

100% CONSTRUCTION SET FOR BID OF BUILDING B & C

LARRY KIESLING YOUTH SPORTS COMPLEX

PREPARED FOR
CITY OF KENEDY, TEXAS

KENEDY CITY COUNCIL

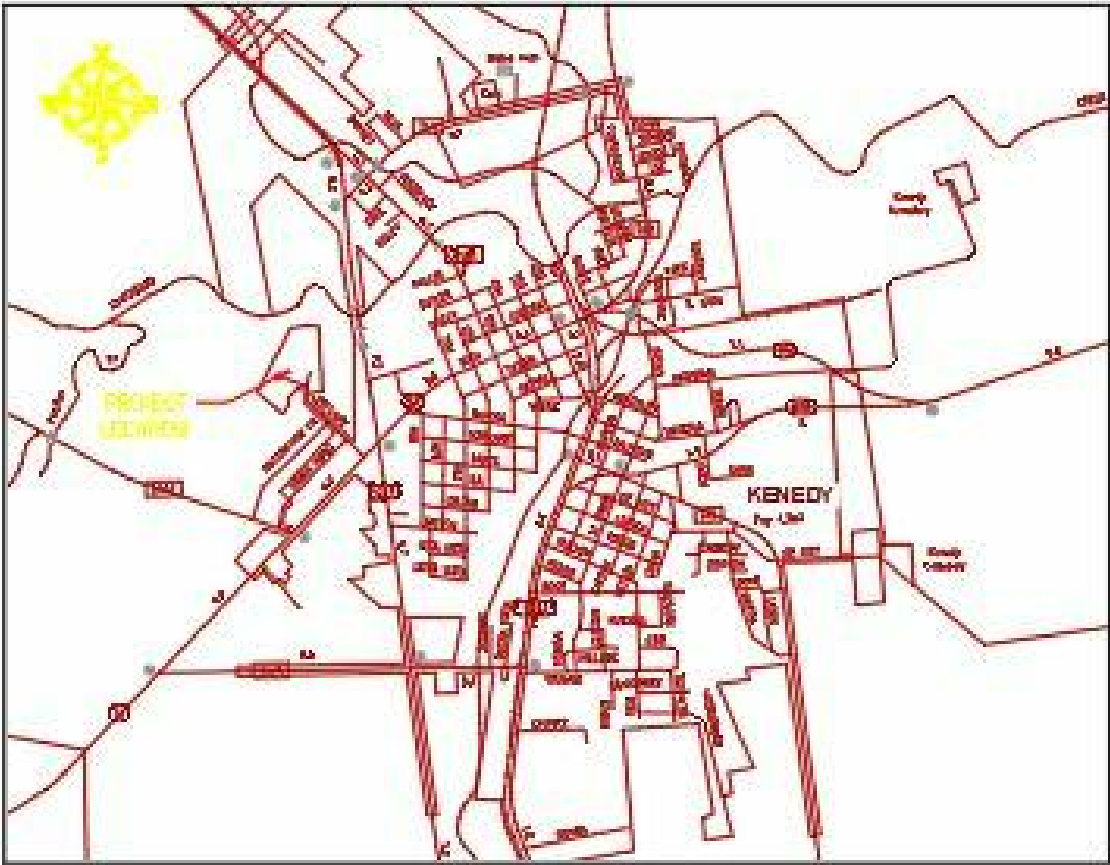
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DISTRICT 2
DISTRICT 3
DISTRICT 4
DISTRICT 5

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AMANDA M. HINES

CITY MANAGER
CITY SECRETARY

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017 1006	
Filename	CITY OF KENEDY SPORTS COMPLEX	
Scale		
Date	11/01/2019	
LAYOUT	AGP	11/01/2019
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REVIEWED	JER	11/01/2019



TBPE F-417
TBPLS F-10039500
TBPG F-50556
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COVER SHEET

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY
FOR BID OF BUILDING A

G-001

of sheets

AUG 06, 2019 4:10 PM C:\AUG001757
1\1700BS\170017\1006 SPORTS COMPLEX\CAD SITE\SHEET2 GENERAL NOTES.DWG

NOTICE: THIS PAGE DOES NOT CONTAIN ALL PROJECT NOTES OR PROJECT REQUIREMENTS. THIS PAGE MAY CONTAIN NOTES THAT ARE NOT PERTINENT TO THE PROJECT BUT ARE INCLUDED FOR REFERENCE. IT WILL BE THE RESPONSIBILITY OF ALL CONTRACTORS WORKING ON THIS PROJECT TO BE KNOWLEDGEABLE WITH ALL PROJECT CONTRACT DOCUMENTS, WHICH INCLUDES BUT NOT LIMITED TO THE PROJECT GENERAL REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS. ANY AND ALL COSTS RELATED TO THE CONTRACTOR FAILURE OF BEING KNOWLEDGEABLE WITH THE CONTRACT DOCUMENTS WILL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.

GENERAL

1. A MINIMUM OF ONE (1) COPY OF THE LATEST VERSION OR EDITION OF THE FOLLOWING, BUT NOT LIMITED TO, MUST BE ON THE PROJECT SITE WHEN CONSTRUCTION IS IN PROGRESS:
1.1. CONTRACT DOCUMENTS AND SPECIFICATIONS,
1.2. ALL CONSTRUCTION DRAWINGS,
1.3. ALL REQUIRED PERMITS,
1.4. ALL REQUIRED LOCAL, STATE, AND FEDERAL DOCUMENTS.

2. ALL WORK ON THIS PROJECT IS REQUIRED TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS, THE DRAWINGS, INDUSTRY STANDARDS, ALL PERMITS, AND ALL LAWS AND REGULATIONS.
2.1. IN THE EVENT THAT A REGULATION, SPECIFICATION, DETAIL, NOTE, OR OTHER REQUIREMENT IS IN CONFLICT WITH ANOTHER REGULATION, SPECIFICATION, DETAIL, NOTE, OR OTHER REQUIREMENT, THE MOST STRINGENT SHALL BE APPLICABLE, UNLESS DIRECTED BY THE OWNER'S REPRESENTATIVE.

3. **NOTICE:** THE CONTRACTOR SHALL KNOW THE ACTUAL SITE CONDITIONS AND SHALL BE RESPONSIBLE FOR FURNISHING A COMPLETED PROJECT AS REPRESENTED IN THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND IN THE DRAWINGS.

4. IF AT ANY POINT THAT SOMETHING IS NOT CLEAR FOR WHAT IS BEING REPRESENTED WITHIN THIS SET OF DRAWINGS, THE GENERAL CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION PRIOR TO PROCEEDING WITH CONSTRUCTION.

5. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS, SHALL PERFORM FIELD MEASUREMENTS PRIOR TO CONSTRUCTION, FABRICATION, AND/OR PURCHASE OF ANY MATERIAL, AND SHALL CONTACT, THE OWNER'S REPRESENTATIVE SHOULD CONDITIONS BE DIFFERENT FROM THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND/OR THE DRAWINGS FOR THIS PROJECT.
5.1. THE CONTRACTOR SHALL FIELD VERIFY BENCHMARK AND CONTROL POINT ELEVATION(S) PRIOR TO COMMENCING ANY CONSTRUCTION.
5.2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, IN WRITING, OF ANY DISCREPANCIES OR OMISSIONS TO THE TOPOGRAPHIC INFORMATION WITHIN THE DRAWINGS.

6. THE CONTRACTOR IS RESPONSIBLE FOR SECURING ALL NECESSARY CONSTRUCTION PERMITS AND CLEARANCES PRIOR TO COMMENCING CONSTRUCTION AND ANY FEES ASSOCIATED WITH THE PERMIT SHALL BE INCLUDED WITHIN THE BID ITEM(S) REQUIRING THE PERMIT.

7. THE CONTRACTOR SHALL CONFINED ALL CONSTRUCTION ACTIVITY TO WITHIN THE LIMITS OF CONSTRUCTION (LOC) AS INDICATED WITHIN THE DRAWINGS INCLUDING, BUT NOT LIMITED TO, JOB SITE FACILITIES, STAGING AREAS, STOCKPILES, EQUIPMENT, ETC., UNLESS PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE IS GIVEN.

8. ALL QUANTITIES INDICATED WITHIN THE DRAWINGS ARE APPROXIMATE AND FOR REFERENCE USE; NOT ALL MATERIALS REQUIRED TO CONSTRUCT THE PROJECT MAY BE INDICATED AND IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INCLUDE ALL MATERIALS AND APPURTENANCES TO CONSTRUCT THE PROJECT WITHIN THE AMOUNT BID.

9. A SEQUENCE OF CONSTRUCTION SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND CHANGES TO THE SEQUENCE SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

LOCATION AND PROTECTION OF EXISTING UTILITIES, STRUCTURES, DITCHES, ROADS, AND OTHER IMPROVEMENTS

NOTICE: THE LOCATION OF EXISTING ABOVE GROUND UTILITIES, UNDERGROUND FACILITIES, STRUCTURES, DITCHES, ROADS, AND OTHER IMPROVEMENTS WITHIN THE DRAWINGS ARE APPROXIMATE IN BOTH HORIZONTAL AND VERTICAL LOCATION(S) AND NOT ALL EXISTING ABOVE GROUND UTILITIES, UNDERGROUND FACILITIES, STRUCTURES, DITCHES, ROADS, AND OTHER IMPROVEMENTS WITHIN AND ADJACENT TO THE SITE MAY BE INDICATED ON THE DRAWINGS. THE OWNER AND THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA AND THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION FOR THE SAFETY AND PROTECTION THEREOF AND REPAIRING ANY DAMAGE THERETO RESULTING FROM THE WORK; THE COST OF ALL OF WHICH WILL BE CONSIDERED AS HAVING BEEN INCLUDED IN THE CONTRACT PRICE.

1. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL APPROPRIATE PUBLIC AND PRIVATE UTILITY COMPANIES, BY ALL MEANS POSSIBLE, PRIOR TO COMMENCING CONSTRUCTION TO DETERMINE UTILITY LOCATION(S) WITHIN AND ADJACENT TO THE PROJECT SITE.

2. THE CONTRACTOR(S) SHALL VIDEO TAPE AND PHOTOGRAPH ALL PROPERTIES AND EXISTING IMPROVEMENTS THAT WILL BE AFFECTED BY CONSTRUCTION, WITH COPIES OF THE INFORMATION BEING SUPPLIED TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING CONSTRUCTION.

3. THE CONTRACTOR(S) IS RESPONSIBLE FOR CONFIRMING THE LOCATION(S) HORIZONTALLY AND VERTICALLY OF ALL BURIED CABLES, CONDUITS, PIPES, AND UNDERGROUND FACILITIES (INCLUDING BUT NOT LIMITED TO STORM SEWER, SANITARY SEWER, WATER, GAS, TELEVISION, TELEPHONE, FIBER OPTIC, ETC.) WHICH ARE WITHIN AND ADJACENT TO THE SITE.
3.1. THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IF ANY DISCREPANCIES ARE FOUND BETWEEN THE ACTUAL CONDITIONS VERSUS THE DATA CONTAINED IN THE CONSTRUCTION DRAWINGS PRIOR TO CONSTRUCTION.
3.2. ADDITIONALLY, THE CONTRACTOR(S) SHALL NOTIFY THE OWNER AND ENGINEER IF ANY ERRORS OR DISCREPANCIES ARE FOUND ON THE CONSTRUCTION DOCUMENTS WHICH NEGATIVELY IMPACT THE PROJECT.

4. IN THE EVENT THAT A UTILITY LINE NEEDS TO BE ADJUSTED, THE CONTRACTOR SHALL COORDINATE CONSTRUCTION SO THAT THE ADJUSTMENT CAN BE MADE.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING ABOVE GROUND UTILITIES, UNDERGROUND FACILITIES, STRUCTURES, DITCHES, ROADS, AND ALL PROPOSED IMPROVEMENTS WITHIN AND ADJACENT TO THE PROJECT AREA.
5.1. IF ANY DAMAGE OCCURS TO ANY OF THE ABOVE MENTIONED ITEMS DURING CONSTRUCTION, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE REPAIR, REPLACEMENT, OR REMEDY OF THE DAMAGED ITEM TO EQUAL OR BETTER THAN ITS ORIGINAL CONDITION AS REQUIRED BY THE OWNER OF THE DAMAGED ITEM IN A PROMPT MANNER WITH NO ADDITIONAL TIME ADDED TO THE CONTRACT.

6. IF ABANDONED UNDERGROUND FACILITIES ARE ENCOUNTERED, THE CONTRACTOR MUST EXPLORE AND RESEARCH THE SITUATION AND PROVIDE TO THE OWNER'S REPRESENTATIVE THAT THE FACILITY(IES) ARE ABANDONED.
6.1. THE CONTRACTOR SHALL REMOVE THE ABANDONED UNDERGROUND FACILITY(IES) REQUIRED TO COMPLETE THE WORK OR SHALL FULLY GROUT THE ABANDONED FACILITY(IES) IN PLACE, UNLESS OTHERWISE INDICATED BY THE OWNER'S REPRESENTATIVE; ALL WORK SHALL BE INCIDENTAL AND NO SEPARATE PAYMENT SHALL BE MADE.

7. THE CONTRACTOR SHALL REMOVE, REPLACE, AND RESTORE TO ORIGINAL CONDITION, ELEVATION, AND LOCATION ALL EXISTING IMPROVEMENTS THAT ARE TO REMAIN THAT ARE ENCOUNTERED DURING CONSTRUCTION, UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE.

PROTECTION OF VEGETATION AND ENVIRONMENTALLY SENSITIVE AREAS

1. **NOTICE:** IF THE PROJECT IS REGULATED BY A U.S. ARMY CORPS OF ENGINEERS (COE) PERMIT OR OTHER ENVIRONMENTAL PERMIT, THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH THE PERMIT.

2. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL ENVIRONMENTALLY SENSITIVE AREAS NOTED ON THE DRAWINGS OR AS IDENTIFIED BY THE OWNER'S REPRESENTATIVE.
2.1. IF AN ENVIRONMENTALLY SENSITIVE AREA IS DISTURBED OR DAMAGED, IT WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REMEDY THE DISTURBANCE OR DAMAGE TO THE REQUIREMENTS OF A LOCAL EXPERT APPROVED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND REQUIREMENTS AT THE CONTRACTOR'S SOLE EXPENSE.

3. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL VEGETATION THAT IS NOTED ON THE DRAWINGS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
3.1. TREES, SHRUBS, AND VEGETATION THAT ARE TO REMAIN SHALL BE TRIMMED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES AND PROTECTED FROM DAMAGE.
3.2. IF DAMAGE SHOULD OCCUR TO A TREE OR SHRUB THAT IS TO REMAIN, THE CONTRACTOR WILL BE RESPONSIBLE FOR CARING/REPLACING THE ITEM FOR A PERIOD TO BE DETERMINED BY A COMPETENT PERSON AT THE CONTRACTOR'S SOLE EXPENSE.

WORK SITE SAFETY AND SECURITY

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT A SAFETY PROGRAM THAT IS IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS FOR ALL WORKERS AND VISITORS FOR THE ENTIRETY OF THE PROJECT.

2. THE CONTRACTOR SHALL POST ON-SITE ALL EMERGENCY PHONE NUMBERS FOR:
2.1. POLICE, FIRE, AND MEDICAL EMERGENCIES

2.2. PUBLIC UTILITY OPERATORS (FOR EACH OPERATOR WITHIN AND ADJACENT TO THE PROJECT SITE)
2.3. PRIVATE UTILITY OPERATORS (FOR EACH OPERATOR WITHIN AND ADJACENT TO THE PROJECT SITE)
2.4. STREET OPERATORS (FOR EACH OPERATOR WITHIN AND ADJACENT TO THE PROJECT SITE)
2.5. TRAFFIC SIGNAL OPERATORS (FOR EACH OPERATOR WITHIN AND ADJACENT TO THE PROJECT SITE)

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAINING ALL EMPLOYEES AND SUBCONTRACTORS IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS AND IN THE REGULATIONS AND HAZARDS WHICH APPLY TO THE AREA IN WHICH THE WORK WILL TAKE PLACE.

4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EQUIPMENT AND MATERIALS FOR THE PROTECTION OF PERSONS AND PROPERTY AND FOR PROVIDING SAFE WORKING CONDITIONS THROUGHOUT THE WORK PROGRESS.
4.1. ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY BY THE CONTRACTOR.

5. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER SUCH THAT TRUCKS AND OTHER EQUIPMENT DO NOT CREATE A SAFETY HAZARD ON ANY PUBLIC OR PRIVATE STREETS.

6. TRENCH SAFETY
6.1. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A TRENCH SAFETY PROGRAM WHICH MEETS OR EXCEEDS THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) AND ANY OTHER LOCAL, STATE, AND FEDERAL REGULATIONS THAT PERTAIN TO TRENCH SAFETY.
6.1.1. ALL EXCAVATIONS AND BACKFILL OPERATIONS SHALL BE IN ACCORDANCE WITH THE LATEST OSHA EXCAVATION SAFETY STANDARDS, STATE REGULATIONS, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL PROVIDE AN EXCAVATION PLAN PREPARED BY AN ENGINEER REGISTERED IN THE STATE OF TEXAS PRIOR TO BEGINNING TRENCHING OPERATIONS.
6.1.2. THE CONTRACTOR SHALL APPOINT A "COMPETENT PERSON" AS DEFINED BY OSHA WHO WILL BE ON-SITE AT ALL TIMES WHILE TRENCHING, PERFORMING EXCAVATIONS, AND WHEN WORKERS ARE IN TRENCHES.
6.1.3. THE EXCAVATION PLAN SHALL INDICATE THE PROCEDURES TO BE USED BY THE CONTRACTOR TO COMPLY WITH THE OSHA, STATE, AND LOCAL REQUIREMENTS.
6.1.4. THE TRENCH SAFETY PROGRAM AND EXCAVATION PLAN SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR RECORD PURPOSES ONLY AND NOT FOR APPROVAL OR VERIFICATION.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING AND CONTROLLING THE WORK SITE TO PREVENT ACCIDENTS, THEFT, AND VANDALISM.
7.1. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR REPLACEMENT OR SATISFACTORY REPAIRS TO EXISTING AND NEW IMPROVEMENTS DUE TO ACCIDENTS, THEFT, AND VANDALISM.

8. IT WILL NOT BE THE RESPONSIBILITY OF THE OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER TO ENSURE THAT ALL SAFETY REGULATIONS ARE ABIDED BY. HOWEVER, IF THE OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER RECOGNIZES OR IS NOTIFIED OF UNSAFE CONDITIONS, THE WORK BEING ACCOMPLISHED WILL BE STOPPED UNTIL THE CONTRACTOR INDICATES THAT IT IS NOT AN UNSAFE METHOD OR RECTIFIES THE SITUATION AT NO EXPENSE TO THE OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER.

EQUIPMENT

1. ONLY EQUIPMENT REQUIRED FOR PERFORMING THE WORK ON THE PROJECT WILL BE ALLOWED AT THE SITE.

2. THE EQUIPMENT USED ON THE PROJECT SHALL HAVE ALL OF THE REQUIRED PARTS FOR OPERATION INSTALLED AS RECOMMENDED BY THE MANUFACTURER.

3. ALL EQUIPMENT REQUIRED TO PERFORM THE WORK ON THE PROJECT SHALL BE IN GOOD WORKING ORDER AND MAINTAINED THROUGHOUT CONSTRUCTION.

4. ANY EQUIPMENT THAT IS TO BE STORED ON-SITE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED TO PREVENT ACCIDENTS, DAMAGE TO MATERIALS, AND ANY ADVERSE ENVIRONMENTAL EFFECTS.

5. ANY EQUIPMENT THAT IS LEAKING FLUIDS SHALL BE FIXED PROMPTLY AND ANY FLUID CONTAMINATED SOIL SHALL BE REMOVED PROMPTLY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

6. THE CONTRACTOR SHALL PROTECT AGAINST SOIL/WATER CONTAMINATION BY UTILIZING CONTAINERS OR BARRIERS.

7. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL FLUIDS, CLEANING MATERIALS, AND LIQUIDS IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

MATERIALS

1. ONLY MATERIALS MEETING THE REQUIREMENTS OF THE SPECIFICATIONS AND REQUIRED FOR PERFORMING THE WORK ON THE PROJECT WILL BE ALLOWED AT THE SITE.

2. ANY PROPOSED ALTERNATIVES TO THE MATERIALS NOTED WITHIN THE DRAWINGS OR REQUIRED BY THE SPECIFICATIONS ARE TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL SEVEN (7) CALENDAR DAYS PRIOR TO THE BID OPENING.
2.1. ANY CHANGES TO THE DRAWINGS REQUIRED BY ACCEPTANCE OF MATERIAL ALTERNATIVES AND/OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL, WITH ALL COSTS ASSOCIATED WITH THE CHANGE BEING THE RESPONSIBILITY OF THE CONTRACTOR.
2.2. THE OWNER RESERVES THE RIGHT TO REJECT ANY PROPOSED SUBSTITUTION IN FAVOR OF THAT SPECIFIED.

3. MATERIALS THAT ARE TO BE STORED ON-SITE SHALL BE STORED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS AND PROJECT SPECIFICATIONS AND SHALL BE LOCATED IN AN AREA THAT IS PROTECTED TO PREVENT ACCIDENTS, DAMAGE TO MATERIALS, AND ANY ADVERSE ENVIRONMENTAL EFFECTS.

4. ANY DAMAGED MATERIALS SHALL BE PROMPTLY REMEDIED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE EXPENSE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
4.1. IF IT IS DETERMINED THAT THE MATERIAL(S) ARE NOT SUITABLE FOR INSTALLATION BY EITHER THE ENGINEER OR THE OWNER, THEN THE MATERIAL(S) ARE TO BE REMOVED FROM THE PROJECT SITE IMMEDIATELY AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATION AT THE SOLE EXPENSE OF THE CONTRACTOR.

EROSION AND POLLUTION CONTROL DURING CONSTRUCTION

1. ALL CONSTRUCTION ACTIVITIES SHALL BE SUBJECT TO THE EROSION AND POLLUTION PREVENTION REQUIREMENTS OF THE CITY, COUNTY, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), ALL APPLICABLE PERMITS, AND ALL LAWS AND REGULATIONS.
1.1. A TCEQ STORMWATER PERMIT FOR CONSTRUCTION WILL BE REQUIRED FOR THIS PROJECT.

2. THE CONTRACTOR IS TO OBTAIN ALL REQUIRED PERMITS AND POST REQUIRED COPIES ON-SITE AT ALL ENTRANCES PRIOR TO COMMENCING CONSTRUCTION.

3. THE CONTRACTOR WILL BE REQUIRED AT ALL TIMES DURING CONSTRUCTION TO PROVIDE AND MAINTAIN ALL REQUIRED CONTROL DEVICES THAT ARE INDICATED WITHIN THE DRAWINGS AND ALL REQUIRED DEVICES AS REQUIRED BY ANY PERMIT.

TRAFFIC CONTROL AND EXISTING PEDESTRIAN FACILITIES

1. THE CONTRACTOR IS SOLELY RESPONSIBLE TO PROVIDE, IMPLEMENT, AND COMPLY WITH A TRAFFIC CONTROL PLAN MEETING THE REQUIREMENTS OF THE COUNTY OR CITY, TxDOT, THE OWNER'S REPRESENTATIVE, AND THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) (LATEST EDITION) FOR ANY WORK ALONG THE ROAD AND ALL ADJACENT ROADS TO THE PROJECT SITE.
1.1. THE PLAN SHALL CONTAIN PROVISIONS FOR ALL PROJECT PHASES AND PROVIDE SUFFICIENT BARRICADES, WARNINGS, AND LIGHTING TO WARN AND GUIDE MOTORISTS AND PEDESTRIANS THROUGH THE WORK AREA.
1.2. THIS PLAN IS TO BE SUBMITTED TO AND APPROVED BY ALL APPROPRIATE AGENCIES BEFORE CONSTRUCTION ALONG THE ROAD IS TO COMMENCE.
1.3. THIS PLAN AND THE APPROVAL NOTIFICATION ARE TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR RECORD KEEPING PURPOSES ONLY BEFORE CONSTRUCTION ALONG THE ROAD IS TO COMMENCE.
1.4. IF A PLAN IS INCLUDED WITHIN THE DRAWINGS, IT SHOULD BE USED AS A GENERAL GUIDELINE.

2. ANY MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO ALL APPROPRIATE AGENCIES FOR APPROVAL PRIOR TO IMPLEMENTATION.

3. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR MAINTAINING AND VERIFYING THAT ALL TRAFFIC CONTROL DEVICES ARE IN THE PROPER POSITION, WORKING ORDER, AND MEET THE SPECIFICATIONS EACH DAY PRIOR TO COMMENCING WORK AND PRIOR TO LEAVING FOR THE DAY, AND VERIFYING AT LEAST ONE PER DAY WHEN NO WORK IS DONE INCLUDING WEEKENDS, HOLIDAYS, AND WEATHER DAYS.

4. MAINTENANCE OF TRAFFIC CONTROL DEVICES ARE TO OCCUR IMMEDIATELY WHEN NOTICED THAT THE DEVICE DOES NOT MEET THE TRAFFIC CONTROL PLAN AND SPECIFICATIONS.

5. IF TRAFFIC ON A ROAD IS TO BE DETOURED, OBSTRUCTED, AND/OR ROAD CLOSED, THE CONTRACTOR SHALL PROVIDE DAILY NOTIFICATION TO ALL PUBLIC EMERGENCY DEPARTMENTS (I.E. FIRE, POLICE, EMS) AND ALL PRIVATE EMS.
5.1. AT ALL TIMES, THE CONTRACTOR SHALL MAINTAIN INGRESS/EGRESS TO ADJACENT PROPERTIES FOR EMERGENCY VEHICLES AND POSTAL SERVICE IF AN ALTERNATE ROUTE IS NOT AVAILABLE.

6. PLACEMENT OF TEMPORARY AND PERMANENT PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE TMUTCD, THE DRAWINGS, AND SHALL BE APPROVED BY THE GOVERNING ENTITY.

7. THE CONTRACTOR SHALL MAINTAIN AND PROVIDE FOR SAFE AND CONVENIENT INGRESS/EGRESS TO THE PROPERTY ADJACENT TO CONSTRUCTION, PROTECT EXISTING IMPROVEMENTS, AND SHALL COORDINATE WITH THE PROPERTY OWNER / LESSEE FOR WORK ON THE SITE.
7.1. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNER/LESSEE IN WRITING SEVEN (7) DAYS PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY IN WRITING AT LEAST TWO (2) WEEKS IN ADVANCE OF ANY WORK AFFECTING INGRESS/EGRESS FROM THE PROPERTY.
7.1.1. THE NOTICE SHALL BE APPROVED OF BY THE OWNER AND THE OWNER'S REPRESENTATIVE.
7.1.2. THE NOTICE SHALL BE HAND DELIVERED BY THE CONTRACTOR.
7.1.3. THE NOTICE SHALL INDICATE WHAT DISRUPTIONS WILL OCCUR AND PROVIDE DATES AND CONTRACTOR CONTACT INFORMATION IN THE EVENT OF EMERGENCIES OR ANY QUESTIONS.

8. THE CONTRACTOR SHALL MAINTAIN EXISTING PEDESTRIAN FACILITIES DURING CONSTRUCTION.

9. THE CONTRACTOR SHALL FILL ANY HOLES LEFT WHEN BARRICADES AND SIGNS ARE REMOVED AND RESTORE THE AREA TO THE ADJACENT CONDITIONS.

DRAINAGE DURING CONSTRUCTION

1. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.

2. THE CONTRACTOR SHALL PROVIDE INTERIM DRAINAGE BY MEANS OF PUMPS AND TEMPORARY DITCHES DURING CONSTRUCTION AS REQUIRED TO MAINTAIN A WELL-DRAINED SITE FREE OF STANDING WATER AND WATER SOFTENED SOILS, UNLESS OTHERWISE INDICATED BY THE OWNER'S REPRESENTATIVE.

3. DRAINAGE FROM ADJACENT PROPERTIES SHALL NOT BE BLOCKED AT ANYTIME PRIOR, DURING, AND AFTER CONSTRUCTION AND WILL BE HANDLED AS SHOWN ON THE DRAWINGS OR AS INDICATED BY THE OWNER'S REPRESENTATIVE.

EXCESS, DEMOLITION, AND SALVAGED MATERIALS

1. THE PROJECT AREA SHALL AT ALL TIMES BE KEPT FREE OF DEBRIS AND EXCESS MATERIAL TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

2. EXCESS AND DEMOLITION MATERIALS WHICH ARE NOT USED ON THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS THE OWNER'S REPRESENTATIVE STATES OTHERWISE.

3. DISPOSAL OF ALL EXCESS AND DEMOLITION MATERIALS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

SITE CLEARING AND EARTHWORK

1. ALL EARTHWORK (SITE GRADING, FILLING, HAULING, CUTTING, LOADING, ETC.) REQUIRED TO ACHIEVE THE LINES AND GRADES AS INDICATED WITHIN THIS DRAWING SET SHALL BE COMPLETED BY THE CONTRACTOR.

2. CONTRACTOR SHALL PERFORM ROUGH EARTHWORK (SITE GRADING, FILLING, HAULING, CUTTING, LOADING, ETC.) TO VERIFY ADEQUATE EARTH QUANTITY ON-SITE TO ACHIEVE THE REQUIRED GRADES INDICATED WITHIN THIS DRAWING SET PRIOR TO ANY OTHER CONSTRUCTION.
2.1. IF MATERIAL IS TO BE HAULED FROM OFF-SITE SOURCES THE MATERIAL SHALL BE OF LIKE MATERIAL COMPOSITION AS TO WHAT IS FOUND CURRENTLY ON-SITE AND APPROVED BY THE OWNER'S REPRESENTATIVE.

3. AFTER ROUGH EARTHWORK IS COMPLETE AND CONTRACTOR DETERMINES THAT SUFFICIENT MATERIAL IS AVAILABLE TO ACHIEVE THE REQUIRED GRADES, CONSTRUCTION ON THE REST OF THE PROJECT CAN COMMENCE.

4. FINAL GRADES AS INDICATED WITHIN THE DRAWINGS SHALL BE ACHIEVED PRIOR TO FINAL ACCEPTANCE.

5. GRADES NOT OTHERWISE INDICATED SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE GIVEN, OR BETWEEN SUCH POINTS AND EXISTING FINISH GRADES.

6. THE CONTRACTOR WILL BE REQUIRED TO LIMIT THE AMOUNT OF DUST AND WIND TRANSPORTED MATERIALS FROM OCCURRING ON AND OFF THE PROJECT SITE DURING AND AFTER WORKING HOURS SEVEN (7) DAYS A WEEK THROUGHOUT THE DURATION OF THE PROJECT.
6.1. THE CONTRACTOR SHALL PHASE WORK ON THE SITE AND USE WATER, TEMPORARY COVER, AND/OR DUST CONTROL AGENTS TO LIMIT THE AMOUNT OF DUST AND OTHER WIND-BORNE MATERIALS FROM EXITING THE PROJECT SITE.
6.2. IF DUST FROM THE PROJECT SITE BECOMES EXCESSIVE, THE CONTRACTOR WILL BE REQUIRED TO TAKE ANY AND ALL MEASURES POSSIBLE TO CONTROL THE POLLUTION.

7. CONTRACTOR SHALL LIMIT THE AMOUNT OF EROSION DUE TO STORM EVENTS AND ANY EROSION AREAS SHALL BE RESHAPED AND REPAIRED TO THE LINES AND GRADES SHOWN IN THE DRAWINGS IN A TIMELY MANNER WHEN CONDITIONS ALLOW.

8. WHEN THE FINISHED FLOOR (FF) ELEVATION IS INDICATED ON THE GRADING PLAN, IT IS TO BE UNDERSTOOD THAT IT IS A RECOMMENDATION BASED UPON THE DRAINAGE DESIGN OF THE PROJECT. THIS RECOMMENDED FINISHED FLOOR ELEVATION (FF) IS SUBJECT TO CHANGE UPON FINAL DESIGN OF THE BUILDING.
8.1. THE OWNER AND THE DESIGN PROFESSIONAL OF THE BUILDING WILL BE SOLELY RESPONSIBLE FOR ADJUSTING THE FINISHED FLOOR (FF) ELEVATION UPON VERIFICATION OF CURRENT CONDITIONS AND ALL CURRENT APPLICABLE LAWS, STATUTES, RULES, REGULATIONS, ORDINANCES, CODES, AND ORDERS OF ANY AND ALL GOVERNMENTAL BODIES, AGENCIES, AUTHORITIES, AND COURTS HAVING JURISDICTION.

SITE GRADING

1. PRIOR TO COMMENCING GRADING ACTIVITIES, ALL IMPROVEMENTS SHALL BE PROTECTED FROM DAMAGE.
1.1. IF ANY IMPROVEMENT IS DAMAGED, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE ITEM DAMAGED AT NO ADDITIONAL COST TO THE PROJECT.

2. THE CONTRACTOR SHALL CONSTRUCT THE SITE TO THE LINES, GRADES, AND ELEVATIONS AS SPECIFIED AND AS INDICATED WITHIN THE DRAWINGS.

3. ANY ADJUSTMENTS TO THE LINES, GRADES, AND ELEVATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.

4. AREAS TO RECEIVE FILL SHALL BE STRIPPED OF ALL VEGETATION, HUMUS, AND OTHER OBJECTIONABLE MATTER ENCOUNTERED WITHIN THE TOP SIX-INCHES (6") OF THE SOIL.
4.1. THIS MATERIAL, WITH THE EXCEPTION OF OBJECTIONABLE MATTER, SHALL BE STOCKPILED, IF FEASIBLE, AND REUSED AS SURFACE STABILIZATION MATERIAL BEYOND THE RIGHT-OF-WAY.

4.2. OBJECTIONABLE MATTER SHALL BE DETERMINED BY THE OWNER'S REPRESENTATIVE AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, UNLESS OTHERWISE INSTRUCTED BY THE OWNER'S REPRESENTATIVE.

5. EXCESS SOIL MATERIAL FROM GRADING ACTIVITIES SHALL NOT BE REMOVED FROM THE SITE, UNLESS DIRECTED BY THE OWNER'S REPRESENTATIVE.

6. ALL FILL SHALL BE PLACED IN LAYERS APPROXIMATELY PARALLEL TO THE FINISH GRADE AND IN LAYERS NOT IN EXCESS OF SIX-INCHES (6") OF UN-COMPACTED DEPTH, UNLESS INDICATED OTHERWISE BY THE OWNER'S REPRESENTATIVE.

7. ANY EARTHWORK QUANTITIES SHOWN WITHIN THE DRAWINGS ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REFLECT THE ACTUAL AMOUNT THAT WILL BE REQUIRED TO COMPLETE THE WORK DUE TO CONSTRUCTION METHODS.

EXCAVATION AND TRENCHING FOR UTILITIES, ROADWAY, AND STRUCTURES

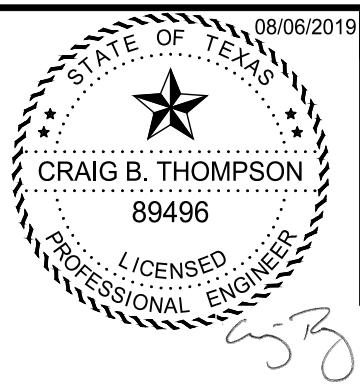
1. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE TRENCH SAFETY PROGRAM THAT HAS BEEN DEVELOPED AND IMPLEMENTED BY THE CONTRACTOR.

2. EXCAVATIONS SHALL NOT BE MADE DURING INCLEMENT WEATHER.

3. WATER ACCUMULATION IN EXCAVATIONS EXCEEDING ONE-INCH (1") SHALL BE PUMPED OUT PRIOR TO CONTINUING CONSTRUCTION OR AS APPROVED BY THE OWNER'S REPRESENTATIVE.

4. TRENCHES SHALL NOT BE LEFT OPEN OR UNSECURED AFTER NORMAL WORKING HOURS OR WHILE WORKERS ARE NOT PRESENT ON-SITE.
4.1. IF TRENCHES ARE LEFT OPEN, THEY SHALL BE COVERED AND APPROPRIATE AND ADEQUATE BARRICADES SHALL BE PLACED TO PREVENT ACCESS INTO THE TRENCH AREA.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No.	17L0017	
Filename	2 GENERAL NOTES	
Scale	AS SHOWN	
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GENERAL NOTES (1 OF 2)

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

C-1

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NOTICE: THIS PAGE DOES NOT CONTAIN ALL PROJECT NOTES OR PROJECT REQUIREMENTS. THIS PAGE MAY CONTAIN NOTES THAT ARE NOT PERTINENT TO THE PROJECT BUT ARE INCLUDED FOR REFERENCE. IT WILL BE THE RESPONSIBILITY OF ALL CONTRACTORS WORKING ON THIS PROJECT TO BE KNOWLEDGEABLE WITH ALL PROJECT CONTRACT DOCUMENTS, WHICH INCLUDES BUT NOT LIMITED TO THE PROJECT GENERAL REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS. ANY AND ALL COSTS RELATED TO THE CONTRACTOR FAILURE OF BEING KNOWLEDGEABLE WITH THE CONTRACT DOCUMENTS WILL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.

DEWATERING

- DEWATERING ACTIVITIES MAY BE REQUIRED TO CONSTRUCT PORTIONS OF THE PROJECT
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL REQUIRED PERMITS AND EROSION AND POLLUTION CONTROL DEVICES TO CONTROL THE EFFLUENT AND SHALL INSTALL THOSE DEVICES PRIOR TO COMMENCING DEWATERING ACTIVITIES.
 - THE LOCATION OF THE(SE) DEVICES SHALL BE INSTALLED AT APPROVED LOCATION(S) BY THE OWNER'S REPRESENTATIVE.
- ALL DEWATERING ACTIVITIES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND LOCAL, STATE, AND FEDERAL REGULATIONS.
- THE CONTRACTOR WILL ALSO BE REQUIRED TO TEST THE SURROUNDING SURFACE WATER(S) AND THE WATER FROM THE DEWATERING ACTIVITIES FOR WATER COMPOSITION PRIOR TO DISCHARGING EFFLUENT.
 - THE CONTRACTOR SHALL FURNISH THE OWNER'S REPRESENTATIVE WITH A COPY OF THE TEST REPORT.
 - IF THE WATER IS DETERMINED TO BE OF A COMPOSITION THAT MAY HARM THE SURROUNDING ENVIRONMENT, THEN THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DISPOSAL IN A MANNER THAT IS IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- WATER REMOVED FROM EXCAVATIONS SHALL BE HANDLED IN SUCH A MANNER AS TO PREVENT DAMAGE TO ADJACENT PROPERTY AND OTHER WORK.
 - DAMAGE CAUSED BY DEWATERING OPERATIONS TO THE ADJACENT PROPERTY OR WORK SHALL BE REPAIRED OR REMEDIED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE EXPENSE.
 - IF WATER IS TO BE DISPOSED OF OFFSITE, THE CONTRACTOR WILL BE REQUIRED TO LOCATE AND ACQUIRE THE DISPOSAL SITE, OBTAIN ALL PERMITS, AND DISPOSE OF IT IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

WASTEWATER (SANITARY SEWER) UTILITY NOTES

- GENERAL
 - THE WASTEWATER UTILITY MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES, THE TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 213.5(c) AND 217.51-217.70, 30 TAC CHAPTER 217, SUBCHAPTER D, AND THE DRAWINGS, DETAILS, AND SPECIFICATIONS FOR THIS PROJECT.
 - ALL CONTRACTORS PERFORMING ANY UTILITY WORK MUST BE PROVIDED WITH COPIES OF THE WASTEWATER UTILITY DRAWING(S).
 - NOTICE: IF ANY PORTION OF THE PROPOSED SEWAGE COLLECTION SYSTEM IS TO BE PRIVATE, THEN THAT PORTION SHALL BE CONSTRUCTED UNDER THE SUPERVISION OF A LICENSED PLUMBER AND HAVE ALL THE REQUIRED PERMITS.
 - CONSTRUCTION OF THE PROPOSED SYSTEM SHALL BEGIN AT THE TIE-IN POINT TO AN EXISTING SYSTEM, UNLESS OTHERWISE APPROVED BY THE OWNERS REPRESENTATIVE.
 - ALL WORK SHALL BE VERIFIED BY THE CONTRACTOR AND PASS ALL TESTING REQUIREMENTS PRIOR TO PLACEMENT OF ANY SURFACE IMPROVEMENTS.

STORM WATER UTILITY NOTES

- ALL STORM SEWER SHALL BE AS INDICATED ON THE DRAWINGS AND SHALL BE INSTALLED, BEDDED, AND BACK FILLED IN ACCORDANCE WITH THE STANDARDS, DETAILS, INDUSTRY STANDARDS, AND MANUFACTURERS RECOMMENDATIONS.
- ALL REINFORCED CONCRETE PIPE (RCP) JOINTS SHALL BE WRAPPED WITH GEOTEXTILE.
- ALL DITCHES SHALL BE GRADED TO THE PROPOSED ELEVATIONS TO ENSURE PROPER DRAINAGE.
- ALL OUTFALLS SHALL BE PROPERLY BACKFILLED AND COMPACTED.

WATER UTILITY NOTES

- THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE SYSTEM OWNER'S REPRESENTATIVE MUST NOTIFY THE APPROPRIATE TCEQ REGIONAL OFFICE.
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO THE AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL FOUNDATION (NSF/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
- PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-pw) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS.
- NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
- WATER TRANSMISSION AND DISTRIBUTION LINES MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 36-INCHES BELOW THE GROUND SURFACE.
- DEFLECTION OF WATERLINE HORIZONTALLY AND/OR VERTICALLY MAY OR MAY NOT BE INDICATED ON THE DRAWINGS.
 - THE CONTRACTOR SHALL DISINFECT THE NEW WATER MAINS IN ACCORDANCE WITH AWWA STANDARD C651 AND PROECT SPECIFICATIONS AND THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE.
 - SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS.
 - A MINIMUM OF ONE (1) SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATER LINE WILL BE REQUIRED, UNLESS NOTED OTHERWISE.
- LOCATION OF WATER LINES, SERVICE CONNECTIONS, VALVES, FIRE HYDRANTS, FITTINGS, AND OTHER ITEMS ARE APPROXIMATE AND ARE TO BE LOCATED IN ACCORDANCE WITH THE STANDARD DETAILS.
- QUANTITIES INDICATED ARE APPROXIMATE AND NOT ALL REQUIRED MATERIALS MAY BE INDICATED.

EXISTING PAVEMENT REMOVAL AND REPAIR

- ASPHALT PAVEMENT
 - PAVEMENT SHALL BE SAW-CUT FULL DEPTH WHERE EXISTING PAVEMENT IS BEING PARTIALLY REMOVED.
 - AT A MINIMUM, PAVEMENT REPAIR SHALL CONSIST OF TWO-INCH (2") HOT MIX ASPHALTIC CEMENT (HMAC) AND TWELVE-INCH (12") COMPACTED FLEXIBLE BASE IN ACCORDANCE WITH THE SPECIFICATIONS.
 - BASE SHALL BE COMPACTED TO A MINIMUM OF NINETY-EIGHT PERCENT (98%) MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D1557 AT MOSTIURE CONTENT -1% TO +3% OF OPTIMUM.
 - IF THE EXISTING PAVEMENT SECTION IS FOUND TO BE THICKER, THE PAVEMENT REPAIR SECTION SHALL BE INCREASED TO MATCH THE EXISTING SECTION.
- CONCRETE PAVEMENT
 - PAVEMENT SHALL BE SAW-CUT FULL DEPTH WHERE EXISTING PAVEMENT IS BEING PARTIALLY REMOVED.
 - AT A MINIMUM, PAVEMENT REPAIR SHALL CONSIST OF SIX-INCH (6") REINFORCED WITH #4 BARS ON TWELVE-INCH (12") ON-CENTERS WITH DOWELS INTO THE EXISTING PAVEMENT EVERY TWENTY-FOUR INCHES (24") OR EVENLY SPACED AND EIGHT-INCH (8") COMPACTED FLEXIBLE BASE IN ACCORDANCE WITH THE SPECIFICATIONS.
 - BASE SHALL BE COMPACTED TO A MINIMUM OF NINETY-EIGHT PERCENT (98%) MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D1557 AT MOSITURE CONTENT -1% TO +3% OF OPTIMUM.
 - IF THE EXISTING PAVEMENT SECTION IS FOUND TO BE THICKER, THE PAVEMENT REPAIR SECTION SHALL BE INCREASED TO MATCH THE EXISTING SECTION.

PAVEMENT CONSTRUCTION

- PRIOR TO COMMENCING PAVING ACTIVITIES, ALL IMPROVEMENTS SHALL BE PROTECTED FROM DAMAGE.
 - IF ANY IMPROVEMENT IS DAMAGED, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF THE ITEM DAMAGED AT NO ADDITIONAL COST TO THE PROJECT.
- THE CONTRACTOR SHALL CONSTRUCT PAVEMENT TO THE LINES, GRADES, AND ELEVATIONS AS REQUIRED BY THE SPECIFICATIONS AND AS INDICATED WITHIN THE DRAWINGS.
 - ANY ADJUSTMENTS TO THE LINES, GRADES, AND ELEVATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL CONSTRUCT PAVEMENT SECTIONS AS INDICATED WITHIN THE DRAWINGS WITH MATERIALS MEETING OR EXCEEDING THE SPECIFICATIONS.

- THE CONTRACTOR WILL BE REQUIRED TO HAVE THE SUBGRADE AND PROPOSED BASE MATERIALS TESTED BY AN APPROVED GEOTECHNICAL TESTING LABORATORY FOR THE ESTABLISHMENT OF AN OPTIMUM SOIL MOISTURE AND DENSITY PROCTOR.
 - REPORT COPIES SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK REQUIRING THE MATERIALS. IMPROVEMENTS WITHIN THE PAVEMENT AREA SHALL BE MARKED BY THE CONTRACTOR SO THAT AFTER PAVING ACTIVITIES ARE COMPLETE, THE IMPROVEMENTS CAN BE ADJUSTED TO WITHIN ONE-QUARTER INCH (1/4") OF THE FINAL SURFACE, UNLESS OTHERWISE REQUIRED BY OTHER DETAILS OR THE OWNER'S REPRESENTATIVE.
- PRIOR TO PLACEMENT OF ANY PAVING IMPROVEMENTS, ALL UNDERGROUND IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO: SANITARY SEWER UTILITIES, STORM SEWER UTILITIES, WATER UTILITIES, SLEEVES FOR ELECTRICAL UTILITIES, SLEEVES FOR IRRIGATION UTILITIES, SLEEVES FOR COMMUNICATION UTILITIES, AND OTHER UNDERGROUND IMPROVEMENTS THAT ARE REQUIRED AND ARE BENEATH AND ADJACENT TO THE PAVING IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS AND INDUSTRY STANDARDS, VERIFIED BY THE CONTRACTOR, AND PASS ALL TESTING REQUIREMENTS.
 - THE CONTRACTOR MAY PROCEED SOLELY AT THE CONTRACTOR'S OWN RISK IN THE PLACEMENT OF PAVING IMPROVEMENTS PRIOR TO THE VERIFICATION AND FINAL TESTING OF UNDERGROUND IMPROVEMENTS WITH ANY COSTS RESULTING FROM THE VERIFICATION OR TESTING FAILURE BEING SOLELY AT THE CONTRACTOR'S EXPENSE.
 - IF IT IS DETERMINED THAT THE CONTRACTOR HAS FAILED TO PLACE THE UNDERGROUND IMPROVEMENTS AS INDICATED ON THE DRAWINGS AND/OR FAILED TO VERIFY THE LOCATION PRIOR TO THE PLACEMENT OF PAVING IMPROVEMENTS, THEN ANY COSTS RESULTING FROM ACTIVITIES TO REMEDY THE SITUATION SHALL BE SOLELY AT THE CONTRACTOR'S EXPENSE.
- WHERE THE PROPOSED PAVEMENT IMPROVEMENTS MEET THE EXISTING PAVEMENTS, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT IN A LINE THAT IS PARALLEL TO THE PROPOSED PAVEMENT EDGE TO A POINT THAT IS NOT DAMAGED AND AT A MINIMUM DISTANCE OF TWO FEET (2') BEYOND THE START OF THE PROPOSED PAVEMENT.

SIDEWALK AND ACCESSIBILITY RAMP CONSTRUCTION

- NOTE: ALL SIDEWALKS AND ACCESSIBILITY RAMPS (CURB RAMPS, RAMPS, ETC.) ON THIS PROJECT ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS), LATEST EDITION; WHEN THE DETAILS AND NOTES AS SHOWN IN THE DRAWINGS ARE IN CONFLICT WITH THE TAS, THEN THE TAS REQUIREMENTS SHALL BE USED.
- THE CONTRACTOR SHALL CONSTRUCT THE SIDEWALK TO THE LINES, GRADES, AND ELEVATIONS AS REQUIRED BY THE SPECIFICATIONS AND AS INDICATED WITHIN THE DRAWINGS.
 - ANY ADJUSTMENTS TO THE LINES, GRADES, AND ELEVATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
 - IMPROVEMENTS WITHIN THE SIDEWALK SURFACE SHALL BE ADJUSTED TO WITHIN PLUS OR MINUS ONE-QUARTER INCH (±1/4") OF THE FINAL SURFACE WITH THE EDGE BEING ROUNDED, UNLESS OTHERWISE REQUIRED BY OTHER DETAILS OR THE OWNER'S REPRESENTATIVE.
 - WHERE THE PROPOSED SIDEWALK IMPROVEMENTS MEET THE EXISTING SIDEWALK,THE CONTRACTOR SHALL PERFORM THE FOLLOWING:
 - IF THE POINT OF THE EXISTING SIDEWALK EDGE WHERE THE PROPOSED IS TO ABUT TO IS DAMAGED, CRACKED, AND/OR IN A CONDITION THAT WILL NOT ALLOW FOR THE PROPOSED SIDEWALK TO PROPERLY TIE-INTO, THE CONTRACTOR SHALL PERFORM ONE OF THE FOLLOWING:
 - SAW CUT THE SIDEWALK AT A CONTROL JOINT WITH, AT ALL TIMES, LEAVING A MINIMUM OF 2 CONTROL JOINT SECTIONS BETWEEN AN EXPANSION JOINT AND THE PROPOSED SIDEWALK.
 - BREAK OUT THE SIDEWALK AT AN EXPANSION JOINT IN A MANNER THAT WILL NOT DAMAGE THE EXISTING.
 - INSTALL TWELVE-INCH (12") DOWELS WITH SIX-INCHES (6") BEING WITHIN THE EXISTING SIDEWALK BY DRILLING AND USING EPOXY ADHESIVE ANCHOR (HILTI No. HIT HY150 OR OWNER'S REPRESENTATIVE APPROVED EQUAL) AND THE OTHER PORTION OF THE DOWEL WITHIN THE PROPOSED SIDEWALK.
 - IF THE SIDEWALK WIDTHS ARE DIFFERENT, THE CONTRACTOR SHALL PROVIDE A TRANSITIONAL AREA AS NOTED ON THE DRAWINGS OR AS REQUIRED BY THE OWNER'S REPRESENTATIVE.

SIGNS AND PAVEMENT MARKINGS

- ALL REGULATORY SIGNS, WARNING SIGNS, OBJECT MARKERS, AND BARRICADES SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD).
- THE CONTRACTOR SHALL INSTALL ALL REGULATORY SIGNS, WARNING SIGNS, OBJECT MARKERS, BARRICADES, AND PAVEMENT MARKINGS IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AS INDICATED BY THE OWNER'S REPRESENTATIVE, AND MANUFACTURER'S RECOMMENDATIONS AS SOON AS PRACTICABLE AND PRIOR TO OPENING TO THE PUBLIC.
 - ALL CONNECTORS AND FASTENERS USED TO ATTACH THE SIGN TO THE POST SHALL BE GALVANIZED STEEL.
- SIGN(S) SHALL BE INSTALLED AT TIME OF POST INSTALLATION TO ENSURE THE SIGN(S) WILL FACE THE CORRECT DIRECTION.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES PRIOR TO EXCAVATION.
- ANY REGULATORY SIGNS, WARNING SIGNS, OBJECT MARKERS, AND BARRICADES DAMAGED PRIOR TO ACCEPTANCE SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

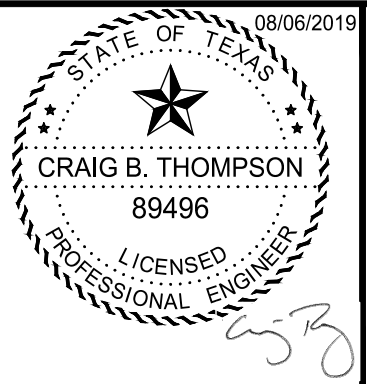
FINAL CLEAN-UP AND SITE PREPARATION

- THE CONTRACTOR WILL BE REQUIRED TO REMOVE EXCESS MATERIALS AND CONSTRUCTION DEBRIS FROM THE PROJECT SITE, CLEAN ALL ROADS AND SIDEWALKS, CLEAR THE STORM SEWER OF SILT AND DEBRIS, CLEAR THE SANITARY SEWER OF DEBRIS, BRING ALL MANHOLES, VALVE BOX COVERS, FIRE HYDRANTS TO PROPER GRADE, AND CLEAR THE SITE OF ALL EQUIPMENT TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- MATERIALS LARGER THAN FOUR-INCHES (4") IN SIZE WITHIN THE CONSTRUCTION LIMITS AND NOT INCORPORATED INTO THE PROJECT SHALL BE REMOVED BY THE CONTRACTOR FROM THE PROJECT AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- EROSION AND POLLUTION CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, REINFORCED SILT FENCE, INLET PROTECTION, HAY BALES, AND OTHER DEVICES AS DIRECTED BY THE OWNER'S REPRESENTATIVE SHALL BE VERIFIED AND REMEDIED TO MEET THE REQUIREMENTS OF THE DEVICE AND OWNER'S REPRESENTATIVE.
 - THE CONSTRUCTION ENTRANCE SHALL BE REMOVED IN ITS ENTIRETY UNLESS OTHERWISE STATED BY THE ENGINEER.
 - ADDITIONAL EROSION AND POLLUTION CONTROL DEVICES MAY BE REQUIRED TO HAVE THE PROJECT SITE IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- THE CONTRACTOR SHALL GRADE AND STABILIZE THE SITE TO PREPARE THE SITE FOR THE INTENDED USE TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

AS-BUILT DRAWINGS

- THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING TWO (2) SETS OF "AS-BUILT" DRAWINGS SHOWING ILLUSTRATIONS AND/OR NOTES OF ALL FIELD CHANGES AND MODIFICATIONS TO THE DRAWINGS AS ISSUED FOR THE PROJECT.
 - AS-BUILT DRAWINGS SHALL BE SIGNED BY ALL CONTRACTOR DESIGNEE(S) AND INSPECTOR(S).
- AT PROJECT COMPLETION, ALL SETS OF "AS-BUILT" DRAWINGS MUST BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO PROJECT FINAL ACCEPTANCE AND FINAL RELEASE OF PAYMENT.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
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


























































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GENERAL NOTES (2 OF 2)

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

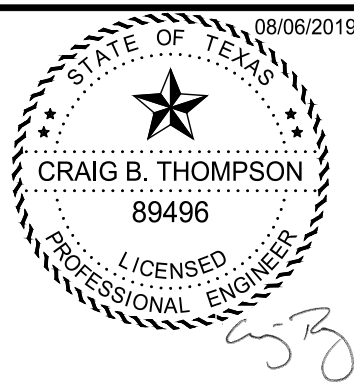
THE FOLLOWING IS A GENERAL LEGEND OF THE SYMBOLS AND LINES THAT MAY BE FOUND WITHIN THE CIVIL PORTION OF CONSTRUCTION DRAWINGS. THE ACTUAL LINE WEIGHT, SIZE, COLOR, AND ACTUAL INFORMATION ON THE LINE MAY DIFFER FROM SHEET TO SHEET. WHEN LINE TYPE HAS NUMERAL(S) WITHIN THE SEQUENCE IT IS INDICATING THE SIZE OF THE ITEM THAT IS BEING REPRESENTED. IF AT ANY POINT AN SYMBOL AND/OR LINE IS NOT CLEAR FOR WHAT IT REPRESENTS IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REQUEST CLARIFICATION FROM THE OWNER'S REPRESENTATIVE. ALL EXISTING ITEMS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.

	SANITARY UTILITY - EXISTING MANHOLE
	SANITARY UTILITY - PROPOSED MANHOLE
	SANITARY UTILITY - EXISTING SINGLE SERVICE CONNECTION
	SANITARY UTILITY - PROPOSED SINGLE SERVICE CONNECTION
	SANITARY UTILITY - EXISTING DOUBLE SERVICE CONNECTION
	SANITARY UTILITY - PROPOSED DOUBLE SERVICE CONNECTION
	SANITARY UTILITY - EXISTING CLEAN OUT
	SANITARY UTILITY - PROPOSED CLEAN OUT
	SANITARY UTILITY - EXISTING PIPE MARKER
	SANITARY UTILITY - PROPOSED PIPE MARKER
	SANITARY UTILITY - EXISTING FOCMAIN MARKER
	SANITARY UTILITY - PROPOSED FORCEMAIN MARKER
	STORM UTILITY - EXISTING CURB INLET
	STORM UTILITY - PROPOSED CURB INLET
	STORM UTILITY - EXISTING GRATE INLET
	STORM UTILITY - PROPOSED GRATE INLET
	STORM UTILITY - EXISTING POST INLET
	STORM UTILITY - PROPOSED POST INLET
	STORM UTILITY - EXISTING MANHOLE
	STORM UTILITY - PROPOSED MANHOLE
	STORM UTILITY - EXISTING JUNCTION BOX
	STORM UTILITY - PROPOSED JUNCTION BOX
	STORM UTILITY - EXISTING OUTFALL / OPEN END
	STORM UTILITY - PROPOSED OUTFALL / OPEN END
	STORM UTILITY - EXISTING MARKER
	STORM UTILITY - PROPOSED MARKER
	WATER UTILITY - EXISTING VALVE
	WATER UTILITY - PROPOSED VALVE
	WATER UTILITY - EXISTING FITTING
	WATER UTILITY - PROPOSED FITTING
	WATER UTILITY - EXISTING FIRE HYDRANT
	WATER UTILITY - PROPOSED FIRE HYDRANT
	WATER UTILITY - EXISTING SINGLE SERVICE CONNECTION
	WATER UTILITY - PROPOSED SINGLE SERVICE CONNECTION
	WATER UTILITY - EXISTING DOUBLE SERVICE CONNECTION
	WATER UTILITY - PROPOSED DOUBLE SERVICE CONNECTION
	WATER UTILITY - EXISTING MARKER
	WATER UTILITY - PROPOSED MARKER
	WATER UTILITY - EXISTING WATER METER
	WATER UTILITY - PROPOSED WATER METER
	LOC LIMITS OF CONSTRUCTION (LOC)
	PROPERTY BOUNDARY LINE
	ADJACENT BOUNDARY LINE
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	ROAD CENTER LINE
	YARD REQUIREMENT
	EASEMENT
	FENCE - EXISTING (SEE DRAWING NOTE)
	FENCE - PROPOSED (SEE DRAWING NOTE)
	PROPOSED FIBER FILTRATION TUBE
	PROPOSED REINFORCED FILTER FABRIC FENCE
	ROCK FILTER
	PROPOSED STRAW BALE
	PROPOSED STRAW BALE FENCE
	ELEVATION - EXISTING
	ELEVATION CONTOUR - EXISTING
	ELEVATION CONTOUR - PROPOSED
	DRAINAGE BASIN - EXISTING BASIN
	DRAINAGE BASIN - EXISTING SUB-BASIN
	DRAINAGE BASIN - PROPOSED BASIN
	DRAINAGE BASIN - PROPOSED SUB-BASIN

_____	E SS	SANITARY UTILITY – EXISTING PIPE
_____	SS	SANITARY UTILITY – PROPOSED PIPE
_____	F SS	SANITARY UTILITY – FUTURE PIPE
_____	E FM	SANITARY UTILITY – EXISTING FORCEMAIN
_____	FM	SANITARY UTILITY – PROPOSED FORCEMAIN
_____	E SSS	SANITARY UTILITY – EXISTING SERVICE CONNECTION
_____	SSS	SANITARY UTILITY – PROPOSED SERVICE CONNECTION
_____	E ST	STORM UTILITY – EXISTING GENERAL PIPE
_____	ST	STORM UTILITY – PROPOSED GENERAL PIPE
_____	F ST	STORM UTILITY – FUTURE GENERAL PIPE
_____	E BOX ST	STORM UTILITY – EXISTING CONCRETE BOX
_____	BOX ST	STORM UTILITY – PROPOSED CONCRETE BOX
_____	E #x# ST	STORM UTILITY – EXISTING CONCRETE BOX SIZE
_____	#x# ST	STORM UTILITY – PROPOSED CONCRETE BOX SIZE
_____	E CMP ST	STORM UTILITY – EXISTING CMP PIPE
_____	CMP ST	STORM UTILITY – PROPOSED CMP PIPE
_____	E HDPE ST	STORM UTILITY – EXISTING HDPE PIPE
_____	HDPE ST	STORM UTILITY – PROPOSED HDPE PIPE
_____	E HP ST	STORM UTILITY – EXISTING HP PIPE
_____	HP ST	STORM UTILITY – PROPOSED HP PIPE
_____	E PVC ST	STORM UTILITY – EXISTING PVC PIPE
_____	PVC ST	STORM UTILITY – PROPOSED PVC PIPE
_____	E RCP ST	STORM UTILITY – EXISTING RCP PIPE
_____	RCP ST	STORM UTILITY – PROPOSED RCP PIPE
_____	E DCL	STORM UTILITY – EXISTING DITCH CENTERLINE
_____	DCL	STORM UTILITY – PROPOSED DITCH CENTERLINE
_____	E W	WATER UTILITY – EXISTING GENERAL PIPE
_____	W	WATER UTILITY – PROPOSED GENERAL PIPE
_____	F W	WATER UTILITY – FUTURE GENERAL PIPE
_____	E AC W	WATER UTILITY – EXISTING ASBESTOS COATED PIPE
_____	E W PVC	WATER UTILITY – EXISTING PVC PIPE
_____	W PVC	WATER UTILITY – PROPOSED PVC PIPE
_____	E WS	WATER UTILITY – EXISTING SERVICE CONNECTION
_____	WS	WATER UTILITY – PROPOSED SERVICE CONNECTION
_____	E RE	WATER UTILITY – EXISTING REUSE
_____	RE	WATER UTILITY – PROPOSED REUSE
_____	F RE	WATER UTILITY – FUTURE REUSE
_____	E G	GAS UTILITY – EXISTING GAS
_____	G	GAS UTILITY – PROPOSED GAS
_____	E E	ELECTRICAL UTILITY – EXISTING GENERAL LINE
_____	E	ELECTRICAL UTILITY – PROPOSED GENERAL LINE
_____	F E	ELECTRICAL UTILITY – FUTURE GENERAL LINE
_____	E OHE	ELECTRICAL UTILITY – EXISTING OVERHEAD LINE
_____	OHE	ELECTRICAL UTILITY – PROPOSED OVERHEAD LINE
_____	E UGE	ELECTRICAL UTILITY – EXISTING UNDERGROUND LINE
_____	UGE	ELECTRICAL UTILITY – PROPOSED UNDERGROUND LINE
_____	E EGW	ELECTRICAL UTILITY – EXISTING GUY WIRE
_____	EGW	ELECTRICAL UTILITY – PROPOSED GUY WIRE
_____	E T	COMM UTILITY – EXISTING TELEPHONE GENERAL
_____	T	COMM UTILITY – PROPOSED TELEPHONE GENERAL
_____	E OHT	COMM UTILITY – EXISTING OVERHEAD TELEPHONE
_____	OHT	COMM UTILITY – PROPOSED OVERHEAD TELEPHONE
_____	E UGT	COMM UTILITY – EXISTING UNDERGROUND TELEPHONE
_____	UGT	COMM UTILITY – PROPOSED UNDERGROUND TELEPHONE
_____	E FOC	COMM UTILITY – EXISTING FIBEROPTIC
_____	FOC	COMM UTILITY – PROPOSED FIBEROPTIC
_____	E OHFOC	COMM UTILITY – EXISTING OVERHEAD FIBEROPTIC
_____	OHFOC	COMM UTILITY – PROPOSED OVERHEAD FIBEROPTIC
_____	E UGFOC	COMM UTILITY – EXISTING UNDERGROUND FIBEROPTIC
_____	UGFOC	COMM UTILITY – PROPOSED UNDERGROUND FIBEROPTIC
_____	E OHTV	COMM UTILITY – EXISTING OVERHEAD TELEVISION
_____	OHTV	COMM UTILITY – PROPOSED OVERHEAD TELEVISION
_____	E UGTV	COMM UTILITY – EXISTING UNDERGROUND TELEVISION
_____	UGTV	COMM UTILITY – PROPOSED UNDERGROUND TELEVISION
_____	OHUK	OTHER UTILITY– OVERHEAD UNKNOWN CABLE / PIPE
_____	UGUK	OTHER UTILITY – UNDERGROUND UNKNOWN CABLE / PIPE
_____	E PIPELINE	PIPELINE – EXISTING PIPELINE (SEE DRAWINGS FOR INFO.)
_____		EXISTING TOP OF SLOPE
_____		EXISTING TOE OF SLOPE
_____		EXISTING FLOW OF DITCH
=====		EXISTING CURB & GUTTER

THE FOLLOWING IS A GENERAL ABBREVIATION DEFINITION OF THE INFORMATION THAT MAY BE COMMONLY FOUND WITHIN THE CIVIL PORTION OF CONSTRUCTION DRAWINGS. IN SOME CASES A ABBREVIATION MAY HAVE MULTIPLE DEFINITIONS AND/OR IF AT ANY POINT THAT AN ABBREVIATION IS NOT CLEAR FOR WHAT IT REPRESENTS IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REQUEST CLARIFICATION FROM THE OWNER'S REPRESENTATIVE.

AC - ACRE	EL - ELEVATION	HP - HIGH-PERFORMANCE	PL - PROPERTY LINE	SY - SQUARE YARDS
ACC - ARCH CONCRETE PIPE	ELEC - ELECTRICAL	POLYPROPYLENE	PP - POWER POLE	T - TELEPHONE
ADA - AMERICAN WITH DISABILITIES ACT	ELEV - ELEVATION	HMAC - HOT MIX ASPHALTIC CONCRETE	PR - PROPOSED	TC - TOP OF CURB
AE - ACCESS EASEMENT	EJ - EXPANSION JOINT	I - INTENSITY	PRO - PROPOSED	TDLR - TEXAS DEPARTMENT OF
AEP - AMERICAN ELECTRIC POWER	EOR - EDGE OF RADIUS	IR - IRON ROD	PROP - PROPOSED	TEL - LICENSING AND REGULATION
BO - BACK OF CURB TO BACK OF CURB	EP - EDGE OF PAVEMENT	LF - LINEAR FEET	PT - POINT OF TANGENCY	TEL - TELEPHONE
BC - BACK OF CURB	EW - EACH WAY	LOC - LIMITS OF CONSTRUCTION	PVC - POLYVINYL CHLORIDE	TG - TOP OF GRATE
BRK - BROKEN	EX - EXISTING	LT - LEFT	Q - FLOW	TP - TOP OF PAVEMENT
BL - BUILDING LINE	EXIST - EXISTING	MAX - MAXIMUM	QT - TOTAL FLOW	TRW - TOP OF RETAINING WALL
BM - BENCHMARK	EXP - EXPANSION	ME - MATCH EXISTING	RC - REINFORCED CONCRETE	TS - TOP OF SLOPE
BW - BOTH WAYS	F - FUTURE	MH - MANHOLE	RCP - REINFORCED CONCRETE PIPE	TW - TOP OF WALK
C - RUNOFF COEFFICIENT	FC - FENCE CORNER	MJ - MECHANICAL JOINT	REFL - REFLECTIVE	TXDOT - TEXAS DEPARTMENT OF
CI - CURB INLET	FD - FOUND	MIN - MINIMUM	ROW - RIGHT-OF-WAY	TRANSPORTATION
CL - CENTERLINE	FF - FINISHED FLOOR	MR - MAP RECORDS	R.O.W. - RIGHT-OF-WAY	TY - TYPE
CJ - CONTROL JOINT	FG - FINISH GRADE	NAVD - NORTH AMERICAN VERTICAL	RT - RIGHT	TYP - TYPICAL
CO - CLEANOUT	FH - FIRE HYDRANT	DATUM	S - SLOPE	TV - TELEVISION
CONC - CONCRETE	FL - FLOWLINE	NG - NATURAL GROUND	S - SANITARY / WASTEWATER	UE - UTILITY EASEMENT
CMP - CORRUGATED METAL PIPE	FM - FORCEMAIN	NGVD - NATIONAL GEODETIC VERTICAL	SAN - SANITARY / WASTEWATER	US - UPSTREAM
COMM - COMMUNICATION	FOC - FIBER OPTIC CABLE	DATUM	SS - SANITARY / WASTEWATER	VG - VALLEY GUTTER
D - DRAINAGE / STORM	FT - FEET	NO - NUMBER	SD - SOLID	VOL - VOLUME
DBL - DOUBLE	G - GAS	OC - ON CENTER	SE - SANITARY EASEMENT	W - WATER
DE - DRAINAGE EASEMENT	GB - GRADE BREAK	O.C. - ON CENTER	SF - SQUARE FEET	W - WHITE
DI - DUCTILE IRON	GI - GRATE INLET	OH - OVERHEAD ELECTRIC	SGM - SANITARY GRAVITY MANHOLE	W - WATER EASEMENT
DR - DEED RECORDS	GT - GUTTER	PAVE - PAVEMENT	ST - STORM	WHT - WHITE
DS - DOWN STREAM	GW - GUY WIRE	PC - POINT OF CURVATURE	STA - STATION	WL - WATER LINE
E - ELECTRICAL	HDPE - HIGH DENSITY POLYETHYLENE	PE - PRIVATE EASEMENT	STRM - STORM	WTR - WATER
ECP - ELLIPTICAL CONCRETE PIPE	HG - HYDRAULIC GRADE	PG - PAGE	STM - STORM	WW - WATER VALVE
EE - ELECTRICAL EASEMENT	HGL - HYDRAULIC GRADE LINE	PG - PROPOSED GRADE	SW - SIDEWALK	YLW - YELLOW
		PI - POINT OF INTERSECTION		YR - YARD REQUIREMENT

[illegible]

"The Junction Where Good Friends Meet"

Hanson No. 17L0017
 Filename 5 GENERAL LEGEND
 Scale AS SHOWN
 Date 08/06/2019

ROUT	AN/GP	08/06/20
AWN	AN/GP	08/06/20
BEWE	CBT	08/06/20



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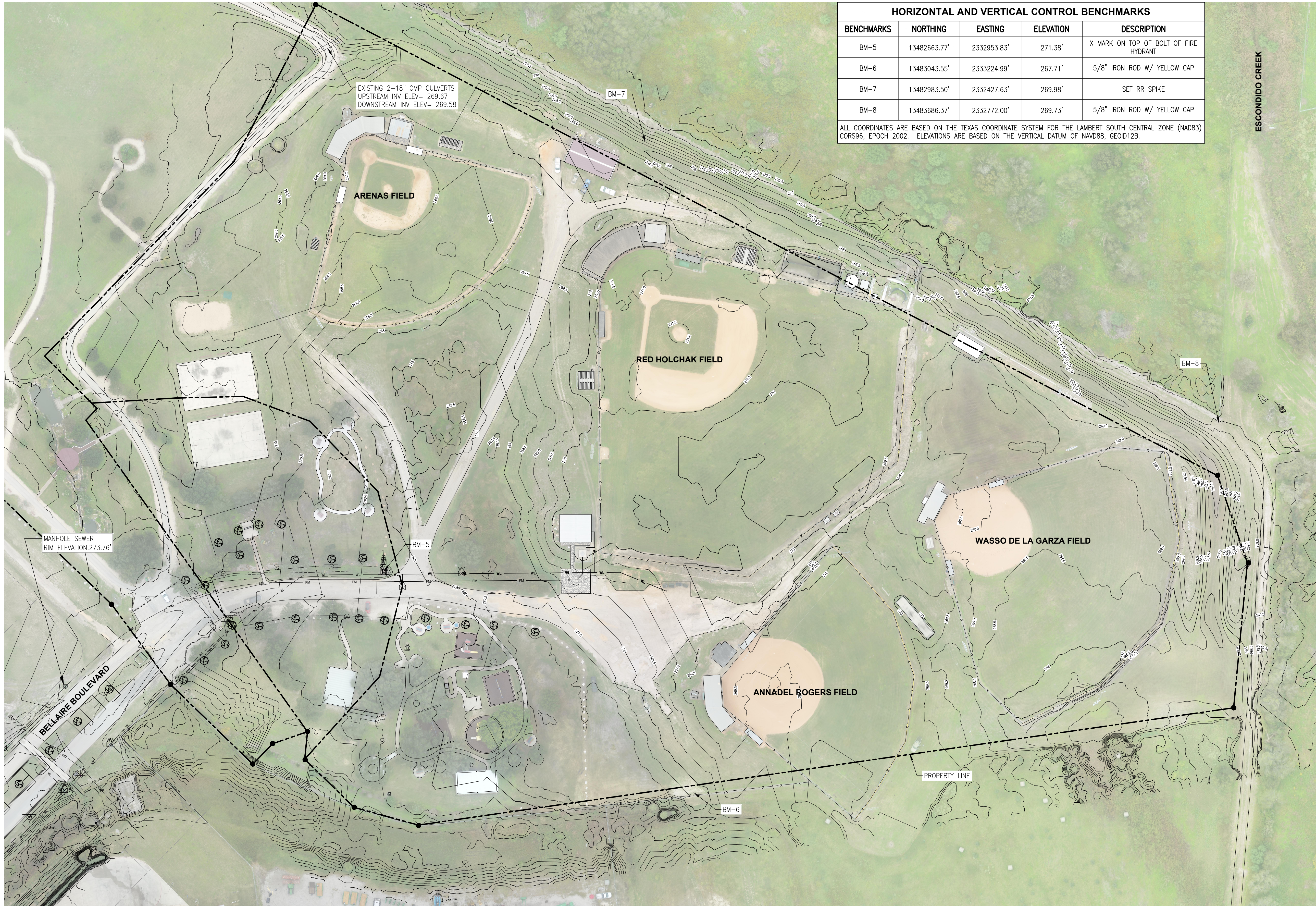
GENERAL LEGEND

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

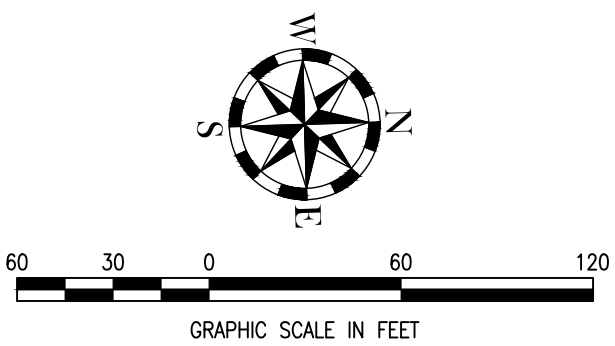
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3 of 42 sheets

AUG 06, 2019 4:11 PM CAMAC01757
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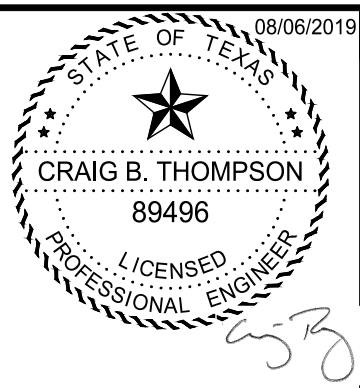
HORIZONTAL AND VERTICAL CONTROL BENCHMARKS				
BENCHMARKS	NORTHING	EASTING	ELEVATION	DESCRIPTION
BM-5	13482663.77'	2332953.83'	271.38'	X MARK ON TOP OF BOLT OF FIRE HYDRANT
BM-6	13483043.55'	2333224.99'	267.71'	5/8" IRON ROD W/ YELLOW CAP
BM-7	13482983.50'	2332427.63'	269.98'	SET RR SPIKE
BM-8	13483686.37'	2332772.00'	269.73'	5/8" IRON ROD W/ YELLOW CAP
ALL COORDINATES ARE BASED ON THE TEXAS COORDINATE SYSTEM FOR THE LAMBERT SOUTH CENTRAL ZONE (NAD83) CORRS96, EPOCH 2002. ELEVATIONS ARE BASED ON THE VERTICAL DATUM OF NAVD88, GEOID12B.				



