THE COMMONS AT HIGHLAND HEIGHTS

CENTRAL COMMONS IMPROVEMENTS

CITY OF HIGHLAND HEIGHTS, CAMPBELL COUNTY, KENTUCKY

VICINITY MAP

241829

SITE MAP

CITY OF HIGHLAND HEIGHTS OFFICIALS

MAYOR
GREG MEYERS

CITY CLERK
JEANNE PETTIT

CITY ADMINISTRATOR
MICHAEL GIFFEN

CITY COUNCIL MEMBERS
DEB BALL
JOHN BRAUN
GARY CHINN
PATRICIA HAYLEY
RENE HEINRICH
JESSE HOCKENBURY

PUBLIC WORKS DIRECTOR
STEVE LEHMAN

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K.T.C. SPECIFICATIONS

THE LATEST STANDARD SPECIFICATIONS OF THE KENTUCKY DEPARTMENT OF TRANSPORTATION CABINET, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS THERETO.

SOURCE OF BOUNDARY INFORMATION

THE BOUNDARY INFORMATION SHOWN ON THESE PLANS IS BASED UPON CAMPBELL COUNTY G.I.S. MAPPING AND DOES NOT REPRESENT AN ACTUAL FIELD BOUNDARY SURVEY BY CT CONSULTANTS, INC.

ENGINEER *P.E. #*

verdantas

NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: AS SHOWN
DESIGNED BY: C.BARRY
DRAWN BY: C.BARRY
CHECKED BY: F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

TITLE SHEET

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME G1
SHEET 1 OF 31

H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS TTL.DWG - C1 TITLE SHEET - 11/3/2025 12:51:01 PM - TYLER PELFREY

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS, THE LATEST EDITION OF THE CITY OF HIGHLAND HEIGHTS SUBDIVISION REGULATIONS AND THE KENTUCKY DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. THERE SHALL BE NO DEVIATION FROM THE APPROVED PLANS WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER OR THEIR REPRESENTATIVE. ANY DEVIATION FROM THESE PLANS WITHOUT PRIOR WRITTEN APPROVAL SHALL BE AT THE CONTRACTOR'S RISK AND EXPENSE.
3. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A TESTING AGENCY FOR ALL REQUIRED TESTING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT STAKING INCLUDING HORIZONTAL AND VERTICAL CONTROL. ANY DISCREPANCIES DISCOVERED IN THE PLAN INFORMATION, OR BETWEEN THE PLAN AND ELECTRONIC DATA SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE DESIGN ENGINEER SO THE APPROPRIATE ADJUSTMENTS MAY BE MADE.
5. ALL WORK SHALL BE LIMITED TO THE PROPERTIES AND EASEMENTS IDENTIFIED ON THE PLANS. ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO INSPECTIONS AND ENCROACHMENT PERMITS FROM THE JURISDICTION HAVING AUTHORITY OVER THE RIGHT-OF-WAY. REQUIREMENTS OF SUCH PERMITS ARE INCORPORATED INTO THESE DOCUMENTS BY REFERENCE.
6. ANY DEFECTS IN CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY THE CONTRACTOR BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHODS PRIOR TO ACCEPTANCE BY THE OWNER WITH NO ADDITIONAL COMPENSATION.
7. CONTRACTOR SHALL SUBMIT A PLAN OF OPERATIONS FOR REVIEW AND APPROVAL BY THE OWNER THAT WILL INDICATE EQUIPMENT STAGING AREAS, STOCKPILE LOCATION AND SANITATION FACILITIES.
8. RIGHT-OF-WAY AND PROPERTY LINES SHOWN ARE PLOTTED FROM CAMPBELL COUNTY G.I.S. MAPPING AND ARE APPROXIMATE AND NOT THE RESULT OF A FIELD BOUNDARY SURVEY.
9. ALL OSHA, STATE AND LOCAL SAFETY REGULATIONS SHALL BE FOLLOWED DURING CONSTRUCTION.
11. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL CAMPBELL COUNTY AND THE CITY OF HIGHLAND HEIGHTS PERMITS HAVE BEEN ISSUED AS REQUIRED.
12. APPROPRIATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL.
13. ANY EXISTING ROADWAY, LAWN, CURB, SIDEWALK OR OTHER APPURTENANCE DISTURBED DURING CONSTRUCTION NOT DESIGNATED FOR REMOVAL OR REPLACEMENT SHALL BE RESTORED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO DISTURBANCE.
14. ANY TEMPORARY UTILITY REQUIRED BY THE CONTRACTOR (ELECTRIC, WATER ETC.) SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.
15. THE CONTRACTOR SHALL PRESERVE ALL BENCHMARKS, PROPERTY LINE REFERENCES, REFERENCE POINTS, STAKES AND ANY OTHER SURVEY REFERENCE. IN CASE OF DISTURBANCE THE CONTRACTOR SHALL REPLACE THEM AT THE CONTRACTOR'S EXPENSE, BE RESPONSIBLE FOR ANY ERRORS THAT MAY BE CAUSED BY THEIR LOSS OR DISTURBANCE.
16. ALL PROPOSED CONCRETE PAVEMENT ABUTTING EXISTING PAVEMENT SHALL BE DOWELED INTO EXISTING CONCRETE PAVEMENT USING A $\frac{1}{2}$" DEFORMED DOWEL WITH 9" MINIMUM EMBEDMENT.
17. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF THE BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH THE CONDITIONS AND CONSTRAINTS OF THE SITE.
19. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
20. EXPANSION MATERIAL SHALL BE FLEXIBLE FOAM MATERIAL, SUCH AS CERAMAR BY W.R. MEADOWS OR APPROVED EQUAL, INSTALLED IN AREAS OF CONCRETE WALK, DRIVES, OR CURB/GUTTER ONLY AT THE FOLLOWING:

A. AT ALL FIXED OBJECTS (I.E. UTILITY COVERS, VALVES, MANHOLES, ETC.)
B. AT ALL RIGID STRUCTURES (I.E. DRIVES, CURBS, STEPS, ETC.) PAYMENT FOR THIS ITEM AND ZIP STRIPS INCLUDED IN THE PERTINENT CONCRETE PAVEMENT UNIT PRICE.
C. NO CONCRETE SHALL BE LEFT ABOVE THE EXPANSION MATERIAL OR ACROSS THE JOINT AT ANY POINT. ANY CONCRETE SPANNING THE ENDS OF THE JOINT NEXT TO THE FORMS SHALL BE CAREFULLY CUT AWAY AFTER THE FORMS ARE REMOVED. BEFORE THE PAVEMENT IS OPENED TO TRAFFIC, THE GROOVE ABOVE THE EXPANSION JOINT MATERIAL SHALL BE CLEANED AND SEALED WITH JOINT SEALING MATERIAL.

ACCESSIBILITY NOTES

1. ALL REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) SHALL BE FOLLOWED IN ALL ASPECTS OF THE PROJECT.
2. ALL SIDEWALKS INSTALLED SHALL HAVE A MAXIMUM CROSS SLOPE OF 2%.

UTILITY NOTES

1. THIS PLAN SHOWS THE APPROXIMATE LOCATION OF UNDERGROUND UTILITIES (GAS, WATER, STORM SEWER, SANITARY SEWER, TELEPHONE, ELECTRIC, ETC.). THE PREPARER DOES NOT GUARANTEE THEIR ACCURACY OR CORRECTNESS. THE INFORMATION PROVIDED SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE UTILITY AS WELL AS THE SERVICE LATERALS AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL PRACTICE CARE DURING THE GRADING AND TRENCH EXCAVATION AND SHALL BE RESPONSIBLE FOR REPLACING ANY SERVICES THAT ARE DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
2. PRIOR TO ANY EXCAVATION OVER AN EXISTING UTILITY LINE OR SERVICE, CONTRACTOR SHALL HAND EXCAVATE TO EXPOSE THE UTILITY AND DETERMINE LOCATION AND DEPTH. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS.
3. TOPS OF EXISTING AND PROPOSED CASTING ELEVATIONS ARE SUBJECT TO FINAL ADJUSTMENTS AS APPROVED BY THE ENGINEER AND REQUIREMENTS OF UTILITY OWNER. THIS WORK WILL BE INCIDENTAL TO THE CONTRACT.
4. FORTY-EIGHT (48) HOURS BEFORE EXCAVATION IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: THE KENTUCKY UTILITY PROTECTION SERVICE AND ALL OTHER UTILITIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF KENTUCKY UNDERGROUND PROTECTION.
5. THE SITE MAY CONTAIN EXISTING PRIVATELY OWNED UTILITIES. THESE HAVE BEEN SHOWN AS ACCURATELY AS POSSIBLE BASED ON EXISTING UTILITY INFORMATION, BUT THE PREPARER OF THESE DOCUMENTS DOES NOT ATTEST TO THEIR ACCURACY OR CORRECTNESS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A PRIVATE UTILITY MARKING AGENCY TO IDENTIFY AND LOCATE ALL PRIVATE UTILITIES WITHIN THE WORK SITE. THIS MAY INVOLVE THE EXCAVATION AND UNCOVERING OF UTILITIES TO VERIFY LOCATION. NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS. CONTRACTOR SHALL MAKE RECORDS OF ALL PRIVATE UTILITIES ENCOUNTERED DURING THE PROJECT.

STORM & SANITARY NOTES

1. ALL STORM AND SANITARY ITEMS SHALL BE IN ACCORDANCE WITH THE LATEST SPECIFICATIONS AND DETAILS FROM SD1. CONCRETE AND METAL PIPE MATERIALS SHALL NOT BE USED UNLESS OTHERWISE SPECIFIED ON THESE PLANS.
2. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STORM AND SANITARY SEWER FLOW THROUGHOUT THE PROJECT, FOR THE DURATION OF CONSTRUCTION. ALL COST FOR THE ABOVE SHALL BE INCIDENTAL TO THE CONTRACT.
3. IF REQUIRED, CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND SCHEDULING STORM AND SANITARY SEWER INSPECTIONS AS SET OUT IN THE PRECONSTRUCTION MEETING.
4. CONNECTIONS INTO EXISTING OR PROPOSED STORM OR SANITARY SEWER STRUCTURES OR PIPES SHALL BE COMPLETED BY A CERTIFIED TAPPER BY SD1.
5. DOWNSPOUT AND UNDERDRAIN CONSTRUCTION SHALL MEET THESE AND THE LATEST SPECIFICATION OF THE CITY OF HIGHLAND HEIGHTS SUBDIVISION REGULATIONS, SD-1 REGULATIONS AND STANDARD DRAWINGS, AND DETAILS SHOWN ON THIS PLAN. BEDDING, BACKFILLING, JOINTS, EXCAVATION AND INSTALLATION SHALL BE INCLUDED IN THE COST PER FOOT OF PIPE. STORM SEWER, DOWNSPOUT AND UNDERDRAIN PIPE MATERIAL SHALL HAVE A MANNING'S "N" VALUE OF 0.013 OR LESS (UNLESS OTHERWISE SHOWN) AND BE RIGID / SMOOTH INTERIOR WALLED PVC SDR-35 PIPE, RIBBED PVC PIPE, A-2000 PVC PIPE, UNLESS OTHERWISE SHOWN.
6. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
7. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES, INLETS AND DETENTION SYSTEMS.
8. CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE INLETS UPON PLACEMENT OF NEW PAVEMENT.

WATER NOTES

1. ALL WORK RELATING TO WATER MAINS OR WATER SERVICE LINES SHALL BE COMPLETED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE NORTHERN KENTUCKY WATER DISTRICT (NKWD).
2. CONTRACTOR MAY NOT USE WATER FROM FIRE HYDRANTS WITHOUT PRIOR PERMISSION FROM NKWD.
3. MAINTAIN A MINIMUM 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION FROM ALL SANITARY SEWERS.

GAS NOTES

1. ALL WORK RELATING TO GAS MAINS OR GAS SERVICE LINES SHALL BE COMPLETED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE DUKE ENERGY.

ELECTRIC NOTES

1. ALL WORK RELATING TO ELECTRIC LINES SHALL BE COMPLETED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE DUKE ENERGY.

