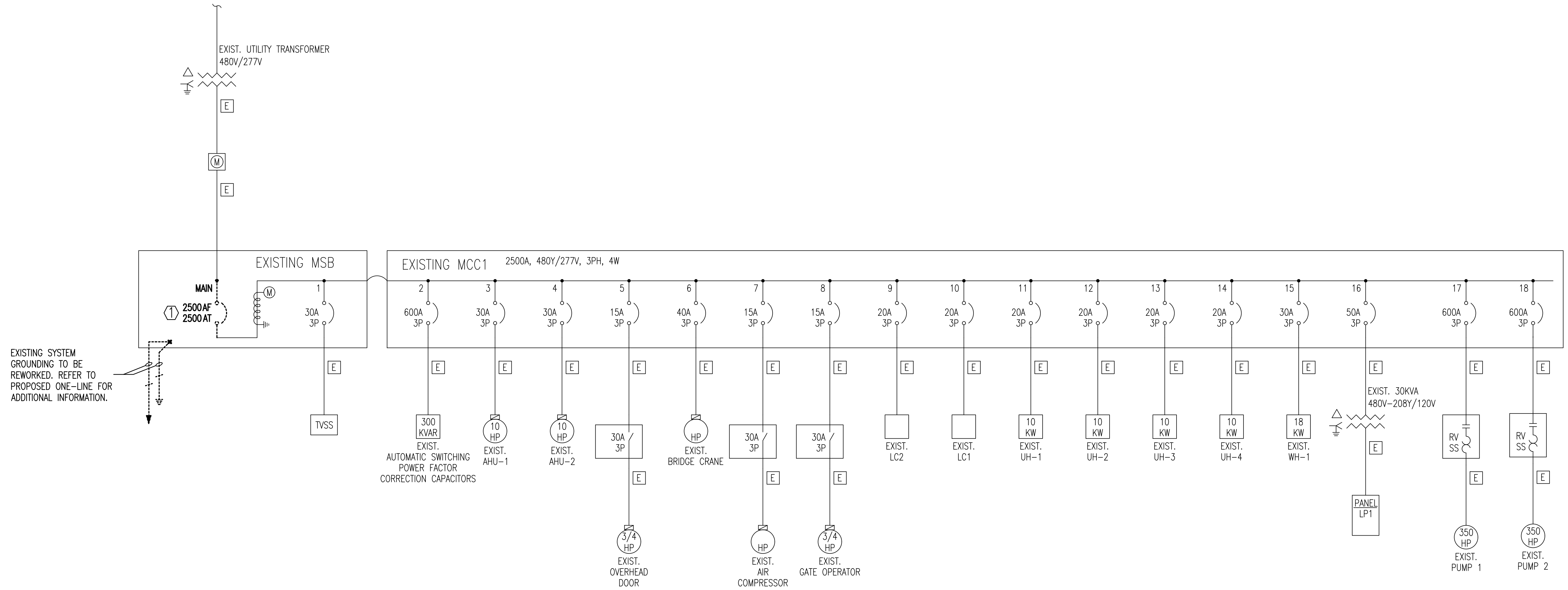
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL DETAILS			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E501

KEYED NOTES:

- ① EXISTING BREAKER TO BE REWORKED TO INCLUDE GROUND FAULT PROTECTION. REFER TO PROPOSED ONE-LINE DIAGRAM.

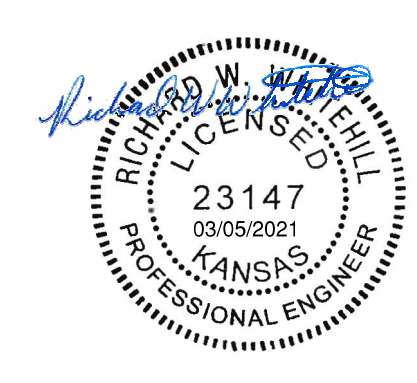
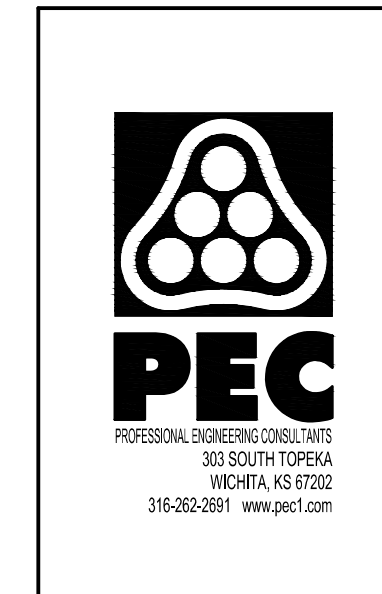
GENERAL ONE-LINE DIAGRAM NOTES:

- UNLESS OTHERWISE NOTED, ALL CIRCUIT BREAKERS AND/OR SWITCHES ARE THREE POLE.
- ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A LIGHT LINE, IS EXISTING TO REMAIN.
- ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A DARK LINE, IS NEW WORK UNDER THIS CONTRACT.
- ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A DARK DASHED LINE, IS TO BE REMOVED UNDER THIS CONTRACT.