NOTES:

- EXISTING CONDITIONS REFLECT THE SITE AT TIME OF SURVEY. SEE DEMOLITION PLAN FOR SUMMARY OF EXISTING SITE FEATURES THAT WILL BE REMOVED UNDER SEPARATE CONTRACT PRIOR TO START OF CONSTRUCTION.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename 6 EXISTING CONDITION		
Scale AS SHOWN		
Date 08/06/2019		
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
REVIEWED	CBT	08/06/2019



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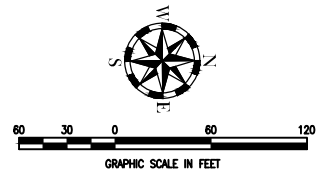
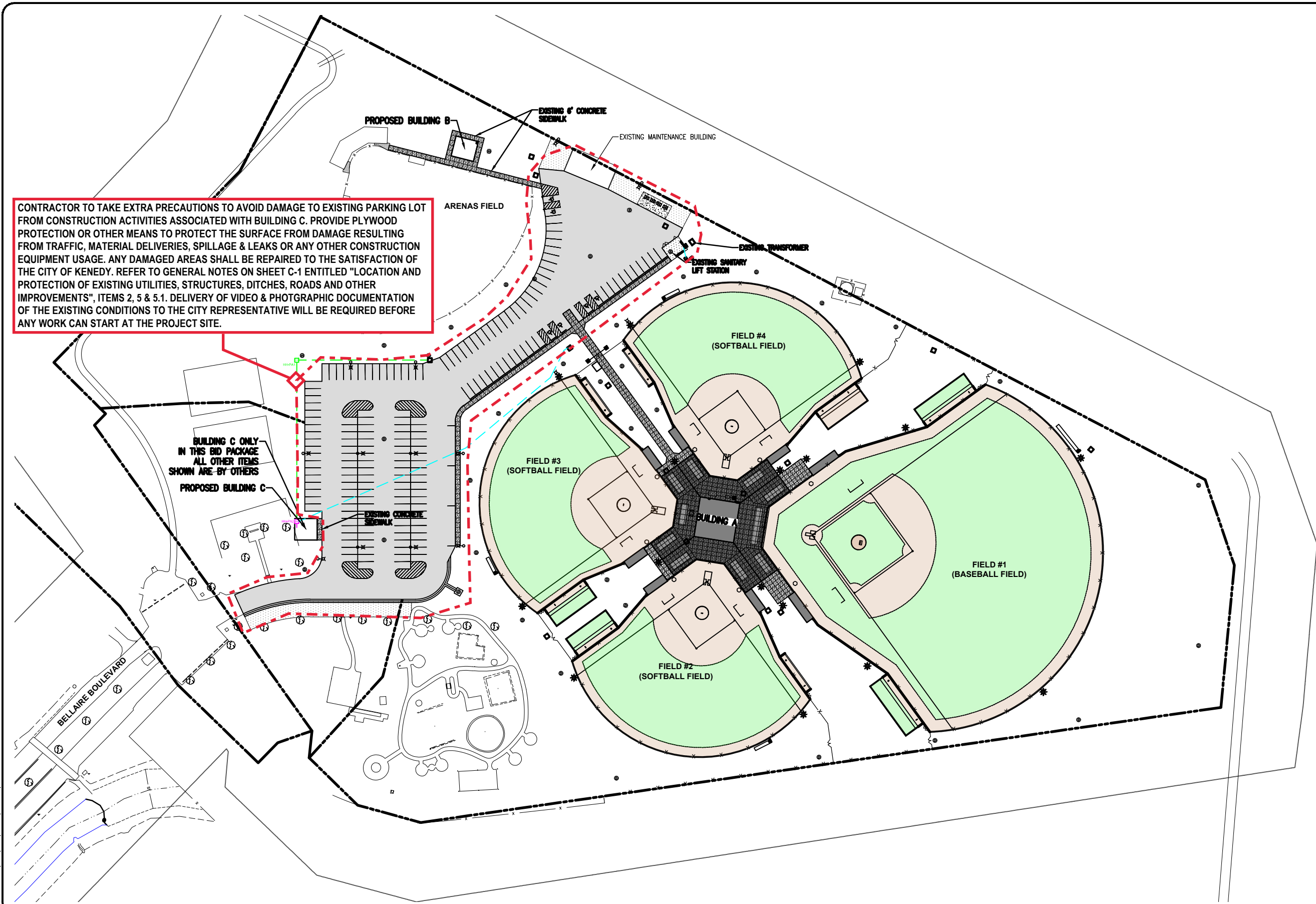
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EXISTING CONDITIONS

CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

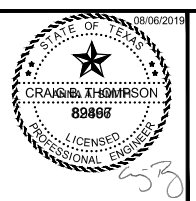
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- LEGEND**
- x— FENCE
 - STORM SEWER MANHOLE
 - SANITARY SEWER MANHOLE
 - ⊗ LIGHT POLE
 - HAND HOLE

- NOTE:**
1. SEE ELECTRICAL PLANS FOR SITE ELECTRICAL AND LIGHTING DETAILS.
 2. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR BUILDING, ENTRANCE ARCHWAY AND DUGOUT DETAILS.
 3. CONTRACTOR SHALL RESTORE DISTURBED AREAS AFFECTED BY CONSTRUCTION. ANY EXISTING PAVEMENT OR SIDEWALK THAT IS DAMAGED SHALL BE REMOVED AND REPLACED.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017	
Filename	7 PROPOSED SITE PLAN	
Scale	AS SHOWN	
Date	08/06/2019	
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
REVIEWED	CBT	08/06/2019

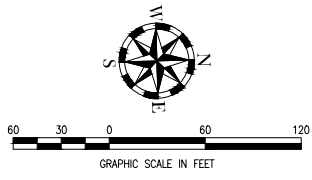
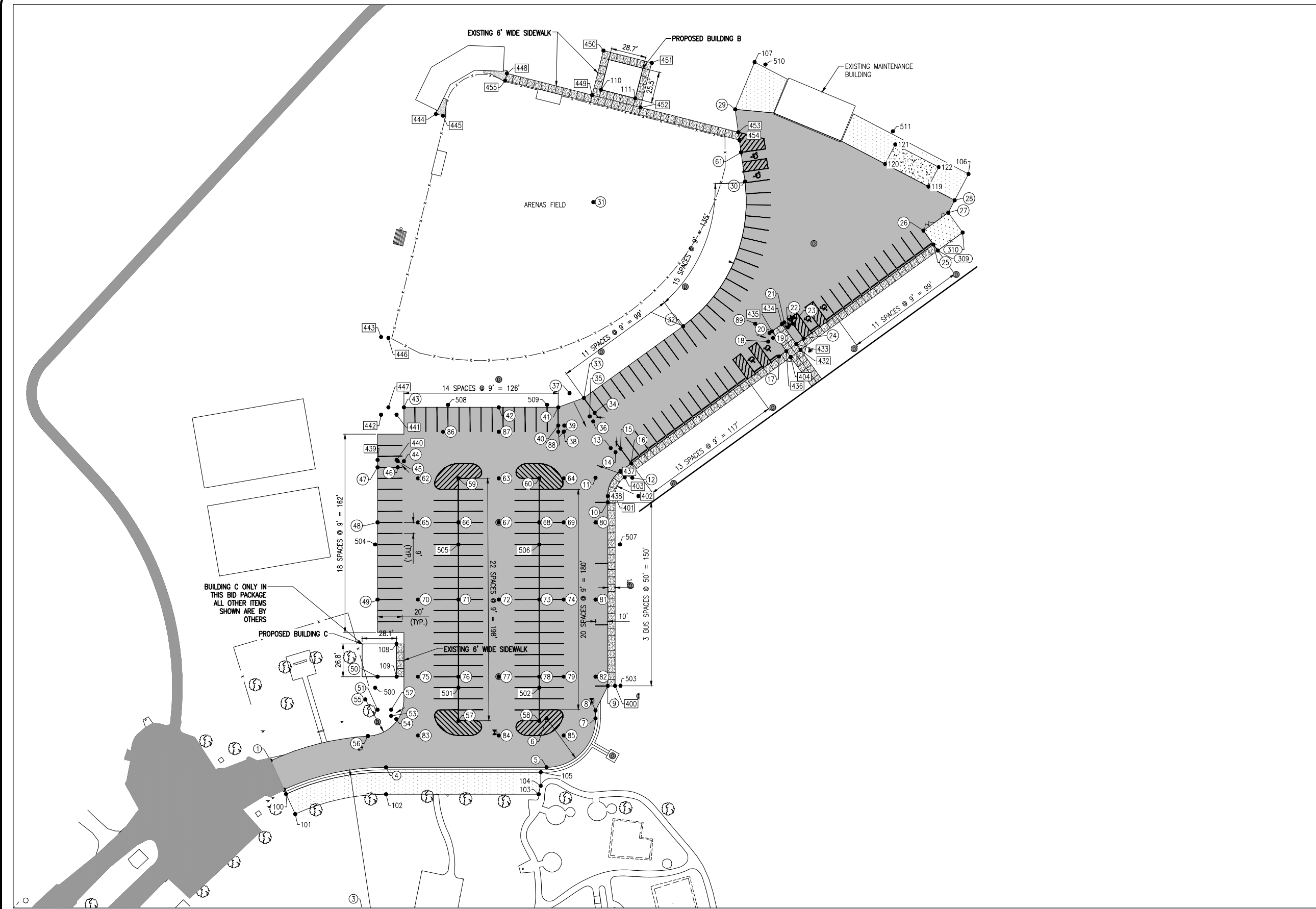


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PROPOSED SITE PLAN

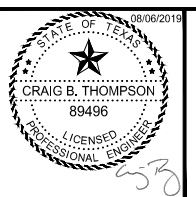
CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

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- LEGEND**
- EXISTING PAVEMENT
 - EXISTING FENCE
 - EXISTING ASPHALT PAVEMENT
 - EXISTING CRUSHED LIMESTONE LIMITS
 - EXISTING SIDEWALK
 - CONCRETE SLAB PAVEMENT
 - EXISTING FENCE
 - PARKING LOT CONTROL POINT
 - SIDEWALK CONTROL POINT
 - FIELD COMPLEX CONTROL POINT
 - GRAVEL, LIGHT POLE & GENERAL CONTROL POINT

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017	
Filename	10. CONTROL PLAN	
Scale	AS SHOWN	
Date	08/06/2019	
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
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LAYOUT PLAN - (1 OF 2)

CONSTRUCTION DRAWINGS FOR
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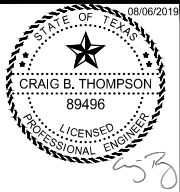
PARKING LOT CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
1	PAVEMENT EDGE	269.77'	13482473.90	2332980.57
2	PAVEMENT EDGE	269.35'	13482484.74	2333004.21
3	CENTER POINT OF 200' RADIUS	269.19'	13482568.12	2333186.00
4	PAVEMENT EDGE	268.87'	13482568.12	2332986.00
5	PAVEMENT EDGE	268.23'	13482699.19	2332986.00
6	CENTER POINT OF 40' RADIUS	268.77'	13482699.19	2332946.00
7	PAVEMENT EDGE	268.11'	13482739.19	2332946.00
8	PAVEMENT EDGE	268.19'	13482739.19	2332939.58
9	PAVEMENT EDGE/SIDEWALK EDGE	268.54'	13482749.19	2332919.58
10	PAVEMENT EDGE/SIDEWALK EDGE	270.04'	13482749.19	2332769.58
11	PAVEMENT EDGE	270.09'	13482739.19	2332749.58
12	CENTER POINT OF 30' RADIUS	269.87'	13482769.19	2332749.58
13	PAVEMENT EDGE	269.80'	13482751.60	2332725.28
14	CENTER POINT OF 5' RADIUS	269.85'	13482755.52	2332728.61
15	PAVEMENT EDGE	269.81'	13482759.57	2332725.68
16	PAVEMENT EDGE/SIDEWALK EDGE	270.04'	13482768.37	2332737.83
17	PAVEMENT EDGE/SIDEWALK EDGE	269.85'	13482889.04	2332650.43
18	PAVEMENT EDGE	269.63'	13482880.20	2332638.31
19	CENTER POINT OF 5' RADIUS	269.62'	13482884.25	2332635.38
20	PAVEMENT EDGE	269.57'	13482881.31	2332631.33
21	PAVEMENT EDGE	269.57'	13482893.33	2332622.63
22	CENTER POINT OF 5' RADIUS	269.62'	13482896.26	2332626.68
23	PAVEMENT EDGE	269.63'	13482900.31	2332623.75
24	PAVEMENT EDGE	269.85'	13482909.11	2332635.90
25	PAVEMENT EDGE	270.25'	13483015.20	2332559.05
26	PAVEMENT EDGE/UTILITY ENCLOSURE	270.04'	13483006.99	2332547.72
27	PAVEMENT EDGE/UTILITY ENCLOSURE	270.04'	13483027.24	2332533.05
28	PAVEMENT EDGE/CALICHE EDGE	269.80'	13483032.52	2332522.96
29	PAVEMENT EDGE/CALICHE EDGE	270.04'	13482853.25	2332448.62
30	PAVEMENT EDGE	269.86'	13482861.27	2332507.56
31	CENTER POINT OF 125' RADIUS	269.26'	13482737.41	2332524.42
32	PAVEMENT EDGE	269.05'	13482810.73	2332625.65
33	PAVEMENT EDGE	269.05'	13482729.66	2332684.37
34	PAVEMENT EDGE	269.27'	13482738.46	2332696.52
35	CENTER POINT OF 5' RADIUS	269.31'	13482734.41	2332699.46
36	PAVEMENT EDGE	269.35'	13482737.34	2332703.50
37	CENTER POINT OF 30' RADIUS	269.70'	13482717.96	2332680.50
38	PAVEMENT EDGE	269.35'	13482713.26	2332711.88
39	CENTER POINT OF 5' RADIUS	269.41'	13482713.69	2332706.90
40	PAVEMENT EDGE	269.43'	13482708.69	2332706.90

PARKING LOT CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
41	PAVEMENT EDGE	269.65'	13482708.69	2332692.00
42	PAVEMENT EDGE	269.16'	13482660.19	2332692.00
43	PAVEMENT EDGE/SIDEWALK EDGE	270.41'	13482582.69	2332692.00
44	PAVEMENT EDGE/SIDEWALK EDGE	270.33'	13482582.69	2332736.00
45	CENTER POINT OF 5' RADIUS	270.37'	13482577.69	2332736.00
46	PAVEMENT EDGE/SIDEWALK EDGE	270.28'	13482577.69	2332741.00
47	PAVEMENT EDGE/SIDEWALK EDGE	270.32'	13482561.19	2332741.00
48	PAVEMENT EDGE	269.87'	13482561.19	2332786.00
49	PAVEMENT EDGE	270.12'	13482561.19	2332849.00
50	PAVEMENT EDGE	269.78'	13482561.19	2332912.00
51	PAVEMENT EDGE	269.65'	13482561.19	2332939.00
52	PAVEMENT EDGE	269.48'	13482572.27	2332939.00
53	CENTER POINT OF 5' RADIUS	269.28'	13482572.27	2332944.00
54	PAVEMENT EDGE	269.38'	13482576.49	2332946.69
55	CENTER POINT OF 30' RADIUS	269.32'	13482551.19	2332930.56
56	PAVEMENT EDGE	269.38'	13482553.18	2332960.49
57	ISLAND MARKING REFERENCE POINT	268.88'	13482627.19	2332948.00
58	ISLAND MARKING REFERENCE POINT	268.86'	13482693.19	2332948.00
59	ISLAND MARKING REFERENCE POINT	269.16'	13482627.19	2332750.00
60	ISLAND MARKING REFERENCE POINT	268.75'	13482693.19	2332750.00
61	ISLAND MARKING REFERENCE POINT	269.93'	13482858.05	2332483.78
62	PAVEMENT	269.85'	13482594.19	2332750.00
63	PAVEMENT	268.29'	13482660.19	2332750.00
64	PAVEMENT	269.33'	13482713.19	2332750.00
65	PAVEMENT	269.27'	13482594.19	2332786.00
66	PAVEMENT	268.51'	13482627.19	2332786.00
67	PAVEMENT	267.75'	13482660.19	2332786.00
68	PAVEMENT	268.58'	13482693.19	2332786.00
69	PAVEMENT	269.08'	13482713.19	2332786.00
70	PAVEMENT	269.71'	13482594.19	2332849.00
71	PAVEMENT	269.43'	13482627.19	2332849.00
72	PAVEMENT	268.70'	13482660.19	2332849.00
73	PAVEMENT	269.43'	13482693.19	2332849.00
74	PAVEMENT	269.47'	13482713.19	2332849.00
75	PAVEMENT	269.20'	13482594.19	2332912.00
76	PAVEMENT	268.48'	13482627.19	2332912.00
77	PAVEMENT	267.75'	13482660.19	2332912.00
78	PAVEMENT	268.74'	13482693.19	2332912.00
79	PAVEMENT	268.84'	13482713.19	2332912.00
80	PAVEMENT	269.73'	13482739.19	2332786.00

PARKING LOT CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
81	PAVEMENT	269.10'	13482739.19	2332849.00
82	PAVEMENT	268.47'	13482739.19	2332912.00
83	PAVEMENT	269.18'	13482594.19	2332960.00
84	PAVEMENT	268.85'	13482660.19	2332960.00
85	PAVEMENT	268.36'	13482713.19	2332960.00
86	PAVEMENT	269.79'	13482614.69	2332712.00
87	PAVEMENT	268.86'	13482660.19	2332712.00
88	PAVEMENT	269.35'	13482708.69	2332712.00
89	PAVEMENT	269.36'	13482869.58	2332623.78

CRUSHED LIMESTONE & GENERAL CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
100	CRUSHED LIMESTONE EDGE	269.35'	13482486.41	2333007.84
101	CRUSHED LIMESTONE EDGE	270.00'	13482493.91	2333024.21
102	CRUSHED LIMESTONE EDGE	269.03'	13482568.12	2333008.00
103	CRUSHED LIMESTONE EDGE	268.75'	13482692.77	2333007.98
104	CRUSHED LIMESTONE EDGE	268.60'	13482694.41	2333001.18
105	CRUSHED LIMESTONE EDGE	268.29'	13482694.41	2332990.00
106	CRUSHED LIMESTONE EDGE	269.30'	13483043.77	2332501.44
107	CRUSHED LIMESTONE EDGE	270.10'	13482869.11	2332410.07
108	BUILDING C REFERENCE POINT	270.50'	13482576.69	2332885.22
109	BUILDING C REFERENCE POINT	270.50'	13482576.69	2332912.00
110	BUILDING B REFERENCE POINT	270.50'	13482743.75	2332432.68
111	BUILDING B REFERENCE POINT	270.50'	13482771.57	2332439.74
112	ENTRANCE ARCWAY COLUMN	269.34'	13482937.48	2332672.31
113	ENTRANCE ARCWAY COLUMN	269.34'	13482914.80	2332688.74
114	TICKET BOOTH REFERENCE POINT	270.00'	13482929.13	2332693.18
115	BUILDING A REFERENCE POINT	270.50'	13483054.81	2332858.19
116	BUILDING A REFERENCE POINT	270.50'	13483104.19	2332866.08
117	BUILDING A REFERENCE POINT	270.50'	13483096.29	2332915.46
118	BUILDING A REFERENCE POINT	270.50'	13483046.92	2332907.56
119	DUMPSTER PAD/PAVEMENT EDGE	269.70'	13483011.10	2332511.76
120	DUMPSTER PAD/PAVEMENT EDGE	269.70'	13482975.66	2332493.22
121	DUMPSTER PAD/PAVEMENT EDGE	269.88'	13482984.00	2332477.27
122	DUMPSTER PAD/PAVEMENT EDGE	269.88'	13483019.44	2332495.81

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename 10 CONTROL PLAN		
Scale AS SHOWN		
Date 08/06/2019		
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
REVIEWED	CBT	08/06/2019



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CONTROL POINT TABLES - (1 OF 3)	
CONSTRUCTION DRAWINGS FOR LARRY KIESLING YOUTH SPORTS COMPLEX CITY OF KENEDY	

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SIDEWALK CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
400	SIDEWALK EDGE	268.63'	13482755.19	2332919.58
401	SIDEWALK EDGE	270.13'	13482755.19	2332764.48
402	CENTER POINT OF 19' RADIUS	269.10'	13482774.19	2332764.48
403	SIDEWALK EDGE	270.13'	13482763.05	2332749.09
404	SIDEWALK EDGE	269.90'	13482898.55	2332650.95
405	SIDEWALK EDGE	270.10'	13482954.27	2332727.89
406	SIDEWALK EDGE	270.21'	13482983.60	2332768.39
407	SIDEWALK EDGE	270.33'	13483015.99	2332813.10
408	SIDEWALK EDGE	270.09'	13483000.40	2332824.40
409	SIDEWALK EDGE	270.10'	13483026.97	2332861.09
410	SIDEWALK EDGE	270.10'	13483021.37	2332896.12
411	SIDEWALK EDGE	270.09'	13482984.68	2332922.70
412	SIDEWALK EDGE	270.33'	13482998.90	2332942.34
413	SIDEWALK EDGE	270.09'	13483013.13	2332961.98
414	SIDEWALK EDGE	270.10'	13483049.82	2332935.40
415	SIDEWALK EDGE	270.10'	13483084.85	2332941.00
416	SIDEWALK EDGE	270.09'	13483111.43	2332977.70
417	SIDEWALK EDGE	270.33'	13483131.07	2332963.47
418	SIDEWALK EDGE	270.23'	13483151.60	2332991.82
419	SIDEWALK EDGE	270.09'	13483171.24	2332977.60
420	SIDEWALK EDGE	270.09'	13483130.29	2332921.06
421	SIDEWALK EDGE	270.09'	13483138.24	2332871.36
422	SIDEWALK EDGE	270.09'	13483194.78	2332830.41
423	SIDEWALK EDGE	270.23'	13483180.55	2332810.77
424	SIDEWALK EDGE	270.33'	13483152.20	2332831.31
425	SIDEWALK EDGE	270.09'	13483137.98	2332811.67
426	SIDEWALK EDGE	270.10'	13483101.28	2332838.24
427	SIDEWALK EDGE	270.10'	13483066.25	2332832.64
428	SIDEWALK EDGE	270.09'	13483039.68	2332795.95
429	SIDEWALK EDGE	270.33'	13483024.09	2332807.24
430	SIDEWALK EDGE	270.21'	13482991.70	2332762.52
431	SIDEWALK EDGE	270.10'	13482962.37	2332722.03
432	SIDEWALK EDGE	269.90'	13482906.64	2332645.09
433	SIDEWALK EDGE	269.82'	13482903.12	2332640.23
434	SIDEWALK EDGE	269.55'	13482891.39	2332624.03
435	SIDEWALK EDGE	269.55'	13482883.29	2332629.90
436	SIDEWALK EDGE	269.82'	13482895.03	2332646.09
437	SIDEWALK EDGE	270.04'	13482759.53	2332744.23
438	SIDEWALK EDGE	270.04'	13482749.19	2332764.48
439	SIDEWALK EDGE	270.42'	13482561.19	2332735.00

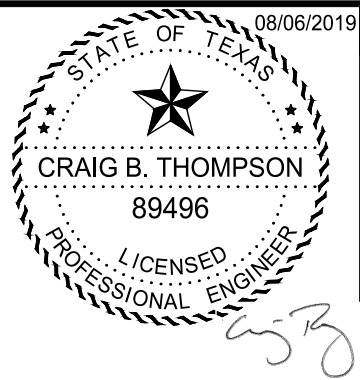
SIDEWALK CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
440	SIDEWALK EDGE	270.40'	13482576.69	2332735.00
441	SIDEWALK EDGE	270.46'	13482576.69	2332698.00
442	SIDEWALK EDGE	270.46'	13482564.02	2332698.00
443	SIDEWALK EDGE	269.31'	13482564.02	2332634.62
444	SIDEWALK EDGE	269.90'	13482608.79	2332452.45
445	SIDEWALK EDGE	269.85'	13482614.62	2332453.89
446	SIDEWALK EDGE	269.40'	13482570.02	2332635.34
447	SIDEWALK EDGE	270.41'	13482570.02	2332692.00
448	SIDEWALK EDGE	269.90'	13482666.83	2332419.36
449	SIDEWALK EDGE	270.38'	13482736.45	2332437.02
450	SIDEWALK EDGE	270.38'	13482745.68	2332400.67
451	SIDEWALK EDGE	270.38'	13482785.14	2332410.68
452	SIDEWALK EDGE	270.38'	13482775.91	2332447.03
453	SIDEWALK EDGE	269.98'	13482855.79	2332467.29
454	SIDEWALK EDGE	269.96'	13482856.66	2332473.70
455	SIDEWALK EDGE	269.90'	13482665.35	2332425.17

LIGHT POLE CONTROL POINTS				
POINT #	DESCRIPTION	ELEVATION	NORTHING	EASTING
500	LIGHT POLE	269.60'	13482559.19	2332921.00
501	LIGHT POLE	268.58'	13482627.19	2332921.00
502	LIGHT POLE	268.77'	13482693.19	2332921.00
503	LIGHT POLE	268.59'	13482759.57	2332919.36
504	LIGHT POLE	269.83'	13482559.19	2332804.02
505	LIGHT POLE	268.77'	13482627.19	2332804.02
506	LIGHT POLE	268.82'	13482693.19	2332804.02
507	LIGHT POLE	269.32'	13482759.08	2332804.05
508	LIGHT POLE	269.70'	13482618.65	2332690.00
509	LIGHT POLE	269.47'	13482699.65	2332690.00
510	LIGHT POLE	269.80'	13482877.98	2332411.99
511	LIGHT POLE	269.52'	13482981.99	2332466.58
512	LIGHT POLE	268.58'	13482878.50	2332708.51
513	LIGHT POLE	268.62'	13482967.59	2332643.99
514	LIGHT POLE	269.38'	13483253.86	2332689.77
515	LIGHT POLE	270.29'	13483154.20	2332824.92
516	LIGHT POLE	270.35'	13483022.76	2332813.93
517	LIGHT POLE	270.11'	13483187.23	2332810.87
518	LIGHT POLE	269.77'	13483310.90	2332771.93
519	LIGHT POLE	268.80'	13483529.70	2332809.78
520	LIGHT POLE	268.79'	13483483.03	2333101.64
521	LIGHT POLE	269.77'	13483263.34	2333069.38
522	LIGHT POLE	270.13'	13483157.98	2332993.81
523	LIGHT POLE	270.29'	13483130.97	2332970.16
524	LIGHT POLE	269.39'	13483183.52	2333129.66
525	LIGHT POLE	268.03'	13482897.24	2333083.88
526	LIGHT POLE	270.35'	13483002.66	2332939.61
527	LIGHT POLE	268.52'	13482832.72	2332994.79

NOTE: FINAL LIGHT POLE LOCATIONS SHALL BE COORDINATED WITH LIGHTING MANUFACTURER AND/OR SUPPLIER.

*SHEET INCLUDED FOR
INFORMATION ONLY

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename 10 CONTROL PLAN		
Scale AS SHOWN		
Date 08/06/2019		
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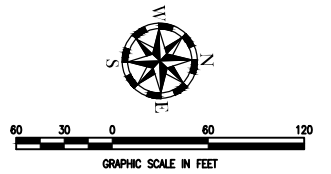
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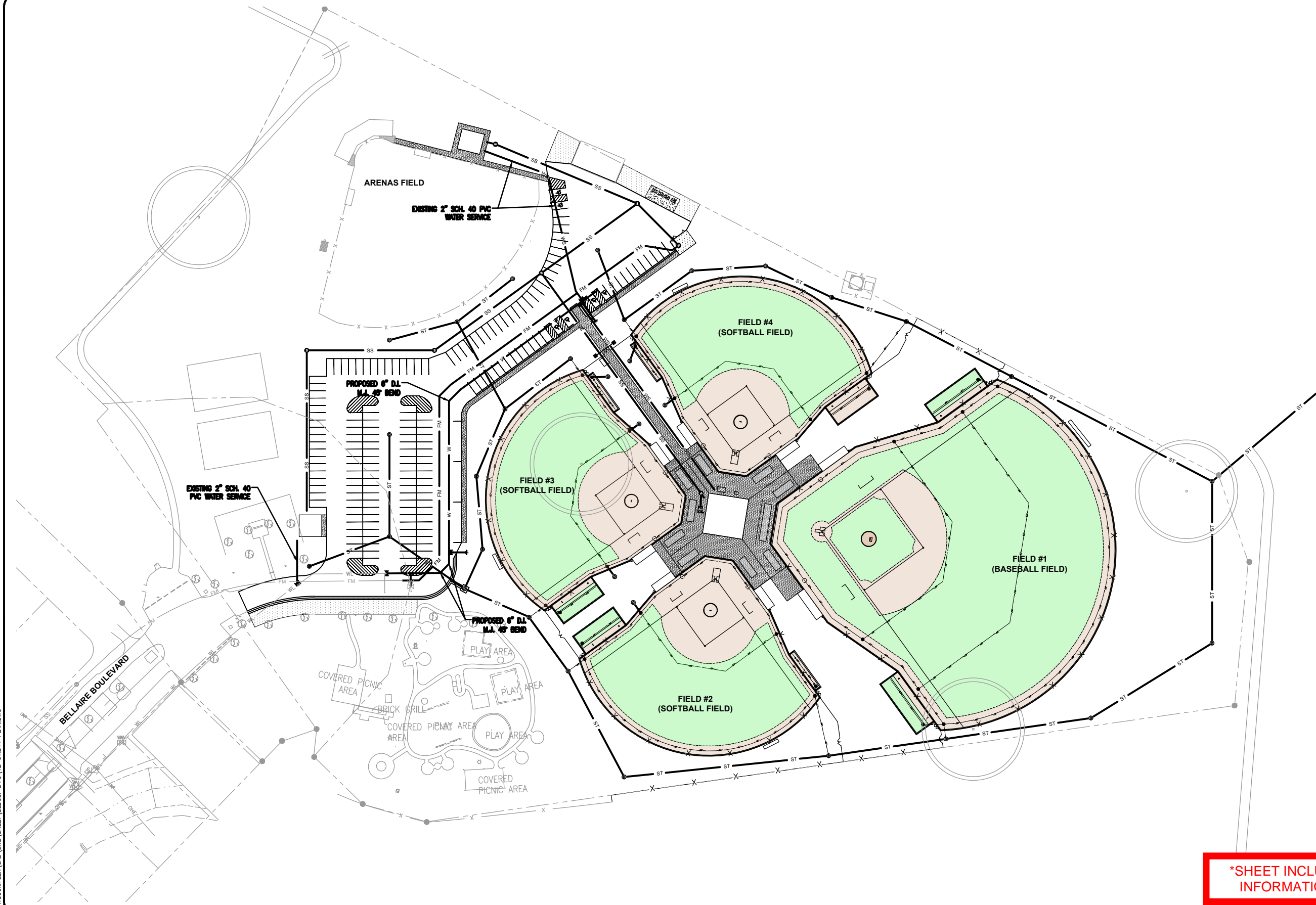
CONTROL POINT TABLES - (3 OF 3)

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY



- LEGEND**
- ST — EXISTING STORM SEWER LINE
 - WL — EXISTING WATER LINE
 - SS — EXISTING SANITARY SEWER LINE
 - FM — EXISTING FORCEMAIN
 - FIELD DRAINAGE LINE
 - EXISTING STORM SEWER MANHOLE
 - EXISTING FIELD DRAINAGE STRUCTURE
 - EXISTING SANITARY SEWER MANHOLE
 - ✕ EXISTING WATER VALVES
 - ✱ EXISTING FIRE HYDRANT

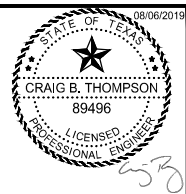
NOTES:
1. EXISTING WATER SERVICE LINES STOP 8 FT. FROM THE BUILDING. REFER TO MEP PLANS FOR CONNECTIONS.



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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017	
Filename	12 UTILITY PLAN	
Scale	AS SHOWN	
Date	08/06/2019	
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
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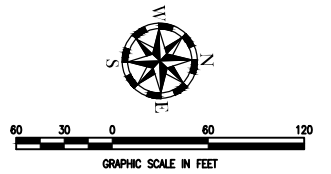
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WATER PLAN

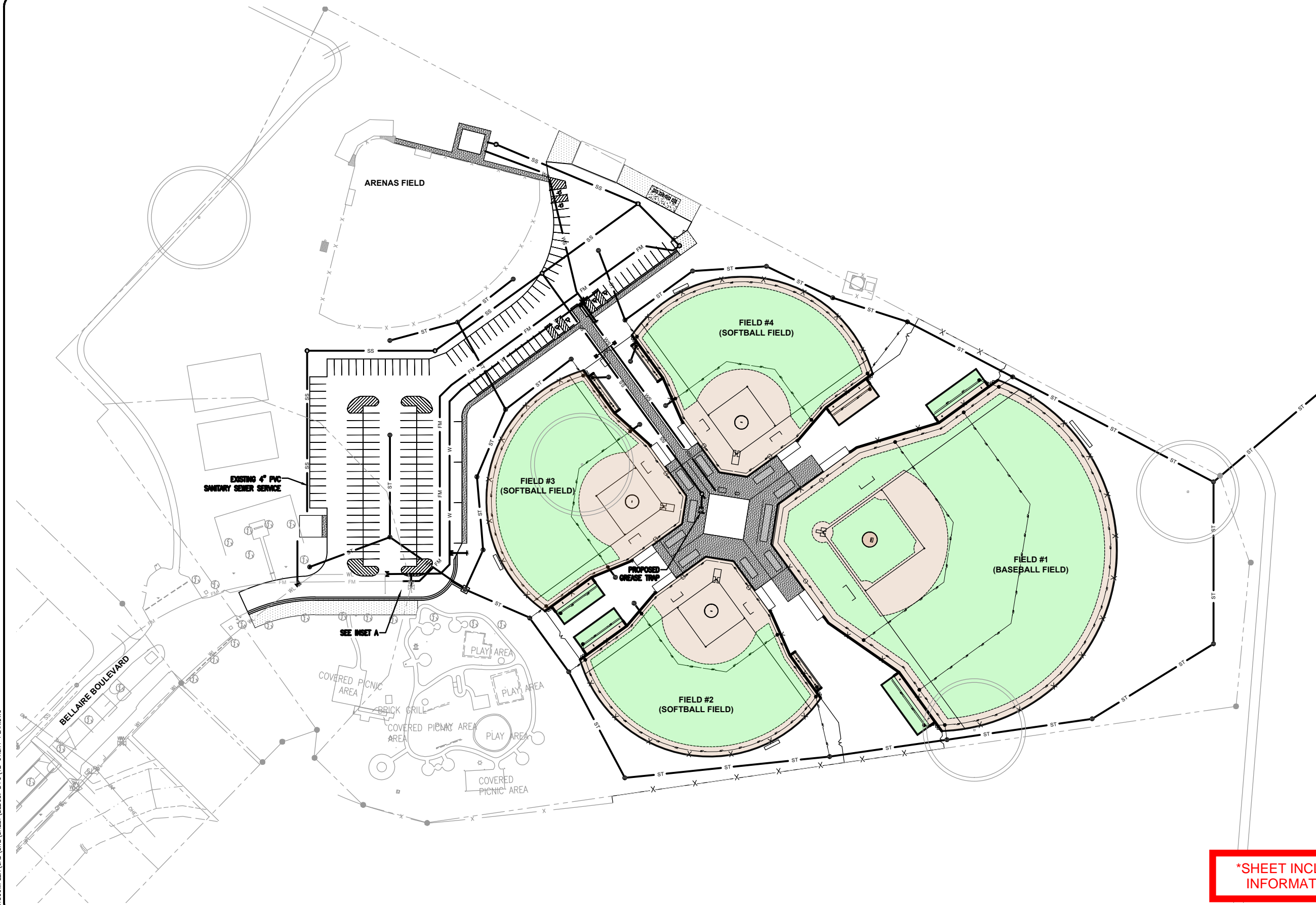
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

C-21
21 of 42 sheets



- LEGEND**
- ST — EXISTING STORM SEWER LINE
 - WL — EXISTING WATER LINE
 - SS — EXISTING SANITARY SEWER LINE
 - FM — EXISTING FORCEMAIN
 - FIELD DRAINAGE LINE
 - EXISTING STORM SEWER MANHOLE
 - EXISTING FIELD DRAINAGE STRUCTURE
 - EXISTING SANITARY SEWER MANHOLE
 - ✕ EXISTING WATER VALVES
 - ✱ EXISTING FIRE HYDRANT

NOTE:
1. EXISTING SEWER SERVICE LINES STOP 6' FROM BUILDING. REFER TO MEP PLANS FOR CORRECTIONS.



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Filename 12 UTILITY PLAN
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Date 08/06/2019

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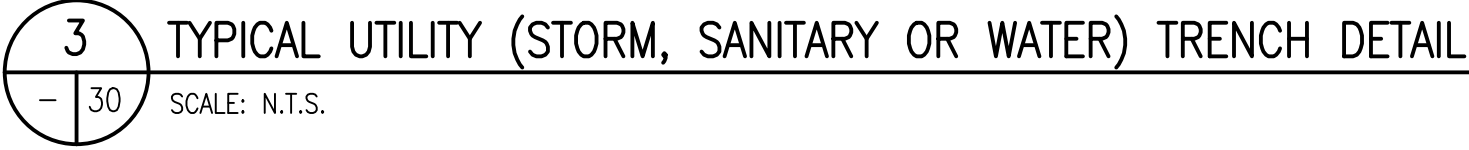
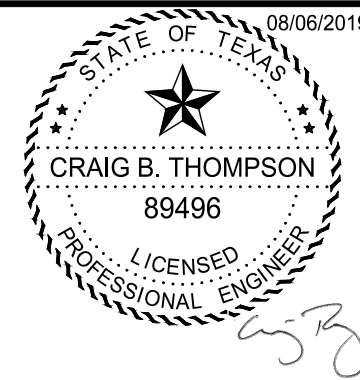
SANITARY SEWER PLAN

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

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22 of 42 sheets



- NOT USED

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Filename 16 UTILITY DETAILS
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Date 08/06/2019

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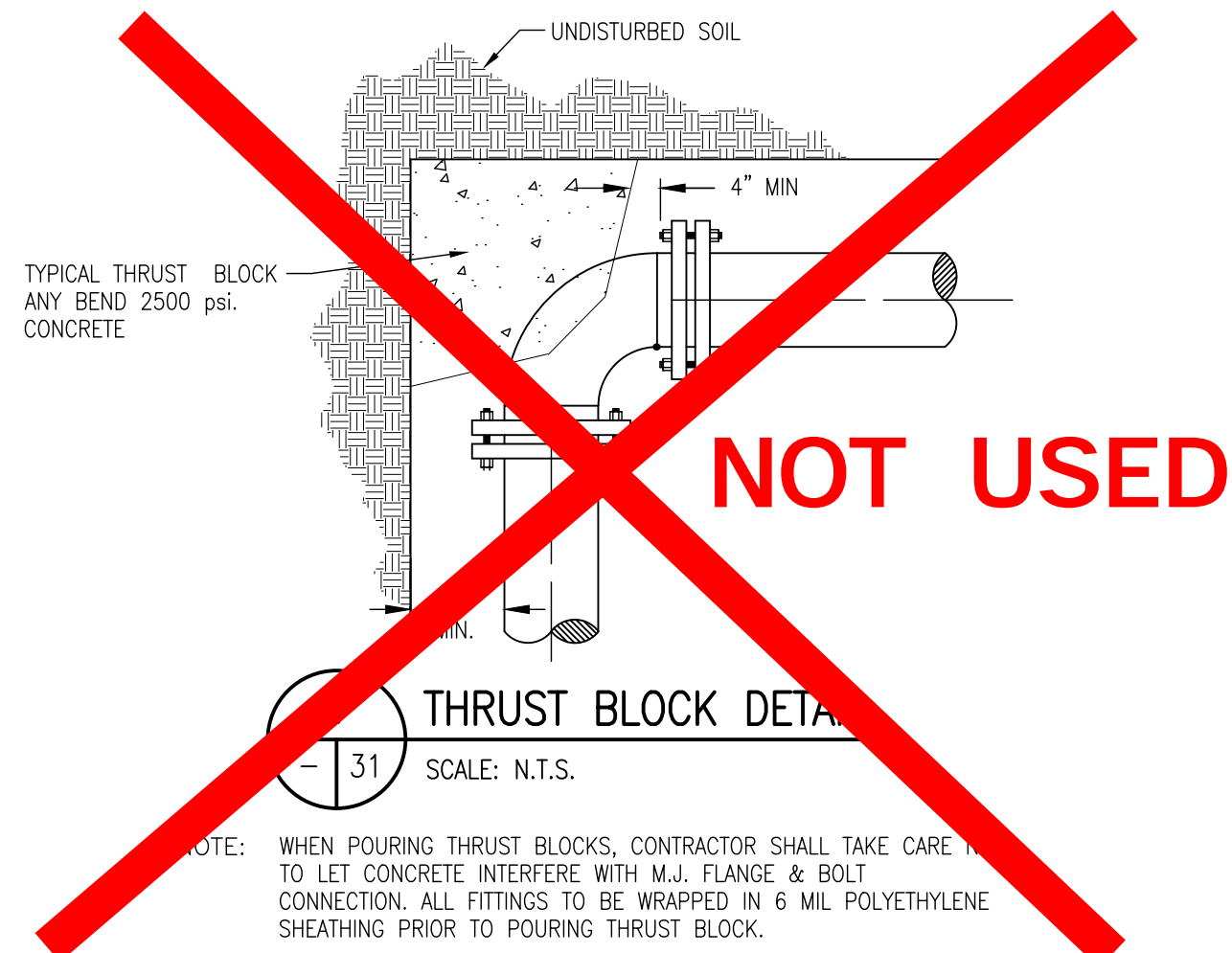
TBPE F-417
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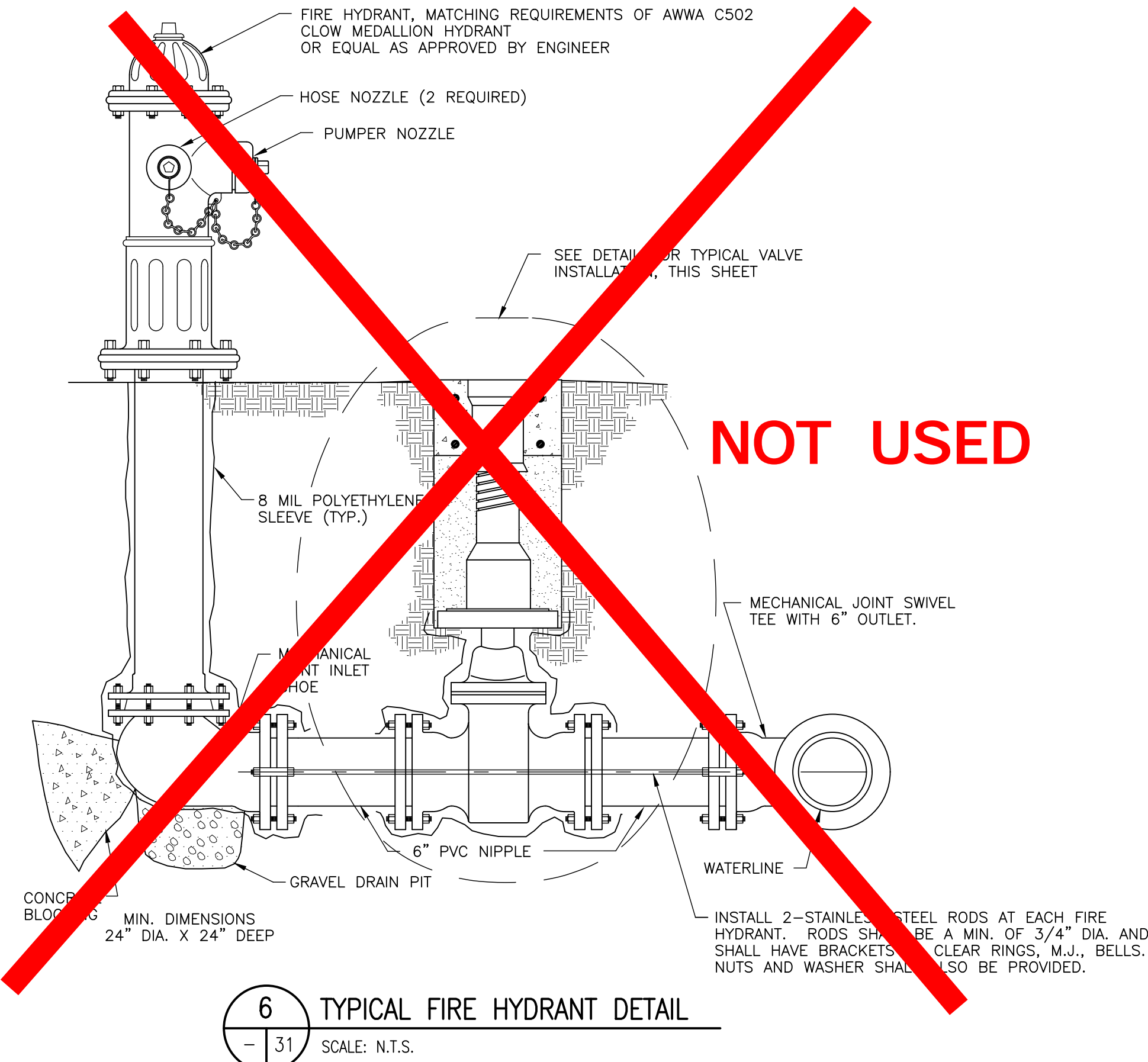
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

C-30

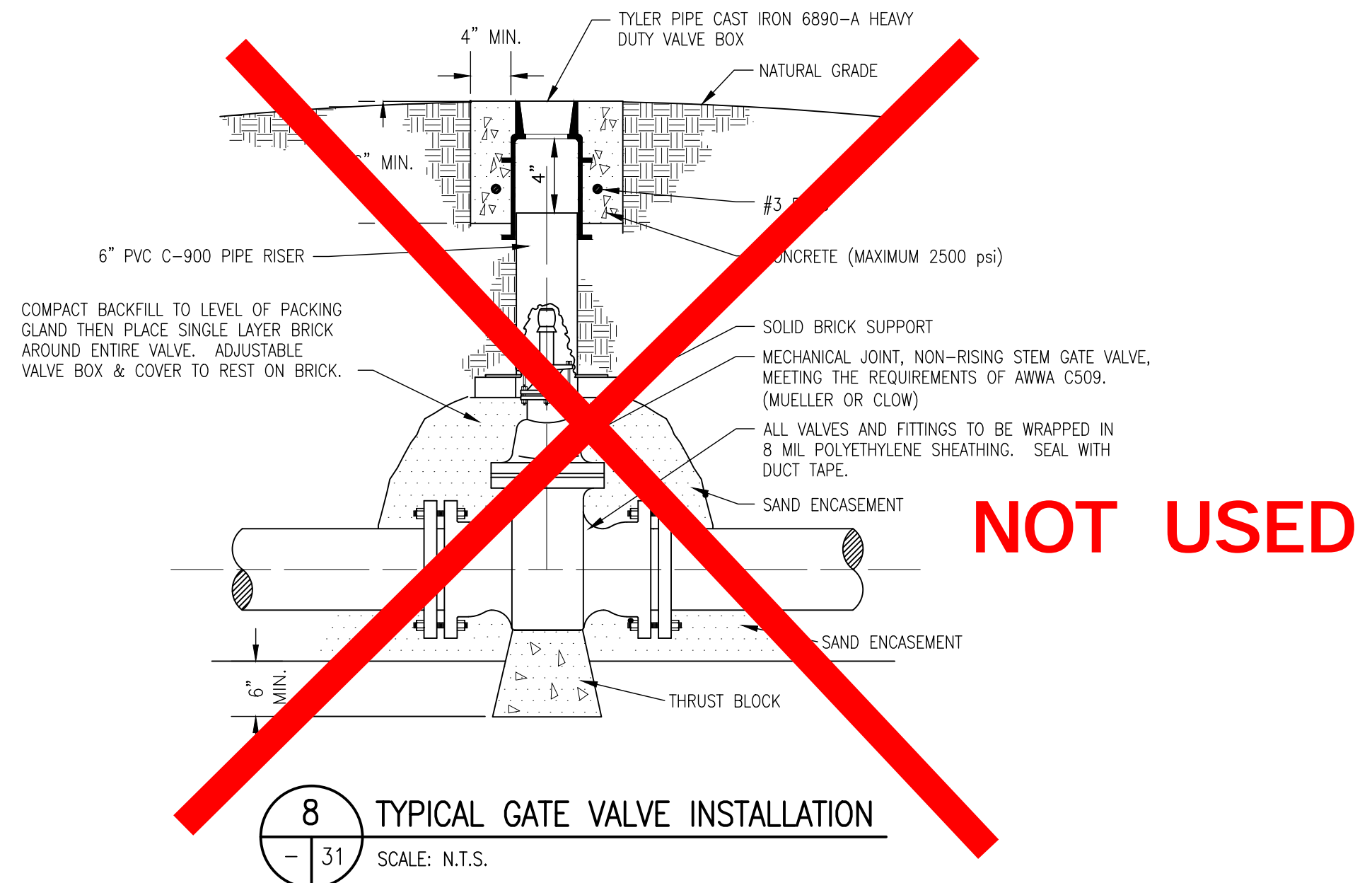
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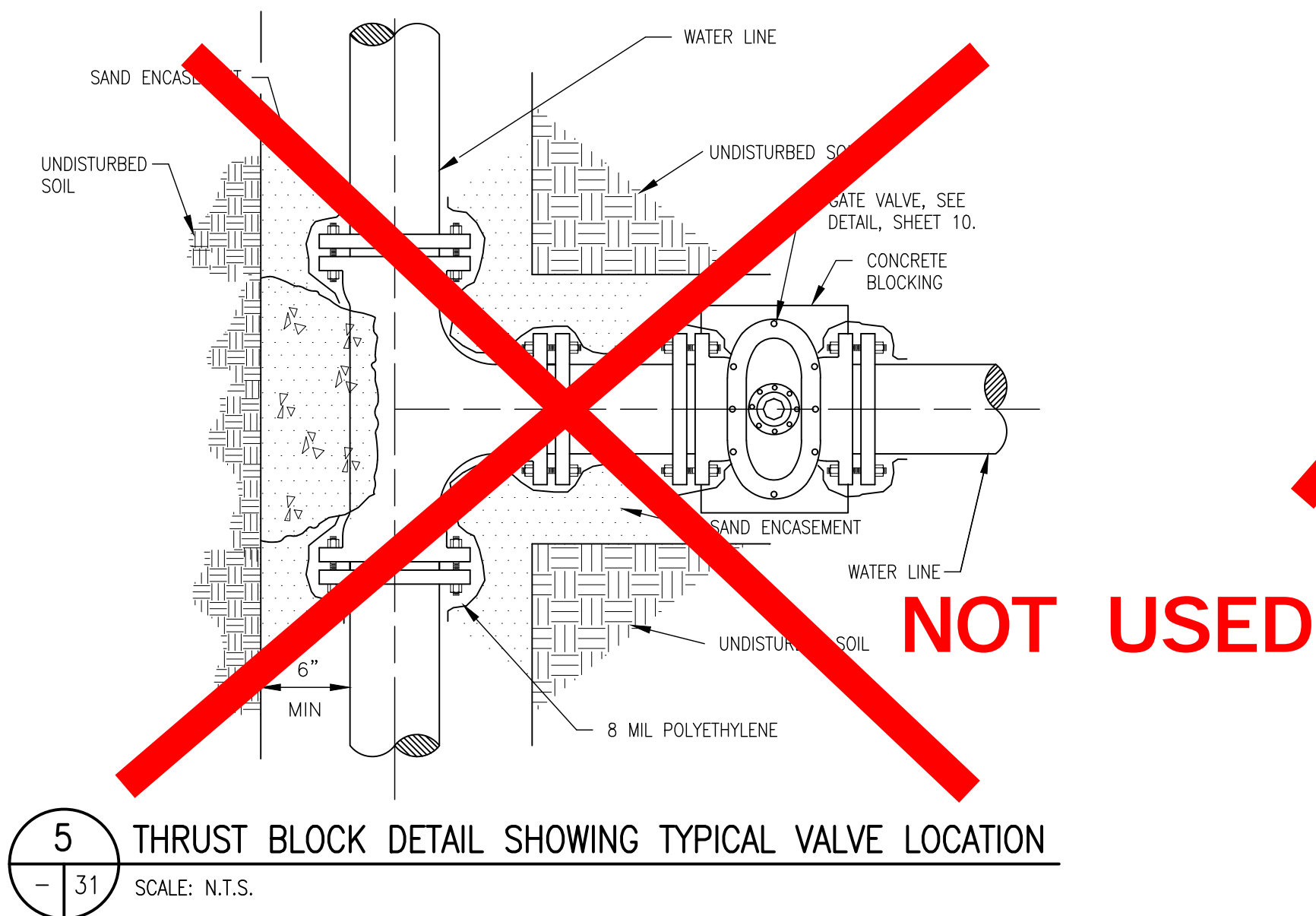
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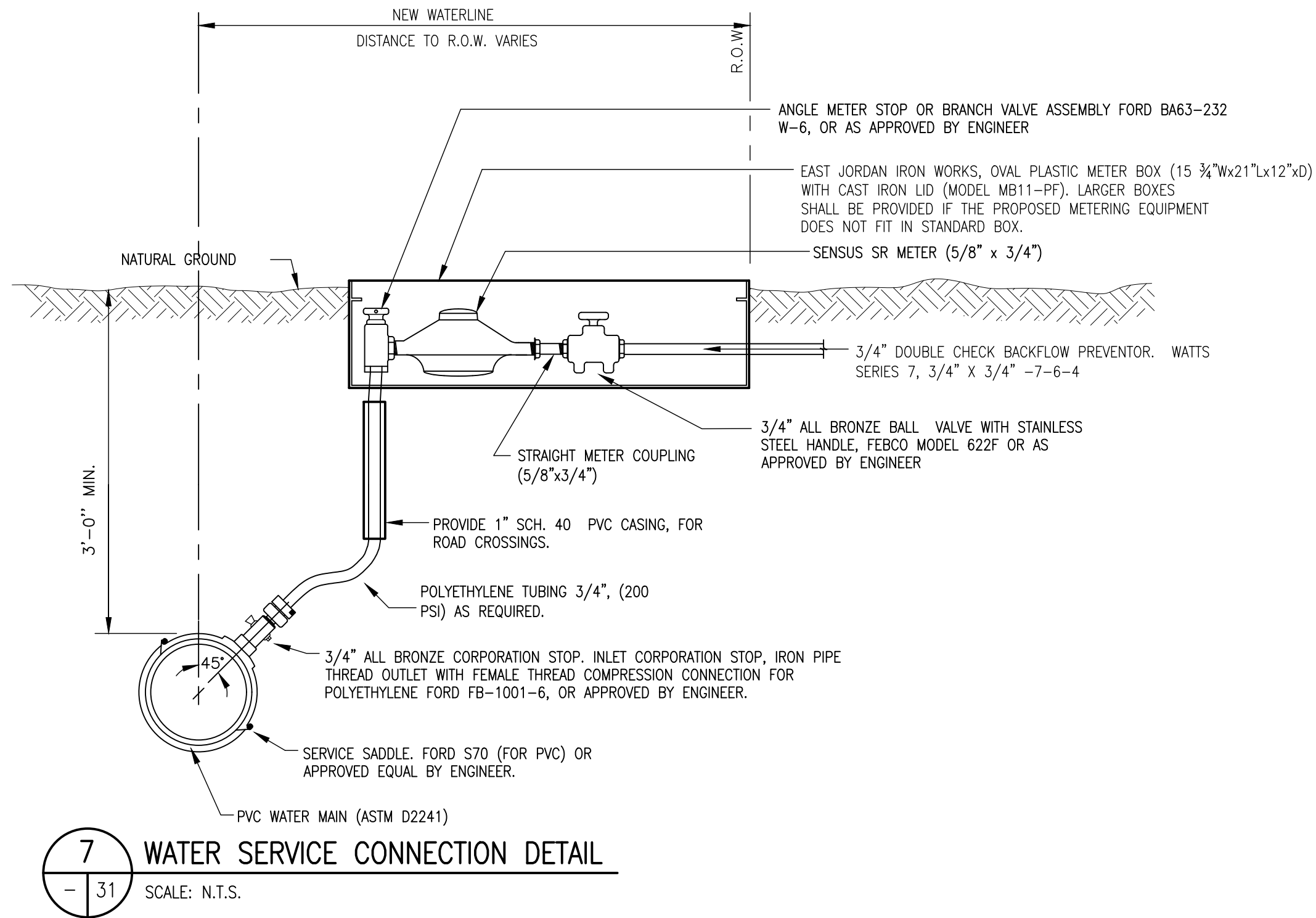
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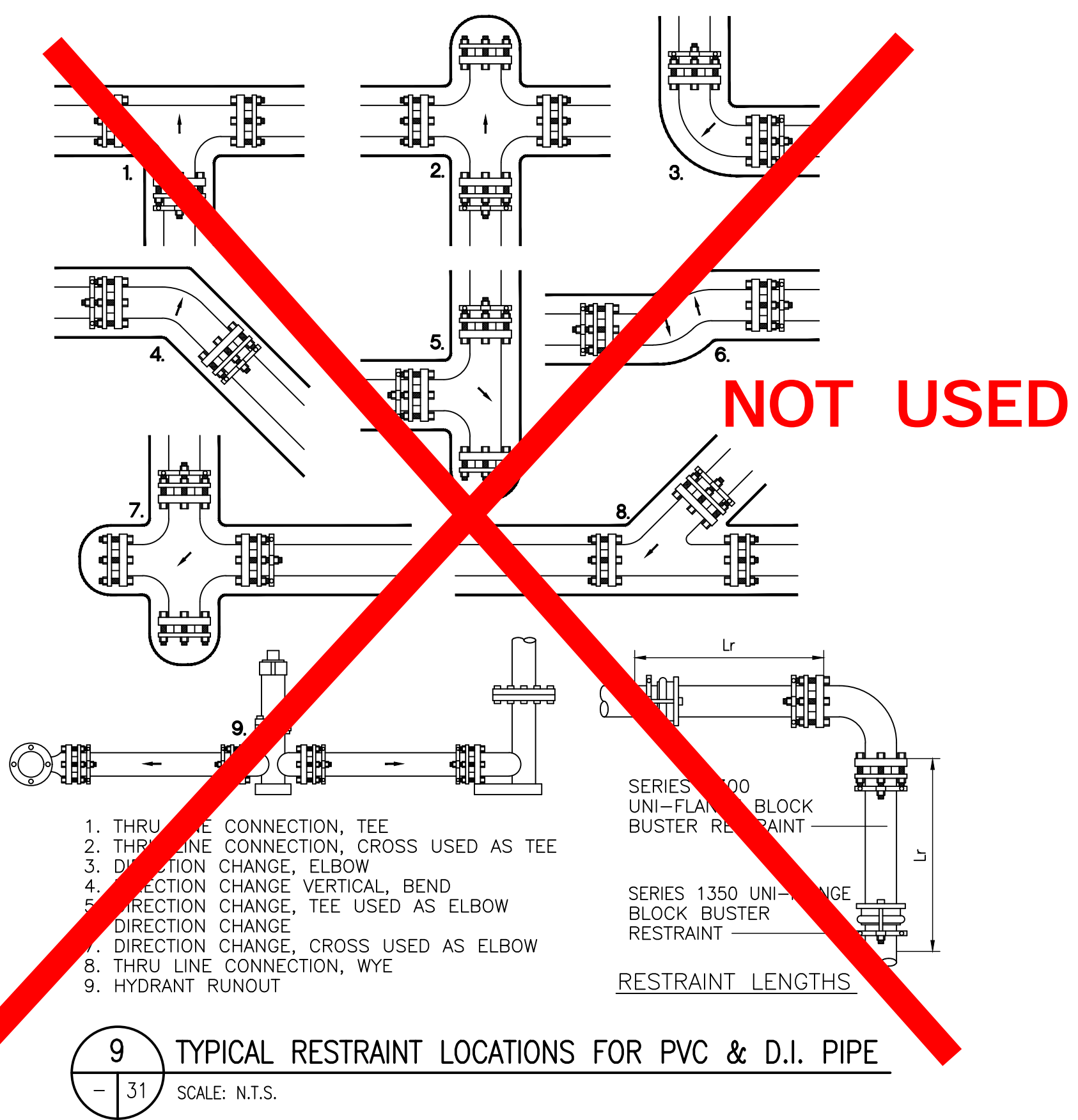
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7 WATER SERVICE CONNECTION DETAIL
SCALE: N.T.S.



NOT USED

9 TYPICAL RESTRAINT LOCATIONS FOR PVC & D.I. PIPE
SCALE: N.T.S.

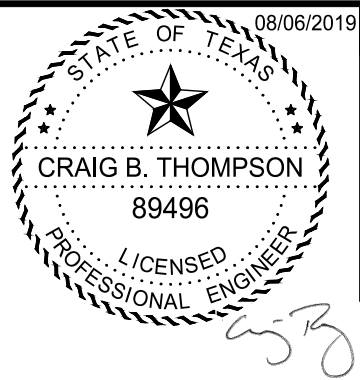
MINIMUM THRUST BLOCK AREA REQUIRED					
PIPE SIZE	TEES & VALVES	90° BEND	45° BEND	22 1/2° BEND	15/4° BEND
4"	4 SQ FT	3 SQ FT	2 SQ FT	1 SQ FT	1 SQ FT
6"	7 SQ FT	7 SQ FT	4 SQ FT	2 SQ FT	1 SQ FT
8"	16 SQ FT	11 SQ FT	6 SQ FT	3 SQ FT	2 SQ FT
10"	24 SQ FT	17 SQ FT	10 SQ FT	5 SQ FT	4 SQ FT
12"	35 SQ FT	24 SQ FT	14 SQ FT	7 SQ FT	4 SQ FT

NOT USED

- THRUST BLOCK NOTES
- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
 - WHERE TRENCH WALL HAS BEEN DISTURBED, REMOVE ALL LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED SOIL.
 - ON TEES AND BENDS, EXTEND THRUST BLOCK FULL LENGTH.
 - NO CONCRETE SHALL BE POURED OVER BOLTS OR ON TOP OF FITTINGS.
 - BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SOIL FREE OF ROCK FRAGMENTS. ANY MUCH COUNTERED SHALL BE REPLACED WITH ACCEPTABLE BACKFILL.
 - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2800 PSI AT 28 DAYS.
 - NO SEPARATE PAYMENT.
 - NO CONCRETE IS ALLOWED AROUND NUTS OR BOLTS. A MINIMUM OF 4" CLEARANCE SHALL BE MAINTAINED BETWEEN CONCRETE AND BOLTS.
 - 150 PSI WAS USED FOR THE HEAD AND 1,000 LB WAS USED FOR BEARING CAPACITY FOR THE ABOVE TABLE.

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I:\1700B\1710017\1006 SPORTS COMPLEX\CAD\SITE\16 UTILITY DETAILS.DWG

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017	
Filename	16 UTILITY DETAILS	
Scale	AS SHOWN	
Date	08/06/2019	
LAYOUT	AN/GP	08/06/2019
DRAWN	AN/GP	08/06/2019
REVIEWED	CBT	08/06/2019



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UTILITY DETAILS (2 OF 3)

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

GENERAL REQUIREMENTS

- 1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAINING HIS EMPLOYEES AND SUBCONTRACTORS IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS, AND IN THE REGULATIONS AND HAZARDS WHICH APPLY TO THE AREA IN WHICH THE WORK WILL TAKE PLACE.
- 2 ALL SAFETY EXPOSURES OR VIOLATIONS SHALL BE RECTIFIED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROTECTION OF PERSONS AND PROPERTY, AND FOR PROVIDING SAFE WORKING CONDITIONS THROUGHOUT THE WORK PROGRESS. ALL AREAS ADJACENT TO THE CONSTRUCTION AREA OR AFFECTED BY THE CONSTRUCTION MUST BE PROTECTED FROM DAMAGE, CLEANED, AND RESTORED TO THE ORIGINAL CONDITION, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL CLEARANCES AND PERMITS, AS NECESSARY, PRIOR TO THE COMMENCEMENT OF THE WORK.
- 4 WORK AREAS SHALL BE KEPT, AT ALL TIMES, FREE OF DEBRIS AND NON-HAZARDOUS MATERIAL TO THE SATISFACTION OF THE OWNER. ALL EXISTING PIPING AND CONDUITS SHALL HAVE TEMPORARY PROTECTION DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE OWNER. AFTER PROJECT COMPLETION, THE SITE SHALL BE CLEANED UP TO ITS CONDITION PRIOR TO THE START OF THE PROJECT TO THE SATISFACTION OF THE OWNER.
- 5 THE SEQUENCE OF CONSTRUCTION SHALL BE SCHEDULED AND COORDINATED WITH THE OWNER.
- 6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING CONDITIONS, AND SHALL PERFORM FIELD MEASUREMENTS PRIOR TO FABRICATION AND/OR PURCHASE OF ANY MATERIAL AND SHALL CONTACT THE ENGINEER SHOULD EXISTING CONDITIONS BE DIFFERENT FROM THE DESIGN DRAWINGS FOR THIS PROJECT. CONFLICTS ARISING DUE TO LACK OF COORDINATION SHALL BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE CONTRACTOR.
- 7 THE CONTRACTOR SHALL NOT FABRICATE OR INSTALL MEMBERS AS SHOWN ON THE DRAWINGS IF THERE ARE DISCREPANCIES OR CONFLICTS BETWEEN THE EXISTING CONDITIONS AND THE INFORMATION SHOWN ON THE DRAWINGS, UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED. PRIOR TO FABRICATION OR INSTALLATION, THE CONTRACTOR SHALL IMMEDIATELY CALL SUCH DISCREPANCIES OR CONFLICTS TO THE ATTENTION OF THE ENGINEER.
- 8 ANY REQUIRED CHANGES TO THE DRAWINGS RESULTING FROM THE ACCEPTANCE OF ALTERNATES AND/OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE OWNER AND THE ENGINEER FOR APPROVAL.
- 9 ALL CONTRACT WORK IN THESE DRAWINGS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING NATIONAL CODES AND STANDARDS:
- A

INTERNATIONAL BUILDING CODES, 2015 (IBC2015).
- B

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-05 AND 7-10.
- C

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- D

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).
- E

NATIONAL FIRE CODE (NFC).
- 10 ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTING TO THE ENGINEER. ALL SHOP DRAWINGS NOT REVIEWED BY THE CONTRACTOR WILL BE RETURNED WITHOUT REVIEW. AFTER REVIEW HAS BEEN COMPLETED, THE CONTRACTOR SHALL SUBMIT A COPY OF EACH SHOP DRAWING TO THE OWNER, WITH THE APPROVAL SEAL OF THE ENGINEER AND THE CONTRACTOR.
- 11 THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS REMOVED WHICH ARE NOT TO BE REINSTALLED OR SALVAGED ON THE PROJECT. DISPOSAL OF MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 12 THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER, IN LIEU OF THE PREPARATION OF SHOP DRAWINGS IS FORBIDDEN. SHOP DRAWINGS RECEIVED BEARING THE ENGINEER'S TITLE AND SEAL SHALL BE PROMPTLY REJECTED.

DESIGN CRITERIA

- 1 GOVERNING CODES AND STANDARDS
- A

INTERNATIONAL BUILDING CODE, 2015 EDITION (IBC2015).
- B

AMERICAN CONCRETE INSTITUTE (ACI) - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-08.
- C

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (13TH EDITION), WITH COMMENTARY.
- D

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- 2 DESIGN LOADS
- A

WIND LOADS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7-10.
- 1

NOMINAL 3-SECOND GUST WIND SPEED = 146 MPH.
- 2

EXPOSURE CATEGORY C
- DOWELS FOR REINFORCED MASONRY
- 1 DOWELS SHALL BE 4'-0" LONG. PROVIDE 2'-0" EMBEDMENT INTO GRADE BEAMS. PROVIDE STANDARD 90° BENDS IN THICKEND SLAB AREAS WHERE 2'-0" EMBEDMENT INTO CONCRETE IS NOT POSSIBLE. AT CONTRACTORS OPTION, DOWELS FOR MASONRY REINFORCING MAY BE DRILLED AND EPOXY GROUTED IN PLACE AFTER THE SLAB HAS BEEN CAST. USE POWER FASTENERS AC100 ADHESIVE OR APPROVED SUBSTITUTE. EMBED #4 DOWELS A MINIMUM OF 12" INTO CONCRETE.
- STRUCTURAL EXCAVATION, BACKFILL AND COMPACTION NOTES
- 1 BEFORE THE START OF EARTH-WORK OPERATIONS, ADEQUATELY PROTECT EXISTING STRUCTURES, UTILITIES, AND OTHER PERMANENT OBJECTS FROM DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ALL DAMAGED ELEMENTS, AT NO ADDITIONAL COST TO OWNER.

2 EXCAVATION WORK SHALL BE NEAT AND FREE OF DEBRIS AND LOOSE MATERIAL. REFER TO THE SPECIFICATIONS FOR PROTECTION OF EXCAVATIONS.

3 EXCAVATIONS SHALL NOT BE MADE DURING INCLEMENT WEATHER. WATER ACCUMULATION IN EXCAVATIONS EXCEEDING 1 INCH SHALL BE PUMPED OUT BEFORE THE CONCRETE IS PLACED.

4 ALL EXCAVATIONS AND BACKFILL OPERATIONS SHALL BE IN ACCORDANCE WITH THE LATEST OSHA EXCAVATION SAFETY STANDARDS, OSHA 2226 AND 29 CFR PART 1926 SUBPART P. THE CONTRACTOR SHALL PROVIDE AN EXCAVATION PLAN PREPARED BY AN ENGINEER LICENSED IN THE STATE OF TEXAS. THE EXCAVATION PLAN SHALL INDICATE THE PROCEDURES TO BE USED BY THE CONTRACTOR TO COMPLY WITH THE OSHA REQUIREMENTS. THE EXCAVATION PLAN SHALL IDENTIFY THE "COMPETENT PERSON" AS REQUIRED BY PARAGRAPH 1926.651(k)(1) THAT WILL WORK WITH EACH CREW.

5 ALL SURFICIAL VEGETATION AND OTHER ORGANIC MATERIAL TO A DEPTH OF 6 INCHES SHALL BE REMOVED BENEATH PROPOSED FOUNDATION, BUILDING AND PAVING AREAS PRIOR TO CONSTRUCTION. PILE IN A LOCATION ACCEPTABLE TO THE OWNER.

6 SELECT NON-EXPANSIVE FILL MATERIAL SHALL CONFORM TO ANY ONE OF THE FOLLOWING SPECIFICATIONS:

A

SELECT NON-EXPANSIVE FILL MATERIAL SHALL BE SOIL CLASSIFIED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) IN ACCORDANCE WITH ASTM D2487 AS A SC, GC OR CL SOIL (OR A COMBINATION OF THESE MATERIALS). SELECT NON-EXPANSIVE FILL MATERIAL SHALL HAVE A PLASTICITY INDEX BETWEEN 7 AND 18, A MAXIMUM LIQUID LIMIT OF 40 AND SHALL HAVE A MAXIMUM PARTICLE SIZE OF 2".

OR

B

SELECT NON-EXPANSIVE FILL SHALL CONFORM TO TxDOT ITEM 247, FLEXIBLE BASE, TYPE A, GRADES 1 OR 2.

7 FOR BUILDING A, SUB-GRADE PREPARATION AND FILLING SHALL BE AS FOLLOWS:

A

EXCAVATE EXISTING SOILS BELOW THE BUILDING A FOUNDATION A MINIMUM OF 6". EXTEND EXCAVATION 5'-0" BEYOND THE LIMITS OF THE SLAB ON EACH SIDE.

B

SCARIFY THE TOP 8" OF EXPOSED SUBGRADE, MOISTURE CONDITION AND COMPACT TO 95% OF ASTM D698.

C

AFTER COMPACTION, PROOF ROLL THE EXPOSED SUBGRADE WITH A 20-TON ROLLER OR LOADED DUMP TRUCK. ANY WEAK OR SOFT AREAS SHOULD BE EXCAVATED AND FILLED WITH SELECT NON- EXPANSIVE FILL MATERIAL. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 95% ASTM D698.

D

AS SOON AS THE SUBGRADE HAS BEEN TESTED, PROOF ROLLED AND ACCEPTED, PROTECT FROM EXCESSIVE DRYING BY PLACING SELECT NON-EXPANSIVE FILL MATERIAL.

E

PLACE COMPACTED SELECT NON-EXPANSIVE FILL MATERIAL FROM THE ACCEPTED SUBGRADE ELEVATION UP TO ELEVATION 270.08' (THE BOTTOM OF THE BUILDING A SLAB). EXTEND FILL 5'-0" BEYOND THE LIMITS OF THE BUILDING A FOUNDATION SLAB ON EACH SIDE. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 98% ASTM D698 AT MOISTURE CONTENTS AT OR SLIGHTLY GREATER THAN OPTIMUM (WITHIN 3% ABOVE OPTIMUM).

8 FOR BUILDING B, SUB-GRADE PREPARATION AND FILLING SHALL BE AS FOLLOWS:

A

EXCAVATE EXISTING SOILS BELOW THE BUILDING B FOUNDATION A MINIMUM OF 4'-0". EXTEND EXCAVATION 5'-0" BEYOND THE LIMITS OF THE SLAB ON EACH SIDE.

B

SCARIFY THE TOP 8" OF EXPOSED SUBGRADE, MOISTURE CONDITION AND COMPACT TO 95% OF ASTM D698.

C

AFTER COMPACTION, PROOF ROLL THE EXPOSED SUBGRADE WITH A 20-TON ROLLER OR LOADED DUMP TRUCK. ANY WEAK OR SOFT AREAS SHOULD BE EXCAVATED AND FILLED WITH SELECT NON-EXPANSIVE FILL MATERIAL. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 95% ASTM D698.

D

AS SOON AS THE SUBGRADE HAS BEEN TESTED, PROOF ROLLED AND ACCEPTED, PROTECT FROM EXCESSIVE DRYING BY PLACING SELECT NON-EXPANSIVE FILL MATERIAL.

E

PLACE COMPACTED SELECT NON-EXPANSIVE FILL MATERIAL FROM THE ACCEPTED SUBGRADE ELEVATION UP TO ELEVATION 270.08' (THE BOTTOM OF THE BUILDING B SLAB). EXTEND FILL 5'-0" BEYOND THE LIMITS OF THE BUILDING A FOUNDATION SLAB ON EACH SIDE. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 98% ASTM D698 AT MOISTURE CONTENTS AT OR SLIGHTLY GREATER THAN OPTIMUM (WITHIN 3% ABOVE OPTIMUM).

9 FOR BUILDING C, SUB-GRADE PREPARATION AND FILLING SHALL BE AS FOLLOWS:

A

EXCAVATE EXISTING SOILS BELOW THE BUILDING C FOUNDATION A MINIMUM OF 4'-0". EXTEND EXCAVATION 5'-0" BEYOND THE LIMITS OF THE SLAB ON EACH SIDE.

B

SCARIFY THE TOP 8" OF EXPOSED SUBGRADE, MOISTURE CONDITION AND COMPACT TO 95% OF ASTM D698.

C

AFTER COMPACTION, PROOF ROLL THE EXPOSED SUBGRADE WITH A 20-TON ROLLER OR LOADED DUMP TRUCK. ANY WEAK OR SOFT AREAS SHOULD BE EXCAVATED AND FILLED WITH SELECT NON-EXPANSIVE FILL MATERIAL. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 95% ASTM D698.

D

AS SOON AS THE SUBGRADE HAS BEEN TESTED, PROOF ROLLED AND ACCEPTED, PROTECT FROM EXCESSIVE DRYING BY PLACING SELECT NON-EXPANSIVE FILL MATERIAL.

E

PLACE COMPACTED SELECT NON-EXPANSIVE FILL MATERIAL FROM THE ACCEPTED SUBGRADE ELEVATION UP TO ELEVATION 270.08' (THE BOTTOM OF THE BUILDING C SLAB). EXTEND FILL 5'-0" BEYOND THE LIMITS OF THE BUILDING A FOUNDATION SLAB ON EACH SIDE. PLACE SELECT NON-EXPANSIVE FILL IN 8" LOOSE LIFTS AND COMPACT TO 98% ASTM D698 AT MOISTURE CONTENTS AT OR SLIGHTLY GREATER THAN OPTIMUM (WITHIN 3% ABOVE OPTIMUM).
- 10 A 10 MIL VAPOR BARRIER CONFORMING WITH ASTM E1745, CLASS C, SHALL BE PLACED BENEATH SLAB-ON-GRADE FOUNDATIONS FOR BUILDINGS A, B AND C. LAP ALL JOINTS A MINIMUM OF 6" AND SEAL PER THE MANUFACTURER'S RECOMMENDATIONS. USE PREFABRICATED PIPE BOOTHS AND SUITABLE SEALING TAPE TO SEAL ALL PENETRATIONS THROUGH THE VAPOR BARRIER. VAPOR BARRIER SHALL BE AS MANUFACTURED BY STEGO INDUSTRIES, VAPOR BLOCK, OR APPROVED SUBSTITUTE.
- 11 STOCKPILE EXCAVATED MATERIALS SUITABLE FOR USE AS SATISFACTORY FILL MATERIAL AT A LOCATION APPROVED BY THE OWNER. PLACE, GRADE, AND SHAPE STOCKPILES FOR PROPER DRAINAGE. EXCESS EXCAVATED MATERIAL AND EXCAVATED MATERIAL UNSUITABLE FOR USE AS SATISFACTORY FILL MATERIAL SHALL BE DISPOSED OF LEGALLY OFF SITE.
- REINFORCED CONCRETE NOTES
- 1 CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, LATEST EDITION. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL COMPLY WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315). SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION OR PLACEMENT.

2 ALL STRUCTURAL CONCRETE SHALL BE NORMAL WEIGHT AND SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI. USE GRAY PORTLAND CEMENT CONFORMING TO ASTM C 150 TYPE I. MINIMUM CEMENT CONTENT SHALL BE 41/2 SACKS PER CUBIC YARD. MAXIMUM WATER CEMENT RATIO SHALL BE 0.50. MAXIMUM SLUMP SHALL BE 5 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 1 1/2 INCH. PROVIDE 4 TO 6 PERCENT AIR-ENTRAINMENT, CONFORMING TO ASTM C 260. CHEMICAL ADMIXTURES SHALL CONFORM TO ASTM C 484. TYPE A, D, OR E. IF FLYASH IS TO BE USED IN THE CONCRETE MIX, IT SHALL BE INCLUDED IN THE MIX DESIGN SUBMITTAL. THE AMOUNT OF FLY ASH USED SHALL BE NO GREATER THAN 15 TO 20 PERCENT BY WEIGHT OF THE SPECIFIED CEMENT. IN NO CASE SHALL THE PORTLAND CEMENT CONTENT OF THE MIX BE LESS THAN 41/2 SACKS PER YARD. CONCRETE SHALL NOT BE PLACED PRIOR TO APPROVAL OF THE CONCRETE MIX DESIGN BY THE ENGINEER.

3 THE PROPOSED USE OF FLY ASH IN THE CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE AMOUNT OF FLY ASH USED SHALL BE NO GREATER THAN 15 TO 20 PERCENT BY WEIGHT OF THE SPECIFIED CEMENT. IN NO CASE SHALL THE PORTLAND CEMENT CONTENT OF THE MIX BE LESS THAN 41/2 SACKS PER YARD.

4 REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL, CONFORMING TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE. BEAM STIRRUPS SHALL BE ASTM A615, GRADE 40.

5 PROVIDE CORNER BARS AT ALL EXTERIOR GRADE BEAM INTERSECTIONS AND WALL INTERSECTIONS. MATCH SIZE AND SPACING OF INTERSECTING STEEL REINFORCING. PROVIDE 40 BAR DIAMETER LAPS WITH CONTINUOUS STEEL.

6 ALL CONTINUOUS REINFORCING SHALL BE SPLICED WITH 40 BAR DIAMETER (MIN.) LAP SPLICES.

7 UNLESS NOTED OTHERWISE, ALL 90, 135 AND 180 DEGREE HOOKS SHOWN ON THE DRAWINGS SHALL BE STANDARD ACI HOOKS.

8 FIELD CUTTING OF REINFORCING BARS SHALL BE BY SHEARING OR SAWING. FIELD CUTTING BY CUTTING TORCH IS NOT ALLOWED.

9 MINIMUM REINFORCING STEEL COVERAGE FOR CONCRETE WORK IN CONTACT WITH SOIL SHALL BE 3". REFER TO DRAWINGS FOR COVERAGE AT OTHER CONDITIONS.

10 ENSURE THAT ALL ITEMS WHICH MUST BE EMBEDDED IN THE CONCRETE ARE DELIVERED TO THE SITE IN A TIMELY FASHION AND FIRMLY INSTALLED IN THE FORMWORK PRIOR TO PLACING CONCRETE. THE DRAWINGS SHALL BE THOROUGHLY EXAMINED TO ENSURE THAT ALL EMBEDDED ITEMS ARE PROVIDED AND PROPERLY INSTALLED. PROVIDE ACCURATELY MADE, RIGID TEMPLATES FOR SETTING ANCHOR BOLTS AND DOWELS.
- 11 INITIAL AND FINAL CURING SHALL BE BY WET-CURING METHODS ONLY (CONTINUOUS SPRINKLING OR STEAM, OR MOISTURE-RETAINING COVER).

12 ALL CONCRETE BLEMISHES, HONEYCOMBS, AND OTHER IMPERFECTIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
- TESTING LABORATORY REQUIREMENTS
- THE CONTRACTOR SHALL SECURE THE SERVICES OF A COMMERCIAL TESTING LABORATORY, ACCEPTABLE TO THE OWNER AND THE ENGINEER, TO PERFORM CONSTRUCTION MATERIALS TESTS AND VISUAL INSPECTION SERVICES AS OUTLINED IN THE PROJECT SPECIFICATIONS AND AS LISTED BELOW:
- 1 APPROPRIATE TESTS SHALL BE PERFORMED TO CERTIFY THAT FILL AND BACKFILL MATERIALS SPECIFIED FOR USE ON THE PROJECT MEET THE MINIMUM REQUIREMENTS SET FORTH IN THE PROJECT SPECIFICATIONS AND IN THE NOTES HEREIN.

2 INSPECTION OF ALL ANCHOR BOLTS, EXPANSION ANCHORS, AND EPOXY ANCHORS SHALL BE PERFORMED TO INSURE PROPER INSTALLATION AND TIGHTENING OF BOLTS

3 IF WORKMANSHIP IS FOUND TO BE BELOW THE REQUIREMENTS SET FORTH HEREIN OR IN THE SPECIFICATIONS AS A RESULT OF TESTING AND/OR VISUAL INSPECTION, THE CONTRACTOR SHALL CORRECT OR REPLACE MATERIALS AT NO ADDITIONAL COST TO THE OWNER.

4 THE CONTRACTOR SHALL COOPERATE AND COORDINATE FULLY WITH THE TESTING LABORATORY AND PROJECT TESTING REQUIREMENTS.
- STRUCTURAL STEEL NOTES
- 1 DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL COMPLY WITH AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS WITH COMMENTARY, AISC CODE OF STANDARD PRACTICE, AND ALL UPDATING PUBLICATIONS.

2 STRUCTURAL STEEL SHAPES, PLATES, BARS, AND MISCELLANEOUS METALS SHALL CONFORM TO ASTM A36, UNLESS NOTED OTHERWISE.

3 COLD-FORMED STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A 500, GRADE B, WITH A MINIMUM YIELD STRENGTH OF 46 KSI.

4 STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A 53, TYPE E OR S, GRADE B, WELDED OR SEAMLESS. HYDROSTATIC TESTS ARE NOT REQUIRED.

5 SHOP CONNECTIONS MAY BE WELDED OR BOLTED. ALL FIELD CONNECTIONS SHALL BE BOLTED UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL BOLTS IN BOLTED CONNECTIONS SHALL BE 3/4-INCH DIAMETER, GALVANIZED, HIGH STRENGTH BOLTS CONFORMING TO ASTM A 325, TYPE N, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

6 ALL CONNECTION HARDWARE SHALL BE PROVIDED WITH AN "ANTI-SEIZE" COMPONENT/ADDITION TO PROTECT AGAINST "FREEZE" DUE TO PROLONGED EXPOSURE TO THE ELEMENTS.

7 WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY SPECIFICATIONS. ELECTRODES SHALL CONFORM TO AWS A5.5, E70XX.

8 INSPECTION OF WELDS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

9 SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER AS TO THE LOCATION AND TYPE OF SPLICE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON THE SHOP DRAWINGS WILL BE REJECTED.

10 ALL MISCELLANEOUS WELDS SHALL BE MINIMUM SIZE FILLET WELD ALL AROUND IN ACCORDANCE WITH AISC. WELDING OF CONTINUOUS MEMBERS SHALL BE A MINIMUM OF 2 INCHES OF 3/16-INCH FILLET WELD AT 12 INCHES O.C., STAGGERED EACH SIDE, UNLESS NOTED OTHERWISE. COLUMN BASE PLATES, COLUMN CAP PLATES AND ALL STIFFENER PLATES SHALL BE WELDED ALL AROUND.

11 BURNING OF HOLES IN STRUCTURAL STEEL IS PROHIBITED. ANY MEMBER WITH BURNED HOLES SHALL BE REJECTED.

12 PRE-GROUTING OF BASE PLATES IS PROHIBITED.

13 STRUCTURAL STEEL SHALL BE SHOP FINISHED AS FOLLOWS:

A

ALL STRUCTURAL STEEL, INCLUDING MISCELLANEOUS STEEL PLATES, ANGLES, EMBEDS, AND METALS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, "SPECIFICATION F OR ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS." STEEL SHALL BE PRE-CLEANED UTILIZING A CAUSTIC BATH, ACID PICKLE AND FLUX. ZINC COATING FOR THREADED PRODUCTS SHALL CONFORM TO ASTM A153, CLASS C.

14 FIELD REPAIR OF GALVANIZING SHALL BE DONE WITH "ZRC COLD GALVANIZING COMPOUND," MANUFACTURED BY ZRC CHEMICAL PRODUCTS COMPANY, QUINCY, MASSACHUSETTS, OR APPROVED EQUAL.

15 THE OWNER RESERVES THE RIGHT TO REJECT MATERIAL AT ANY TIME BEFORE FINAL ACCEPTANCE IF MATERIAL AND WORKMANSHIP DO NOT CONFORM TO THE DRAWINGS OR SPECIFICATIONS.
- SUBMITTAL NOTES
- THE FOLLOWING PARTIAL LISTING OF SUBMITTALS SHALL BE FORWARDED TO THE ENGINEER FOR REVIEW. THE WORK ASSOCIATED WITH THESE ITEMS SHALL NOT COMMENCE UNTIL THE SUBMITTALS HAVE BEEN REVIEWED AND APPROVED BY THE ENGINEER. REFERENCE THE PROJECT SPECIFICATIONS FOR A COMPLETE LISTING OF REQUIRED SUBMITTALS.
- 1 SUBMIT MOISTURE-DENSITY RELATIONSHIPS FOR EACH TYPE OF FILL MATERIAL SPECIFIED AND FOR EACH TYPE OF EXPOSED EXISTING SUBGRADE MATERIAL.

2 SUBMIT CONCRETE MIX DESIGNS WITH TEST DATA FOR EACH TYPE AND STRENGTH OF CONCRETE SPECIFIED.

3 SUBMIT REINFORCING STEEL SHOP DRAWINGS DETAILING REINFORCEMENT FABRICATION AND BAR PLACEMENT. THE SHOP DRAWINGS SHALL CLEARLY INDICATE LOCATION, SIZE, SPACING, SPLICES AND PIECEMARK FOR ALL REINFORCING STEEL. THE SHOP DRAWINGS SHALL INCLUDE A COMPLETE BILL OF MATERIALS FOR ALL REINFORCING STEEL, WHICH IS REFERENCED TO THE INFORMATION ON THE SHOP DRAWINGS. THE SHOP DRAWINGS SHALL PROVIDE SUFFICIENT DETAIL TO PERMIT PLACEMENT OF THE REINFORCEMENT WITHOUT THE USE OF THE DESIGN DRAWINGS.

4 SUBMIT STRUCTURAL STEEL SHOP DRAWINGS DETAILING ALL STRUCTURAL AND MISCELLANEOUS STEEL MEMBERS, CONNECTIONS AND RELATED STRUCTURAL STEEL ITEMS. THE SHOP DRAWINGS SHALL INDICATE MATERIAL TYPE, BOLT HOLES, COPEDED EDGES, WELDS, AND ALL OTHER DETAILS REQUIRED TO FABRICATE EACH PIECE. IN ADDITION, THE CONTRACTOR SHALL SUBMIT COORDINATED ERECTION DRAWINGS CLEARLY INDICATING THE INSTALLED LOCATION, SIZE, ORIENTATION AND PIECEMARK FOR ALL STRUCTURAL STEEL MEMBERS. THE SHOP DRAWINGS AND ERECTION DRAWINGS SHALL PROVIDE SUFFICIENT DETAIL TO PERMIT STEEL FABRICATION AND ERECTION WITHOUT THE USE OF THE DESIGN DRAWINGS.

5 SUBMIT PREFABRICATED WOOD TRUSS DESIGN CALCULATIONS, FABRICATION AND ERECTION DRAWINGS. SUBMITTAL SHALL INDICATE THE CALCULATED UPLIFT WIND REACTIONS AT THE TRUSS SUPPORT LOCATIONS. DESIGN CALCULATIONS SHALL BE PREPARED AND SEALED BY A LICENSED TEXAS ENGINEER. SUBMITTAL SHALL CLEARLY INDICATE LOCATION, SIZE, AND SPACING OF TRUSSES AND TRUSS COMPONENTS. ALL DESIGN LOADS FOR EACH TRUSS SHALL BE INDICATED.

6 SUBMIT DESCRIPTIVE LITERATURE, BULLETINS, TECHNICAL DATA SHEETS, MATERIAL SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS FOR THE WATERPROOFING, COATINGS AND MISCELLANEOUS PRODUCTS SPECIFIED HEREIN.

7 SUBMIT ANY PROPOSED SUBSTITUTIONS TO THE ITEMS SPECIFIED HEREIN OR IN THE SPECIFICATIONS. OWNER RESERVES THE RIGHT TO REJECT ANY PROPOSED SUBSTITUTION IN FAVOR OF THAT SPECIFIED.
- REINFORCED MASONRY NOTES
- 1 CONCRETE MASONRY UNIT (CMU) CONSTRUCTION SHALL BE IN ACCORDANCE WITH:

A

ACI 530/ASCE 5/TMS 402: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES

B

ACI 530.1/ASCE 6/TMS 602: SPECIFICATIONS FOR MASONRY STRUCTURES

2 MASONRY DESIGN IS BASED ON A MASONRY PRISM STRENGTH OF F'm = 1500 PSI.

3 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90, LIGHTWEIGHT, GRADE N, TYPE 1, MOISTURE-CONTROLLED, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI ON THE NET AREA OF THE BLOCK.

4 MORTAR SHALL CONFORM TO ASTM C 270, TYPE S, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI.

5 COURSE GROUT SHALL HAVE A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

6 COARSE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 404. SAND SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 144.

7 LOAD BEARING WALLS SHALL HAVE FULL BED MORTAR JOINTS. COLLAR JOINTS IN MULTI-WYTHE WALLS SHALL BE 3/8".

8 VERTICAL REINFORCING SHALL BE AS NOTED ON PLANS. IN ADDITION, THE FIRST CELL AT CORNERS, ENDS OF WALLS AND AT ALL DOOR AND WINDOW JAMBS SHALL BE REINFORCED WITH #4 AND FILLED WITH 2500 PSI COURSE GROUT.

9 VERTICAL REINFORCING BARS MAY BE SPLICED IN 6'-0" TO 8'-0" LENGTHS, PROVIDED THE SPLICES IN ADJACENT BARS ARE STAGGERED AND ARRANGED SO THAT NOT MORE THAN ONE-HALF OF THE TOTAL NUMBER OF BARS ARE SPLICED AT ANY ONE HEIGHT. MINIMUM LAP AT SPLICE SHALL BE 50 BAR DIAMETERS.

10 BOND BEAMS AND LINTELS SHALL BE LOCATED WHERE SHOWN ON THE DRAWINGS. REINFORCE BOND BEAMS AS NOTED ON PLANS AND FILL WITH 2500 PSI COURSE GROUT. REINFORCING STEEL IN BOND BEAMS MAY BE SPLICED WITH A MINIMUM LAP LENGTH OF 50 BAR DIAMETERS.

11 PROVIDE STAINLESS STEEL REBAR POSITIONERS, AS MANUFACTURED BY HOHMANN & BARNARD, TO MAINTAIN ALIGNMENT OF VERTICAL WALL REINFORCING.

12 PROVIDE GALVANIZED SPYRA-LOX REBAR LAP JOINT TIES, AS MANUFACTURED BY HOHMANN & BARNARD, FOR ALL LAP SPLICES IN VERTICAL AND HORIZONTAL REINFORCING BARS.

13 HORIZONTAL JOINT REINFORCEMENT SHALL BE "DUR-O-WAL" (TRUSS TYPE, 9 GAGE, GALVANIZED) AT 16 INCHES ON CENTER, VERTICALLY, UNLESS OTHERWISE NOTED ON DRAWINGS. HORIZONTAL JOINT REINFORCEMENT SHALL BE LAPPED AT LEAST 11" AT SPLICES AND SHALL CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.

14 ADHESIVE ANCHORING SYSTEM: THREADED ADHESIVE ANCHORS INTO SOLID GROUTED MASONRY WALLS SHALL BE BY THE HILTI "HIT" ADHESIVE ANCHOR SYSTEM. USE HY-150 ADHESIVE AND HAS STD THREADED RODS. USE MANUFACTURER'S STANDARD NOMINAL EMBEDMENT, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

15 PROVIDE TEMPORARY BRACING FOR WALLS UNTIL THE FLOOR OR ROOF DECK AT THE TOP AND BOTTOM OF THE WALL HAVE BEEN COMPLETED AND PERMANENTLY TIED IN. THE CONTRACTOR SHALL DESIGN ALL TEMPORARY BRACING.
- MISCELLANEOUS PRODUCTS
- 1 EXPANSION ANCHORING SYSTEM: BOLTING INTO EXISTING CONCRETE SHALL BE WITH SIMPSON SET HIGH STRENGTH EPOXY-TIE ANCHORING ADHESIVE ANCHORS, UNLESS NOTED OTHERWISE ON THE DRAWINGS. USE EMBEDMENT AS NOTED ON THE DRAWINGS.

2 NON-SHRINK GROUT: PROVIDE A PRE-MIXED, NON-SHRINK, NONMETALLIC GROUT, EQUAL TO "MASTERFLOW 713", BY MASTER BUILDERS. MIX AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- GENERAL NOTES
- CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY
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PREFABRICATED WOOD TRUSSES

1 ALL PLAN DIMENSIONS, RECESSES, OPENINGS THROUGH FRAMING, ETC. SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

2 THE FRAMING CONTRACTOR SHALL FURNISH ALL TIMBER CONNECTIONS BETWEEN VARIOUS ELEMENTS AND PROVIDE HARDWARE REQUIRED TO MAKE CONNECTIONS. ALL CONNECTORS SHALL BE SIMPSON "STRONG-TIES" OR APPROVED SUBSTITUTE.

3 PRIOR TO FABRICATION OF TRUSSES, THE CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS, FABRICATION AND ERECTION DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TPI 1-1995. DESIGN LOADS FOR WOOD TRUSSES ARE AS FOLLOWS:

A ROOF TRUSSES:
TOP CHORD DEAD LOAD 10 PSF
BOTTOM CHORD DEAD LOAD 10 PSF
TOP CHORD LIVE LOAD 20 PSF

B WIND LOADS SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7-10.

USING ASCE 7-10, THE FOLLOWING CRITERIA SHALL APPLY:

1 NOMINAL 3-SECOND GUST WIND SPEED = 131 MPH.
2 EXPOSURE CATEGORY C

4 PREFABRICATED WOOD TRUSSES MEMBERS AND CONNECTIONS SHALL BE DESIGNED BY TRUSS MANUFACTURER TO SUPPORT DESIGN LOADS AND MEET L/360 LIVE LOAD DEFLECTION CRITERIA.

5 PREFABRICATED TRUSSES SHALL BE SQUARE, WITH COMPONENTS ATTACHED IN A MANNER AS TO PREVENT RACKING AND TO MINIMIZE DISTORTION WHILE LIFTING.

6 ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR, AS REQUIRED, FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS.

7 TRUSS MEMBERS SHALL BE INSTALLED IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED TIGHTLY AGAINST THE SIDES OF ABUTTING MEMBERS PRIOR TO FASTENING.

8 SPLICES IN TRUSS MEMBERS SHALL NOT BE PERMITTED UNLESS DETAILED ON THE SHOP DRAWING SUBMITTAL AND APPROVED DURING THE REVIEW PROCESS.

9 TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.

WOOD CONSTRUCTION NOTES

1 CONSTRUCTION PRACTICES AND NAILING SCHEDULES SHALL CONFORM TO THE REQUIREMENTS OF THE IBC2015.

2 ALL PLAN DIMENSIONS, RECESSES, OPENINGS THROUGH FRAMING, ETC. SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

3 SAWN LUMBER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. SAWN LUMBER MATERIALS AND FASTENINGS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.

4 MANUFACTURE ALL LUMBER TO COMPLY WITH PS 20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND WITH APPLICABLE GRADING RULES OF INSPECTION AGENCIES CERTIFIED BY AMERICAN LUMBER STANDARDS COMMITTEE'S (ALSC) BOARD OF REVIEW.

5 PROVIDE DRESSED LUMBER, S4S, UNLESS OTHERWISE INDICATED. PROVIDE KILN DRIED LUMBER, WITH 15 PERCENT MAXIMUM MOISTURE CONTENT AT THE TIME OF SHIPMENT FOR SIZES 2" OR LESS IN NOMINAL THICKNESS, UNLESS OTHERWISE INDICATED.