MAINTENANCE OF TRAFFIC NOTES

1. ALL MAINTENANCE OF TRAFFIC PROCEDURES SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND SECTION 112 OF KTC STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOCAL TRAFFIC (ACCESS TO RESIDENCES WITHIN CONSTRUCTION LIMITS) AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT SIGN, WARNING LIGHTS, BARRICADES, OR OTHER NECESSARY DEVICES TO MAKE THE SITE SAFE TO THE TRAVELING PUBLIC.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT TO THE ENGINEER AND THE OWNER A TRAFFIC CONTROL PLAN FOR THIS PROJECT.
3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF HIGHLAND HEIGHTS, AS WELL AS THEIR POLICE AND FIRE DEPARTMENTS. AT ALL TIMES, EMERGENCY VEHICLES SHALL BE GIVEN ACCESS.
4. RESIDENTS OF THE PROJECT AREA SHALL BE ALLOWED ACCESS TO THEIR PROPERTY AT ALL TIMES.
5. ALTERNATE ROUTES OR CONTINUOUS TRAFFIC CONTROL SHALL BE EMPLOYED WHEN A PUBLIC WAY IS TEMPORARILY BLOCKED DURING CONSTRUCTION, INCLUDING PEDESTRIAN AND BICYCLE FACILITIES. ADVANCED NOTICE SIGNS IN ACCORDANCE WITH THE MUTCD SHALL BE EMPLOYED.

GRADING AND EROSION CONTROL NOTES

1. ALL DISTURBED AREAS ARE TO BE RESTORED (SEEDED AND MULCHED) BY THE CONTRACTOR AND SHALL PROCEED WITH JOB PROGRESSION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVING ANY EXCESS MATERIALS AT THE SITE AND MAINTAINING ALL SEEDED AND MULCHED AREAS UNTIL PROJECT COMPLETION AND FINAL INSPECTION PER KDOT SPEC. 212. ALL DISTURBED AREAS SHALL BE RESTORED WITHIN TWENTY-ONE (21) DAYS AFTER CONSTRUCTION.
2. ALL APPLICABLE RECOMMENDATIONS IN KENTUCKY'S BEST MANAGEMENT PRACTICES MANUAL SHALL BE FOLLOWED BY THE CONTRACTOR, INCLUDING SEEDING OF DISTURBED GROUND.
3. ADDITIONAL BMP'S AND EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY. ALL COST FOR ABOVE SHALL BE INCLUDED IN LUMP SUM BID FOR EROSION CONTROL AND WATER POLLUTION CONTROL.
4. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS AND MATERIALS OF CONSTRUCTION. THE DESIGN ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SUITABILITY OF MATERIAL UNDERLYING THE PROJECT SITE. THE CONTRACTOR SHALL PERFORM ANY INVESTIGATIONS OR TESTING NECESSARY TO ADEQUATELY DETERMINE OR ESTIMATE TO THEIR SATISFACTION ANY EXISTING SITE CONDITION WHICH COULD AFFECT HIS BID OR THE PERFORMANCE OF THE PROPOSED IMPROVEMENTS. THIS COULD INCLUDE, BUT NOT BE LIMITED TO, UNSUITABLE OR UNSTABLE SOIL/SUBSURFACE CONDITIONS, ROCK, WATER (PERCHED OR FREE), OBSTRUCTIONS, ETC.
5. ALL TREES AND OTHER VEGETATION WITHIN THE PROJECT LIMITS THAT INTERFERE WITH CONSTRUCTION SHALL BE REMOVED, INCLUDING STUMP REMOVAL.
6. THE CONTRACTOR SHALL REMOVE ALL SURPLUS DEMOLISHED AND WASTE MATERIALS, INCLUDING TREES, STUMPS, TRASH AND DEBRIS, FROM THE PROJECT LIMITS AND DISPOSE OF OFF-SITE. IN NO INSTANCE SHALL MATERIAL BE BURIED ON-SITE.
7. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL MATERIAL DEEMED UNSUITABLE FOR EMBANKMENT BY THE OWNER'S REPRESENTATIVE AND BE DISPOSED OF OFF-SITE.
8. THE CONTRACTOR SHALL PROVIDE FINAL GRADING TO WITHIN 1" OF GRADES SHOWN ON THE PLANS.
9. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM ALL AREAS TO BE GRADED, TO WHATEVER DEPTH ENCOUNTERED, AND IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL. SOIL SHALL NOT BE STOCKPILED NEAR THE EDGE OF EXCAVATIONS OR WITHIN DRIP LINES OF TREES TO REMAIN.
10. EXCESS SOIL GENERATED FROM TRENCH EXCAVATIONS SHALL BE INCORPORATED IN THE UNIT PRICE BID FOR EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION. ANY EXCESS SOIL UNABLE TO BE PLACED ON-SITE OR DEEMED UNSUITABLE FOR EMBANKMENT BY THE ENGINEER SHALL BE DISPOSED OF OFF-SITE.
11. NO SLAG, RIVER GRAVEL, RECYCLED PORTLAND CEMENT CONCRETE, RECLAIMED ASPHALT CONCRETE PAVEMENT OR RECLAIMED BITUMINOUS AGGREGATE BASE SHALL BE USED AS FILL.
12. EXPOSED PAVEMENT SUBGRADE AREAS SHALL BE MAINTAINED IN CONDITIONS TO PREVENT PONDING OF WATER AFTER RAINS.
13. ALL EXISTING AND PROPOSED MANHOLE COVERS, VALVE BOXES, ETC. LOCATED WITHIN PEDESTRIAN ACCESS SHALL BE FLUSH MOUNTED WITH THE WALKING SURFACE.
14. SLOPE ALL PAVING AND LANDSCAPE AREAS AWAY FROM THE BUILDING AT A MINIMUM OF 1%.
15. THE ENGINEER MAKES NO REPRESENTATION AS TO A BALANCED EARTHWORK SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE FINAL SITE GRADES AS INDICATED ON THE GRADING PLAN, INCLUDING THE IMPORT OR EXPORT OF MATERIAL IF REQUIRED TO ACHIEVE THE PROPOSED GRADES. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL SURPLUS EARTHWORK, DEBRIS OR WASTE FROM THE SITE. ALL COST FOR THE ABOVE SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE FOR EXCAVATION AND/OR EMBANKMENT.
16. THE CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS AND OTHER FACILITIES TO REMAIN FROM DAMAGE CAUSED BY EARTHWORK OPERATIONS.
17. MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR(S).
18. CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION OF REPAIR AND/OR REPLACEMENT OF BMP'S.

EROSION CONTROL LEGEND

- IP — INLET PROTECTION (SEE DETAIL)
- CD — CHECK DAM
- CE — CONSTRUCTION ENTRANCE
- WA — CONCRETE WASHOUT
- RCP — ROCK CHANNEL PROTECTION
- SDD — SKIMMER DEWATERING DEVICE
- SF — PROPOSED SILT FENCE

SYMBOL LEGEND

G	EXISTING GAS LINE
GS	EXISTING GAS SERVICE
E-UG / E-OH	EXISTING ELECTRIC (UNDERGROUND / OVERHEAD)
C-UG / C-OH	EXISTING CABLE (UNDERGROUND / OVERHEAD)
T-UG / T-OH	EXISTING TELEPHONE (UNDERGROUND / OVERHEAD)
W	EXISTING WATER MAIN
WS	EXISTING WATER SERVICE
	EXISTING STORM SEWER
RD	EXISTING ROOF DRAIN
S	EXISTING SANITARY SEWER
FM	EXISTING SANITARY FORCE MAIN
FO	EXISTING FIBER OPTICS
X	EXISTING FENCE
650	EXISTING CONTOURS (MAJOR)
648	EXISTING CONTOURS (MINOR)
EX. R/W	EXISTING RIGHT OF WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING GUARDRAIL
	EXISTING TREE LINE
G	PROPOSED GAS LINE
GS	PROPOSED GAS SERVICE
E-UG / E-OH	EXISTING ELECTRIC (UNDERGROUND / OVERHEAD)
C-UG / C-OH	PROPOSED CABLE (UNDERGROUND / OVERHEAD)
T-UG / T-OH	PROPOSED TELEPHONE (UNDERGROUND / OVERHEAD)
W	PROPOSED WATER MAIN
WS	PROPOSED WATER SERVICE
	PROPOSED STORM SEWER
UD	PROPOSED UNDERDRAIN
UD/DSC	PROPOSED UNDERDRAIN / DOWNSPOUT COLLECTOR COMBO
S	PROPOSED SANITARY SEWER
FM	PROPOSED SANITARY FORCE MAIN
FO	PROPOSED FIBER OPTICS
X	PROPOSED FENCE
650	PROPOSED CONTOURS (MAJOR)
648	PROPOSED CONTOURS (MINOR)
	PROPOSED RIGHT OF WAY
	PROPOSED PROPERTY LINE
	PROPOSED EASEMENT
	PROPOSED GUARDRAIL
	PROPOSED TREE LINE / CLEARING LIMITS
	PROPOSED DISTURBED LIMITS
EXISTING FLAGPOLE	PROPOSED FLAGPOLE
EXISTING MAILBOX	PROPOSED MAILBOX
EXISTING SIGN	PROPOSED SIGN
EXISTING CABLE PEDESTAL	PROPOSED CABLE PEDESTAL
EXISTING ELECTRIC PEDESTAL	PROPOSED ELECTRIC PEDESTAL
EXISTING PULL BOX	PROPOSED PULL BOX
EXISTING GROUND LIGHT	PROPOSED GROUND LIGHT
EXISTING LIGHT POLE	PROPOSED LIGHT POLE
EXISTING ELECTRIC METER	PROPOSED ELECTRIC METER
EXISTING ELECTRIC MANHOLE	PROPOSED ELECTRIC MANHOLE
EXISTING GAS METER	PROPOSED GAS METER
EXISTING GAS VALVE	PROPOSED GAS VALVE
EXISTING GAS BOX	PROPOSED GAS BOX
EXISTING UTILITY POLE	PROPOSED UTILITY POLE
EXISTING GUY WIRE / ANCHOR	PROPOSED GUY WIRE / ANCHOR
EXISTING SANITARY MANHOLE	PROPOSED SANITARY MANHOLE
EXISTING SANITARY CLEANOUT	PROPOSED SANITARY CLEANOUT
EXISTING STORM MANHOLE	PROPOSED STORM MANHOLE
EXISTING SINGLE / DOUBLE CURB INLET	PROPOSED SINGLE / DOUBLE CURB INLET
EXISTING CATCH BASIN	PROPOSED CATCH BASIN
EXISTING STORM CLEANOUT	PROPOSED STORM CLEANOUT
EXISTING TELEPHONE MANHOLE	PROPOSED TELEPHONE MANHOLE
EXISTING TELEPHONE PEDESTAL	PROPOSED TELEPHONE PEDESTAL
EXISTING FIRE HYDRANT	PROPOSED FIRE HYDRANT
EXISTING WATER METER	PROPOSED WATER METER
EXISTING WATER VALVE	PROPOSED WATER VALVE
EXISTING BUSHES / TREES	REMOVE EXISTING BUSH / TREE
EXISTING SURVEY BENCHMARK	PROPOSED SLOPE DIRECTION
TEST BORING LOCATION	

verdantas

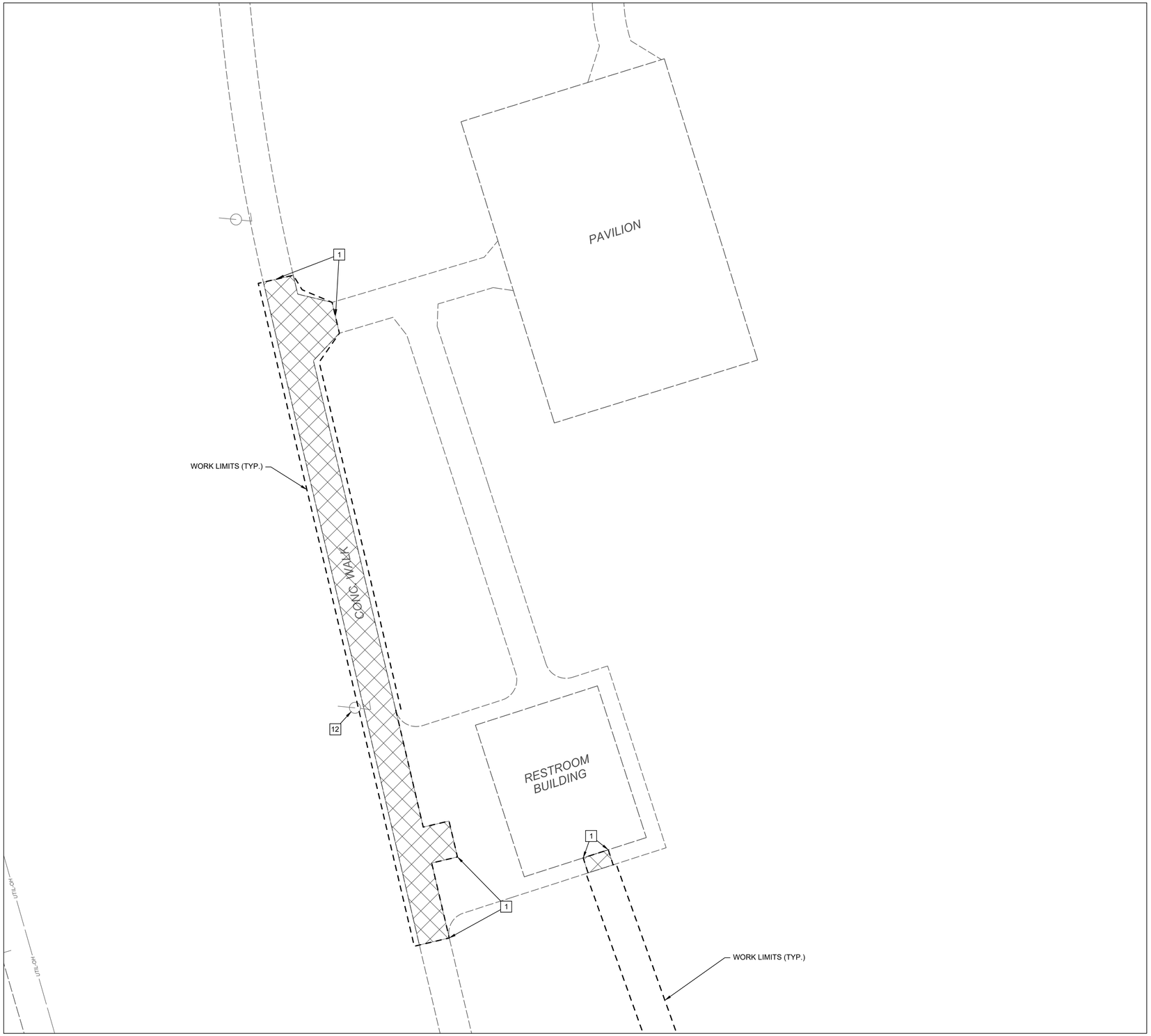
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	11/04/2025
SCALE:	AS SHOWN
DESIGNED BY:	C.BARRY
DRAWN BY:	C.BARRY
CHECKED BY:	F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