1 ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION
NO SCALE

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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION			
STANDBY POWER GENERATION - SOUTHEAST PUMP STATION			
Professional Engineering Consultants, P.A. 303 S. TOPPEKA • WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	DCG	Job No.	180537-000
Drawn by	JAR	Checked by	DCG
Date	MARCH 2021	Dwg No.	E601

FEEDER SCHEDULE

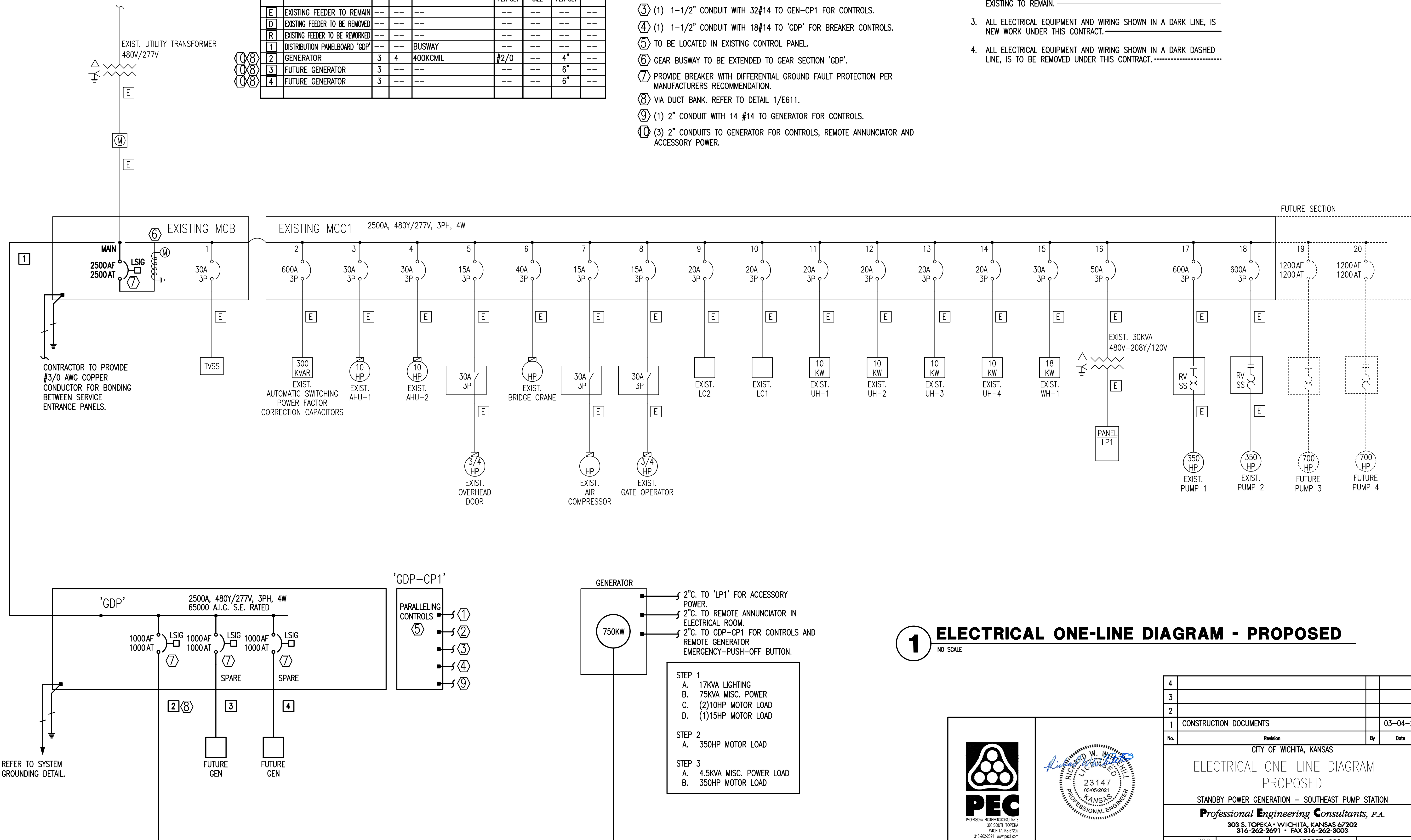
DESIG.	EQUIPMENT SERVED	CONDUCTORS			GROUND SIZE PER SET	ISOLATED GROUND SIZE	CONDUIT SIZE PER SET	SPARE CONDUIT
		SETS	NO.	SIZE				
E	EXISTING FEEDER TO REMAIN	--	--	--	--	--	--	--
D	EXISTING FEEDER TO BE REMOVED	--	--	--	--	--	--	--
R	EXISTING FEEDER TO BE REMOVED	--	--	--	--	--	--	--
1	DISTRIBUTION PANELBOARD 'GDP'	--	--	BUSWAY	--	--	--	--
2	GENERATOR	3	4	400KCMIL	#2/0	--	4"	--
3	FUTURE GENERATOR	3	--	--	--	--	6"	--
4	FUTURE GENERATOR	3	--	--	--	--	6"	--