6 ALL SAWN LUMBER SHALL BE #2 K.D., SOUTHERN YELLOW PINE, UNLESS NOTED OTHERWISE ON THE DRAWINGS. WALLS MAY BE STUD GRADE SOUTHERN PINE. ALL GROUND LEVEL WALL SILL PLATES SHALL BE PRESSURE TREATED. AFTER TREATMENT, KILN-DRY LUMBER TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT.

7 ALL SAWN LUMBER SHALL BE STRAIGHT AND TRUE WITHOUT EXCESSIVE WARPS OR TWISTS. THE OWNER RESERVES THE RIGHT TO REJECT ANY SAWN WOOD MEMBERS BASED ON APPEARANCE.

8 PLYWOOD FOR ROOF AREAS SHALL BE 5/8" NOMINAL CDX PLYWOOD. JOINTS IN PLYWOOD SHEATHING SHALL OCCUR OVER SUPPORTS.

9 PLYWOOD FOR FLOORS SHALL BE 3/4" NOMINAL CDX PLYWOOD. JOINTS IN PLYWOOD SHALL OCCUR ON SUPPORTS.

10 THE FRAMING CONTRACTOR SHALL FURNISH ALL TIMBER CONNECTIONS BETWEEN VARIOUS ELEMENTS AND PROVIDE HARDWARE REQUIRED TO MAKE CONNECTIONS. ALL CONNECTORS SHALL BE SIMPSON "STRONG-TIE" OR APPROVED SUBSTITUTE.

11 ALL STEEL CONNECTION PLATES, BOLTS, LAG SCREWS AND OTHER STEEL ACCESSORIES SHALL BE HOT DIPPED GALVANIZED.

12 NAILING OF MEMBERS SHALL BE IN ACCORDANCE WITH NAILING SCHEDULES IN TABLE 2304.9.1, IBC2006.

13 ALL PARALLAM PSL MEMBERS SHALL BE GRADE 2.0E AS MANUFACTURED BY WEYERHAUSER, ILEVEL AND HAVE A MINIMUM DESIGN PARAMETERS AS FOLLOWS:

Fb = 2400 PSI
Fv = 265 PSI
E = 2,000,000 PSI

DESIGN WIND LOADS FOR EXTERIOR MATERIALS, COMPONENTS AND CLADDING (PSF)

1 ALL EXTERIOR BUILDING MATERIALS, COMPONENTS & CLADDING SHALL BE DESIGNED FOR POSITIVE AND NEGATIVE WIND PRESSURES TABULATED ABOVE. SUPPLIERS SHALL FURNISH MANUFACTURER'S DOCUMENTATION THAT ALL EXTERIOR BUILDING MATERIALS, COMPONENTS & CLADDING MEET THE ABOVE DESIGN WIND LOADS.

2 LOADS TO BE APPLIED IN ACCORDANCE WITH ASCE 7-10, FIGURES 30.4-1 & 30.4-2A. WIND PRESSURES CALCULATED BASED ON 131 MPH (3-SECOND GUST) BASIC WIND SPEED, EXPOSURE C AND A MEAN ROOF HEIGHT, "H", LESS THAN 25'-0". FOR THIS BUILDING, THE WIDTH OF ZONES ROOF 2, WALL 5 AND OVERHANG 2 (DIMENSION "a" IN ASCE 7-10) IS 5'-0".

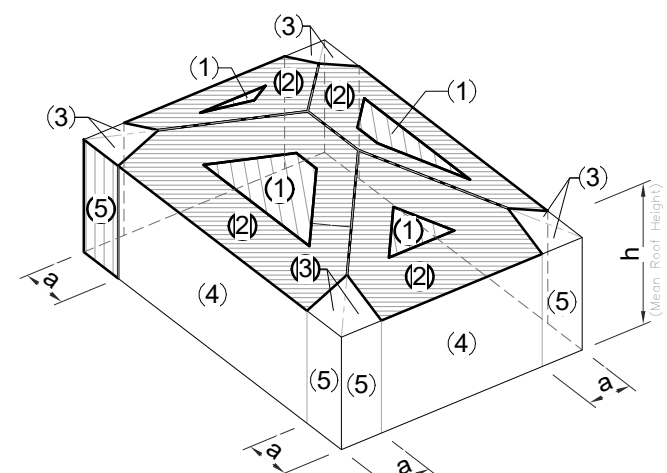
3 LINEAR INTERPOLATION BETWEEN VALUES OF TRIBUTARY AREA IS PERMITTED.

4 FOR FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.

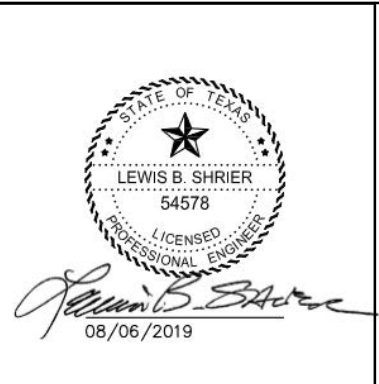
5 ALL EXTERIOR BUILDING MATERIALS, COMPONENTS & CLADDING MUST BE TESTED AND INSTALLED TO WITHSTAND THE SPECIFIED WIND PRESSURES.

6 ALL COMPONENTS FOR EXTERIOR OPENINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS FOR THE MANNER IN WHICH THEY WERE TESTED FOR UNIFORM STATIC WIND PRESSURE RESISTANCE AND FOR WINDBORNE DEBRIS RESISTANCE. EXTERIOR OPENINGS SHALL INCLUDE EXTERIOR WINDOWS, EXTERIOR DOORS AND SKYLIGHTS.

WIND ZONE	EFFECTIVE WIND AREA < 10 SQ. FT.		EFFECTIVE WIND AREA > 100 SQ. FT.	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
ROOF 1	+24	-39	+17	-35
ROOF 2	+24	-67	+17	-49
ROOF 3	+24	-98	+17	-77
WALL 4	+42	-46	+31	-35
WALL 5	+42	-56	+31	-35
OVERHANG 2	NA	-78	NA	-78
OVERHANG 3	NA	-131	NA	-88



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"The Junction Where Good Friends Meet"

Hanson No. 17L0017-1006		
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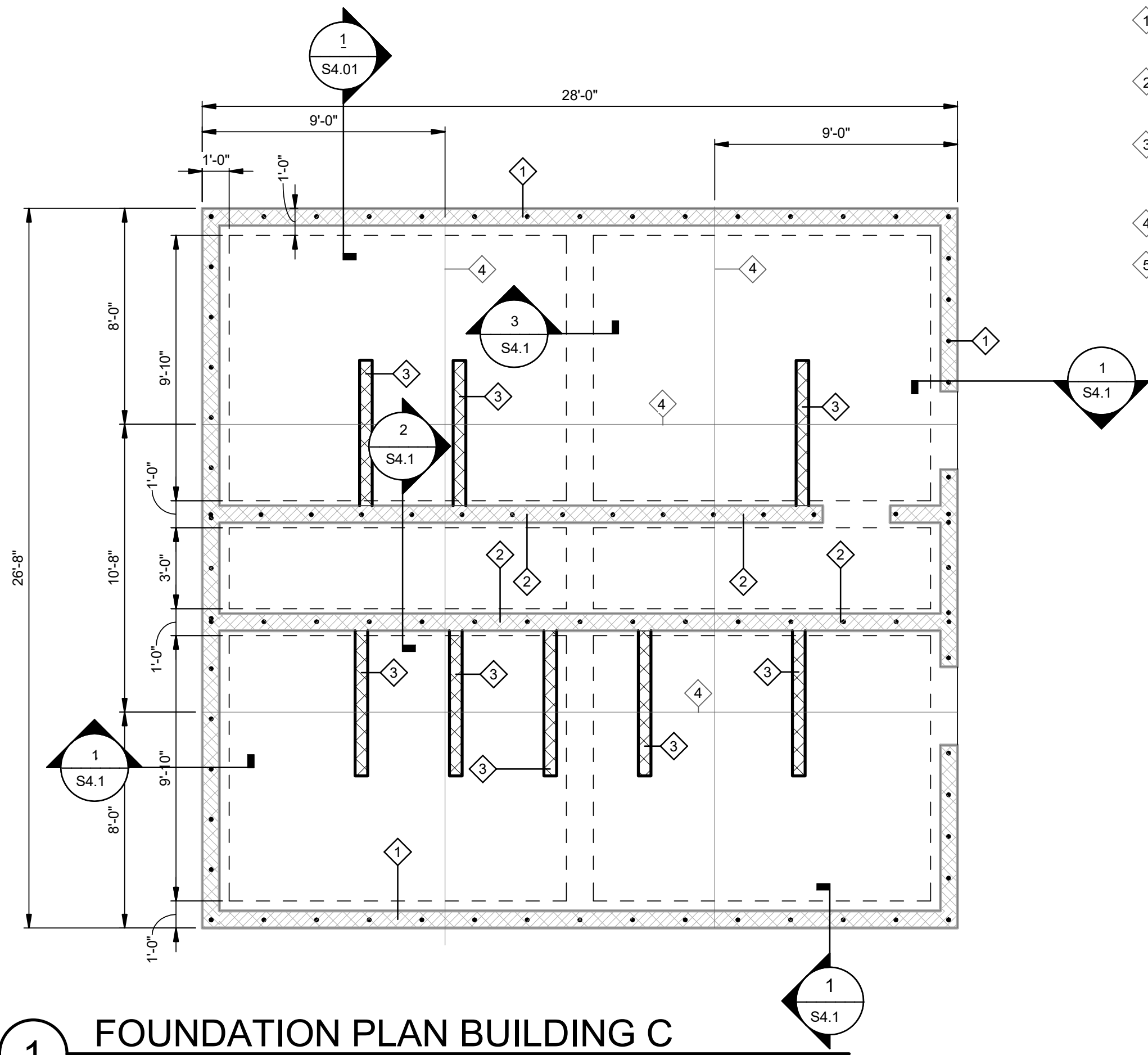
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GENERAL NOTES

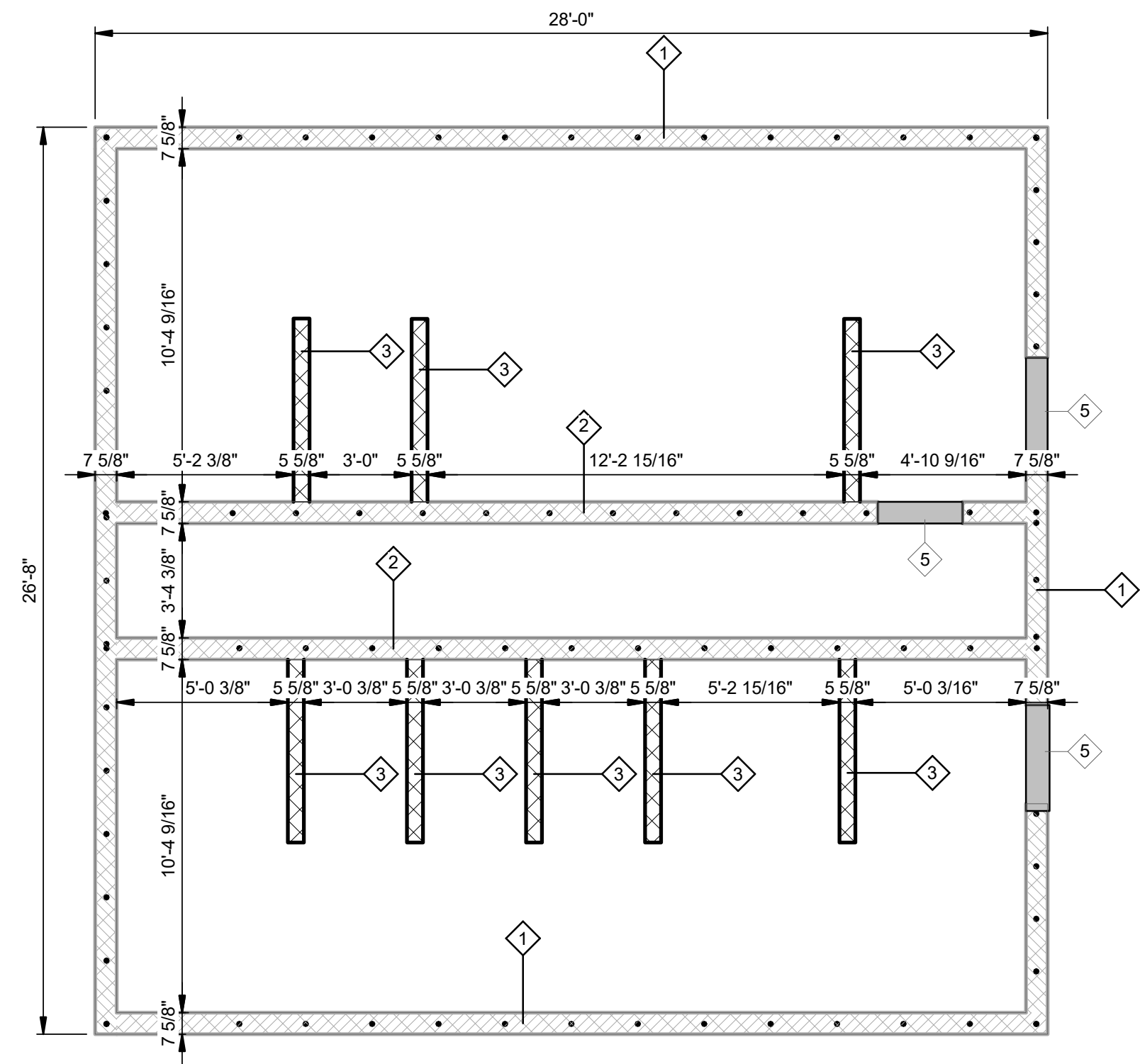
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

S0.2



1 FOUNDATION PLAN BUILDING C
1/4" = 1'-0"
1. TOP OF CONCRETE SLAB REFERENCE ELEVATION 0.00' (CIVIL ELEVATION 270.50')

- Reference Notes**
- 1 8" CMU EXTERIOR WALL REINFORCE WITH #4 VERTICAL BARS @ 48"
 - 2 8" CMU INTERIOR LOAD BEARING WALL REINFORCE WITH #4 VERTICAL BARS @ 48"
 - 3 3" CMU INTERIOR PARTITION WALL REINFORCE WITH #4 VERTICAL BARS @ 48" OC
 - 4 1 1/4" DEEP SAWCUT CONTROL JOINT
 - 5 WINDOW OR DOOR HEADER, TEE TYPICAL LINTEL DETAIL 3/S6.1
- REFER TO DETAIL SHEET S4.01 FOR TYPICAL PIPE PENETRATIONS THROUGH GRADE BEAMS



2 CMU WALL PLAN BUILDING C
1/4" = 1'-0"

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"The Junction Where Good Friends Meet"

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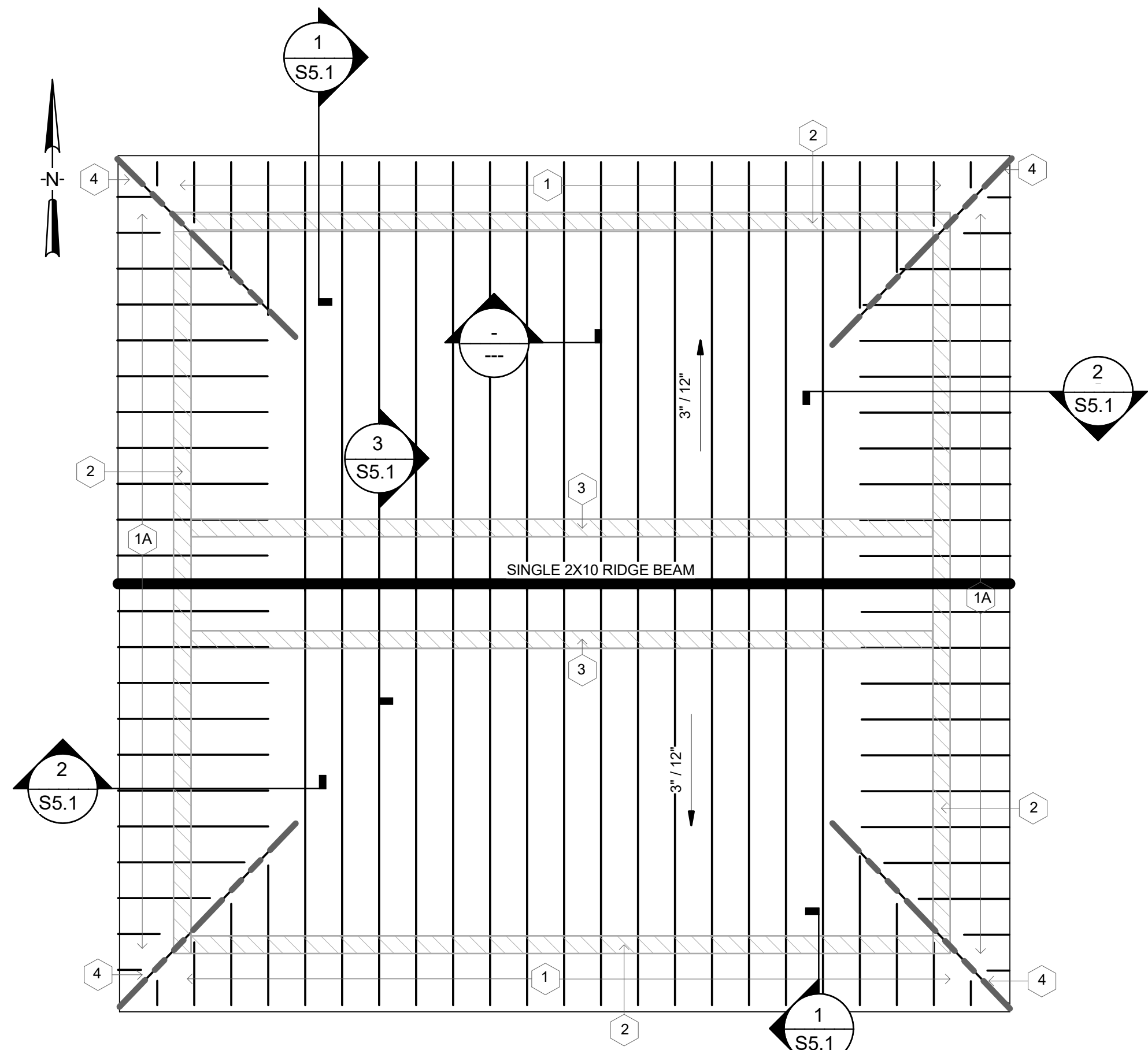
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FOUNDATION PLAN BLDG. C

CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

S3.1

of sheets



1

ROOF FRAMING PLAN BUILDING C

1/4" = 1'-0"

REFERENCE NOTES

- 1
- 2X8 ROOF RAFTERS AT 16" O.C. PROVIDE ONE 8X8 TOP PLATE. ANCHOR TO CMU WITH 1/2"Ø ANCHOR BOLTS @24" O.C. PROVIDE 2"Ø WASHER UNDER NUT
- 1A
- 2X8 OUTRIGGERS AT 16" O.C. AT 16" O.C. PROVIDE ONE 8X8 TOP PLATE. ANCHOR TO CMU WITH 1/2"Ø ANCHOR BOLTS @24" O.C. PROVIDE 2"Ø WASHER UNDER NUT
- 2
- 8" CMU EXTERIOR WALL. REINFORCE WITH #4 VERTICAL BARS AT 48" O.C.
- 3
- 8" CMU INTERIOR LOAD BEARING WALL. REINFORCE WITH #4 VERTICAL BARS AT 48" O.C.
- 4
- 2X8 HIP RAFTERS

PLAN NOTES

1.
- COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS
2.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL INTERIOR WALL DIMENSIONS
3.
- ROOF DECKING SHALL BE 5/8" PLYWOOD SHEATHING WITH 10dX3" HOT DIPPED GALVANIZED NAILS AT 4" O.C. EDGE AND 6" O.C. FIELD

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Lewis B. Shrier
08/06/2019



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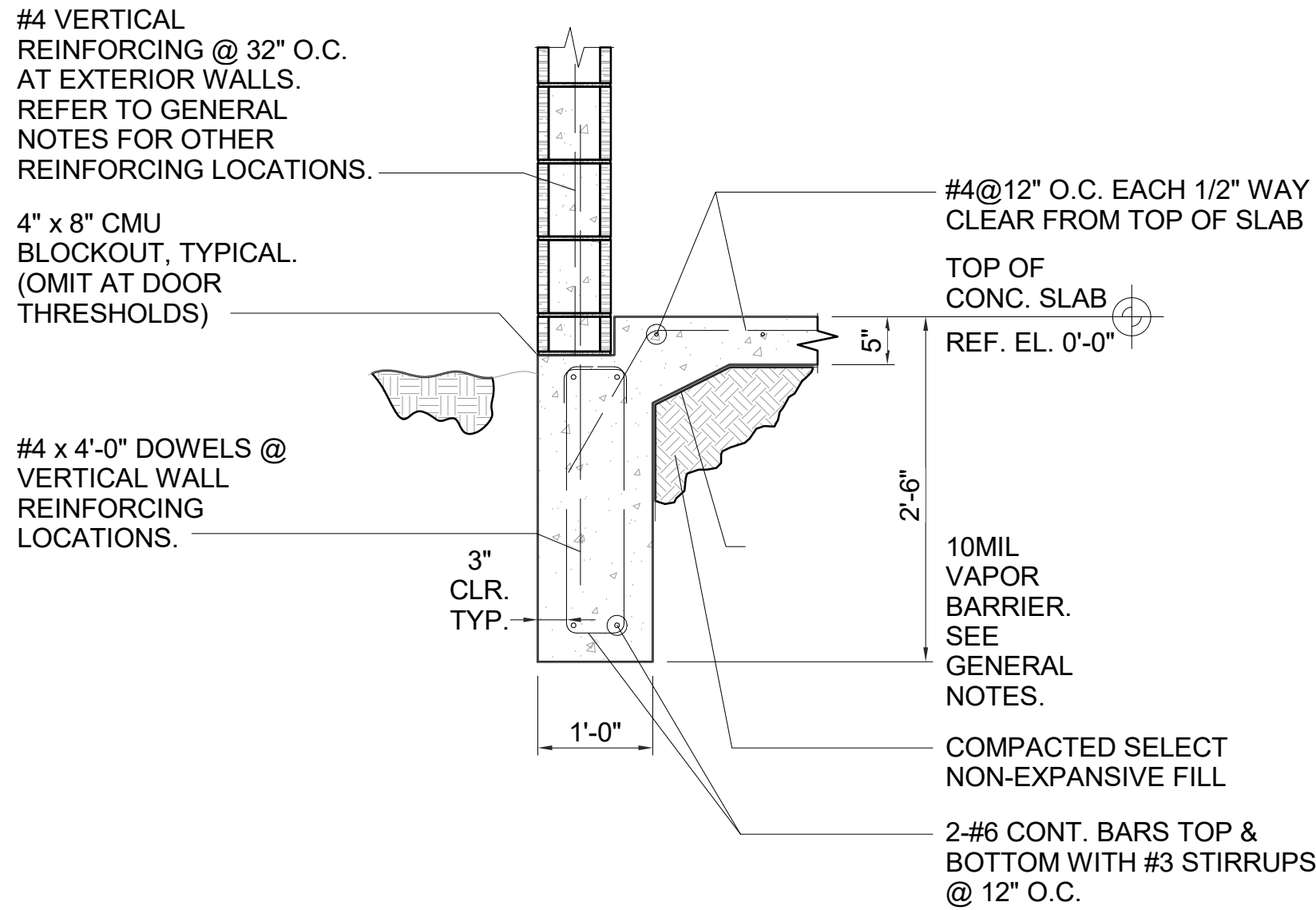
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ROOF FRAMING PLAN BLDG. C

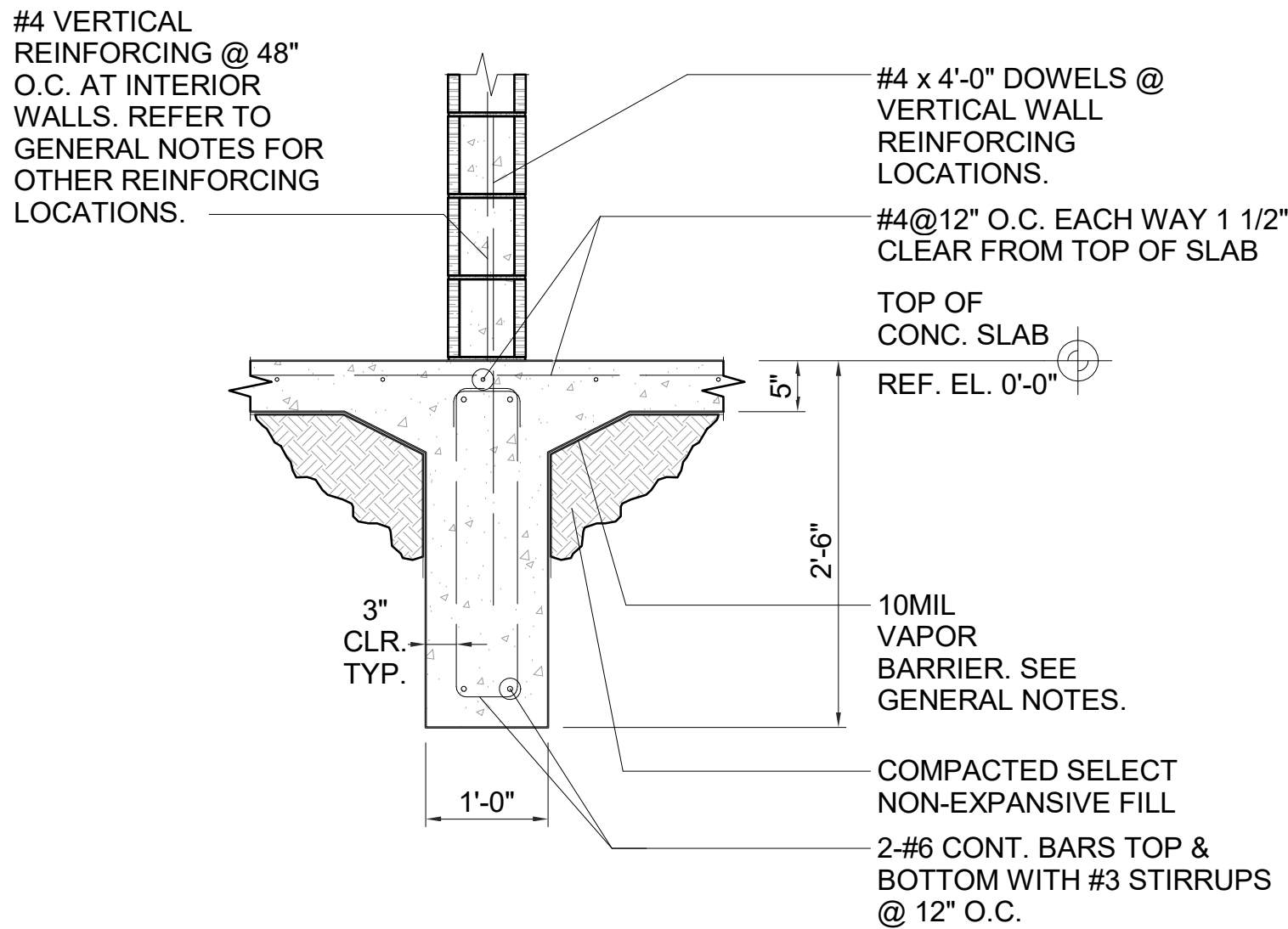
CONSTRUCTION DRAWINGS FOR
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S3.2

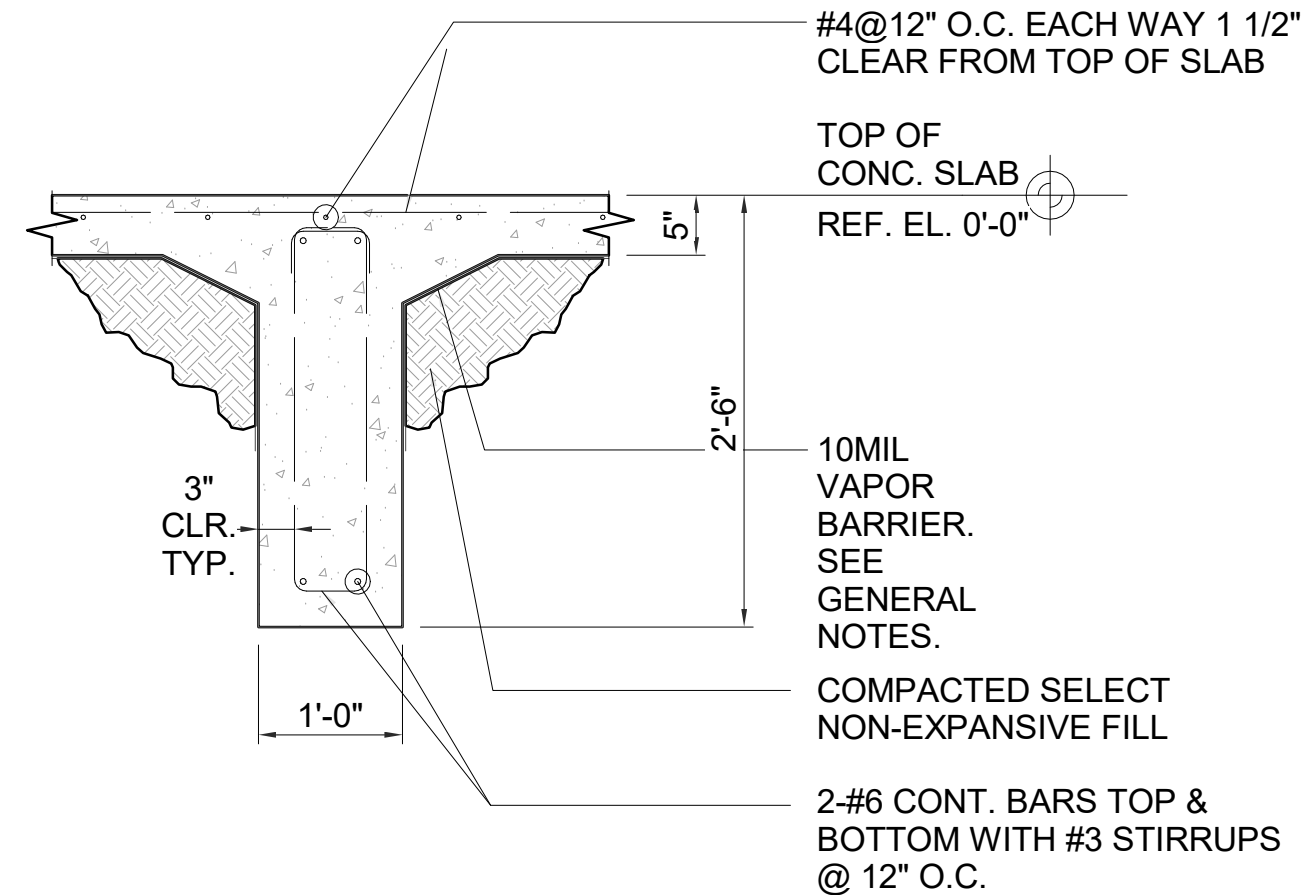
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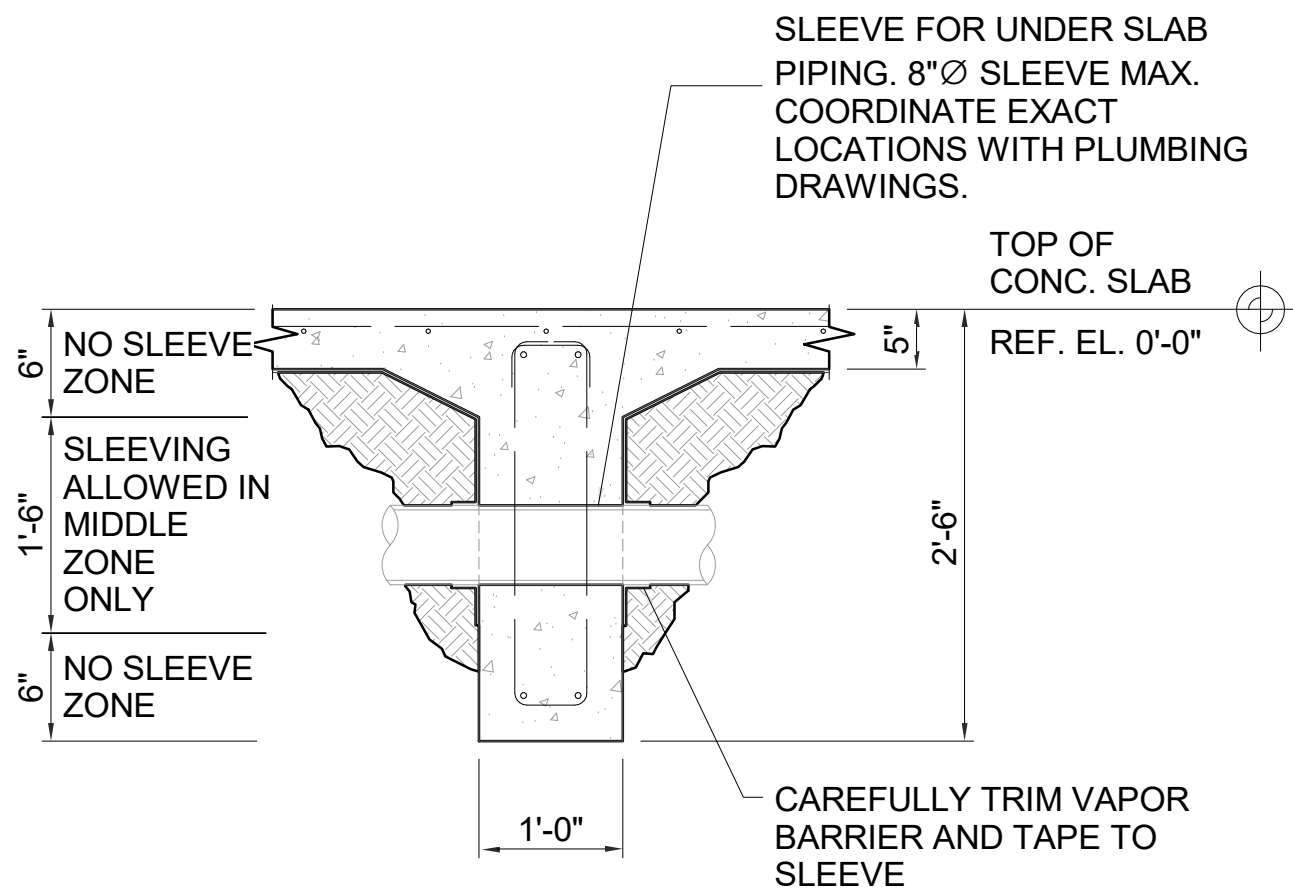
1 WIDE EXTERIOR GRADE BEAM
3/4" = 1'-0"



2 INTERIOR GRADE BEAM AT CMU WALL
3/4" = 1'-0"



3 TYPICAL INTERIOR GRADE BEAM
3/4" = 1'-0"



4 TYPICAL PIPE SLEEVE THROUGH GRADE BEAM
3/4" = 1'-0"

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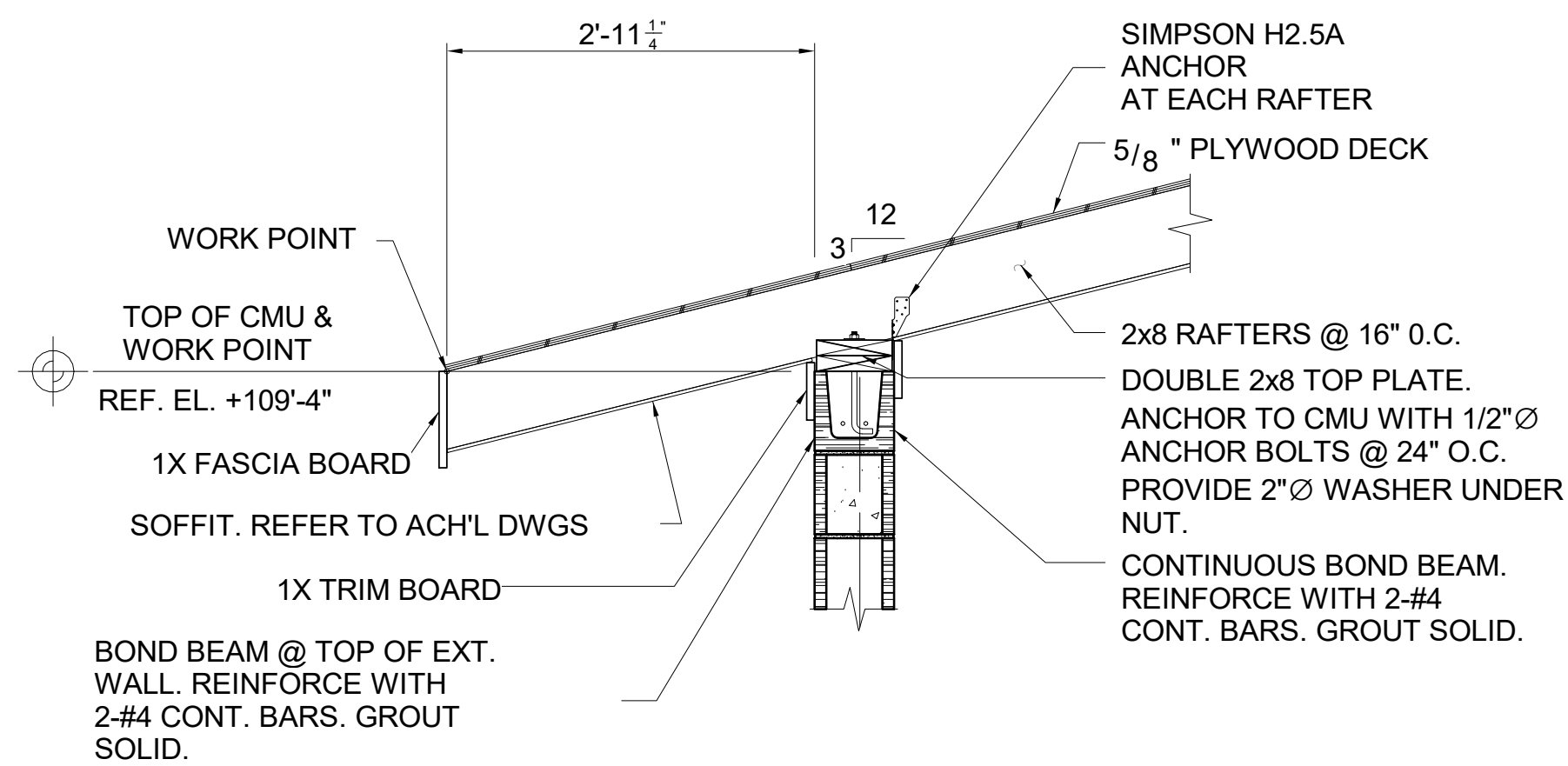
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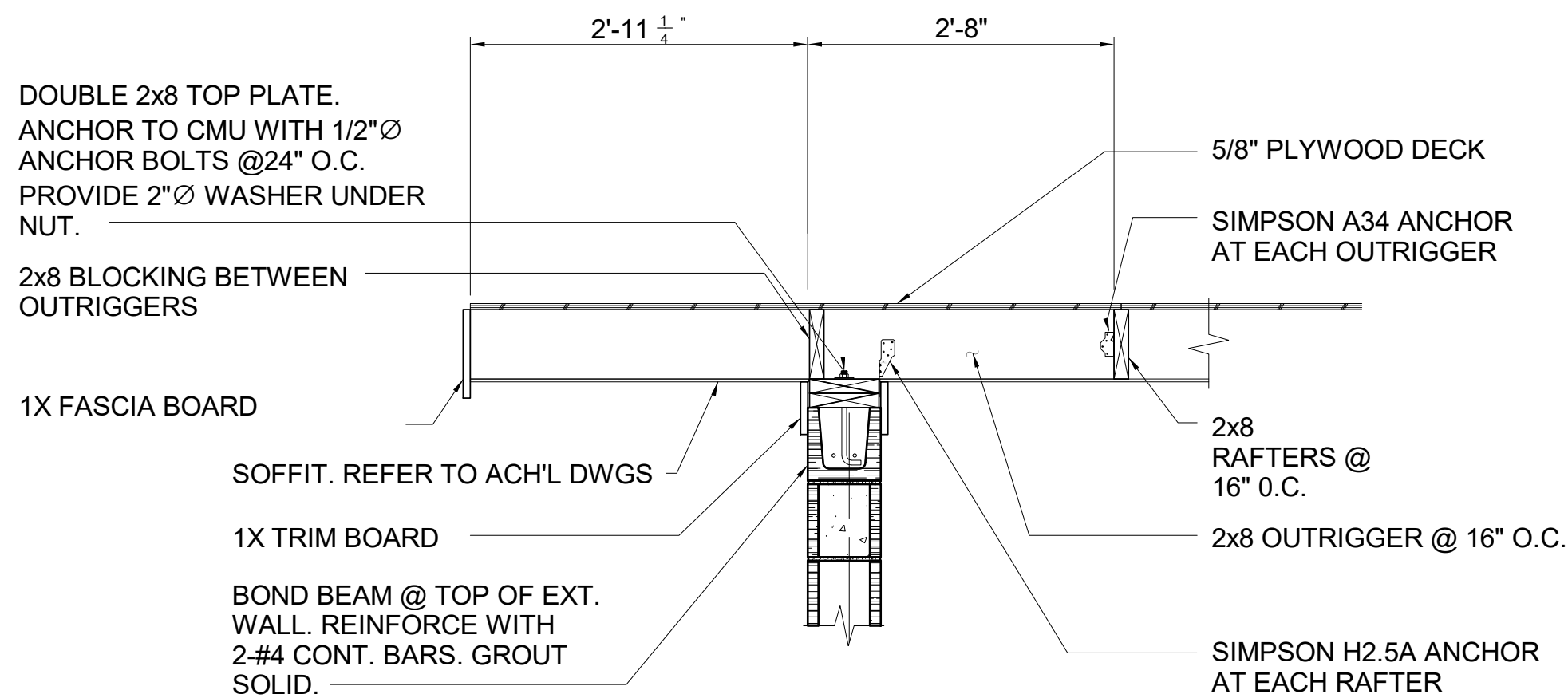
CONSTRUCTION DRAWINGS FOR
 LARRY KIESLING YOUTH SPORTS COMPLEX
 CITY OF KENEDY

S4.1

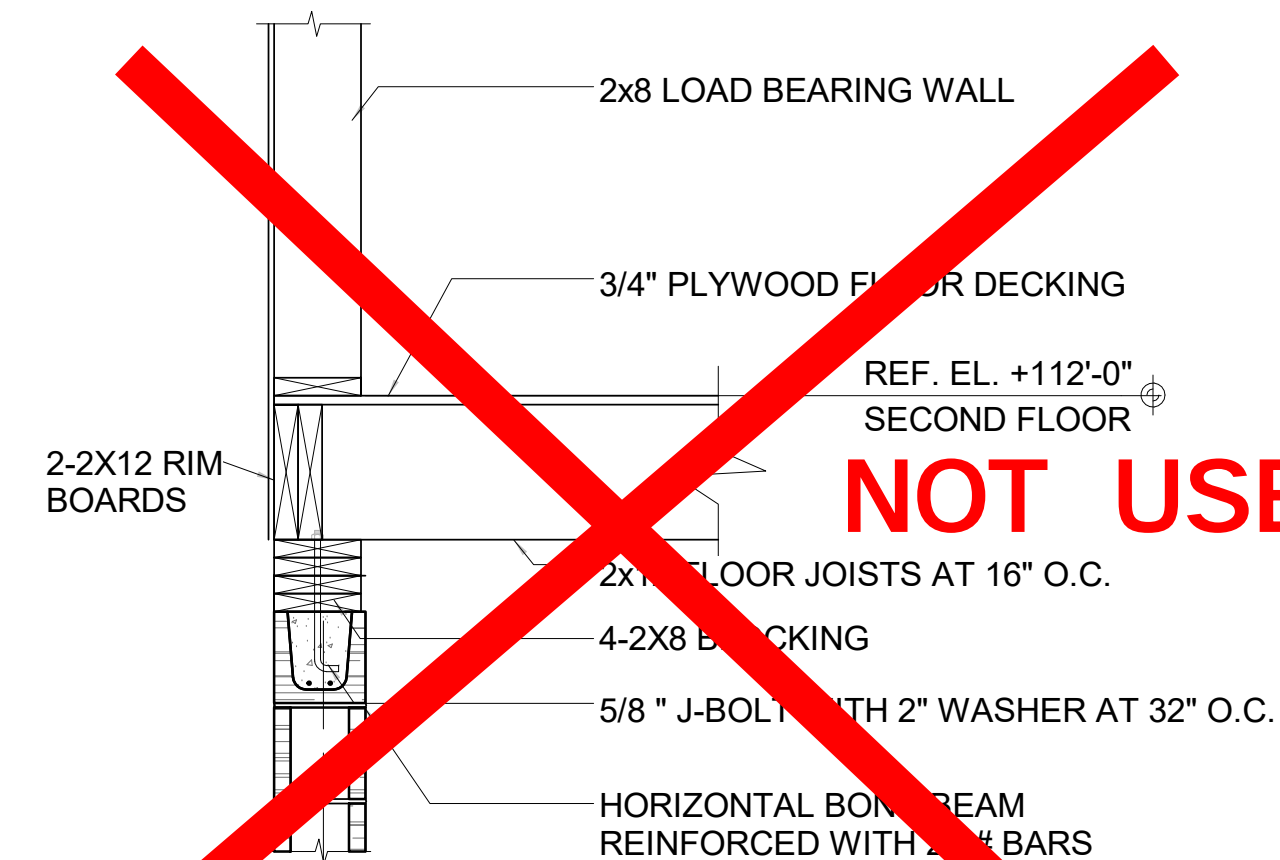
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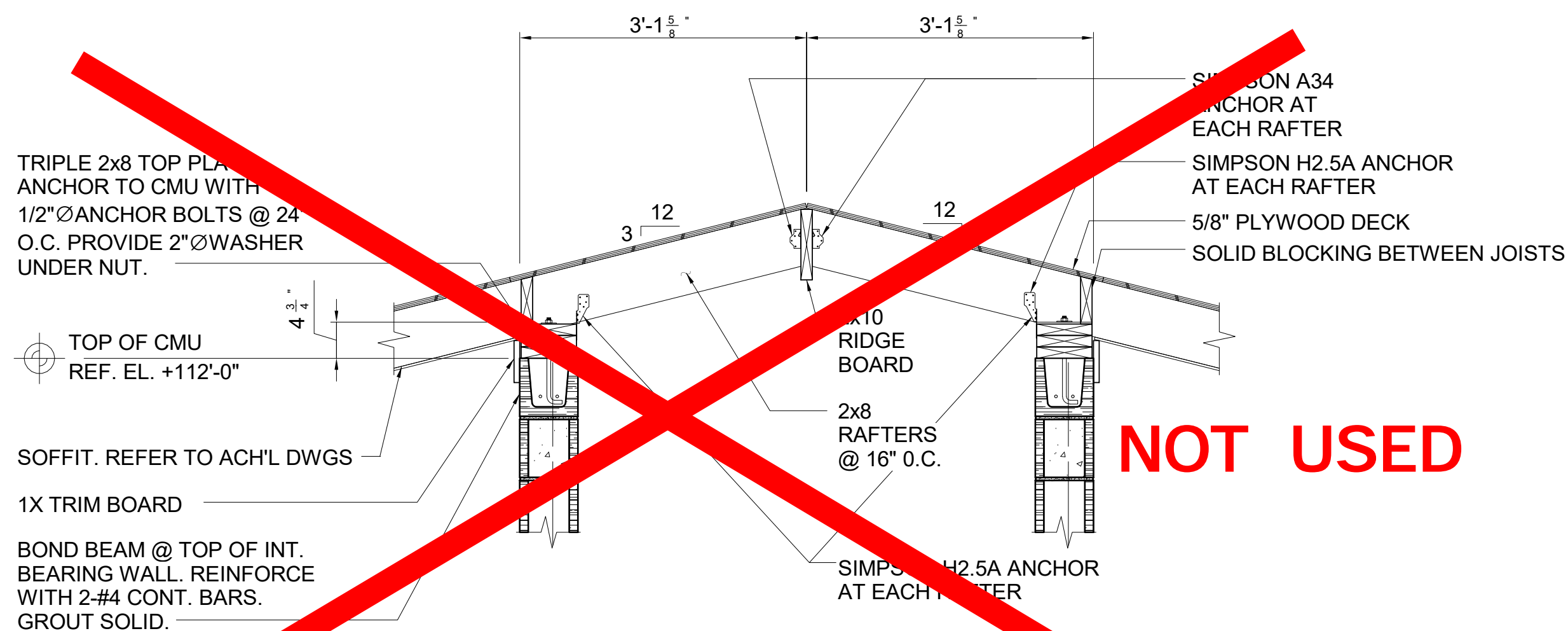
1 ROOF EAVE DETAIL
3/4" = 1'-0"



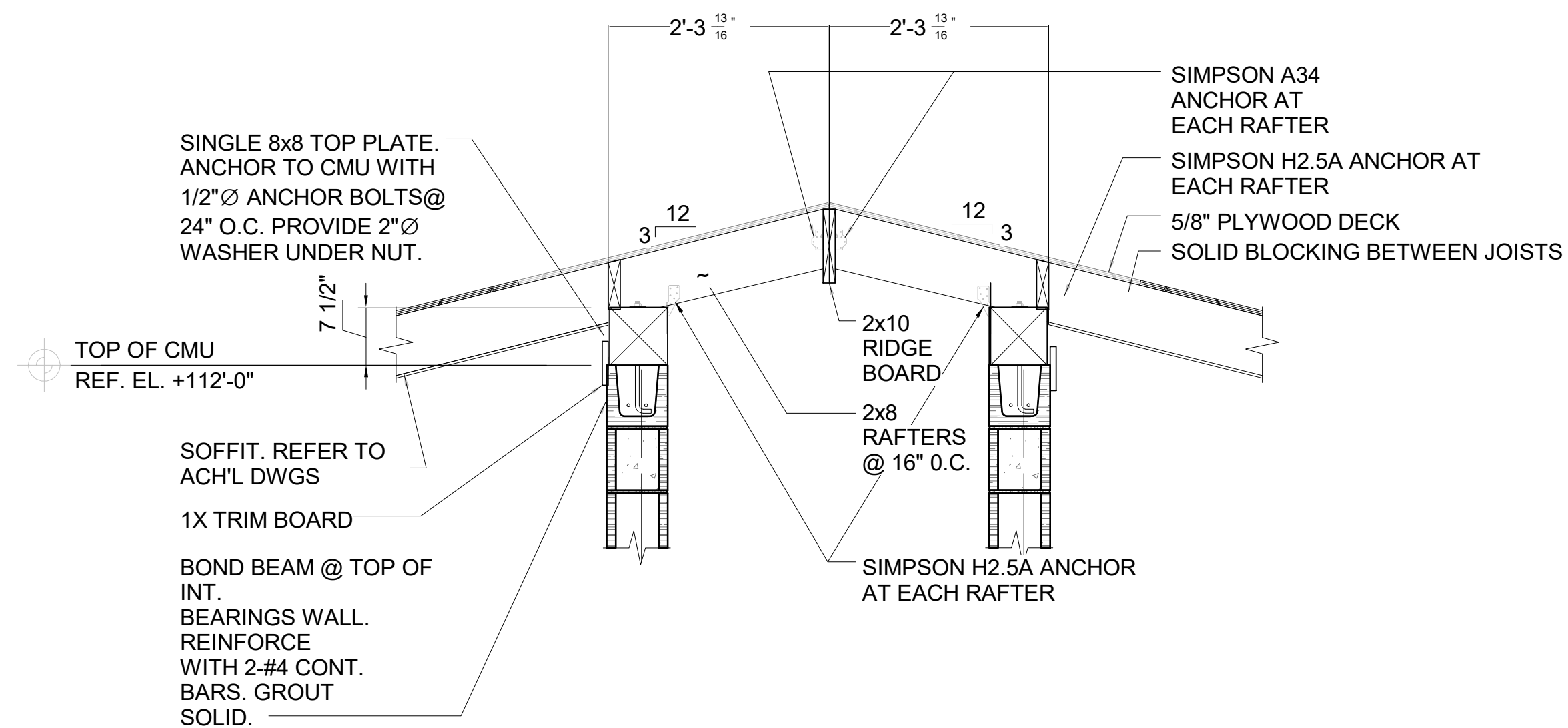
2 ROOF RAKE DETAIL
3/4" = 1'-0"



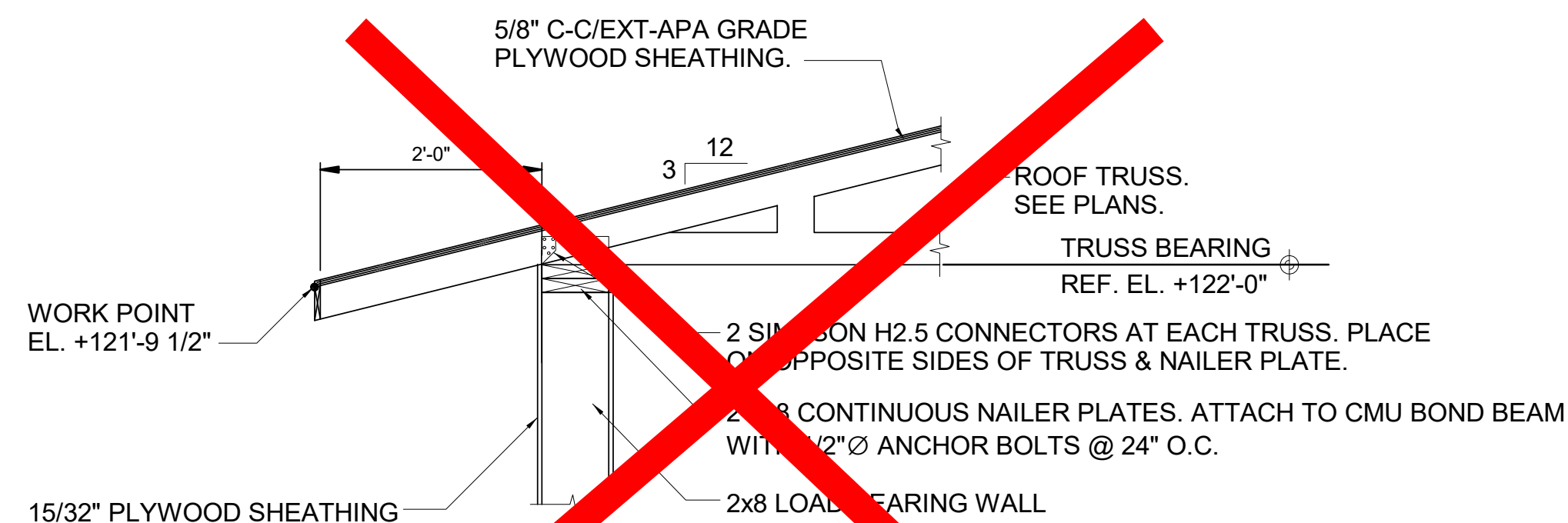
3 BUILDING A
3/4" = 1'-0"



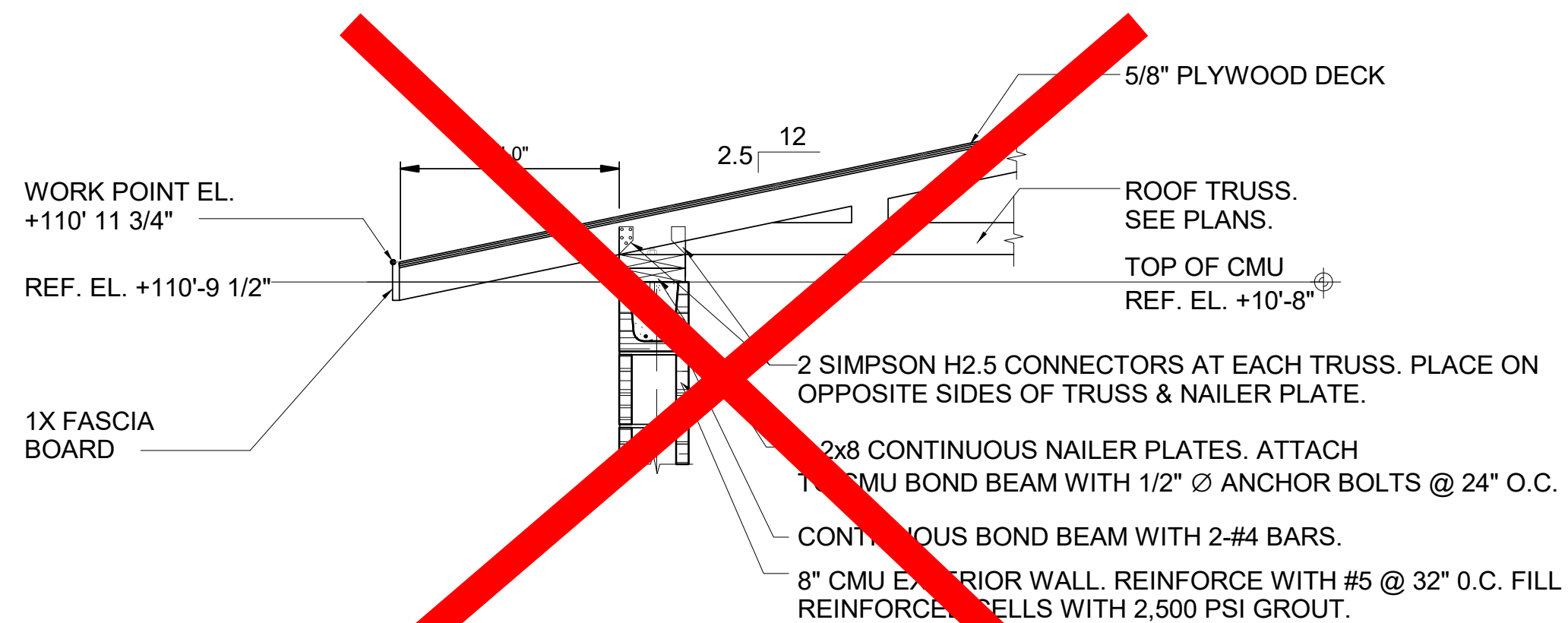
4 ROOF RIDGE DETAIL BUILDING B
3/4" = 1'-0"



5 ROOF RIDGE DETAIL BUILDING C
3/4" = 1'-0"



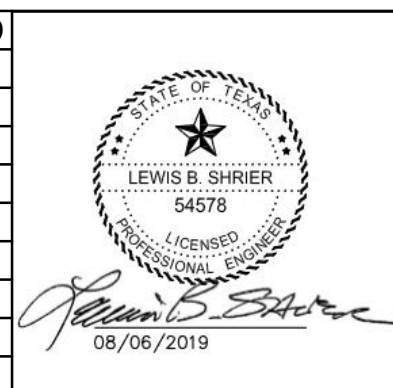
6 TRUSS BEARING ON WOOD
3/4" = 1'-0"



7 TRUSS BEARING ON CMU
3/4" = 1'-0"

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ROOF FRAMING DETAILS
CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

S5.1

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DESIGN BASIS PRODUCT:

TOILET PARTITIONS:

DESCRIPTION: HIGH DENSITY POLYETHYLENE (HDPE) PANELS, PILASTERS AND DOORS CONSTRUCTION, PILASTERS SHALL BE MOUNTED TO THE FACE OF THE 6" CMU PARTITIONS AT EACH TOILET STALL.

PRODUCT COMPLIANCE:

- PANEL THICKNESS: 1 INCH CROSS SECTION
- COLOR: AS SELECTED BY OWNER FROM MFR'S. STD. COLORS
- MOUNTING HARDWARE:
 - DOOR PANEL: STAINLESS STEEL OPERATING HARDWARE WITH PIANO HINGE FOR DOOR
 - PANELS: STAINLESS STEEL CONTINUOUS MOUNTING BRACKETS
 - ANCHOR TRIM: STAINLESS STEEL

MANUFACTURERS / PRODUCTS:

- BOBRICK
- AMERICAN SPECIALTIES INC. - ASI ACCURATE PARTITIONS
- OR APPROVED EQUIVALENT

INSTALLATION:

INSTALLATION SHALL USE VANDAL RESISTANT FASTENERS, AND BE CONDUCTED IN ACCORDANCE TO THE MANUFACTURER'S INSTRUCTIONS FOR THE WALL TYPE. PARTITION PANELS SHALL BE INSTALLED STRAIGHT, PLUMB AND RIGID (NOT LOOSE).

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

COMPOSITE FRAME WINDOWS:

DESCRIPTION:

A COMPOSITE FRAME WINDOW WITH HIGH PERFORMANCE GLAZING, FOR BOTH INSET (THRU FRAME AND [NAILING] FIN TYPE INSTALLATION

MANUFACTURERS / PRODUCTS:

- ANDERSON WINDOWS AND DOORS: A-100 WINDOW SERIES
- FRAME COLOR TO BE DETERMINED
- REFER TO THE WINDOW SCHEDULE FOR DIMENSIONS AND OPERATING TYPES
- PROVIDE THE STANDARD MANUFACTURER'S WARRANTY
- GLAZING SHALL BE:
 - HIGH-PERFORMANCE LOW-E PER THE MANUFACTURER

INSTALLATION:

WINDOWS ARE TO BE INSTALLED IN BOTH CONVENTIONAL WOOD FRAMING AND INSET (THRU FRAME) INTO CONCRETE UNIT MASONRY ROUGH OPENINGS. FASTENERS SHALL BE CORROSIVE RESISTANT, AND PER THE SIZE / TYPE RECOMMENDED BY THE MANUFACTURER

REFER TO THE BUILDING ELEVATIONS AND WINDOW SCHEDULES FOR MORE INFORMATION

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

RESILIENT SHEET VINYL FLOORING:

DESCRIPTION: SHEET VINYL WITH HEAT WELDED AND FLASH COVERED 6" BASE IN COLOR ANCHOR 20 MIL COMMERCIAL FLOORING

RESILIENT FLOORING MATERIALS

- A. Provide Mannington Mills, Inc. heterogeneous resilient vinyl sheet flooring in [color selected from the range currently available], [6"] [9"] [12"] wide, having a nominal total thickness of .080 in. (2.0 mm). The vinyl wear surface shall be composed of polyvinyl chloride resin, plasticizers, stabilizers, fillers, and pigments. Vinyl sheet flooring shall conform to the requirements of ASTM F 1913. Static Load (ASTM F970 mod.) 2,000 PSI; Residual Indent ≤ 0.005 in.
- B. Vinyl sheet flooring shall have one of the following topical wear layers with minimum 10 year warranty:
 - 1. Quantum Guard HP wear layer composed of a urethane aluminum oxide topcoat cured by an ultraviolet process. The aluminum oxide wear layer shall have a rating of 9 on the MOH (Hardness Scale).
 - 2. Quantum Guard Elite wear layer with a patent-pending two-part wear layer and aluminum oxide infused top coat cured by ultraviolet process.
- C. Environmental: Flooring must be FloorScore certified. Flooring must be made in the USA.

2.02 WALL BASE MATERIALS

- A. For integral flash cove base: Provide integral flash cove wall base by extending sheet flooring [4 in. (10.16 cm)] [6 in. (15.24 cm)] up the wall using adhesive, welding rod, and accessories recommended and approved by the flooring manufacturer.
- B. For top set wall base: Provide Mannington Commercial [0.080 in. (2.0 mm)] [1/8 in. (3.2 mm)] thick, [2 1/2 in. (6.35 cm)] [4 in. (10.16 cm)] [6 in. (15.24 cm)] high wall base with a matte finish, conforming to ASTM F 1861, [Type TV - Vinyl, Thermoplastic] [Type TS – Rubber, Thermoset Vulcanized] [Type TP - Rubber, Thermoplastic], Group 2 - Layered, [Style A – Straight] [Style B – Cove] with MR-101 Installation Adhesive.

2.03 ADHESIVES

- A. Provide Mannington [V-82 Acrylic Flooring Adhesive] [V-95 Two Component Polyurethane Adhesive] [V-88 High Moisture Flooring Adhesive] [XpressStep Spray Adhesive] under the flooring.
 - B. Provide [MLG-33 Seam Sealer] [Solid Color Vinyl Weld Rod] as produced by the manufacturer of the resilient flooring and intended for welding of seams. [Weld rod color shall be compatible with field color of flooring or as selected by Architect to contrast with field color of flooring. Color selected from the range currently available.]
 - C. Provide MT-800 Seam Sealer, if needed, to chemically weld product to surrounding broadloom carpet materials.
- 2.04 ACCESSORIES
- A. Resilient sheet goods must have the ability to be chemically welded to adjoining broadloom carpet materials.
 - B. For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), provide Portland cement-based latex underlayment or patch and skim coat as recommended by the resilient flooring manufacturer.
 - C. For sealing joints between the top of wall base or integral cove cap and irregular wall surfaces such as masonry, provide plastic filler applied according to the manufacturer's recommendations.
 - D. [Provide top edge trim caps of [plastic] [anodized aluminum] [plastic zero reducer] for integral flash cove as approved by the Architect.]
 - E. [Provide a fillet support strip for integral cove base with a minimum radius of 1 in. (2.54 cm) of wood or plastic.]
 - F. Provide transition / reducing strips tapered to meet abutting materials.
 - G. Provide threshold of thickness and width as shown on the drawings.
 - H. Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.
 - I. Provide metal edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type metal edge strips for concealed anchorage, or overlap-type metal edge strips for exposed anchorage. Unless otherwise shown, provide strips made of extruded aluminum with a mill finish.

INSTALLATION OF FLOORING

- A. Install flooring in strict accordance with the manufacturer's written instructions.
- B. Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.
- C. If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.
- D. Scribe, cut, and fit to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.
- E. Chemically weld LVT to adjoining broadloom carpet materials (Mannington Integra HP). Chemical welding carpet to sheet vinyl: Mannington's seam sealer MT-800 must be used to chemically weld Integra HP / Integra HP RE Backing to commercial sheet vinyl per manufacturer's instructions.

- F. Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.

INSTALLATION OF ACCESSORIES

- A. Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.
- B. Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.
- C. Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.
- D. Apply [butt-type] [overlap] metal edge strips where shown on the drawings, [before] [after] flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

INSTALLATION METHOD PER MANUFATURER BY APPROVED INSTALLER

MANUFACTURERS / PRODUCTS:
MANNINGTON FLOORING

COLOR ANCHOR COLLECTION
ARC AND PRISM WATER JET LOGO
OR APPROVED EQ.

DESIGN BASIS PRODUCT:

RESINOUS FLOOR FINISH:

DESCRIPTION: CLASS I RATED FLOOR FINISH

RESINOUS FLOORING TYPE 1:

- SLIP RESISTANT RESINOUS FLOORING: 2 COMPONENT, SOLVENT-FREE, FREE FLOWING, ALIPHATIC URETHANE SYSTEM, 3/32 TO 1/8 INCH (FIN. THICKNESS) NOMINAL FLOOR FINISH, WITH QUARTZ AGGREGATE BROADCAST MEDIA FOR SLIP RESISTANCE
- FOR USE IN BUILDING "A", REFER TO THE ROOM FINISH SCHEDULE

RESINOUS FLOORING TYPE 2:

- DECORATIVE RESINOUS FLOORING: 3/32 TO 1/8 INCH (FIN. THICKNESS) NOMINAL FLOOR FINISH WITH SLIP RESISTANCE PROPERTIES AND 1/4 INCH DECORATIVE FLAKE BROADCAST MEDIA
- FOR USE IN BUILDING "A", REFER TO THE ROOM FINISH SCHEDULE
- FOR USE IN BUILDING "B", REFER TO THE ROOM FINISH SCHEDULE

MANUFACTURERS / PRODUCTS:

- THE STONHARD GROUP (WWW.STONHARD.COM)
 - TYPE 1: STONSHIELD URT, AND ASSOCIATED SUBSURFACE PRIMER, AGGREGATE AND SEALER WITH COVE BASE OPTION - 4 INCHES
 - TYPE 2: STONTEC XPRESS, AND ASSOCIATED SUBSURFACE PRIMER, AGGREGATE, COLORED FLAKES, AND SEALER, WITH COVER BASE OPTION - 4 INCHES
- OR APPROVED EQUIVALENT
- COLORS PER THE MANUFACTURER'S STANDARD COLORS PER FLOORING SERIES

INSTALLATION:

- PER THE MANUFACTURER'S RECOMMENDED PROCESS.
- INSTALLER SHALL HAVE MINIMUM FIVE YEARS EXPERIENCE IN APPLYING THIS MATERIAL TO BOTH NEW AND OLD CONCRETE

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

PAINT PRIMERS AND COATINGS:

FOR CONCRETE MASONRY UNITS- INTERIORS:

1. PRIMER: SHERWIN WILLIAMS LOXON BLOCK SURFACER, A24W200
2. FINAL COAT: SHERWIN WILLIAMS PRO INDUSTRIAL WATER BASED PRE-CATALYZED EPOXY SEMI-GLOSS, K46 SERIES; COLOR T.B.D.

FOR CONCRETE MASONRY UNITS- EXTERIOR:

1. PRIMER: SHERWIN WILLIAMS LOXON BLOCK SURFACER, A24W200
2. FINAL COAT: SHERWIN WILLIAMS A-100 EXTERIOR LATEX SATIN, A82 SERIES; COLOR T.B.D.

FOR FIBER CEMENT MATERIAL:

1. PRIMER: QUICK DRY INTERIOR / EXTERIOR STAIN BLOCKING PRIMER; WHITE
2. FINAL COAT: SHERWIN WILLIAMS A-100 EXTERIOR LATEX SATIN, A82 SERIES; COLOR T.B.D.

FOR LUMBER/PLYWOOD:

1. PRIMER: SHERWIN WILLIAMS A-100 EXTERIOR FAST DRY STAIN BLOCKING ALKYD WOOD PRIMER; WHITE
2. FINAL COAT: SHERWIN WILLIAMS A-100 EXTERIOR LATEX SATIN, A82 SERIES; COLOR T.B.D.

FOR FACTORY PRIMED STEEL DOORS AND FRAMES:

1. PRIMER: NONE
2. FINAL COAT: SHERWIN WILLIAMS PRO-INDUSTRIAL STM ACRYLIC, COLOR T.B.D.

PRIMER:

1. SHERWIN WILLIAMS QUICK DRY INTERIOR/EXTERIOR STAIN BLOCKING PRIMER

FINAL COAT:

1. SHERWIN WILLIAMS PROMAR 400 ZERO VOC INTERIOR LATEX EGG SHELL FINISH

INSTALLATION:

APPLY ONE (1) COAT PRIMER TO PREVIOUSLY UNPAINTED SURFACES, AND TWO (2) COATS OF FINISH PAINT TO ALL SURFACES.

ABIDE BY THE MANUFACTURER'S RECOMMENDATIONS FOR SURFACE PREPARATION AND COATING APPLICATION FOR EACH INDIVIDUAL COATING BEING SPECIFIED/USED ON THE PROJECT

ALL CRACKS AND SUBSURFACE FAILURES MUST BE CORRECTED/REPAIRED BEFORE FINISHING

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

SUSPENDED ACOUSTICAL CEILING SYSTEM:

DESCRIPTION:

PAINTED STEEL GRID SYSTEM WITH LAY-IN, MINERAL FIBER TILES IN STANDARD SIZES PER MANUFACTURER'S PRODUCT LINE

TILE THICKNESS: 5/8 TO 3/4 INCH
TILE SIZE: 2'-0" X 2'-0"
TILE EDGE: SQUARE
TILE COLOR: WHITE

TILE PROPERTIES:

- MOISTURE RESISTANT
- ORGANIC GROWTH RESISTANT
- CLASS A FIRE RESISTANCE IN ACCORDANCE WITH ASTM E84 OR UL 723
- CLEANABLE SURFACE

GRID SYSTEM: 15/16"
GRID COLOR: WHITE

MANUFACTURERS / PRODUCTS:

- ARMSTRONG FINE FISSURED, No. 1831 APC-2
- ARMSTRONG KITCHEN ZONE, No. 673 APC-1
- USG RADAR ACOUSTICAL PANELS, No. 2215
- USG KITCHEN LAY-IN ACOUSTICAL PANELS, No. 3210
- OR APPROVED EQUIVALENT

NOTE: ARMSTRONG No. 673 OR USG No. 3210 FOR KITCHEN, CONCESSIONS, AND CONCESSIONS STORAGE AREA IN BLDG. A

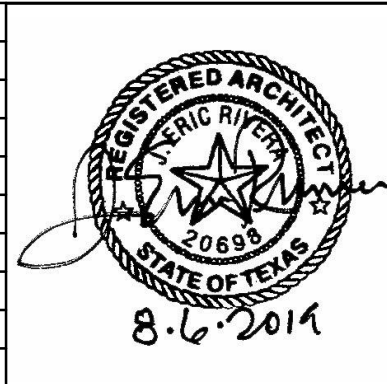
INSTALLATION:

INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CEILING SHALL BE INSTALLED LEVEL ACROSS VISIBLE SURFACE PLANE.

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No.	17L0017 1006	
Filename	CITY OF KENEDY SPORTS COMPLEX	
Scale		
Date	8/06/19	
LAYOUT	AGP	8/06/19
DRAWN	AGP	8/06/19
REVIEWED	JER	8/06/19



TBPE F-417 TBPLS F-10039500 TBPG F-50556 TBAE F-BR 2458
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ARCHITECTURAL DESIGN
BASIS INFORMATION
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

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DESIGN BASIS PRODUCT:

PREFINSIHED CONCEALED FASTENER METAL ROOF PANELS:

DESCRIPTION: INSTALLATION FASTENERS AND CLIPS SHALL BE CORROSIVE RESISTANT.

MANUFACTURER/SERIES:

- METAL BUILDING COMPONENTS INC. (MBCI)
 - SUPERLOK, 24 GAUGE, FINISH- STRIATED (STANDARD);
 - COATING- SIGNATURE 300, COLOR- T.B.D.
 - PANEL WIDTH; 16 INCHES
- OR APPROVED EQUIVALENT
- ASSOCIATED HIP, FASCIA AND RIDGE TRIM SHALL BE COLOR COORDINATED WITH THE ROOF COLOR

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

OVERHEAD COILING DOORS

DESCRIPTION: OVERHEAD ROLLING COUNTER DOOR AND FACE MOUNTED GUIDE RAILS

- CURTAIN: INTERLOCKING ALUMINUM FACE SLATS, CLEAR ANODIZED FINISH
- GUIDES: EXTRUDED ALUMINUM, FACE MOUNTED, CLEAR ANODIZED FINISH
- BOTTOM RAIL: EXTRUDED ALUMINUM, CLEAR ANODIZED FINISH WITH VINYL GASKET
- OPERATION: MANUAL PUSH UP, PROVIDE POLE HOOK FOR EACH DOOR
- PROVIDE WEATHER SEALS FOR EDGES AND HEAD FOR EXTERIOR USE
- PROVIDE SLIDE LOCKS AT EACH JAMB, EACH UNIT SHOULD BE PADLOCK CAPABLE FROM INSIDE, BOTH JAMBS

WIND LOADING: DESIGN PRESSURE CHART LOCATED IN THE STRUCTURAL SHEETS, THIS SET

MANUFACTURERS / PRODUCTS:

- CORNELL IRON WORKS, MODEL ESC10 ROLLING COUNTER DOOR
- CLOPAY BUILDING PRODUCTS

INSTALLATION:

INSTALL DOOR AND OPERATING EQUIPMENT WITH NECESSARY HARDWARE, ANCHORS, INSERTS, HANGERS AND SUPPORTS. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

CONCRETE SEALER FOR FLOORS:

DESCRIPTION: CLEAR FINISH, WATER BASED PRODUCT - WATER. OIL AND STAIN REPELLENT FOR NEW CONCRETE SURFACES

- FOR USE IN BUILDING "C" AND MISC. STORAGE AREAS OR IN OTHER BUILDINGS

MANUFACTURERS / PRODUCTS:

- PROSOCO- CONSOLIDECK CONCRETE PROTECTOR WB
- OR APPROVED EQUIVALENT

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

ROOFING UNDERLAYMENT

DESCRIPTION: SELF ADHERING RUBBER-MODIFIED SHEET WITH STRIPPABLE RELEASE FILM AND WOVEN POLYPROPYLENE SHEET TOP SURFACE

COMPLYING WITH:

- 1) ASTM D 1970/D1970M- STANDARD SPECIFICATION FOR SELF-ADHERING POLYMER MODIFIED BITUMINOUS SHEET MATERIAL USED AS STEEP ROOFING UNDERLAYMENT FOR ICE DAM PROTECTION; 2013
- 2) ASTM D 3161/D316M- STANDARD TEST METHOD FOR WIND RESISTANCE OF STEEP SLOPE ROOFING PRODUCTS (FAN INDUCED METH.); 2014

PLYWOOD ADHESION TESTED PER ASTM D 903

MANUFACTURERS / PRODUCTS:

- GCP APPLIED TECHNOLOGIES - GRACE ICE AND WATER SHIELD HT
- CARLISLE WIP PRODUCTS - WIP 300 HT

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

FIBER CEMENT SIDING: PLANKS, SOFFITS, PANELS, TRIM:

COMPLYING WITH:

- 1) ASTM C1186 - STANDARD SPECIFICATION FOR FLAT FIBER CEMENT SHEETS (REAPPROVED 2012)

LAP SIDING:

- STYLE: STANDARD LAP STYLE
- TEXTURE: SIMULATED WOOD GRAIN
- WIDTH (HEIGHT): 7 1/2 INCHES
- EXPOSURE: 6 INCHES
- THICKNESS: 5/16 INCHES
- FINISH: FACTORY PRIMED

SOFFIT PANELS:

- TEXTURE: SMOOTH
- THICKNESS: 5/16 INCHES
- FINISH: FACTORY PRIMED

TRIM AT INSIDE/OUTSIDE CORNERS, OPENINGS, WALL TO SOFFIT TRANSITIONS:

- TEXTURE: SIMULATED WOOD GRAIN
- THICKNESS: NOMINAL 3/4 INCH
- FINISH: FACTORY PRIMED

SIDING PANELS:

- TEXTURE: SIMULATED WOOD GRAIN
- THICKNESS: NOMINAL 5/16 INCH
- FINISH: FACTORY PRIMED

MANUFACTURERS:

- JAMES HARDIE PRODUCTS
- ALLURA, A DIVISION OF PLYCEM USA, INC.
- OR APPROVED EQUIVALENT

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

BATT INSULATION:

- 1) DESCRIPTION: SUSTAINABLE GLASS FIBER INSULATION WITH A FORMALDEHYDE-FREE BINDING AGENT
- 2) IN COMPLIANCE WITH ASTM C553 AND ASTM C 655
- 3) FIRE RESISTANCE- IN COMPLIANCE WITH ASTM E84, UNFACED BATTS
- 4) NONCOMBUSTIBILITY- IN COMPLIANCE WITH ASTM E136
- 5) THERMAL PERFORMANCE- ASTM C518
- 6) FUNGAL RESISTANCE- ASTM C1338
- 7) ODOR EMISSION- ASTM C1304
- 8) CORROSIVENESS- ASTM C 665

MANUFACTURERS / PRODUCTS:

- CERTAINTeed
- KNAUF
- OWENS CORNING

INSTALLATION:

- FRICTION FIT BETWEEN WOOD OR METAL STUDS

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

WEATHER BARRIER; MECHANICALLY FASTENED:

DESCRIPTION: FOR USE OVER WOOD FRAMED, EXTERIOR WALLS - NON WOVEN, NON PERFORATED SHEET PRODUCT COMPLYING WITH:

- 1) AATCC TEST METH. 127- WATER RESISTANCE: HYDROSTATIC PRES. TEST; 2013
- 2) ASTM E84- STANDARD TEST METHOD FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS; 2014
- 3) ASTM E96/E96M- STANDARD TEST METHOD FOR WATER VAPOR TRANSMISSION OF MATERIALS; 2014
- 4) ASTM E2178- STANDARD TEST METHOD FOR AIR PERMEANCE OF BUILDING MATERIALS; 2014

SEAM TAPE: AS RECOMMENDED BY MANUFACTURER

FASTENERS: AS RECOMMENDED BY MANUFACTURER

MANUFACTURERS / PRODUCTS:

- DUPONT- TYVEK COMMERCIAL WRAP

DESIGN BASIS PRODUCT:

CONCRETE MASONRY UNITS: ALL SIZES:

MANUFACTURED UNITS COMPLYING WITH:

- 1) ASTM C90-14 - STANDARD SPECIFICATION FOR LOADBEARING CONCRETE MASONRY UNITS
- 2) ASTM C-129-06 - STANDARD SPECIFICATION FOR NONLOADBEARING CONCRETE MASONRY UNITS
- 3) ASTM C55-06 - STANDARD SPECIFICATION FOR CONCRETE BUILDING BRICK

AGGREGATES USED IN MANUFACTURING CONFORM TO:

- 1) ASTM C33-07 - STANDARD SPECIFICATION FOR CONCRETE AGGREGATES
- 2) ASTM C331-05 - STANDARD SPECIFICATION FOR LIGHTWEIGHT AGGREGATES FOR CONCRETE MASONRY UNITS
- 3) ASTM C150-07 - STANDARD SPECIFICATION FOR PORTLAND CEMENT
- 4) ASTM C618-12A - STANDARD SPECIFICATION FOR COAL FLY ASH

TESTED IN ACCORDANCE TO:

- 1) ASTM C140-07A - STANDARD TEST METHODS FOR TESTING CONCRETE MASONRY UNITS

MANUFACTURERS:

- HEADWATERS CONSTRUCTION MATERIALS
- FEATHERLITE BUILDING PRODUCTS
- OR APPROVED EQUIVLENT

BLOCK TYPES:

- SMOOTH FACE, 8 INCH, REGULAR AND 2-SCORE UNITS
- SMOOTH FACE, 6 INCH, REGULAR UNITS
- SPLIT FACE, 8 INCH, SIDE AND CORNER UNITS
- BOND/LINTEL BEAMS PER STRUCTURAL DRAWINGS, SMOOTH FACE

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

DESIGN BASIS PRODUCT:

JOINT SEALANTS:

DESCRIPTION: FLEXIBLE AND WEATHER RESISTANT FOR THE EXTERIOR. FLEXIBLE SEALANT FOR THE INTERIOR CAPABLE OF BEING PAINTED OVER, OR COLOR COORDINATED WITH THE PAINT TO BE APPLIED TO ADJACENT SURFACES.

SEALANT INTEGRAL COLORS SHALL COORDINATE THE FINISHED SURFACES IT IS BEING APPLIED TO OR ADJACENT TO, CONTRACTOR TO PROVIDE MANUFACTURER'S STANDARD COLOR SELECTIONS TO CHOOSE FROM IN THE SUBMITTAL PACKAGE.

MANUFACTURERS / PRODUCTS:

FOR EXTERIOR USE ON CONCRETE, PAINTED METAL, AND MASONRY SURFACES:

- BASF MASTERSEAL NP-1, ELASTOMERIC, GUN GRADE, SINGLE COMPONENT, POLYURETHANE SEALANT

FOR INTERIOR USE ON CONCRETE, PAINTED METAL, AND MASONRY SURFACES:

- TREMCO SPECTREM 2- A SINGLE COMPONENT, MEDIUM MODULUS SILICONE SEALANT, NEUTRAL CURE, OR APPROVED EQUAL

FOR WOOD/LUMBER SURFACES:

- TREMCO, SPECTREM 2- A SINGLE COMPONENT, MEDIUM MODULUS SILICONE SEALANT, NEUTRAL CURE, OR APPROVED EQUAL

INSTALLATION:

APPLY SEALANTS PER MANUFACTURER'S INSTRUCTIONS. AS A BASIS, CONTACT SURFACES SHOULD BE FREE OF DUST, DEBRIS, OILS AND ANY OTHER SURFACE CONTAMINANTS. VERIFY PREFERRED WEATHER CONDITIONS FOR INSTALLATION.

DESIGN BASIS PRODUCT:

DOORS AND HARDWARE:

DESCRIPTION: HOLLOW METAL, INSULATED, STEEL DOOR AND FRAME, INSTALLATION FASTENERS SHALL BE CORROSIVE RESISTANT.