GENERAL NOTES & LEGEND

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C1
SHEET 2 OF 31



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

DEMOLITION NOTES

1. SAWCUT PAVEMENT, FULL DEPTH
2. REMOVE EXISTING CURB
3. REMOVE EXISTING DRINKING FOUNTAIN
4. REMOVE EXISTING SHOWERS
5. REMOVE EXISTING PVC PIPE
6. REMOVE EXISTING BBQ
7. REMOVE EXISTING STORM INLET
8. REMOVE EXISTING STORM SEWER
9. SAWCUT & REMOVE EXISTING ASPHALT 6" OUTSIDE OF FENCE
10. REMOVE EXISTING GAZEBO
11. SEE LTP100 FOR TREE REMOVAL AND PRESERVATION
12. PROTECT EXISTING FENCE DURING CONSTRUCTION
13. PROTECT EXISTING LIGHT POLE DURING CONSTRUCTION
14. PROTECT EXISTING EMERGENCY CALLBOX
15. PROTECT EXISTING WALL DURING CONSTRUCTION
16. PROTECT EXISTING BUILDING DURING CONSTRUCTION

LEGEND

REMOVE EXISTING CONCRETE PAVEMENT

LIMITS OF DISTURBANCE

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NO	REVISION	DATE
		11/18/24

ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: AS SHOWN
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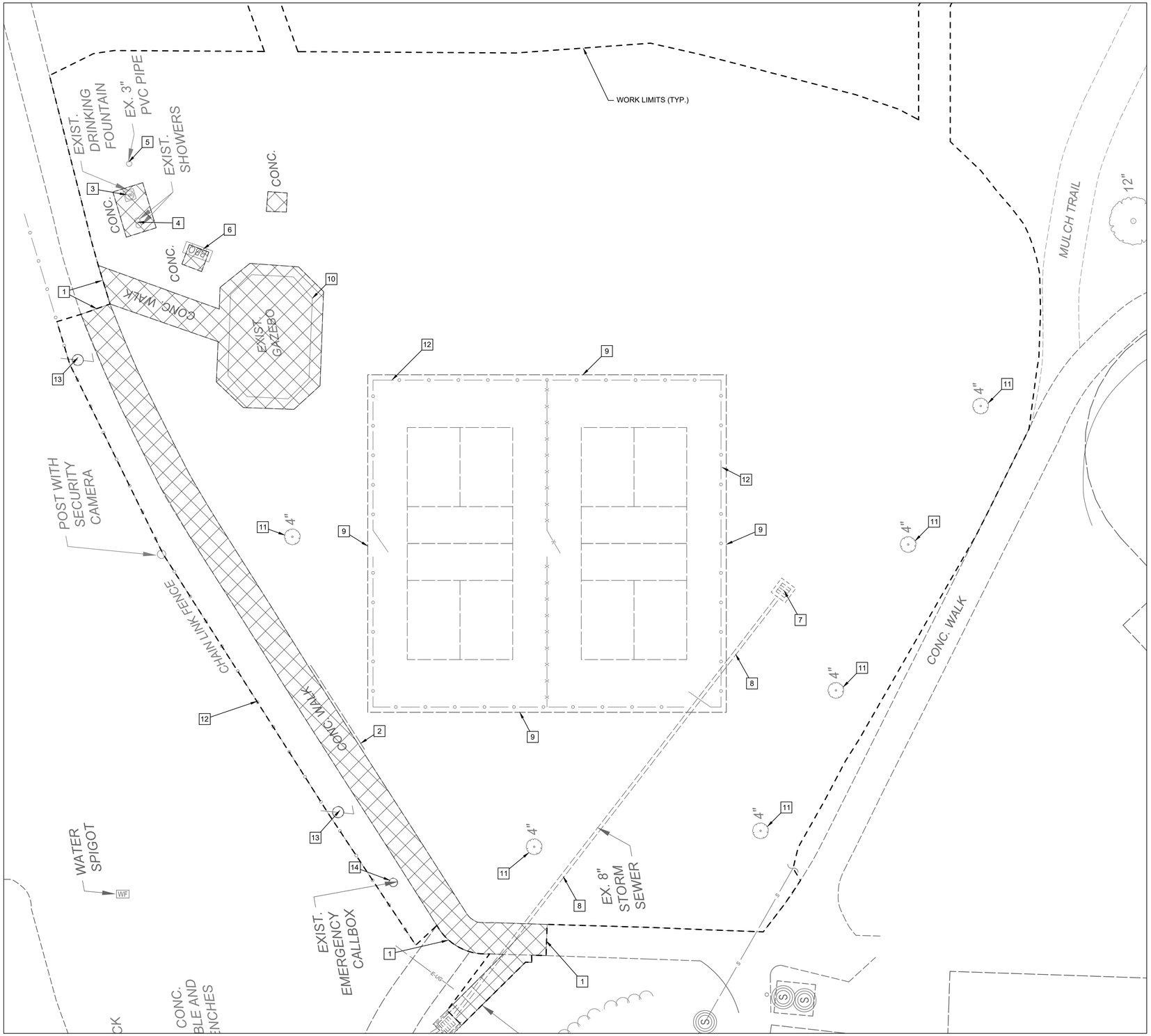
DRAWN BY: C.BARRY
CHECKED BY: F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

EXISTING CONDITIONS AND DEMOLITION PLAN

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C2
SHEET 3 OF 31

H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS EX COND.DWG - C3 EX COND1 - 10/30/2025 9:23:51 PM - TYLER PELFREY



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10' 0' 10'

SCALE: 1" = 10'

DEMOLITION NOTES

1	SAWCUT PAVEMENT, FULL DEPTH
2	REMOVE EXISTING CURB
3	REMOVE EXISTING DRINKING FOUNTAIN
4	REMOVE EXISTING SHOWERS
5	REMOVE EXISTING PVC PIPE
6	REMOVE EXISTING BBQ
7	REMOVE EXISTING STORM INLET
8	REMOVE EXISTING STORM SEWER
9	SAWCUT & REMOVE EXISTING ASPHALT 6" OUTSIDE OF FENCE
10	REMOVE EXISTING GAZEBO
11	SEE LTP100 FOR TREE REMOVAL AND PRESERVATION
12	PROTECT EXISTING FENCE DURING CONSTRUCTION
13	PROTECT EXISTING LIGHT POLE DURING CONSTRUCTION
14	PROTECT EXISTING EMERGENCY CALLBOX
15	PROTECT EXISTING WALL DURING CONSTRUCTION
16	PROTECT EXISTING BUILDING DURING CONSTRUCTION

LEGEND

REMOVE EXISTING CONCRETE PAVEMENT

LIMITS OF DISTURBANCE

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DRAWN BY: C.BARRY
CHECKED BY: F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

EXISTING CONDITIONS AND DEMOLITION PLAN

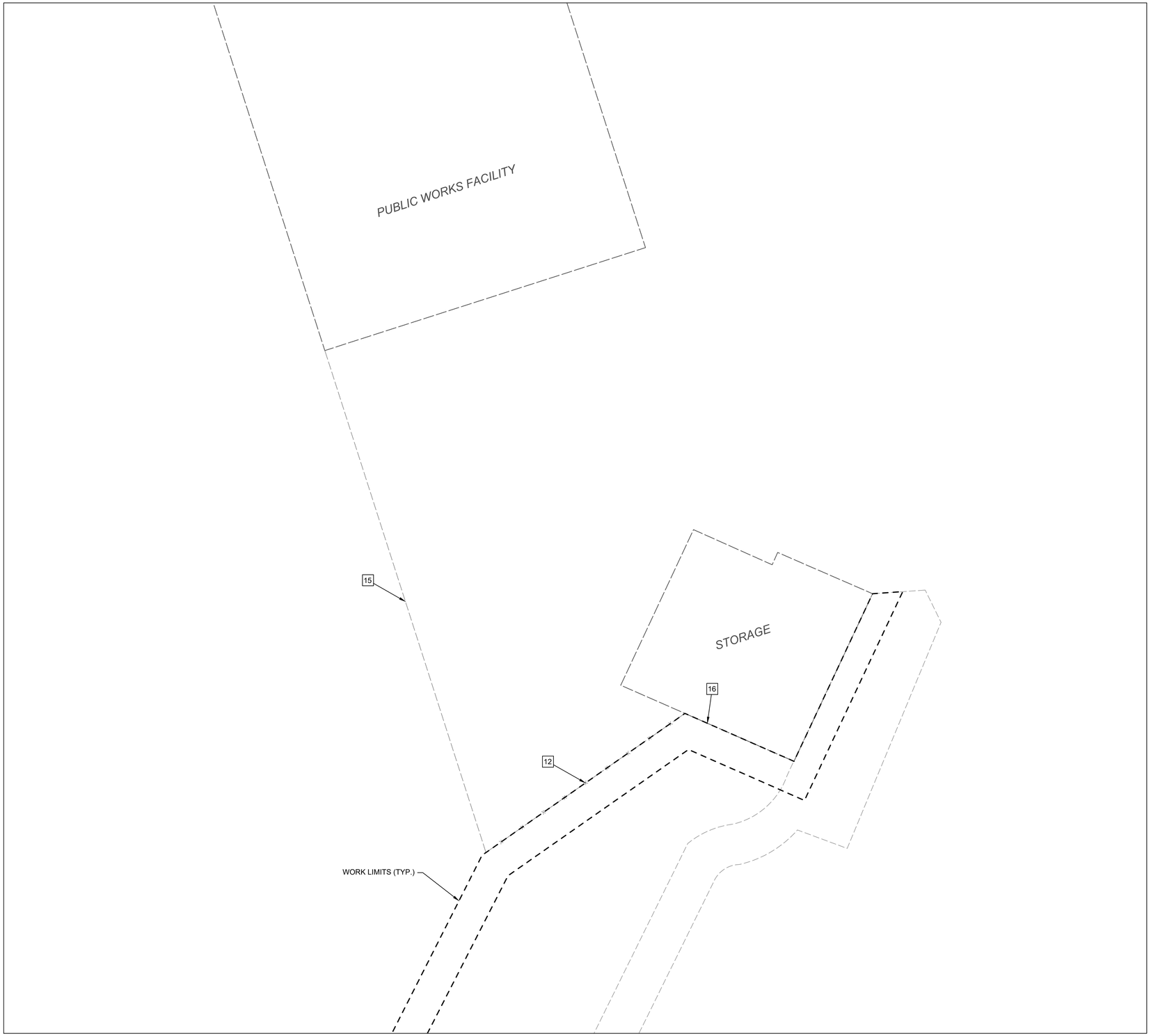
PROJECT NO. 241829

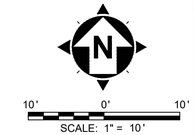
DISCIPLINE CIVIL

SHEET NAME C3

SHEET 4 OF 31

H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS EX COND.DWG - C4 EX CONC2 - 10/30/2025 9:23:51 PM - TYLER PELFREY