KEYED NOTES:

- ① (1) 1" CONDUIT WITH 2 #14 AWG TO GENERATOR EMERGENCY-PUSH-OFF BUTTON.
- ② (2) 2" CONDUIT WITH PULL ROPE FOR CONTROLS CABLING TO EACH HANDHOLE FOR FUTURE GENERATORS.
- ③ (1) 1-1/2" CONDUIT WITH 32#14 TO GEN-CP1 FOR CONTROLS.
- ④ (1) 1-1/2" CONDUIT WITH 18#14 TO 'GDP' FOR BREAKER CONTROLS.
- ⑤ TO BE LOCATED IN EXISTING CONTROL PANEL.
- ⑥ GEAR BUSWAY TO BE EXTENDED TO GEAR SECTION 'GDP'.
- ⑦ PROVIDE BREAKER WITH DIFFERENTIAL GROUND FAULT PROTECTION PER MANUFACTURERS RECOMMENDATION.
- ⑧ VIA DUCT BANK. REFER TO DETAIL 1/E611.
- ⑨ (1) 2" CONDUIT WITH 14 #14 TO GENERATOR FOR CONTROLS.
- ⑩ (3) 2" CONDUITS TO GENERATOR FOR CONTROLS, REMOTE ANNUNCIATOR AND ACCESSORY POWER.

GENERAL ONE-LINE DIAGRAM NOTES:

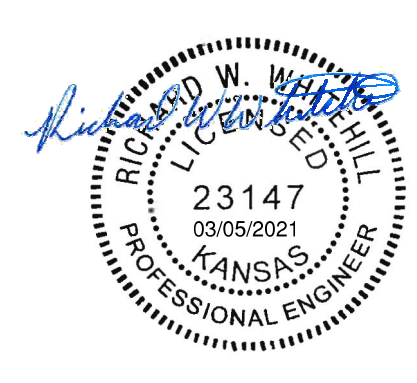
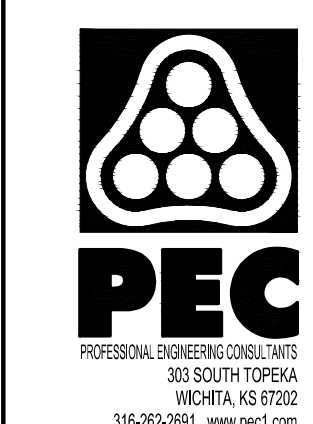
- 1. UNLESS OTHERWISE NOTED, ALL CIRCUIT BREAKERS AND/OR SWITCHES ARE THREE POLE.
- 2. ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A LIGHT LINE, IS EXISTING TO REMAIN.
- 3. ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A DARK LINE, IS NEW WORK UNDER THIS CONTRACT.
- 4. ALL ELECTRICAL EQUIPMENT AND WIRING SHOWN IN A DARK DASHED LINE, IS TO BE REMOVED UNDER THIS CONTRACT.



1 ELECTRICAL ONE-LINE DIAGRAM - PROPOSED

NO SCALE

- STEP 1
- A. 17KVA LIGHTING
 - B. 75KVA MISC. POWER
 - C. (2)10HP MOTOR LOAD
 - D. (1)15HP MOTOR LOAD
- STEP 2
- A. 350HP MOTOR LOAD
- STEP 3
- A. 4.5KVA MISC. POWER LOAD
 - B. 350HP MOTOR LOAD



4			
3			
2			
1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
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Date	MARCH 2021	Dwg No.	E602

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LIGHTING FIXTURE SCHEDULE (P.E.C.)