DESCRIPTION:

- THICKNESS: 1 3/4"
- HEIGHT/WIDTH: PER DOOR SCHEDULE
- FACE SKINS; 18 GA.
- CORE: POLYSTYRENE
- FINISH: FACTORY PRIMED

DOOR FRAMES

- DOOR FRAMES: 16 GA., FACTORY PRIMED, FIELD PAINTED
- DOOR FRAME TO INCLUDE 4" HEADER FOR MASONRY OPENINGS, 2" HEADER FOR ALL OTHER OPENINGS

MANUFACTURERS:

- CURRIES, A DIVISION OF ASSA ABLOY
- OR APPROVED EQUIVALENT

INSTALLATION TYPES:

1. MASONRY OPENINGS
2. WOOD FRAMED OPENINGS

DOOR TYPES/MODELS:

- CURRIES, MODEL 707, FLUSH DOORS
- CURRIES, MODEL 767, STILE/RAIL DOORS
 - TYPE: FLUSH WITH FULL GLAZING (TYPE FG)
 - TYPE: FLUSH WITH NARROW LIGHT (TYPE FNV1)
 - TYPE: FLUSH WITH LOUVER (TYPE FL2)

DOOR HARDWARE:

- PER THE HARDWARE SCHEDULE; REFER TO ARCHITECTURAL DRAWINGS

SUBMITTALS:

- SUBMITTAL REQUIRED; PACKAGE PER THE INSTRUCTIONS IN THIS SET OF CONSTRUCTION DRAWINGS.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017 1006		
Filename: CITY OF KENEDY SPORTS COMPLEX		
Scale		
Date: 8/06/19		
LAYOUT	AGP	8/06/19
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REVIEWED	Checker	8/06/19



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**ARCHITECTURAL DESIGN
BASIS INFORMATION**

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

A-001

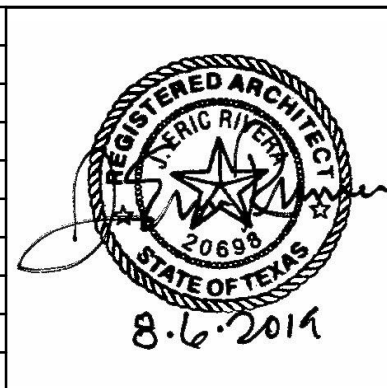
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ABBREVIATIONS

"	INCHES	CORR	CORRECT; CORRIDOR	HWY	HIGHWAY	P	POLE; PUMP	VEST	VESTIBULE
#	NUMBER, POUND	CPT	CARPET; CONTROL POWER TRANSFORMER	I		P	PRECAST CONCRETE; PRECOOL COIL	VS	VENT STACK; VOLTmeter SWITCH
&	AND	CSK	COUNTER SUNK	ID	IDENTIFICATION; INSIDE DIAMETER; INSIDE DIMENSION;	PCC	CONCRETE PAVEMENT	VTR	VENT THROUGH ROOF
'	FOOT (FEET)	CW	CASEMENT WINDOW; CHEMICAL WASTE LINE; CLOCKWISE;	IFS	INSIDE FACE OF STUD	PCCP	PREMOLDED EXPANSION JOINT	VWC	VINYL WALL COVERING
+/-	PLUS OR MINUS		COLD WATER PIPING; COOL WHITE	INSP	INSPECT	PEJ	POINT OF INTERSECTION	WWF	VINYL WALL FABRIC
@	AT	D		INSTL	INSTALL	PI	PLASTIC LAMINATE	W	
X°	DEGREE (S)	DBL	DOUBLE	INSUL	INSULATION	PLAM	PLASTER; PLASTIC	W	WASTE; WATT; WEST; WIDE
A		DET	DETAIL	INSUL PNL	INSULATED METAL PANEL	PLAS	PLACE	W/	WITH
A/C	AIR CONDITIONED	DF	DRINKING FOUNTAIN; DIESEL FUEL; DAMAGE FREE	INT	INTERIOR	PLYWD	PLYWOOD	W/O	WITHOUT
AB	ANCHOR BOLT	DIA	DIAMETER	INV	INVERT	PNL	PANEL	WC	WALL COVERING; WATER CLOSET; WATER COLUMN
ABBRV	ABBREVIATION	DIAG	DIAGONAL; DIAGRAM	IR	INSIDE RADIUS	PR	PAIR; PIPE RAIL; PUMPED RETURN	WD	WOOD, WOOD DOOR
ABC	AGGREGATE BASE COURSE; ASSOCIATED BUILDERS AND CONTRACTORS	DIM	DIMENSION	ISO	INTERNATIONAL STANDARDS ORGANIZATION; ISOMETRIC	PRCST	PRECAST	WDW	WINDOW
ABRSV	ABRASIVE	DISP	DISPENSER			PRELIM	PRELIMINARY	WGL	WIRED GLASS
ACC	ACCESSIBLE	DL	DEAD LOAD	J		PSF	POUNDS PER SQUARE FOOT	WP	WATER PUMP; WATERPROOFING; WEATHERPROOF; WORKING POINT
ACOUS INSUL	ACOUSTICAL INSULATION	DMPF	DAMPProofing	J-BOX	JUNCTION BOX	PTD	PAPER TOWEL DISPENSER; PRINTED	WSCT	WAINSCOT
ACOUS PNL	ACOUSTICAL PANEL	DR	DINNING ROOM; DOOR; DRAIN; DRESSING ROOM; DRIVE	JAL	JALOUSIE	PTDR	PAPER TOWEL DISPENSER AND RECEPTACLE	WTR	WATER
ACP	ASPHALTIC CONCRETE PAVING; AUTOMATIC CONTROL PANEL	DS	DOWNSPOUT; DOUBLE STRENGTH (GLASS); DISCONNECT SWITCH;	JAN	JANITOR	PTN	PARTITION	WWF	WELDED WIRE FABRIC
ACS PNL	ACCESS PANEL	DW	DISHWASHER; DISTILLED WATER; DOMESTIC WATER	JAN CLO	JANITOR CLOSET	PW	PASS WINDOW		
ACT	ACOUSTICAL CEILING TILE			JR	JUNIOR			X	
AD	AREA DRAIN	E		JS	JANITOR'S SINK	Q		X BRACE	CROSS BRACE
ADA	AMERICAN WITH DISABILITIES ACT	E	EAST; MODULUS OF ELASTICITY			QT	QUARRY TILE	X SECT	CROSS SECTION
AFF	ABOVE FINISHED FLOOR	EA	EACH	K		QTR	QUARTER	XBRA	CROSSBRACING
ALT	ALTERNATE; ALTITUDE	EF	EXTERIOR FINISH; EACH FACE	KD	KILN DRIED; KNOCKED DOWN	QTY	QUANTITY	XFER	TRANSFER
ALUM	ALUMINUM	EFS	EXTERIOR FINISH SYSTEM	KO	KNOCK OUT			XPS	EXTRUDED POLYSTYRENE BOARD (INSULATION)
APC	ACOUSTICAL PANEL CEILING	EJ	EXPANSION JOINT	KPL	KICKPLATE	R			
APPD	APPROVED	EL	ELEVATION; EACH LAYER; EASEMENT LINE	L		R	THERMAL RESISTANCE; RADIUS; RANGE; RISER		
APPROX	APPROXIMATE	ELEC	ELECTRIC	L	LITER; ANGLE	RA	RETURN AIR		
AR	AS REQUIRED	EQ	ELECTRIC	LAB	LABORATORY	RA GR	RETURN AIR GRILLE		
ASC	ABOVE SUSPENDED CEILING; ASPHALT SURFACE COURSE; AMPS SHORT CIRCUIT	EQUIP	EQUIPMENT	LAD	LADDER	RB	RESILIENT BASE; RUBBER BASE		
ASI	ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS	EW	EACH WAY	LAM	LAMINATE	RC	REINFORCED CONCRETE; REMOTE CONTROL		
ASSY	ASSEMBLY	EWC	ELECTRIC WATER COOLER	LAV	LAVATORY	RD	REFRIGERANT DISCHARGE; ROAD; ROOF DRAIN		
ATC	ACOUSTICAL TILE CEILING	EXH	EXHAUST; EXHIBIT	LBS	POUND	RECPT	RECEPTACLE		
ATM	AUTOMATIC TELLER MACHINE; ATMOSPHERE	EXIST	EXISTING	LCMU	LIGHTWEIGHT CONCRETE MASONRY UNIT	REF	REFERENCE; REFRIGERATOR		
ATTN	ATTENTION	EXP	EXPAND; EXPANSION; EXPOSED	LD BRG	LOAD-BEARING	REINF	REINFORCE		
AUTO	AUTOMATIC	EXT	EXTERIOR; EXTERNAL; EXTINGUISHER	LDG	LANDING	RESIL	RESILIENT		
AVG	AVERAGE			LH	LEFT HAND	REV	REVISION; REVOLUTIONS		
		F		LKR	LOCKER	RM	ROOM		
B		FA	FRESH AIR; FACE AREA; FINAL ASSEMBLY; FIRE ALARM	LLH	LONG LEG HORIZONTAL	RO	ROUGH OPENING		
B PL	BASE PLATE	FAAP	FIRE ALARM ANNUNCIATOR PANEL	LLV	LONG LEG VERTICAL	S			
BAT	BATTEN; BATTERY	FC BRK	FACE BRICK	LMST	LIMESTONE	SAN	SANITARY		
BB	BULLETIN BOARD; BASEBOARD	FCU	FAN COIL UNIT	LNDSCLP	LANDSCAPE	SB	SPLASH BLOCK		
BD	BOARD; BUTTERFLY DAMPER	FD	FLOOR DRAIN	LT	LIGHT	SC	SHADING COEFFICIENT; SOLID CORE		
BEV	BEVEL	FDTN	FOUNDATION	LTD	LIMITED	SCHED	SCHEDULE		
BITUM	BITUMINOUS	FEC	FIRE EXTINGUISHER CABINET	LTG	LIGHTING	SCR	SEMICONDUCTOR CONTROLLED RECTIFIER; SHOWER CURTIN ROD		
BL	BASE LINE; BUILDING LINE	FH	FIRE HOSE; FIRE HYDRANT; FLAT HEAD; FLAT HEAD SCREWS	LVR	LOUVER	SCRN	SCREEN		
BLDG	BUILDING	FHC	FIRE HOSE CABINET	LWC	LIGHTWEIGHT CONCRETE	SD	STORM DRAIN; SUPPLY DUCT		
BLKHD	BULKHEAD	FIN	FINISH	M		SECT	SECTION		
BM	BEAM; BENCHMARK; BENDING MOMENT	FIN FLR	FINISH FLOOR	MACH	MACHINE	SEP	SEPEARATE		
BN	BULLNOSE	FIN GR	FINISH GRADE	MAINT	MAINTENANCE	SHT	SHAFT; SHEET		
BDNG	BONDING	FLASH	FLASHING	MATL	MATERIAL	SHT MTL	SHEET METAL (FLASHING)		
BOS	BOTTOM OF STEEL	FLR	FILLER; FLOOR	MAX	MAXIMUM	SHV	SHELVING		
BOT	BOTTOM	FLUOR	FLUORESCENT	MC	MEDICINE CABINET; MANHOLE COMBER; MECHANICAL CONTRACTOR; METAL-CLAD; MOISTURE CONTENT; MOMENT CONNECTION	SIM	SIMILAR		
BRCG	BRACING	FOM	FACE OF MASONRY	MECH	MECHANICAL	SND	SANITARY NAPKIN DESPENSER		
BRG	BEARING	FS	FULL SCALE; FULL SIZE; FAR SIDE; FEDERAL SPECIFICATION; FIRE STATION	MEZZ	MEZZANINE	SPEC	SPECIFICATION		
BRG PL	BEARING PLATE	FT	FEET; FIRE TREATED; FOOT; FULLY TEMPERED (GLASS)	MFD	MANUFACTURED	SPRT	SUPPORT		
BRKT	BACKET	FTD	FACIAL TISSUE DISPENSER	MFR	MANUFACTURER; MASS FLOW RATE	SQ	SQUARE		
BSMT	BASEMENT	FTG	FOOTING	MH	MANHOLE	SS	SANITARY SEWER; SERVICE SINK; STANDING SEAM (ROOF); STEAM SUPPLY; STORM SEWER		
BUR	BUILT-UP ROOFING	FURG	FURRING	MIN	MINIMUM; MINUTE	STD	STANDARD		
BW	BOTH WAYS	FURN	FURNACE; FURNISH; FURNITURE	MISC	MISCELLANEOUS	STL JST	STEEL JOIST		
S BM	BEAM, STANDARD	FUT	FUTURE	MO	MASONRY OPENING; MOTOR OPERATED	STL PL	STEEL PLATE		
WF BM	BEAM, WIDE FLANGE			MTL	METAL	STOR	STORAGE		
		G		MTLD	METAL DOOR	STRUCT	STRUCTURAL		
C		G	GROUND; NATURAL GAS; GIRDER	MTLF	METAL FLASHING	SUSP	SUSPEND		
C	CELSIUS; CHANNEL	GAL	GALLON	MTLR	METAL ROOF	SYM	SYMBOL		
C CONC	CAST CONCRETE	GALV	GALVANIC; GALVANIZED	MULT	MULLION	SYS	SYSTEM		
C TO C	CENTER TO CENTER	GB	GRAB BAR; GAS BIBB						
CA	CAST IRON, CURB INLET	GFRC	GLASS-FIBER-REINFORCED CONCRETE						
CAB	CABINET	GL	GLASS; GROUND LEVEL						
CAP	CAPACITY; CAPACITOR	GOVT	GOVERNMENT						
CB	CARRIAGE BOLT; CATCH BASIN; CEMENT BASE; CERAMIC BASE; CORNER BEAD	GSU	GLAZED STRUCTURAL UNIT						
CEM	CEMENT; CEMETERY	GYP	GYP SUM						
CER	CERAMIC	GYP BD	GYP SUM BOARD						
CF/CI	CONTRACTOR FURNISHED / CONTRACTOR INSTALLED			N	NEWTON; NORTH	T	TREAD		
CFM	CUBIC FEET PER MINUTE	H		NA	NOT APPLICABLE	T&G	TONGUE AND GROOVE		
CH	CHILLER; COAT HOOK	HB	HOSE BIBB	NIC	NOISE ISOLATION CLASS; NOT IN CONTRACT	TAN	TANGENT		
CH BD	CHALKBOARD	HC	HANDICAP; HEATING COIL; HEAVY COMMERCIAL; HOLLOW CORE; HOSE CABINET	NO	NORMALLY OPEN; NUMBER	TB	THROUGH BOLT; TOWEL BAR		
CHFR	CHAMFER			NS	NARROW STILE; NEAR SIDE; NO SCALE	TEL	TELEPHONE		
CIP	CAST-IN-PLACE; CAST IRON PIPE	HCMU	HOLLOW CONCRETE MASONRY UNIT	NTS	NOT TO SCALE	TEMP	TEMPORATURE; TEMPORARY		
CJ	CONSTRUCTION JOINT; CONTROL JOINT	HCP	HANDICAPPED	O		THK	THICKNESS		
CLG	CEILING	HD	HAND DRYER; HEAVY DUTY	OA	OUTSIDE AIR; OVERALL	THRES	THRESHOLD		
CLG DIFF	CEILING DIFFUSER	HDR	HEADER	OC	ON CENTER	TOB	TOP OF BEAM		
CLG REG	CEILING REGISTER	HDW	HARDWARE	OD	OUTSIDE DIAMETER; OUTSIDE DIMENSION	TOC	TOP OF CURB; TOP OF CONCRETE; TABLE OF CONTENT		
CLKJ	CALKED JOINT	HDM	HOLLOW METAL	OF	OUTSIDE FACE	TOS	TOP OF STEEL; TOP OF SLAB		
CLO	CLOSET	HMD	HOLLOW METAL DOOR; HUMIDITY	OFF	OFFICE	TOW	TOP OF WALL		
CLOS	CLOSURE	HMDF	HOLLOW METAL DOOR AND FRAME	OH	OVERHANG	TYP	TYPICAL		
CLR	CLEAR; COLOR; COOLER	HMF	HOLLOW METAL FRAME	OH DR	OVERHEAD (COILING) DOOR	U			
CMP	CORRUGATED METAL PIPE	HNDRL	HANDRAIL	OPH	OPPOSITE HAND	UN	UNLESS NOTED		
CMU	CONCRETE MASONRY UNIT	HORIZ	HORIZONTAL	OPNG	OPENING	UNFIN	UNFINISHED		
CO	CASED OPENING; CERTIFICATE OF OCCUPANCY; CLEANOUT; COMPANY; CUTOUT; CARBON MONOXIDE	HOSP	HOSPITAL	OPP	OPPOSITE	UNO	UNLESS NOTED OTHERWISE		
		HP	HORSEPOWER; HEAT PUMP; HIGH PRESSURE	OPR	OPERABLE	UR	URINAL		
COL	COLUMN	HT	HEIGHT	OR	OUTSIDE RADIUS				
CONC	CONCENTRIC; CONCRETE	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	OVFL	OVERFLOW	V			
CONN	CONNECT	HW	HOT WATER	OZ	OUNCE	VCT	VINYL COMPOSITION TILE; VITRIFIED CLAY TILE		
CONSTR	CONSTRUCTION					VENT	VENTILATION; VENTILATOR		
CONT	CONTINUE; CONTROLLER					VERT	VERTICAL		

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



The Junction Where Good Friends Meet

Hanson No.	17L0017 1006	
Filename	CITY OF KENEDY SPORTS COMPLEX	
Scale		
Date	8/06/19	
LAYOUT	AGP	8/06/19
DRAWN	AGP	8/06/19
REVIEWED	Checker	8/06/19

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TBAE	F-BR 2458
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SYMBOLS AND ABBREVIATIONS

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

A. IT IS THE INTENT OF THE ARCHITECT THAT THE SIGNED AND SEALED DRAWINGS AND SPECIFICATIONS PRODUCED AND DISTRIBUTED FOR THE PURPOSE OF BIDDING AND CONSTRUCTING THE PROJECT HEREIN, SHALL BE CROSS-REFERENCED WITH THE DRAWINGS INCLUDED AND PRODUCED BY OTHER DISCIPLINES TO OBTAIN THE INFORMATION NECESSARY TO CONSTRUCT THIS PROJECT IN AN ORDERLY AND TIME EFFICIENT MANNER.

B. DAMAGE DONE TO ANY SURROUNDING [HORIZONTAL AND/OR VERTICAL] SURFACE(S) IN THE AREAS LEADING TO AND IN THE IMMEDIATE VICINITY OF THE AREA OF WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, OVERHEAD OR UNDERGROUND UTILITIES, IRRIGATION SYSTEMS, LANDSCAPING, LANDSCAPING FEATURES, BUILDING SURFACES, PAVED SURFACES, OR ANY OTHER ITEMS THAT PERTAIN TO THE NORMAL APPEARANCE OR OPERATIONS OF THE PROJECT LOCATION PRIOR TO THE COMMENCEMENT OF WORK.

C.A. FACE OF STUD TO FACE OF STUD
C.B. FACE OF CONCRETE TO FACE OF STUD
C.C. FACE OF EXISTING FINISH TO FACE OF STUD
C.D. STRUCTURAL GRID TO FACE OF STUD
C.E. FACE OF MASONRY TO FACE OF STUD
C.F. OR AS NOTED OTHERWISE ON THE DRAWING

D. THE CONTRACTOR SHALL COORDINATE THE FOLLOWING ITEMS WITH THE OWNER, OR THE OWNER'S REPRESENTATIVE, IF APPLICABLE TO THIS PROJECT: (1) JOBSITE ACCESS, UTILITIES ACCESS, (2) THE LOCATION OF THE JOB SHACK, (3) MATERIALS STAGING AND WASTE COLLECTION AREAS, (4) THE HOURS OF CONSTRUCTION (WEEKDAY, WEEKEND OR EVENING HOURS), (5) ANY SECURITY REQUIREMENTS, AND (6) ANY OTHER ISSUES NOT LISTED HEREIN THAT COULD AFFECT ACCESS AND/OR THE CONSTRUCTION PROCESS.

F. THE CONTRACTOR SHALL ABIDE BY THE MOST CURRENT BUILDING AND ENERGY CODES (INTERNATIONAL BUILDING CODES, N.E.C., N.F.P.A., ETC.) ADOPTED AND ENFORCED BY THE MUNICIPALITY IN WHICH THE PROJECT IS TO BE CONSTRUCTED, AND/OR

H. THE CONTRACTOR SHALL ABIDE BY THE MOST CURRENT VERSION OF THE TEXAS ACCESSIBILITY STANDARDS (T.A.S.), OR

J. THE CONTRACTOR SHALL OBSERVE ALL CURRENT O.S.H.A. REGULATIONS AT THE JOBSITE DURING THE COURSE OF CONSTRUCTION.

L. WARRANTIES FOR ALL CONSTRUCTION PRODUCTS SHALL BE THE MANUFACTURER'S STANDARD WARRANTY UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, DRAWINGS, OR SUBSEQUENT DOCUMENTATION (SEE NOTE A: A.A).



ITEMS DEPICTED HEREIN ARE EXAMPLES, REFER TO T.A.S. FOR ADDITIONAL INFORMATION

SCALE: 12" = 1'-0'

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017 1006		
Filename CITY OF KENEDY SPORTS COMPLEX		
Scale 12" = 1'-0"		
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DRAWN	AGP	8/06/19
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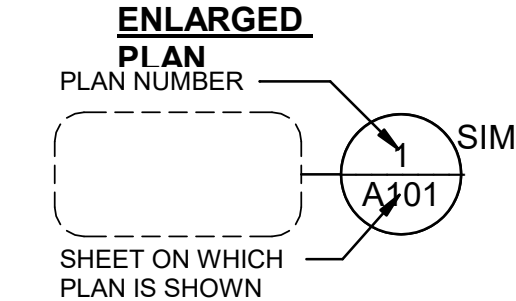
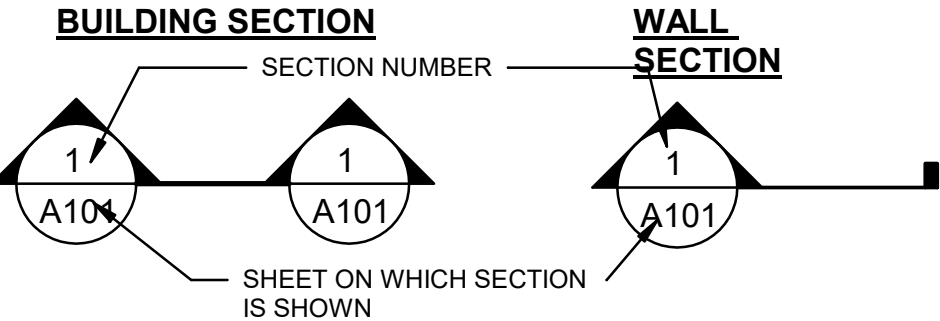
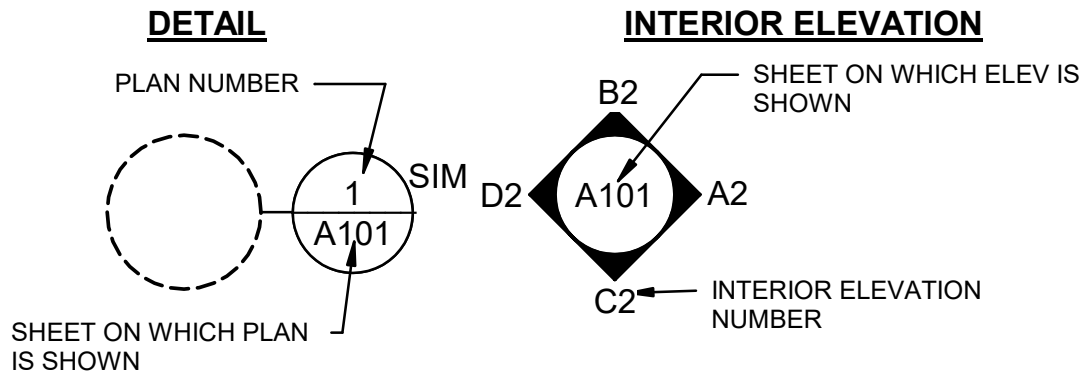
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**ARCHITECTURAL GENERAL
NOTES AND SYMBOLS**
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

A-004

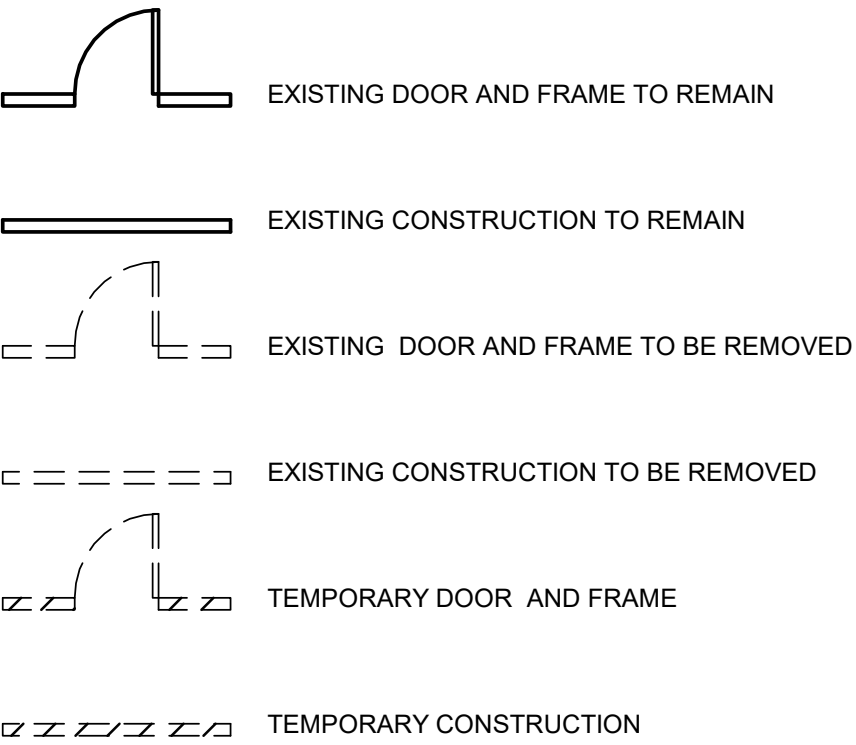
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MATERIAL	SYMBOL
EARTHWORK, COMPACT FILL	
STONE, RUBBLE	
CONCRETE	
BRICK, COMMONFACE	
CONCRETE MASONRY UNITS	
ACOUSTICAL MATERIAL	
INSULATION, LOOSE FILL OR BLANKET	
RIGID INSULATION	
STEEL	
WOOD BLOCKING OR SHIM	
WOOD FRAMING, CONTINUOUS	
GROUT	
PLYWOOD	
STONE, CUT	

MATERIAL SYMBOLS
SCALE: 12" = 1'-0"

SYMBOL LEGEND
SCALE: 12" = 1'-0"



NOTE:
WALLS, DOOR AND FIXTURES SHOWN DASHED REQUIRE REMOVAL
AND DISPOSAL. PATCH AND REPAIR ADJACENT REMAINING SURFACES
AND FLOOR FOR NEW FINISHES.

DEMOLITION LEGEND
SCALE: 12" = 1'-0"



- STANDING SEAM METAL ROOFING
SYSTEM, WITH SELF-ADHERING
UNDERLAYMENT & PRE-FINISHED
EDGE TRIM AND FLASHING**



RESTROOM ACCESSORY LEGEND			
#	MANUF.	MODEL	TYPE
TA-1	BOBRICK	B-2740	SURFACE MOUNT DOUBLE-ROLL TOILET TISSUE DISPENSER
TA-2	BOBRICK	B-270	SANITARY NAPKIN DISPOAL UNIT
TA-3	BOBRICK	B-2111	SURFACE MOUNTED SOAP DISPENSER
TA-4	BOBRICK	B-6806X	36" AND 42" GRAB BARS
TA-5	BOBRICK	B-293 1830	TILT MIRROR WITH S.S. FRAME
TA-6	KOALA	KB200-01	PLASTIC BABY CHANGING STATION, HORIZONTAL WHITE NO BRAILLE
TA-7	XLERATOR	MODEL XL-BW WHITE	HIGH EFFICIENCY HEATED AIR HAND DRYER
TA-8	BOBRICK	1091G.67	FLOOR MOUNTED SCRC NO PANELS, MOUNTED TO ESTABLISHED WALL
TA-9	BOBRICK	1091G.67	ACCESSIBLE FLOOR MOUNTED SCRC NO PANELS, MOUNTED TO ESTABLISHED WALL
TA-10	BOBRICK	B-223 x 36	STAINLESS STEEL MOP AND BROOM HOLDER

[illegible]

"The Junction Where Good Friends Meet"

Hanson No. 17L0017		
Filename City of Kenedy Sports Complex Bldg. C		
Scale 1/4" = 1'-0"		
Date 6/24/2019		
LAYOUT	Drawer	6/24/2019
DRAWN	Drawer	6/24/2019
REVIEWED	Checker	6/24/2019



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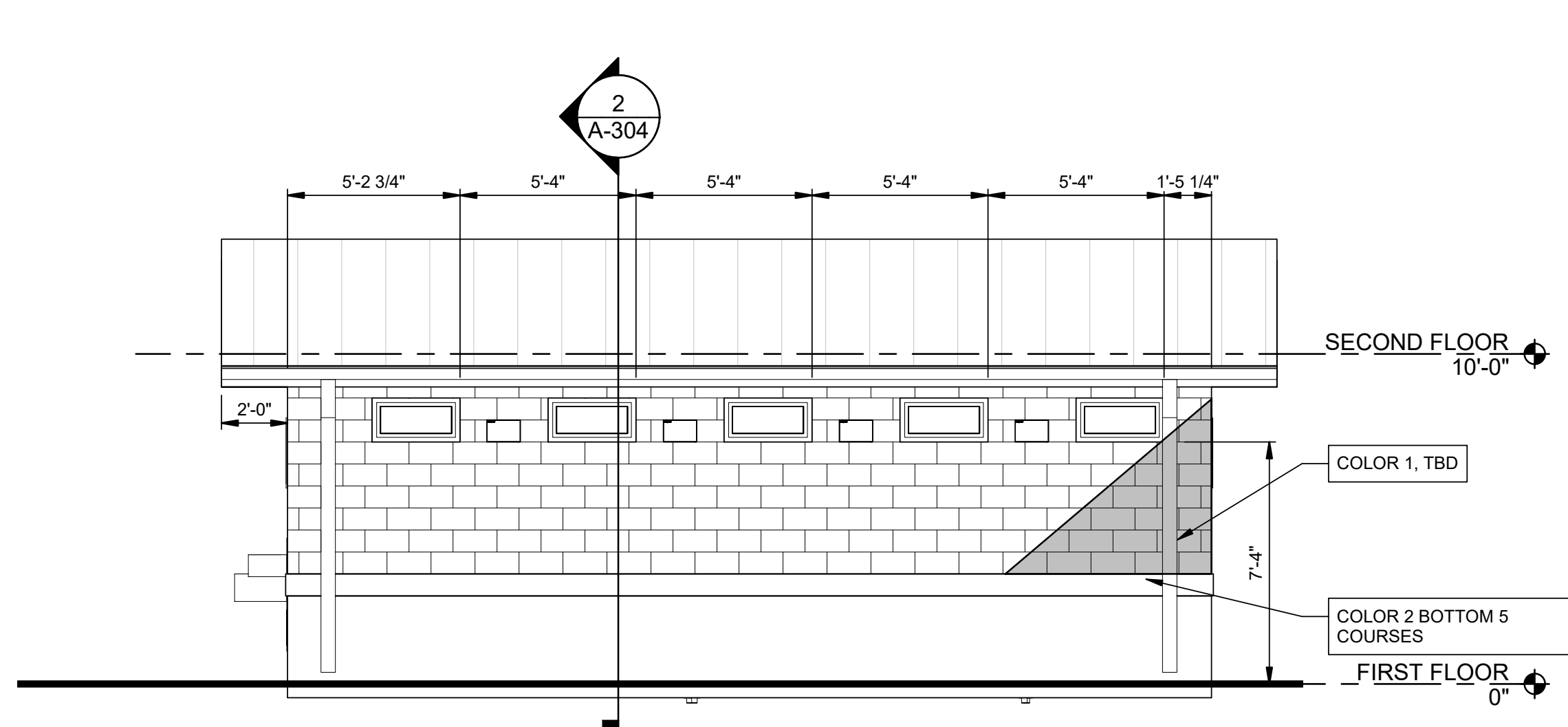
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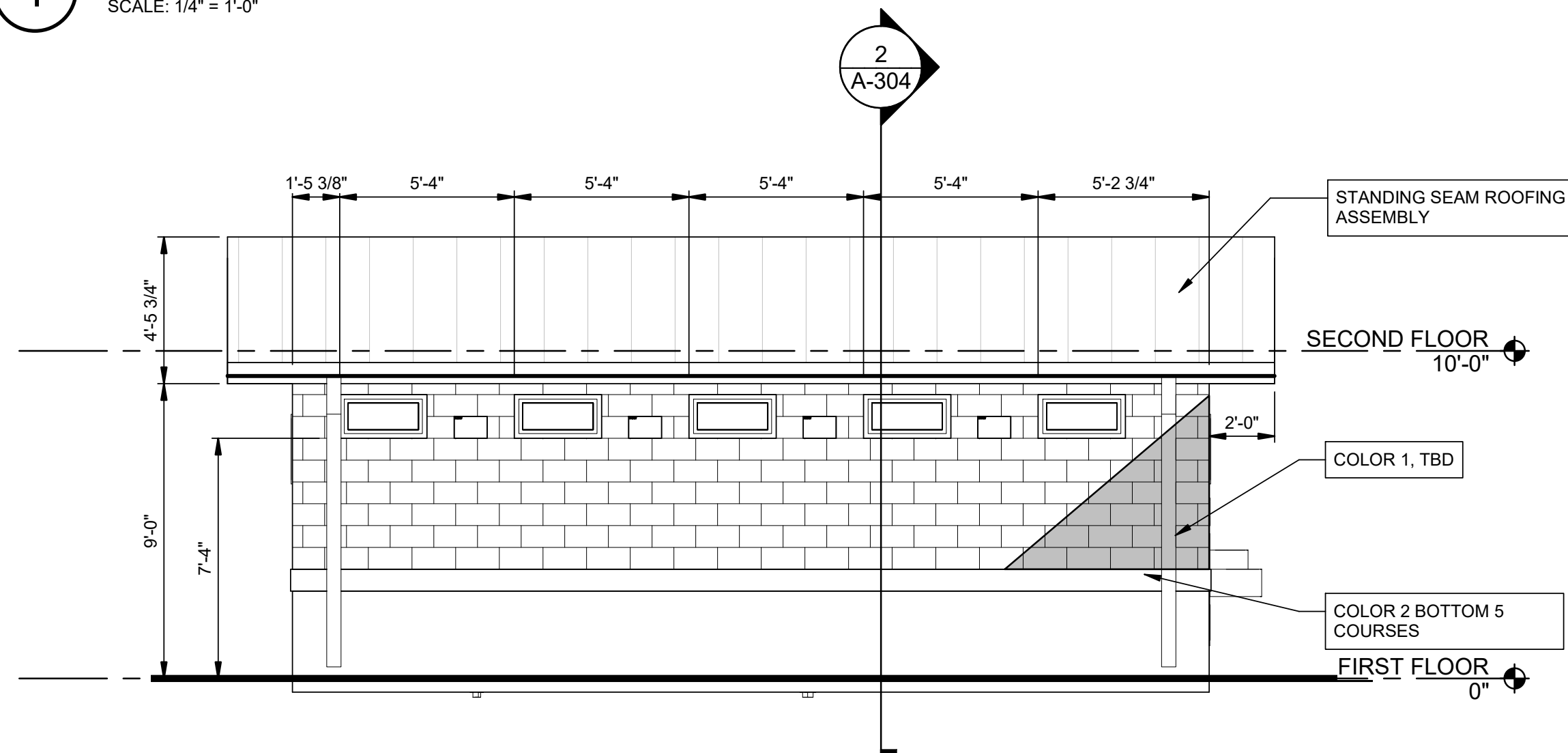
FLOOR PLAN, RCP, ROOF
PLAN & ANNO. PLAN-BLDG. C
CONSTRUCTION DRAWINGS FOR
LARRY KIESLER YOUTH SPORTS COMPLEX
CITY OF KENEDY

A-108

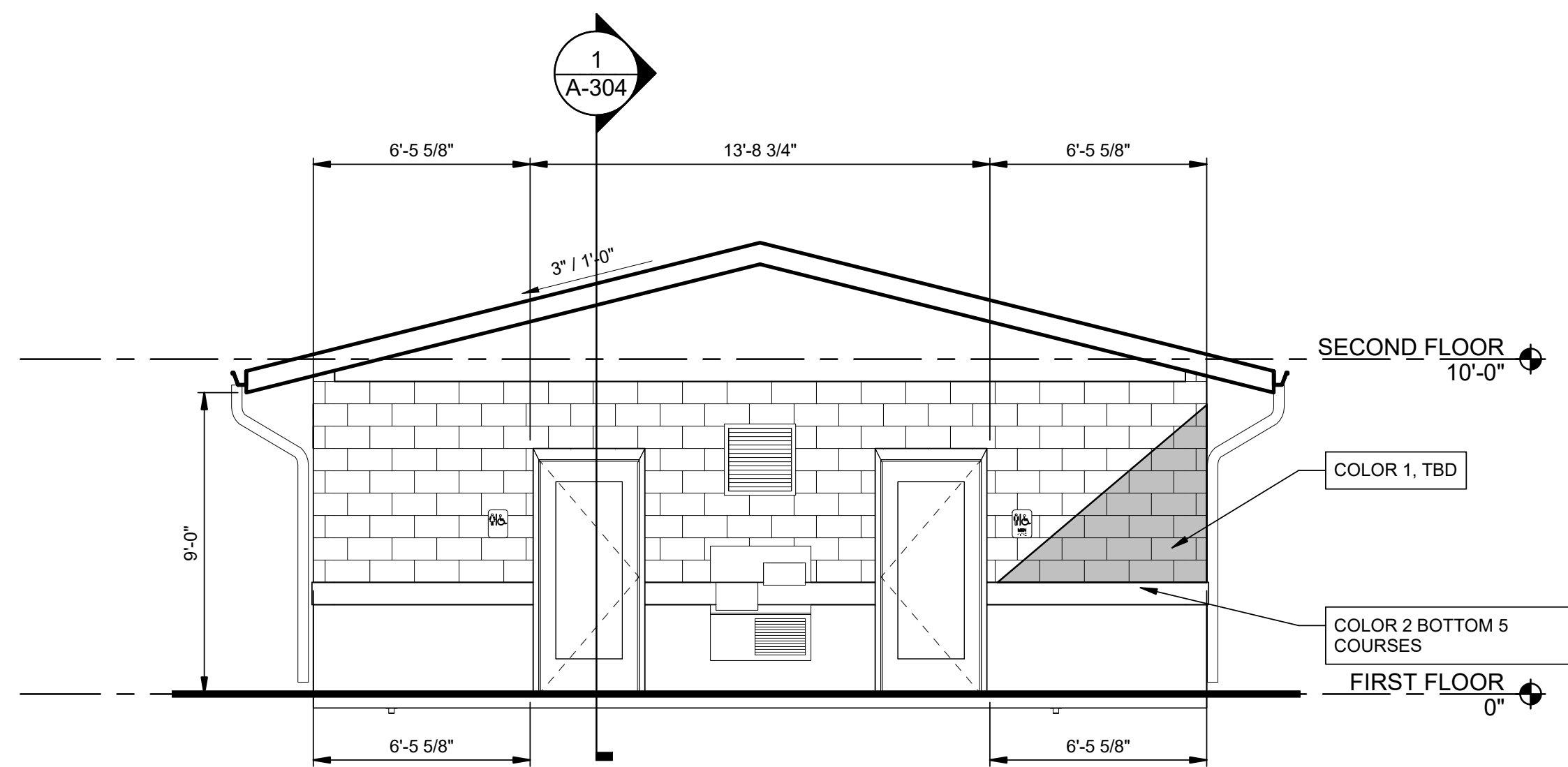
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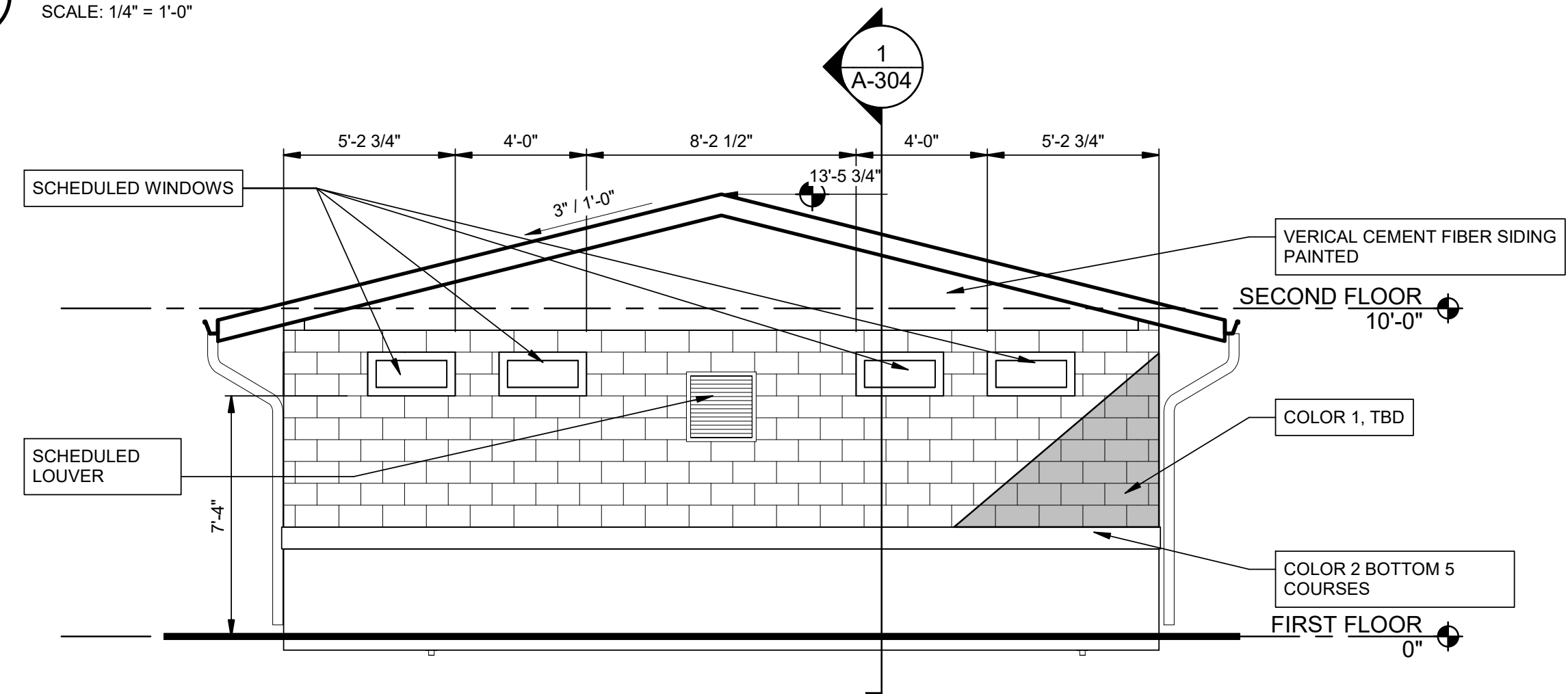
1 NORTH ELEVATION - BLDG. C
SCALE: 1/4" = 1'-0"



2 SOUTH ELEVATION - BLDG. C
SCALE: 1/4" = 1'-0"



3 EAST ELEVATION - BLDG. C
SCALE: 1/4" = 1'-0"



4 WEST ELEVATION - BLDG. C
SCALE: 1/4" = 1'-0"

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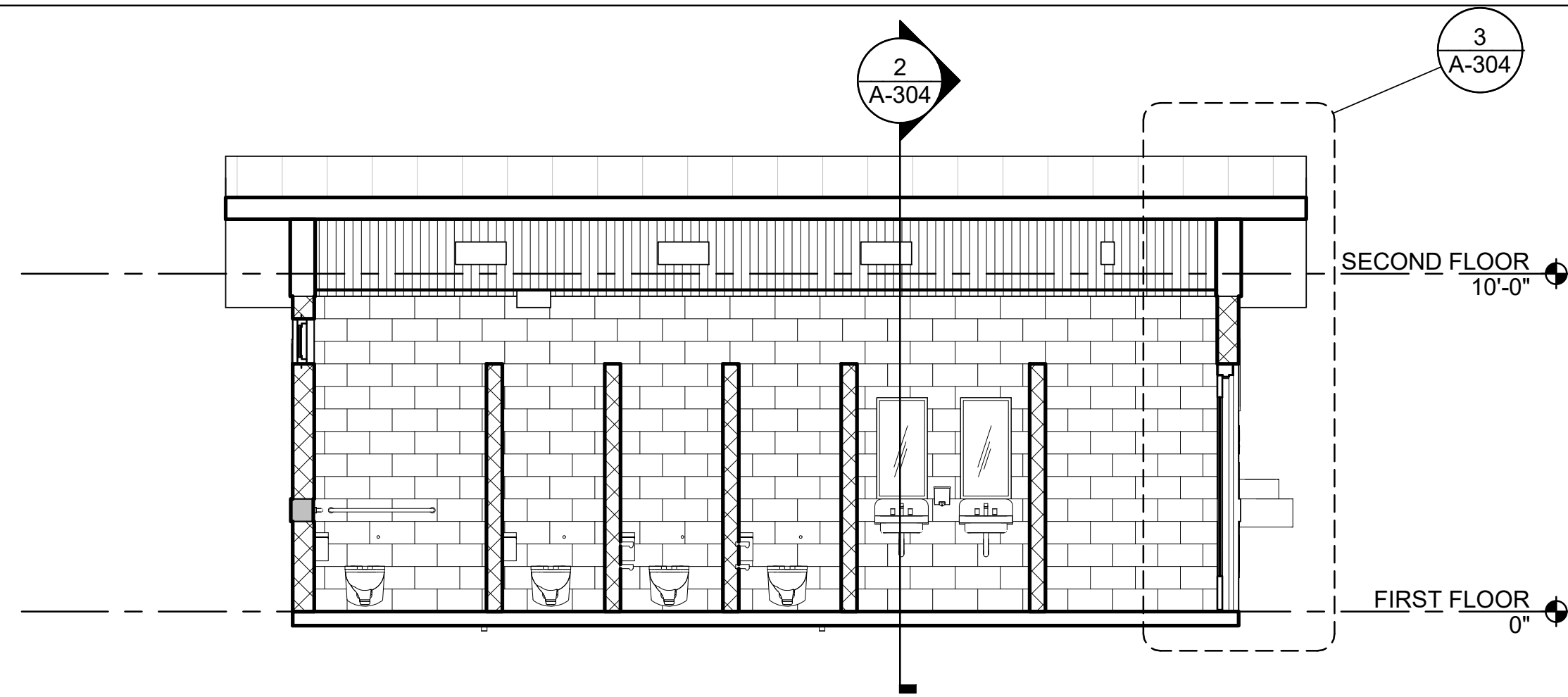
"The Junction Where Good Friends Meet"

Hanson No.	17L0017
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Scale	1/4" = 1'-0"
Date	6/24/2019
LAYOUT	Author 6/24/2019
DRAWN	Author 6/24/2019
REVIEWED	Checker 6/24/2019

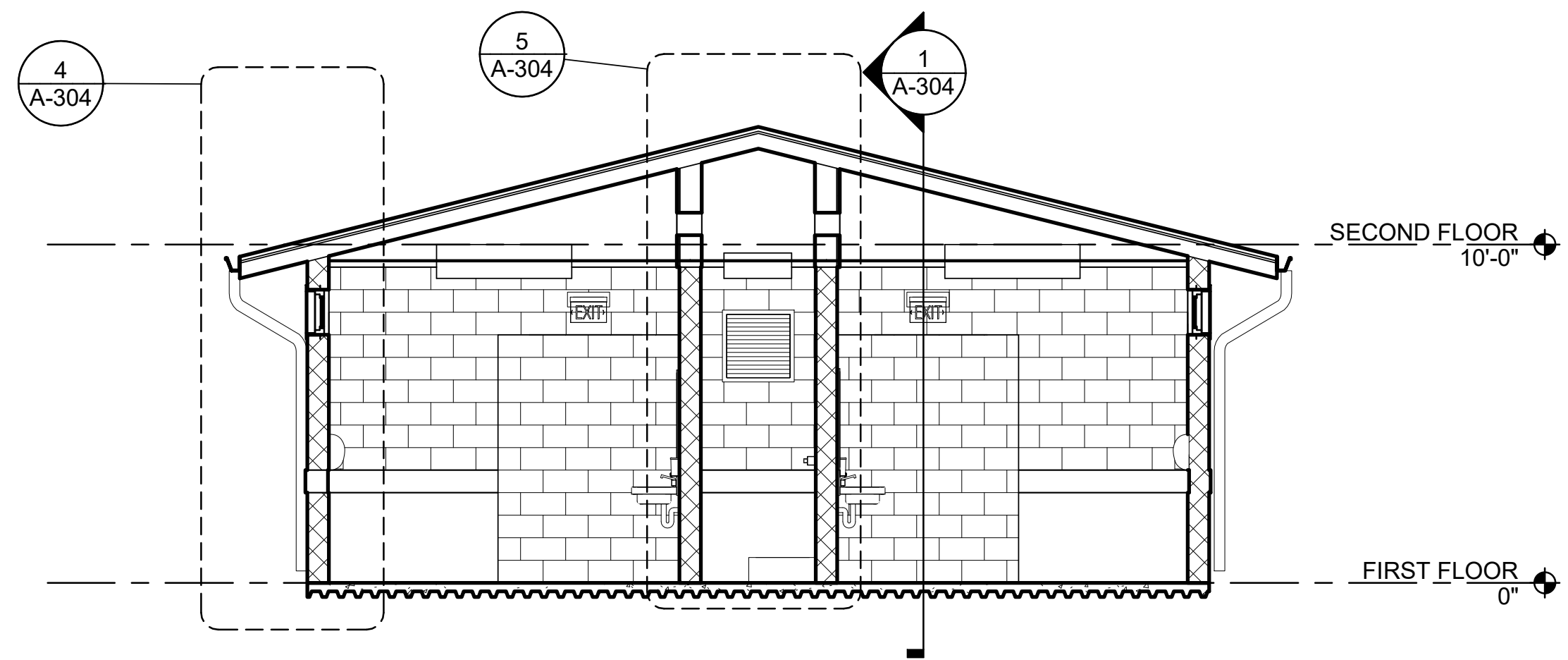


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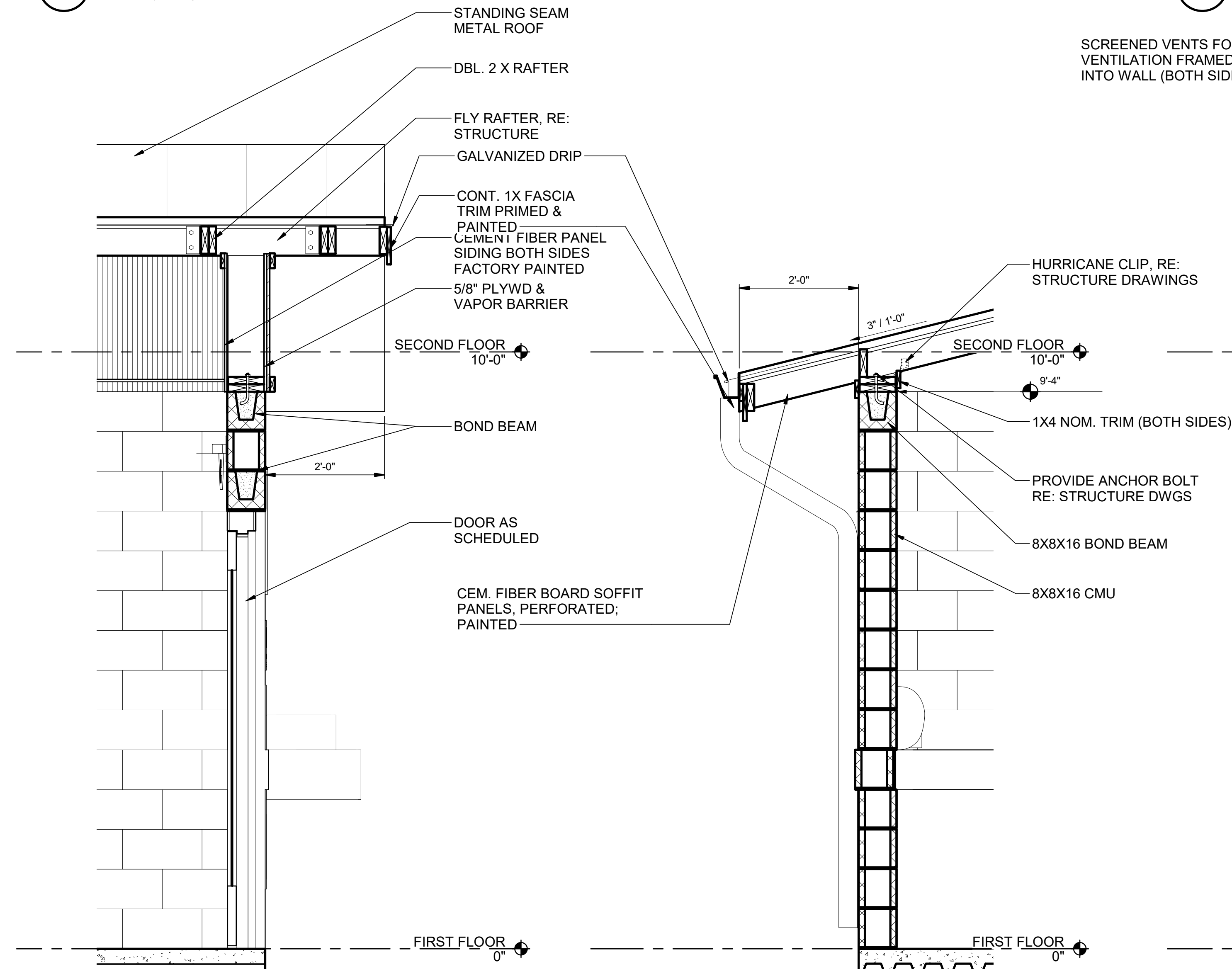
EXTERIOR ELEVATIONS -
BLDG. C
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY



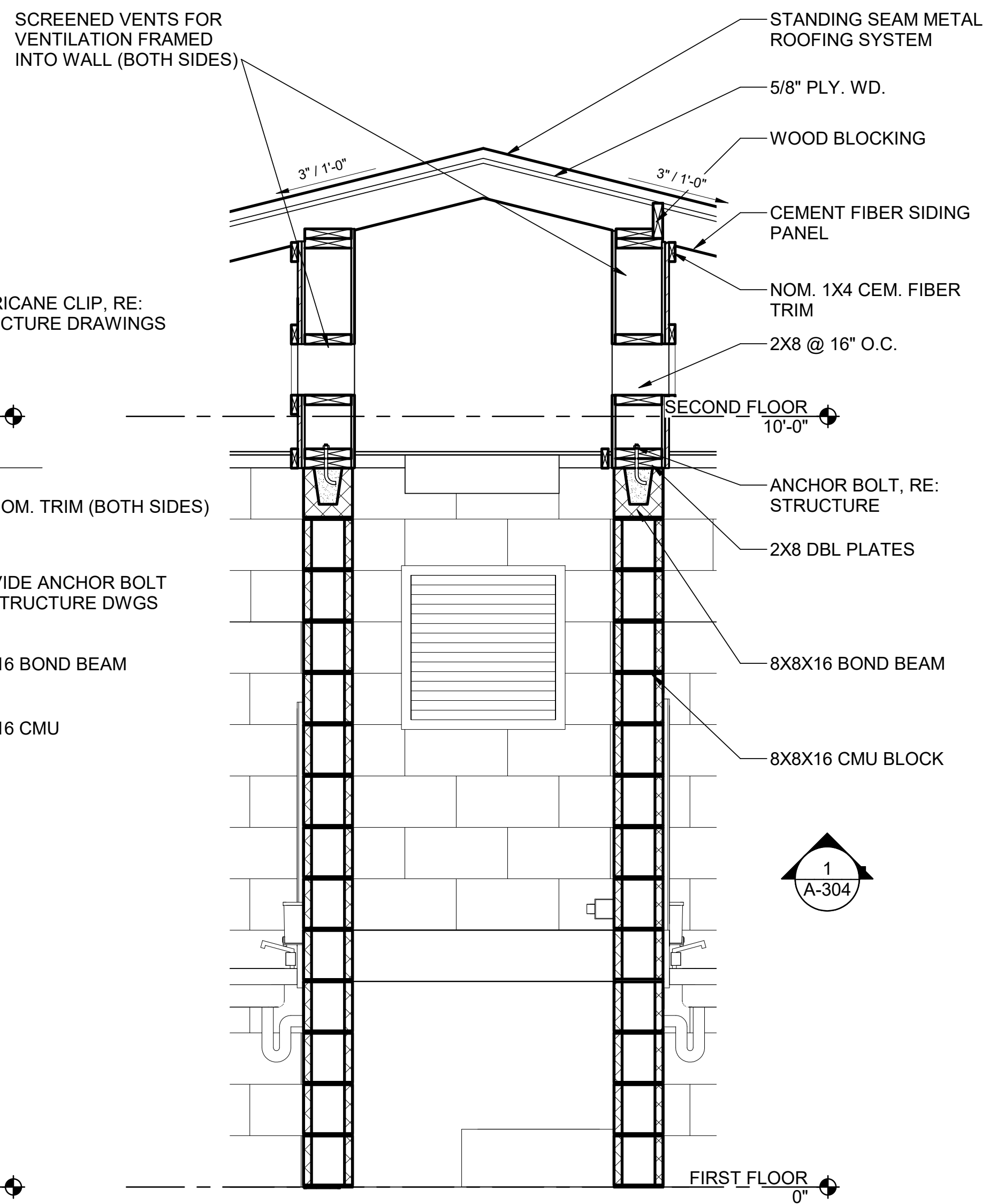
1 Section 1
SCALE: 1/4" = 1'-0"



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



3 Section 1 - Callout 2
SCALE: 3/4" = 1'-0"



5 Section 2 - Callout 2
SCALE: 3/4" = 1'-0"

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No.	17L0017	
Filename	City of Kenedy Sports Complex Bldg.	
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Date	6/24/2019	
LAYOUT	AGP	6/24/2019
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BUILDING & WALL SECTIONS -
BLDG. C
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

A-304

of sheets

DOOR SCHEDULE - BLDG. A																	
DOOR NO.	LOCATION FROM		SIZE		DETAIL			DOOR				FRAME			LABEL	REMARKS	
	ROOM	NO.	WIDTH	HEIGHT	HEAD	JAMB	THRESHOLD	TYPE	HARDWARE GROUP	MATERIAL	FINISH	TYPE	MATERIAL	FINISH			
101	Stairway	101	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		3	H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
102A	Dining	102	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	4	H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
102B	Dining	102	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		4	H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
103	Womens	103	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602			H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
104	Mens	104	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602			H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		FROSTED GLASS
105	Janitor 2	105	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		2	H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		FROSTED GLASS
106	Chase	106	2'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		2	H-03	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		18" x 12" w LOUVER
108	Field Storage	108	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		1	H-03	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
109A	Concession	110	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		N/A	N/A	N/A		A	METAL	FACTORY PRIME		
109B	Concession Storage	109	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		1	H-02	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
110	Concession	110	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		1	H-01	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
111A	Kitchen		3'-0"	7'-0"	0"	1/A-602	2/A-602		N/A	N/A	N/A		A	METAL	FACTORY PRIME		
111B	Kitchen	111	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		1	H-02	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		
111C	Field Storage	109	3'-0"	7'-0"	0"	1/A-602	2/A-602		N/A	N/A	N/A		A	METAL	FACTORY PRIME		
	Elev. Rm	112	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602		2	H-05	H.M. INSUL.	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		18" x 12" w LOUVER

NOT USED

Type Mark	Count	Family and Type	Width	Height	Head Height	Louver Height	Louver Width	Type Comments	Comments	Notes	Airflow
W1	4	Window-Gliding-Andersen-100_Series_Two_Sash_Windows-Andersen-100_Series_Two_Sash	3'-11 1/2"	3'-11 1/2"	7'-3 1/2"			Andersen Corporation	Fibrex gliding window	Window-Gliding-Andersen-100_Series_Two_Sash	
W2	7	Window-Fixed-Andersen-100_Series_Window-Fixed-Andersen-100_Series	2'-8"	1'-4"	8'-8"			Andersen Corporation	Fibrex fixed window	Window-Fixed-Andersen-100_Series	
W3	2	Window-Gliding-Andersen-100_Series_Three_Sash_Unequal: Window-Gliding-Andersen-100_Series_Three_Sash_Unequal	3'-11 1/2"	3'-11 1/2"	6'-11 1/2"			Andersen Corporation	Fibrex gliding window	Window-Gliding-Andersen-100_Series_Three_Sash_Unequal	
	3	Window-Gliding-Andersen-100_Series_Three_Sash_Unequal: Window-Gliding-Andersen-100_Series_Three_Sash_Unequal	8'-0"	8'-0"	8'-0"			Andersen Corporation	Fibrex gliding window	Window-Gliding-Andersen-100_Series_Three_Sash_Unequal	

NOT USED

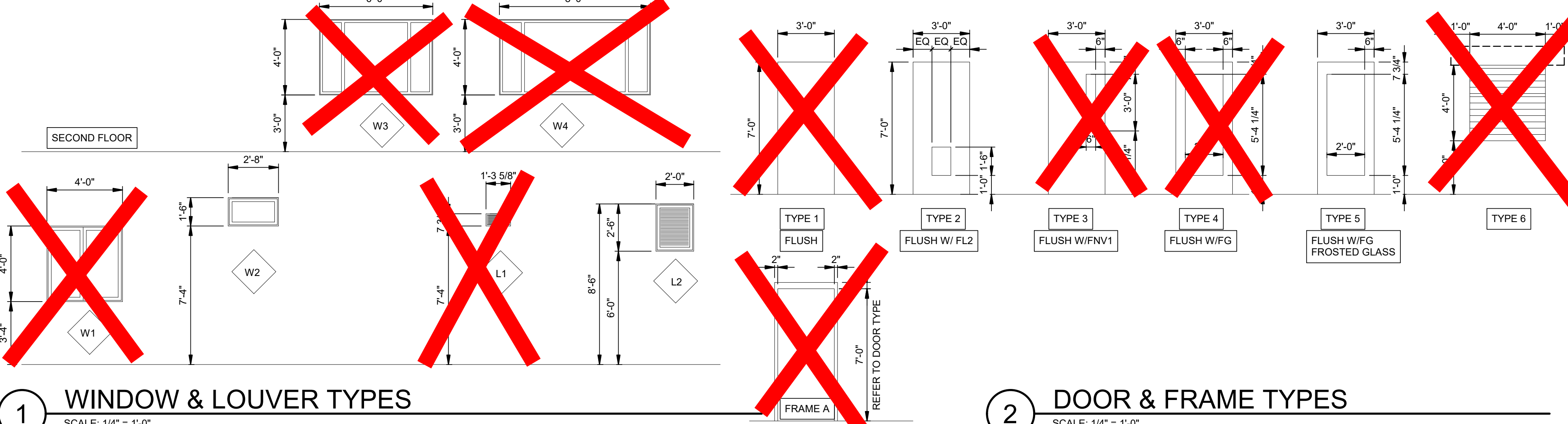
DOOR SCHEDULE - BLDG. B																	
DOOR NO.	LOCATION		SIZE			DETAIL			DOOR				FRAME			LABEL	REMARKS
	ROOM	NO.	WIDTH	HEIGHT	HEAD	JAMB	THRESHOLD	TYPE	HARDWARE GROUP	MATERIAL	FINISH	TYPE	MATERIAL	FINISH			
100a	Concession	100	4'-0"	4'-0"	2"	4/A-603	4/A-603	6	H-06	H.M. INSUL	PRIME PAINT	N/A	METAL	FACTORY PRIME	NA		
100b	Concession	100	4'-0"	4'-0"	2"	4/A-603	4/A-603	6	H-06	H.M. INSUL	PRIME PAINT	N/A	METAL	FACTORY PRIME	NA		
100c	Concession	100	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	H-01	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME			
100d	Concession	100	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	H-01	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME			
101	WOMENS	101	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	5	H-04	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME			
102	JANITOR	102	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	2	H-04	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME		18" x 12" w LOUVER	
103	MENS	103	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	5	H-04	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME			

NOT USED

WINDOW/LOUVER SCHEDULE - BLDG. B												Type Mark	Count	Family and Type	Width	Height	Sill Height	Bird Screen	Comments
L1	10	Ruskin_BV100, Extruded Aluminum Brick Vents, Face Based, Revit 16 V0: Ruskin_BV100, Extruded Aluminum Brick Vents, Face Based, Revit 16 V0	1'-4"	8"															
W2		Window-Fixed-Andersen-100_Series: Window-Fixed-Andersen-100_Series	2'-8"	1'-4"	6'-8"														

A-SH-DOOR SCHEDULE - BLDG. C																	
DOOR NO.	LOCATION		SIZE			DETAIL			DOOR				FRAME			LABEL	REMARKS
	FROM		WIDTH	HEIGHT	PANEL	HEAD	JAMB	THRESHOLD	TYPE	HARDWARE GROUP	MATERIAL	FINISH	TYPE	MATERIAL	FINISH		
	ROOM	NO.															
101	MENS	101	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	5	H-04	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME	FROSTED GLASS	
102	JANITOR	102	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	2	H-03	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME	18" x 12" w LOUVER	
103	WOMENS	103	3'-0"	7'-0"	1 3/4"	1/A-602	2/A-602	3/A-602	5	H-04	H.M. INSUL	FACTORY PRIME/PAINT	A	METAL	FACTORY PRIME	FROSTED GLASS	

WINDOW/LOUVER SCHEDULE - BLDG. C												Type Mark	Count	Family and Type	Width	Height	Sill Height	Bird Screen	Comments
L2	2	Louvers with Trim: 24" x 24"	2'-0"	2'-0"	6'-8"														
W2	14	Window-Fixed-Andersen-100_Series: Window-Fixed-Andersen-100_Series	2'-8"	1'-4"	6'-8"														



1 WINDOW & LOUVER TYPES
SCALE: 1/4" = 1'-0"

2 DOOR & FRAME TYPES
SCALE: 1/4" = 1'-0"

3 DOOR HARDWARE
SCALE: 1/4" = 1'-0"

H-01 HINGES RIM EXIT DEVICE CLOSER KICK PLATE WEATHER STRIPPING DOOR SWEEP	- 5 KNUCKLE, BALL BEARING, NON-REMOVABLE PIN - IVES 5-BB-1-HW-4.5 X 4.5-NRP OR EQUAL - VON DUPRIN, 98L-986L-07, US26D FINISH OR EQUAL - PUSH SIDE MOUNTED, LCN 4040XP-72 OR EQUAL - PLATE W/ COUNTERSUNK HOLES - HAGER, 109S-CSK, MIL FINISH, W/ BEVELED EDGES - HAGER 891S - HAGER 756C, MIL FINISH
H-02 HINGES RIM EXIT DEVICE CLOSER KICK PLATE WEATHER STRIPPING DOOR SWEEP KICK DOWN DOOR STOP	- 5 KNUCKLE, BALL BEARING, NON-REMOVABLE PIN - IVES 5-BB-1-HW-4.5 X 4.5-NRP OR EQUAL - VON DUPRIN, 98L-986L-07, US26D FINISH OR EQUAL - PUSH SIDE MOUNTED, LCN 4040XP-72 OR EQUAL - PLATE W/ COUNTERSUNK HOLES - HAGER, 109S-CSK, MIL FINISH, W/ BEVELED EDGES - HAGER 891S - HAGER 756C, MIL FINISH, OR EQUAL - HAGER, 270C, OR EQUAL
H-03 HINGES LOCKSET WEATHER STRIPING DOOR SWEEP	- 5 KNUCKLE, BALL BEARING, NON-REMOVABLE PIN - IVES 5-BB-1-HW-4.5 X 4.5-NRP OR EQUAL - VANDAL RESISTANT LEVER HANDLE, STOREROOM FUNCTION - SCHLAGE ND96PD-ATH, 626 FINISH OR EQUAL - HAGER 891S - HAGER 756C, MIL FINISH OR EQUAL
H-04 HINGES DEADBOLT PUSH PLATE VANDAL RESISTANT PULL CLOSER KICK PLATE WEATHER STRIPPING DOOR SWEEP	- 5 KNUCKLE, BALL BEARING, NON-REMOVABLE PIN - IVES 5-BB-1-HW-4.5 X 4.5-NRP OR EQUAL - CLASSROOM FUNCTION DEADBOLT, SCHLAGE, B663P, 626 FINISH OR EQUAL - IVES 8200, 626 FINISH - IVES, VR814-NL, 626 FINISH - PUSH SIDE MOUNTED, LCN 4040XP-72 OR EQUAL - PLATE W/ COUNTERSUNK HOLES - HAGER, 109S-CSK, MIL FINISH, W/ BEVELED EDGES - HAGER 891S - HAGER 756C, MIL FINISH, OR EQUAL
H-05 HINGES LOCKSET	- 5 KNUCKLE, BALL BEARING, NON-REMOVABLE PIN - IVES 5-BB-1-HW-4.5 X 4.5-NRP OR EQUAL - VANDAL RESISTANT LEVER HANDLE, STOREROOM FUNCTION - SCHLAGE ND96PD-ATH US26D FINISH OR EQUAL

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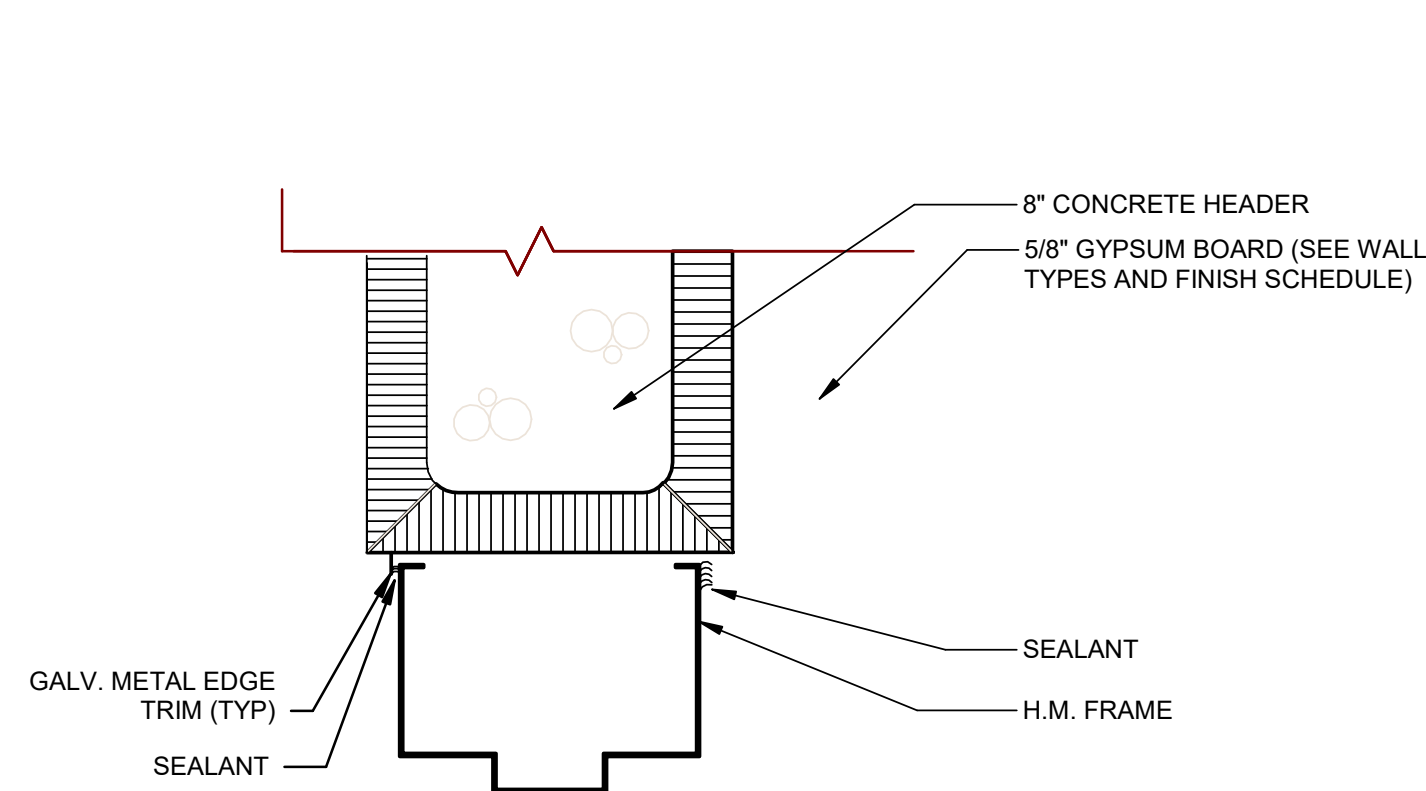


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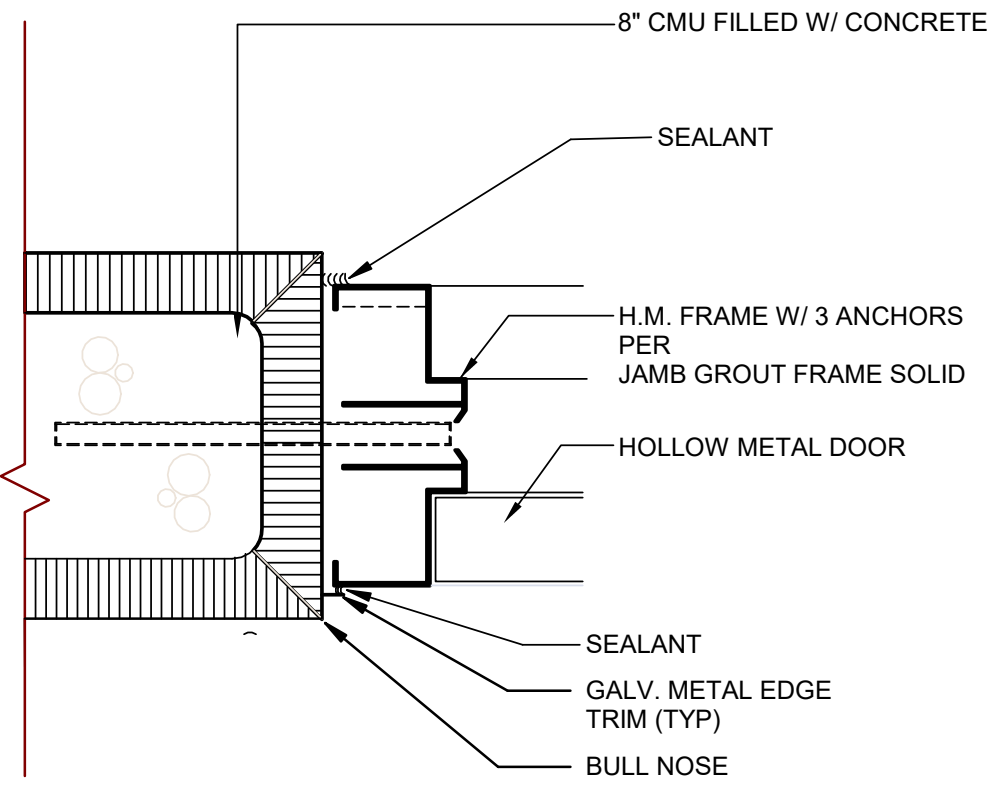


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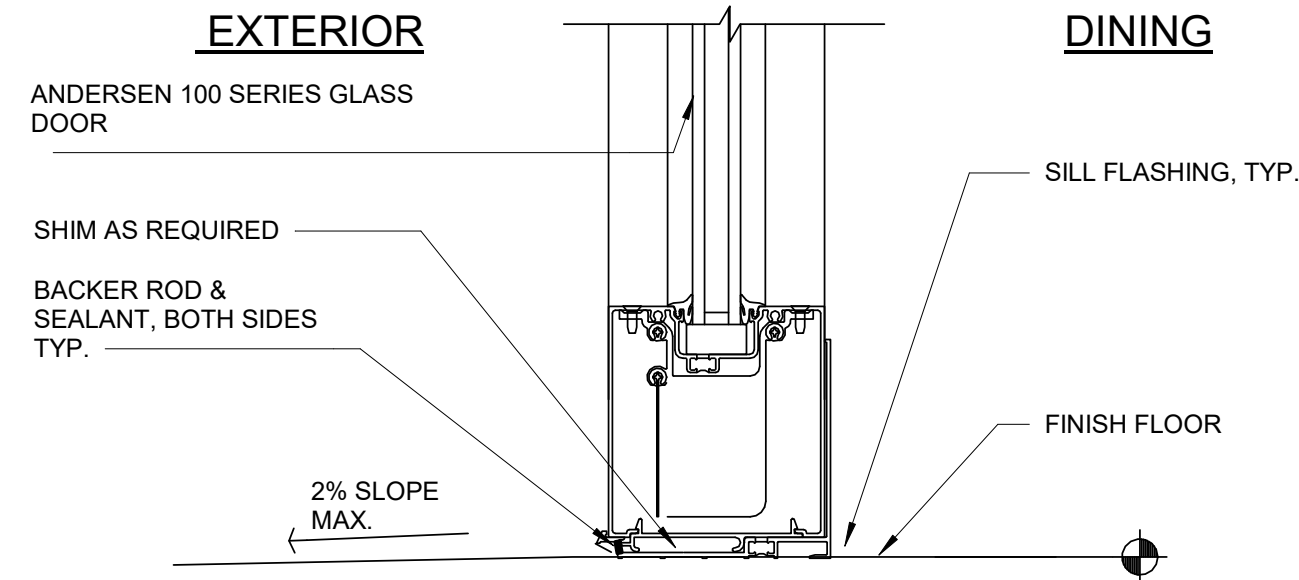
DOOR AND WINDOW
SCHEDULES
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
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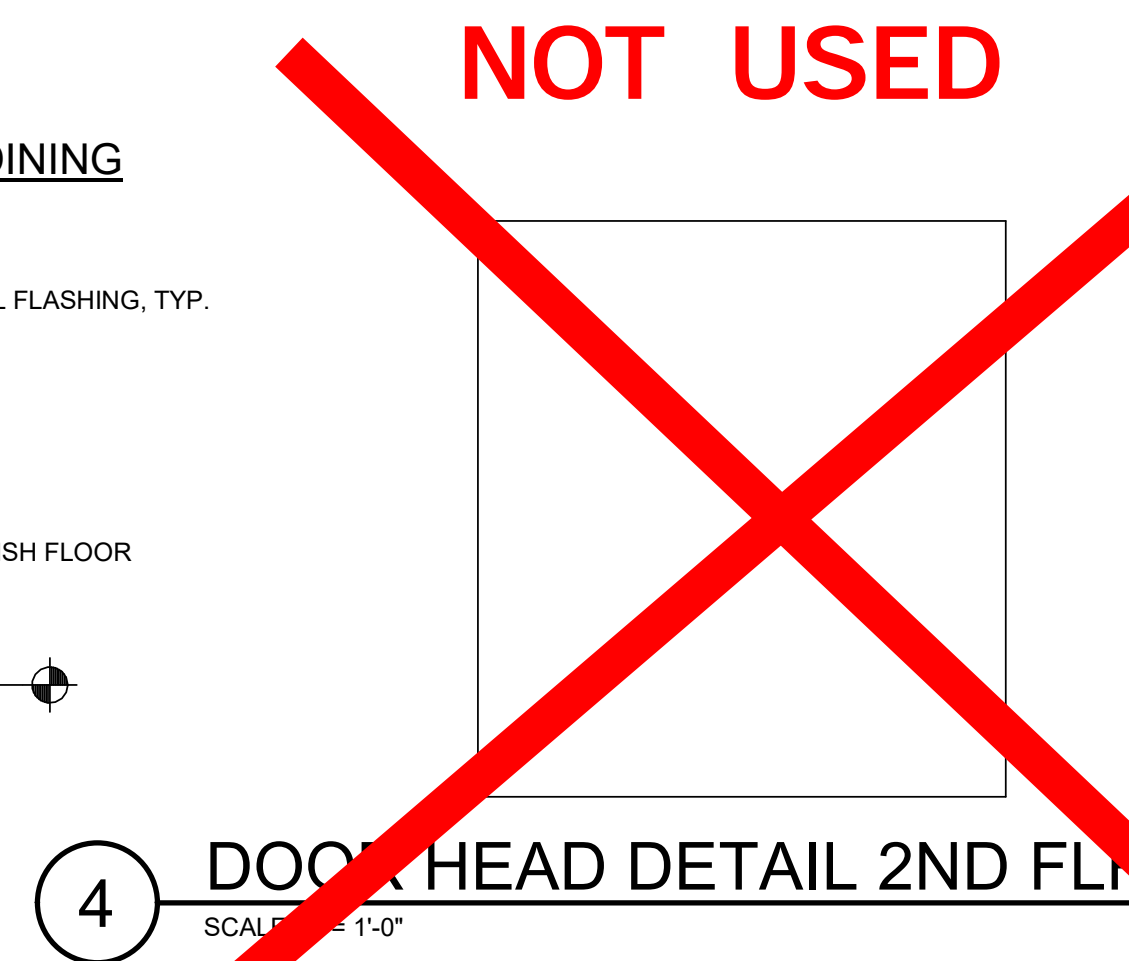
1 DOOR HEAD DETAIL
SCALE: 3" = 1'-0"



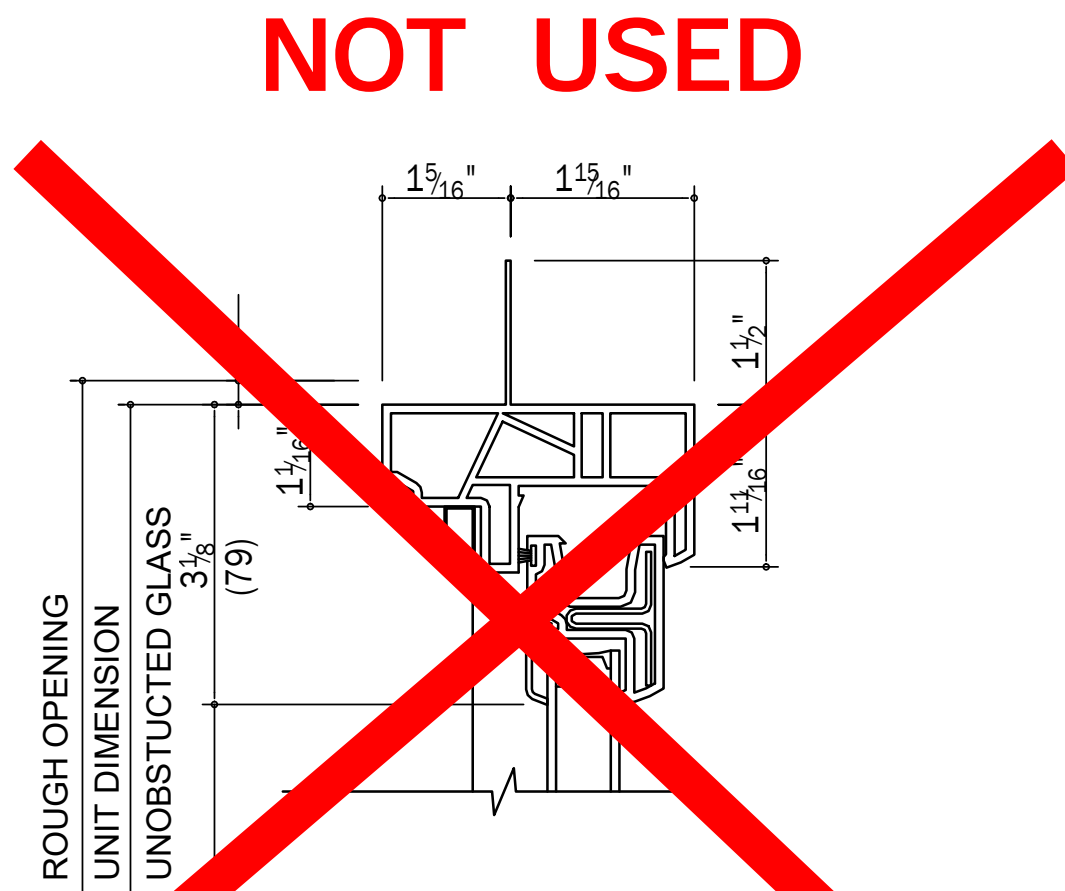
2 DOOR JAMB DETAIL
SCALE: 3" = 1'-0"



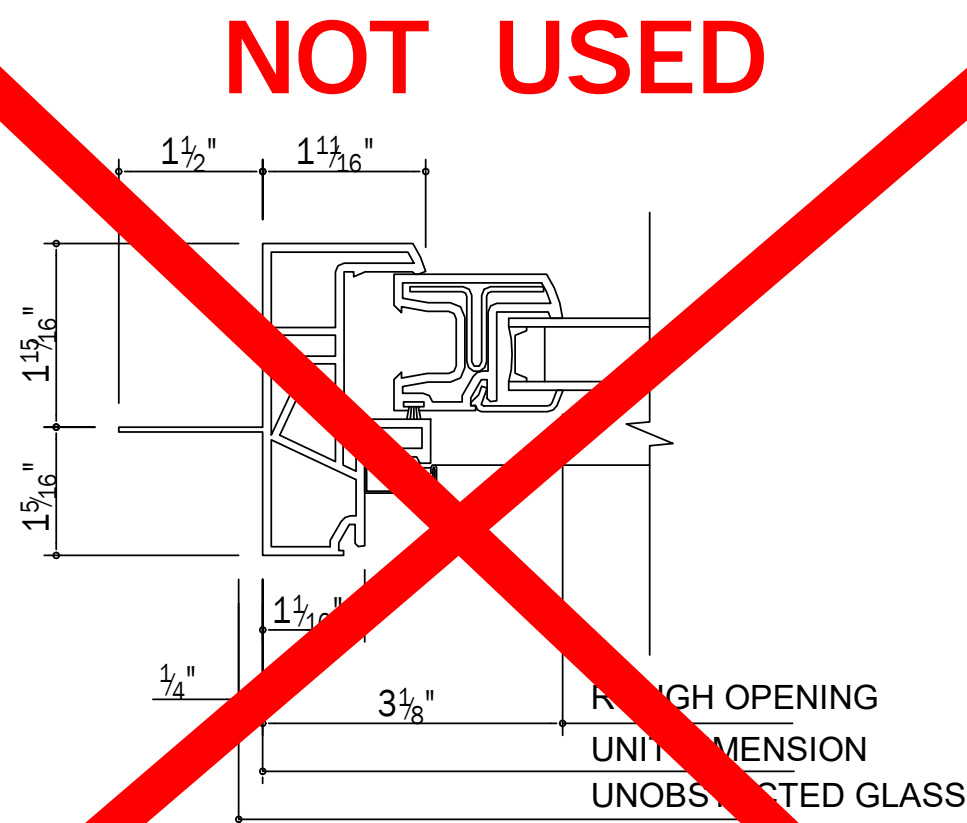
3 DOOR THRESHOLD DETAIL
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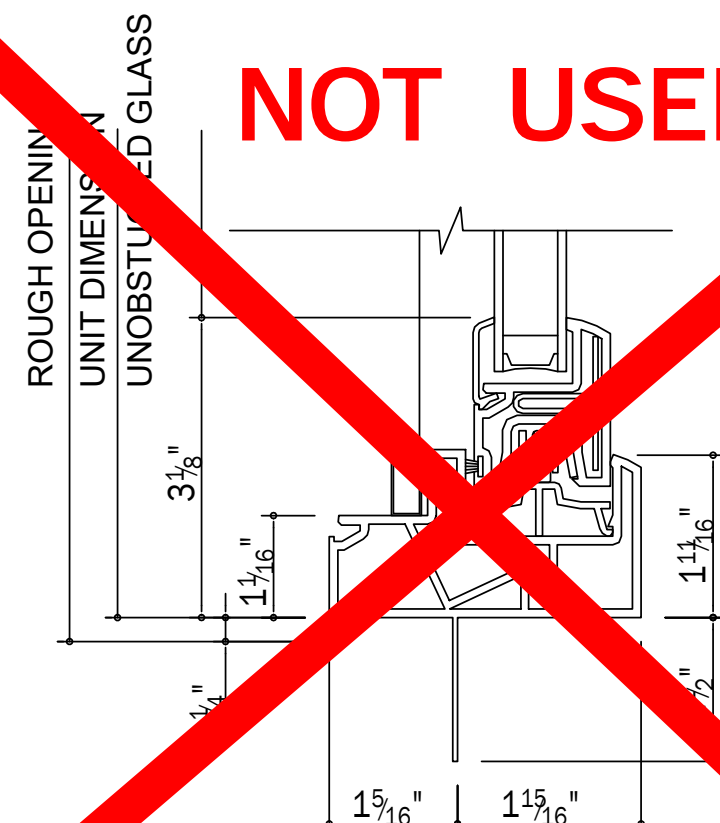
4 DOOR HEAD DETAIL 2ND FLR
SCALE: 3" = 1'-0"