DEMOLITION NOTES

1. SAWCUT PAVEMENT, FULL DEPTH
2. REMOVE EXISTING CURB
3. REMOVE EXISTING DRINKING FOUNTAIN
4. REMOVE EXISTING SHOWERS
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LEGEND

REMOVE EXISTING CONCRETE PAVEMENT

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THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

EXISTING CONDITIONS AND DEMOLITION PLAN

PROJECT NO.
241829

DISCIPLINE
CIVIL

SHEET NAME
C4

SHEET 5 OF 31

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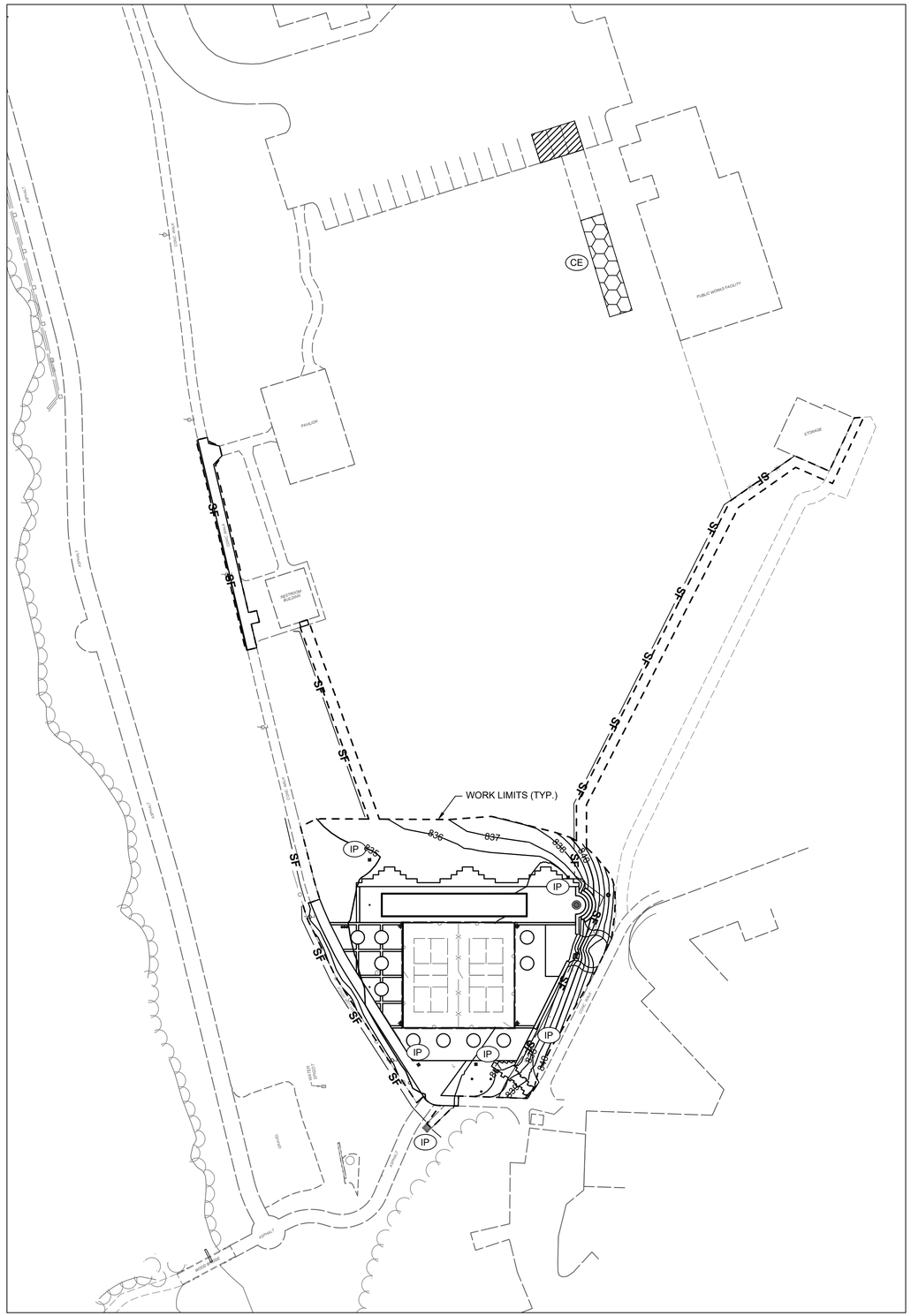

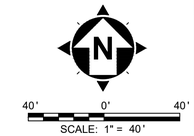

EROSION CONTROL LEGEND

IP	INLET PROTECTION
CE	CONSTRUCTION ENTRANCE
SF	PROPOSED SILT FENCE / FILTER SOCK
	CONSTRUCTION ENTRANCE
	NO PARKING ZONE DURING CONSTRUCTION

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		11/18/24

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THE COMMONS AT HIGHLAND HEIGHTS
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HIGHLAND HEIGHTS, KY

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PROJECT NO.	
241829	
DISCIPLINE	
CIVIL	
SHEET NAME	
C5	
SHEET	OF
6	31

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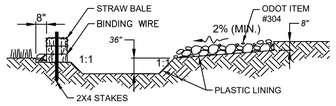
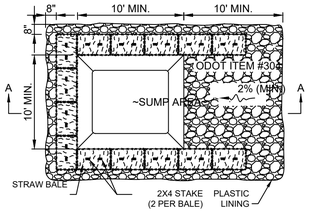
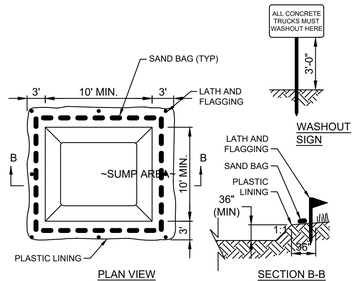


SECTION A-A



PLAN VIEW
SINGLE LOCATION FOR ENTIRE PROJECT



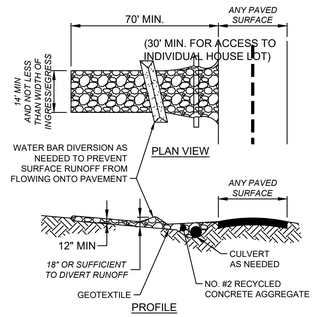
PLAN VIEW SECTION B-B
TEMPORARY LOCATION FOR MULTIPLE PHASE PROJECT

NOTES:

1. WASHOUT PIT SHALL BE LOCATED 100' MINIMUM FROM INLETS, STREAMS, WETLANDS AND ANY OTHER SURFACE WATERS.
2. ALL EXCESS CONCRETE AND CONCRETE WASHOUT, INCLUDING FROM HAND MIXERS AND LIGHT EQUIPMENT, SHALL BE DISPOSED OF IN THE CONCRETE WASHOUT AREA. DISPOSAL OF EXCESS CONCRETE OR CONCRETE WASHOUT ON THE GROUND, OR IN STORM DRAINS, DITCHES OR WATER BODIES, IS PROHIBITED.
3. CONCRETE WASHOUT AREA SHALL BE SUFFICIENT SIZE TO CONTAIN CONCRETE WASTE GENERATED. FOR LARGER SITES, MULTIPLE CONCRETE WASHOUT AREAS MAY BE REQUIRED.
4. IF CONCRETE WASHOUT AREA IS LOCATED AWAY FROM A PAVED SURFACE, CONSTRUCT A GRAVEL ACCESS ROUTE EQUAL IN COMPOSITION TO THE CONSTRUCTION ENTRANCE.
5. PLASTIC LINING SHALL BE DOUBLE-LINED, CONTINUOUS 10-ML POLYETHYLENE SHEETING FREE OF HOLES, TEARS OR OTHER DEFECTS, AND INSTALLED ON A SMOOTH, LEVEL SURFACE, FREE OF ROCKS OR DEBRIS.
6. CONCRETE WASHOUT SIGNAGE SHALL BE CLEARLY VISIBLE AND LOCATED WITHIN 30 FEET OF EACH WASHOUT AREA.
7. CONCRETE WASHOUT AREAS SHALL BE COVERED DURING INCLEMENT WEATHER TO PREVENT OVERFLOWS.
8. PREFABRICATED, PORTABLE AND RE-USABLE CONCRETE WASHOUT CONTAINERS ARE ACCEPTABLE, BUT MUST BE SPECIFICALLY DESIGNED FOR CONCRETE WASHOUT USE.
9. CONCRETE WASHOUT AREA SHALL BE INSPECTED DAILY TO CHECK FOR DAMAGE AND TO DETERMINE IF IT NEEDS CLEANED OR REPLACED. ANY DAMAGE TO THE SIDEWALLS OR POLYETHYLENE SHEETING SHALL BE REPAIRED IMMEDIATELY. THE CONCRETE WASHOUT AREA SHALL BE CLEANED OR REPLACED WHEN IT IS 75% FULL. THE POLYETHYLENE SHEETING SHALL BE REPLACED AFTER EACH CLEANING.
10. SAW CUT CONCRETE, RESIDUE FROM SAW CUT, AND GRINDINGS SHALL BE DISPOSED OF IN THE WASHOUT PIT.

CONCRETE WASHOUT DETAIL

SCALE: NONE



PROFILE

NOTES:

1. PLACE GEOTEXTILE OVER THE ENTIRE AREA PRIOR TO PLACING STONE MEETING THE MIN. SPECIFICATIONS:
   A. TENSILE STRENGTH = 200 LBS.
   B. PUNCTURE STRENGTH = 80 PSI
   C. TEAR STRENGTH = 50 LBS.
   D. BURST STRENGTH = 320 PSI
   E. ELONGATION = 20%
   F. EQUIVALENT OPENING SIZE ≤ 0.6 MM
   G. PERMITTIVITY = 0.001 CM/SEC
2. APPLY ADDITIONAL STONE AS CONDITIONS DEMAND AND REPLENISH STONE WHEN THE DEPTH IS LESS THAN 6". REMOVE AND REPLACE IF STONES BECOMES MUD-LADEN.
3. IMMEDIATELY REMOVE MUD DROPPED, WASHED OR TRACKED ONTO ROADS OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS BY SCRAPING OR SWEEPING.
4. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES OR TO PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION SITE SHALL BE RESTRICTED FROM MUDDY AREAS.

CONSTRUCTION ENTRANCE

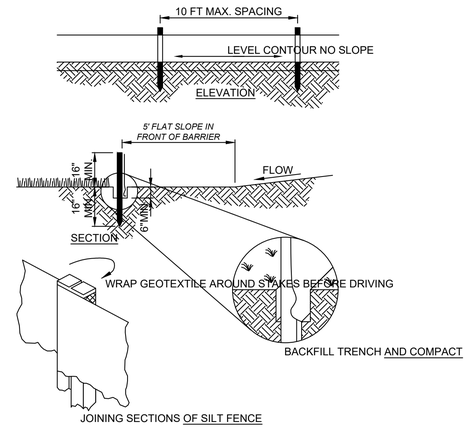
SCALE: NONE

PERMANENT SEEDING FERTILIZATION AND MOWING CHART				
MIXTURE	FORMULA	LB/AC.	TIME	MOW
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	10-10-10	500	FALL YEARLY OR AS NEEDED	≥3"
TALL FESCUE	10-10-10	500		≥4"
TURF-TYPE FESCUE	10-10-10	500		
CROWN VETCH FESCUE	0-20-20	400	SPRING, AND YEARLY AFTER ESTABLISHED	DO NOT MOW
FLAT PEA FESCUE	0-20-20	400		

PERMANENT SEEDING SPECIES SELECTION		
SEED MIX	SEED RATE LB/AC.	NOTES:
GENERAL USE		
CREEPING RED FESCUE DOMESTIC RYEGRASS KENTUCKY BLUEGRASS	20 - 40 10 - 20 20 - 40	FOR CLOSE MOWING AND WATERWAYS WITH ≤2.0 FT./SEC. VELOCITY
TALL FESCUE	40 - 50	
TURF-TYPE FESCUE	90	
STEEP BANKS OR CUT SLOPES		
TALL FESCUE	40 - 50	
CROWN VETCH TALL FESCUE	10 - 20 20 - 30	DO NOT SEED LATER THAN AUGUST
FLAT PEA TALL FESCUE	20 - 25 20 - 30	DO NOT SEED LATER THAN AUGUST
ROAD DITCHES AND SWALES		
TALL FESCUE	40 - 50	
TURF-TYPE FESCUE KENTUCKY BLUEGRASS	90 5	
LAWN		
KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	100 - 120 100 - 120	
KENTUCKY BLUEGRASS CREEPING RED FESCUE	100 - 120 100 - 120	FOR SHADED AREAS

PERMANENT SEEDING DETAIL

SCALE: NONE



NOTES:

1. PRESERVE VEGETATION FOR 5 FEET, OR AS MUCH AS POSSIBLE, UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE RE-ESTABLISHED WITHIN 7 DAYS FROM SILT FENCE INSTALLATION.
2. SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. PERFORM ONE OF THE FOLLOWING IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW:
   - CHANGE THE LAYOUT OF THE SILT FENCE.
   - REMOVE ACCUMULATED SEDIMENT.
   - INSTALL OTHER PRACTICES.