FIXT. LTR.	MANUFACTURER CATALOG NUMBER	MANUFACTURER CATALOG NUMBER	MANUFACTURER CATALOG NUMBER	MANUFACTURER CATALOG NUMBER	DESCRIPTION SEE NOTES	LAMP TYPE		LENS/LOUVER\FINISH	W	L	D
						NO.	VOLTS				
D	EXISTING FIXTURE TO BE REMOVED										
HB	WILLIAMS 81-4-L180/840-FP-C22/118/10-DRY-UNV	COLUMBIA PEL4-40MM-FP-EU-LHVQM10	LITHONIA 83N-1800LM-FST-FL-90-MWLT-G210-4K-80CR-UNV	OR PRE-APPROVED EQUAL	LOW BAY WHITE FINISH	126W	UNV	18000LM;4000K;80CRI			
HBE	WILLIAMS 81-4-L180/840-FP-C22/118/10-DRY-UNV-EM/10W	COLUMBIA PEL4-40MM-FP-EU-LHVQM10-ELL14	LITHONIA 83N-1800LM-FST-FL-90-MWLT-G210-4K-80CR-UNV-520K	OR PRE-APPROVED EQUAL	LOW BAY WHITE FINISH	126W	UNV	18000LM;4000K;80CRI SURFACE MOUNT TO BOTTOM OF STRUCTURE W/90 MIN BATTERY			
G2	WILLIAMS 75-2-L25/840-DRY-UNV	COLUMBIA MPS2-40-MW-FW-EU	LITHONIA ZLN-124-2500LM-FST-MWLT-4K-80CR-UNV	OR PRE-APPROVED EQUAL	WALL MTD STRIP	19W	UNV	1800LM;4000K;80CRI			
P14	MCGRAW EDISON GLEON-SAZA-730-U-14FT-AP	OR PRE-APPROVED EQUAL			POLE MTD BLACK	66W	UNV	9500LM;3000K;70CRI BLACK POLE AND FIXTURE			
S4E	WILLIAMS 75-4-L50/840-AC/D24-DRY-UNV-EM/10W	COLUMBIA MPS4-40-ML-FW-EU-CM24S33-KIT-ELL14	LITHONIA ZLN-148-5000LM-FST-MWLT-4K-80CR-UNV-720K-FL000P	OR PRE-APPROVED EQUAL	4' STRIP	34W	UNV	5000LM;4000K;80CRI WHITE W/90 MIN BATTERY			
W4	LUMARK XTORG6B-Y-BK	GARDCO 121-16L-1200-MW-04-4-UNV-BK	LITHONIA KAXW-P2-30K-R4-120-DBLXD	OR PRE-APPROVED EQUAL	TYPE IV WALL PACK	60W	UNV	6000LM;3000K;70CRI BLACK			

- GENERAL CONTRACTOR SHALL PROVIDE FIREPROOFING AROUND RECESSED FIXTURES INSTALLED IN FIRE RATED CEILING PER U.L. REQUIREMENTS. ELECTRICAL CONTRACTOR WILL COORDINATE.
- MANUFACTURERS LISTED IN THIS SCHEDULE OR APPROVED BY WRITTEN ADDENDUM WILL BE THE ONLY APPROVED MANUFACTURERS TO BID THE LIGHTING FIXTURES FOR THIS PROJECT. CONTRACTORS AND SUPPLIERS USING PRICING FROM MANUFACTURERS NOT LISTED ON SCHEDULE OR BY ADDENDUM DO SO AT THEIR OWN RISK.
- LIGHT FIXTURE SELECTIONS ARE BASED ON THE MANUFACTURER IN THE LEFT MOST COLUMN AS LISTED IN THE SCHEDULE. FIXTURES APPROVED AS EQUALS IN THIS SCHEDULE OR BY ADDENDUM SHALL BE EQUAL TO THE UNIT SPECIFIED IN THE LEFT MOST COLUMN, IE: SPRING LOADED LATCHES, POST PAINTED FINISH, AND PHOTOMETRICS.
- ALL LIGHT FIXTURES SHALL BE SECURED TO THE CEILING FRAMING SYSTEM BY MECHANICAL MEANS (SUCH AS BOLTS, SCREWS, OR RIVETS) OR BY CLIPS IDENTIFIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER AND LIGHT FIXTURE.
- LIGHT FIXTURES SHALL BE PROVIDED WITH 0-10V DIMMING DRIVERS. DRIVERS SHALL BE CAPABLE OF DIMMING TO A MINIMUM OF 10% OF TOTAL LIGHT OUTPUT. LED DRIVERS SHALL HAVE A DISCONNECTING MEANS MEETING THE REQUIREMENTS OF NEC SECTION 410.130(G), EXCEPT FOR THOSE INSTALLED IN CORD-AND-PLUG CONNECTED FIXTURES. WHERE APPLICABLE, WHEN DIMMING SWITCHES ARE NOT PROVIDED AS PART OF THE DESIGN, CONTRACTOR SHALL CAP OFF 0-10V DIMMING WIRES FOR FUTURE EXTENSION BY OWNER.
- 20'-0" OVERALL MOUNTING HEIGHT, CONTRACTOR TO PROVIDE ROUND TAPERED STEEL POLE. PROVIDE WITH HAND-HOLES AND BOLT COVERS. POLE TO MEET TOTAL FIXTURE EPA REQUIREMENTS AT 90MPH WITH A 1.3 GUST FACTOR.