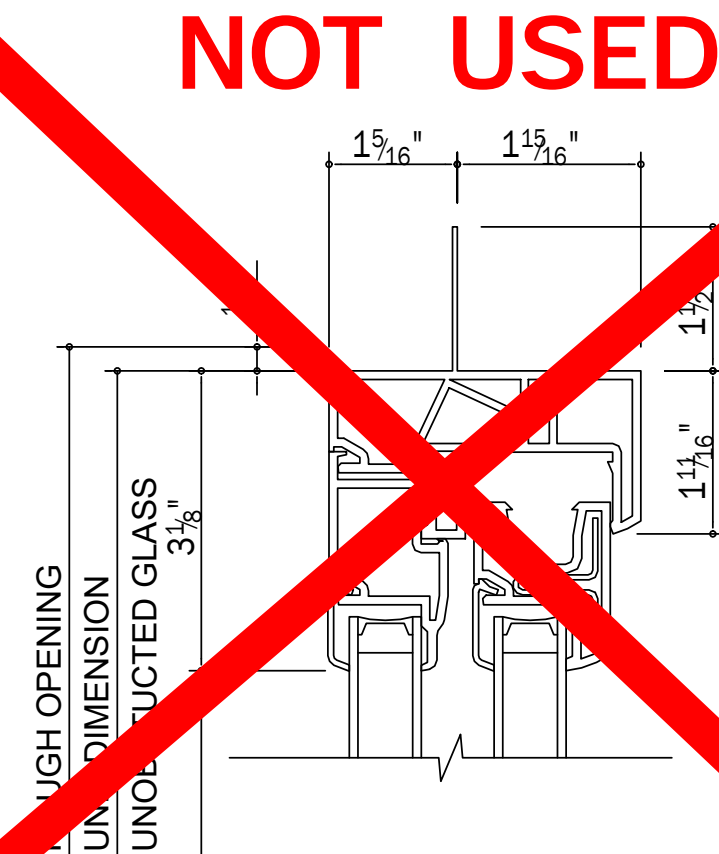
5 GLIDING WINDOW HEAD DETAIL
SCALE: 6" = 1'-0"



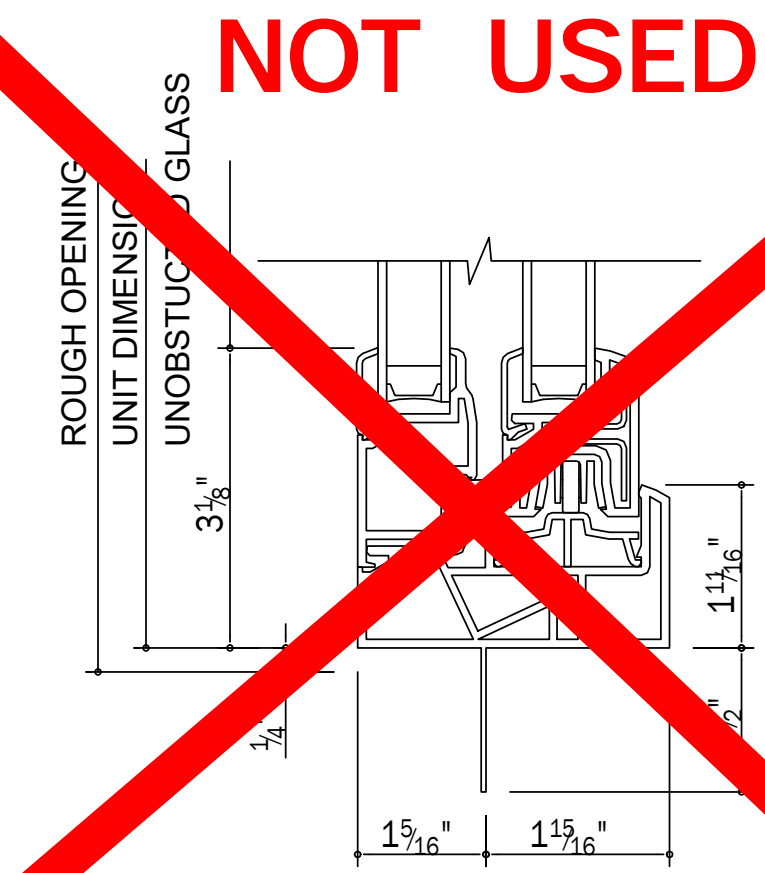
6 GLIDING WINDOW JAMB DETAIL
SCALE: 6" = 1'-0"



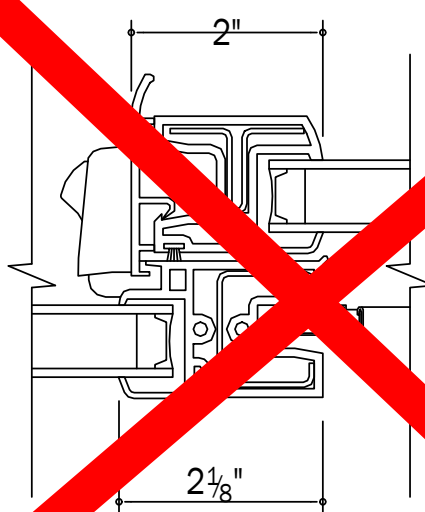
7 GLIDING WINDOW SILL DETAIL
SCALE: 6" = 1'-0"



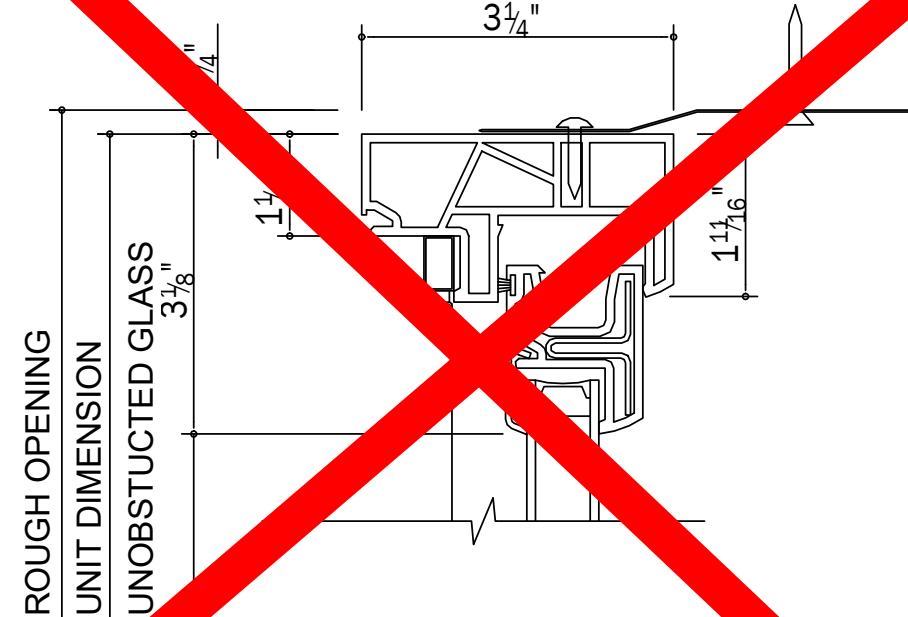
8 GLIDING STATIONARY HEAD DETAIL
SCALE: 6" = 1'-0"



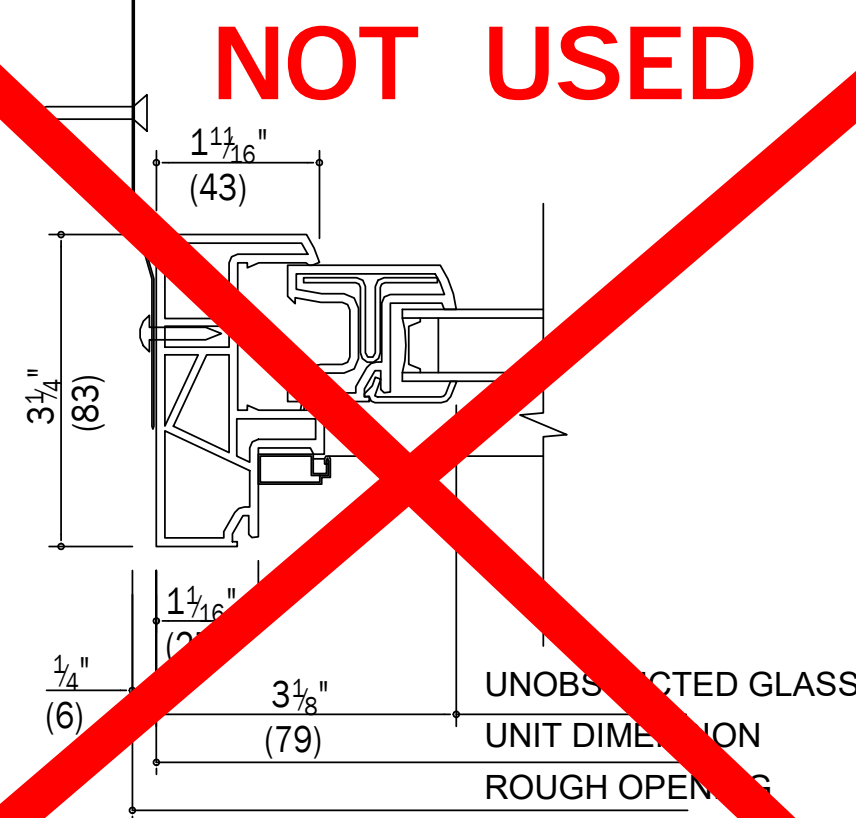
9 GLIDING STATIONARY SILL DETAIL
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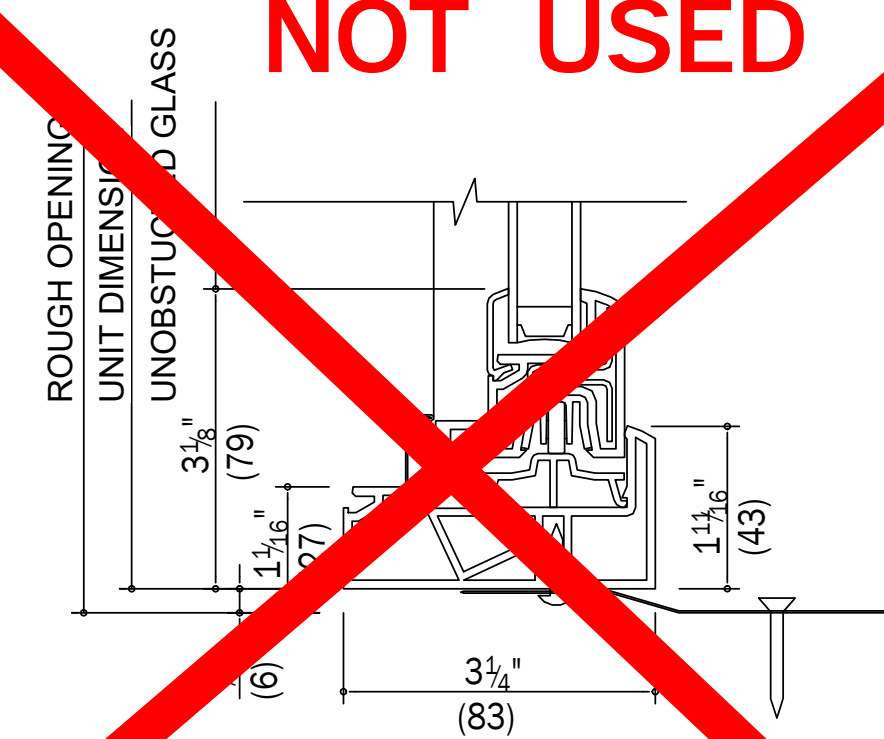
10 MEETING STILE
SCALE: 6" = 1'-0"



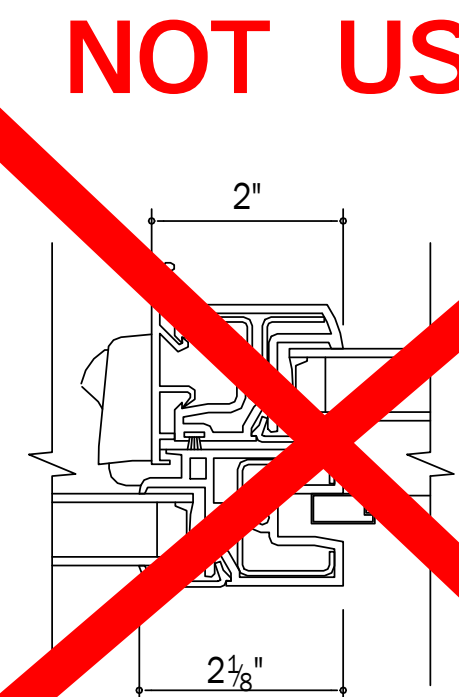
11 SLIDING HEAD DETAIL
SCALE: 6" = 1'-0"



12 SLIDING JAMB DETAIL
SCALE: 6" = 1'-0"



13 SLIDING SILL DETAIL
SCALE: 6" = 1'-0"



14 SLIDING MEETING STILE
SCALE: 6" = 1'-0"

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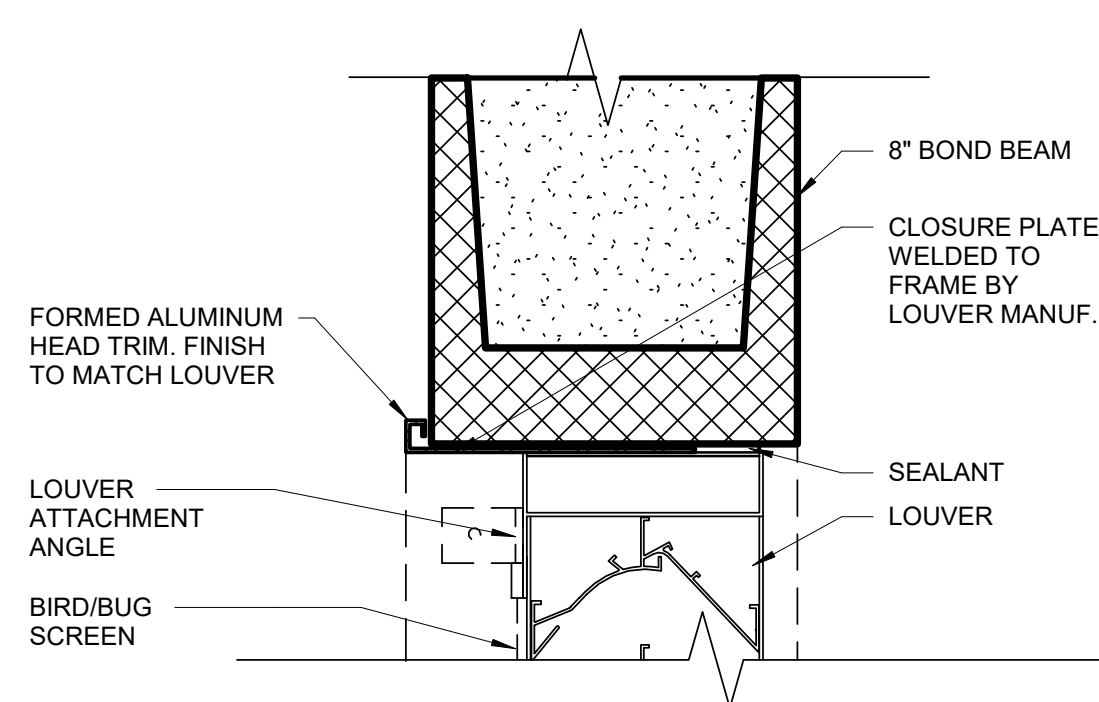
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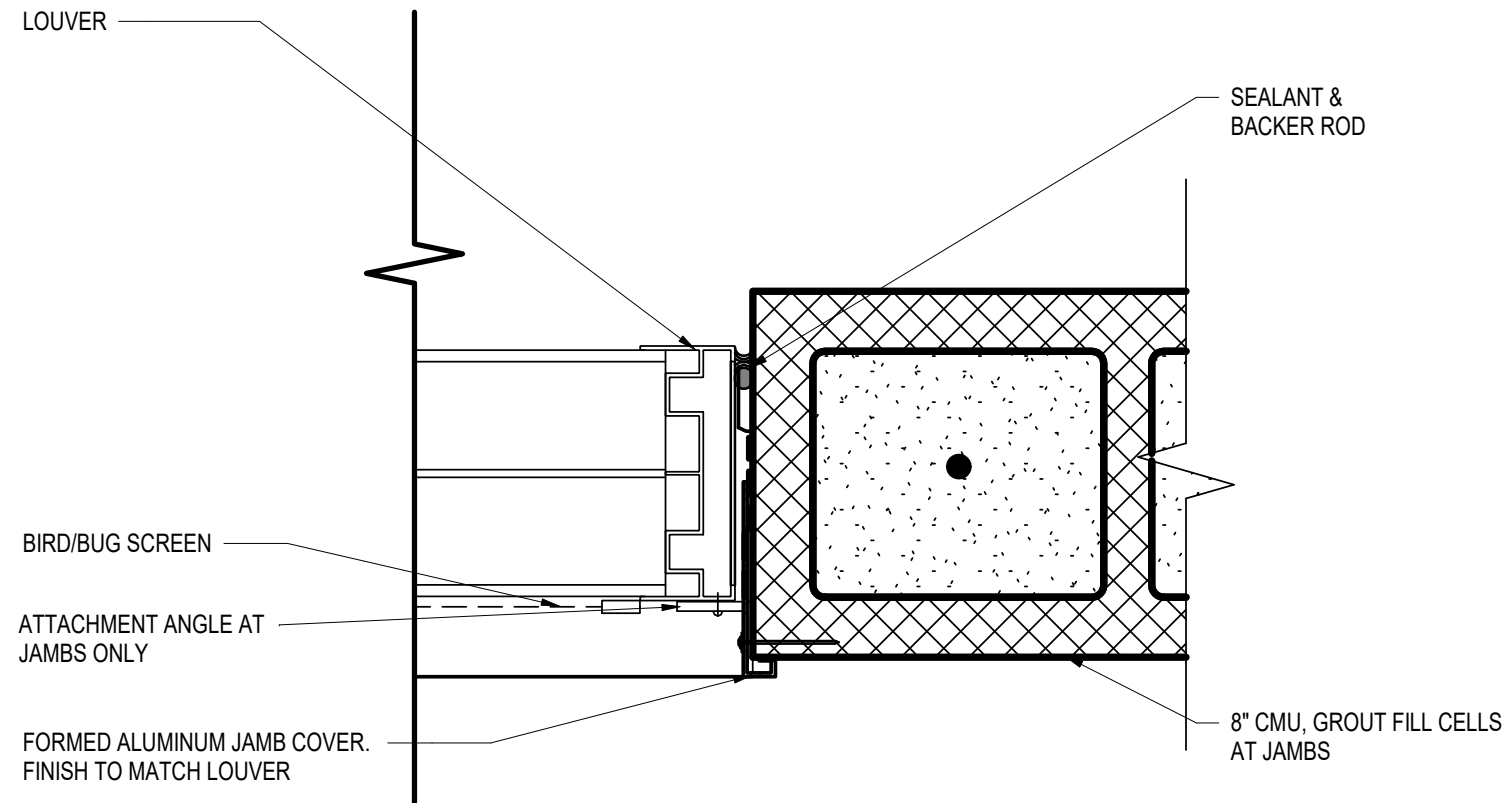
DOOR AND WINDOW DETAILS
CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

A-602

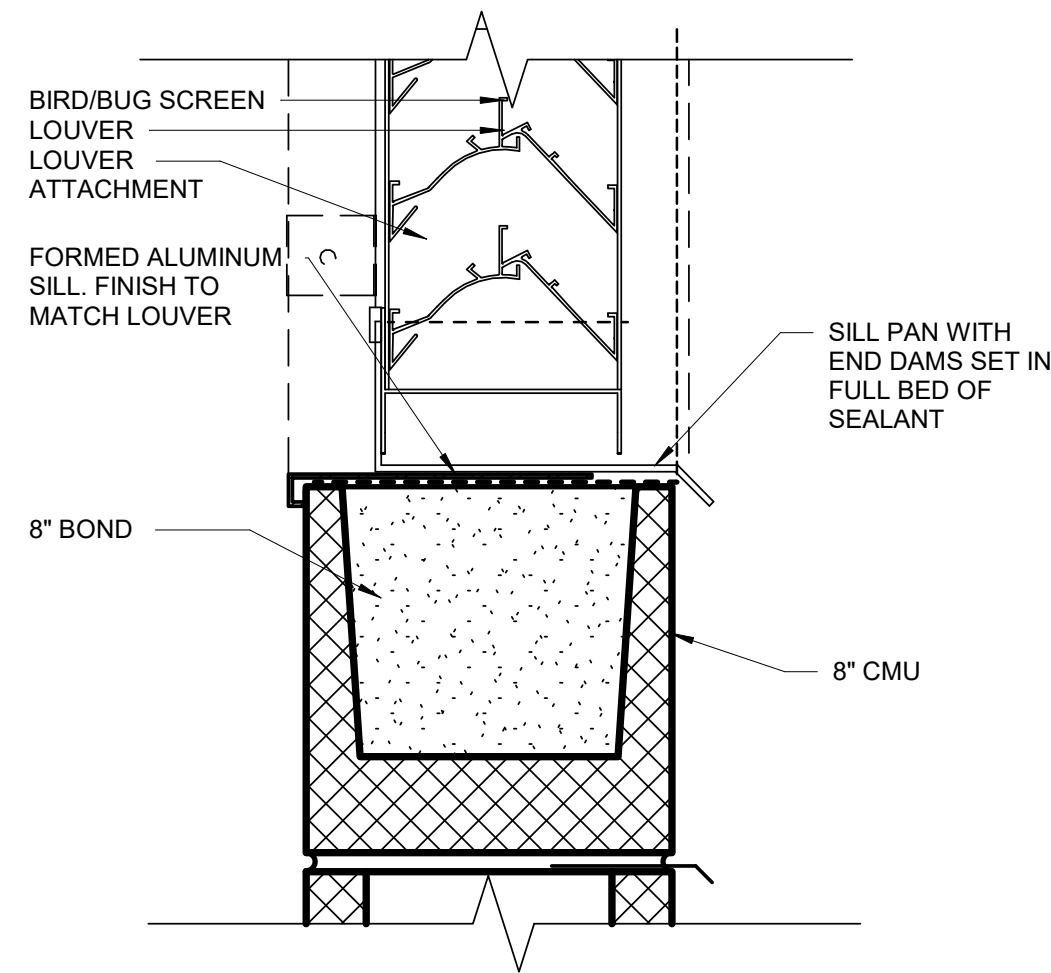
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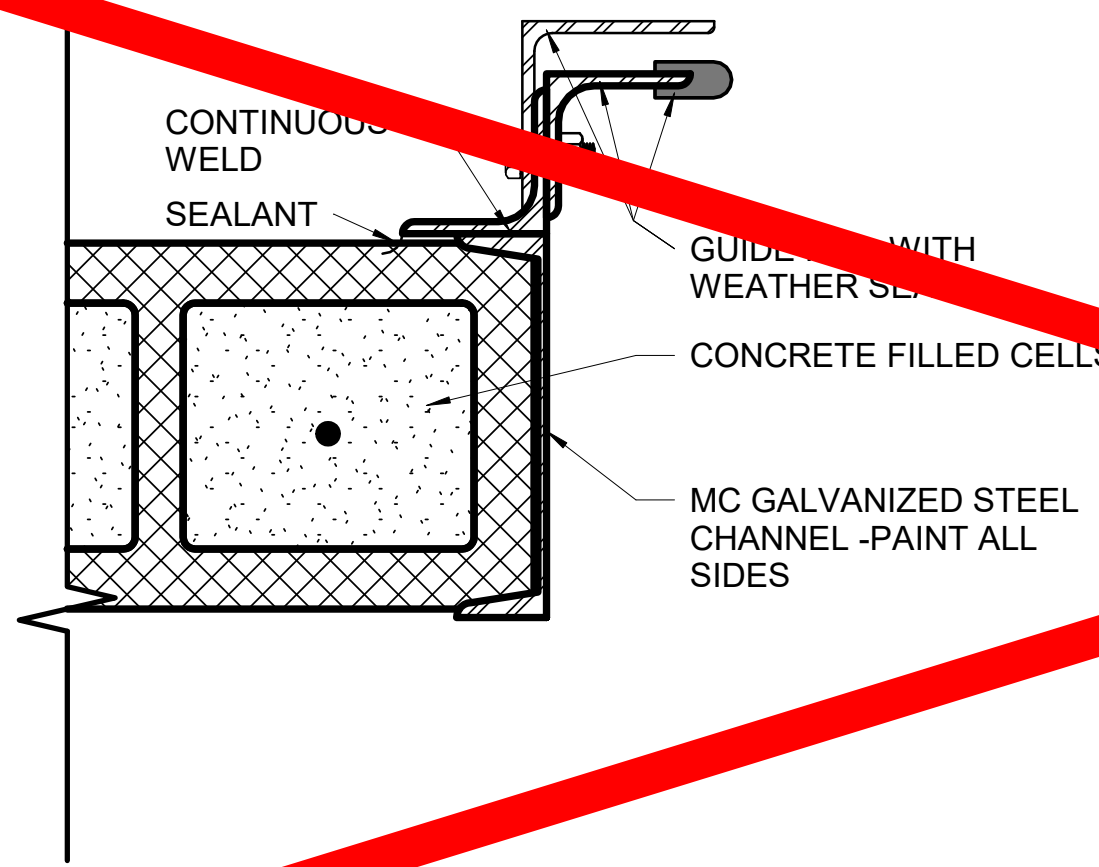
1 LOUVER HEAD
SCALE: 3" = 1'-0"



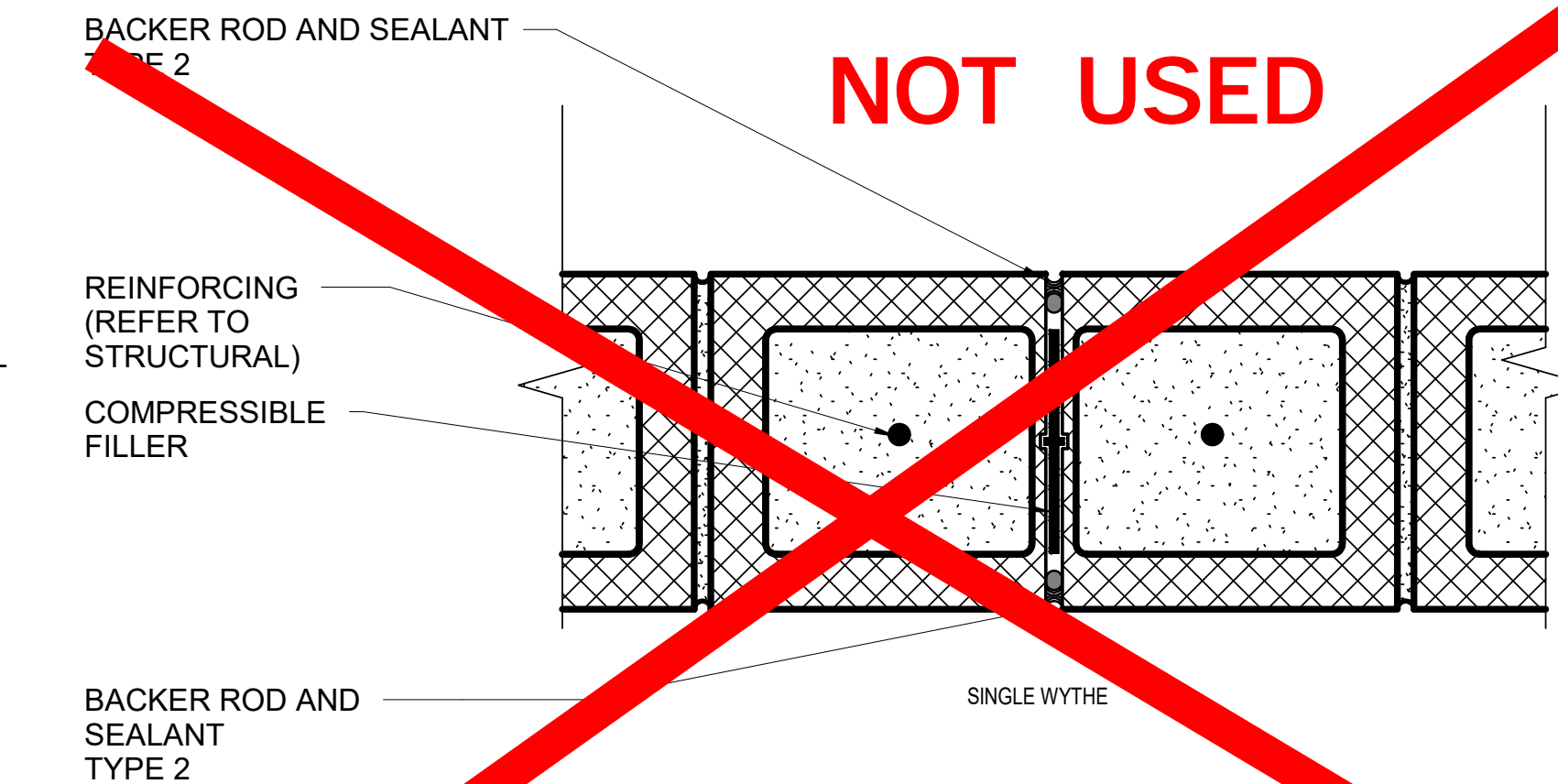
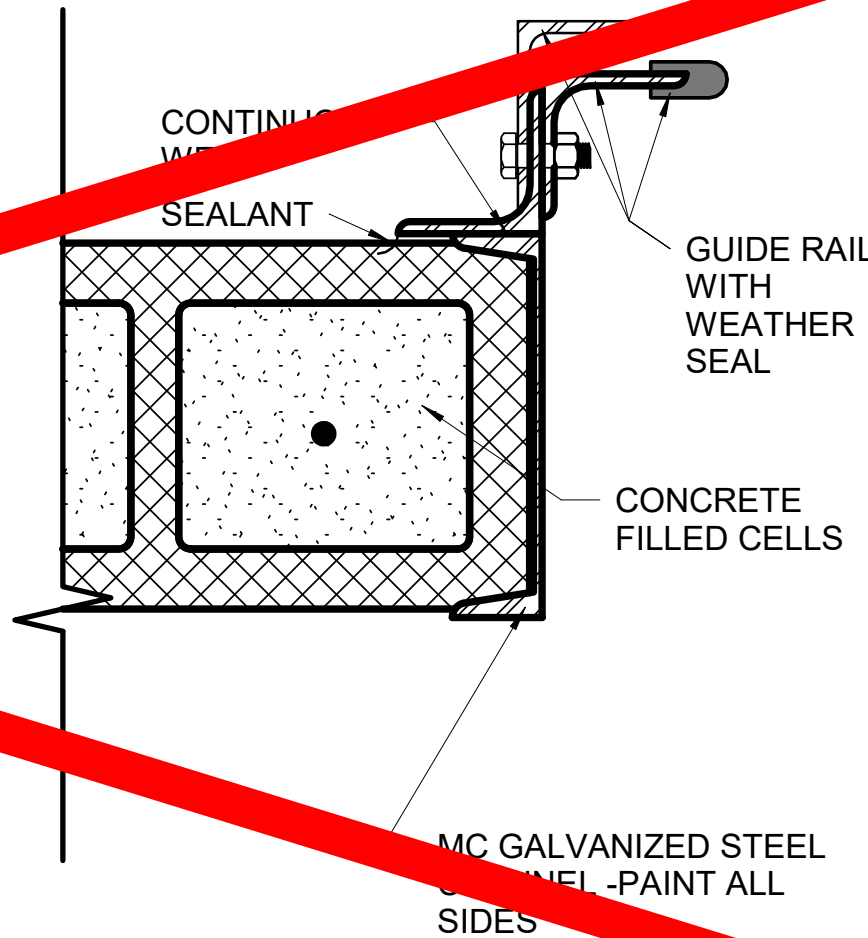
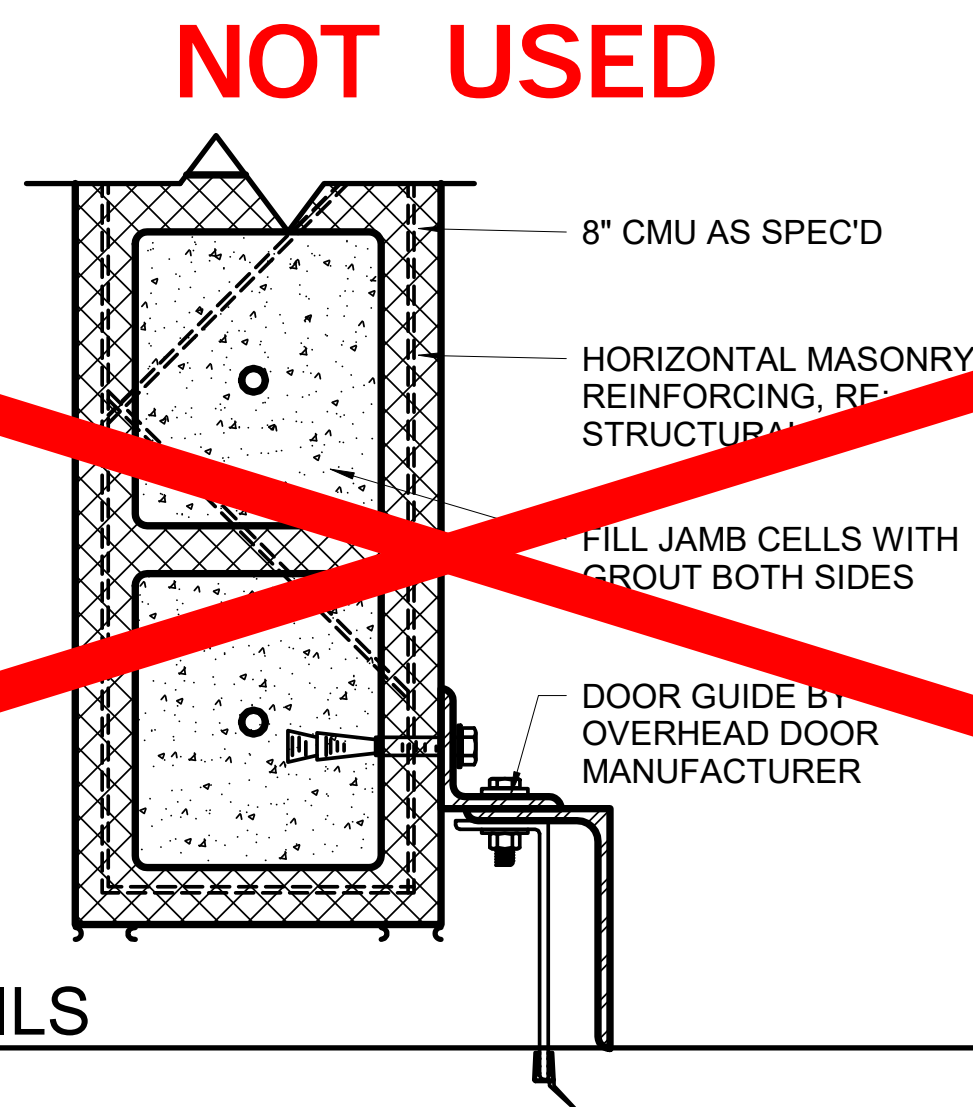
2 LOUVER JAMB
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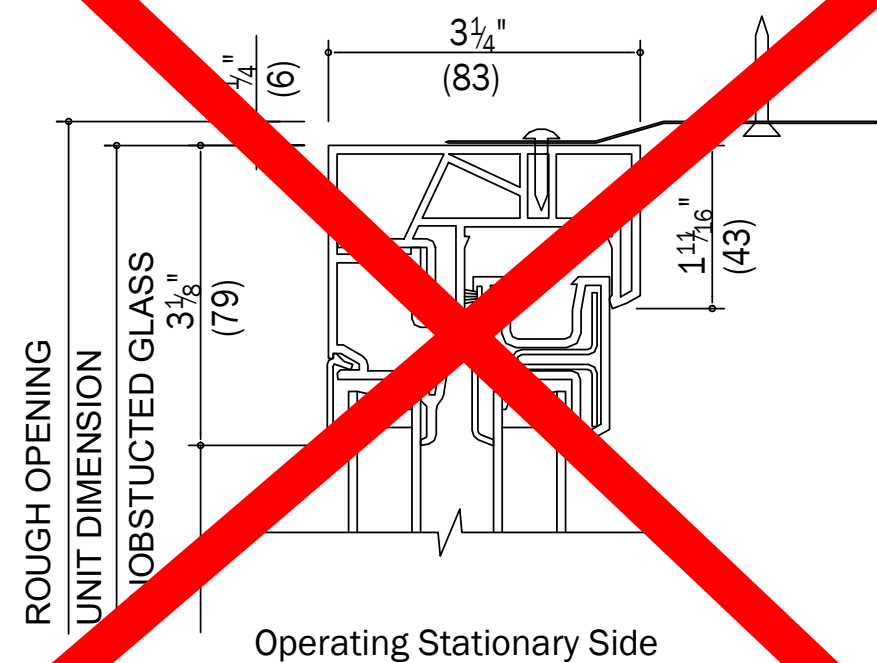
3 LOUVER SILL
SCALE: 3" = 1'-0"



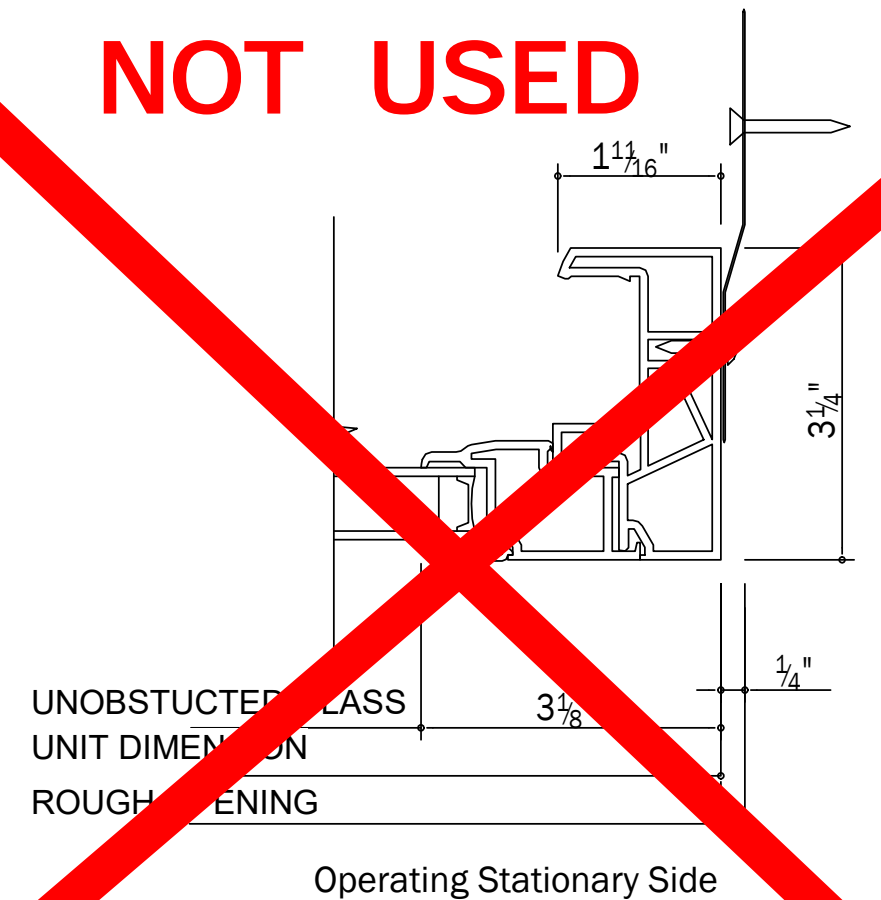
4 OVERHEAD COILING DOOR DETAILS
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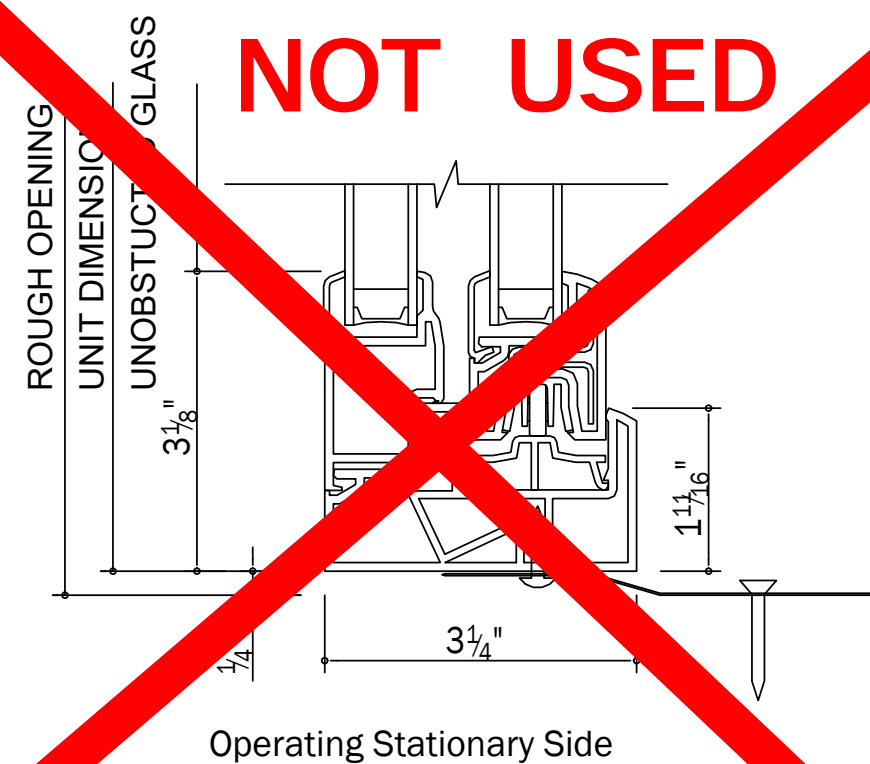
5 MASONRY EXPANSION JOINT DETAIL
SCALE: 3" = 1'-0"



6 SLIDING STATIONARY HEAD
SCALE: 6" = 1'-0"



7 SLIDING STATIONARY JAMB
SCALE: 6" = 1'-0"



8 SLIDING STATIONARY SILL
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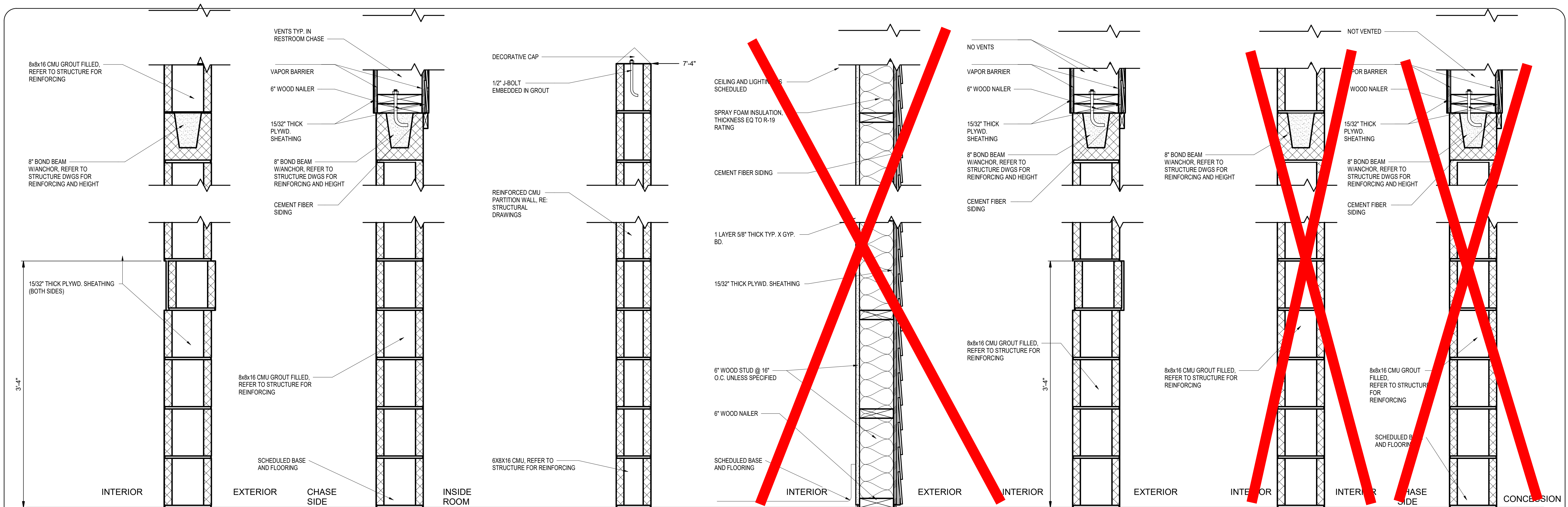
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DOOR AND WINDOW DETAILS

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CITY OF KENEDY

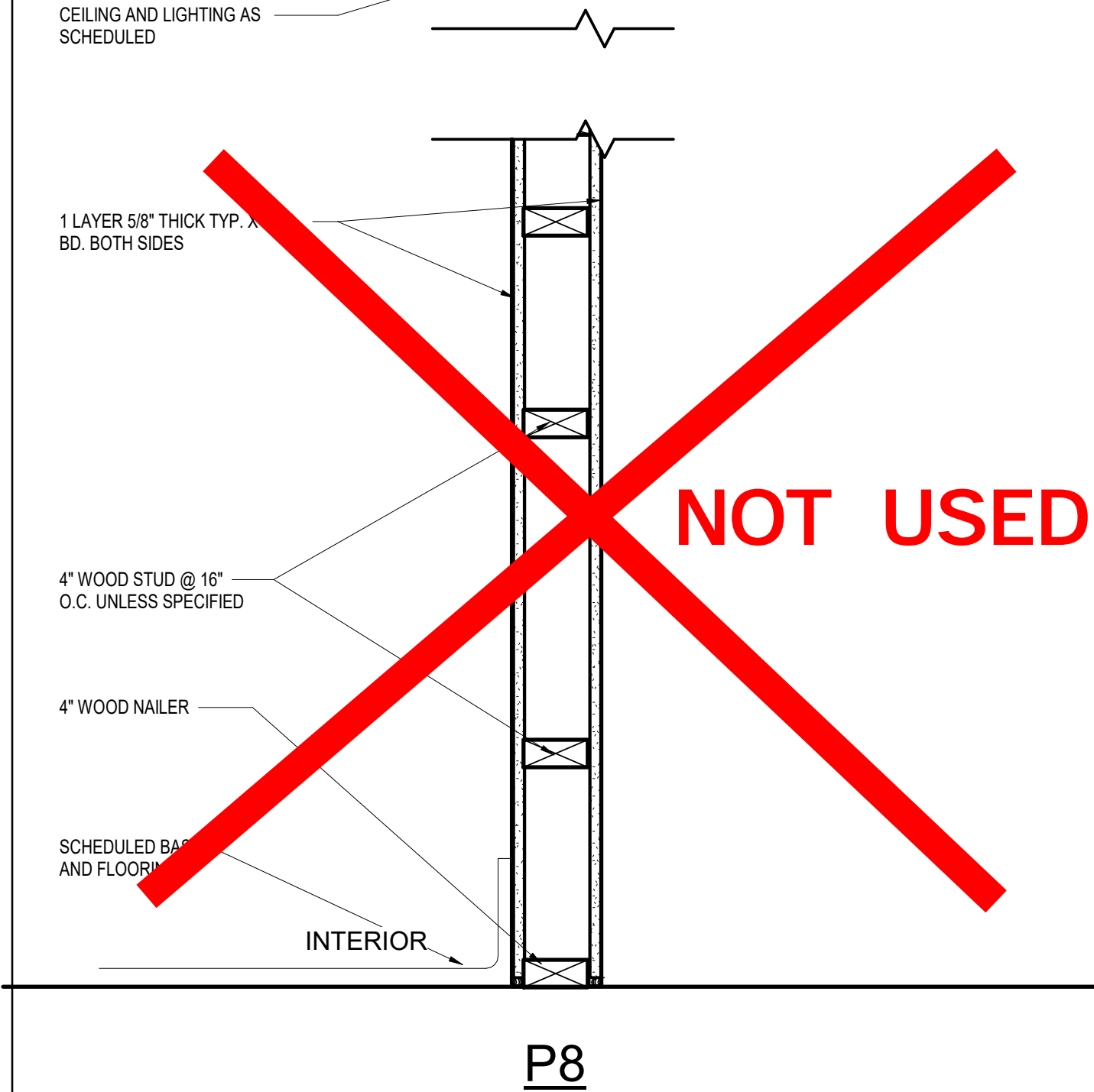
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LINE OF SLAB **P1** **P2** **P3** **P4** **P5** **P6** **P7**

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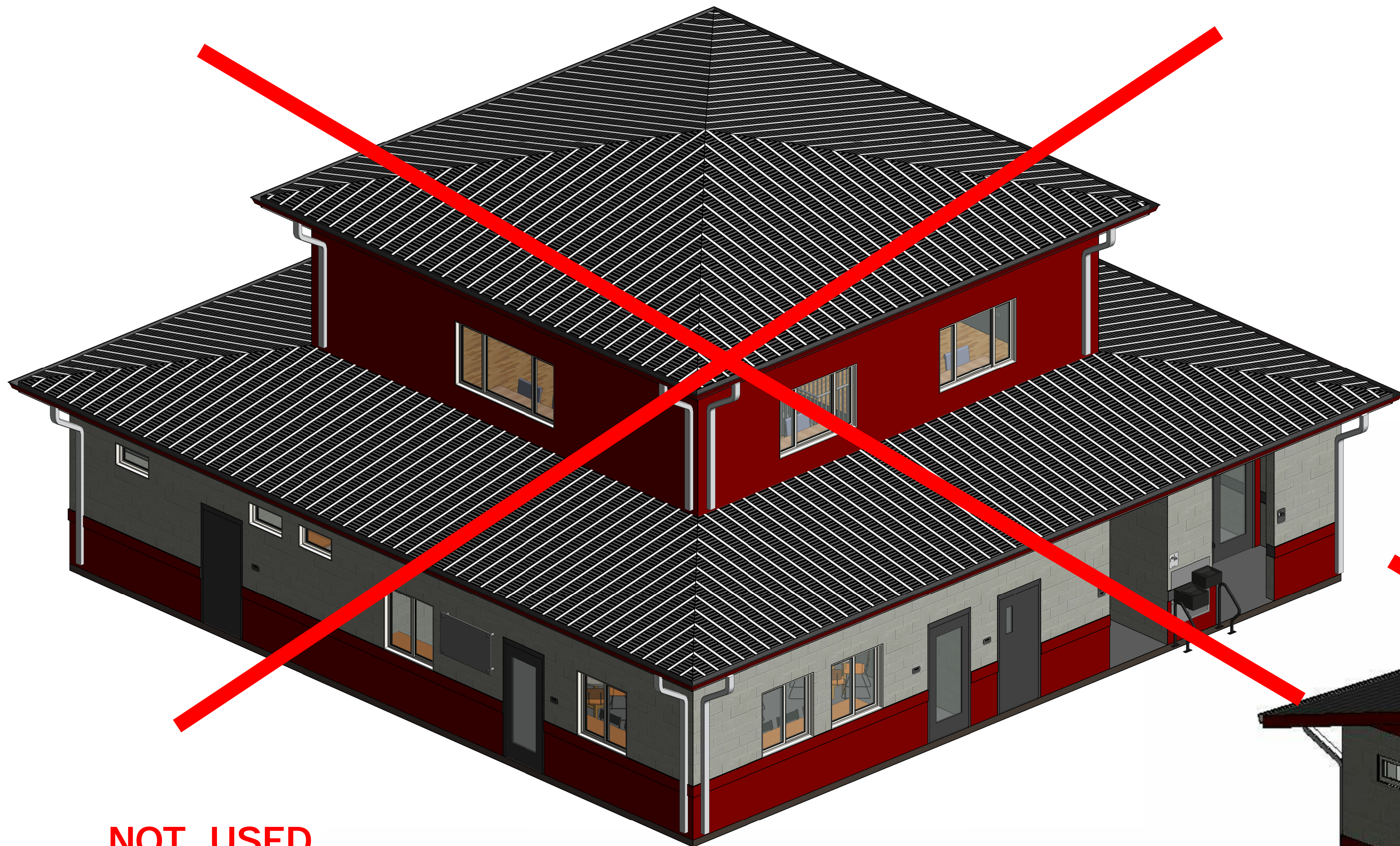
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WALL LEGEND

CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

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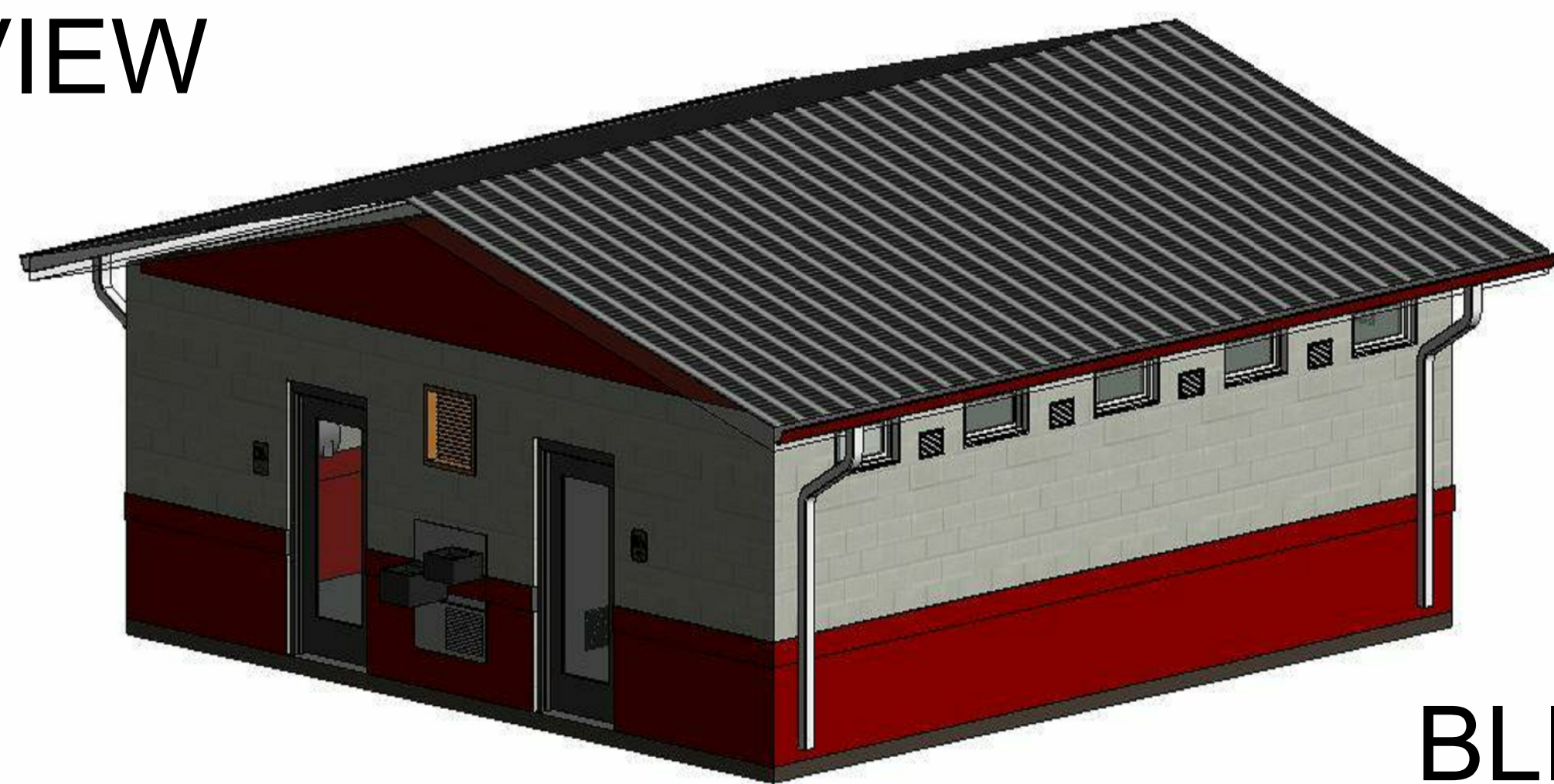
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NOT USED
BLDG. - B 3D VIEW



BLDG. - C 3D VIEW

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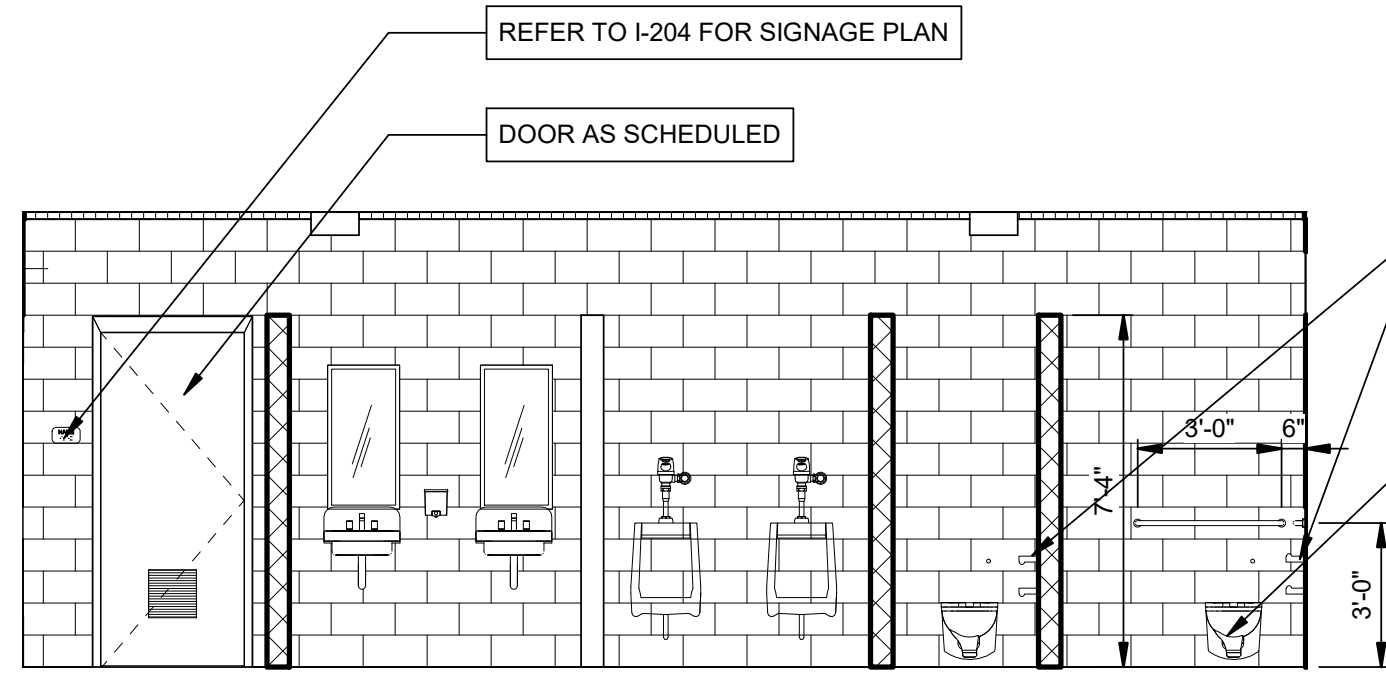
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3D VIEWS

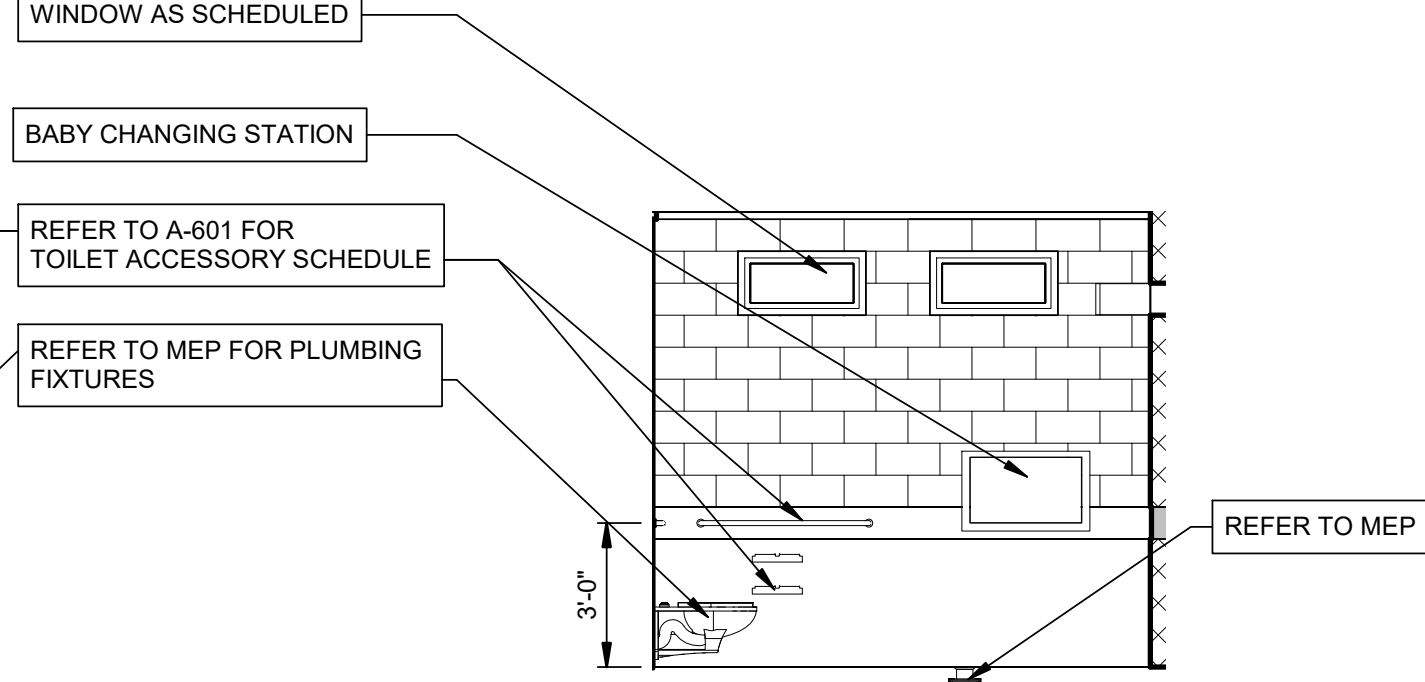
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CITY OF KENEDY

A-800

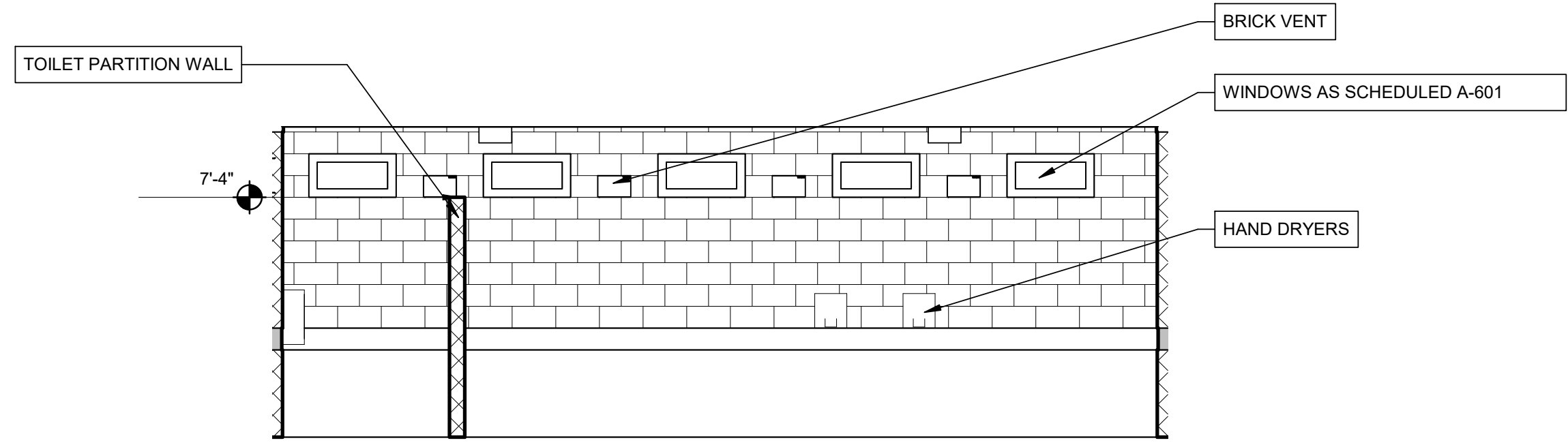
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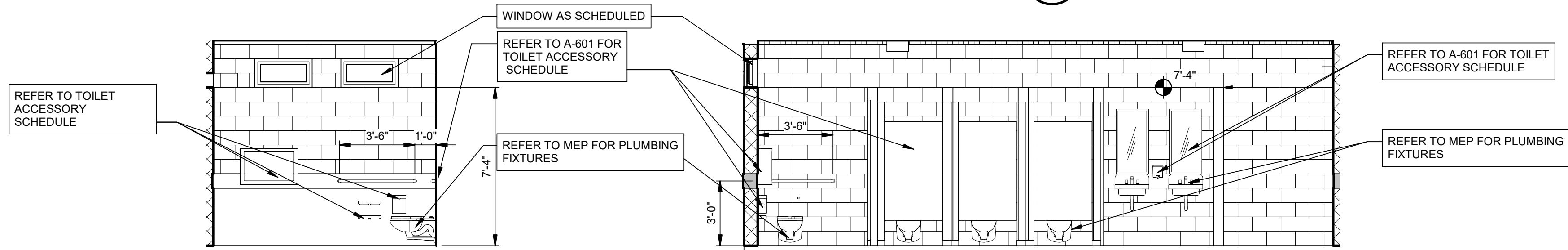
1 MEN'S SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



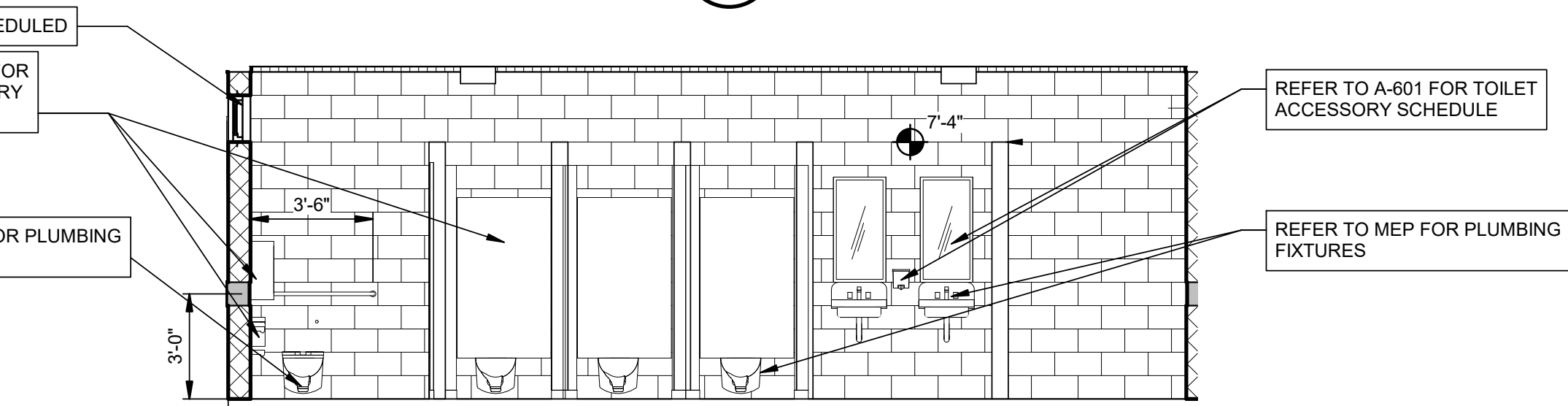
2 MEN'S WEST ELEVATION
SCALE: 1/4" = 1'-0"



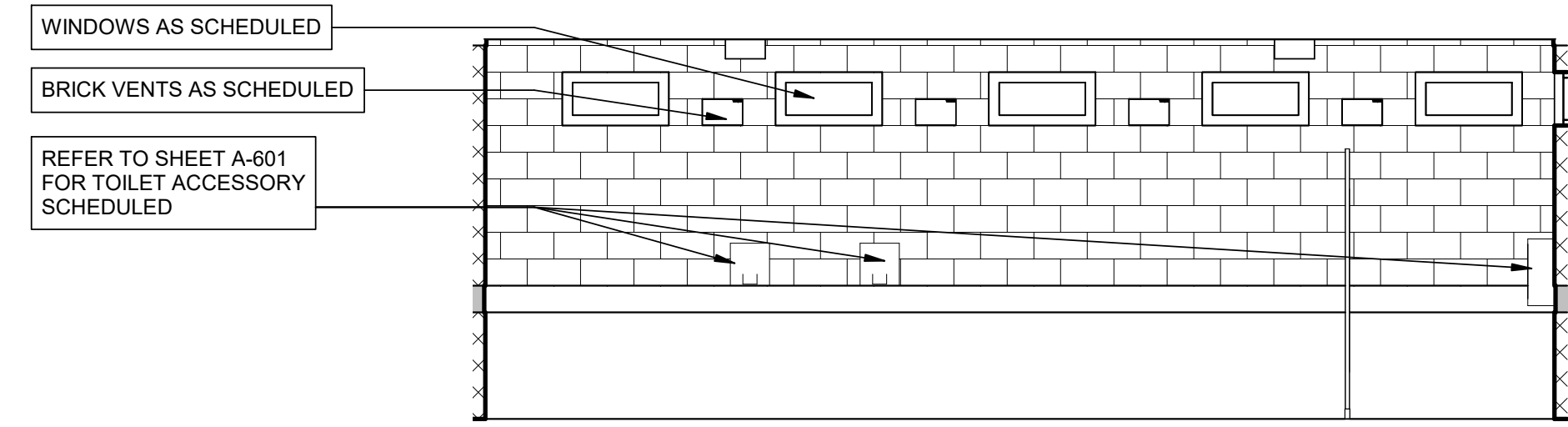
3 MEN'S NORTH ELEVATION
SCALE: 1/4" = 1'-0"



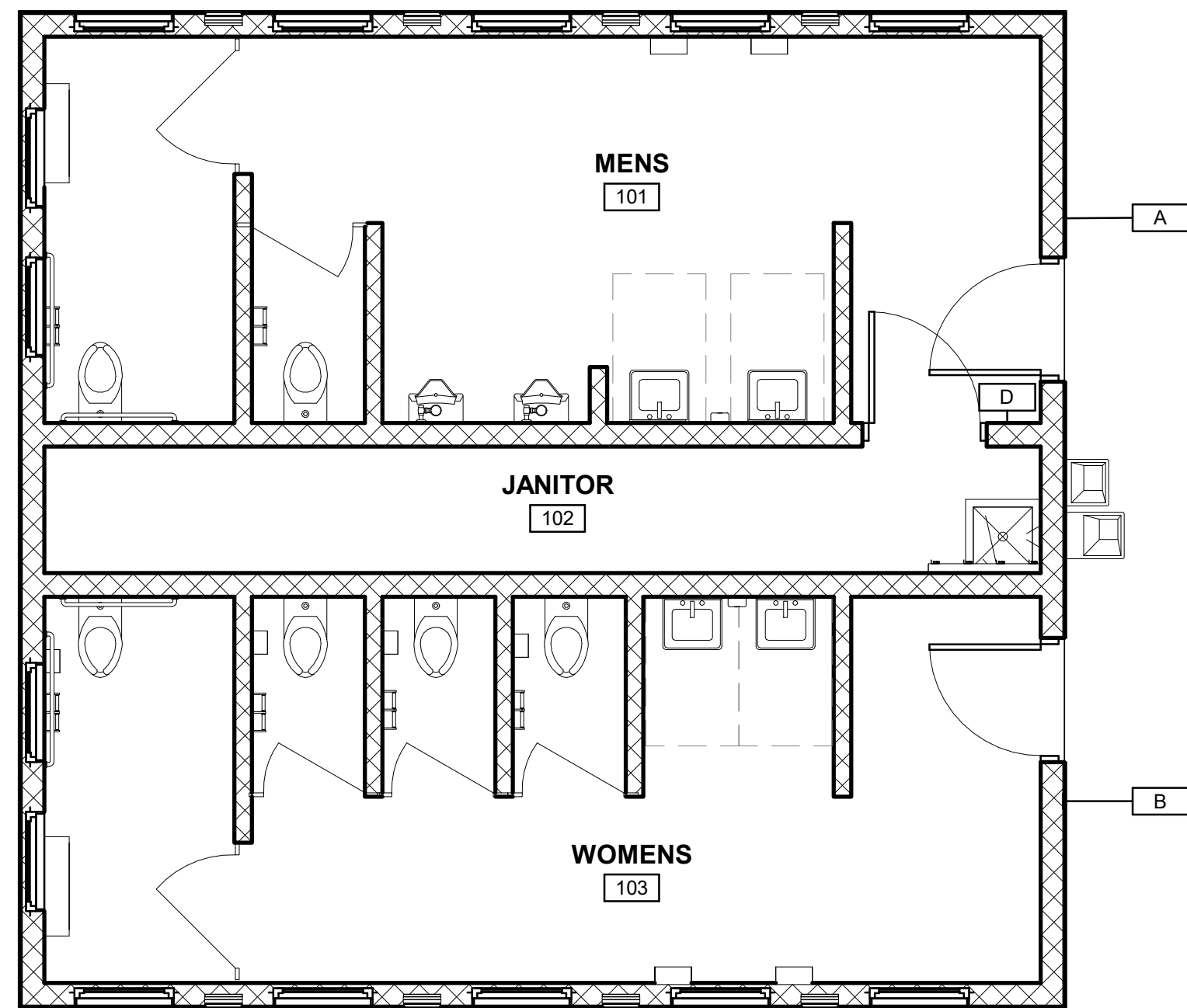
4 WOMEN'S WEST ELEVATION
SCALE: 1/4" = 1'-0"



5 WOMEN'S NORTH ELEVATION
SCALE: 1/4" = 1'-0"



6 WOMEN'S SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



7 SIGNAGE PLAN - BLDG. C
SCALE: 1/4" = 1'-0"

SIGNAGE SCHEDULE BLDG. C				
Mark	Count	Description	Type Comments	
A	1	MENS		
B	1	WOMENS		
D	1	SINGLE NAME	JANITOR	

A-SH-ROOM FINISH																							
ROOM NO.	ROOM NAME	FLOOR			BASE			WALLS												CEILING			COMMENTS
		MAT'L	FINISH	COLOR	MAT'L	FINISH	COLOR	NORTH			EAST			SOUTH			WEST			MAT'L	FINISH	COLOR	
								MAT'L	FINISH	COLOR	MAT'L	FINISH	COLOR	MAT'L	FINISH	COLOR	MAT'L	FINISH	COLOR				
101	MENS	CONCRETE	RESINOUS TYPE 2	TBD	COVE	TYPE 2	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	N/A	N/A	N/A	
102	JANITOR	CONCRETE	STAINED SEALED	TBD	N/A	N/A	N/A	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	N/A	N/A	N/A	
103	WOMENS	CONCRETE	RESINOUS TYPE 2	TBD	COVE	TYPE 2	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	CMU	SEMI-GLOSS	TBD	N/A	N/A	N/A	

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename: City of Kenedy Sports Complex Bldg. C		
Scale: 1/4" = 1'-0"		
Date: 6/24/2019		
LAYOUT	Author	6/24/2019
DRAWN	Author	6/24/2019
REVIEWED	Checker	6/24/2019



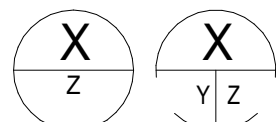




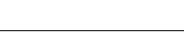







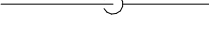

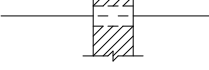
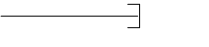


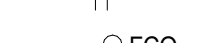


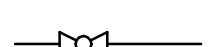

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INTERIOR ELEVATIONS &
SIGNAGE PLAN - BLDG. C
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY



PLUMBING LEGEND																																																																																										
<h3>GENERAL SYMBOLS</h3> <div>  <p>SECTION/DETAIL DESIGNATIONS X = SECTION (LETTER) OR DETAIL (NUMBER) Y = SHEET WHERE DETAIL/SECTION IS REFERENCED Z = SHEET WHERE DETAIL/SECTION IS SHOWN</p> </div> <div>  <p>EQUIPMENT DESIGNATION TOP = EQUIPMENT TAG BOTTOM = EQUIPMENT NUMBER</p> </div> <div>  <p>REFERENCED NOTES</p> </div> <div>  <p>ROOM NUMBERS</p> </div> <div>  <p>DEMOLITION HATCHING - INDICATES ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED</p> </div> <div>  <p>ITEMS SHOWN DASHED AND RELATIVELY LIGHT ARE EXISTING UNLESS NOTED OTHERWISE</p> </div> <div>  <p>REVISION CLOUD AND REFERENCE NUMBER</p> </div> <div>  <p>POINT OF CONNECTION (POC) NEW TO EXISTING</p> </div> <div>  <p>CENTERLINE</p> </div>		<h3>SYMBOLS</h3> <div>  <p>TEE - UP, BRANCH OUT OF TOP</p> </div> <div>  <p>TEE - DOWN, BRANCH OUT OF BOTTOM</p> </div> <div>  <p>ELBOW - UP</p> </div> <div>  <p>ELBOW - DOWN</p> </div> <div>  <p>RISE OR DROP</p> </div> <div>  <p>DIRECTION OF FLOW</p> </div> <div>  <p>SLEEVE THRU WALL</p> </div> <div>  <p>CAP ON END OF PIPE</p> </div> <div>  <p>HOSE BIBB (ELEVATION)</p> </div> <div>  <p>HOSE BIBB (PLAN)</p> </div> <div>  <p>WALL CLEAN-OUT OR END OF LINE CLEAN-OUT (CO).</p> </div> <div>  <p>FLOOR CLEAN-OUT</p> </div> <div>  <p>FLOOR DRAIN AND TRAP (TYPE AS NOTED ON PLANS)</p> </div> <div>  <p>WATER HAMMER ARRESTOR. LETTER INDICATES P.D.I. SIZE</p> </div> <div>  <p>ISOLATION BALL VALVE</p> </div>																																																																																								
<h3>ABBREVIATIONS</h3> <table> <tr> <td>A.C.</td><td>AIR CHAMBER</td><td>MSB</td><td>MOP SERVICE BASIN</td></tr> <tr> <td>A.D.A.</td><td>AMERICANS WITH DISABILITIES ACT</td><td>PDI</td><td>PLUMBING DRAINAGE INSTITUTE</td></tr> <tr> <td>A.F.F.</td><td>ABOVE FINISHED FLOOR</td><td>PRESS.</td><td>PRESSURE</td></tr> <tr> <td>CW</td><td>COLD WATER</td><td>PSI</td><td>POUNDS PER SQUARE INCH</td></tr> <tr> <td>DF</td><td>DRINKING FOUNTAIN</td><td>RD</td><td>ROOF DRAIN</td></tr> <tr> <td>DOM.</td><td>DOMESTIC</td><td>SK</td><td>SINK</td></tr> <tr> <td>EWC</td><td>ELEC. WATER COOLER</td><td>S.A.</td><td>SHOCK ABSORBER</td></tr> <tr> <td>FCO</td><td>FLOOR CLEAN OUT</td><td>SAN.</td><td>SANITARY</td></tr> <tr> <td>FD</td><td>FLOOR DRAIN</td><td>SS</td><td>SERVICE SINK</td></tr> <tr> <td>GWH</td><td>ELEC. WATER HEATER (STORAGE TYPE)</td><td>TPL</td><td>TRAP PRIMER LINE</td></tr> <tr> <td>HB</td><td>HOSE BIBB</td><td>U.N.O.</td><td>UNLESS NOTED OTHERWISE</td></tr> <tr> <td>H.C.</td><td>HANDICAPPED</td><td>UR</td><td>URINAL</td></tr> <tr> <td>H/C</td><td>HOT/COLD</td><td>VTR</td><td>VENT THRU ROOF</td></tr> <tr> <td>HW</td><td>HOT WATER</td><td>WC</td><td>WATER CLOSET</td></tr> <tr> <td>HWR</td><td>HOT WATER RECIRCULATION</td><td>WCH</td><td>WATER CLOSET HANDICAPPED</td></tr> <tr> <td>HWRP</td><td>HOT WATER RECIRCULATION PUMP</td><td>WCO</td><td>WALL CLEAN OUT</td></tr> <tr> <td>I.E. x-x"</td><td>INVERT ELEVATION DESIGNATION</td><td>WH</td><td>WALL HYDRANT</td></tr> <tr> <td>IWH</td><td>INSTANTANEOUS WATER HEATER</td><td></td><td></td></tr> <tr> <td>LAV</td><td>LAVATORY</td><td></td><td></td></tr> <tr> <td>LAVH</td><td>LAVATORY HANDICAPPED</td><td></td><td></td></tr> </table>		A.C.	AIR CHAMBER	MSB	MOP SERVICE BASIN	A.D.A.	AMERICANS WITH DISABILITIES ACT	PDI	PLUMBING DRAINAGE INSTITUTE	A.F.F.	ABOVE FINISHED FLOOR	PRESS.	PRESSURE	CW	COLD WATER	PSI	POUNDS PER SQUARE INCH	DF	DRINKING FOUNTAIN	RD	ROOF DRAIN	DOM.	DOMESTIC	SK	SINK	EWC	ELEC. WATER COOLER	S.A.	SHOCK ABSORBER	FCO	FLOOR CLEAN OUT	SAN.	SANITARY	FD	FLOOR DRAIN	SS	SERVICE SINK	GWH	ELEC. WATER HEATER (STORAGE TYPE)	TPL	TRAP PRIMER LINE	HB	HOSE BIBB	U.N.O.	UNLESS NOTED OTHERWISE	H.C.	HANDICAPPED	UR	URINAL	H/C	HOT/COLD	VTR	VENT THRU ROOF	HW	HOT WATER	WC	WATER CLOSET	HWR	HOT WATER RECIRCULATION	WCH	WATER CLOSET HANDICAPPED	HWRP	HOT WATER RECIRCULATION PUMP	WCO	WALL CLEAN OUT	I.E. x-x"	INVERT ELEVATION DESIGNATION	WH	WALL HYDRANT	IWH	INSTANTANEOUS WATER HEATER			LAV	LAVATORY			LAVH	LAVATORY HANDICAPPED			<h3>PIPING DESIGNATIONS</h3> <table> <tr> <td>----</td><td>SANITARY, WASTE OR LEADER (ABOVE FLOOR)</td></tr> <tr> <td>-----</td><td>VENT LINE</td></tr> <tr> <td>-----</td><td>COLD WATER (CW)</td></tr> <tr> <td>-----</td><td>HOT WATER (HW)</td></tr> </table>	----	SANITARY, WASTE OR LEADER (ABOVE FLOOR)	-----	VENT LINE	-----	COLD WATER (CW)	-----	HOT WATER (HW)
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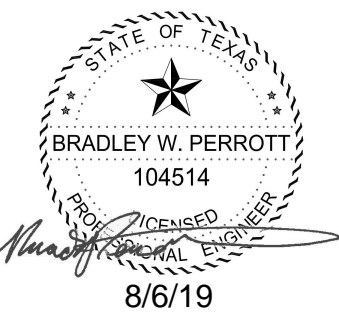
PIPING SERVICE SCHEDULE	
SERVICE	MATERIAL
1. ABOVE GROUND SOIL, WASTE, VENT AND DOWNSPOUTS, 2" DIAMETER AND LARGER	HUBBED CAST IRON SOIL PIPE OR SCHEDULE 40 PVC, TYPE DWV
2. BELOW GROUND SOIL, WASTE, VENT AND DOWNSPOUTS, 2" DIAMETER AND LARGER	HUBBED CAST IRON SOIL PIPE OR SCHEDULE 40 PVC, TYPE DWV
3. ABOVE GROUND SOIL, WASTE, VENT AND DOWNSPOUTS, 1-1/2" DIAMETER AND SMALLER	SCHEDULE 40 PVC, TYPE DWV
4. ABOVE GROUND DOMESTIC WATER	COPPER TUBING, TYPE L OR SCHEDULE 80 CPVC
5. BELOW GROUND DOMESTIC WATER	COPPER TUBING, TYPE L
6. ABOVE GROUND SANITARY VENTS	SCHEDULE 40 PVC, TYPE DWV
7. EXPOSED PIPING CONNECTIONS FOR PLUMBING FIXTURES	BRASS PIPE, SCHEDULE 40, CHROMIUM PLATED

WATER HAMMER ARRESTOR SCHEDULE						
MARK	A	B	C	D	E	F
MAXIMUM FIXTURE UNITS	11	32	60	113	154	330
MAXIMUM PRESSURE RATING	65 PSI					

NOTES:

1. WHEN WORKING WATER PRESSURE EXCEEDS 65 PSI, USE NEXT LARGEST SIZE.
2. MAXIMUM PIPING LENGTH COVERED BY ONE ARRESTOR SHALL BE 20 LINEAR FEET.
3. SIZING AND PLACEMENT SHALL BE IN ACCORDANCE WITH PDI STANDARD PDI-WH 201.
4. FIELD FABRICATED AIR CHAMBERS ARE NOT ACCEPTABLE AS SHOCK ABSORBERS.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY FITTINGS AS REQUIRED BY ALL APPLICABLE CODES AND GOVERNING AUTHORITIES.
2. CONTRACTOR SHALL VERIFY AND CORRECT AS REQUIRED TO MEET ALL CODES AND REGULATIONS ANY POSSIBLE DISCREPANCIES BETWEEN TYPE AND SIZE OF CONNECTION SPECIFIED IN PLUMBING FIXTURE SCHEDULE AND FIXTURES ACTUALLY INSTALLED ON THE SITE.
3. ALL SANITARY PIPING 3" OR SMALLER SHALL HAVE A 1/4" PER FOOT SLOPE AND 4" AND LARGER SHALL HAVE A 1/8" PER FOOT SLOPE UNLESS OTHERWISE NOTED.
4. VENT PIPING SHOWN ON FLOOR PLANS IS ONLY INDICATIVE EXCEPT FOR VTR LOCATIONS.
5. VALVES AND FITTINGS SHALL BE OF SAME SIZE OF LINE ON WHICH THEY ARE LOCATED, UNLESS OTHERWISE INDICATED ON DRAWINGS.
6. CONTRACTOR SHALL FIELD VERIFY ALL GIVEN MEASUREMENTS PRIOR TO LAYING AND CONNECTING ALL SANITARY AND WASTE PIPING AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
7. AIR CHAMBERS SHALL NOT BE USED.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING AND WEATHERPROOFING INTEGRITY OF ALL PIPING AND PENETRATIONS.
9. ALL WATER SUPPLY AND SANITARY LINES SHALL BE RUN AS CLOSE TO PLANS AS POSSIBLE WITH NO CHANGES IN SIZING.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SUPPORTING DEVICES FOR ALL FIXTURES INCLUDED IN CONTRACT OR HEREIN SPECIFIED OR OTHERWISE.
11. CHANGES IN THE DIRECTION OF SANITARY DRAIN PIPING SHALL NOT BE MADE WITH FITTINGS WHICH WILL CAUSE EXCESSIVE REDUCTION IN THE VELOCITY OF FLOW OR CREATE ANY OTHER ADVERSE EFFECT UNLESS PHYSICALLY IMPOSSIBLE (I.E. USE OF SANITARY TEE IN A HORIZONTAL CONNECTION, USE OF A DOUBLE SANITARY TEE IN A VERTICAL STACK, IN GENERAL, USE OF A SHORT-RADIUS FITTINGS FOR BRANCH TO HOUSE DRAIN OR STACK CONNECTION).
12. CONTRACTOR SHALL GIVE 24 HOURS NOTICE TO APPLICABLE UTILITY COMPANY PRIOR TO PERFORMING WORK INVOLVING UTILITIES.
13. ALL SANITARY AND WATER SUPPLY LINES SHALL BE MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION.
14. ALL COPPER PIPE SHALL BE INSTALLED SO AS TO NOT CONTACT CONCRETE SURFACES.
15. ALL FLOOR DRAINS SHALL BE PROVIDED WITH DEEP SEAL TRAPS AND TRAP PRIMERS, UNLESS NOTED OTHERWISE.
16. ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, OR IN CHASES EXCEPT AS SPECIFICALLY NOTED, OR IN MECHANICAL ROOMS.
17. PROVIDE ACCESS PANELS TO ALL VALVES WITHIN CHASES OR ABOVE NON-ACCESSIBLE CEILINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
18. INSTALL WATER HAMMER SHOCK ARRESTORS AT EACH FIXTURE OR BATTERY OF FIXTURES WHERE REQUIRED. ARRESTORS SHALL BE FACTORY FABRICATED. INSTALL ARRESTORS AND SIZE PER PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH-201. ACCEPTABLE MANUFACTURERS: ZURN, JOSAM, JAY R. SMITH.
19. METERING AND SITE UTILITY CONNECTIONS ARE EXISTING TO REMAIN. ALL SERVICES SHOWN ON THIS SET OF PLANS COMMENCE INSIDE OF THE BUILDING, UNLESS SHOWN OTHERWISE ON DRAWINGS. PLUMBING CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING SYSTEMS.
20. SEE ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS, DRAIN LOCATIONS, MOUNTING HEIGHTS, AND DIMENSIONS.
21. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING SEWERS TO WHICH NEW SEWER LINES ARE TO BE CONNECTED BEFORE INSTALLATION OF NEW SEWER PIPING.
22. CONTRACTOR SHALL INSTALL DIELECTRIC CONNECTION DEVICES AT CONNECTIONS OF DISSIMILAR METALS.