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MIN	ASTM D-1682
MULLEN BURST STRENGTH	190 PSI MIN	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL./MIN./S.F. MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MIN	ASTM-G-26

SILT FENCE

SCALE: NONE

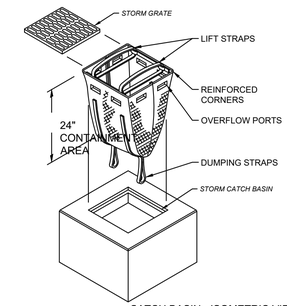
NOTES:

1) THE SEED BED SHALL BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.
2) SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH ADEQUATE VEGETATION. PERFORM SOIL TESTS ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
3) APPLY SEED UNIFORMLY. COVER BROADCASTED SEED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPING INTO PLACE.
4) APPLY MULCHING IMMEDIATELY AFTER SEEDING.
5) SEEDING SHALL BE INSPECTED FOR BARE SPOTS AND WASHOUTS, AND RESEEDED AS NECESSARY.

TEMPORARY SEEDING SPECIES SELECTION			
DATES	SPECIES	LB/1,000 SF	LB/AC.
MARCH 1 TO AUGUST 15	OATS TALL FESCUE PERENNIAL RYEGRASS	3 1 1	128 40 40
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40
AUGUST 16 TO NOVEMBER 1	RYE TALL FESCUE PERENNIAL RYEGRASS	3 1 1	112 40 40
	WHEAT TALL FESCUE PERENNIAL RYEGRASS	3 1 1	120 40 40
	PERENNIAL RYEGRASS TALL FESCUE	2 1	40 40
NOVEMBER 1 TO SPRING	ONLY MULCH OR DORMANT SEEDING.		

TEMPORARY SEEDING DETAIL

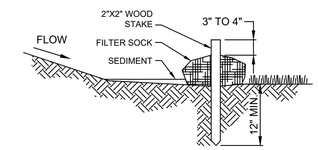
SCALE: NONE



CATCH BASIN - ISOMETRIC VIEW

INLET PROTECTION

SCALE: NONE



NOTES:

1) FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST.
2) COMPOST SHALL BE WEED, PATHOGEN AND INSECT FREE, FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH, BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".
3) FILTER SOCKS SHALL BE PLACED ON A LEVEL LINE ACROSS SLOPES PARALLEL TO THE BASE OF THE SLOPE.
4) FILTER SOCKS SHALL BE PLACED AT LEAST 5' FROM THE TOE OF SLOPE FOR SEDIMENT DEPOSIT.
5) BUILT UP SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED 1/3 THE FILTER SOCK HEIGHT.
6) WHEN A FILTER SOCK IS NO LONGER REQUIRED, IT SHALL BE DISPERSED ON-SITE.
7) THE MAXIMUM DRAINAGE AREA PER 100 FEET OF FILTER SOCK IS 1/2 ACRE AND IS DEPENDENT ON THE SLOPE:

MAX. SLOPE LENGTH ABOVE FILTER SOCK					
SLOPE	RATIO (H:V)	8"	12"	18"	24"
0% - 2%	0 - 50:1	125'	250'	300'	350'
2% - 10%	50:1 - 10:1	100'	125'	200'	250'
10% - 20%	10:1 - 5:1	75'	100'	150'	200'

FILTER SOCK DETAIL

SCALE: NONE

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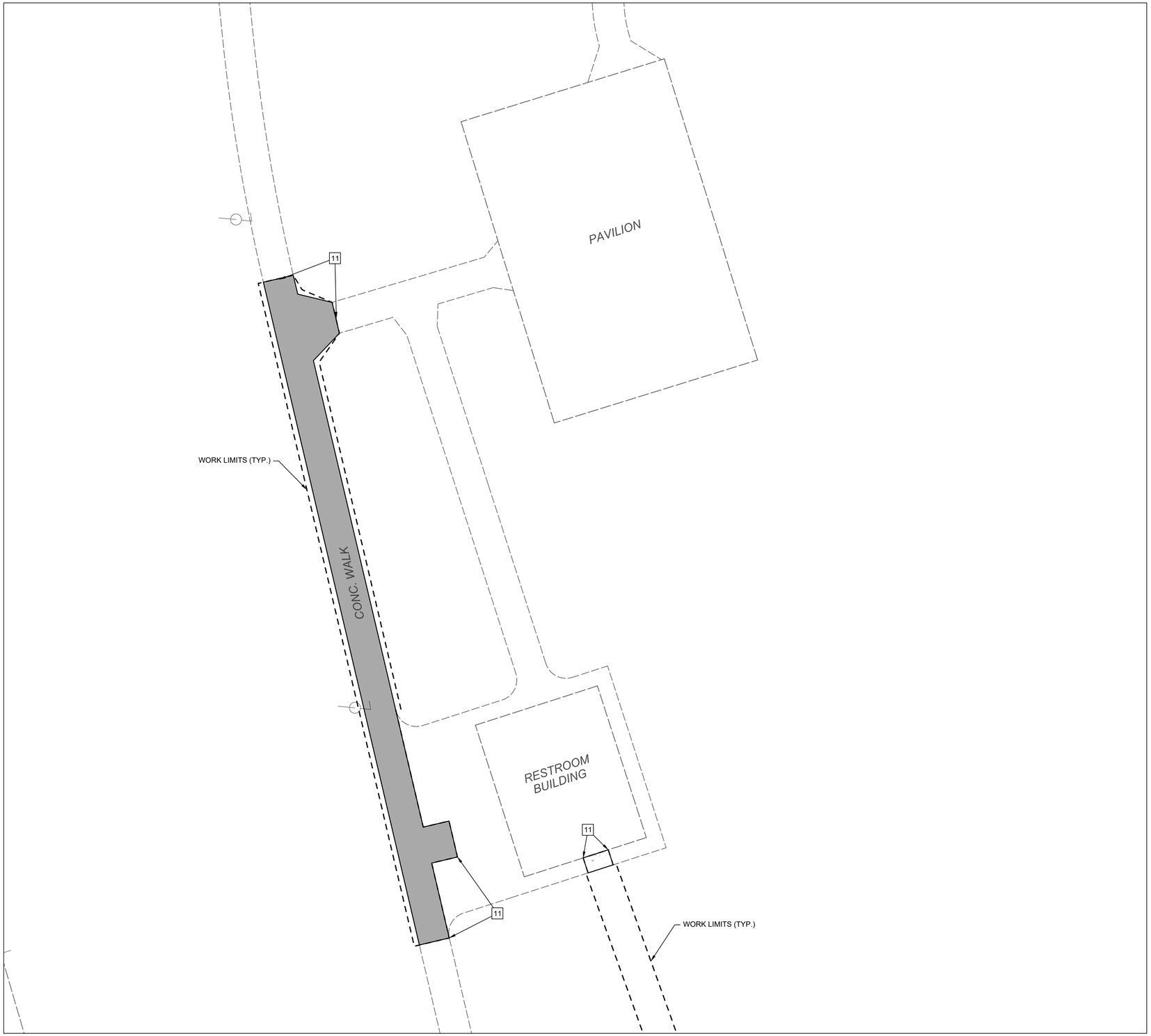
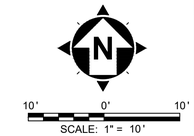
THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

EROSION CONTROL DETAILS

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C6
SHEET 7 OF 31





GENERAL CONSTRUCTION NOTES

1. 18" SEAT WALL. SEE ARCHITECTURAL PLANS.
2. TERRACED SEAT WALL. SEE ARCHITECTURAL PLANS.
3. VERTICAL CURB. REFER TO GRADING & LANDSCAPE PLANS FOR DETAILS.
4. STORM INLET. SEE UTILITY PLAN.
5. STORM MANHOLE. SEE UTILITY PLAN.
6. NYLOPLAST INLET BASIN. SEE UTILITY PLAN.
7. INSTALL HAMMOCK POSTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (BASEIS OF DESIGN: GARD & ROCK ANCHORING BASE AND HAMMOCK POST)
8. DRINKING FOUNTAIN. REFER TO LANDSCAPING PLANS FOR DETAILS.
9. INSTALL FIRE PIT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SEE UTILITY PLANS FOR GAS SERVICE ROUTING.
10. LIGHT POLE. SEE UTILITY PLANS.
11. MATCH EXISTING PAVEMENT.
12. 6" STONE STEPS. SEE LANDSCAPE PLANS.

LANDSCAPING CONSTRUCTION NOTES

L1 ALL AREAS NOT NOTED FOR LANDSCAPING OR PAVEMENT SHALL BE RESTORED WITH 6" TOPSOIL, SEED, AND MULCH.

HATCH LEGEND

- TURNDOWN SIDEWALK REPLACEMENT, REFER TO CONSTRUCTION DETAIL
- 5" CONCRETE SIDEWALK, REFER TO CONSTRUCTION DETAIL
- PAVER BAND, REFER TO LANDSCAPE PLANS FOR DETAILS
- SYNTHETIC TURF, REFER TO LANDSCAPE PLANS FOR DETAILS
- BOCCE COURT, REFER TO LANDSCAPE PLANS FOR DETAILS
- PAVERS WITH TURF BAND, REFER TO LANDSCAPE PLANS FOR DETAILS
- TREE WELL, REFER TO LANDSCAPE PLANS FOR DETAILS
- PLANTER AREA, REFER TO LANDSCAPE PLANS FOR DETAILS
- PLAY SYNTHETIC TURF, REFER TO LANDSCAPE PLANS FOR DETAILS
- MULCH RESTORATION, MULCH TO BE PROVIDED BY OWNER

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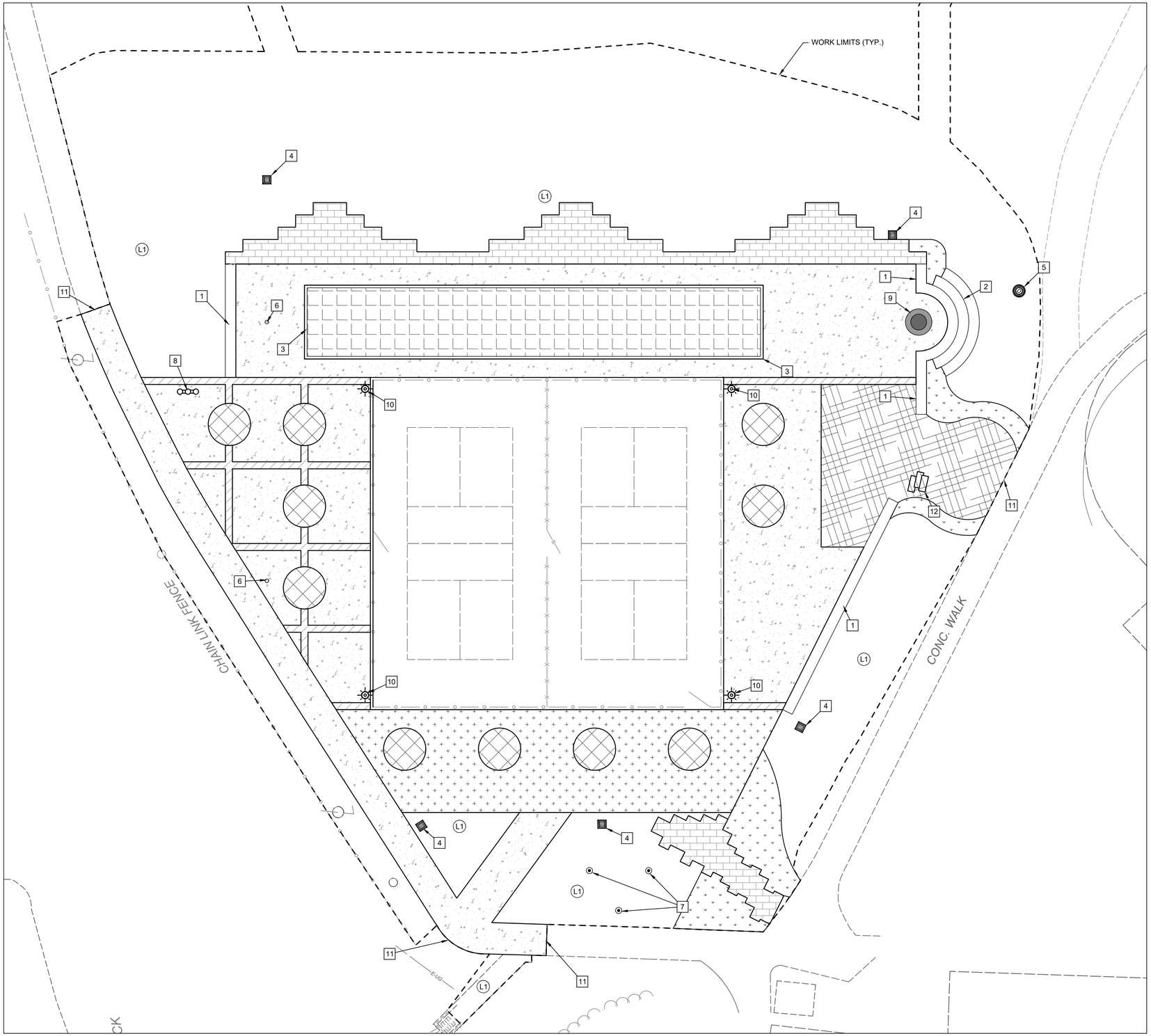
THE COMMONS AT HIGHLAND HEIGHTS CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