EQUIPMENT CONNECTION SCHEDULE

MECHANICAL EQUIPMENT CONNECTIONS											
UNIT DESIG.	UNIT VOLTAGE	LOAD			PANEL DEVICE			DEVICE AT UNIT			REMARKS OR SEE THE FEEDER SCHEDULE OR NOTES BELOW
		H.P.	FLA	KVA	CIRCUIT NUMBER	BKR/SW FUSE	NEMA START SIZE	BKR/SW FUSE	NEMA START SIZE	OTHER	
OU	OUTDOOR UNIT										
1	208/1	16A	16.0	3.328	LP1:17	40	2	30	25	1" NEMA-3R	1 2 #8 AWG THHN; #10 AWG GRD; 3/4" C.
2	208/1	16A	16.0	3.328	LP1:21	40	2	30	25	1" NEMA-3R	1 2 #8 AWG THHN; #10 AWG GRD; 3/4" C.
DSS	DUCTLESS SPLIT SYSTEM										
1	208/1				LP1:17	40	2			2 MMS	1 2 #8 AWG; #10 AWG GRD; 3/4"
2	208/1				LP1:21	40	2			2 MMS	1 2 #8 AWG; #10 AWG GRD; 3/4"

- ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.
- REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.
- SIZE FUSES FOR MOTOR FUSTATS BASED ON 125% OF MANUFACTURER'S NAMEPLATE FULL LOAD AMPERAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- MINI-SPLIT SYSTEM: INDOOR UNIT IS FED FROM THE OUTDOOR UNIT, PROVIDE INTERCONNECTING WIRING AS REQUIRED. PROVIDE A 3-POLE MANUAL MOTOR STARTING SWITCH WITHOUT OVERLOADS FOR INDOOR LOCAL DISCONNECTING MEANS. PROVIDE WITH APPROPRIATE COVERPLATE. FIELD VERIFY ALL CONNECTION REQUIREMENTS PRIOR TO ROUGH-IN WITH EQUIPMENT PROVIDED.

EXISTING CONTROL PANEL

LOCATION: BOOSTER PUMP STATION NEMA-1

CIRCUIT NO.	EQUIPMENT SERVED/ MARK	CONNECT				DESCRIPTION/FUNCTION	CONDUCTORS IN CABLE	DISCRETE	ANALOG	DIGITAL	INPUT	OUTPUT	REMARKS
		DEVICES	CTL.	PHL	STARTER								
1	GENERATOR 1	X	-	-	-	RUN STATUS	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
2		-	X	-	-	FAIL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
3		-	X	-	-	LOW FUEL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
4		-	X	-	-	RUN STATUS	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
5	FUTURE GENERATOR 2	X	-	-	-	FAIL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
6		-	X	-	-	LOW FUEL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
7		-	X	-	-	RUN STATUS	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
8	FUTURE GENERATOR 3	X	-	-	-	FAIL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
9		-	X	-	-	LOW FUEL	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B
10	GEN. 1 CB	-	X	-	-	CIRCUIT BREAKER STATUS	2	X	-	-	-	-	
11	GEN. 2 CB	-	X	-	-	CIRCUIT BREAKER STATUS	2	X	-	-	-	-	
12	GEN. 3 CB	-	X	-	-	CIRCUIT BREAKER STATUS	2	X	-	-	-	-	
13		-	X	-	-	NORMAL POSITION	2	X	-	-	-	-	
14	ATO	-	X	-	-	EMERGENCY POSITION	2	X	-	-	-	-	
15		-	X	-	-	AUTO/MAN STATUS	2	X	-	-	-	-	
16	ESD	X	-	-	-	GENERATOR EMERGENCY SHUTDOWN PUSH BUTTON	2	X	-	-	-	-	PROVIDE SURGE PROTECTION PER 27 40 00, 2,2, B