[illegible]

"The Junction Where Good Friends Meet"

Hanson No. 17L0017 1006		
Filename CITY OF KENEDY SPORTS COMPLEX		
Scale N.T.S.		
Date 8/6/19		
LAYOUT	BWP	8/6/19
DRAWN	BWP	8/6/19
REVIEWED	BWP	8/6/19



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CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
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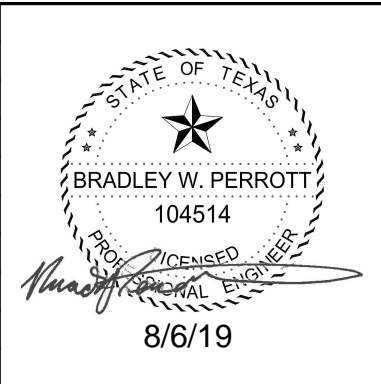
P-001

PLUMBING SPECIFICATIONS

<p>SECTION 220517 - SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING</p> <p>A. PVC Pipe Sleeves: ASTM D 1785, Schedule 40.</p> <p>B. Install sleeves for piping passing through penetrations in floors, partitions, roofs, and walls.</p> <p>C. Use sleeves for the following piping-penetration applications:</p> <ol style="list-style-type: none">Interior Partitions: Piping Smaller Than NPS 6: PVC pipe sleeves. <p>END OF SECTION 220517</p> <p>SECTION 220523.12 - BALL VALVES FOR PLUMBING PIPING</p> <p>A. Valve Pressure-Temperature Ratings: Not less than indicated and as required for system pressures and temperatures.</p> <p>B. Valve Sizes: Same as upstream piping unless otherwise indicated.</p> <p>C. Valve Actuator Types:</p> <ol style="list-style-type: none">Handlever: For quarter-turn valves smaller than NPS 4. <p>D. Valves in Insulated Piping:</p> <ol style="list-style-type: none">Include 2-inch stem extensions.Extended operating handles of nonthermal-conductive material and protective sleeves that allow operation of valves without breaking vapor seals or disturbing insulation.Memory stops that are fully adjustable after insulation is applied. <p>E. Brass Ball Valves, Two-Piece with Regular Port and Brass Trim:</p> <ol style="list-style-type: none">Description; Standard: MSS SP-110 CWP Rating: 600 psig; Body Design: Two piece; Body Material: Forged brass; Ends: Threaded and soldered; Seats: PTFE; Stem: Stainless steel; Ball: Chrome-plated brass; Port: Regular. <p>F. Install valves with unions or flanges at each piece of equipment arranged to allow service, maintenance, and equipment removal without system shutdown.</p> <p>G. Locate valves for easy access and provide separate support where necessary.</p> <p>H. Install valves in horizontal piping with stem at or above center of pipe.</p> <p>I. Install valves in position to allow full stem movement.</p> <p>J. For Copper Tubing, NPS 2 and Smaller: Threaded ends except where solder-joint valve-end option is indicated in valve schedules below.</p> <p>END OF SECTION 220523.12</p> <p>SECTION 220529 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT</p> <p>1.1 METAL PIPE HANGERS AND SUPPORTS</p> <p>A. Carbon-Steel Pipe Hangers and Supports:</p> <ol style="list-style-type: none">Description: MSS SP-58, Types 1 through 58, factory-fabricated components.Galvanized Metallic Coatings: Pregalvanized or hot dipped.Nonmetallic Coatings: Plastic coating, jacket, or liner.Padded Hangers: Hanger with fiberglass or other pipe insulation pad or cushion to support bearing surface of piping.Hanger Rods: Continuous-thread rod, nuts, and washer made of carbon steel. <p>B. Copper Pipe Hangers:</p> <ol style="list-style-type: none">Description: MSS SP-58, Types 1 through 58, copper-coated-steel, factory-fabricated components.Hanger Rods: Continuous-thread rod, nuts, and washer made of stainless steel. <p>2.1 HANGER AND SUPPORT INSTALLATION</p> <p>A. Metal Pipe-Hanger Installation: Comply with MSS SP-69 and MSS SP-89. Install hangers, supports, clamps, and attachments as required to properly support piping from the building structure.</p> <p>B. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.</p> <p>C. Load Distribution: Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.</p> <p>D. Pipe Slopes: Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.</p> <p>E. Attach clamps and spacers to piping.</p> <ol style="list-style-type: none">Piping Operating above Ambient Air Temperature: Clamp may project through insulation.Do not exceed pipe stress limits allowed by ASME B31.9 for building services piping. <p>F. Install MSS SP-58, Type 39, protection saddles if insulation without vapor barrier is indicated. Fill interior voids with insulation that matches adjoining insulation.</p> <p>END OF SECTION 220529</p> <p>SECTION 220553 - IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT</p> <p>1.1 PIPE LABELS</p> <p>A. General Requirements for Manufactured Pipe Labels: Preprinted, color-coded, with lettering indicating service, and showing flow direction.</p> <p>B. Pretensioned Pipe Labels: Precoiled, semirigid plastic formed to partially cover circumference of pipe and to attach to pipe without fasteners or adhesive.</p> <p>C. Pipe Label Contents: Include identification of piping service using same designations or abbreviations as used on Drawings; also include pipe size and an arrow indicating flow direction.</p> <ol style="list-style-type: none">Flow-Direction Arrows: Integral with piping-system service lettering to accommodate both directions or as separate unit on each pipe label to indicate flow direction.Lettering Size: Size letters according to ASME A13.1 for piping.	<p>2.1 PIPE LABEL INSTALLATION</p> <p>A. Pipe Label Locations: Locate pipe labels where piping is exposed or above accessible ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums.</p> <p>B. Pipe Label Color Schedule:</p> <ol style="list-style-type: none">Domestic Water Piping: Background: Safety green; Letter Colors: White.Sanitary Waste Piping: Background Color: Safety black; Letter Color: White. <p>END OF SECTION 220553</p> <p>SECTION 220719 - PLUMBING PIPING INSULATION</p> <p>1.1 QUALITY ASSURANCE</p> <p>A. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.</p> <p>2.1 INSULATION MATERIALS</p> <p>A. Products shall not contain asbestos, lead, mercury, or mercury compounds.</p> <p>B. Mineral-Fiber, Preformed Pipe Insulation: Type I, 850 Deg F Materials: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 547, Type I, Grade A, with factory-applied ASJ. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.</p> <p>2.2 ADHESIVES</p> <p>A. Mineral-Fiber Adhesive: Comply with MIL-A-3316C, Class 2, Grade A.</p> <p>B. ASJ Adhesive, and FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.</p> <p>2.3 FACTORY-APPLIED JACKETS</p> <p>A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following: ASJ: White, kraft-paper, fiberglass-reinforced scrim with aluminum-foil backing; complying with ASTM C 1136, Type I.</p> <p>2.4 TAPES</p> <p>A. ASJ Tape: White vapor-retarder tape matching factory-applied jacket with acrylic adhesive, complying with ASTM C 1136. Width: 3 inches. Thickness: 11.5 mils. Adhesion: 90 ounces force/inch in width; Elongation: 2 percent; Tensile Strength: 40 lbf/inch in width; ASJ Tape Disks and Squares: Precut disks or squares of ASJ tape.</p> <p>3.1 PENETRATIONS</p> <p>A. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.</p> <p>3.2 INSTALLATION OF MINERAL-FIBER PREFORMED PIPE INSULATION</p> <p>A. Insulation Installation on Straight Pipes and Tubes:</p> <ol style="list-style-type: none">Secure each layer of preformed pipe insulation to pipe with wire or bands and tighten bands without deforming insulation materials.Where vapor barriers are indicated, seal longitudinal seams, end joints, and protrusions with vapor-barrier mastic and joint sealant.For insulation with factory-applied jackets on above-ambient surfaces, secure laps with outward clinched staples at 6 inches o.c.For insulation with factory-applied jackets on below-ambient surfaces, do not staple longitudinal tabs. Instead, secure tabs with additional adhesive as recommended by insulation material manufacturer and seal with vapor-barrier mastic and flashing sealant. <p>END OF SECTION 220719</p> <p>SECTION 221116 - DOMESTIC WATER PIPING</p> <p>1.1 COPPER TUBE AND FITTINGS</p> <p>A. Hard Copper Tube: water tube, drawn temper.</p> <p>B. Wrought-Copper, Solder-Joint Fittings: ASME B16.22, wrought-copper pressure fittings.</p> <p>C. Copper Unions:</p> <ol style="list-style-type: none">MSS SP-123.Cast-copper-alloy, hexagonal-stock body.Ball-and-socket, metal-to-metal seating surfaces.Solder-joint or threaded ends. <p>D. Copper Pressure-Seal-Joint Fittings:</p> <ol style="list-style-type: none">Fittings for NPS 2 and Smaller: Wrought-copper fitting with EPDM-rubber, O-ring seal in each end.Fittings for NPS 2-1/2 to NPS 4: Cast-bronze or wrought-copper fitting with EPDM-rubber, O-ring seal in each end. <p>1.2 CPVC PIPING</p> <p>A. CPVC Pipe: ASTM F 441/F 441M, Schedule 80.</p> <ol style="list-style-type: none">CPVC Socket Fittings: ASTM F 438 for Schedule 40 and ASTM F 439 for Schedule 80.CPVC Threaded Fittings: ASTM F 437, Schedule 80. <p>B. CPVC Piping System: ASTM D 2846/D 2846M, SDR 11, pipe and socket fittings.</p> <p>C. CPVC Tubing System: ASTM D 2846/D 2846M, SDR 11, tube and socket fittings.</p>	<p>2.1 PIPING INSTALLATION</p> <p>A. Drawing plans, schematics, and diagrams indicate general location and arrangement of domestic water piping. Indicated locations and arrangements are used to size pipe and calculate friction loss, expansion, and other design considerations. Install piping as indicated unless deviations to layout are approved on coordination drawings.</p> <p>B. Install domestic water piping level with 0.25 percent slope downward toward drain and plumb.</p> <p>C. Install piping concealed from view and protected from physical contact by building occupants unless otherwise indicated and except in equipment rooms and service areas.</p> <p>D. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal, and coordinate with other services occupying that space.</p> <p>E. Install piping to permit valve servicing.</p> <p>F. Install nipples, unions, special fittings, and valves with pressure ratings the same as or higher than the system pressure rating used in applications below unless otherwise indicated.</p> <p>G. Install piping free of sags and bends.</p> <p>H. Install fittings for changes in direction and branch connections.</p> <p>I. Install unions in copper tubing at final connection to each piece of equipment, machine, and specialty.</p> <p>2.2 JOINT CONSTRUCTION</p> <p>A. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.</p> <p>B. Remove scale, slag, dirt, and debris from inside and outside of pipes, tubes, and fittings before assembly.</p> <p>C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Apply appropriate tape or thread compound to external pipe threads. Do not use pipe or pipe fittings with threads that are corroded or damaged.</p> <p>D. Soldered Joints for Copper Tubing: Apply ASTM B 813, water-flushable flux to end of tube. Join copper tube and fittings according to ASTM B 828 or CDA's "Copper Tube Handbook."</p> <p>E. Pressure-Sealed Joints for Copper Tubing: Join copper tube and pressure-seal fittings with tools recommended by fitting manufacturer.</p> <p>F. Joint Construction for Solvent-Cemented Plastic Piping: Clean and dry joining surfaces. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements. Apply primer. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.</p> <p>2.3 HANGER AND SUPPORT INSTALLATION</p> <p>A. Comply with requirements for pipe hanger, support products, and installation in Section 220529 "Hangers and Supports for Plumbing Piping and Equipment."</p> <p>B. Support vertical piping and tubing at base and at each floor.</p> <p>C. Rod diameter may be reduced one size for double-rod hangers, to a minimum of 3/8 inch.</p> <p>D. Install hangers for copper tubing with the following maximum horizontal spacing and minimum rod diameters: NPS 3/4 and Smaller: 60 inches with 3/8-inch rod; NPS 1 and NPS 1-1/4: 72 inches with 3/8-inch rod; NPS 1-1/2 and NPS 2: 96 inches with 3/8-inch rod.</p> <p>E. Install supports for vertical copper tubing every 10 feet.</p> <p>F. Install vinyl-coated hangers for CPVC piping with the following maximum horizontal spacing and minimum rod diameters: NPS 1 and Smaller: 36 inches with 3/8-inch rod; NPS 1-1/4 to NPS 2: 48 inches with 3/8-inch rod.</p> <p>G. Install supports for vertical CPVC piping every 60 inches for NPS 1 and smaller, and every 72 inches for NPS 1-1/4 and larger.</p> <p>H. Support piping and tubing not listed in this article according to MSS SP-58 and manufacturer's written instructions.</p> <p>2.4 IDENTIFICATION</p> <p>A. Identify system components. Comply with requirements for identification materials and installation in Section 220553 "Identification for Plumbing Piping and Equipment."</p> <p>B. Label pressure piping with system operating pressure.</p> <p>2.5 CLEANING</p> <p>A. Purge new piping and parts of existing piping that have been altered, extended, or repaired before using.</p> <p>B. Use purging and disinfecting procedures prescribed by authorities having jurisdiction; if methods are not prescribed, use procedures described in either AWWA C651 or AWWA C652 or follow procedures described below:</p> <ol style="list-style-type: none">Flush piping system with clean, potable water until dirty water does not appear at outlets.Fill and isolate system according to either of the following:<ul style="list-style-type: none">Fill system or part thereof with water/chlorine solution with at least 50 ppm of chlorine. Isolate with valves and allow to stand for 24 hours.Fill system or part thereof with water/chlorine solution with at least 200 ppm of chlorine. Isolate and allow to stand for three hours.Flush system with clean, potable water until no chlorine is in water coming from system after the standing time.Repeat procedures if biological examination shows contamination.Submit water samples in sterile bottles to authorities having jurisdiction. <p>C. Prepare and submit reports of purging and disinfecting activities. Include copies of water-sample approvals from authorities having jurisdiction.</p> <p>D. Clean interior of domestic water piping system. Remove dirt and debris as work progresses.</p>	<p>2.6 PIPING SCHEDULE</p> <p>A. Transition and special fittings with pressure ratings at least equal to piping rating may be used in applications below unless otherwise indicated.</p> <p>B. Fitting Option: Extruded-tee connections and brazed joints may be used on aboveground copper tubing.</p> <p>C. Aboveground and belowground domestic water piping, NPS 2 and smaller, shall be one of the following:</p> <ol style="list-style-type: none">Hard copper tube, ASTM B 88, Type L; wrought-copper, solder-joint fittings; and soldered joints.Hard copper tube, ASTM B 88, Type L; copper pressure-seal-joint fittings; and pressure-sealed joints.CPVC, Schedule 80; socket fittings; and solvent-cemented joints.CPVC, Schedule 80 pipe; CPVC, Schedule 80 threaded fittings; and threaded joints.CPVC Tubing System: CPVC tube; CPVC socket fittings; and solvent-cemented joints. NPS 1-1/2 and NPS 2 CPVC pipe with CPVC socket fittings may be used instead of tubing. <p>END OF SECTION 221116</p> <p>SECTION 221316 - SANITARY WASTE AND VENT PIPING</p> <p>1.1 HUB-AND-SPIGOT, CAST-IRON SOIL PIPE AND FITTINGS</p> <p>A. Pipe and Fittings: ASTM A 74, Service class. Gaskets: ASTM C 564, rubber. Calking Materials: ASTM B 29, pure lead and oakum or hemp fiber.</p> <p>1.2 PVC PIPE AND FITTINGS</p> <p>A. Comply with NSF 14, "Plastics Piping Systems Components and Related Materials," for plastic piping components. Include marking with "NSF-dw" for plastic drain, waste, and vent piping and "NSF-sewer" for plastic sewer piping.</p> <p>B. Solid-Wall PVC Pipe: ASTM D 2665, drain, waste, and vent.</p> <p>C. PVC Socket Fittings: ASTM D 2665, made to ASTM D 3311, drain, waste, and vent patterns and to fit Schedule 40 pipe.</p> <p>D. Adhesive Primer: ASTM F 656.</p> <p>E. Solvent Cement: ASTM D 2564.</p> <p>2.1 PIPING INSTALLATION</p> <p>A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems.</p> <ol style="list-style-type: none">Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations.Install piping as indicated unless deviations to layout are approved on coordination drawings. <p>B. Install piping in concealed locations unless otherwise indicated and except in equipment rooms and service areas.</p> <p>C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.</p> <p>D. Install piping above accessible ceilings to allow sufficient space for ceiling panel removal.</p> <p>F. Install piping at indicated slopes.</p> <p>G. Install piping free of sags and bends.</p> <p>H. Install fittings for changes in direction and branch connections.</p> <p>I. Install piping to allow application of insulation.</p> <p>J. Make changes in direction for soil and waste drainage and vent piping using appropriate branches, bends, and long-sweep bends.</p> <ol style="list-style-type: none">Sanitary tees and short-sweep 1/4 bends may be used on vertical stacks if change in direction of flow is from horizontal to vertical.Use long-turn, double Y-branch and 1/8-bend fittings if two fixtures are installed back to back or side by side with common drain pipe.<ol style="list-style-type: none">Straight tees, elbows, and crosses may be used on vent lines.Do not change direction of flow more than 90 degrees.Use proper size of standard increasers and reducers if pipes of different sizes are connected.<ol style="list-style-type: none">Reducing size of waste piping in direction of flow is prohibited. <p>K. Install soil and waste and vent piping at the following minimum slopes unless otherwise indicated:</p> <ol style="list-style-type: none">Building Sanitary Waste: 2 percent downward in direction of flow for piping NPS 3 and smaller; 1/8" per foot downward in direction of flow for piping NPS 4 and larger.Vent Piping: 1 percent down toward vertical fixture vent or toward vent stack. <p>L. Install cast-iron soil piping according to CISPI's "Cast Iron Soil Pipe and Fittings Handbook," Chapter IV, "Installation of Cast Iron Soil Pipe and Fittings."</p> <p>M. Install aboveground PVC piping according to ASTM D 2665.</p> <p>N. Plumbing Specialties:</p> <ol style="list-style-type: none">Install cleanouts at grade and extend to where building sanitary drains connect to building sanitary sewers in sanitary waste gravity-flow piping.<ol style="list-style-type: none">Comply with requirements for cleanouts specified in Section 221319 "Sanitary Waste Piping Specialties." <p>O. Do not enclose, cover, or put piping into operation until it is inspected and approved by authorities having jurisdiction.</p> <p>2.2 JOINT CONSTRUCTION</p> <p>A. Join hub-and-spigot, cast-iron soil piping with gasket joints according to CISPI's "Cast Iron Soil Pipe and Fittings Handbook" for compression joints.</p> <p>B. Grooved Joints: Cut groove ends of pipe according to AWWA C606. Lubricate and install gasket over ends of pipes or pipe and fitting. Install coupling housing sections, over gasket, with keys seated in piping grooves. Install and tighten housing bolts.</p> <p>C. Plastic, Nonpressure-Piping, Solvent-Cement Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:</p> <ol style="list-style-type: none">Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.ABS Piping: Join according to ASTM D 2235 and ASTM D 2661 appendices.PVC Piping: Join according to ASTM D 2855 and ASTM D 2665 appendices.	<p>2.3 HANGER AND SUPPORT INSTALLATION</p> <p>A. Comply with requirements for pipe hanger and support devices and installation specified in Section 220529 "Hangers and Supports for Plumbing Piping and Equipment."</p> <ol style="list-style-type: none">Install carbon-steel pipe hangers for horizontal piping in noncorrosive environments.Install carbon-steel pipe support clamps for vertical piping in noncorrosive environments.Vertical Piping: MSS Type 8 or Type 42, clamps.Install individual, straight, horizontal piping runs:<ol style="list-style-type: none">100 Feet and Less: MSS Type 1, adjustable, steel clevis hangers. <p>B. Support horizontal piping and tubing within 12 inches of each fitting and coupling.</p> <p>C. Support vertical piping and tubing at base and at each floor.</p> <p>D. Rod diameter may be reduced one size for double-rod hangers, with 3/8-inch minimum rods.</p> <p>E. Install hangers for cast-iron soil piping with the following maximum horizontal spacing and minimum rod diameters: NPS 1-1/2 and NPS 2: 60 inches with 3/8-inch rod; NPS 3: 60 inches with 1/2-inch rod; NPS 4 and NPS 5: 60 inches with 5/8-inch rod.</p> <p>F. Install supports for vertical cast-iron soil piping every 15 feet.</p> <p>G. Install hangers for PVC piping with the following maximum horizontal spacing and minimum rod diameters: NPS 1-1/2 and NPS 2: 48 inches with 3/8-inch rod; NPS 3: 48 inches with 1/2-inch rod; NPS 4 and NPS 5: 48 inches with 5/8-inch rod.</p> <p>H. Install supports for vertical PVC piping every 48 inches.</p> <p>2.4 CONNECTIONS</p> <p>A. Connect waste and vent piping to the following:</p> <ol style="list-style-type: none">Plumbing Fixtures: Connect waste piping in sizes indicated, but not smaller than required by plumbing code.Plumbing Fixtures and Equipment: Connect atmospheric vent piping in sizes indicated, but not smaller than required by authorities having jurisdiction.Install test tees (wall cleanouts) in conductors near floor and floor cleanouts with cover flush with floor. <p>B. Where installing piping adjacent to equipment, allow space for service and maintenance of equipment.</p> <p>2.5 IDENTIFICATION</p> <p>A. Identify exposed sanitary waste and vent piping. Comply with requirements for identification specified in Section 220553 "Identification for Plumbing Piping and Equipment."</p> <p>2.6 CLEANING AND PROTECTION</p> <p>A. Clean interior of piping. Remove dirt and debris as work progresses.</p> <p>B. Protect sanitary waste and vent piping during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.</p> <p>C. Place plugs in ends of uncompleted piping at end of day and when work stops.</p> <p>D. Exposed PVC Piping: Protect plumbing vents exposed to sunlight with two coats of water-based latex paint.</p> <p>E. Repair damage to adjacent materials caused by waste and vent piping installation.</p> <p>2.7 PIPING SCHEDULE</p> <p>A. Aboveground and belowground, soil and waste piping NPS 4 and smaller shall be any of the following:</p> <ol style="list-style-type: none">Service class, cast-iron soil pipe and fittings; gaskets; and gasketed joints.Solid-wall PVC pipe, PVC socket fittings, and solvent-cemented joints.Dissimilar Pipe-Material Couplings: Shielded, nonpressure transition couplings. <p>B. Aboveground, vent piping NPS 4 and smaller shall be the following:</p> <ol style="list-style-type: none">Solid-wall PVC pipe, PVC socket fittings, and solvent-cemented joints.Dissimilar Pipe-Material Couplings: Shielded, nonpressure transition couplings. <p>END OF SECTION 221316</p>
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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017 1006		
Filename CITY OF KENEDY SPORTS COMPLEX		
Scale N.T.S.		
Date 8/6/19		
LAYOUT	BWP	8/6/19
DRAWN	BWP	8/6/19
REVIEWED	BWP	8/6/19



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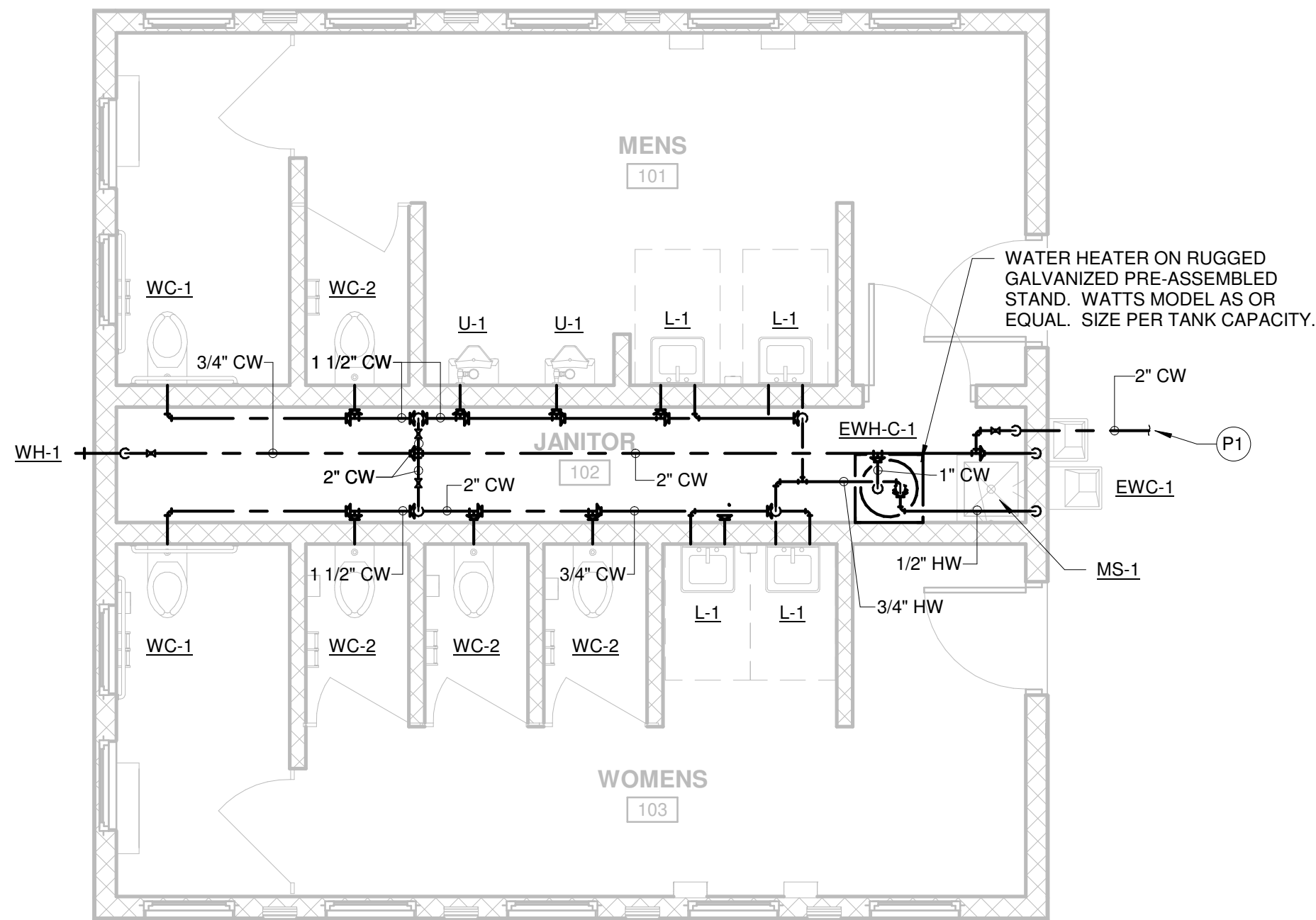
PLUMBING SPECIFICATIONS

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

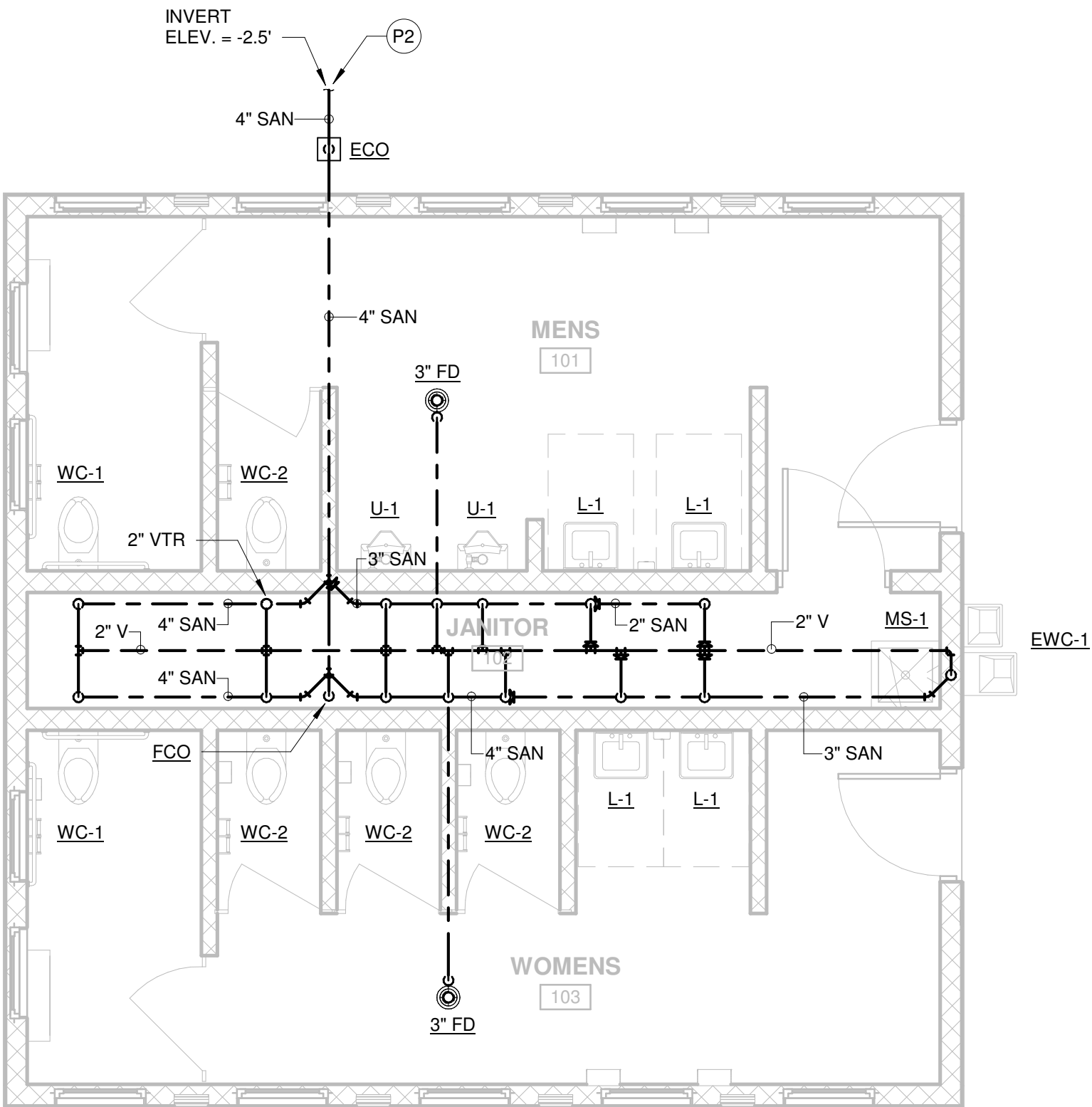
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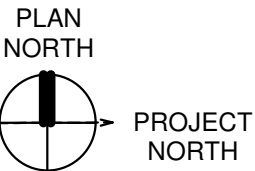
2 FIRST FLOOR - BLDG. C - DOMESTIC WATER
SCALE: 1/4" = 1'-0"



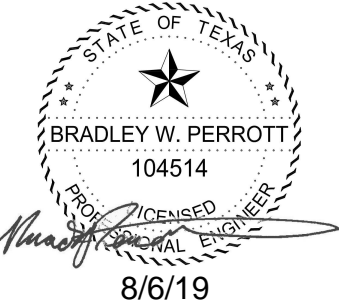
1 FIRST FLOOR - BLDG. C - SANITARY
SCALE: 1/4" = 1'-0"

PLUMBING KEYNOTES

- P1 CONTRACTOR TO MAKE CONNECTION TO DOMESTIC WATER SERVICE UNDER DIVISION 22. INVERT ELEVATION = -3.0'. REFERENCE CIVIL PLANS.
- P2 CONTRACTOR TO MAKE CONNECTION TO SITE SANITARY PIPING UNDER DIVISION 22. REFERENCE CIVIL PLANS.



NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L00171006		
Filename CITY OF KENEDY SPORTS COMPLEX		
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Date 07/12/19		
LAYOUT	BWP	07/12/19
DRAWN	BWP	07/12/19
REVIEWED	BWP	07/12/19



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PLUMBING FLOOR PLANS -
BLDG. C
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

P-103

NOT USED

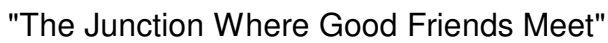
NOTES:

1. ALL PUMPS TO BE NON-OVERHEATING THROUGH THEIR ENTIRE RANGE OF OPERATION
2. SUMP PUMP MOTOR SHALL BE ZOELLER SIMPLEX OIL GUARD SYSTEM WITH REMOTE OIL PROBE. THE SIMPLEX AND ALARM PANEL, THE PUMP SHALL SHUT-OFF WHEN OIL SENSED ON THE PROBE. PROVIDE 6 FT. OIL TIGHT, 1/2" AND ZOELLER 10-1038 SIMPLEX CONTROL PANEL.

TAG	LOCATION	ELEC KW	FLOW REC. (GPH)	STORAGE (GAL)	VOLT/PH	MANUFACTURER	MODEL	NOTES
EWHA-1	SEE PLANS	3.0	21.0	30	240/1	LOCHINVAR	ESP030GD	1,2
EWHA-2	SEE PLANS	(2) 5.0	60.0	66	240/1	LOCHINVAR	ETD65FMD	1, 2, 3
EWHA-3	SEE PLANS	3.0	21.0	30	240/1	LOCHINVAR	ESP030GD	1,2
EWHA-C-1	SEE PLANS	3.0	21.0	30	240/1	LOCHINVAR	ESP030GD	1,2

SERVICE	MINIMUM R-VALUE	THICKNESS / MATERIAL	NOTES
POTABLE WATER PIPING			
DOMESTIC HOT WATER PIPING (100 F TO 210 F), CONDITIONED		2" THICK PRE-FORMED FIBERGLASS	WITH PVC JACKET
DOMESTIC COLD WATER PIPING, CONDITIONED		NOT REQUIRED	
DOMESTIC COLD WATER PIPING, EXTERIOR		1-1/2" THICK PRE-FORMED FIBERGLASS	WITH ALUMINUM JACKET FOR EXTERIOR PIPING AND PVC JACKETING FOR INTERIOR PIPING

MARK	FIXTURE DESCRIPTION	SOIL OR WASTE	MIN. VENT	TRAP	COLD WATER	HOT WATER	MOUNTING HEIGHT	MANUF. / MAKE	MODEL NO.	COLOR	FAUCET	VALVE	ACCESSORIES (PROVIDE & INSTALL)	REMARKS
WC-1	(ADA) WALL-MOUNTED WATER CLOSET	4"	2"	INTEGRAL	1"		16.5" TO RIM	AMERICAN STANDARD "AFWALL MILLENIUM"	2859.111	WHITE		AMERICAN STANDARD	INCLUDED EXPOSED MANUAL FLUSH VALVE OPEN-FRONT SEAT: 5901.100 TOILET SEAT	ELONGATED BOWL, 1.1 GPF FLUSH VALVE
WC-2	WALL-MOUNTED WATER CLOSET	4"	2"	INTEGRAL	1"		15" TO RIM	AMERICAN STANDARD "AFWALL MILLENIUM"	2859.111	WHITE		AMERICAN STANDARD	INCLUDED EXPOSED MANUAL FLUSH VALVE OPEN-FRONT SEAT: 5901.100 TOILET SEAT	ELONGATED BOWL, 1.1 GPF FLUSH VALVE
U-1	(ADA) STANDARD WALL-MOUNTED URINAL (W/CARRIER)	3"	2"	INTEGRAL	3/4"		17" TO RIM	AMERICAN STANDARD "WASHBROOK"	6501.511	WHITE		AMERICAN STANDARD	INCLUDED EXPOSED MANUAL FLUSH VALVE	VITREOUS CHINA, 3/4" TOP SPUD, 1.0 GPF FLUSH VALVE
L-1	ADA WALL-MOUNTED LAVATORY	2"	1-1/2"	2"	1/2"	1/2"	TOP RIM 34" MAX	AMERICAN STANDARD "LUCERNE"	0356.041	WHITE	AMERICAN STANDARD 1340.000		SUPPLY STOP: MCGUIRE 2167LK TRAP: MCGUIRE 8912 W/ CLEANOUT, WATTS LFMMV THERMOSTATIC M.V. SET TO 104-DEG	VITREOUS CHINA, D-SHAPED BOWL, SINGLE CENTER HOLE FOR EXPOSED BRACKET SUPPORT 0.5 GPM
WH-1	WALL HYDRANT				3/4"		12" A.F.F	WOODFORD	MB24BX	ROUGH BRASS		BALL VALVE	COMPOSITE BOX, STAINLESS STEEL DOOR, TEE KEE LOCK, METAL WHEEL FAUCET HANDLE	
MS-1	MOP SINK	3"	2"	3"	1/2"	1/2"		FIAT	TSBC3010	BY ARCH.	FIAT 830-AA		889-CC MOP HANGER 832-AA HOSE AND HOSE BRACKET MSG2424 STAINLESS STEEL WALL GUARDS	24x24 NEO-CORNER MOP SERVICE BASIN. 12" D CURBS WITH 6" DROP FRONT CURB. S.S. CAP ON DROP FRONT CURB.
FD	FLOOR DRAIN	3"	2"	3"				JOSAM	30000-S				ADJ. NICKEL BRONZE TOP	CAST-IRON BODY
EC	FLOOR SINK	4"	2"	4"				JOSAM	40044A				ADJ. NICKEL BRONZE TOP	CAST-IRON BODY
													12 X12" SQUARE, 8" DEEP SUMP	
EW-C-1	ADA WALL-MOUNTED ELECTRIC WATER COOLER	2"	1-1/2"	2"	1/2"		ADA ORIFICE HEIGHT 30" OR LESS	ELKAY VRCTRL8SC						SELF CONTAINED, BI-LEVEL, WALL HUNG, REFRIGERATED WATER COOLER, 120V 60 HZ, 7.8 GPH.



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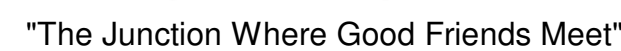
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1. PROVIDE ACCESS PANELS FOR SHUT-OFF VALVES. LOCATION AS APPROVED BY OWNER/ARCHITECT.
2. PROVIDE WATER HAMMER ARRESTORS AT MOST REMOTE FIXTURE ON EACH BRANCH LINE. ARRESTOR SHALL BE ACCESSIBLE FOR MAINTENANCE.



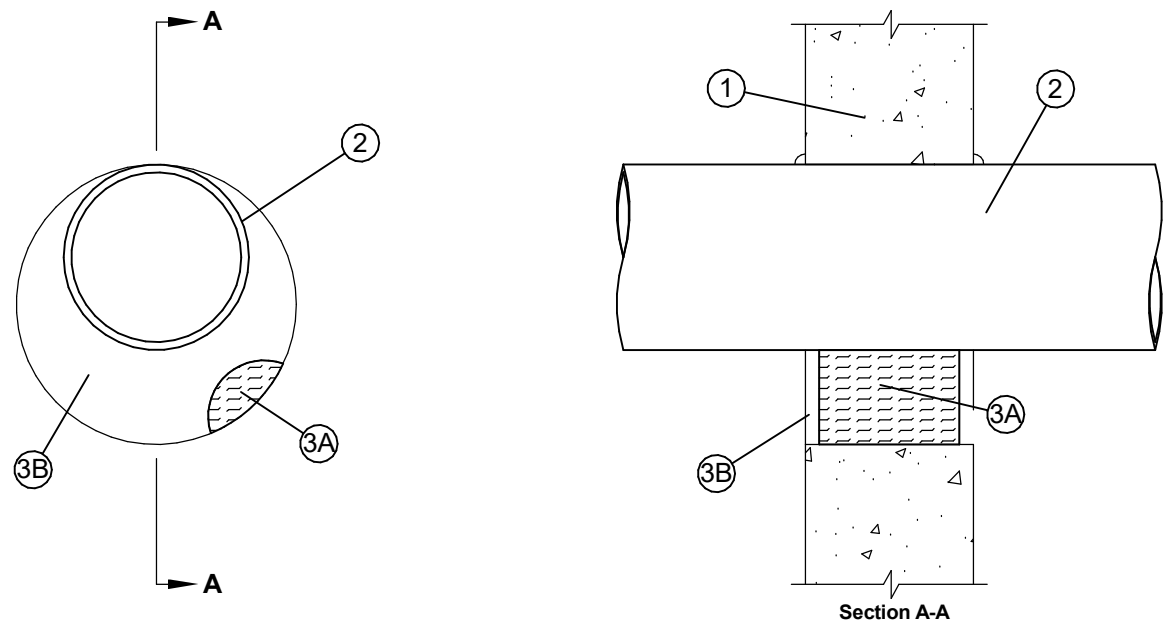
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PLUMBING RISERS - BLDG. C

P-603

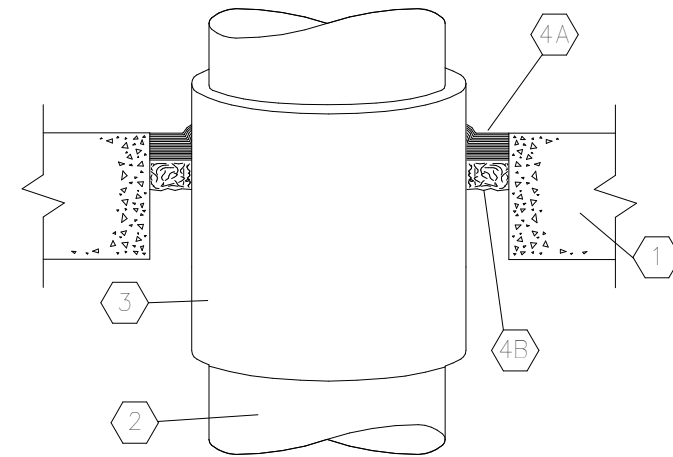
SPECSEAL
FIRESTOP
SEALANT
System No. C-AJ-1079
(Formerly System No. 437)
F-Rating - 3 and 4 Hr (See Item 3C)
T-Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft
L Rating At 400 F - Less Than 1 CFM/sq ft



METALLIC PIPE PENETRATIONS- CONCRETE/MASONRY FLOORS AND WALLS

1

SCALE: N.T.S.



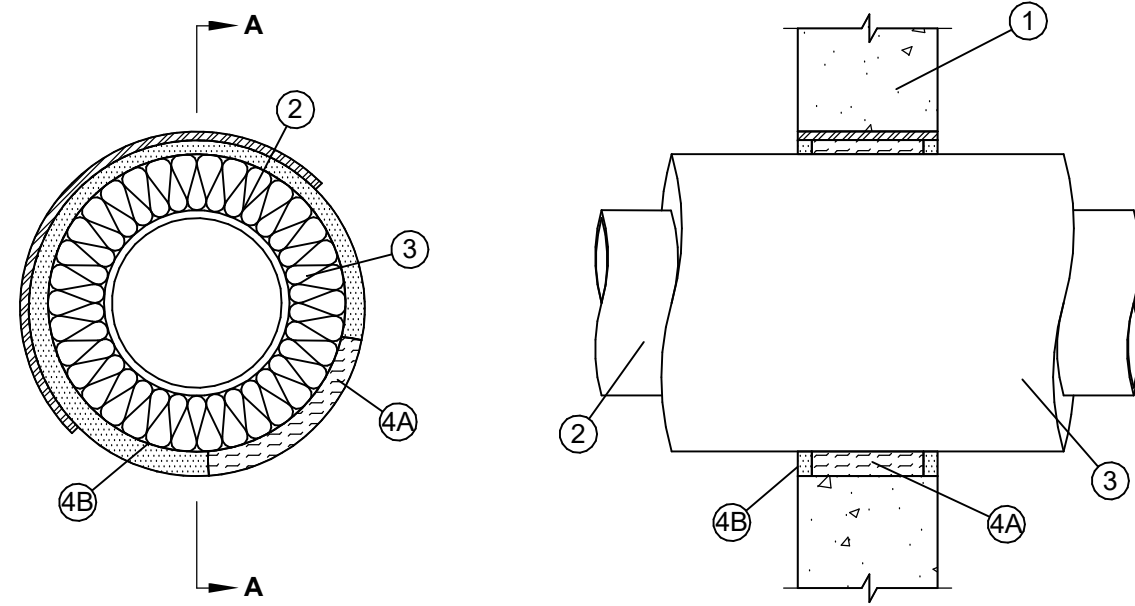
- 1 MIN. 2-1/2 INCH THICK CONCRETE FLOOR OR WALL ASSEMBLY. WALL MAY ALSO BE CONSTRUCTED OF UL CLASSIFIED CONCRETE BLOCKS.
- 2 4 INCH (OR SMALLER), TYPE L (OR HEAVIER) COPPER PIPE 12 INCH (OR SMALLER), SCH. 10 (OR HEAVIER) STEEL PIPE.
- 3 PIPE COVERING, 1 INCH OR 2 INCH GLASS FIBER INSULATION WITH ALL SERVICE JACKET.
- 4A 3M FIRE BARRIER CAULK OR MOLDABLE PUTTY, #CP-25 WB+ FOR WALLS, INSTALL SYMMETRICALLY ON BOTH SIDES.
- 4B MIN. 1 INCH THICK MINERAL WOOL OR BATT INSULATION.

F-RATING: 2-HOUR; UL SYSTEMS CAJ5001, CAJ5005, CAJ5060
CONSULT CURRENT UNDERWRITERS LABORATORIES "FIRE RESISTANCE DIRECTORY" FOR DETAILS

INSULATED PIPE THRU FIRE RATED WALL OR FLOOR

2

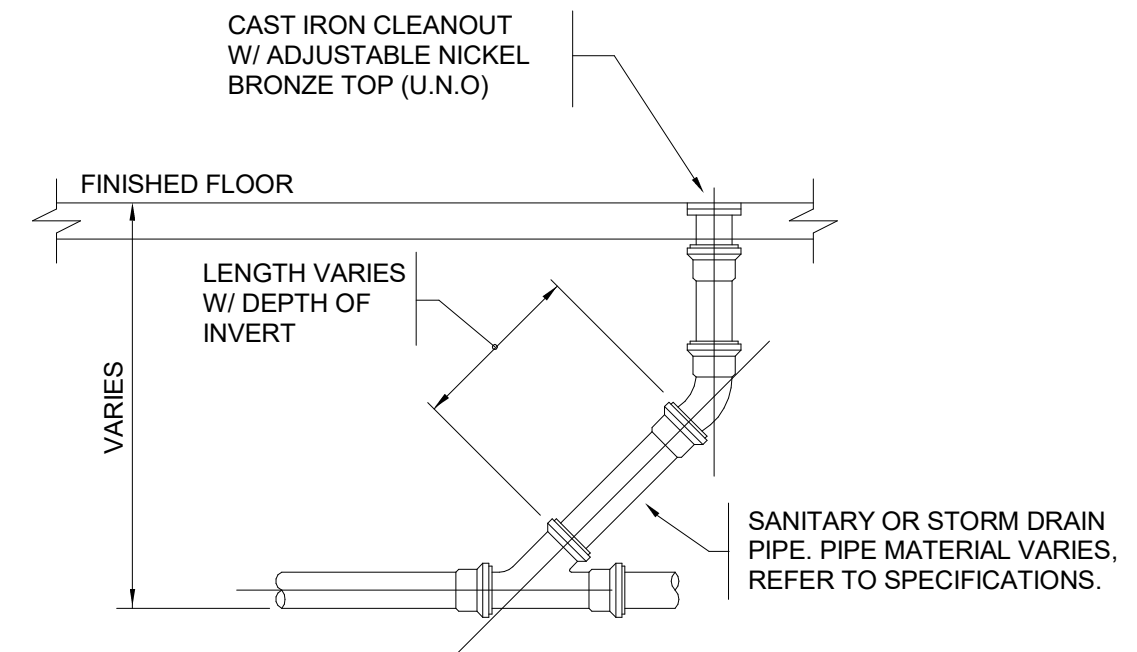
SCALE: N.T.S.



INSULATED METALLIC PIPE PENETRATIONS- CONCRETE/MASONRY FLOOR AND WALLS

3

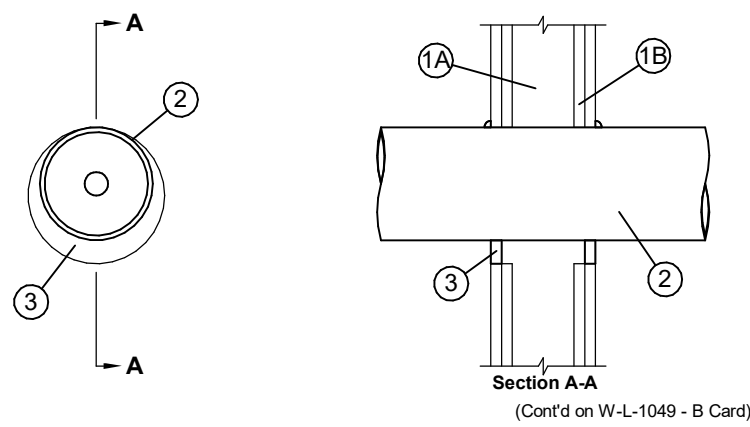
SCALE: N.T.S.



INLINE CLEANOUT DETAIL

4

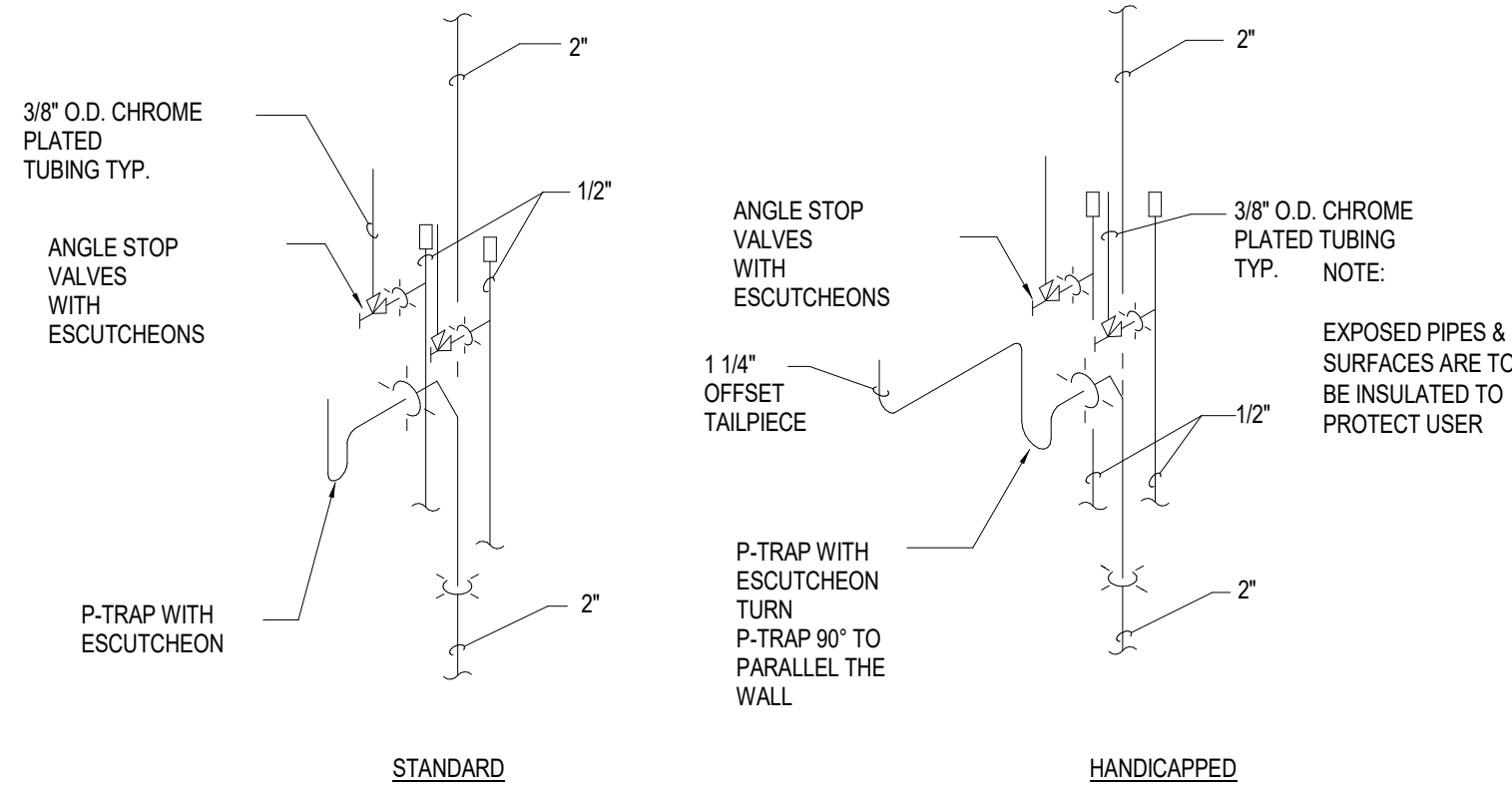
SCALE: N.T.S.



BARE METALLIC PIPE PENETRATIONS- RATED GYPSUM WALLBOARD ASSEMBLIES

5

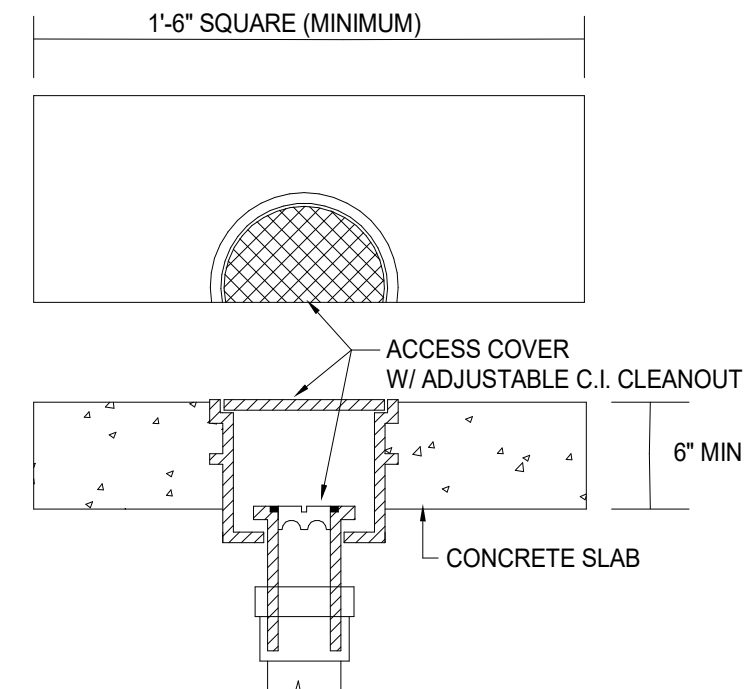
SCALE: N.T.S.



TYPICAL LAVATORY/SINK PIPING DETAIL

6

SCALE: N.T.S.



TYPICAL (GRADE/INTERIOR) CLEANOUT DETAIL

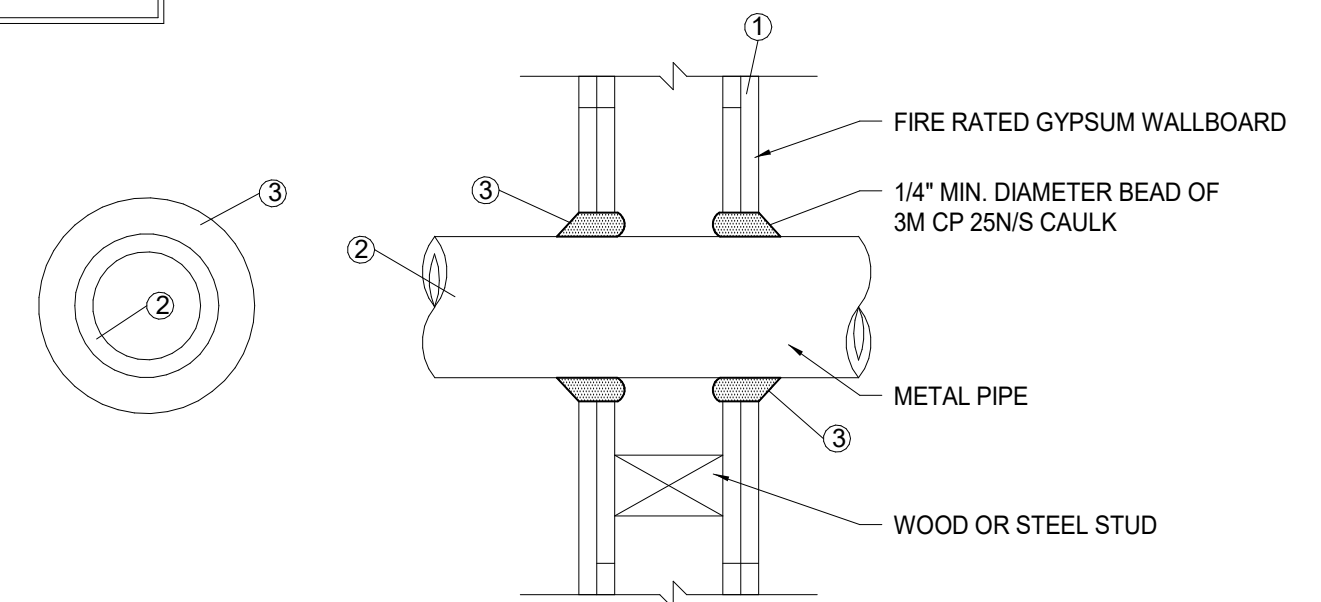
7

SCALE: N.T.S.



1 OR 2 HOUR FIRE RATED THROUGH PENETRATION FIRESTOP FOR SINGLE METAL PIPE THROUGH GYPSUM WALLS

F-rating = 1 and 2 Hr.
T-rating = 0 and 1/2 Hr.



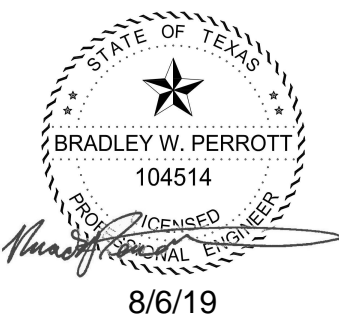
- 1 1 OR 2 - HOUR FIRE RATED GYPSUM WALLBOARD/STUD ASSEMBLY
- 2 A) STEEL PIPE - 12" DIAM. (OR SMALLER) SCH. 10 (OR HEAVIER) STEEL
B) COPPER PIPE - 4" DIAM. (OR SMALLER) TYPE "L" OR HEAVIER
- 3 CAULK FILL MATERIAL, COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE AND WALL. CAULK SYMMETRICALLY ON BOTH SIDES OF WALL

RATED WALL PIPING PENETRATION DETAIL

8

SCALE: N.T.S.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No.	17L0017 1006	
Filename	CITY OF KENEDY SPORTS COMPLEX	
Scale	N.T.S.	
Date	8/6/19	
LAYOUT	BWP	8/6/19
DRAWN	BWP	8/6/19
REVIEWED	BWP	8/6/19

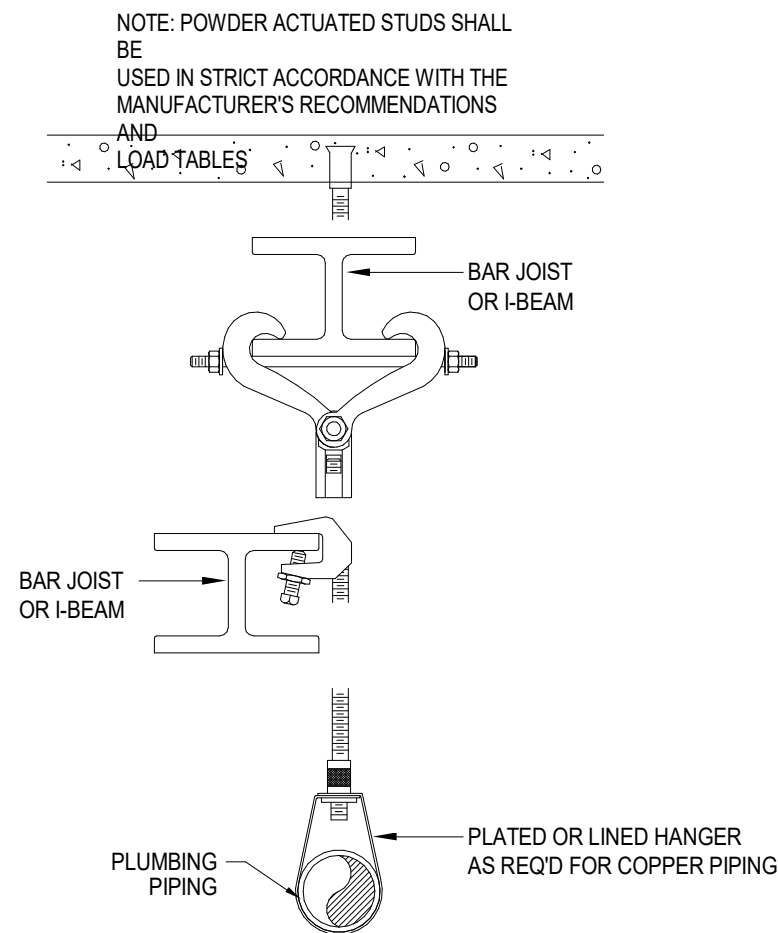


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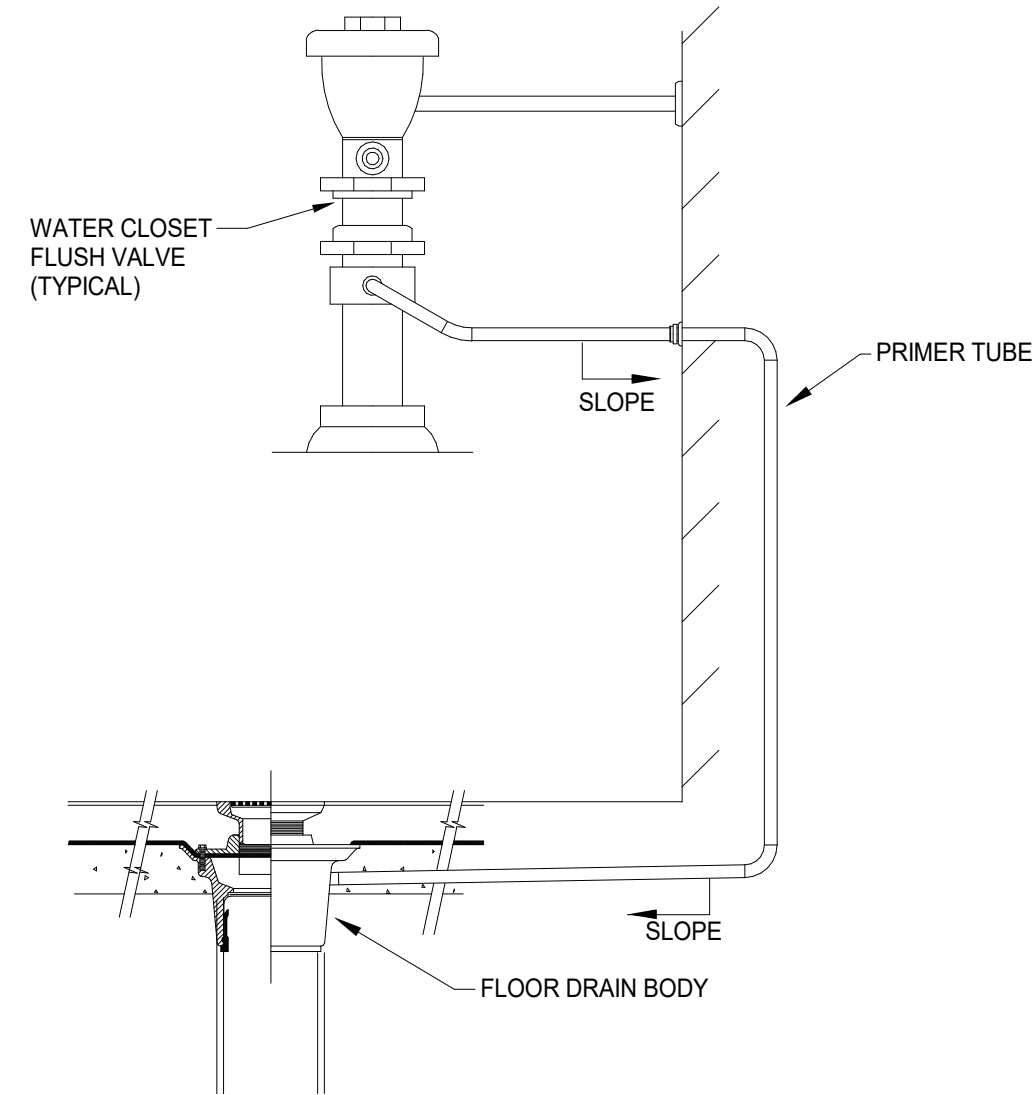
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CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

P-701

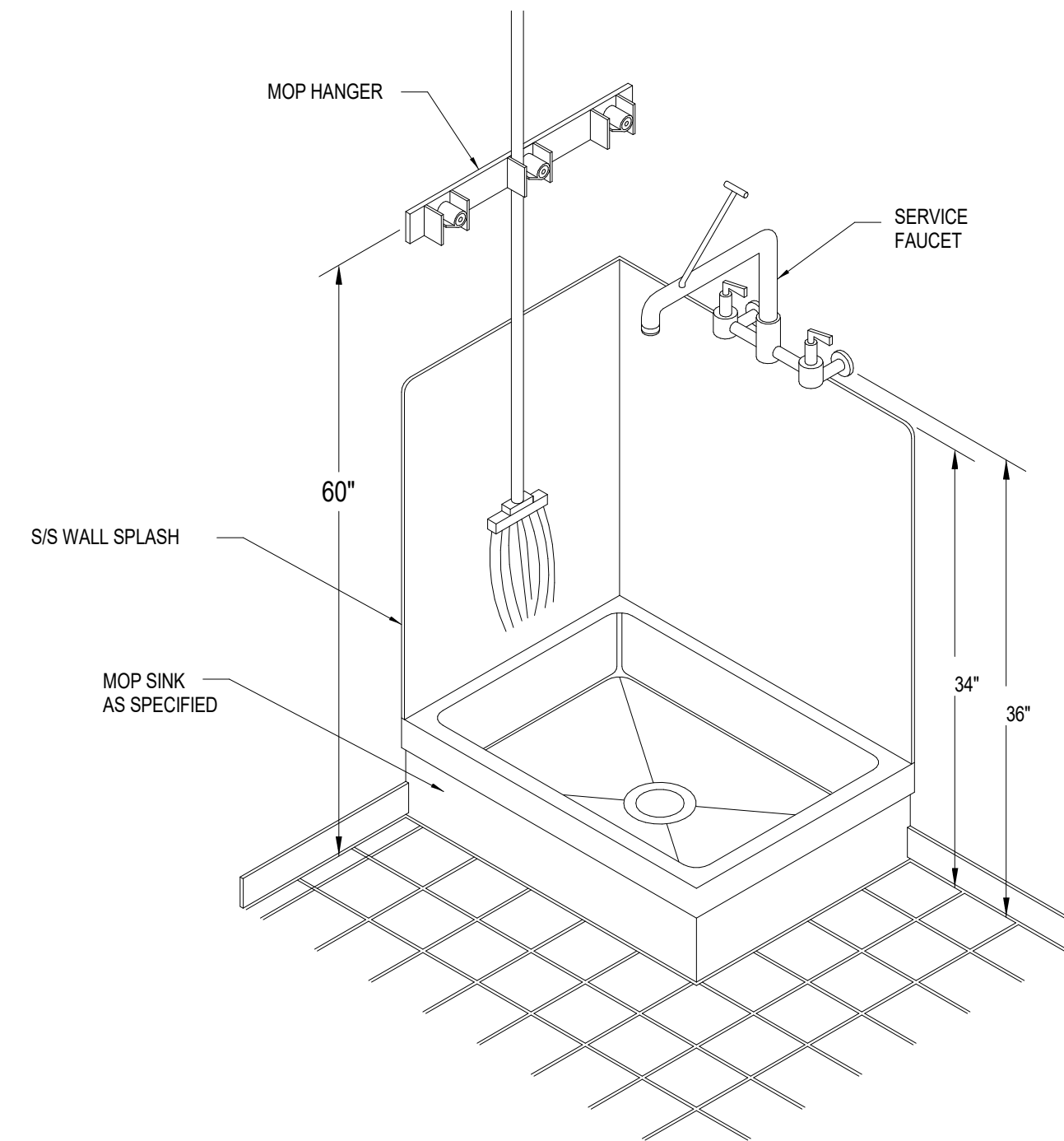
of sheets



1 PIPE HANGER DETAIL
SCALE: N.T.S.

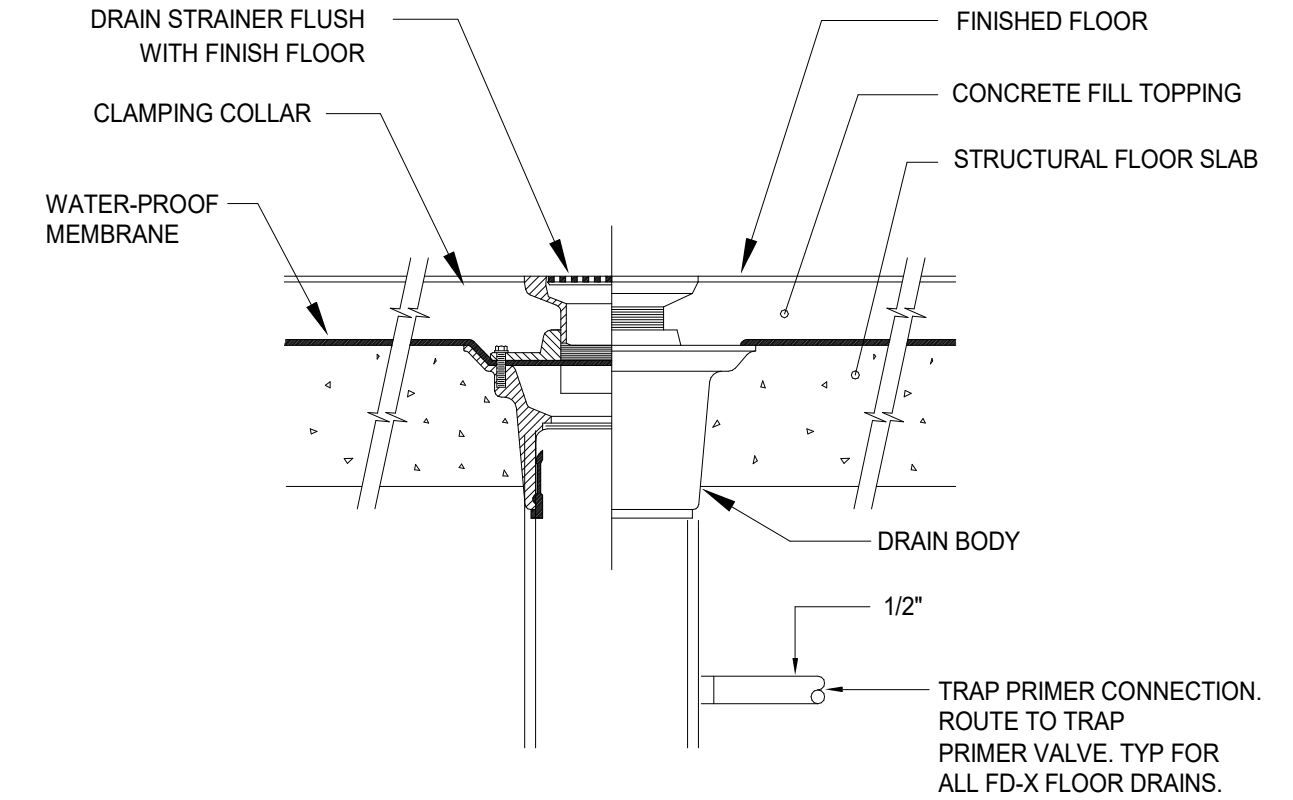


2 TYPICAL FLOOR DRAIN TRAP PRIMER DETAIL
SCALE: N.T.S.

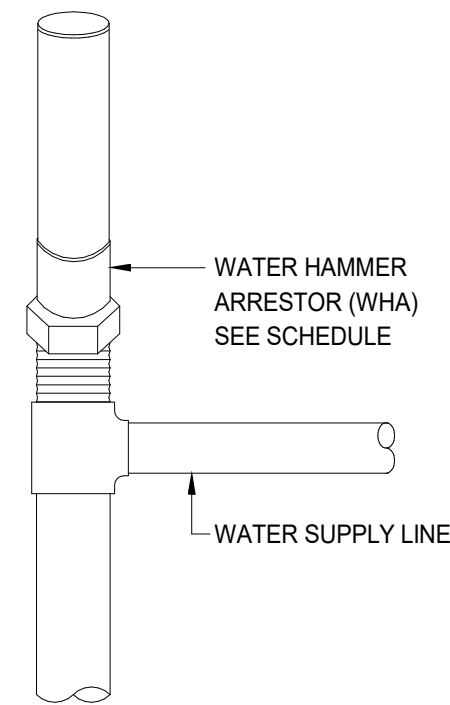


3 MOP SINK AND SPLASH WALL DETAIL
N.T.S.

NOTE:
STAINLESS STEEL MOP SINK, SERVICE FAUCET, MOP HOLDER AND 18 GA. STAINLESS STEEL WALL SPLASH TO BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR. THE PLUMBING CONTRACTOR SHALL MAKE ALL CONNECTIONS TO MOP SINK AND SERVICE FAUCET.

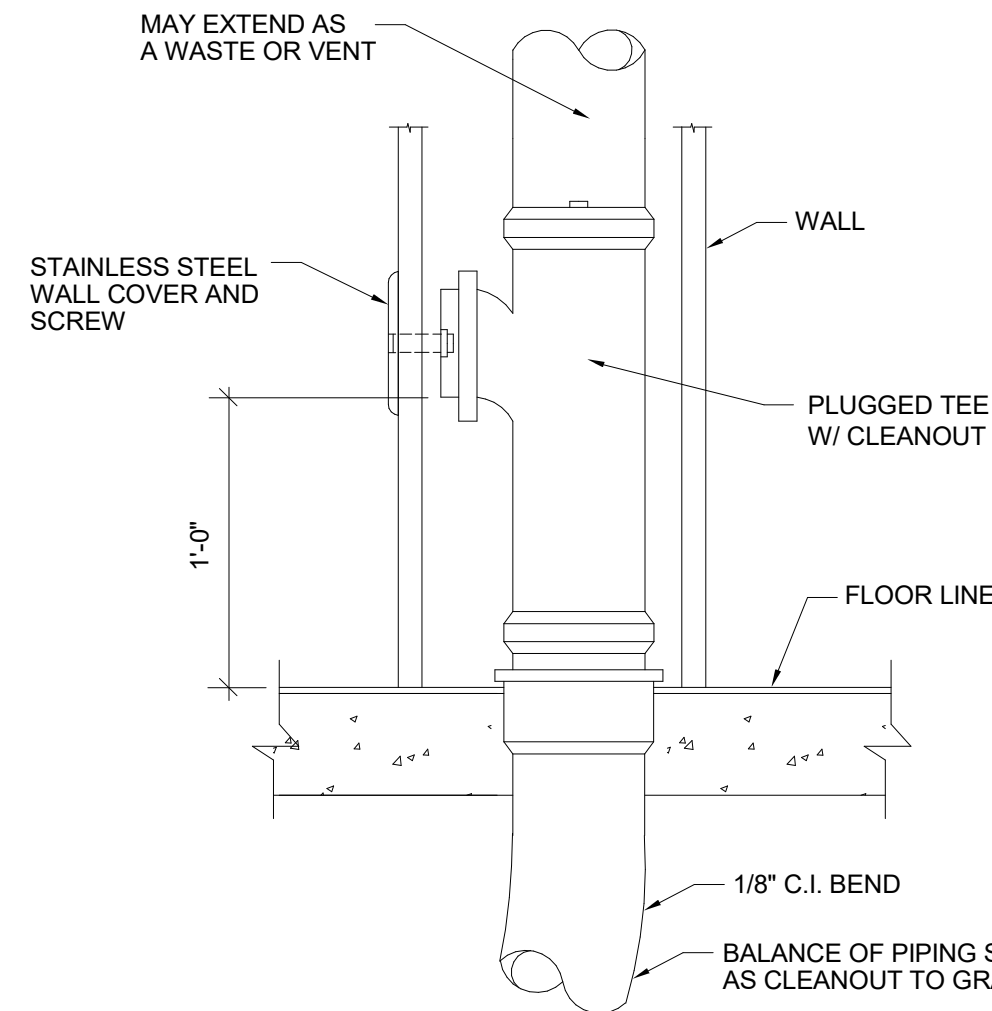


4 TYPICAL FLOOR DRAIN DETAIL
N.T.S.

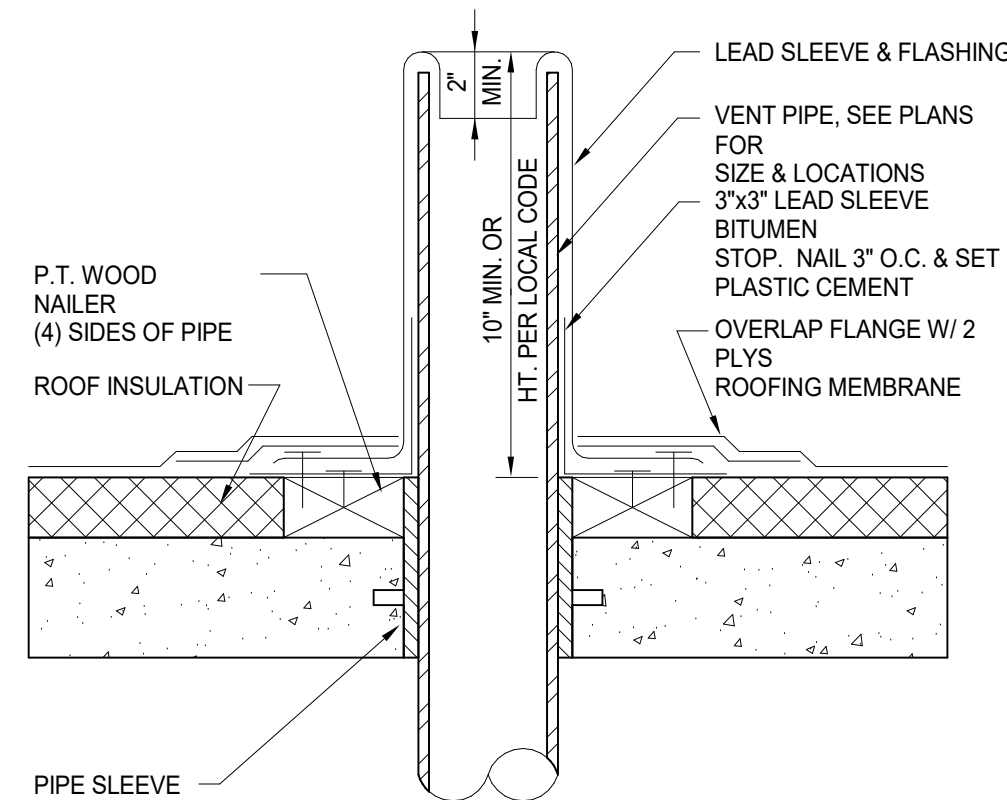


5 WATER HAMMER ARRESTOR DETAIL
SCALE: N.T.S.

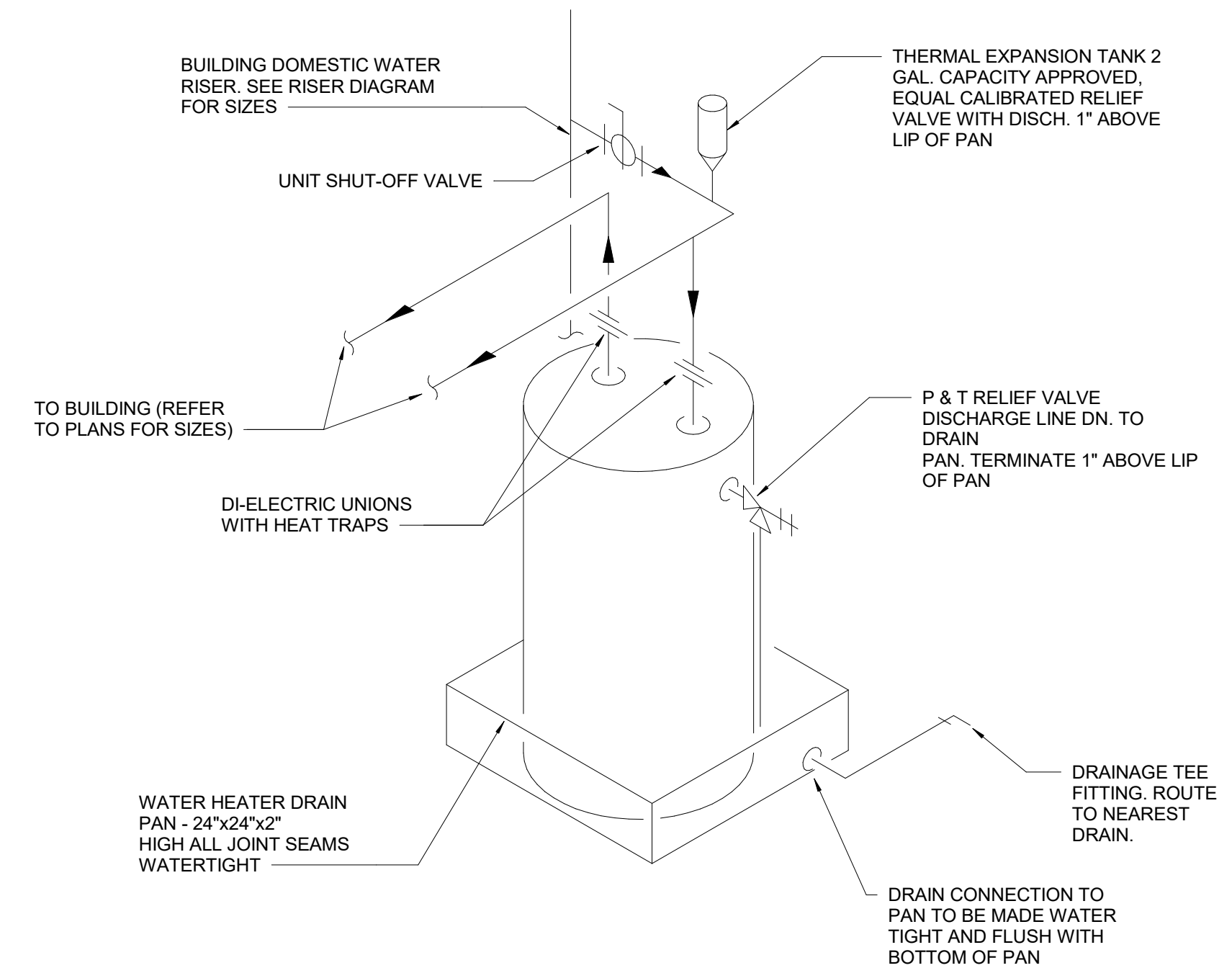
THE ARRESTOR OPENING SHALL BE EQUAL TO THE PIPE DIAMETER AT THE POINT OF INSTALLATION. INSTALLATION TO BE MADE IN VERTICAL POSITION FROM SOURCE OF SHOCK AND INSTALLED PER LOCAL CODE REQUIREMENTS. WATER HAMMER ARRESTORS SHALL BE INSTALLED IN SUCH A MANNER THAT WILL PERMIT DRAINAGE WITHOUT DISCONNECTING FIXTURE SUPPLY. EACH WATER HAMMER ARRESTOR SHALL BE PROVIDED WITH AN ACCESSIBLE MEANS FOR RESTORING THE AIR, IN THE EVENT IT BECOMES WATERLOGGED.