SITE LAYOUT PLAN

PROJECT NO.
241829
DISCIPLINE
CIVIL
SHEET NAME
C7

SHEET	OF
8	31



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

GENERAL CONSTRUCTION NOTES

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2. TERRACED SEAT WALL. SEE ARCHITECTURAL PLANS.
3. VERTICAL CURB. REFER TO GRADING & LANDSCAPE PLANS FOR DETAILS.
4. STORM INLET. SEE UTILITY PLAN.
5. STORM MANHOLE. SEE UTILITY PLAN.
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8. DRINKING FOUNTAIN. REFER TO LANDSCAPING PLANS FOR DETAILS.
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10. LIGHT POLE. SEE UTILITY PLANS.
11. MATCH EXISTING PAVEMENT.
12. 6" STONE STEPS. SEE LANDSCAPE PLANS.

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SCALE: AS SHOWN
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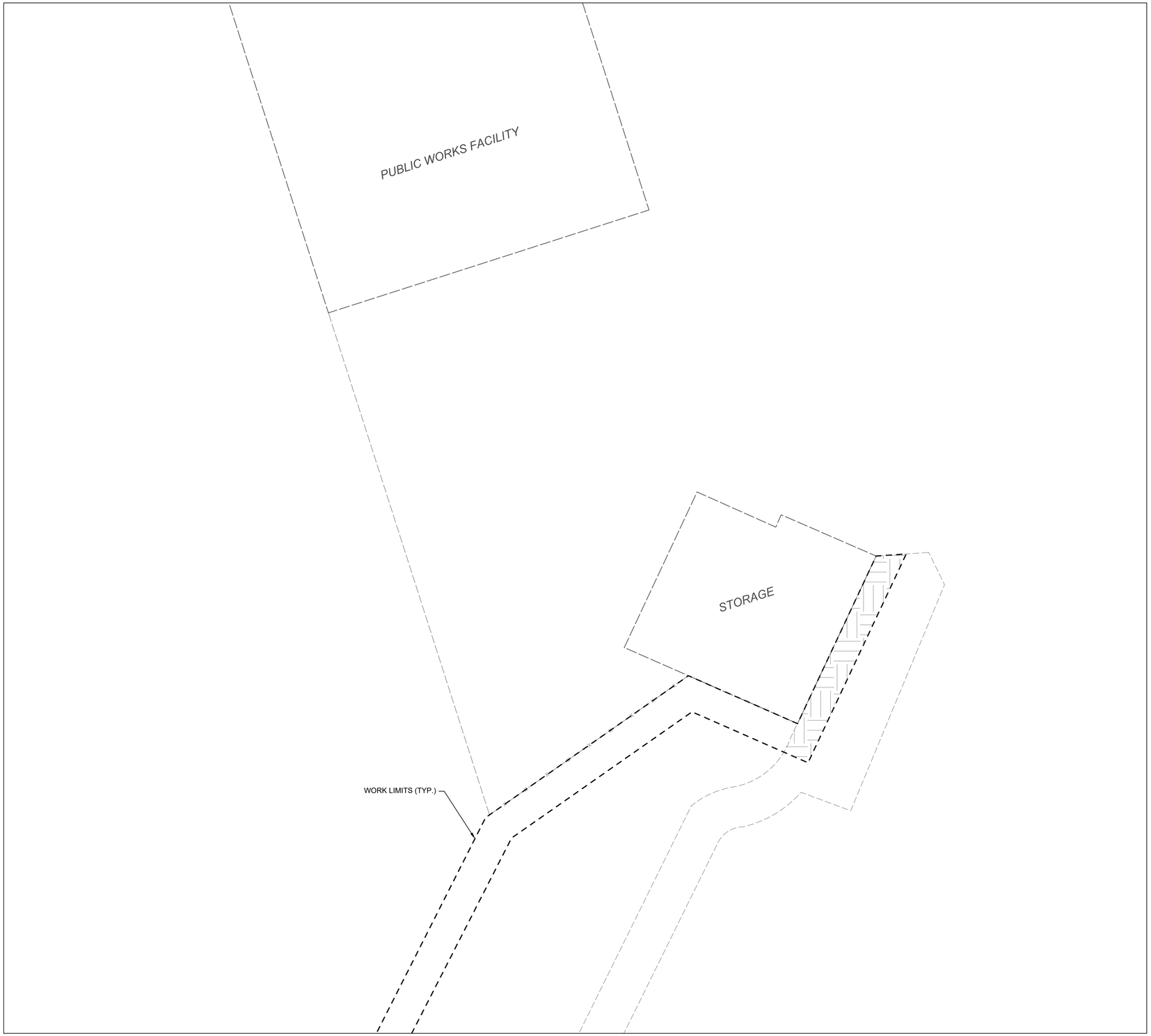
DRAWN BY: C.BARRY
CHECKED BY: F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

SITE LAYOUT PLAN

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C8
SHEET 9 OF 31

H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS SITE PLAN.DWG - C9 SITE2 - 11/3/2025 11:09:31 AM - TYLER PELFREY



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

GENERAL CONSTRUCTION NOTES

1. 18" SEAT WALL. SEE ARCHITECTURAL PLANS.
2. TERRACED SEAT WALL. SEE ARCHITECTURAL PLANS.
3. VERTICAL CURB. REFER TO GRADING & LANDSCAPE PLANS FOR DETAILS.
4. STORM INLET. SEE UTILITY PLAN.
5. STORM MANHOLE. SEE UTILITY PLAN.
6. NYLOPLAST INLET BASIN. SEE UTILITY PLAN.
7. INSTALL HAMMOCK POSTS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (BASEIS OF DESIGN: GARD & ROCK ANCHORING BASE AND HAMMOCK POST)
8. DRINKING FOUNTAIN. REFER TO LANDSCAPING PLANS FOR DETAILS.
9. INSTALL FIRE PIT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SEE UTILITY PLANS FOR GAS SERVICE ROUTING.
10. LIGHT POLE. SEE UTILITY PLANS.
11. MATCH EXISTING PAVEMENT.
12. 6" STONE STEPS. SEE LANDSCAPE PLANS.

LANDSCAPING CONSTRUCTION NOTES

L1 ALL AREAS NOT NOTED FOR LANDSCAPING OR PAVEMENT SHALL BE RESTORED WITH 6" TOPSOIL, SEED, AND MULCH.

HATCH LEGEND

- TURNDOWN SIDEWALK REPLACEMENT, REFER TO CONSTRUCTION DETAIL
- 5" CONCRETE SIDEWALK, REFER TO CONSTRUCTION DETAIL
- PAVER BAND, REFER TO LANDSCAPE PLANS FOR DETAILS
- SYNTHETIC TURF, REFER TO LANDSCAPE PLANS FOR DETAILS
- BOCCE COURT, REFER TO LANDSCAPE PLANS FOR DETAILS
- PAVERS WITH TURF BAND, REFER TO LANDSCAPE PLANS FOR DETAILS
- TREE WELL, REFER TO LANDSCAPE PLANS FOR DETAILS
- PLANTER AREA, REFER TO LANDSCAPE PLANS FOR DETAILS
- PLAY SYNTHETIC TURF, REFER TO LANDSCAPE PLANS FOR DETAILS
- MULCH RESTORATION, MULCH TO BE PROVIDED BY OWNER

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		11/18/24

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ISSUE DATE:	11/04/2025
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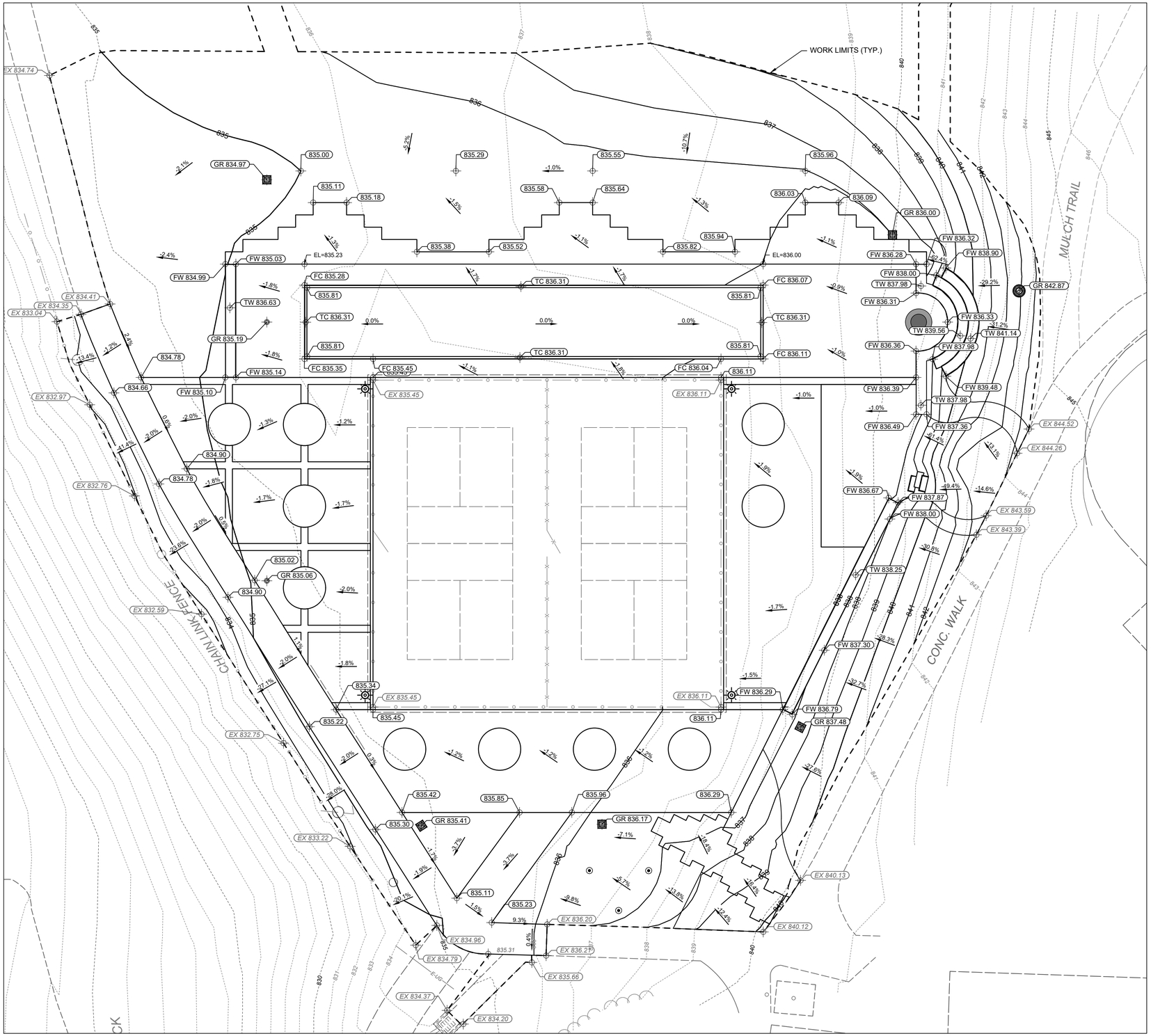
DESIGNED BY:	C.BARRY
DRAWN BY:	C.BARRY
CHECKED BY:	F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

SITE LAYOUT PLAN

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C9
SHEET 10 OF 31

H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS SITE PLAN.DWG - C10 SITE3 - 11/3/2025 11:09:31 AM - TYLER PELFREY