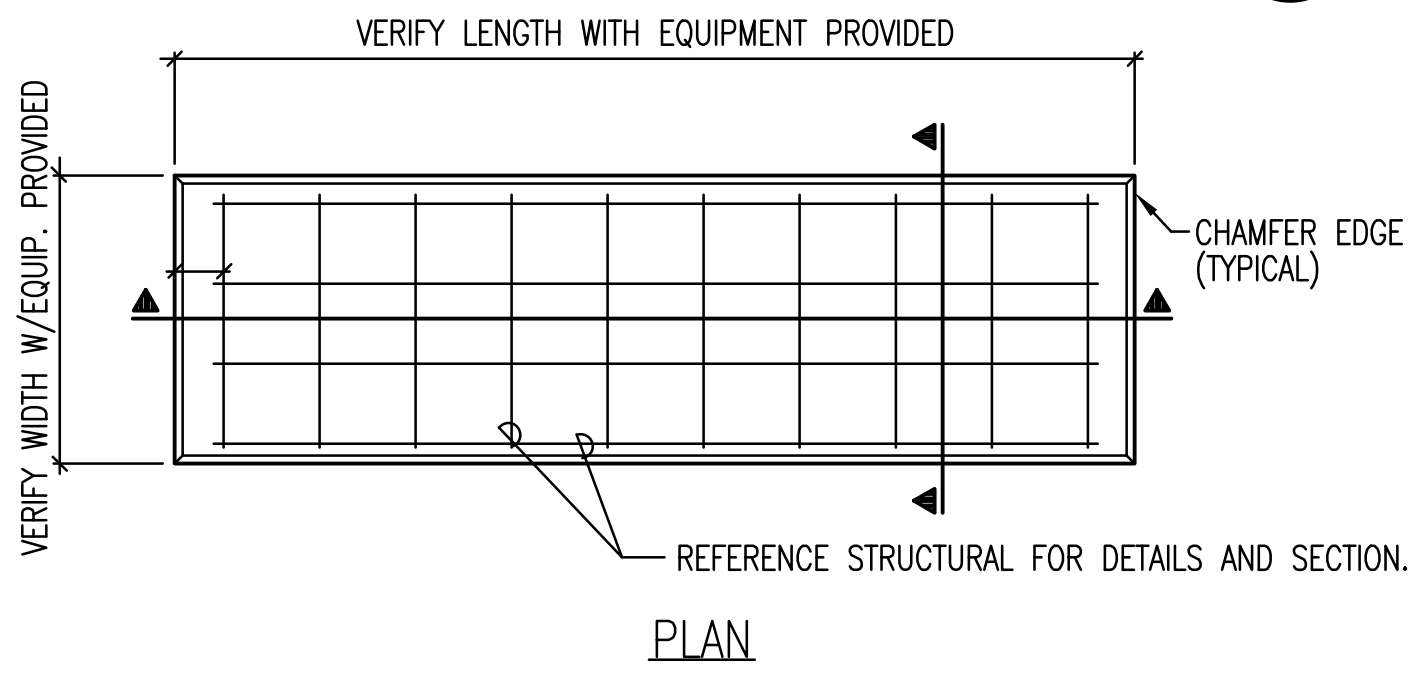
EXIST. PANEL: LP1

208Y/120 VOLTS, 3 PHASE, 4 WIRE
100 AMP MLO, SURFACE MTD.