6 TYPICAL WALL CLEAN OUT (WCO) DETAIL
SCALE: N.T.S.

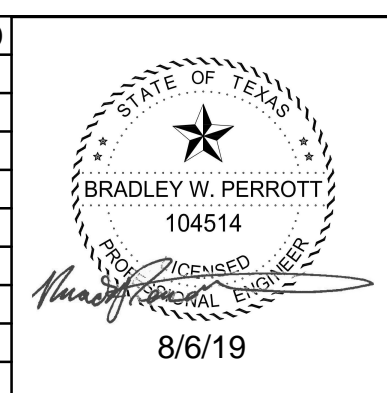


7 VENT STACK FLASHING DETAIL
N.T.S.



8 WATER HEATER DETAIL
N.T.S.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



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REVIEWED	BWP	8/6/19



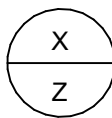



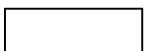


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CITY OF KENEDY

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1. BEFORE SUBMITTING PROPOSAL, CONTRACTOR SHALL VISIT THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL DENOTES THAT SUCH EXAMINATION HAS BEEN MADE AND CLAIMS FOR LATER EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED MAY NOT BE RECOGNIZED.
2. PROVIDE A VOLUME DAMPER AT EVERY BRANCH DUCT LEADING FROM MAIN TRUNK LINES AND AS SHOWN ON THE DOCUMENTS FOR ALL DUCTWORK SYSTEMS. ALL DAMPERS MAY NOT BE SHOWN ON THE DOCUMENTS FOR CLARITY.
3. ALL DUCT SIZES INDICATED ON THE DOCUMENTS ARE NET FREE AREA DIMENSIONS.
4. CONCEAL ALL PIPING AND DUCT ABOVE CEILING OR IN NEW WALLS, UNLESS SPECIFICALLY NOTED AS EXPOSED OR SURFACE MOUNTED. CONTRACTOR TO PAINT ALL EXPOSED PIPING TO MATCH CORRESPONDING EXPOSED AREAS.
5. WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE ESTABLISHED WORK SCHEDULE SET FORTH BY OWNER. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
6. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE UL LISTED WHERE APPLICABLE.
7. PENETRATION OF THE ROOF DECK WILL NOT BE ACCEPTABLE FOR SUPPORT OF DUCTWORK, PIPING EQUIPMENT OR ANY OTHER DEVICES. ALL SUPPORTS SHALL SPAN BETWEEN THE STRUCTURAL ELEMENTS TO SUPPORT THE MECHANICAL EQUIPMENT.
8. IN GENERAL, PLANS AND DIAGRAMS ARE SCHEMATIC ONLY AND SHOULD NOT BE LOCATED TO INDICATE EXACT LOCATION OF ALL CEILING MOUNTED EQUIPMENT SO ALL SERVICEABLE COMPONENTS CAN BE EASILY ACCESSED. REMOVAL OR RELOCATION OF LIGHTING FIXTURES FOR SERVICE ACCESS IS NOT ACCEPTABLE. THE CONTRACTOR SHALL REINSTALL EQUIPMENT THAT HAS INADEQUATE OR UNSAFE ACCESSIBILITY. LOCATE ALL OTHER EQUIPMENT WITH MANUFACTURER RECOMMENDED ACCESS FOR OPERATION AND MAINTENANCE.
9. COMPLY WITH DIVISION 26 OF THE CONTRACT SPECIFICATIONS REFERRING TO MOTORS, STARTERS, VFD'S, ETC.
10. WHENEVER A REFERENCE IS MADE TO A STANDARD, THE WORK SHALL COMPLY WITH THE LATEST PUBLISHED EDITION OF THE STANDARD AT THE TIME THE PROJECT IS BID UNLESS OTHERWISE SPECIFIED.
11. ALL MATERIAL STORED ON SITE SHALL BE PROPERLY PROTECTED FROM INJURY OR DETERIORATION. MATERIAL SHALL NOT BE STORED IN CONTACT WITH THE GROUND. ALL DUCTWORK AND EQUIPMENT, WHETHER INSTALLED OR NOT, SHALL BE SEALED AT ANY OPENING.
12. ALL EXTERNALLY-WRAPPED FIBERGLASS INSULATION SEAMS, CONNECTIONS, AND JOINTS SHALL BE CONSTRUCTED WITH WOVEN PAPER FIBRIC, STAPLED AND THEN SEALED WITH MASTIC PER SPECIFICATION SECTION 23 07 13. HEAT AND PRESSURE SENSITIVE TAPE ARE NOT ACCEPTABLE AS A FINAL CLOSURE.
13. DUCTWORK SHALL BE SHEET METAL, EXTERNALLY WRAPPED UNLESS OTHERWISE NOTED, MIN. 26 GA. AND CONSTRUCTED IN STRICT ACCORDANCE WITH SMACNA STANDARDS.
14. ALL HVAC SYSTEMS WITHIN THE SCOPE OF WORK SHALL BE TESTED AND BALANCED BY A LICENSED TAB CONTRACTOR TO PROVIDE MAXIMUM PERFORMANCE WITH REGARDS TO AIRFLOW, TEMPERATURE AND STATIC PRESSURE. REFER TO SPECIFICATIONS FOR TEST AND BALANCE REQUIREMENTS.
15. ALL INSULATION USED FOR DUCTWORK SHALL BE INSTALLED THICKNESS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS. INSULATION MATERIAL SHALL MEET NFPA 90A REQUIREMENTS AND SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATING AS TESTED IN ACCORDANCE WITH UL 723 NOT EXCEEDING FLAME SPREAD INDEX OF 25 AND SMOKE DEVELOPED INDEX OF 50. REFER TO SPECIFICATION SECTION 23 07 13.
16. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT INTERNATIONAL BUILDING CODE, INTERNATIONAL PLUMBING CODE, AND INTERNATIONAL MECHANICAL CODE & STANDARDS (WITH SUPPLEMENTS) AS REFERENCED THROUGHOUT THE SPECIFICATIONS.
17. REFER TO DIVISION 23 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ALL REQUIREMENTS NOT INDICATED ON THE DRAWINGS. IF THERE ARE ANY APPARENT CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
18. ALL EQUIPMENT AND PIPING SHALL HAVE IDENTIFICATION LABELS AND TAGS PER SPECIFICATION SECTION 23 05 53.

MECHANICAL LEGEND (PIPING)	
<h2 style="text-align: center;"><u>PIPING DESIGNATIONS</u></h2>	
—— HWS ——	HEATING HOT WATER SUPPLY
—— HWR ——	HEATING HOT WATER RETURN
—— RL ——	REFRIGERATION LIQUID
—— RS ——	REFRIGERATION SUCTION
—— C ——	CONDENSATE WATER SUPPLY
—— CR ——	CONDENSATE WATER RETURN
—— CHWS ——	CHILLED WATER SUPPLY
—— CHWR ——	CHILLED WATER RETURN
—— CD ——	CONDENSATE DRAIN
<h2 style="text-align: center;"><u>MECHANICAL SYMBOLS (GENERAL)</u></h2>	
	X = SECTION [LETTER] OR DETAIL [NUMBER] Z = WHERE DETAIL OR SECTION IS SHOWN
	HEX NOTES ON DRAWINGS & SCHEDULES
	REVISIONS
	ROOM NUMBERS
	EQUIPMENT TAGS (XX = MARKS BELOW) AHU = AIR HANDLING UNIT CU = CONDENSING UNIT AS = AIR SEPARATOR EHC = ELECTRIC HEATING COIL FCU = FAN COIL UNIT CH = CHILLER UH = UNIT HEATER CT = COOLING TOWER RTU = ROOFTOP UNIT EF = EXHAUST FAN HX = HT. EXCHANGER
	POINT OF DISCONNECT
	POINT OF CONNECT

AIR DEVICE

24x24 DIFFUSERS

MARK

CFM

S3-200

8"

NECK SIZE

NOTE: FOR 24x24 AIR DEVICES
PROVIDE 4-WAY PATTERN
UNLESS OTHERWISE SPECIFIED.

Diagram illustrating the relationship between various parameters and the central model **S3-200** and **4S-8"**:

- MARK** points to **S3-200**.
- CFM** points to **S3-200**.
- USERS** points to **S3-200**.
- # OF SLOTS FOR LINEAR DIFFUSERS** points to **4S-8"**.
- NECK SIZE** points to **4S-8"**.

STATE OF TEXAS
 ★
 BRADLEY W. PERROTT
 104514
 PROFESSIONAL ENGINEER
 8/6/19



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M-001

MECHANICAL SPECIFICATION

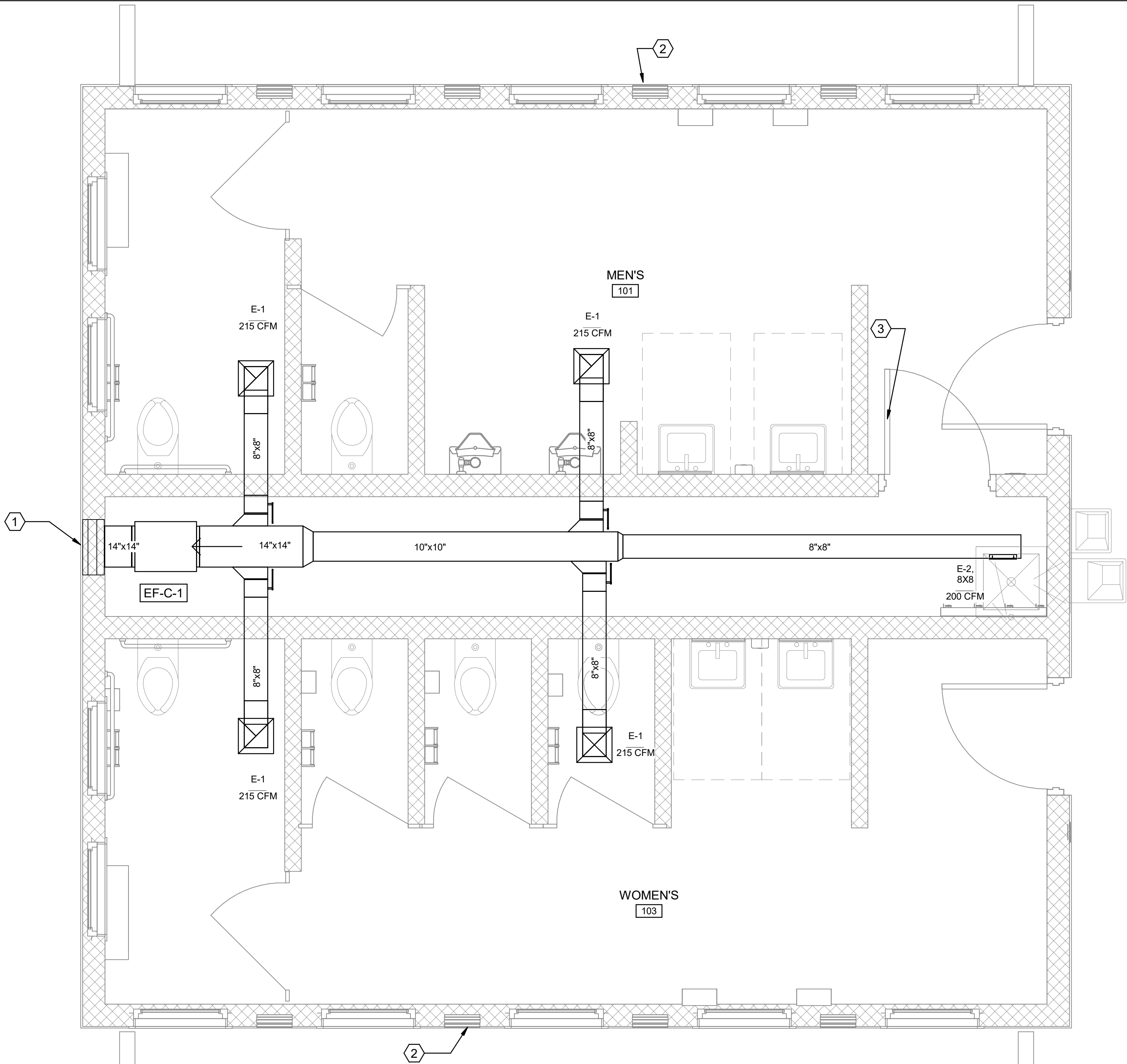
<div>SECTION 230553 - IDENTIFICATION FOR HVAC EQUIPMENT</div> <div>A. Plastic Labels for Equipment: 1. Material and Thickness: Multilayer, multicolor, plastic labels for mechanical engraving, 1/16 inch thick, and having predrilled holes for attachment hardware. 2. Letter Color: White. 3. Background Color: Black. 4. Maximum Temperature: Able to withstand temperatures up to 160 deg F. 5. Minimum Label Size: Length and width vary for required label content, but not less than 2-1/2 by 3/4 inch. 6. Minimum Letter Size: 1/4 inch for name of units if viewing distance is less than 24 inches, 1/2 inch for viewing distances up to 72 inches, and proportionately larger lettering for greater viewing distances. Include secondary lettering two-thirds to three-quarters the size of principal lettering. 7. Fasteners: Stainless-steel rivets. 8. Adhesive: Contact-type permanent adhesive, compatible with label and with substrate. B. Label Content: Include equipment's Drawing designation or unique equipment number, Drawing numbers where equipment is indicated (plans, details, and schedules), and the Specification Section number and title where equipment is specified. C. Equipment Label Schedule: For each item of equipment to be labeled, on 8-1/2-by-11-inch bond paper, Tabulate equipment identification number, and identify Drawing numbers where equipment is indicated (plans, details, and schedules) and the Specification Section number and title where equipment is specified. Equipment schedule shall be included in operation and maintenance data. D. Clean equipment surfaces of substances that could impair bond of identification devices, including dirt, oil, grease, release agents, and incompatible primers, paints, and encapsulants. E. Install or permanently fasten labels on each major item of mechanical equipment. F. Locate equipment labels where accessible and visible. Also affix label to ceiling grid.</div> <div>END OF SECTION 230553</div> <div>SECTION 230593 - TESTING, ADJUSTING, AND BALANCING FOR HVAC</div> <div>1.1 QUALITY ASSURANCE</div> <div>A. TAB Specialists Qualifications: Certified by AABC. 1. TAB Field Supervisor: Employee of the TAB specialist and certified by AABC. 2. TAB Technician: Employee of the TAB specialist and certified by AABC as a TAB technician. B. Examine the Contract Documents to become familiar with Project requirements and to discover conditions in systems designs that may preclude proper TAB of systems and equipment. C. Examine the approved submittals for HVAC systems and equipment.</div> <div>1.2 GENERAL PROCEDURES FOR TESTING AND BALANCING</div> <div>A. Perform testing and balancing procedures on each system according to the procedures contained in AABC's "National Standards for Total System Balance" and in this Section.</div> <div>1.3 GENERAL PROCEDURES FOR BALANCING AIR SYSTEMS</div> <div>A. Prepare test reports for both fans and outlets. Obtain manufacturer's outlet factors and recommended testing procedures. Cross-check the summation of required outlet volumes with required fan volumes. B. Check dampers for proper position to achieve desired airflow path. C. Check for airflow blockages. D. Verify that air duct system is sealed as specified in Section 233113 "Metal Ducts."</div> <div>1.4 PROCEDURES FOR CONSTANT-VOLUME AIR SYSTEMS</div> <div>A. Adjust fans to deliver total indicated airflows within the maximum allowable fan speed listed by fan manufacturer. 1. Measure total airflow. a. Where duct conditions allow, measure airflow by Pitot-tube traverse. If necessary, perform multiple Pitot-tube traverses to obtain total airflow. b. Where duct conditions are not suitable for Pitot-tube traverse measurements, a coil traverse may be acceptable. c. If a reliable Pitot-tube traverse or coil traverse is not possible, measure airflow at terminals and calculate the total airflow. 2. Measure fan static pressures as follows: a. Measure static pressure directly at the fan outlet or through the flexible connection. b. Measure static pressure directly at the fan inlet or through the flexible connection. c. Measure static pressure across each component that makes up the air-handling system. d. Report artificial loading of filters at the time static pressures are measured. 3. Review Record Documents to determine variations in design static pressures versus actual static pressures. Calculate actual system-effect factors. Recommend adjustments to accommodate actual conditions. 4. Do not make fan-speed adjustments that result in motor overload. Consult equipment manufacturers about fan- speed safety factors. Modulate dampers and measure fan-motor amperage to ensure that no overload occurs. Measure amperage in full-cooling, full-heating, economizer, and any other operating mode to determine the maximum required brake horsepower. B. Adjust volume dampers for main duct, submain ducts, and major branch ducts to indicated airflows. 1. Measure airflow of submain and branch ducts. 2. Adjust submain and branch duct volume dampers for specified airflow. 3. Re-measure each submain and branch duct after all have been adjusted. C. Adjust air inlets and outlets for each space to indicated airflows. 1. Set airflow patterns of adjustable outlets for proper distribution without drafts. 2. Measure inlets and outlets airflow. 3. Adjust each inlet and outlet for specified airflow. 4. Re-measure each inlet and outlet after they have been adjusted.</div> <div>1.5 TOLERANCES</div> <div>A. Set HVAC system's airflow rates and water flow rates within the following tolerances: 1. Air Outlets and Inlets: Plus or minus 10 percent.</div> <div>1.6 FINAL REPORT</div> <div>A. Electric-Coil Test Reports: For electric furnaces, duct coils, and electric coils installed in central-station air-handling units, include the following: 1. Unit Data: a. System identification. b. Location. c. Coil identification. d. Capacity in kW. e. Number of stages. f. Connected volts, phase, and hertz. g. Rated amperage. h. Airflow rate in cfm. i. Face area in sq. ft.. j. Minimum face velocity in fpm.</div> <div>2. Test Data (Indicated and Actual Values): a. Heat output in kW. b. Airflow rate in cfm. c. Air velocity in fpm. d. Entering-air temperature in deg F. e. Leaving-air temperature in deg F. f. Voltage at each connection. g. Amperage for each phase. 2. Test Data (Indicated and Actual Values): a. Airflow rate in cfm. b. Air velocity in fpm. c. Preliminary airflow rate as needed in cfm. d. Preliminary velocity as needed in fpm. e. Final airflow rate in cfm. f. Final velocity in fpm. g. Space temperature in deg F.</div> <div>C. Instrument Calibration Reports: 1. Report Data: a. Instrument type and make. b. Serial number. c. Application. d. Dates of use. e. Dates of calibration.</div> <div>END OF SECTION 230593</div> <div>SECTION 230713 - DUCT INSULATION</div> <div>1.1 INSULATION MATERIALS</div> <div>A. Products shall not contain asbestos, lead, mercury, or mercury compounds. B. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process. C. Mineral-Fiber Blanket Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 553, Type II and ASTM C 1290, Type III with factory-applied FSK jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article. 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. Johns Manville; a Berkshire Hathaway company. b. Knauf Insulation. c. Owens Corning. D. Mineral-Fiber Board Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C612, Type IA or Type IB. For duct and plenum applications, provide insulation with factory-applied FSK jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article. 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. Johns Manville; a Berkshire Hathaway company. b. Knauf Insulation. c. Owens Corning.</div> <div>1.2 FIRE-RATED INSULATION SYSTEMS</div> <div>A. Fire-Rated Blanket: High-temperature, flexible, blanket insulation with FSK jacket that is tested and certified to provide a 2-hour fire rating by an NRTL acceptable to authorities having jurisdiction. 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. 3M. b. CertainTeed Corporation. c. Johns Manville; a Berkshire Hathaway company.</div> <div>1.3 FIELD-APPLIED JACKETS</div> <div>A. Self-Adhesive Outdoor Jacket: 60-mil-thick, laminated vapor barrier and waterproofing membrane for installation over insulation located aboveground outdoors; consisting of a nuberized bituminous resin on a crosslaminated polyethylene film covered with stucco-embossed aluminum-foil facing. 1. Manufacturers: Subject to compliance with requirements, provide products by the following: a. Polyguard Products, Inc.</div> <div>1.4 FACTORY-APPLIED JACKETS</div> <div>A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following: 1. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C 1136, Type II. 2.1 INSTALLATION OF MINERAL-FIBER INSULATION</div> <div>A. Blanket Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins. 1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of duct and plenum surfaces. 2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions. 3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows: a. On duct sides with dimensions 18 inches and smaller, place pins along longitudinal centerline of duct. Space 3 inches maximum from insulation end joints, and 16 inches o.c. b. On duct sides with dimensions larger than 18 inches, place pins 16 inches o.c. each way, and 3 inches maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing. c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums. d. Do not overcompress insulation during installation. e. Impale insulation over pins and attach speed washers. f. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing. 4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch outward-clinching staples, 1 inch o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions. a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal. b. Install vapor stops for ductwork and plenums operating below 50 deg F at 18-foot intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along built end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to two times the insulation thickness, but not less than 3 inches. 5. Overlap unfaced blankets a minimum of 2 inches on longitudinal seams and end joints. At end joints, secure with steel bands spaced a maximum of 18 inches o.c. 6. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Install insulation on round and flat-oval duct elbows with individually mitered grooves cut to fit the elbow. 7. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch-wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches o.c.</div> <div>B. Board Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins. 1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 50 percent coverage of duct and plenum surfaces. 2. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows: a. On duct sides with dimensions 18 inches and smaller, place pins along longitudinal centerline of duct. Space 3 inches maximum from insulation end joints, and 16 inches o.c. b. On duct sides with dimensions larger than 18 inches, space pins 16 inches o.c. each way, and 3 inches maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing. c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums. d. Do not overcompress insulation during installation. e. Do not overcompress insulation during installation. f. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing. 3. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch outward-clinching staples, 1 inch o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions. a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal. b. Install vapor stops for ductwork and plenums operating below 50 deg F at 18-foot intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along built end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to two times the insulation thickness, but not less than 3 inches. 4. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Groove and score insulation to fit as closely as possible to outside and inside radius of elbows. Install insulation on round and flat-oval duct elbows with individually mitered grooves cut to fit the elbow. 5. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch-wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches o.c.</div> <div>C. Hanger Spacing: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 5, "Hangers and Supports."</div> <div>D. Support vertical ducts with steel angles or channel secured to the sides of the duct with welds, bolts, sheet metal screws, or blind rivets; support at each floor and at a maximum intervals of 16 feet. E. Install upper attachments to structures. Select and size upper attachments with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.</div> <div>2.5 CONNECTIONS</div> <div>A. Make connections to equipment with flexible connectors complying with Section 233300 "Air Duct Accessories." B. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for branch, outlet and inlet, and terminal unit connections.</div> <div>2.6 ADDITIONAL INSTALLATION REQUIREMENTS FOR TYPE 1 COMMERCIAL KITCHEN GREASE HOOD EXHAUST DUCT</div> <div>A. Install ducts in accordance with NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operation"; SMACNA's "HVAC Duct Construction Standards - Metal and Flexible"; and SMACNA's "Kitchen Ventilation Systems and Food Service Equipment Fabrication and Installation Guidelines" unless otherwise indicated. B. Install all ducts without dips and traps that may hold grease, and sloped a minimum of 2 percent to drain grease back to the hood. C. All ducts exposed to view shall be constructed of stainless steel as per "Duct Schedule" Article. All ducts concealed from view shall be [stainless] [carbon] steel as per "Duct Schedule" Article. D. All joints shall be welded and shall be telescoping, bell, or flange joint as per NFPA 96. E. Install fire-rated access panel assemblies at each change in direction and at maximum intervals of 20 feet in horizontal ducts, and at every floor for vertical ducts, or as indicated on Drawings. F. Do not penetrate fire-rated assemblies except as allowed by applicable building codes and authorities having jurisdiction.</div> <div>2.7 DUCT SCHEDULE</div> <div>A. Supply Ducts: 1. Ducts Connected to Constant-Volume Air-Handling Units: a. Pressure Class: Positive 2-inch wg. b. Minimum SMACNA Seal Class: B. c. SMACNA Leakage Class for Rectangular: 2. d. SMACNA Leakage Class for Round and Flat Oval: 2. B. Exhaust Ducts: 1. Ducts Connected to Commercial Kitchen Hoods: Comply with NFPA 96. a. Exposed to View: Type 304, stainless-steel sheet, No. 4 finish or double-wall, factory-built engineered grease duct. b. Concealed: Carbon-steel sheet. c. Welded seams and joints. d. Pressure Class: Positive or negative 3-inch wg. e. Airtight/watertight. 2. Ducts Connected to Air-Handling Units: a. Pressure Class: Positive or negative 2-inch wg (500 Pa). b. Minimum SMACNA Seal Class: A C. Return Ducts: 1. Ducts Connected to Fan Coil Units, Furnaces, Heat Pumps, and Terminal Units: a. Pressure Class: Positive or negative 1-inch wg (250 Pa). b. Minimum SMACNA Seal Class: A.</div> <div>END OF SECTION 233113</div> <div>SECTION 233300 - AIR DUCT ACCESSORIES</div> <div>1.1 MANUAL VOLUME DAMPERS</div> <div>A. Standard, Steel, Manual Volume Dampers: 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. McGill AirFlow LLC. b. Nailor Industries Inc. c. Potluff. d. Ruskin Company. 2. Standard leakage rating. 3. Suitable for horizontal or vertical applications. 4. Frames: a. Frame: Hat-shaped, 0.094-inch-thick, galvanized sheet steel. b. Mitered and welded corners. c. Flanges for attaching to walls and flangeless frames for installing in ducts. 5. Blades: a. Multiple or single blade. b. Parallel- or opposed-blade design. c. Stiffen damper blades for stability. d. Galvanized-steel, 0.064 inch thick. 6. Blade Axles: Galvanized steel. 7. Bearings: a. Molded synthetic. b. Dampers in ducts with pressure classes of 3-inch wg or less shall have axles full length of damper blades and bearings at both ends of operating shaft. 8. Tie Bars and Brackets: Galvanized steel.</div> <div>G. Install ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building. H. Route ducts to avoid passing through transformer vaults and electrical equipment rooms and enclosures. I. Where ducts pass through non-fire-rated interior partitions and exterior walls and are exposed to view, cover the opening between the partition and duct or duct insulation with sheet metal flanges of same metal thickness as the duct. Overlap openings on four sides by at least 1-1/2 inches. J. Where ducts pass through fire-rated interior partitions and exterior walls, install fire dampers. Comply with requirements in Section 233300 "Air Duct Accessories" for fire and smoke dampers. 2.2 DUCTWORK EXPOSED TO WEATHER A. All external joints are to have secure watertight mechanical connections. Seal all openings to provide weatherproof construction. B. Construct ductwork to resist external loads of wind, snow, ice, and other effects of weather. Provide necessary supporting structures. C. Single Wall: 1. Ductwork shall be galvanized steel. a. If duct outer surface is uninsulated, protect outer surface with suitable paint. Paint materials and application requirements are specified in Section 099113 "Exterior Painting." 2. Where ducts have external insulation, provide weatherproof aluminum jacket. See Section 230713 "Duct Insulation."</div> <div>2.3 DUCT SEALING</div> <div>A. Seal ducts for duct static-pressure, seal classes, and leakage classes specified in "Duct Schedule" Article according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."</div> <div>2.4 HANGER AND SUPPORT INSTALLATION</div> <div>A. 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Support vertical ducts with steel angles or channel secured to the sides of the duct with welds, bolts, sheet metal screws, or blind rivets; support at each floor and at a maximum intervals of 16 feet. E. Install upper attachments to structures. Select and size upper attachments with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.</div> <div>2.5 CONNECTIONS</div> <div>A. Make connections to equipment with flexible connectors complying with Section 233300 "Air Duct Accessories." B. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for branch, outlet and inlet, and terminal unit connections.</div> <div>2.6 ADDITIONAL INSTALLATION REQUIREMENTS FOR TYPE 1 COMMERCIAL KITCHEN GREASE HOOD EXHAUST DUCT</div> <div>A. 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Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 5, "Hangers and Supports."</div> <div>B. Install ducts in accords: Concrete inserts, powder-actuated fasteners, or structural-steel fasteners appropriate for construction materials to which hangers are being attached. 1. Use powder-actuated concrete fasteners for standard-weight aggregate concretes or for slabs more than 4 inches thick. 2. Do not use powder-actuated concrete fasteners for lightweight-aggregate concretes or for slabs less than 4 inches thick.</div> <div>C. Hanger Spacing: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 5-1, "Rectangular Duct Hangers Minimum Size," and Table 5-2, "Minimum Hanger Sizes for Round Duct," for maximum hanger spacing; install hangers and supports within 24 inches of each elbow and within 48 inches of each branch intersection. D. Support vertical ducts with steel angles or channel secured to the sides of the duct with welds, bolts, sheet metal screws, or blind rivets; support at each floor and at a maximum intervals of 16 feet. E. Install upper attachments to structures. Select and size upper attachments with pull-out, tension, and shear capacities appropriate for supported loads and building materials where used.</div> <div>2.5 CONNECTIONS</div> <div>A. Make connections to equipment with flexible connectors complying with Section 233300 "Air Duct Accessories." B. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible" for branch, outlet and inlet, and terminal unit connections.</div> <div>2.6 ADDITIONAL INSTALLATION REQUIREMENTS FOR TYPE 1 COMMERCIAL KITCHEN GREASE HOOD EXHAUST DUCT</div> <div>A. Install ducts in accordance with NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operation"; SMACNA's "HVAC Duct Construction Standards - Metal and Flexible"; and SMACNA's "Kitchen Ventilation Systems and Food Service Equipment Fabrication and Installation Guidelines" unless otherwise indicated. B. Install all ducts without dips and traps that may hold grease, and sloped a minimum of 2 percent to drain grease back to the hood. C. All ducts exposed to view shall be constructed of stainless steel as per "Duct Schedule" Article. All ducts concealed from view shall be [stainless] [carbon] steel as per "Duct Schedule" Article. D. All joints shall be welded and shall be telescoping, bell, or flange joint as per NFPA 96. E. Install fire-rated access panel assemblies at each change in direction and at maximum intervals of 20 feet in horizontal ducts, and at every floor for vertical ducts, or as indicated on Drawings. F. Do not penetrate fire-rated assemblies except as allowed by applicable building codes and authorities having jurisdiction.</div> <div>2.7 DUCT SCHEDULE</div> <div>A. Supply Ducts: 1. Ducts Connected to Constant-Volume Air-Handling Units: a. Pressure Class: Positive 2-inch wg. b. Minimum SMACNA Seal Class: B. c. SMACNA Leakage Class for Rectangular: 2. d. SMACNA Leakage Class for Round and Flat Oval: 2. B. Exhaust Ducts: 1. Ducts Connected to Commercial Kitchen Hoods: Comply with NFPA 96. a. Exposed to View: Type 304, stainless-steel sheet, No. 4 finish or double-wall, factory-built engineered grease duct. b. Concealed: Carbon-steel sheet. c. Welded seams and joints. d. Pressure Class: Positive or negative 3-inch wg. e. Airtight/watertight. 2. Ducts Connected to Air-Handling Units: a. Pressure Class: Positive or negative 2-inch wg (500 Pa). b. Minimum SMACNA Seal Class: A C. Return Ducts: 1. Ducts Connected to Fan Coil Units, Furnaces, Heat Pumps, and Terminal Units: a. Pressure Class: Positive or negative 1-inch wg (250 Pa). b. Minimum SMACNA Seal Class: A.</div> <div>END OF SECTION 233113</div> <div>SECTION 233300 - AIR DUCT ACCESSORIES</div> <div>1.1 MANUAL VOLUME DAMPERS</div> <div>A. Standard, Steel, Manual Volume Dampers: 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. McGill AirFlow LLC. b. Nailor Industries Inc. c. Potluff. d. Ruskin Company. 2. Standard leakage rating. 3. Suitable for horizontal or vertical applications. 4. Frames: a. Frame: Hat-shaped, 0.094-inch-thick, galvanized sheet steel. b. Mitered and welded corners. c. Flanges for attaching to walls and flangeless frames for installing in ducts. 5. Blades: a. Multiple or single blade. b. Parallel- or opposed-blade design. c. Stiffen damper blades for stability. d. Galvanized-steel, 0.064 inch thick. 6. Blade Axles: Galvanized steel. 7. Bearings: a. Molded synthetic. b. Dampers in ducts with pressure classes of 3-inch wg or less shall have axles full length of damper blades and bearings at both ends of operating shaft. 8. Tie Bars and Brackets: Galvanized steel.</div> <div>G. Install ducts close to walls, overhead construction, columns, and other structural and permanent enclosure elements of building. H. Route ducts to avoid passing through transformer vaults and electrical equipment rooms and enclosures. I. Where ducts pass through non-fire-rated interior partitions and exterior walls and are exposed to view, cover the opening between the partition and duct or duct insulation with sheet metal flanges of same metal thickness as the duct. Overlap openings on four sides by at least 1-1/2 inches. J. Where ducts pass through fire-rated interior partitions and exterior walls, install fire dampers. Comply with requirements in Section 233300 "Air Duct Accessories" for fire and smoke dampers. 2.2 DUCTWORK EXPOSED TO WEATHER A. All external joints are to have secure watertight mechanical connections. Seal all openings to provide weatherproof construction. B. Construct ductwork to resist external loads of wind, snow, ice, and other effects of weather. Provide necessary supporting structures. C. Single Wall: 1. Ductwork shall be galvanized steel. a. If duct outer surface is uninsulated, protect outer surface with suitable paint. Paint materials and application requirements are specified in Section 099113 "Exterior Painting." 2. Where ducts have external insulation, provide weatherproof aluminum jacket. See Section 230713 "Duct Insulation."</div> <div>2.3 DUCT SEALING</div> <div>A. Seal ducts for duct static-pressure, seal classes, and leakage classes specified in "Duct Schedule" Article according to SMACNA's "HVAC Duct Construction Standards - Metal and Flexible."</div> <div>2.4 HANGER AND SUPPORT INSTALLATION</div> <div>A. Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Chapter 5, "Hangers and Supports."</div> <div>B. Install ducts in accords: Concrete inserts, powder-actuated fasteners, or structural-steel fasteners appropriate for construction materials to which hangers are being attached. 1. Use powder-actuated concrete fasteners for standard-weight aggregate concretes or for slabs more than 4 inches thick. 2. Do not use powder-actuated concrete fasteners for lightweight-aggregate concretes or for slabs less than 4 inches thick.</div> <div>C. Hanger Spacing: Comply with SMACNA's "HVAC Duct Construction Standards - Metal and Flexible," Table 5-1, "Rectangular Duct Hangers Minimum Size," and Table 5-2, "Minimum Hanger Sizes for Round Duct," for maximum hanger spacing; install hangers and supports within 24 inches of each elbow and within 48 inches of each branch intersection. D. 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GENERAL SHEET NOTES

- 1. PROVIDE A VOLUME DAMPER AT EVERY BRANCH DUCT LEADING FROM MAIN TRUNK LINES FOR ALL LOW-PRESSURE DUCTWORK SYSTEMS. WHETHER SHOWN OR NOT ON THE DRAWINGS. NOT ALL DAMPERS MAY BE SHOWN ON THE DRAWINGS FOR CLARITY.
- 2. ALL OUTSIDE AIR LOUVERS SHALL BE PROVIDED WITH 3/4" X 3/4" REMOVABLE BIRD SCREEN AND REMOVABLE FILTERS IN A FILTER RACK. THIS SHALL BE INSTALLED IN A CHANNEL AND SHALL BE EASILY REMOVED. SCREWED BIRD SCREEN TO THE LOUVER IS NOT ACCEPTABLE. INSECT SCREENS ARE NOT PERMITTED.
- 3. FULLY COORDINATE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS FOR DIFFUSER LOCATIONS PRIOR TO INSTALLATION.

SHEET KEYNOTES

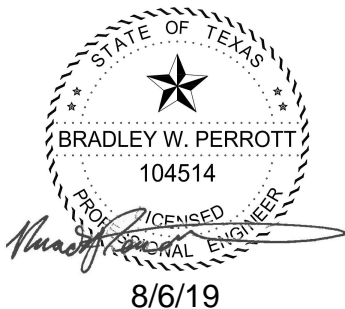
- 1 1.5 SF FREE AREA EXHAUST LOUVER.
- 2 MAKEUP AIR VENTS FOR RESTROOM EXHAUST. REFER TO ARCHITECTURAL DRAWINGS.
- 3 24 X 24 DOOR GRILLE.



1 FIRST FLOOR HVAC - BUILDING C
1/2" = 1'-0"

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017 1006		
Filename: CITY OF KENEDY SPORTS COMPLEX		
Scale: 1/2" = 1'-0"		
Date: 8/6/19		
LAYOUT	LW	8/6/19
DRAWN	LW	8/6/19
REVIEWED	BWP	8/6/19



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FIRST FLOOR HVAC - BUILDING C

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

EXHAUST FAN SCHEDULE											
TAG	LOCATION	SERVICE	CAPACITY (CFM)	ESP (IN WG)	MOTOR HP	FAN RPM	VOLTS / PHASE	FAN TYPE	MANUFACTURER	MODEL	NOTES
EF-A-1	RESTROOM/CONCESSION BLDG	RESTROOMS	1,060	0.25	1/2	1,111	115/1	CENTRIFUGAL INLINE DIRECT DRIVE	GREENHECK	EQ-120-VG	1,2,3
EF-A-2	RESTROOM/CONCESSION BLDG	JANITOR	150	0.25	3/4 W	1,111	115/1	CEILING CABINET FAN	GREENHECK	CEP-A100	1,2,3,4
EF-A-3	RESTROOM/CONCESSION BLDG	ELEV. MACHINE ROOM	300	0.25	3/4 W	900	115/1	CEILING CABINET FAN	GREENHECK	CEP-AF10	1,2,3,4
EF-B-1	SMALL RESTROOM/CONCESSION BLDG	RESTROOMS	700	0.25	1/2	1,111	115/1	CENTRIFUGAL INLINE DIRECT DRIVE	GREENHECK	EQ-05-VG	1,2,3
EF-C-1	RESTROOM BLDG	RESTROOMS	1,060	0.25	2-Jan	1,118	115/1	CENTRIFUGAL INLINE DIRECT DRIVE	GREENHECK	SQ-120-VG	1,2,3
NOTES: 1. PROVIDE BACKDRAFT DAMPER. 2. PROVIDE MANUFACTURER'S FAN SPEED CONTROLLER. MOUNT CONTROLLER ABOVE CEILING. 3. FAN SHALL BE CONTROLLED WITH TIMED DELAY OCCUPANCY SENSOR. COORDINATE WITH ELECTRICAL CONTRACTOR. FAN SHALL CONTINUE TO OPERATE 15 MIN. AFTER BEING UNOCCUPIED. 4. PROVIDE MANUFACTURER'S DESIGNER GRILLE. 5. PROVIDE LINE VOLTAGE THERMOSTAT. 6. INTERLOCK WITH OUTDOOR AIR UNIT.											

PACKAGED 100% OA UNIT SCHEDULE																																											
TAG	SERVICE	INDOOR SUPPLY FAN										TOTAL CAP.	EER (AHRI LISTED)	COOLING				REFRIG. TYPE	CONDENSER FAN DATA				COMPRESSOR DATA				ELEC. HEATING DATA						FILTER			UNIT ELECTRICAL				MANUFACTURER	MODEL	UNIT OPERATING WEIGHT (LBS)	NOTES
		TYPE	SUPPLY CFM	OUTSIDE AIR CFM	EXH. ESP (IN WC)	ESP (IN WC)	BHP	HP	ELECTRICAL	EAT (DEG F)	WB			DB	WB	NO.	HP (ea)		FLA (ea)	VOLT/PH	NO.	STEPS	VOLT/PH	RLA (EACH)	HEATING AIRFLOW (CFM)	EAT (DEG F)	LAT (DEG F)	KW	VOLT	STEPS	EFF.	VOLT - PHASE	FLA	MCA	MOCP								
									PHASE																																		
OAU-A-1	RESTROOM/CONCESSION BLDG	DIRECT DRIVE	1450	1450	0.5	0.65	0.21	1	208/3	119.6	12.4	96.0	74.0			R-410a	2	1	4.2	208/3	1	INF.	208/3	16.1	1450	120	208	20	208/3	3	MERV 8	30%	208/3	69.5	86.9	90	TRANE	OADG010A1	3,027	1,2,3,4,5,6,7			
NOTES: 1. PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION AND FACTORY-PROVIDED COMBINATION DISCONNECT/VFD. VFD USED FOR BALANCING PURPOSES ONLY. NOT FOR FAN. 2. INTERNAL STATIC PRESSURE INCLUDES ALLOWANCE FOR DIRTY FILTER LOADING. 3. PROVIDE MODULATING HOT GAS REHEAT COIL CAPABLE OF SUPPLYING 70-DEG NEUTRAL AIR. 4. FAN BRAKE HORSEPOWER SHALL NOT EXCEED 85% OF THE MOTOR HORSEPOWER. 5. PROVIDE WITH PREWIRED 115 VOLT GFCI SERVICE RECEPTACLE. 6. PROVIDE MOTORIZED DAMPERS ON ALL EXHAUST AIR INLETS. DAMPER SHALL BE 2-POSITION. 7. PROVIDE EXHAUST AIR SENSOR.																																											

NOT USED

PROJECT DESIGN CONDITIONS		
TEMPERATURE DESIGN CRITERIA		
OUTDOOR		
SUMMER:	96 F DB / 74 F WB	0.4% MEAN COINCIDENTAL DB/WB
WINTER:	30 F DB	99.6% DB
DAILY RANGE:	12 F DB	
ASHRAE WEATHER DATA LOCATION: SAN ANTONIO, TX		
INDOOR		
COOLING:	72 F DB / 55% RH	+/- 2 DEG F
HEATING:	65 F DB	+/- 2 DEG F
BUILDING INTERNAL LOADS		
PEOPLE:	VARIOUS	
LIGHTING:	1.2 W/SF	
EQUIPMENT:	KITCHEN: 13 BTUH CONCESSION: 14,100 BTUH	
VENTILATION:	RESTROOM: 1000	CFM
	DINING: 320	
	CONCESSION: 180	
FLOOR AREA:	KITCHEN: 2364	SF
	KITCHEN: 188	
	CONCESSION: 435	
	CONCESSION STORAGE: 150	
	DINING: 546	
	FIELD STORAGE: 79	
WALL:	RESTROOM: 567	
	SCOREKEEPERS AREA: 839	
CEILING:	JANITORS: 78	
BUILDING ENVELOPE		
WALL:	0.085	U VALUE
ROOF:	0.05	U VALUE
FLOORING:	0.75, 0.29	U VALUE, SHGC

NOT USED

AIR DEVICE SCHEDULE											
	USAGE	FACE SIZE (IN.)	NECK SIZE (IN.)	FRAME	PATTERN	MAX. APD	MAXIMUM	MATERIAL	FINISH	MANUFACTURER - MODEL	NOTES
						(IN. WG)	NC				
S-1	CEILING SUPPLY DIFFUSER	24X24	SEE PLANS	LAY-IN	360 DEG	0.1	20	ALUMINUM	WHITE	TITUS - TMS-FA	1,2,3
S-2	CEILING SUPPLY DIFFUSER	12X12	SEE PLANS	LAY-IN	360 DEG	0.1	20	ALUMINUM	WHITE	TITUS - TMS-FA	1,2,3
E-1	CEILING EXHAUST GRILLE	12X12	SEE PLANS	LAY-IN	35 DEG	0.1	20	ALUMINUM	WHITE	TITUS - 350FL	1, 2, 3
E-2	WALL-MOUNT EXHAUST GRILLE	SEE PLANS	SEE PLANS	FLUSH	35 DEG	0.1	20	ALUMINUM	WHITE	TITUS - 350FL	1, 2, 3
R-1	CEILING RETURN GRILLE	24X24	SEE PLANS	LAY-IN	360 GRATE	0.1	20	ALUMINUM	WHITE	TITUS - 360F	1,2,3
NOTES:											
1. REFER TO SPECIFICATION SECTION 230000 FOR ADDITIONAL MANUFACTURERS.											
2. PROVIDE APPROPRIATE FRAME/BORDER/FLANGE FOR PROPER MOUNTING. REFER TO THE ARCHITECTURAL DRAWINGS FOR SURFACES IN WHICH GRILLES, REGISTERS AND DIFFUSERS ARE LOCATED.											
3. BRANCH DUTWORK TO AIR DEVICE INLETS SHALL MATCH THEIR INLET SIZE UNLESS OTHERWISE NOTED.											

HVAC INSULATION SCHEDULE			
SERVICE	MINIMUM R-VALUE	THICKNESS / MATERIAL	NOTES
DUCTWORK (CONCEALED PLENUM)			
SUPPLY AC UNIT TO TERMINAL:	R-6	2" THICK EXTERNALLY-WRAPPED	
RETURN AIR DUCTWORK:	R-4.2	2" THICK EXTERNALLY-WRAPPED	
RETURN PLENUM:	R-6	2" THICK RIGID FIBER BOARD	
OUTSIDE AIR DUCT:	R-6	2" THICK RIGID FIBER BOARD	
EXHAUST DUCTWORK - KITCHEN HOOD		2 LAYERS OF 3M FIREWRAP REFLECTAL AHJ	
DUCTWORK (EXPOSED EXTERIOR)			
SUPPLY AC UNIT TO TERMINAL:	R-8	2" THICK RIGID FIBER BOARD	WITH EITHER ALUMINUM SHEET METAL OR POLYGUARD MEMBRANE
REFRIGERANT PIPING			
SUCTION:		UP TO 3/4": 3/4" CLOSED CELL ELASTOMER	WITH ALUMINUM JACKET FOR EXTERIOR PIPING AND INSULATION JACKETING FOR INTERIOR CONCEALED PIPING
LIQUID:		NOT REQUIRED	
HOT GAS:		UP TO 2": 3/4" CLOSED CELL ELASTOMER	WITH ALUMINUM JACKET FOR EXTERIOR PIPING
HYDRO-PIPING			
CONDENSATE DRAIN: ALL SIZES		1/2" CLOSED CELL ELASTOMER	

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED





Hanson No. 17L0017 1006

Filename: CITY OF KENEDY SPORTS COMPLEX

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LAYOUT LW 8/6/19

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SCHEDULES

CONSTRUCTION DRAWINGS FOR

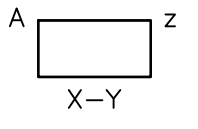
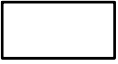











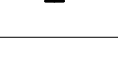










LARRY KIESLING YOUTH SPORTS COMPLEX

CITY OF KENEDY


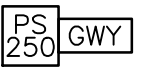





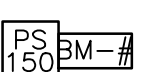

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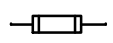

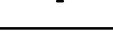
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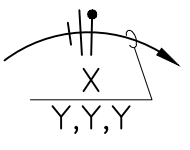


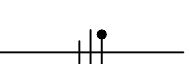
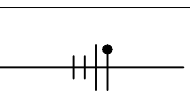



















ELECTRICAL LIGHTING LEGEND					
	FIXTURE LABELING WHEN NOT SHOWING CONDUIT AND WIRE. "X" INDICATES PANEL, "Y" INDICATES CIRCUIT NUMBER(S), "Z" INDICATES SWITCHING OR LIGHTING CONTROL ZONE DESIGNATION, "A" INDICATES FIXTURE TYPE, (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS).				
	2'x4' LED LIGHT FIXTURE.				
	2'x2' LED LIGHT FIXTURE.				
	HIGH BAY LED LIGHT FIXTURE.				
	PENDANT MOUNTED INDUSTRIAL LED LIGHT FIXTURE.				
	LED RECESSED DOWNLIGHT.				
	LED RECESSED DOWNLIGHT (WATERPROOF).				
	HI-HAT LED RECESSED DOWNLIGHT				
	SURFACE MOUNTED LED LIGHT FIXTURE				
	EXTERIOR WALLPACK LED LIGHT FIXTURE				
	UNIVERSAL MOUNT EXIT SIGN WITH BATTERY POWERED EMERGENCY OPERATION. SHADING INDICATES NUMBER OF FACES, ARROWS INDICATE DIRECTIONAL CHEVRONS.				
	SURFACE OR PENDANT MOUNTED LED TRACK LIGHTS.				
	WALL MOUNTED LED LIGHT FIXTURE, (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS).				
	EMERGENCY LIGHT FIXTURE - SWITCHED, (TYPICAL FOR ALL LIGHT FIXTURE SYMBOLS).				
	20 AMP, 120/277 VOLT SINGLE POLE TOGGLE SWITCH MOUNTED 48" AFF, UNLESS OTHERWISE NOTED. LOWER CASE LETTER INDICATES SWITCH-LEG, (TYPICAL FOR ALL SWITCH SYMBOLS).				
	20 AMP, 120/277 VOLT DOUBLE POLE TOGGLE SWITCH MOUNTED 48" AFF, UNLESS OTHERWISE NOTED.				
	20 AMP, 120 OR 277 VOLT SINGLE POLE SWITCH WITH RED PILOT LIGHT HANDLE (LIGHTED WHEN ON) MOUNTED 48" AFF, UNLESS OTHERWISE NOTED.				
	20 AMP, 120/277 VOLT THREE-WAY TOGGLE SWITCH MOUNTED 48" AFF, UNLESS OTHERWISE NOTED.				
	LIGHTING CONTROLLER WITH DIMMER RAISE/LOWER BUTTONS. # INDICATES NUMBER OF CHANNELS ON CONTROL SWITCH. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				
	16 SCENE CONTROLS ON/OFF/DIMMING LIGHTING CONTROL GRAPHIC WALLPAD WITH 150 mA POWER SUPPLY. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				
	2-BUTTON ON/OFF LIGHTING CONTROLLER. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				
	RECEPTACLE LOAD CONTROL POWER PACK. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				
	1-BUTTON LIGHTING CONTROLLER WITH DUAL TECHNOLOGY 120/277 VOLT PASSIVE INFRARED AND MICROPHONICS DETECTION OCCUPANCY SENSOR AND VACANCY SENSOR. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				
	120V POWER PACKS WITH EXTERNAL FAULT PROTECTION FOR 24V OUTPUT TO LIGHTING CONTROL COMPONENTS. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.				








NOTE: ALL SYMBOLS SHOWN ON THIS SHEET MAY NOT BE USED IN THIS SET OF PLANS.










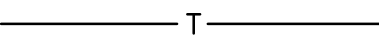

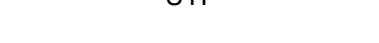
ELECTRICAL LIGHTING LEGEND	
	120V POWER PACKS WITH EXTERNAL FAULT PROTECTION AND OCCUPANCY CONTROLLED DIMMING FOR 24V OUTPUT TO LIGHTING CONTROL COMPONENTS. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	LIGHTING CONTROL SYSTEM GATEWAY WITH SENSORVIEW SOFTWARE AND A 250 mA POWER SUPPLY
	CEILING MOUNTED DUAL TECHNOLOGY 120/277 VOLT PASSIVE INFRARED AND MICROPHONICS DETECTION OCCUPANCY SENSOR WITH INTEGRATED ON/OFF PHOTOCELL. SMALL MOTION/STANDARD RANGE. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	CEILING MOUNTED DUAL TECHNOLOGY 120/277 VOLT PASSIVE INFRARED AND MICROPHONICS DETECTION OCCUPANCY SENSOR WITH INTEGRATED ON/OFF PHOTOCELL. LARGE MOTION/EXTENDED RANGE. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	CEILING MOUNTED DUAL TECHNOLOGY 120/277 VOLT PASSIVE INFRARED AND MICROPHONICS DETECTION OCCUPANCY SENSOR WITH DAYLIGHT COMPENSATION AND INTEGRATED ON/OFF PHOTOCELL. PHOTOCELL TO DIM LIGHTS PROPORTIONALLY TO ROOM LIGHTING LEVELS. SMALL MOTION/STANDARD RANGE. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	CEILING MOUNTED DUAL TECHNOLOGY 120/277 VOLT PASSIVE INFRARED AND MICROPHONICS DETECTION OCCUPANCY SENSOR WITH DAYLIGHT COMPENSATION AND INTEGRATED ON/OFF PHOTOCELL. PHOTOCELL TO DIM LIGHTS PROPORTIONALLY TO ROOM LIGHTING LEVELS. LARGE MOTION/EXTENDED RANGE. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	LIGHTING CONTROL BRIDGE MODULE WITH 150 mA POWER SUPPLY. # IS USED FOR IDENTIFICATION. (TYPICAL FOR ALL BRIDGE MODULES)
	LIGHTING CONTROL ETHERNET AND CONTROL INTERFACE TOUCH PANEL FOR A/V SYSTEM INTEGRATION. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.
	6-BUTTON ON/OFF LIGHTING TIMER CONTROLLER WITH 2 MINUTES, 5 MINUTES, 10 MINUTES, 15 MINUTES, 30 MINUTES, AND 60 MINUTES BUTTONS. LOWER CASE LETTER INDICATES LIGHTING CONTROL SYSTEM ZONE DESIGNATION.




ELECTRICAL ONE-LINE LEGEND	
	CIRCUIT BREAKER.
	FUSED SWITCH OR BOLTED PRESSURE SWITCH.
	TRANSFORMER.
	GROUND OR GROUND ROD.

CONSTRUCTION PHASE LEGEND FOR ELECTRICAL DRAWINGS	
	NEW EQUIPMENT
	EXISTING EQUIPMENT

ELECTRICAL POWER LEGEND	
	HOMERUN TO PANEL. "X" INDICATES PANEL, "Y" INDICATES CIRCUIT NUMBER(S).
	CONDUIT RUN CONCEALED IN WALL OR CEILING.
	CONDUIT RUN CONCEALED IN OR UNDER FLOOR SLAB.
	CONDUIT RUN EXPOSED.
	LONG SLASHES INDICATE NEUTRAL, SHOT SLASHES INDICATE HOT OR SWITCHED LEG, LONG SLASHES WITH DOT INDICATE GROUND.
	RECEPTACLE LABELING WHEN NOT SHOWING CONDUIT AND WIRE. "X" INDICATES PANEL, "Y" INDICATES CIRCUIT NUMBER(S), (TYPICAL FOR ALL POWER SYMBOLS).
	20 AMP, 125 VOLT SINGLE RECEPTACLE, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT DUPLEX RECEPTACLE, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT DOUBLE DUPLEX RECEPTACLE, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT DUPLEX RECEPTACLE MOUNTED ABOVE COUNTERTOP 42"± AFF, UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT SWITCHED RECEPTACLE, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT EMERGENCY POWER RECEPTACLE, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	20 AMP, 125 VOLT SINGLE RECEPTACLE IN A ONE-GANG FULLY ADJUSTABLE CAST IRON FLOOR BOX, BRASS CARPET FLANGE AND BRASS COVER PLATE WITH SCREW PLUGS.
	20 AMP, 125 VOLT DUPLEX RECEPTACLE IN A ONE-GANG FULLY ADJUSTABLE CAST IRON FLOOR BOX, BRASS CARPET FLANGE AND BRASS COVER PLATE WITH SCREW PLUGS.
	20 AMP, 125 VOLT DOUBLE DUPLEX RECEPTACLE IN A TWO-GANG FULLY ADJUSTABLE CAST IRON FLOOR BOX, BRASS CARPET FLANGE AND BRASS COVER PLATE WITH SCREW PLUGS.
	SINGLE SPECIAL PURPOSE RECEPTACLE. MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED. "X" INDICATES NEMA CONFIGURATION, SEE TABLE ON DRAWINGS.
	20 AMP, 125 VOLT DUPLEX RECEPTACLE AND ONE COMMUNICATIONS OUTLET (TYPE AS INDICATED) IN A TWO-GANG FULLY ADJUSTABLE CAST IRON FLOOR BOX, BRASS CARPET FLANGE AND BRASS COVER PLATE WITH SCREW PLUGS.
	20 AMP, 125 VOLT DOUBLE DUPLEX RECEPTACLE AND ONE COMMUNICATIONS OUTLET (TYPE AS INDICATED) IN A THREE-GANG FULLY ADJUSTABLE CAST IRON FLOOR BOX, BRASS CARPET FLANGE AND BRASS COVER PLATE WITH SCREW PLUGS.
	SURFACE MOUNTED POWER OR APPLIANCE PANELBOARD.
	MOTOR OUTLET, "X" INDICATES ESTIMATED HORSEPOWER.
	PULL BOX.
	CONTROL PANEL.
	TRANSFORMER
	MANUAL MOTOR STARTER

ELECTRICAL POWER LEGEND	
	JUNCTION BOX MOUNTED IN OR ABOVE CEILING.
	FLOOR MOUNTED JUNCTION BOX.
	WALL MOUNTED JUNCTION BOX, MOUNTING HEIGHT PER SPEC. UNLESS OTHERWISE NOTED.
	JUNCTION BOX MOUNTED ABOVE CEILING FOR MODULAR FURNITURE POWER POLE. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT PRIOR TO INSTALLATION.
	NONFUSED DISCONNECT SWITCH. AMP SIZE, POLES AND ENCLOSURE AS INDICATED. "WP" INDICATES WEATHERPROOF NEMA 3R ENCLOSURE.
	FUSED DISCONNECT SWITCH. AMP SIZE, POLES, FUSING AND ENCLOSURE AS INDICATED. "WP" INDICATES WEATHERPROOF NEMA 3R ENCLOSURE.
	EMERGENCY POWER OFF SWITCH. MUSHROOM HEAD PUSH BUTTON, TWIST & PULL TO RESET.

FIRE ALARM LEGEND	
	CEILING MOUNTED PROGRAMMABLE SMOKE DETECTOR.
	CEILING MOUNTED PROGRAMMABLE HEAT DETECTOR.
	FIRE ALARM VISUAL UNIT ONLY MOUNTED AT 80" AFF, UNLESS OTHERWISE NOTED. "X" INDICATES CANDELA INTENSITY.
	FIRE ALARM SPEAKER AND VISUAL UNIT MOUNTED AT 80" AFF, UNLESS OTHERWISE NOTED. "X" INDICATES WHITE STROBE CANDELA INTENSITY.
	FIRE ALARM CONTROL PANEL.
	FIRE ALARM ADDRESSABLE INPUT MODULE
	FIRE ALARM ADDRESSABLE RELAY MODULE
FIRE ALARM CABLE LEGEND	
	SPEAKER / VOICE ALARM CABLE
	TWISTED PAIR ADDRESSABLE LOOP CABLE
	#14 NOTIFICATION APPLIANCE WIRE
	CATEGORY 6 NETWORK CABLE
	UNSHIELDED TWISTED PAIR TELEPHONE CABLE

COMMUNICATIONS LEGEND	
	COMMUNICATIONS OUTLET, WALL MOUNT 18" AFF, UON. 4 PORT FACE PLATE WITH 2 ACTIVE PORTS AND PROVISIONS FOR 2 FUTURE PORTS
	COMMUNICATIONS OUTLET, WALL MOUNT 18" AFF, UON. 4 PORT FACE PLATE WITH 4 ACTIVE PORTS
	WALL TELEPHONE COMMUNICATIONS OUTLET, MOUNT 48" AFF. SINGLE PORT FACEPLATE WITH PROVISIONS FOR WALL TELEPHONE INSTRUMENT MOUNTING

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017		
Filename E-1-Elec Legends		
Scale NONE		
Date 08/06/2019		
LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
REVIEWED	RDN	08/06/19



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ELECTRICAL LEGENDS

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-1

of 42 sheets

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ELECTRICAL GENERAL NOTES					
1.	THE DRAWINGS AND APPLICABLE SPECIFICATIONS SHALL BE CONSIDERED SUPPLEMENTARY, ONE TO THE OTHER AND ARE CONSIDERED THE "CONTRACT DOCUMENTS". ALL WORKMANSHIP, METHODS, AND/OR MATERIALS DESCRIBED OR IMPLIED BY ONE AND NOT DESCRIBED OR IMPLIED BY THE OTHER SHALL BE PROVIDED, FURNISHED, OR PERFORMED AS IF IT HAD APPEARED IN BOTH SECTIONS. THE TERM "CONTRACT DOCUMENTS" DESCRIBED HEREIN IS NOT LIMITED SOLELY TO THE ELECTRICAL PORTION OF THE DRAWINGS AND SPECIFICATIONS, BUT ENCOMPASSES THE DRAWINGS AND SPECIFICATIONS OF ALL DIVISIONS AS A WHOLE.				
2.	WHERE A DISCREPANCY OR CONFLICT IS FOUND BETWEEN ONE DRAWING AND ANOTHER, OR BETWEEN A DRAWING AND APPLICABLE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE A/E IMMEDIATELY IN WRITTEN FORM. CONTRACTOR SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL A WRITTEN DIRECTIVE HAS BEEN RETURNED. IN GENERAL, THE MOST STRINGENT REQUIREMENT SHALL GOVERN UNLESS THE DISCREPANCY CONFLICTS WITH APPLICABLE CODES, WHEREIN THE CODE SHALL GOVERN.				
3.	THE DRAWINGS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION, METHODS, MATERIALS AND EQUIPMENT, OR EXACT LOCATIONS, ROUTING, ETC. THEY INDICATE THE RESULT TO BE ACHIEVED BY THE ASSEMBLAGE OF SEVERAL SYSTEMS FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. DO NOT SCALE THE CONTRACT DOCUMENTS. COORDINATE EXACT EQUIPMENT LOCATIONS WITH THE ARCHITECTURAL AND STRUCTURAL PORTIONS OF THE CONTRACT DOCUMENTS, AS WELL AS FIELD CONDITIONS, APPROVED SHOP DRAWINGS, AND WORK OF ALL OTHER DIVISIONS/TRADES.				
4.	THE TERM "PROVIDE" USED IN THE CONTRACT DOCUMENTS INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL MATERIALS, INCLUDING ALL COST FOR SHIPPING, UNLOADING, STORAGE, UNPACKING, ERECTION, ANCHORING, ETC. REQUIRED FOR CORRECT INSTALLATION OF A COMPLETE SYSTEM, UNLESS SPECIFICALLY NOTED OTHERWISE.				
5.	UNLESS NOTED AS EXISTING, ALL ELECTRICAL INDICATED IN THE CONTRACT DOCUMENTS SHALL BE NEW. SHALL BE U.L. LISTED, AND SHALL BEAR A U.L. LABEL, WHERE NO U.L. LABEL OR LISTING IS AVAILABLE THE MATERIAL SHALL BE LISTED WITH AN APPROVED, NATIONALLY RECOGNIZED ELECTRICAL TESTING AGENCY. WHERE NO LABELING OR LISTING IS AVAILABLE FOR MATERIAL, TEST DATA SHALL BE SUBMITTED TO THE A/E AS EVIDENCE THAT THE MATERIAL MEETS OR EXCEEDS AVAILABLE STANDARDS. EQUIPMENT SHALL BE INSTALLED AND USED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING.				
6.	ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), ALL APPLICABLE LOCAL CODES, ORDINANCES AND ALL REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION (AHJ), AS A MINIMUM.				
7.	THE CONTRACTOR SHALL PROVIDE EXPERIENCED, QUALIFIED, AND RESPONSIBLE SUPERVISION FOR ALL WORK REQUIRED BY THE CONTRACT DOCUMENTS. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, TO THE SATISFACTION OF THE A/E AND OWNER. ALL WORK SHALL BE PERFORMED IN A FIRST-CLASS MANNER.				
8.	THE CONTRACTOR SHALL CARRY ALL INSURANCE REQUIRED TO PROTECT AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THIS PROJECT.				
9.	THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP ARE FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE A/E AND OWNER. THE CONTRACTOR, AT NO ADDITIONAL COSTS, SHALL PROVIDE THE CORRECTION OF ANY DEFECTS INCLUDING REPAIR OR REPLACEMENT.				
10.	THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH PERMITS, LICENSES, FEES, INSPECTIONS, TESTING AND TEMPORARY POWER IN HIS PROPOSAL, UNLESS SPECIFICALLY NOTED OTHERWISE.				
11.	THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND/OR SITE AFFECTED BY THIS WORK PRIOR TO SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT MAY AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT AND/OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED THAT COULD HAVE REASONABLY BEEN OBSERVED BY THE CONTRACTOR WILL NOT BE RECOGNIZED.				
12.	THE CONTRACTOR SHALL COORDINATE ALL PROJECT SCHEDULING AND PHASING REQUIREMENTS WITH A/E AND OWNER PRIOR TO SUBMITTING PROPOSAL. THIS PROJECT MAY REQUIRE PHASING SEQUENCES AND POTENTIAL PREMIUM TIME WORK AND ALL COSTS FOR SUCH SHALL BE INCLUDED IN THE CONTRACTOR'S PROPOSAL. THE CONTRACTOR SHALL PROVIDE ADEQUATE WORK FORCE, EQUIPMENT, AND SHALL WORK SUCH HOURS INCLUDING PREMIUM TIME AS MAY BE REQUIRED IN ORDER TO ADHERE TO THE PROJECT SCHEDULE. ADDITIONALLY, THE CONTRACTOR SHALL ENSURE THAT LONG-LEAD ITEMS DO NOT IMPACT THE PROJECT'S SCHEDULE OR PHASING.				
13.	ALL TEMPORARY DOWNTIME REQUIRED FOR SYSTEM TIE-IN OR SWITCHOVER FOR ANY PORTION OF THE ELECTRICAL SYSTEM SHALL BE PRE-APPROVED BY THE OWNER AND SCHEDULED IN ADVANCE.				
14.	THE CONTRACTOR SHALL COORDINATE THE EXACT REQUIREMENTS WITH ALL LOCAL UTILITY COMPANIES (ELECTRIC, TELEPHONE, CABLE TV, ETC.) AND INCLUDE ALL COSTS FOR PROVIDING TEMPORARY AND PERMANENT SERVICES REQUIRED FOR THIS PROJECT IN HIS BID. CONTRACTOR'S PROPOSAL SHALL INCLUDE, BUT IS NOT LIMITED TO: EXCAVATION, RACEWAYS, BACKFILL, EQUIPMENT, EQUIPMENT PADS, BACKBOARDS, METERS, GROUNDING AND IMPACT FEES.				
15.	THE CONTRACTOR SHALL INCLUDE ALL COST FOR THE PROPER STORAGE, TRANSPORT, DISPOSAL, AND/OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS WORK. CONTRACTOR SHALL COMPLY WITH ALL RULES, REGULATIONS AND GUIDELINES THAT APPLY. REMOVE DEBRIS, RUBBISH, ETC. RESULTING FROM THIS WORK FROM THE SITE DAILY.				
16.	IF HAZARDOUS MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS AND GUIDELINES CONCERNING REMOVAL, HANDLING, DISPOSAL, AND PROTECTION AGAINST ENVIRONMENTAL EXPOSURE OR POLLUTION. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF SAID COMPLIANCE.				
17.	CONDUCT WORK OPERATIONS AND DEBRIS REMOVAL IN A MANNER THAT ENSURES MINIMUM INTERFERENCE WITH NORMAL BUSINESS OPERATIONS, TRAFFIC, PARKING, ETC. ONGOING IN ADJACENT OCCUPIED SPACES OR FACILITIES. PROVIDE ALL THAT IS REQUIRED TO EFFECTIVELY PROTECT SURROUNDING OCCUPANTS, EQUIPMENT, FINISHES, FURNITURE, ETC. FROM DAMAGE OR EXCESSIVE NOISE THROUGHOUT THE DURATION OF THIS PROJECT. ANY DAMAGE TO SURROUNDING ELEMENTS RESULTING FROM THE CONTRACTOR'S FAILURE TO ADHERE TO THIS REQUIREMENT SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR, TO THE SATISFACTION OF THE A/E AND OWNER, AT NO ADDITIONAL COSTS. REPORT ANY SUCH OCCURRENCE TO THE A/E AND OWNER IMMEDIATELY AND AWAIT WRITTEN DIRECTION PRIOR TO PROCEEDING WITH REPAIRS.				
18.	THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE DESIGN BASIS EQUIPMENT SPECIFIED BY DIVISION 26 AND OTHER DIVISIONS. WHERE THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE A/E AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO ENSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DECISION TO SUBSTITUTE PRODUCTS RESULTS IN THE NEED FOR THE A/E TO REVISE THE CONTRACT DOCUMENTS, THE A/E RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.				
19.	CONTRACTOR SHALL MAINTAIN A CURRENT ACCURATE SET OF PROJECT RECORD DOCUMENTS (AS-BUILTS) AT THE SITE THROUGHOUT THE DURATION OF THIS PROJECT. RECORD DRAWINGS SHALL BE UPDATED EACH DAY TO REFLECT THE ACTUAL LOCATIONS, SIZES, ROUTING, ETC. OF EACH PORTION OF THE ELECTRICAL SYSTEM AFFECTED BY THIS WORK. A FINAL SET OF RECORD DOCUMENTS SHALL BE ISSUED TO THE A/E FOR REVIEW AND THEN SUBMITTED TO THE OWNER AT THE CONCLUSION OF THE PROJECT.				

ELECTRICAL GENERAL NOTES (CONT.)					
20.	ALL 120V, 20A BRANCH CIRCUITS OVER 80'-0" IN LENGTH SHALL BE #10 AWG CU. CONDUCTORS MINIMUM TO ACCOMMODATE VOLTAGE DROP. WHERE A CONFLICT EXISTS BETWEEN THIS REQUIREMENT AND CONDUCTOR SIZES INDICATED ELSEWHERE IN THE CONTRACT DOCUMENTS, THIS REQUIREMENT SHALL TAKE PRECEDENCE.				
21.	ALL 277V, 20A BRANCH CIRCUITS OVER 150'-0" IN LENGTH SHALL BE #10 AWG CU. CONDUCTORS MINIMUM TO ACCOMMODATE VOLTAGE DROP. WHERE A CONFLICT EXISTS BETWEEN THIS REQUIREMENT AND CONDUCTOR SIZES INDICATED ELSEWHERE IN THE CONTRACT DOCUMENTS, THIS REQUIREMENT SHALL TAKE PRECEDENCE.				
22.	IN GENERAL, VOLTAGE DROP FOR ANY BRANCH CIRCUIT SHALL NOT EXCEED 3%. VOLTAGE DROP FOR ANY FEEDER SHALL NOT EXCEED 2%. WHERE VOLTAGE DROP EXCEEDS THESE REQUIREMENTS, THE CONTRACTOR SHALL INCREASE THE SIZE OF THE CONDUCTORS AND RACEWAY AS REQUIRED.				
23.	CONTRACTOR SHALL PROVIDE ALL PENETRATIONS THROUGH FLOORS, WALLS, CEILINGS AND ROOFS. COORDINATE LOCATIONS AND SIZES WITH THE ARCHITECTURAL AND STRUCTURAL PORTIONS OF THE CONTRACT DOCUMENTS, FIELD CONDITIONS, AND WORK OF ALL OTHER DIVISIONS/TRADES. ALL OPENINGS SHALL BE SEALED WATERTIGHT.				
24.	WHERE OPENINGS PENETRATE A FIRE RATED FLOOR, WALL, CEILING, OR ROOF, FIRESTOPPING SHALL BE PROVIDED. MEET ALL REQUIREMENTS FOR THE U.L. ASSEMBLY AND RACEWAYS INVOLVED.				
25.	CONTRACTOR SHALL INCLUDE ALL COSTS FOR EXCAVATION, SAW CUTTING, DIRECTIONAL BORING, CORE DRILLING, BACKFILL, SURFACE RESTORATION, REPAIR OF FINISHES, ETC. THAT IS REQUIRED IN ORDER TO MEET THE PROJECT REQUIREMENTS.				
26.	CONTRACTOR SHALL LOCATE, IDENTIFY, PROTECT, AND DOCUMENT ALL UTILITY LINES LOCATED WITHIN THE PROJECT BOUNDARY UTILIZING APPROPRIATE LOCAL LOCATING SERVICES.				
27.	ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED OUTDOORS OR INDOORS WHERE EXPOSED TO SIGNIFICANT MOISTURE SHALL BE RAINPROOF TYPE NEMA 3R (MINIMUM), WHETHER INDICATED ON CONTRACT DOCUMENTS OR NOT.				
28.	ALL COMPONENTS OF THE ELECTRICAL SYSTEM LOCATED IN A HAZARDOUS (CLASSIFIED) LOCATION SHALL BE APPROVED FOR USE IN SAID LOCATION WHETHER INDICATED ON THE CONTRACT DOCUMENTS OR NOT.				
29.	ALL WORK ON THE ELECTRICAL SYSTEM REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE COORDINATED WITH THE WORK OF ALL OTHER DIVISIONS/TRADES PRIOR TO THE COMMENCEMENT OF WORK. AVOID INTERFERENCES WITH THE PROGRESS OF OTHER DIVISIONS/TRADES.				
30.	COORDINATE THE EXACT LOCATIONS OF ALL DEVICES (RECEPTACLES, TELECOMMUNICATIONS OUTLETS, FIRE ALARM, SECURITY, ETC.) WITH THE ARCHITECTURAL PLANS, APPROVED MILLWORK SHOP DRAWINGS, AND FIELD CONDITIONS.				
31.	COORDINATE THE EXACT REQUIREMENTS OF ALL MECHANICAL (DIVISION 22 & 23) EQUIPMENT PRIOR TO PREPARING SUBMITTALS (PRODUCT DATA & SHOP DRAWINGS). THE CONTRACTOR SHALL PROVIDE ALL RACEWAYS, CONDUCTORS, BOXES, EQUIPMENT, DISCONNECT SWITCHES, CIRCUIT BREAKERS, CONTROL CIRCUITS, CONTROL TRANSFORMERS, FIRE ALARM SHUTDOWN, ETC. REQUIRED FOR A COMPLETE AND OPERATIONAL DIVISION 22 & 23 SYSTEM. VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT PRIOR TO COMMENCEMENT OF WORK.				
32.	THE USE OF ALUMINUM CONDUCTORS, RACEWAYS, BOXES, BUSSING, WINDINGS, ETC. ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E AND OWNER GRANTS WRITTEN PERMISSION.				
33.	THE USE OF ELECTRICAL NON-METALLIC TUBING (ENT), AND LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC) ARE PROHIBITED UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E AND OWNER GRANTS WRITTEN PERMISSION.				
34.	ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS, INCLUDING LOW VOLTAGE SYSTEMS, SHALL BE INSTALLED IN A COMPLETE RACEWAY SYSTEM UNLESS SPECIFICALLY NOTED OTHERWISE.				
35.	ALL RACEWAYS THAT RISE UP FROM UNDERGROUND SHALL BE GALVANIZED RIGID STEEL (RGS) WITH BITUMASTIC COATING FOR AT LEAST THE FINAL 18" IN LENGTH. USE OF NONMETALLIC CONDUIT ABOVE GRADE IS NOT ACCEPTABLE.				
36.	PROVIDE A SEPARATE DEDICATED NEUTRAL CONDUCTOR FOR ALL 120-VOLT RECEPTACLE BRANCH CIRCUITS (INCLUDING MODULAR FURNITURE), AND ALL LIGHTING BRANCH CIRCUITS CONTROLLED BY A DIMMER. SHARED NEUTRALS ARE NOT ACCEPTABLE.				
37.	ALL BRANCH CIRCUITS SHALL BE INSTALLED IN 3/4" TRADE SIZE RACEWAY MINIMUM, INCLUDING FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (FMC & LFMC).				
38.	FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT (FMC & LFMC) SHALL NOT BE USED IN LENGTHS THAT EXCEED 6'-0" UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E AND OWNER GRANTS WRITTEN PERMISSION.				
39.	PANEL SCHEDULES INDICATE DEDICATED HOMERUNS FOR EACH BRANCH CIRCUIT. AT HIS DISCRETION, THE CONTRACTOR MAY GROUP BRANCH CIRCUITS INTO A COMMON HOMERUN WHERE THE HOMERUN DOES NOT EXCEED 3 PHASE CONDUCTORS, 3 NEUTRAL CONDUCTORS, 1 EQUIPMENT GROUND AND 1 ISOLATED GROUND (8 WIRES MAXIMUM). THE CONTRACTOR SHALL INCREASE THE HOMERUN RACEWAY SIZE AS NECESSARY TO COMPLY WITH THE N.E.C. RACEWAY FILL REQUIREMENTS.				
40.	PROVIDE PLASTIC LAMINATE NAME TAGS ON EACH SWITCHGEAR, SWITCHBOARD, PANELBOARD, MOTOR CONTROL CENTER, SAFETY SWITCH, CONTROL PANEL, CABINET, AND ANY OTHER MAJOR COMPONENT OF THE ELECTRICAL SYSTEM.				
41.	PROVIDE TYPED PANEL DIRECTORIES FOR ALL PANELBOARDS. DIRECTORIES SHALL REFLECT TRUE PROJECT AS-BUILT CONDITIONS FOR ALL BRANCH CIRCUITS. DIRECTORIES SHALL INCLUDE WHERE EACH PANEL IS FED FROM. ADDITIONALLY, EACH BRANCH CIRCUIT LOAD DESCRIPTION SHALL INCLUDE THE ROOM NUMBERS FOR EACH LOAD SERVED (i.e. "RECEPTACLES - 501, 503"). ROOM NUMBERS SHALL BE BASED ON ACTUAL ROOM SIGNAGE INSTALLED IN FIELD. COORDINATE EXACT ROOM NUMBERS WITH A/E AND OWNER PRIOR TO COMPLETION OF PANEL DIRECTORIES.				
42.	FOR SWITCHGEAR, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER DISTRIBUTION EQUIPMENT THAT DOES NOT HAVE PROVISIONS FOR ATTACHMENT OF A PANEL DIRECTORY, PROVIDE PLASTIC LAMINATE NAME TAGS FOR EACH BRANCH CIRCUIT BREAKER. NAME TAG SHALL INCLUDE LOAD DESCRIPTION AND ROOM NUMBERS FOR EACH LOAD SERVED.				
43.	ALL DEVICE OUTLET BOXES, JUNCTION BOXES, PULL BOXES, AND RACEWAYS SHALL BE CONCEALED IN CEILINGS, WALLS OR BELOW SLAB UNLESS SPECIFICALLY NOTED OTHERWISE, OR UNLESS A/E AND OWNER GRANTS WRITTEN PERMISSION.				
44.	PROVIDE A REINFORCED CONCRETE PAD SIZED 4" LARGER IN BOTH DIRECTIONS AND 4" HIGH FOR ALL FREESTANDING, FLOOR MOUNTED ELECTRICAL EQUIPMENT. PROVIDE VIBRATION ISOLATORS AND/OR ANCHORS PER MANUFACTURER'S INSTRUCTIONS.				
45.	THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY NORMAL LIGHTING, EMERGENCY LIGHTING, AND EXIT SIGNAGE REQUIRED FOR THE DURATION OF THIS PROJECT.				
46.	CIRCUITS CAN BE COMBINED INTO LARGER CONDUIT SO LONG AS CONDUCTORS ARE DE-RATED PER NEC FOR ANYTHING OVER 3 PHASE CONDUCTORS, 3 NEUTRAL CONDUCTORS, AND 1 GROUND CONDUCTOR IN A SINGLE CONDUIT.				
47.	THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND / OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY, WHATEVER IN RESPECT TO ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION. THE OWNER'S REPRESENTATIVE SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. ALSO CONTACT OWNER'S REPRESENTATIVE FOR ASSISTANCE IN LOCATING UNDERGROUND UTILITIES, PIPELINES, CABLES, OR OTHER LINES OR STRUCTURES. ALSO COORDINATE WORK WITH ALL ABOVE GROUND UTILITIES. CONTACT TEXAS 811 OR TEXAS ONE CALL FOR UTILITY INFORMATION; PHONE NUMBER: 1-800-344-8377.				

ELECTRICAL ABBREVIATIONS			
@	AT	K	KELVIN OR KILO
A/C	AIR CONDITIONING	KCMIL	THOUSAND CIRCULAR MILS
AC	ALTERNATING CURRENT	KVA	KILOVOLT AMPERE
A/E	ARCHITECT/ENGINEER	KW	KILOWATT
AFD	ADJUSTABLE FREQUENCY DRIVE	KWH	KILOWATT HOUR
AFF	ABOVE FINISHED FLOOR	LAHJ	LOCAL AUTHORITY HAVING JURISDICTION
AFG	ABOVE FINISHED GRADE	LED	LIGHT EMITTING DIODE
AHJ	AUTHORITY HAVING JURISDICTION	LF	LINEAR FEET
AHU	AIR HANDLER UNIT	LLD	LAMP LUMEN DEPRECIATION
AIC	AMPS INTERRUPTING CAPACITY	LLF	LIGHT LOSS FACTOR
AL	ALUMINUM	LPF	LOW POWER FACTOR
AM	AMMETER	LT	LIGHT
AMP	AMPERE	LTG	LIGHTING
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	LTS	LIGHTS
ATS	AUTOMATIC TRANSFER SWITCH	LV	LOW VOLTAGE
AWG	AMERICAN WIRE GAUGE	M	METER
BB	BLOWER BUILDING	MAINT	MAINTENANCE
BBCB	BLOWER AND CHLORINE BUILDING	MAX	MAXIMUM
BKR	BREAKER	MCB	MAIN CIRCUIT BREAKER
BLDG	BUILDING	MCC	MOTOR CONTROL CENTER
BMS	BUILDING MANAGEMENT SYSTEM	MCN	THOUSAND CIRCULAR MILS
BPS	BOLTED PRESSURE SWITCH	MFG	MANUFACTURER
BTU	BRITISH THERMAL UNITS	MH	MANHOLE OR METAL HALIDE
BTUH	BRITISH THERMAL UNITS PER HOUR	MIN	MINIMUM
C	CONDUIT	MLO	MAIN LUG ONLY
CB	CIRCUIT BREAKER	MM	MILIMETER
CBM	CERTIFIED BALLAST MANUFACTURERS	MOCF	MAXIMUM OVERCURRENT PROTECTION
CD	CANDELA	MPH	MILES PER HOUR
CFM	CUBIC FEET PER MINUTE	MTD	MOUNTED
CHH	CONTROL HANDHOLE	MV	MEDIUM VOLTAGE
CIS&	COMPLETE INTEGRATION AND SERVICES	#	NUMBER
CKT	CIRCUIT	N	NEUTRAL
CL	CABLE LINE	NC	NORMALLY CLOSED
CLG	CEILING	NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
COMP	COMPRESSOR	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
COND	CONDUIT	NF	NON-FUSED
CONN	CONNECTION	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CONT	CONTINUOUS	NIC	NOT IN CONTRACT
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT	NL	NIGHT LIGHT, NOT SWITCHED
CRI	COLOR RENDERING INDEX	NO	NORMALLY OPEN OR NUMBER
CT	CURRENT TRANSFORMER	NPT	NATIONAL PIPE THREAD
CTR	COUNTER	OD	OUTSIDE DIAMETER
CU	COPPER OR CONDENSER UNIT	OL	OVERLOAD
CW	COLD WATER	OS&Y	OUTSIDE SCREW AND YOKE
DB	DIRECT BURIED	%	PERCENT
DC	DIRECT CURRENT	P	POLE
DISC	DISCONNECT	PB	PULL BOX
DISC SW	DISCONNECT SWITCH	PH OR Ø	PHASE
DN	DOWN	PHH	POWER HANDHOLE
DPST	DOUBLE POLE SINGLE THROW	PL	COMPACT FLUORESCENT LAMP
DS	DISCONNECT SWITCH	PNL	PANEL OR PANELBOARD
EA	EACH	PR	PAIR
ECB	ENCLOSED CIRCUIT BREAKER	PRI	PRIMARY
EC	ELECTRICAL CONTRACTOR	PSF	POUNDS PER SQUARE FOOT
EDH	ELECTRIC DUCT HEATER	PSI	POUNDS PER SQUARE INCH
EF	EXHAUST FAN	PT	POTENTIAL TRANSFORMER
ELEV	ELEVATION OR ELEVATOR	PVC	POLYVINYL CHLORIDE
EMS	ENERGY MANAGEMENT SYSTEM	RECEPT	RECEPTACLE
EMT	ELECTRICAL METALLIC TUBING	RGS	RIGID GALVANIZED STEEL
EQUIP	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
EST	ESTIMATE	RS	RAPID START
ETD	EXISTING TO BE DEMOLISHED	RTU	ROOF TOP UNIT
ETR	EXISTING TO BE RELOCATED	SCA	SHORT CIRCUIT AMPERES
EWC	ELECTRIC WATER COOLER	SEC	SECONDARY
EWH	ELECTRIC WATER HEATER	SF	SQUARE FOOT OR SUPPLY FAN
EX OR EXIST	EXISTING	SIN	SOLID NEUTRAL
F/A	FIRE ALARM	SPST	SINGLE POLE SINGLE THROW
FAAP	FIRE ALARM ANNUNCIATOR PANEL	SS	STAINLESS STEEL
FACP	FIRE ALARM CONTROL PANEL	SW	SWITCH
FATC	FIRE ALARM TERMINAL CABINET	SWBD	SWITCHBOARD
FB	FILTER BUILDING	SYS	SYSTEM
FC	FOOTCANDLES	TEMP	TEMPERATURE
FLA	FULL LOAD AMPERES	TTB	TELEPHONE TERMINAL BOARD
FLR	FLOOR	TTC	TELEPHONE TERMINAL CABINET
FT	FEET	TV	TELEVISION
FTB	FAN TERMINAL BOX	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
FVNR	FULL VOLTAGE NON-REVERSING	TVTC	TELEVISION TERMINAL CABINET
G OR GND	GROUND	TVEC	TELEVISION EQUIPMENT CABINET
GAL	GALLON	TYP	TYPICAL
GALV	GALVANIZED	UG	UNDERGROUND
GC	GENERAL CONTRACTOR	UL	UNDERWRITER'S LABORATORIES
GFI	GROUND FAULT INTERRUPTING	UON	UNLESS OTHERWISE NOTED
GFP	GROUND FAULT PROTECTION	VE	VALUE ENGINEER
GPH	GALLONS PER HOUR	VFD	VARIABLE FREQUENCY DRIVE
GPM	GALLONS PER MINUTE	VHF	VERY HIGH FREQUENCY
GFS	GALVANIZED RIGID STEEL	VHO	VERY HIGH OUTPUT
HID	HIGH INTENSITY DISCHARGE	VOLT	VOLT
HH	HAND HOLE	VA	VOLT AMPERE
HO	HIGH OUTPUT	VAV	VARIABLE AIR VOLUME
HP	HORSEPOWER OR HEAT PUMP	VM	VOLT METER
HPF	HIGH POWER FACTOR	VOL	VOLUME
HPS	HIGH PRESSURE SODIUM	W	WATT OR WIRE
HR	HOUR	WAS	WASTE ACTIVATED SLUDGE
HS	HEAT STRIP	WP	WEATHERPROOF
HT	HEIGHT	WSA	WIRE SIZE AMPERES
HTR	HEATER	WW	WIREWAY OR AUXILIARY GUTTER
HZ	HERTZ	XFMR	TRANSFORMER
IG	ISOLATED GROUND	Y	WYE
IMC	INTERMEDIATE METALLIC CONDUIT	YD	YARD
INCAND	INCANDESCENT	YR	YEAR
IN	INCHES	3R	RAINPROOF
JB	JUNCTION BOX	4X	DUSTIGHT, WATERTIGHT

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017		
Filename E-2-Elec Notes		
Scale NONE		
Date 08/06/2019		
LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
REVIEWED	RDN	08/06/19



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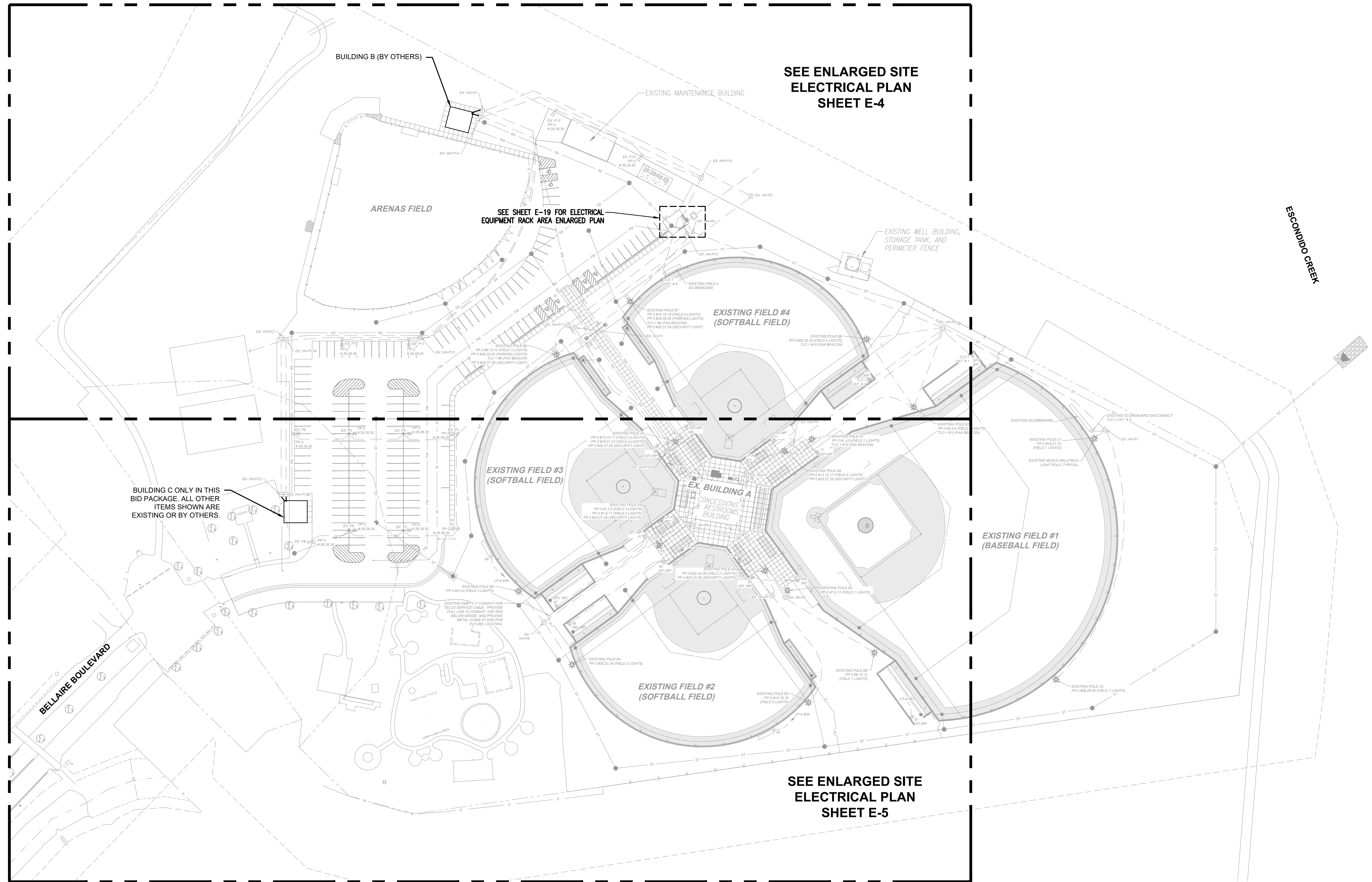
ELECTRICAL NOTES & ABBREVIATIONS

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

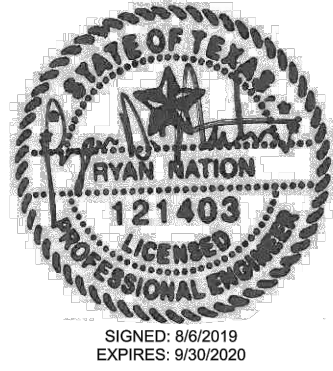
E-2

of 42 sheets

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017
Filename: E-3-Elec Site Key Plan
Scale: AS SHOWN
Date: 08/06/2019

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DRAWN	AJT/SB	08/06/19
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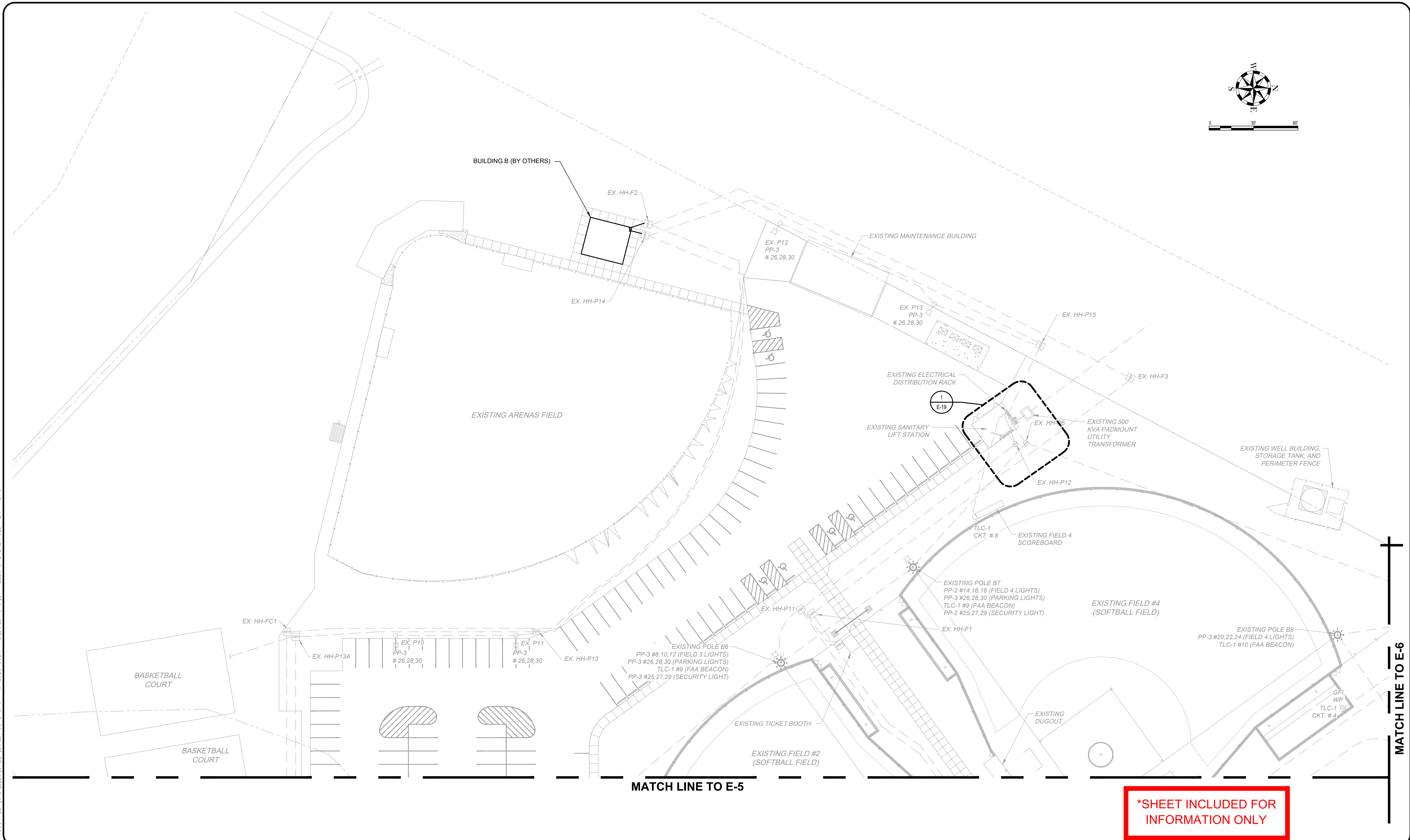
ELECTRICAL SITE KEY PLAN

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-3

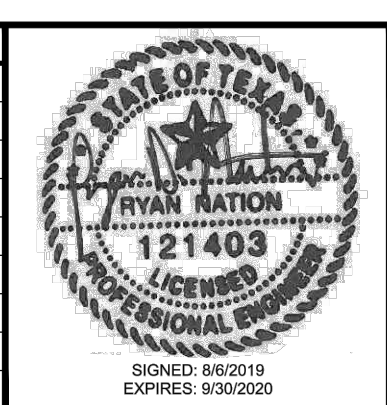
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INFORMATION ONLY

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1	CHANGE ORDER #X	01/09/2020	SKB	GTR	GTR



"The Junction Where Good Friends Meet"

Hanson No.	17L0017	
Filename	E-4-Elec Site Enlarged	
Scale	AS SHOWN	
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ENLARGED SITE ELECTRICAL PLAN

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-4

of 42 sheets

MATCH LINE TO E-4

MATCH LINE TO E-6

BELLAIRE
BOULEVARD

BASKETBALL
COURT

BUILDING C ONLY IN THIS
BID PACKAGE. ALL OTHER
ITEMS SHOWN ARE
EXISTING OR BY OTHERS.