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

GRADING LEGEND	
EXISTING SPOT ELEVATION	EX 232.46
PROPOSED SPOT ELEVATION	232.60
PROPOSED SPOT ELEVATION (TRUNCATED)	GR 32.60
PROPOSED SPOT ELEVATION AT TOP/BACK OF CURB	TC 232.60
PROPOSED SPOT ELEVATION AT FACE/BOTTOM OF CURB	FC 232.60
PROPOSED SPOT ELEVATION AT TOP/BACK OF WALL	TW 232.60
PROPOSED SPOT ELEVATION AT FACE/BOTTOM OF WALL	FW 232.60
PROPOSED SPOT ELEVATION AT HIGH POINT	HP 232.60
PROPOSED SPOT ELEVATION AT LOW POINT	LP 232.60
PROPOSED SPOT ELEVATION AT STRUCTURE GRATE	GR 232.60
PROPOSED GRADE LABEL	10.8%
PROPOSED SLOPE LABEL	4:1
PROPOSED GRADE BREAK	GRADE BREAK
PROPOSED GRADING VALLEY	VALLEY
DIRECTION OF FLOW	

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		11/18/24

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ISSUE DATE:	11/04/2025
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THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

GRADING PLAN

PROJECT NO.	
241829	
DISCIPLINE	
CIVIL	
SHEET NAME	
C10	
SHEET	OF
11	31

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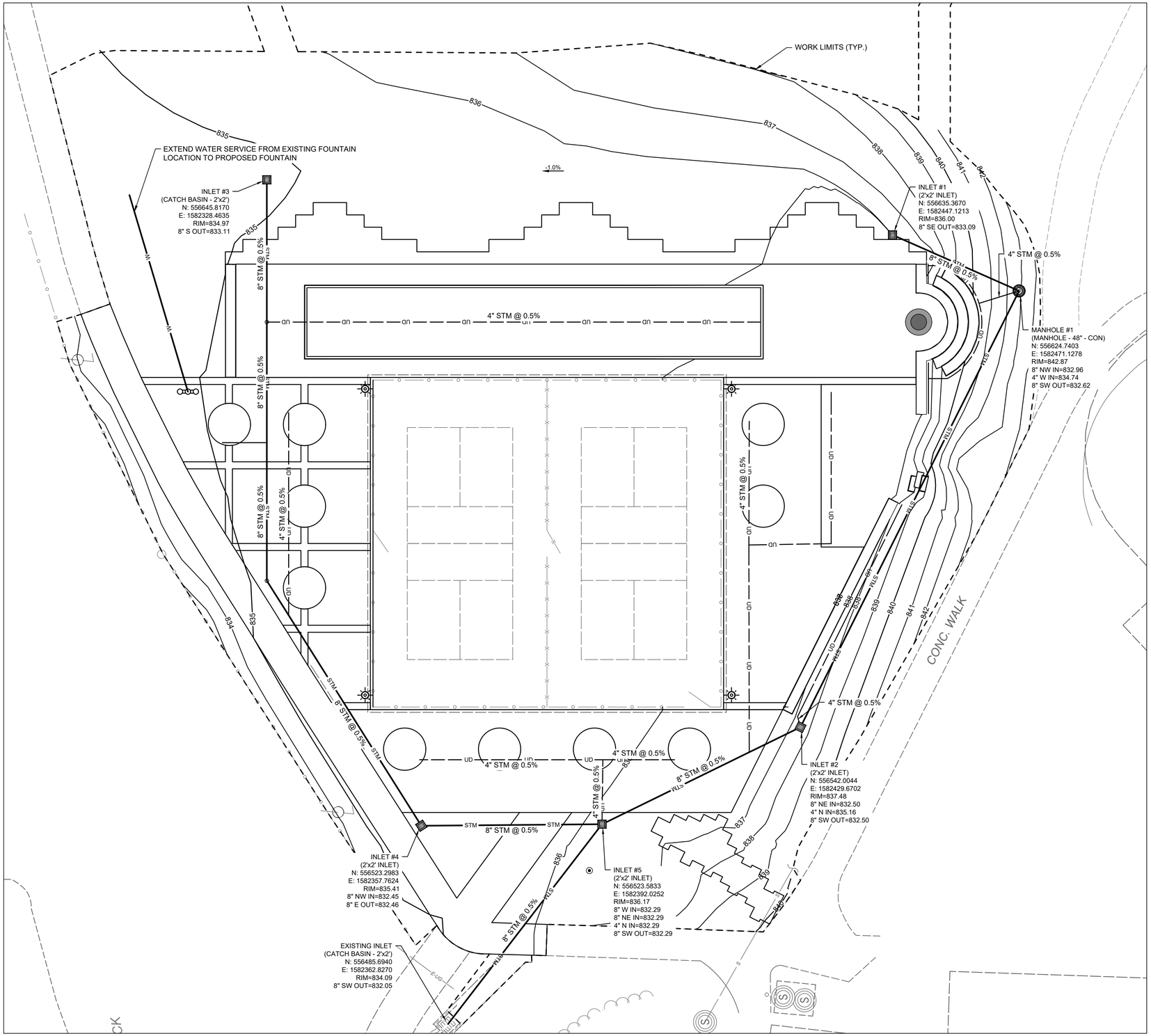
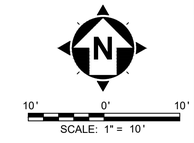
H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS GRADING PLAN.DWG - C11 GRADING - 10/30/2025 9:37:41 PM - TYLER PELFREY





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		11/18/24

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THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

UTILITY PLAN

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PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C11
SHEET 12 OF 31

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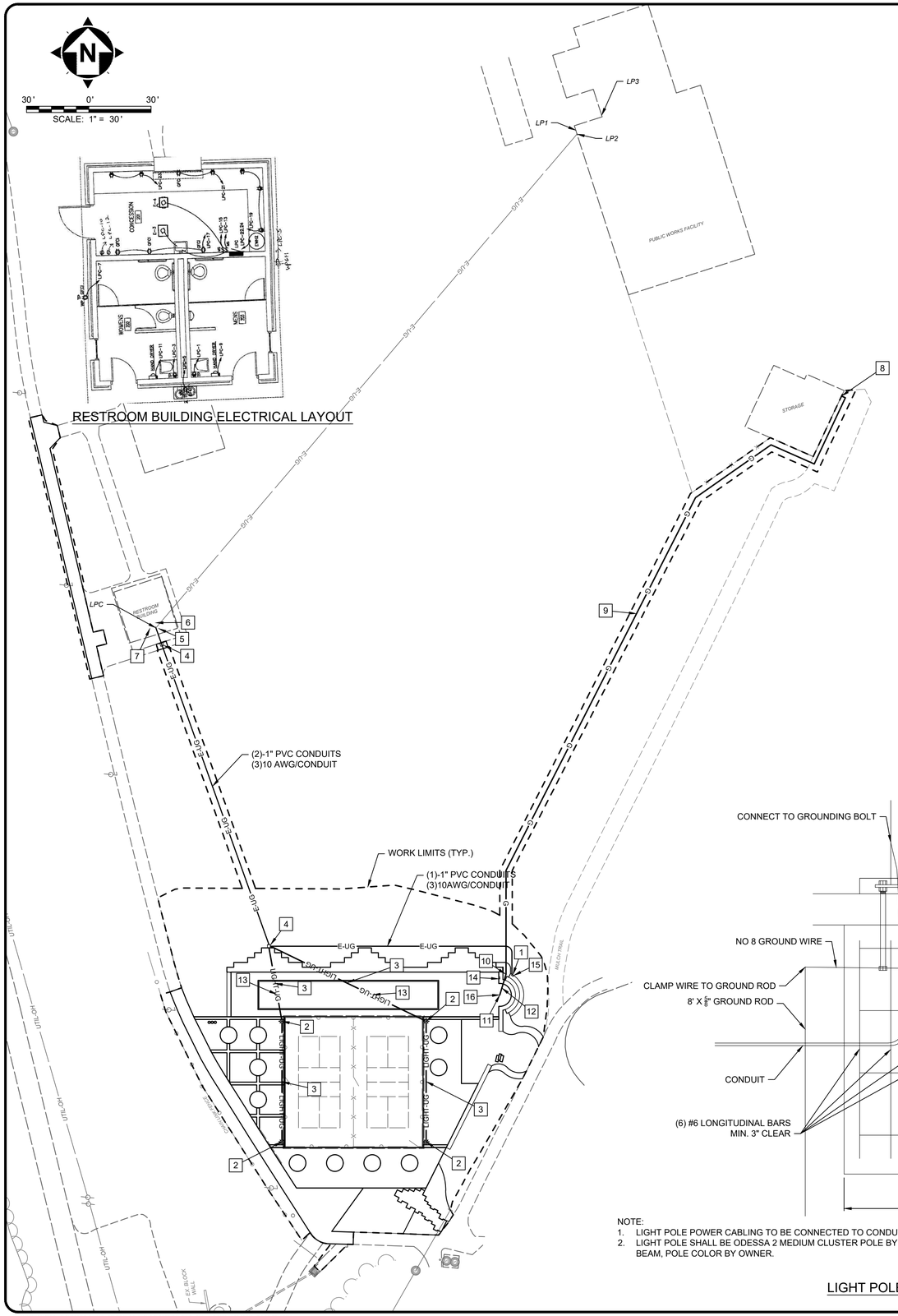
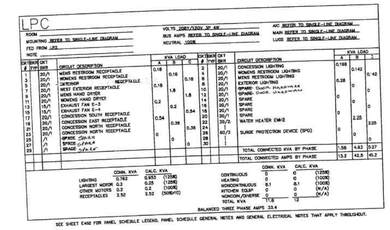
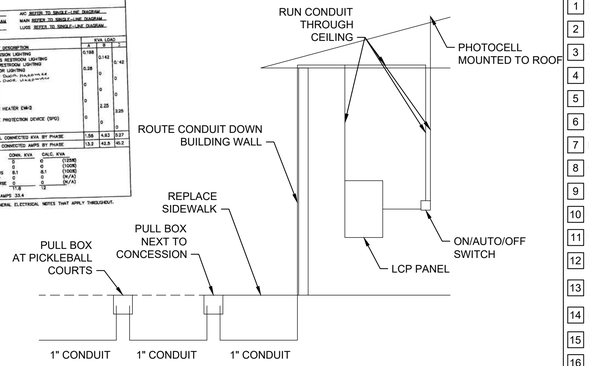


RESTROOM BUILDING ELECTRICAL LAYOUT



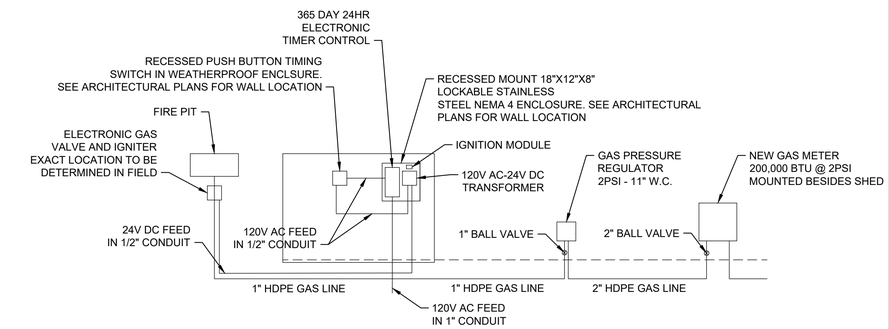
LPC PANEL



ELECTRIC SERVICE SCHEMATIC

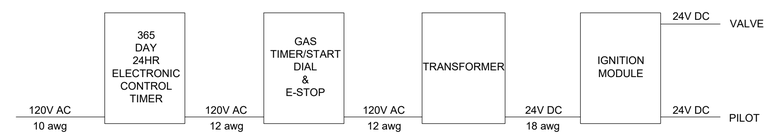
GENERAL CONSTRUCTION NOTES

1. FIRE PIT 24HR ELECTRONIC TIMER CONTROL
2. LIGHT POLE LPC 14
3. 3/4" PVC CONDUIT (3) 10 AWG/CONDUIT
4. 18"X18" QUASITE PULL BOX WITH TRAFFIC RATED LID
5. CONNECT TO EXISTING PANEL LCC
6. ON/AUTO/OFF CONTROLLER
7. INSTALL PHOTOTCELL ON ROOF
8. CONNECT TO EX GAS METER
9. 2" HDPE GAS LINE
10. GAS REGULATOR
11. GAS FIRE PIT
12. 1" HDPE GAS LINE
13. UNDERGROUND ELECTRIC TO BE INSTALLED BENEATH UNDERDRAIN
14. FIRE PIT TIMER AND E-SHUT OFF VALVE CONTROLER.
15. 120V AC-24V DC TRANSFORMER
16. ELECTRONIC GAS VALVE AND IGNITER