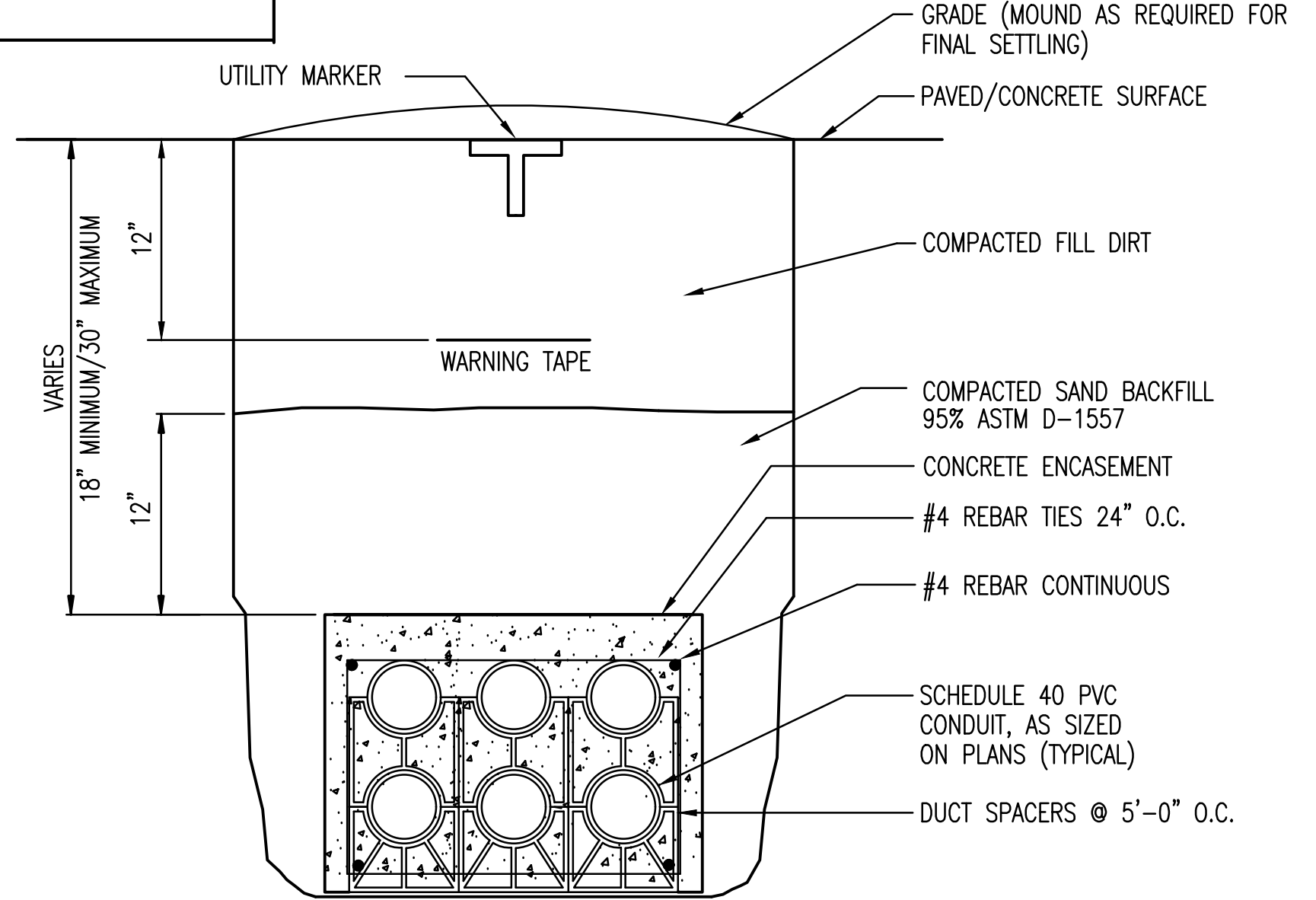
CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	AMP SIZE	AMP SIZE	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.
1			EXISTING LOAD	1 20 A	20	1			2
3			EXISTING LOAD	1 20 B	15	1			4
5			EXISTING LOAD	1 20 C	20	1			6
7			EXISTING LOAD	1 20 A	20	1			8
9			EXISTING LOAD	1 20 B	20	1			10
11			EXISTING LOAD	1 20 C	20	1			12
13			EXISTING LOAD	1 20 A	20	1	GEN BATTERY CHARGER CONNECTION	PWR	800 14
15			EXISTING LOAD	1 15 B	20	1	GEN OIL PUMP HEATER CONNECTION	PWR	800 16
17	3328	OU	OU-1,DSS-1	2 40 C	30	2	GEN JACKET HEATER CONNECTION	PWR	800 18
19									20
21	5325	OU	OU-2,DSS-2	2 50 B	20	1	LTG CENTER ROW	LTG	1008 22
23							POWER LOUVERS	PWR	1200 24
25			SPARE	1 20 A	20	1			26
27			SPARE	1 20 B	20	1			28
29			SPARE	1 20 C	20	1			30

- EXISTING PANELBOARD AND CIRCUIT BREAKERS TO REMAIN UNLESS NOTED OTHERWISE.
- PROVIDE AND INSTALL CIRCUIT BREAKER IN EXISTING SPACE. CIRCUIT BREAKER SHALL MATCH EXISTING CIRCUIT BREAKERS AND SHALL BE RATED FOR THE MAX. AIC RATING WITHIN EXISTING PANEL. VERIFY ALL REQUIREMENTS IN FIELD.
- CONNECT TO EXISTING SPARE CIRCUIT BREAKER. UPDATE PANEL DIRECTORY AS REQUIRED.