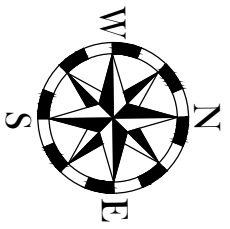
EXISTING FIELD #3
(SOFTBALL FIELD)

EXISTING CONCESSIONS &
RESTROOMS
BUILDING A

EXISTING FIELD #1
(BASEBALL FIELD)

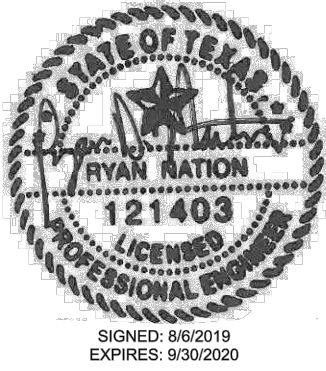
EXISTING FIELD #2
(SOFTBALL FIELD)

EXISTING 6" CHAIN LINK FENCE



0 30' 60'

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017
Filename: E-5-Elec Site Enlarged Plan
Scale: AS SHOWN
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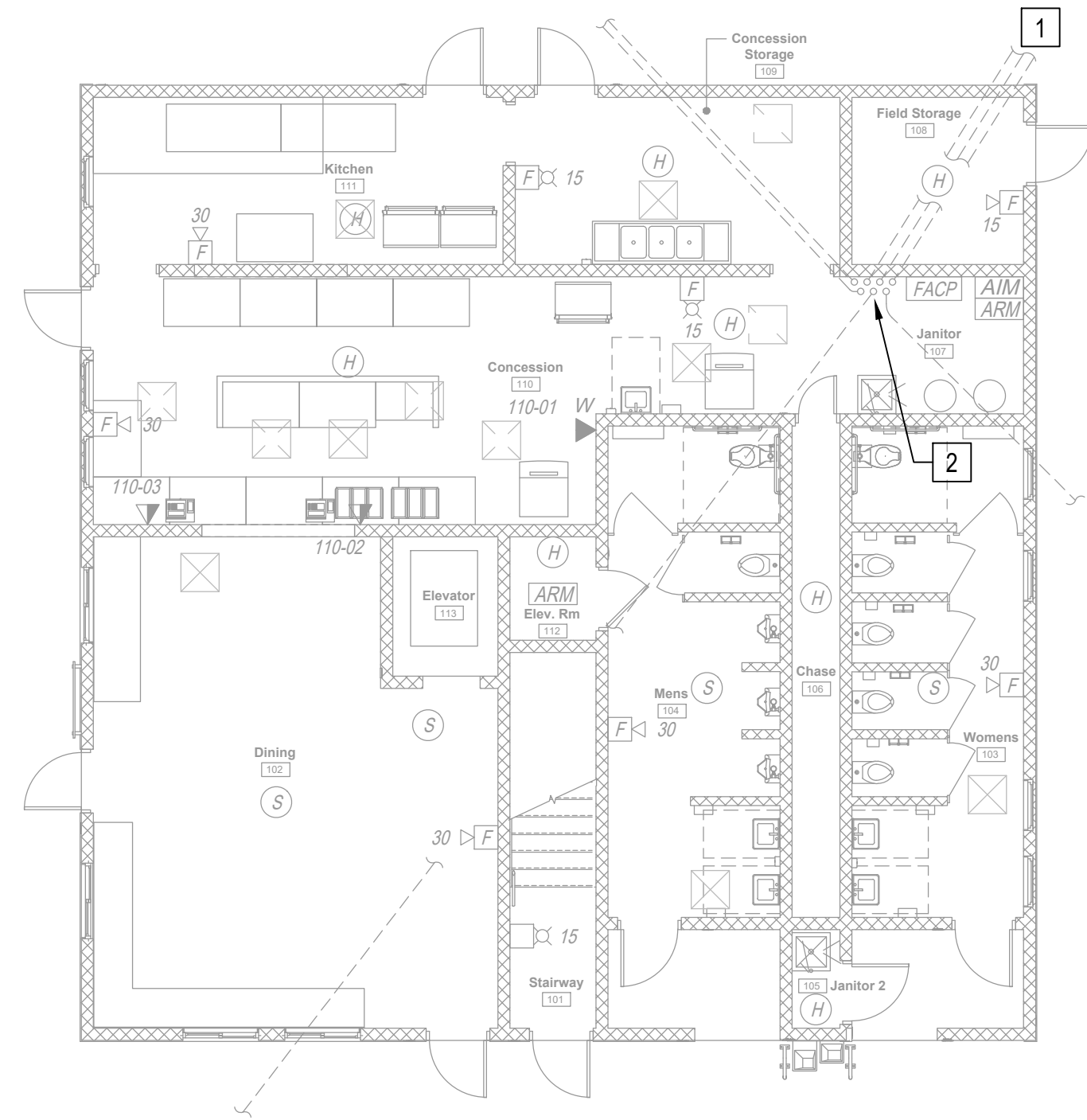
ENLARGED SITE ELECTRICAL PLAN

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

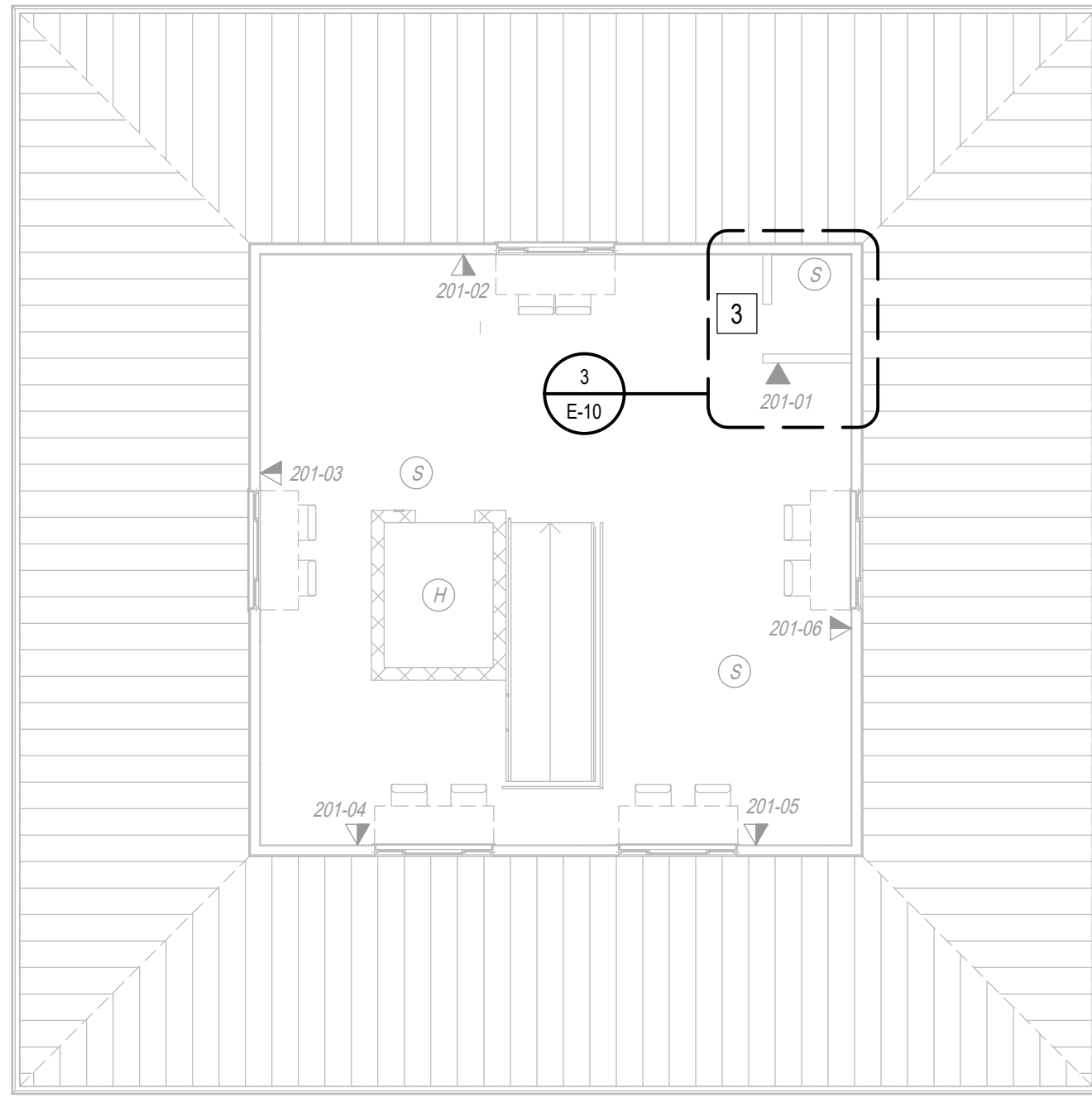
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of 42 sheets

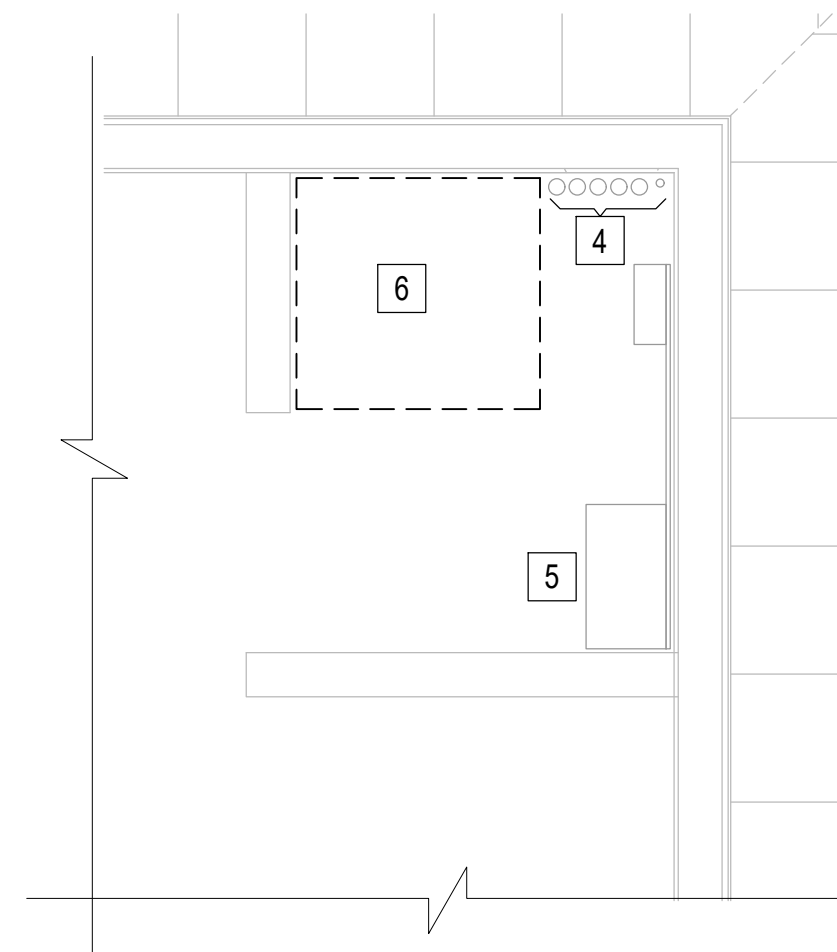
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1 FIRST FLOOR COMMUNICATIONS PLAN - BLDG. A
SCALE: 1/8" = 1'-0"



2 SECOND FLOOR COMMUNICATIONS PLAN - BLDG. A
SCALE: 1/8" = 1'-0"



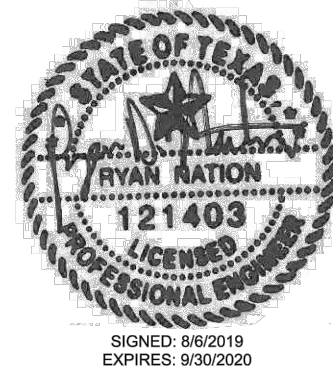
3 PARTIAL SECOND FLOOR PLAN -
COMMUNICATIONS ALCOVE
SCALE: 1/2" = 1'-0"

KEYED NOTES:

- 1 EXISTING ONE (1) 2" SCHEDULE 80 PVC CONDUIT WITH EXISTING ONE (1) 12 STRAND FIBER OPTIC CABLE TO BUILDING B. EXISTING ONE (1) 2" AND EXISTING ONE (1) 3/4" EMPTY SCHEDULE 80 PVC CONDUITS TO POLE A5 FOR FUTURE SPEAKER, CAMERA, AND POWER WIRING. EXISTING ONE (1) 2" EMPTY SCHEDULE 80 PVC CONDUIT FOR FUTURE CAMERAS AT BUILDING C. SEE SHEETS E-4 & E-5 FOR CONTINUATION.
- 2 EXISTING SITE COMMUNICATIONS CONDUITS EXPOSED UP WALL TO SECOND FLOOR COMMUNICATIONS ALCOVE.
- 3 SEE PARTIAL PLAN THIS SHEET FOR ADDITIONAL WORK IN COMMUNICATIONS ALCOVE.
- 4 EXISTING SITE COMMUNICATIONS CONDUITS FROM FIRST FLOOR.
- 5 EXISTING COMMUNICATIONS PATCH PANEL, EXISTING NETWORK SWITCH, AND EXISTING TELCO MODEM/ROUTER IN EXISTING WALL MOUNT EQUIPMENT RACK.
- 6 FUTURE RACK MOUNTED SOUND REINFORCEMENT SYSTEM EQUIPMENT BY OWNER.

*SHEET INCLUDED FOR
INFORMATION ONLY

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017
Filename: E-10-Bldg_A_COMM
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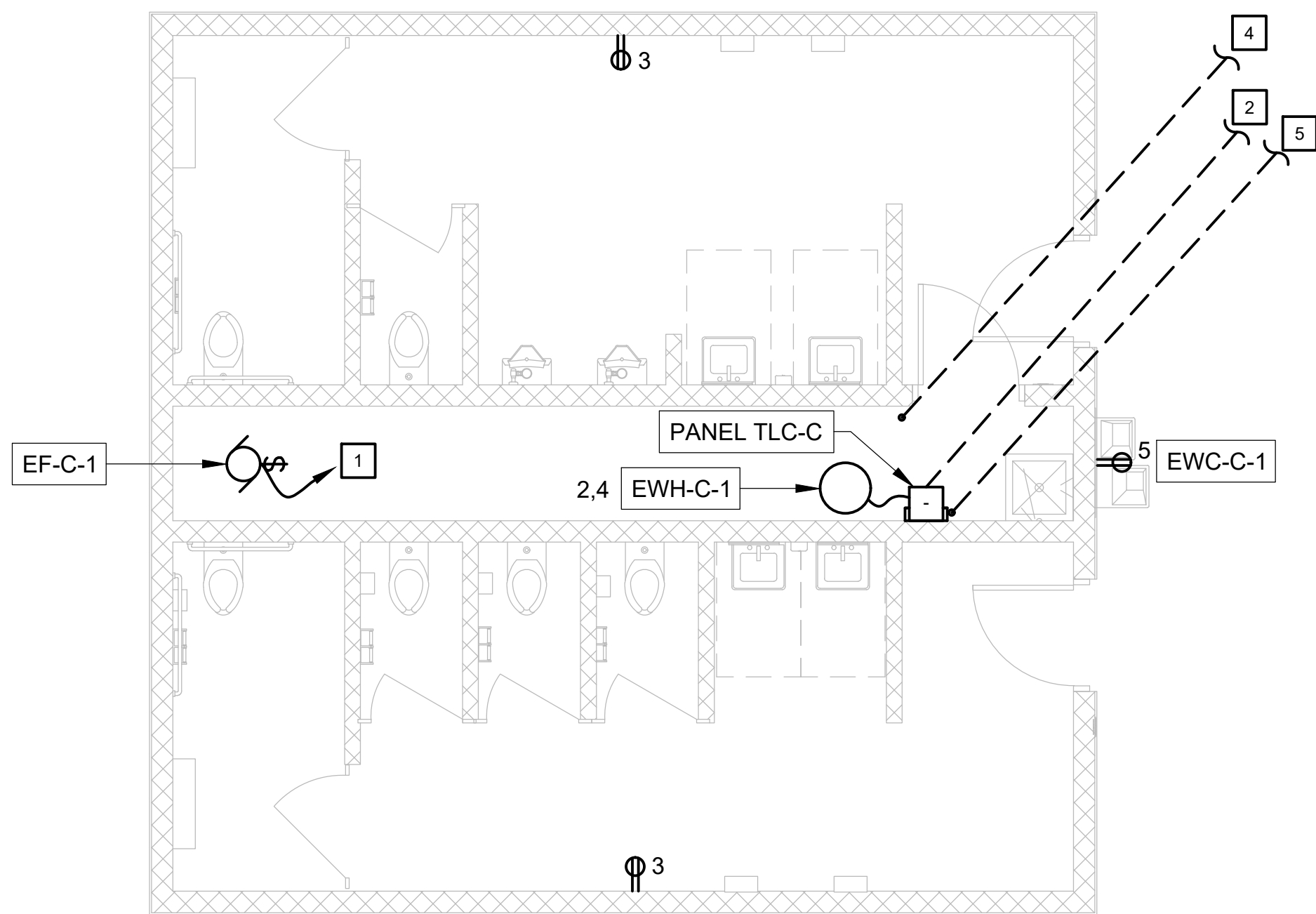
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BUILDING A - COMMUNICATIONS PLAN

CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

E-10

of 42 sheets



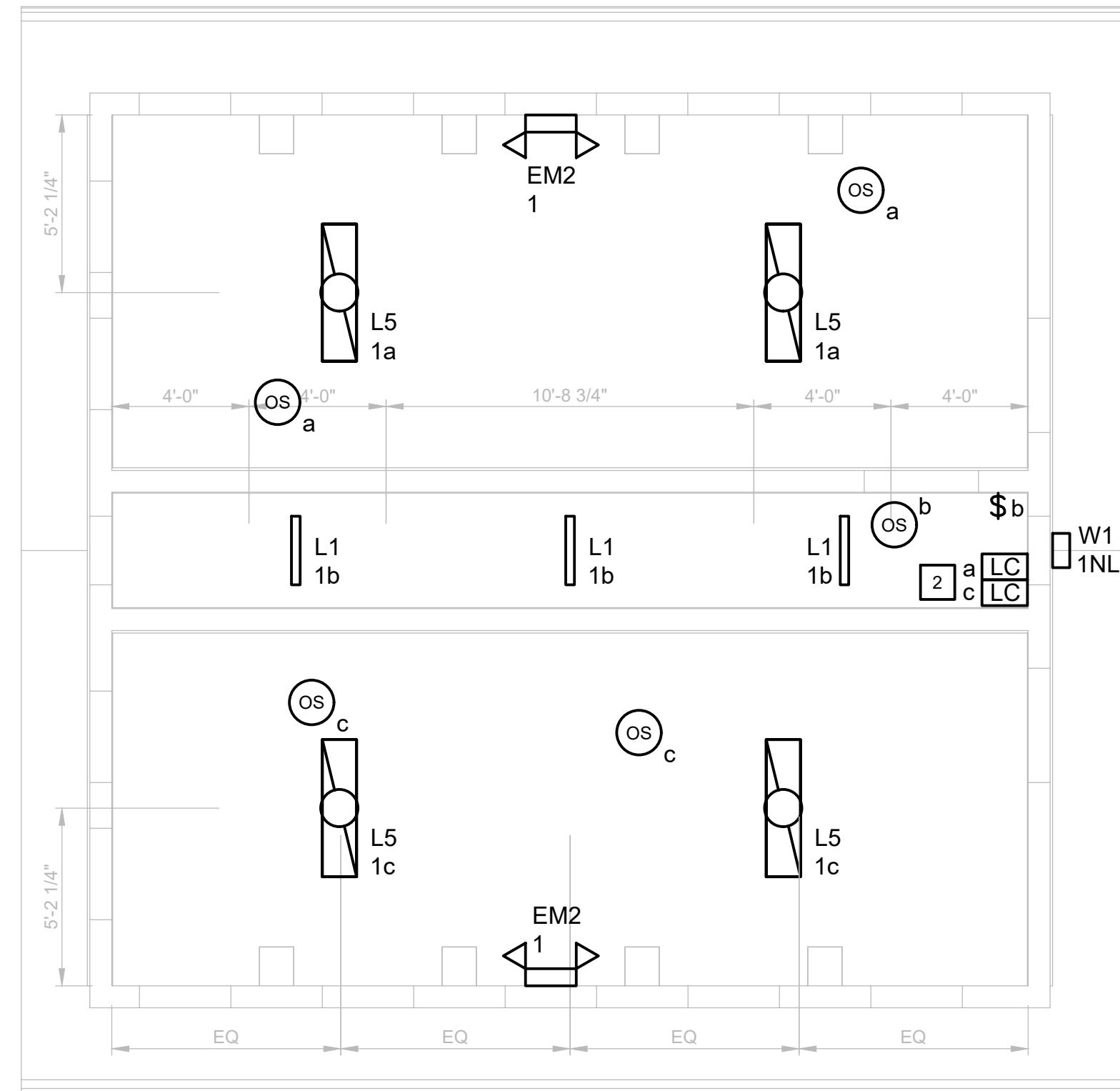
1 FIRST FLOOR ELECTRICAL PLAN - BLDG. C
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- SEE EQUIPMENT CONNECTION SCHEDULE SHEET E-18 FOR EQUIPMENT LOAD DATA AND CONNECTION REQUIREMENTS.
- SEE TLC-C SCHEDULE ON SHEET E-16 FOR CONDUIT AND WIRE SIZES.

KEYED NOTES:

- CONNECT EXHAUST FAN TO BUILDING LIGHTING CIRCUIT. FAN TO OPERATE WHENEVER EITHER TOILET IS OCCUPIED.
- 1-1/4" C WITH 2#4 AWG CABLES, 1#4 AWG GND FROM TLC-C TO EXISTING HANDHOLE HH-P13B. AT HH-P13B, INTERCEPT EXISTING 2#4 AWG FEEDER CABLES FROM MDP-1 AND SPLICE THEM WITH NEW 2#4 AWG FEEDER CABLES FROM TLC-C. USE SPLICING METHODS WITHIN THE RECOMMENDATIONS OF THE NEC. SEE SHEET E-4 FOR CONTINUATION.
- LOCATE MANUAL ON/OFF OVERRIDE SWITCHES FOR TOILET LIGHTS IN JANITOR CLOSET.
- 2" EMPTY CONDUIT FROM ROOM C-101 JANITOR TO EXISTING HANDHOLE HH-FC2. CONDUIT TO BE STUBBED AND CAPPED WITHIN ROOM C-101 JANITOR. CONDUIT IS FOR FUTURE CAMERAS AT BUILDING C.
- 1" EMPTY CONDUIT FROM TLC-C TO EXISTING HANDHOLE HH-P13B FOR FUTURE BASKETBALL COURTS. CONDUIT TO BE STUBBED AND CAPPED WITHIN ROOM C-101 NEAR TLC-C.

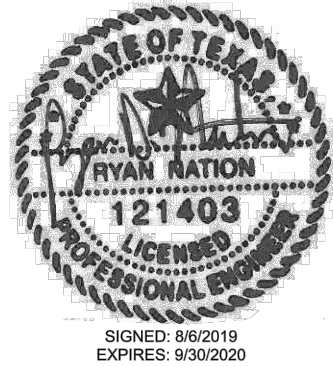


2 FIRST FLOOR REFLECTED CEILING PLAN - BLDG. C
SCALE: 1/4" = 1'-0"

BUILDING C LIGHTING CONTROLS SCHEDULE							
RM #	ROOM / SPACE / AREA DESCRIPTION	ON / OFF CONTROL		LEVEL CONTROL			NOTES
		SYSTEM TYPE	CONTROL SEQUENCE	TYPE	CONTROL DEVICE	ON LEVEL	
C-100	MEN'S TOILET	IND	OCC				
C-101	JANITOR	IND	VAC				
C-102	WOMEN'S TOILET	IND	OCC				
<u>LEGEND</u>							
CONTROL SEQUENCE DESCRIPTIONS							
MAN	MANUAL CONTROL: LIGHTS TURNED ON / OFF VIA TOGGLE SWITCH(ES) IN SPACE. NO AUTOMATIC CONTROLS.						
NL	NIGHT LIGHTING: LIGHTS TURNED ON / OFF VIA PHOTOCELL						
OCC	OCCUPANCY CONTROL: LIGHTS TURNED ON / OFF VIA OCCUPANCY SENSORS IN SPACE. MANUAL ON / OFF OVERRIDE VIA LOCAL CONTROLLER / SWITCH IN SPACE.						
SEC	SECURITY LIGHTING: LIGHTS REMAIN ON CONTINUOUSLY (NO ON / OFF CONTROLS).						
T	TIMER CONTROL: LIGHTS MANUALLY TURNED ON VIA COUNT-DOWN TIMER IN SPACE. LIGHTS TURNED OFF AFTER COUNT-DOWN TIMER EXPIRES.						
TOD	TIME OF DAY CONTROL: LIGHTS TURNED ON / OFF AT SPECIFIC TIMES VIA TIME CLOCK OR TIME-OF-DAY SIGNAL FROM CONTROL SYSTEM.						
VAC	VACANCY CONTROL: LIGHTS TURNED ON / OFF VIA TOGGLE SWITCH(ES) IN SPACE. LIGHTS AUTOMATICALLY TURNED OFF / ON VIA OCCUPANCY SENSOR IF TOGGLE SWITCH(ES) LEFT ON WHEN SPACE UNOCCUPIED.						
CONTROL SYSTEM TYPES				LEVEL CONTROL DEVICES			
IND	INDIVIDUAL CONTROL			CDT	COUNTDOWN TIMER		
LCS	LIGHTING CONTROL SYSTEM			DLS	DUAL-LEVEL SWITCHING		
LEVEL CONTROL TYPES				LCC	LOCAL LIGHTING CONTROLLER		
BI	BI-LEVEL DIMMING			OS	OCCUPANCY SENSOR		
DIM	FULL-RANGE DIMMING			PC	PHOTO CONTROL		
DLH	DAYLIGHT HARVESTING						

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



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Hanson No. 17L0017 Filename: E-12-Bldg_C_Elect Scale: AS INDICATED Date: 08/06/2019		
LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
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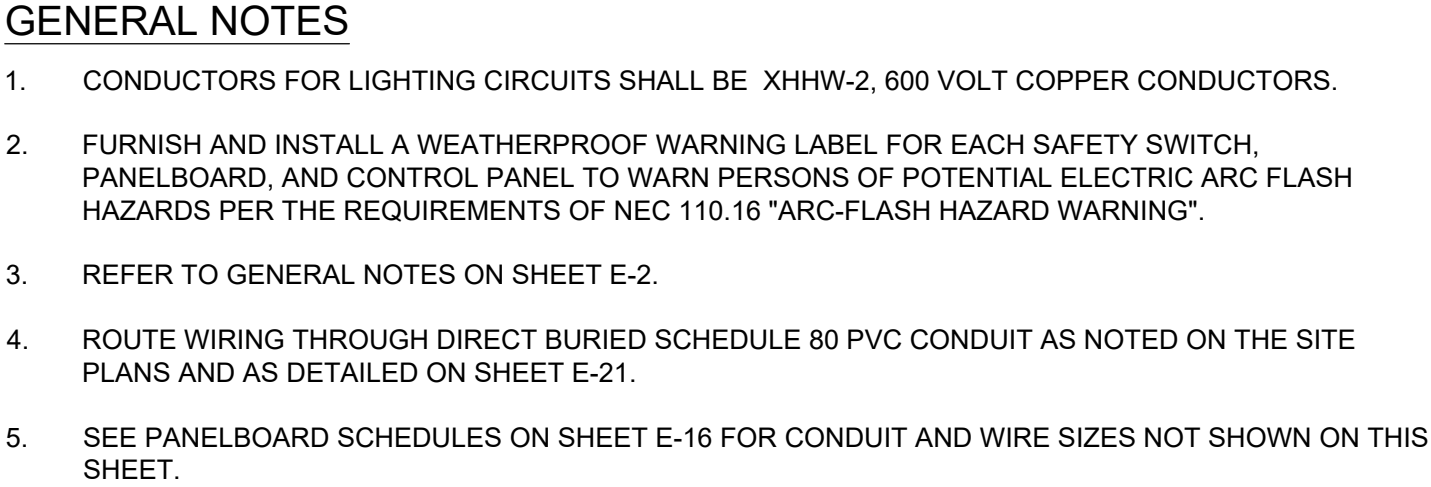
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BUILDING C - ELECTRICAL PLAN

CONSTRUCTION DRAWINGS FOR
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E-12

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NO SCALE

STATE OF TEXAS
 RYAN NATION
 121403
 LICENSED
 PROFESSIONAL ENGINEER
 SIGNED: 8/6/2019
 EXPIRES: 9/30/2020



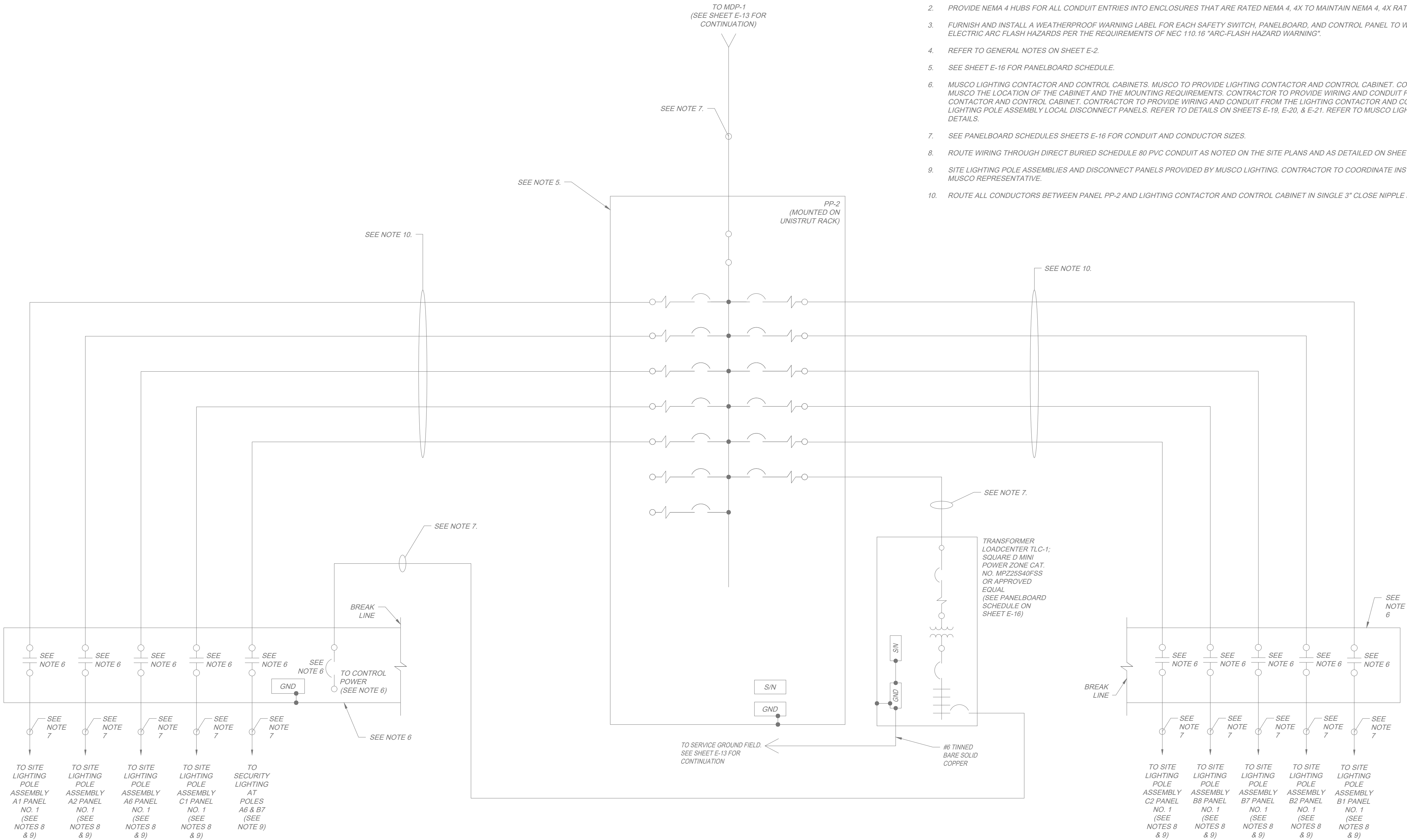
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GENERAL NOTES

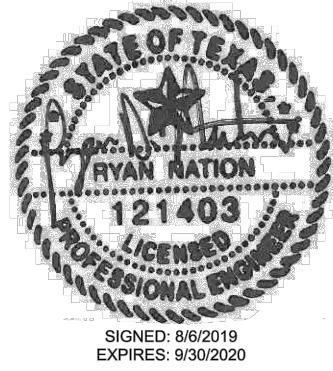
1. CONDUCTORS FOR LIGHTING CIRCUITS SHALL BE XHHW-2, 600 VOLT COPPER CONDUCTORS.
2. PROVIDE NEMA 4 HUBS FOR ALL CONDUIT ENTRIES INTO ENCLOSURES THAT ARE RATED NEMA 4, 4X TO MAINTAIN NEMA 4, 4X RATING.
3. FURNISH AND INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SAFETY SWITCH, PANELBOARD, AND CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER THE REQUIREMENTS OF NEC 110.16 "ARC-FLASH HAZARD WARNING".
4. REFER TO GENERAL NOTES ON SHEET E-2.
5. SEE SHEET E-16 FOR PANELBOARD SCHEDULE.
6. MUSCO LIGHTING CONTACTOR AND CONTROL CABINETS. MUSCO TO PROVIDE LIGHTING CONTACTOR AND CONTROL CABINET. CONTRACTOR TO COORDINATE WITH MUSCO THE LOCATION OF THE CABINET AND THE MOUNTING REQUIREMENTS. CONTRACTOR TO PROVIDE WIRING AND CONDUIT FROM MDP-1 TO THE LIGHTING CONTACTOR AND CONTROL CABINET. CONTRACTOR TO PROVIDE WIRING AND CONDUIT FROM THE LIGHTING CONTACTOR AND CONTROL CABINETS AND THE SITE LIGHTING POLE ASSEMBLY LOCAL DISCONNECT PANELS. REFER TO DETAILS ON SHEETS E-19, E-20, & E-21. REFER TO MUSCO LIGHTING SUBMITTAL FOR FURTHER DETAILS.
7. SEE PANELBOARD SCHEDULES SHEETS E-16 FOR CONDUIT AND CONDUCTOR SIZES.
8. ROUTE WIRING THROUGH DIRECT BURIED SCHEDULE 80 PVC CONDUIT AS NOTED ON THE SITE PLANS AND AS DETAILED ON SHEET E-21.
9. SITE LIGHTING POLE ASSEMBLIES AND DISCONNECT PANELS PROVIDED BY MUSCO LIGHTING. CONTRACTOR TO COORDINATE INSTALLATION OF THE PANELS WITH MUSCO REPRESENTATIVE.
10. ROUTE ALL CONDUCTORS BETWEEN PANEL PP-2 AND LIGHTING CONTACTOR AND CONTROL CABINET IN SINGLE 3" CLOSE NIPPLE NOT EXCEEDING 24" IN LENGTH.

EXISTING 480/277V POWER PANEL PP-2 ONE-LINE DIAGRAM

NO SCALE

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NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



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Hanson No. 17L0017
Filename: E-14-PP-2 One-Line
Scale: NONE
Date: 08/06/2019

LAYOUT	AJT/GR	08/06/19
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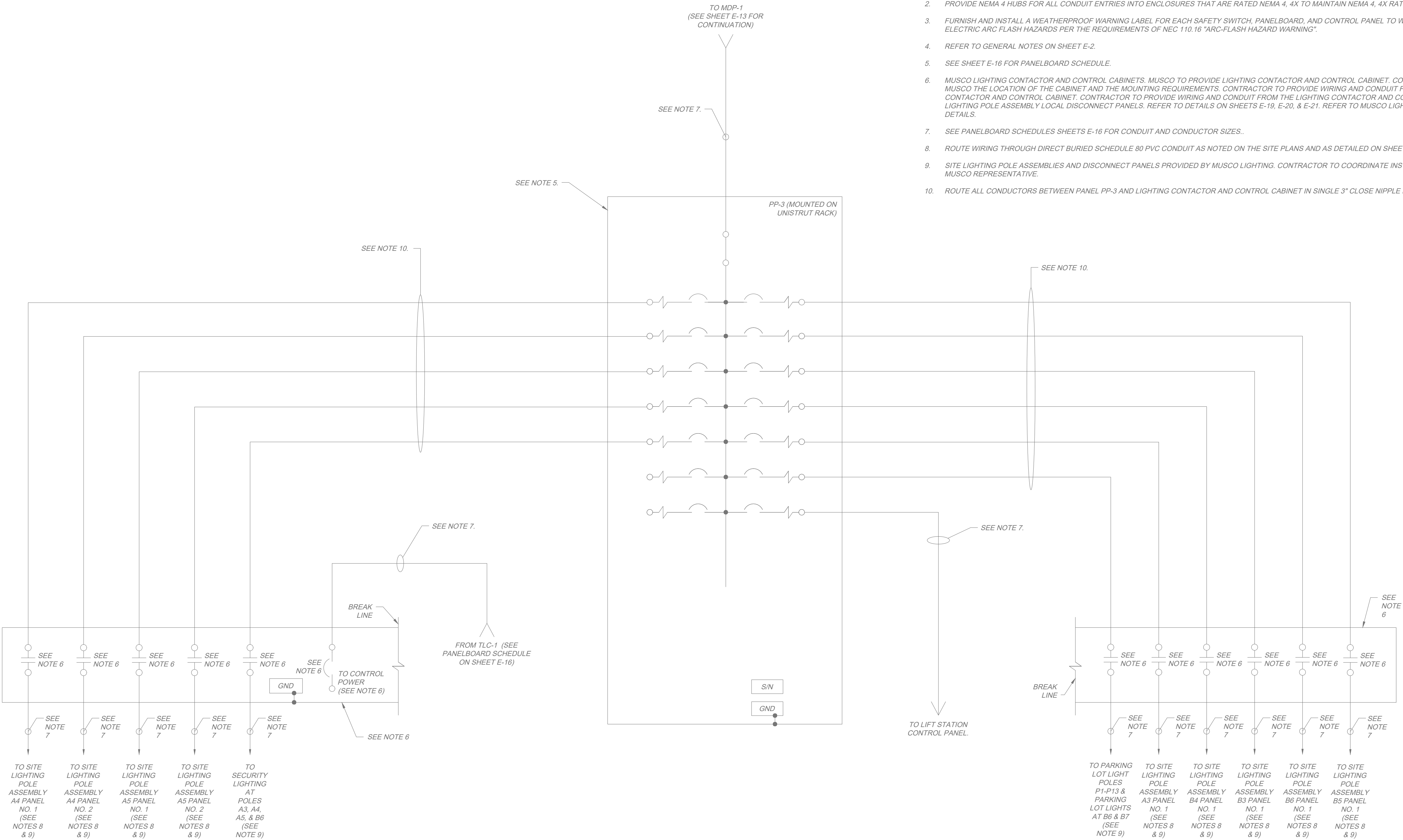
PP-2 ONE-LINE DIAGRAM

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-14

of 42 sheets

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GENERAL NOTES

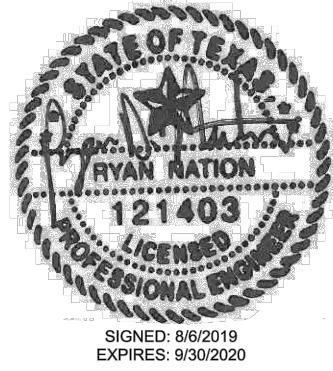
1. CONDUCTORS FOR LIGHTING CIRCUITS SHALL BE XHHW-2, 600 VOLT COPPER CONDUCTORS.
2. PROVIDE NEMA 4 HUBS FOR ALL CONDUIT ENTRIES INTO ENCLOSURES THAT ARE RATED NEMA 4, 4X TO MAINTAIN NEMA 4, 4X RATING.
3. FURNISH AND INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SAFETY SWITCH, PANELBOARD, AND CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS PER THE REQUIREMENTS OF NEC 110.16 "ARC-FLASH HAZARD WARNING".
4. REFER TO GENERAL NOTES ON SHEET E-2.
5. SEE SHEET E-16 FOR PANELBOARD SCHEDULE.
6. MUSCO LIGHTING CONTACTOR AND CONTROL CABINETS. MUSCO TO PROVIDE LIGHTING CONTACTOR AND CONTROL CABINET. CONTRACTOR TO COORDINATE WITH MUSCO THE LOCATION OF THE CABINET AND THE MOUNTING REQUIREMENTS. CONTRACTOR TO PROVIDE WIRING AND CONDUIT FROM MDP-1 TO THE LIGHTING CONTACTOR AND CONTROL CABINET. CONTRACTOR TO PROVIDE WIRING AND CONDUIT FROM THE LIGHTING CONTACTOR AND CONTROL CABINETS AND THE SITE LIGHTING POLE ASSEMBLY LOCAL DISCONNECT PANELS. REFER TO DETAILS ON SHEETS E-19, E-20, & E-21. REFER TO MUSCO LIGHTING SUBMITTAL FOR FURTHER DETAILS.
7. SEE PANELBOARD SCHEDULES SHEETS E-16 FOR CONDUIT AND CONDUCTOR SIZES.
8. ROUTE WIRING THROUGH DIRECT BURIED SCHEDULE 80 PVC CONDUIT AS NOTED ON THE SITE PLANS AND AS DETAILED ON SHEET E-21.
9. SITE LIGHTING POLE ASSEMBLIES AND DISCONNECT PANELS PROVIDED BY MUSCO LIGHTING. CONTRACTOR TO COORDINATE INSTALLATION OF THE PANELS WITH MUSCO REPRESENTATIVE.
10. ROUTE ALL CONDUCTORS BETWEEN PANEL PP-3 AND LIGHTING CONTACTOR AND CONTROL CABINET IN SINGLE 3" CLOSE NIPPLE NOT EXCEEDING 24" IN LENGTH.

EXISTING 480/277V POWER PANEL PP-3 ONE-LINE DIAGRAM

NO SCALE

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"The Junction Where Good Friends Meet"

Hanson No.	17L0017
Filename	E-15-PP-3 One-Line
Scale	NONE
Date	08/06/2019

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PP-3 ONE-LINE DIAGRAM

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CITY OF KENEDY

E-15

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EXISTING DISTRIBUTION PANELBOARD SCHEDULE																					
NAME: EXISTING MDP-1				VOLTAGE: 277 / 480 V, THREE PHASE, 4 WIRE + G MAINS: 800 A MCB										ENCLOSURE RATING: NEMA 4XSS SYM. INTERRUPT RATING: 35,000 A							
PH	N	G	C	CIRCUIT DESCRIPTION	AMP FRAME	AMP TRIP	POLE	PHASE A kW		PHASE B kW		PHASE C kW		AMP FRAME	AMP TRIP	POLE	CIRCUIT DESCRIPTION	PH	N	G	C
								LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT								
250KCM	-	#2	3"	EX. LVT-A BUILDING A	225	225	3	42.56	-	42.30	4.78	41.99	4.31	100	80	2	TLC-B BUILDING B (BY OTHERS)	#4	-	#8	1-1/4"
#4	-	#4	1-1/4"	TLC-C BUILDING C	100	40	2	2.29	37.81	-	37.81	1.86	37.71	225	200	3	EX. PANELBOARD PP-3	#3/0	#3/0	#6	2"
#3/0	#3/0	#6	2"	EX. PANELBOARD PP-2	225	200	3	34.28	-	33.97	-	30.52	-	100	60	3	EX. AC SURGE PROTECTOR (INTERNAL)	#6	#6	#6	-
-	-	-	-	SPACE				-	-	-	-	-	-				SPACE	-	-	-	-
-	-	-	-	SPACE				-	-	-	-	-	-				SPACE	-	-	-	-
-	-	-	-	SPACE				-	-	-	-	-	-				SPACE	-	-	-	-
-	-	-	-	SPACE				-	-	-	-	-	-				SPACE	-	-	-	-
OPTIONS:								116.95	118.86	116.39	CONNECTED kVA / PHASE				TOTAL CONNECTED LOAD (kVA):				352.19		
								422	429	420	CONNECTED AMPS / PHASE				TOTAL DEMAND LOAD (kVA):						

1

2

KEYED NOTES:

- 1
- CONTRACTOR TO ONLY PROVIDE CABLE AND CONDUIT FROM EXISTING HH-P13B TO TLC-C AS SHOWN ON SHEETS E-12 AND E-13. CIRCUIT BREAKER FOR TLC-C ON MDP-1 HAS ALREADY BEEN INSTALLED. CONDUIT AND WIRE FROM MDP-1 TO HH-P13B HAS ALREADY BEEN INSTALLED.
- 2
- BUILDING B WORK BY OTHERS. SHOWN FOR REFERENCE ONLY.

1 EXISTING MDP-1 PANELBOARD SCHEDULE

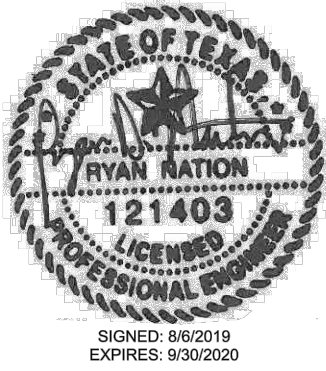
SCALE: NONE

TRANSFORMER LOADCENTER SCHEDULE																			
NAME: TLC-C				PRIMARY VOLTAGE: 480 V, SINGLE PHASE PRIMARY CIRCUIT BREAKER: 40 A SECONDARY VOLTAGE: 120 / 240 V, SINGLE PHASE, 3 WIRE + G SECONDARY CIRCUIT BREAKER: 60 A								TRANSFORMER SIZE: 10kVA ENCLOSURE RATING: NEMA 1 SYM. INTERRUPT RATING: 10,000 A							
PH	N	G	C	CIRCUIT DESCRIPTION	POLE	AMP RAT.	CKT NO.	PHASE A kW		PHASE B kW		CKT NO.	AMP RAT.	POLE	CIRCUIT DESCRIPTION	PH	N	G	C
#12	#12	#12	3/4"	LIGHTING, EF-C-1	1	20	1	0.39	1.50			2	20	2	EW-H-C-1	#12	-	#12	3/4"
#12	#12	#12	3/4"	RECEPTACLES	1	20	3			0.36	1.50	4							
#12	#12	#12	3/4"	EW-C-1	1	20	5	0.40	-			6			SPACE	-	-	-	-
-	-	-	-	SPACE			7			-		8			SPACE	-	-	-	-
-	-	-	-	SPACE			9	-	-			10			SPACE	-	-	-	-
OPTIONS:								2.29	1.86	CONNECTED kVA / PHASE				TOTAL CONNECTED LOAD (kVA):				4.15	
								19	16	CONNECTED AMPS / PHASE				TOTAL DEMAND LOAD (kVA):					

2 TLC-C TRANSFORMER LOAD CENTER SCHEDULE

SCALE: NONE

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017 Filename E-16-Panel Schedules 1 Scale NONE Date 08/06/2019		
LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
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ELECTRICAL SCHEDULES - 1 OF 3

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-16

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BUILDINGS LUMINAIRE SCHEDULE												
LED LUMINAIRES												
MARK	VOLTS	VA	DESCRIPTION	BASIS OF DESIGN		LIGHT ENGINE			DRIVER		MOUNTING	
				MANUF.	CATALOG NUMBER	NOM. LUMENS	TEMP	CRI	TYPE	QTY	TYPE	DETAIL
L1	120	12	2 FOOT STRIP FIXTURE	LITHONIA	MNSL L23 1LL 120V GZN 40K 80CRI M6	1100	4000K	80	E	1	SURFACE	
L5	120	33	4 FOOT ENCLOSED AND GASKETED VANDAL RESISTANT STRIP	LITHONIA	VAP 4000LM FST MD 120 35K 80CRI	4000	3500K	80	E	1	SURFACE	
W1	120	25	WALLPACK, CAST ALUMINUM BODY, GLASS LENS, FULL CUTOFF, FORWARD THROW OPTICS, EMERGENCY DRIVER	LITHONIA	WST LED P2 40K VF 120 DDBXD E7WH	3000	4000K	70	EM	1	WALL	
EMERGENCY FIXTURES												
MARK	VOLTS	VA	DESCRIPTION	MANUF.	CATALOG NUMBER	LAMP	SELF DIAG.	TEXT COLOR	BATTERY	MOUNTING		
										TYPE	DETAIL	
EM2	120	3.15	VANDAL RESISTANT DUAL HEAD EMERGENCY LIGHT	LITHONIA	EML4L SDRT WPVS	LED	Y	NA	NICAD	SURFACE		
CFL COMPACT FLUORESCENT				BX BIAx		D ELECTRONIC DIMMING				M HPF MAGNETIC		
EM EMERGENCY				DQT DOUBLE QUAD TUBE		E LOW THD ELECTRONIC				NA NOT APPLICABLE		
FL FLUORESCENT				LED LIGHT EMITTING DIODE		EM EMERGENCY BATTERY PACK				PS PROGRAM START		
HAL HALOGEN				QT QUAD TUBE		IS INSTANT START				RS RAPID START		
LED LIGHT EMITTING DIODE				TTT TRIPLE TWIN TUBE								
XEN XENON												

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename: E-17-Panel Schedules 2		
Scale: NONE		
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CITY OF KENEDY

E-17

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EQUIPMENT CONNECTION SCHEDULE - BUILDING C																		
EQUIPMENT						LOCAL DISCONNECT						CONTROLLER						
TAG	DESCRIPTION NAME	BY	LOAD	VOLTS	PH	BY	TYPE	RECEPT. CONFIG.	SWITCH / FRAME	FUSE / TRIP	POLE	ENCL. TYPE	BY	TYPE	SIZE	ENCL. TYPE	CONTROL DIAGRAM	COMMENTS
EF-C-1	EXHAUST FAN - TOILETS	MECH	0.25 HP	120	1	INT							ELECT	LCS				1, 2
EW-H-C-1	ELECTRIC WATER HEATER	PLMB	3000 W	240	1	NONE							INT					
EW-C-1	ELECTRIC WATER COOLER	PLMB	400 W	120	1	ELECT	C&P	5-20R					INT					
TRADES (BY)		LOCAL DISCONNECT TYPES				CONTROLLER TYPES				ENCLOSURE TYPES								
INT	INTEGRAL WITH EQUIPMENT	CB	ENCLOSED CIRCUIT BREAKER				FVNR	FULL VOLTAGE NON-REVERSING				1	INDOOR, DRY					
GEN	GENERAL	COMB	COMBINATION STARTER/CONTROLLER				FVR	FULL VOLTAGE REVERSING				3R	WET, NON-CORROSIVE					
PLMB	PLUMBING	C&P	CORD AND PLUG CONNECTION				LCS	LIGHTING CONTROL SYSTEM				4X	WET, CORROSIVE					
MECH	MECHANICAL	MS	MANUAL STARTER				MS	MANUAL STARTER				4XSS	WET, CORROSIVE, HARSH					
TEMP	TEMPERATURE CONTROLS	SW	SAFETY SWITCH				RVSS	REDUCED VOLTAGE SOLID STATE					CONDITIONS (STAINLESS STEEL)					
ELECT	ELECTRICAL	TS	TOGGLE SWITCH				T-STAT	THERMOSTAT				6	EXPLOSION PROOF					
OWNER	BY OWNER (NIC)						TS	TOGGLE SWITCH				12	INDOOR, OIL & DUST TIGHT					
							VFD	VARIABLE FREQUENCY DRME										

COMMENTS:
1. FAN PROVIDED WITH INTEGRAL MANUAL SPEED CONTROLLER FOR BALANCING.
2. CONNECT EXHAUST FAN TO OPERATE WHENEVER EITHER TOILET'S LIGHTS ARE ON.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



Hanson No. 17L0017		
Filename: E-18-Panel Schedules 3		
Scale: NONE		
Date: 08/06/2019		
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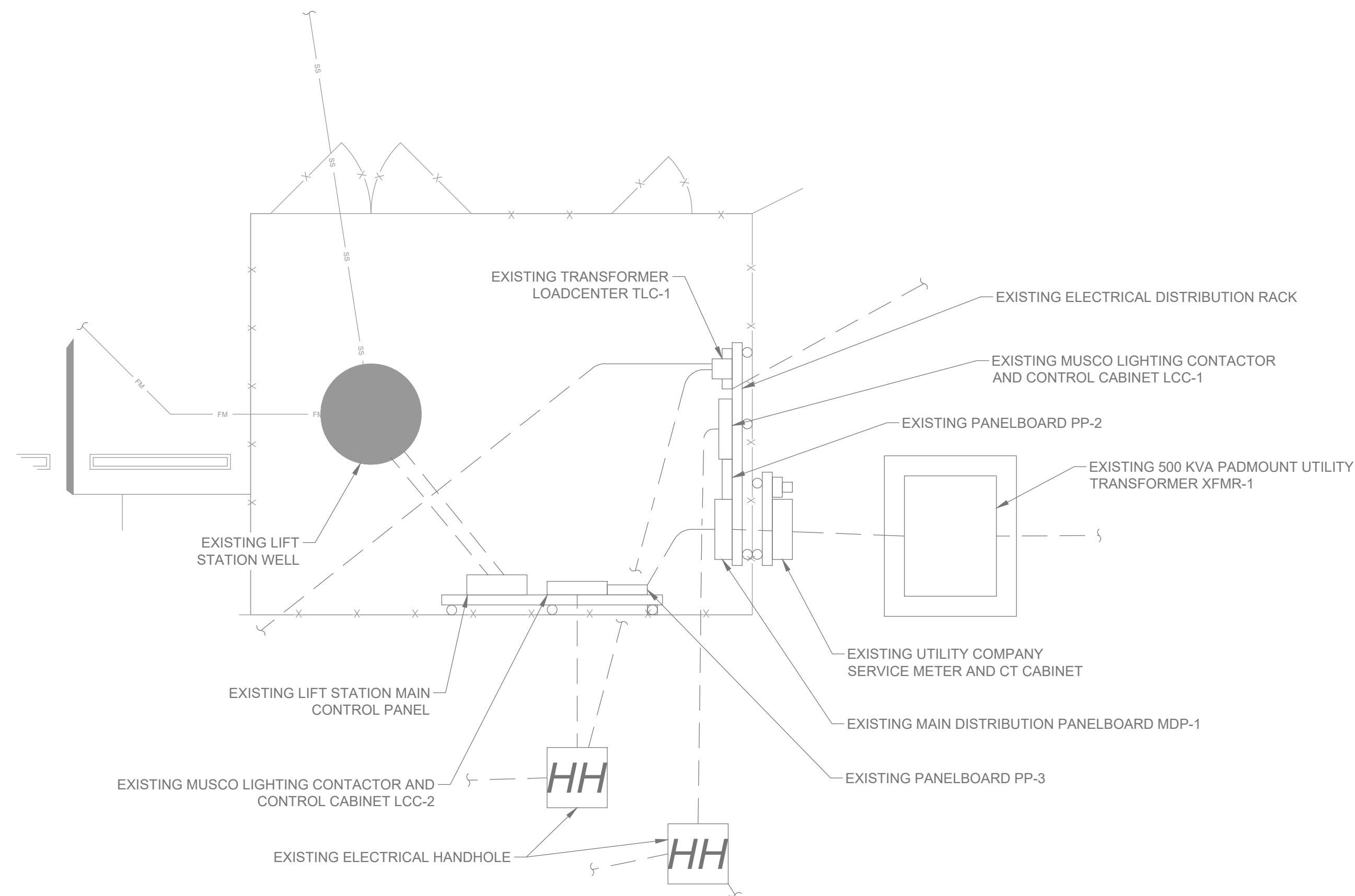
ELECTRICAL SCHEDULES - 3 OF 3

CONSTRUCTION DRAWINGS FOR
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CITY OF KENEDY

E-18

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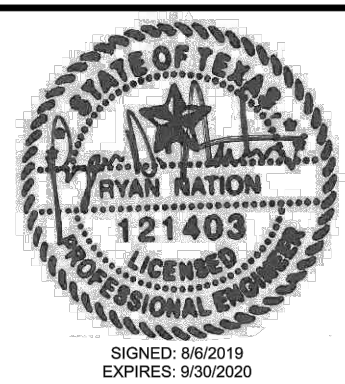


1
SCALE: 1" = 5'-0"

0 5 10

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Hanson No. 17L0017		
Filename: E-19-MDP-1 Rack Details		
Scale: AS SHOWN		
Date: 08/06/2019		
LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
REVIEWED	RDN	08/06/19



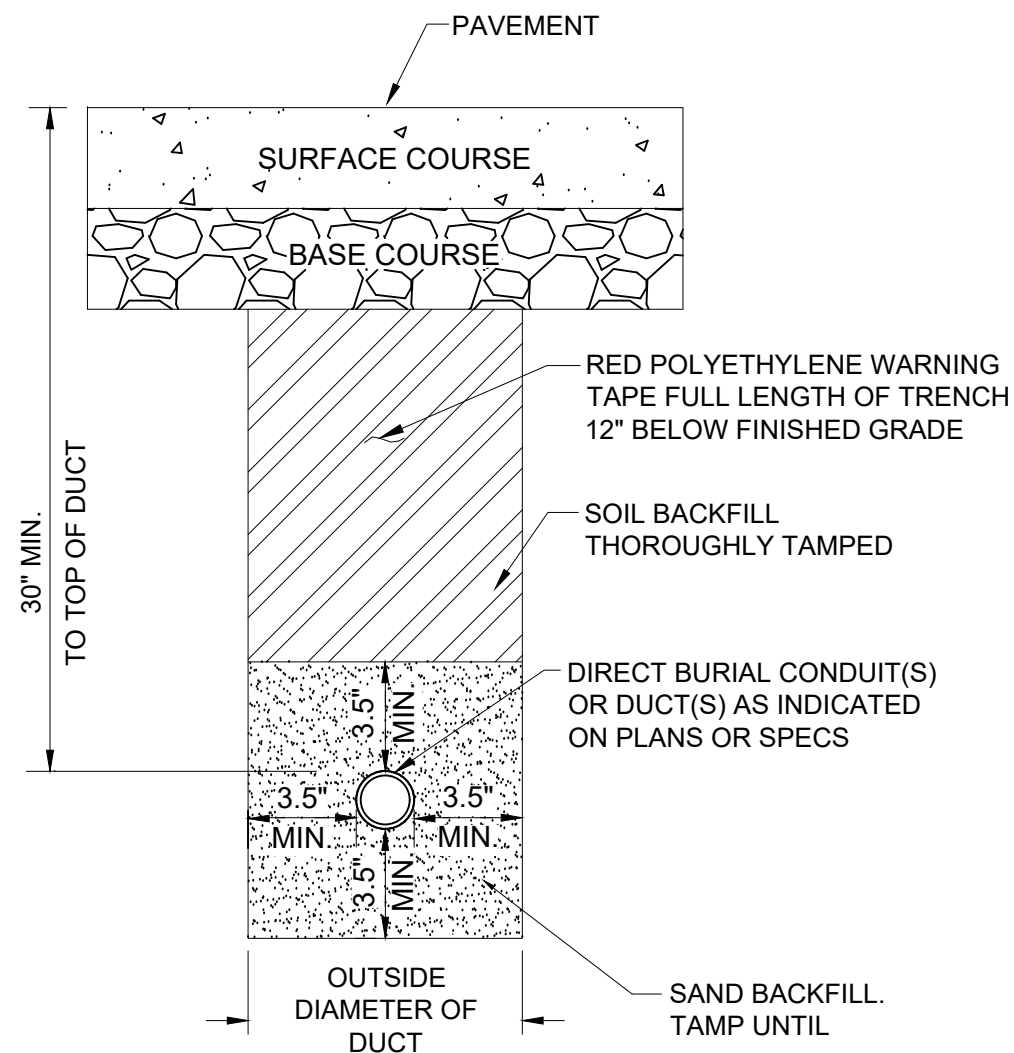
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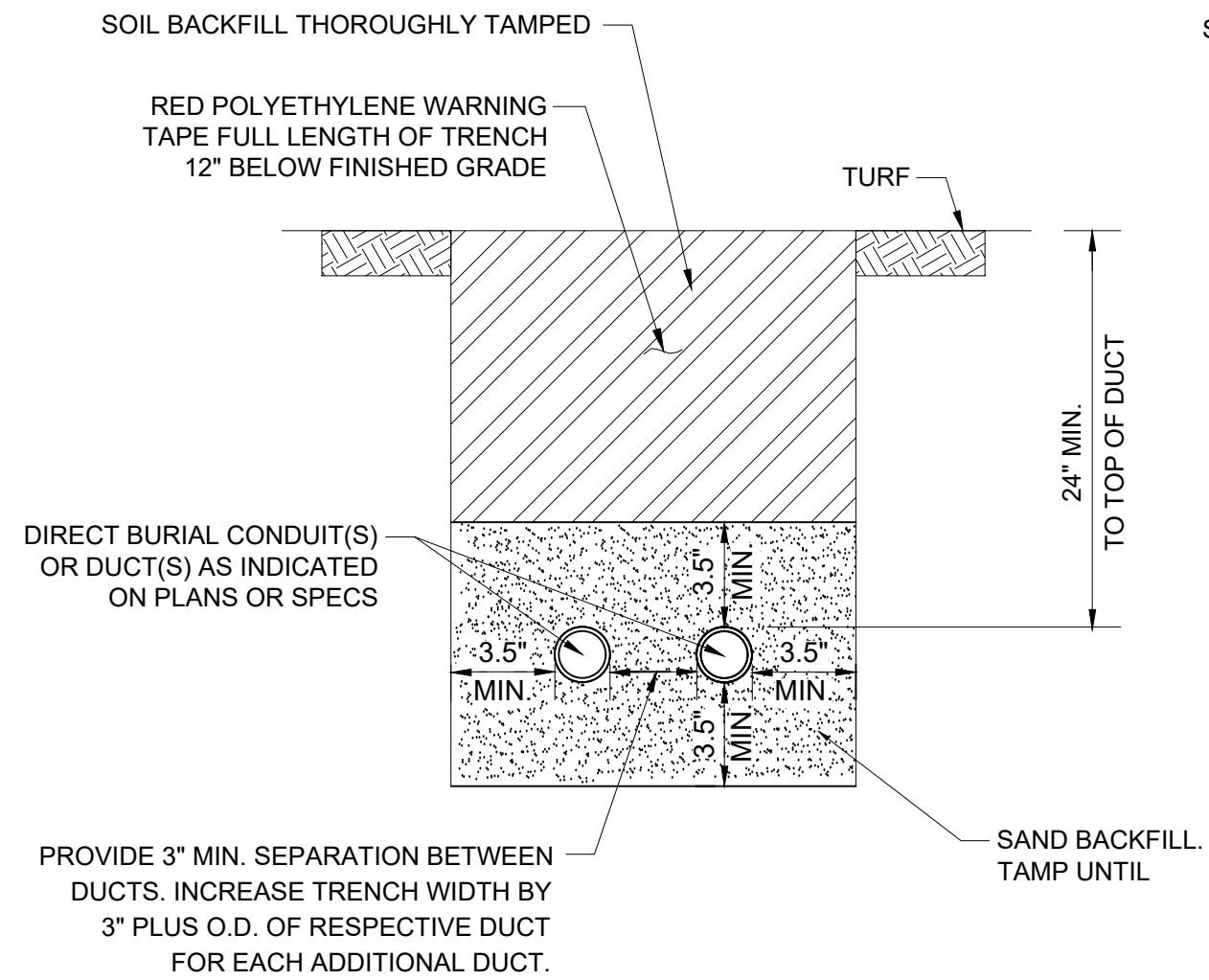
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MDP-1 RACK DETAILS AND PLAN

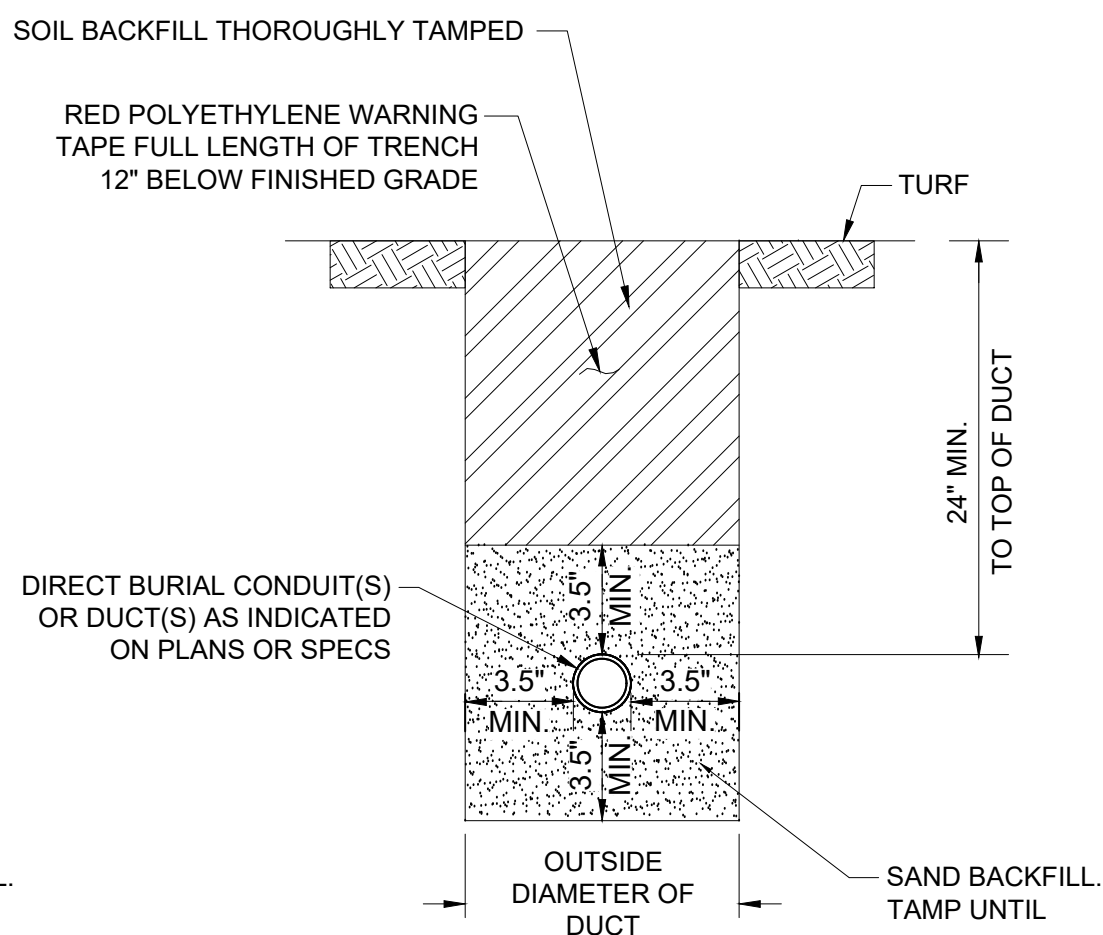
CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY



1 TRENCH DETAIL IN PAVEMENT AREAS
NOT TO SCALE

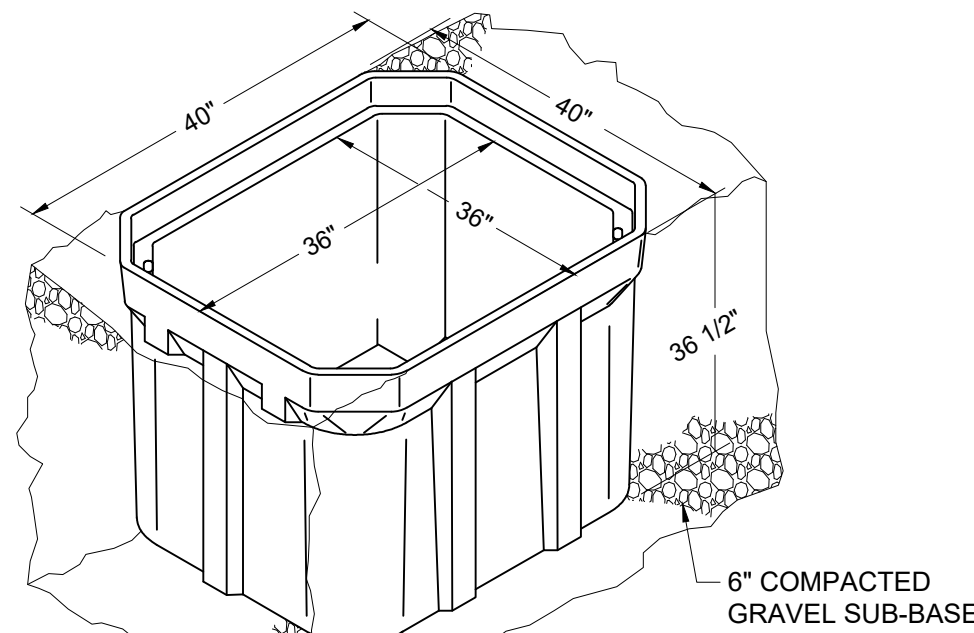
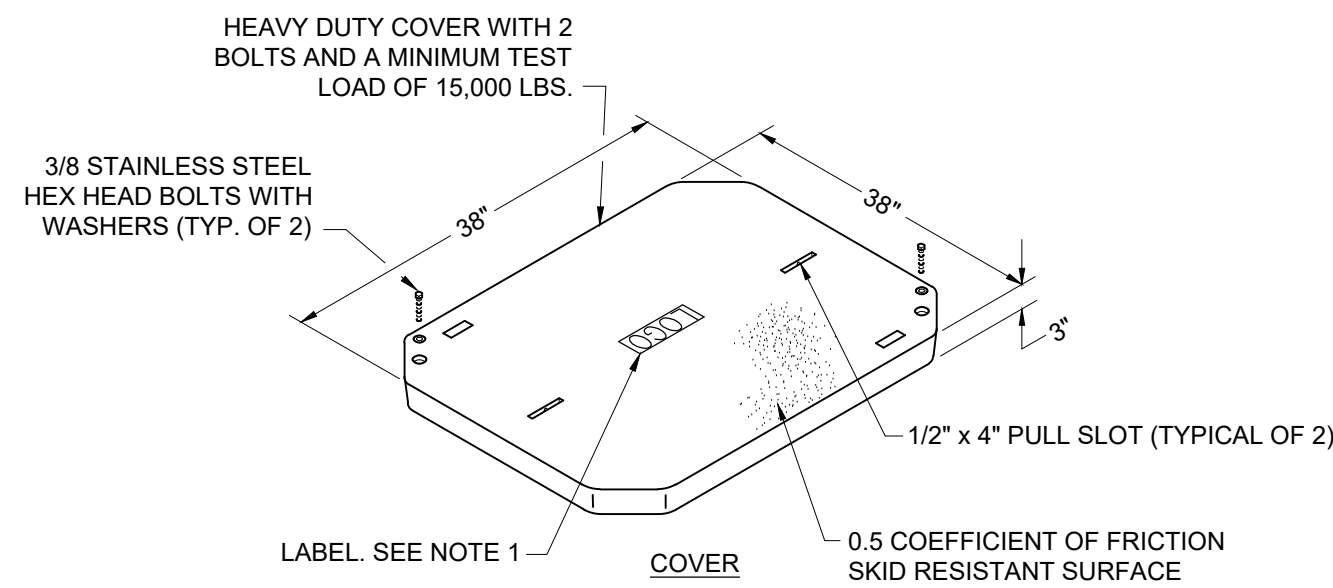


2 TRENCH DETAIL IN SODDED AREAS
NOT TO SCALE



DUCT BANK NOTES:

- DIMENSIONS FOR COVERAGE AND SEPARATION BETWEEN DUCTS ARE MINIMUM.
- TRENCHES WITH MORE THAN TWO CONDUITS OR DUCTS SHALL BE INCREASED 3 INCHES IN WIDTH PLUS DIAMETER OF RESPECTIVE DUCT FOR EACH ADDITIONAL CONDUIT, OR DUCT; IF SPECIFIED ON PLANS TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
- DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS. MINIMUM COVER REQUIREMENTS FOR DUCTS LOCATED IN TURF AREAS IS 24 INCHES. MINIMUM COVER REQUIREMENTS FOR DUCTS LOCATED BELOW PAVEMENT IS 30 INCHES. COVER IS DEFINED AS THE SHORTEST DISTANCE IN INCHES MEASURED BETWEEN A POINT ON THE TOP SURFACE OF ANY DIRECT-BURIED CONDUCTOR, CABLE, CONDUIT, OR OTHER RACEWAY AND THE TOP SURFACE OF FINISHED GRADE, CONCRETE OR SIMILAR COVER.
- COMMUNICATION CIRCUITS SHALL NOT BE INSTALLED IN THE SAME RACEWAY, CONDUIT, DUCT, OR HANDHOLE WITH POWER CIRCUITS.
- DUCT AND CONDUIT INTERFACE TO HANDHOLES OR MANHOLES WILL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE DUCT WORK.
- ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH.
- DIRECT BURIED ELECTRICAL CONDUIT'S OUTSIDE EDGES TO MAINTAIN A MINIMUM OF 6 INCHES SEPARATION IN ALL DIRECTIONS OF ALL OTHER UNDERGROUND SITE UTILITY PIPING'S OUTSIDE EDGES. ELECTRICAL CONDUIT MAY BE INSTALLED ABOVE OR BELOW OTHER UTILITIES SO LONG AS BOTH MINIMUM COVER AND MINIMUM VERTICAL CLEARANCE HAVE BEEN MET.



3 ELECTRICAL HANDHOLE DETAIL
SCALE: NONE

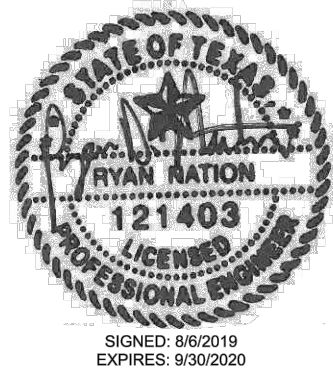
ELECTRICAL HANDHOLE NOTES:

- SHOWN FOR REFERENCE ONLY FOR EXISTING HANDHOLES ON SITE. NO NEW HANDHOLES TO BE INSTALLED FOR THIS PORTION OF DESIGN.

*DETAIL INCLUDED FOR
INFORMATION ONLY

MAY 07, 2020 3:17 PM THOMP01677
I:\1700BS\170017\1006 SPORTS COMPLEX\CAD\ELEC\SHEET\BUILDINGS B & C - 5-2020 SUBMITTAL\BUILDING C\E-21-UG ELEC DETAILS.DWG

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017
Filename: E-21-UG Elec Details
Scale: NONE
Date: 08/06/2019

LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
REVIEWED	RDN	08/06/19



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UNDERGROUND ELECTRIC DETAILS

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-21
of 42 sheets

MAY 07, 2020 3:18 PM THOMP01677
I:\1700BS\1710017\1006 SPORTSCOMPLEX\CAD\ELEC\SHEET\BUILDINGS B & C - 5-2020 SUBMITTAL\BUILDING C\E-22-HANDHOLE SCHEDULES.DWG

NEW CONDUIT TO BE PROVIDED BY CONTRACTOR FROM HH-FC2 TO BUILDING C PER NOTES ON SHEET E-12.

GENERAL NOTES

1. ALL CONDUIT RUNS THAT ARE NOTED ON THE HANDHOLE SCHEDULES ARE EXISTING UNLESS NOTED OTHERWISE.

NEW CONDUIT AND CABLE TO BE PROVIDED BY CONTRACTOR FROM HH-P13B TO BUILDING C PER NOTES ON SHEETS E-12 AND E-13.

NEW CONDUIT TO BE PROVIDED BY CONTRACTOR FROM HH-P13B TO BUILDING C PER NOTES ON SHEETS E-12 AND E-13.

EXISTING HH P13B							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
		1-1/4"	BUILDING C			1-1/4"	BUILDING C
		1"	BBALL COURTS			1"	BBALL COURTS

1 EXISTING HANDHOLE HH-P13B SCHEDULE

SCALE: NONE

EXISTING HH FC2							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
		2"	FUTURE CAMERAS - BLDG C			2"	FUTURE CAMERAS - BLDG C

2 EXISTING HANDHOLE HH-FC2 SCHEDULE

SCALE: NONE

EXISTING HH P14							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
1-1/4"	BUILDING B			1-1/4"	BUILDING B		
1-1/4"	BUILDING C (IN)						
1-1/4"	BUILDING C (OUT)						
1"	PARKING LGTS (IN)						
1"	PARKING LGTS (OUT)						

3 EXISTING HANDHOLE HH-P14 SCHEDULE

SCALE: NONE

EXISTING HH F2							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
2"	12 STRAND FIBER			2"	12 STRAND FIBER		
2"	TELCO SERVICE			2"	FUTURE CAMERAS - BLDG C		
2"	FUTURE CAMERAS - BLDG C (IN)						
2"	FUTURE CAMERAS - BLDG C (OUT)						

4 EXISTING HANDHOLE HH-F2 SCHEDULE

SCALE: NONE

*EXISTING HH-P14, HH-F2, HH-P15, HH-F1, HH-F3, HH-P13, HH-P13A, AND HH-FC1 HANDHOLE SCHEDULES ARE INCLUDED FOR INFORMATION ONLY

EXISTING HH P15							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
		1-1/4"	BUILDING B	1-1/4"	BUILDING B		
		1-1/4"	BUILDING C	1-1/4"	BUILDING C		
		1"	PARKING LGTS	1"	PARKING LGTS		
				1"	PARKING - P12 & P13		

5 EXISTING HANDHOLE HH-P15 SCHEDULE

SCALE: NONE

EXISTING HH F1							
CONDUIT ENTRY							
NORTHWEST SIDE		NORTHEAST SIDE		SOUTHEAST SIDE		SOUTHWEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
2"	12 STRAND FIBER	2"	12 STRAND FIBER				
2"	TELCO SERVICE	2"	TELCO SERVICE				
2"	FUTURE CAMERAS - BLDG C	2"	FUTURE CAMERAS - BLDG C				

6 EXISTING HANDHOLE HH-F1 SCHEDULE

SCALE: NONE

EXISTING HH F3							
CONDUIT ENTRY							
NORTHWEST SIDE		NORTHEAST SIDE		SOUTHEAST SIDE		SOUTHWEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
				2"	12 STRAND FIBER	2"	12 STRAND FIBER
				2"	TELCO SERVICE	2"	TELCO SERVICE
				2"	FUTURE CAMERAS - BLDG C	2"	FUTURE CAMERAS - BLDG C

7 EXISTING HANDHOLE HH-F3 SCHEDULE

SCALE: NONE

EXISTING HH P13							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
1-1/4"	BUILDING C			1-1/4"	BUILDING C		
1"	PARKING - P10 & P11			1"	PARKING - P10 & P11		

8 EXISTING HANDHOLE HH-P13 SCHEDULE

SCALE: NONE

EXISTING HH P13A							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
1-1/4"	BUILDING C	1-1/4"	BUILDING C	1"	BBALL COURTS		
		1"	BBALL COURTS				

9 EXISTING HANDHOLE HH-P13A SCHEDULE

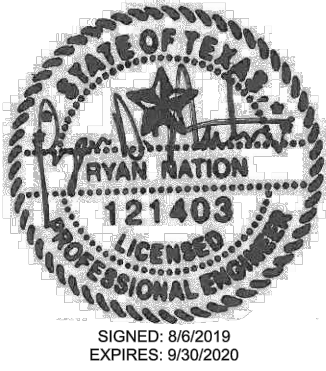
SCALE: NONE

EXISTING HH FC1							
CONDUIT ENTRY							
NORTH SIDE		EAST SIDE		SOUTH SIDE		WEST SIDE	
DIA.	DUCT	DIA.	DUCT	DIA.	DUCT	DIA.	DUCT
2"	FUTURE CAMERAS - BLDG C	2"	FUTURE CAMERAS - BLDG C				

10 EXISTING HANDHOLE HH-FC1 SCHEDULE

SCALE: NONE

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED



"The Junction Where Good Friends Meet"

Hanson No. 17L0017
Filename: E-22-Handhole Schedules
Scale: NONE
Date: 08/06/2019

LAYOUT	AJT/GR	08/06/19
DRAWN	AJT/SB	08/06/19
REVIEWED	RDN	08/06/19



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HANDHOLE & IT SCHEDULES

CONSTRUCTION DRAWINGS FOR
LARRY KIESLING YOUTH SPORTS COMPLEX
CITY OF KENEDY

E-22

of 42 sheets