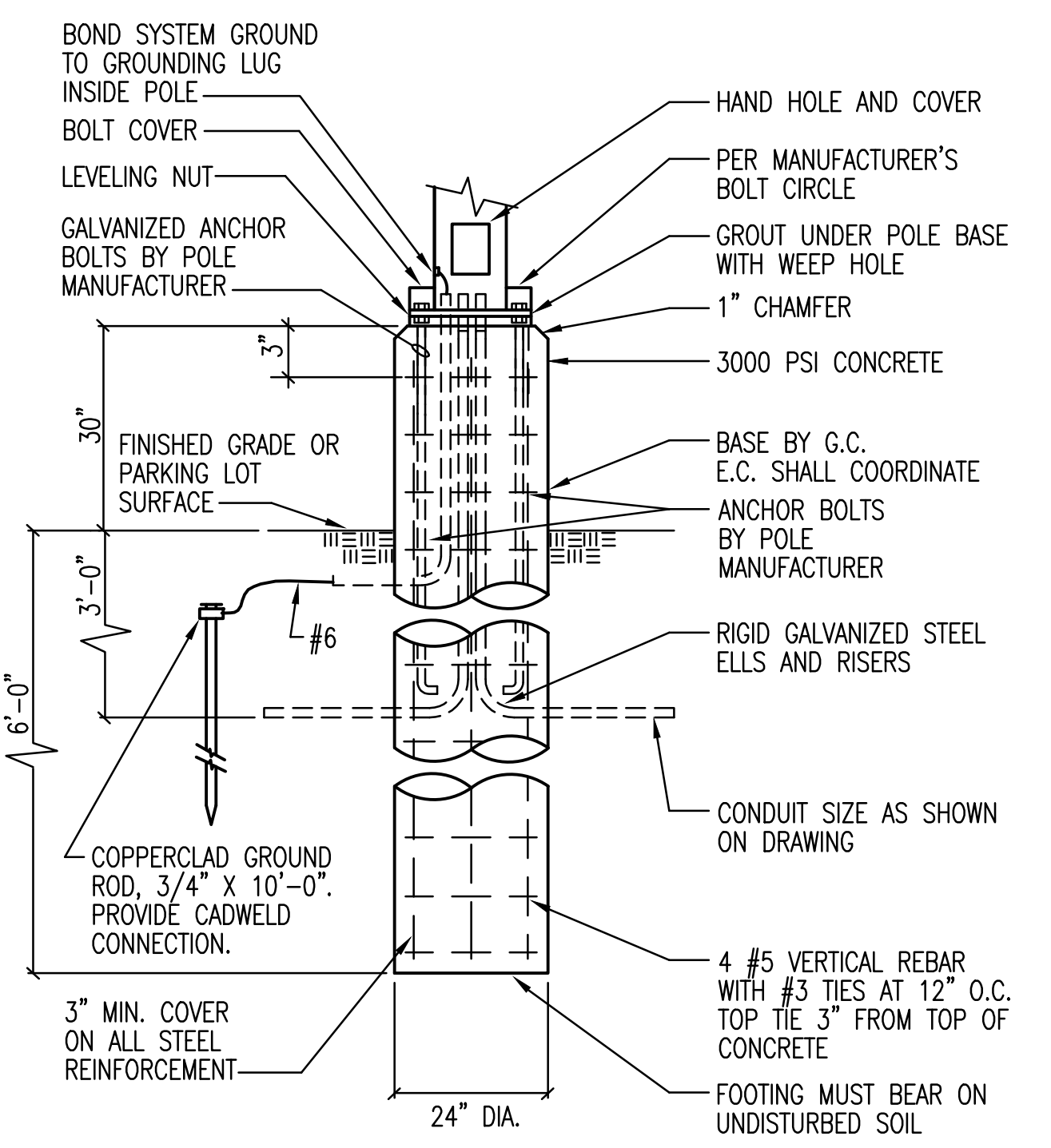
PAD BY G.C./ E.C. TO VERIFY ALL REQUIREMENTS WITH EQUIPMENT PROVIDED PRIOR TO G.C. POURING PAD.



1 ENGINE GENERATOR PAD DETAIL
NO SCALE

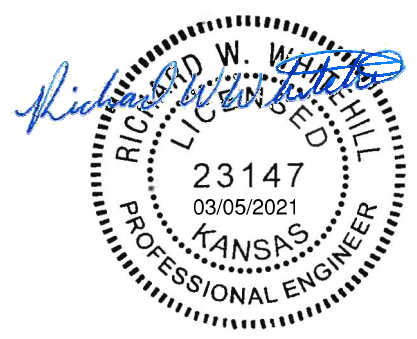
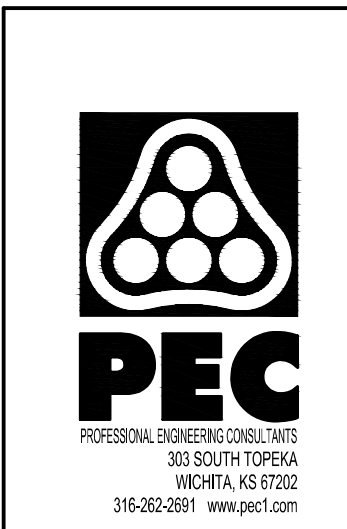


2 DUCTBANK DETAIL - CONCRETE ENCASED
NO SCALE



3 POLE BASE DETAIL
NO SCALE (20' MAX. POLE)

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4			
3			
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1	CONSTRUCTION DOCUMENTS		03-04-21
No.	Revision	By	Date
CITY OF WICHITA, KANSAS			
ELECTRICAL SCHEDULES			
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