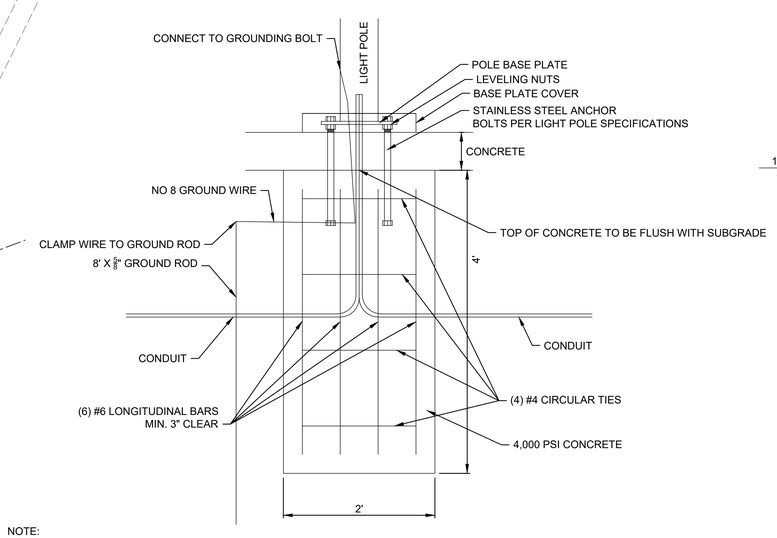


NOTE:
1. ELECTRONIC TIMER TO AUTOMATICALLY START AT 5PM AND SHUT OFF AT 10PM AND ACCOUNT FOR DAYLIGHT SAVINGS TIME.
2. PUSH BUTTOM TIMER SHALL HAVE 5 MIN, 10 MIN, 15MIN, 30MIN AND 60 MIN INCREMENTS AND BE IN A WEATHERPROOF WHILE IN USE COVER.
3. 48" GROUNDING RODS TO BE PROVIDED AT REGULATOR AND NEAR THE WALL FOR PURPOSES OF GROUNDING OUT GAS MAIN.
4. EXACT LOCATIONS OF EQUIPMENT AND CONTROLS TO BE DETERMINED AND APPROVED IN THE FIELD.

GAS SERVICE SCHEMATIC



CONTROL WIRING SCHEMATIC



NOTE:
1. LIGHT POLE POWER CABLING TO BE CONNECTED TO CONDUCTORS WITH UNFUSED Y CONNECTOR INSIDE OF POLE.
2. LIGHT POLE SHALL BE ODESSA 2 MEDIUM CLUSTER POLE BY LIGMAN LIGHTING, MODEL 21021 4X43, 30K, 13' POLE HEIGHT, VERY WIDE BEAM, POLE COLOR BY OWNER.

LIGHT POLE FOOTING DETAIL

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THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

UTILITY PLAN

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PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C12
SHEET 13 OF 31

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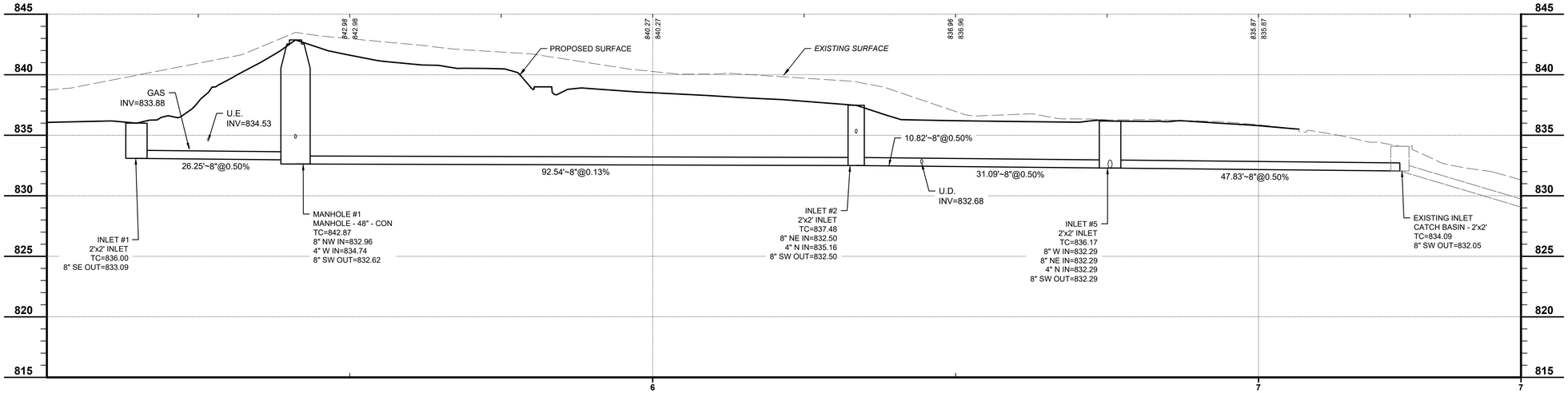
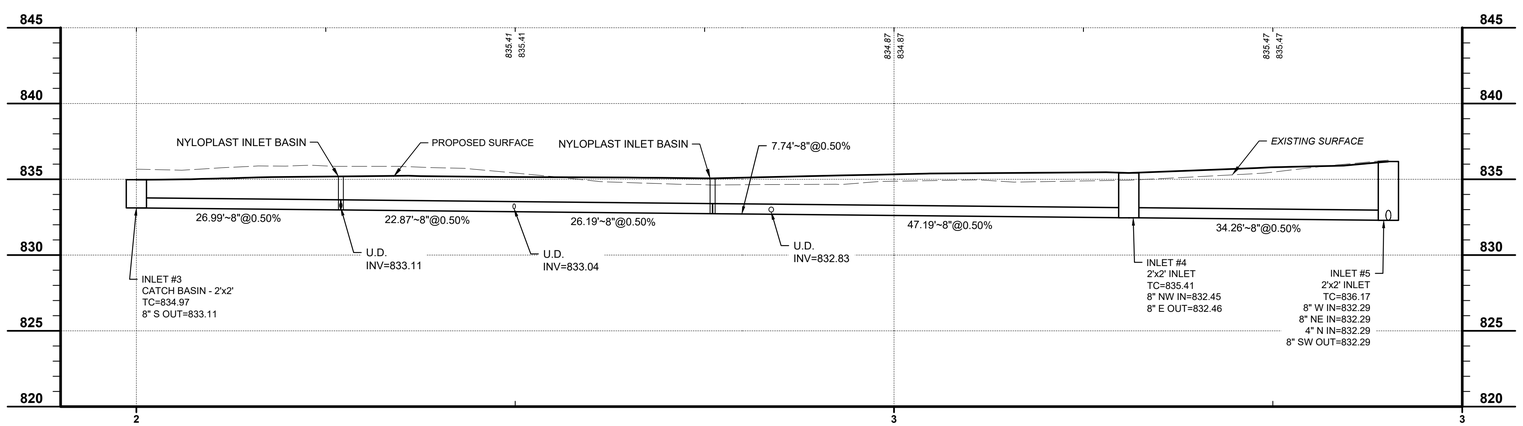


STORM 1 (H10:V5)



STORM 2 (H10:V5)

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DRAWN BY: C.BARRY
CHECKED BY: F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

UTILITY PROFILES

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C13
SHEET 14 OF 31

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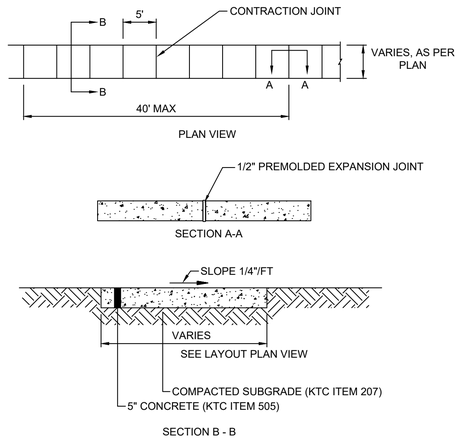
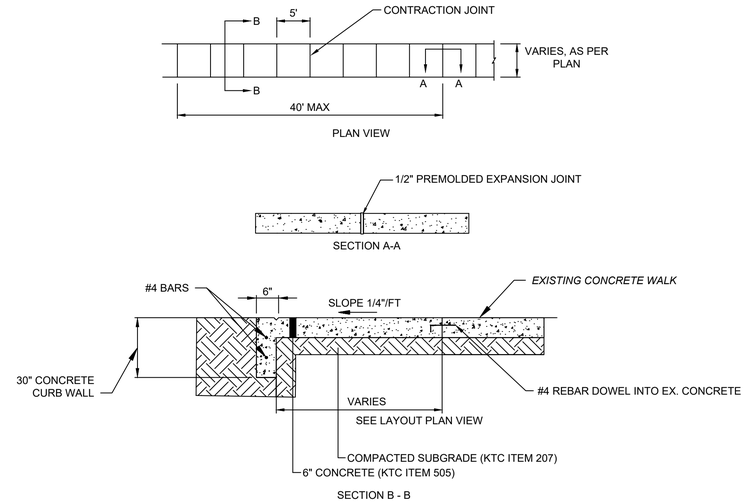
H:\2024\241829\DWG\SHEETS\C_241829 - CENTRAL COMMONS UTILITY PLAN.DWG - C16 UTILITY PROFILE - 10/30/2025 8:59:28 PM - TYLER PELFREY



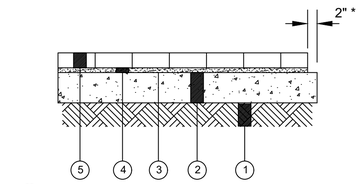
CONCRETE SIDEWALK DETAIL

SCALE: NONE



TURNDOWN SIDEWALK DETAIL

SCALE: NONE

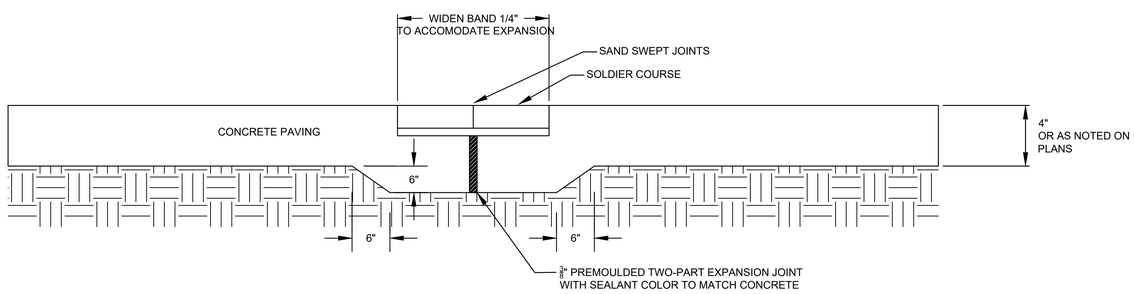


1. ITEM 207 - SUBGRADE COMPACTION (INCIDENTAL TO PERTINENT PAVEMENT ITEM)
2. ITEM 505 - 4" MIN. CONCRETE PAVEMENT
3. ITEM 406 - TACK COAT @ 0.1 GAL/SY
4. ITEM SPL. - 3/4" ROLLED BITUMINOUS SETTING BED
5. ITEM SPL. - PAVER - SEE PAVING MATERIALS PLANS/ DETAILS LANDSCAPING PLANS

* EXTEND CONCRETE PAVEMENT 2" BEYOND PAVER

PAVER DETAIL

SCALE: NONE



EXPANSION JOINTS UNDER PAVER BANDS

SCALE: NONE

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DRAWN BY:	C.BARRY
CHECKED BY:	F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

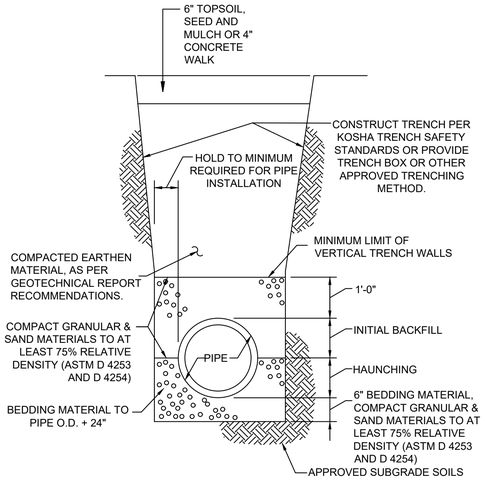
CONSTRUCTION DETAILS

PROJECT NO. 241829

DISCIPLINE CIVIL

SHEET NAME C14

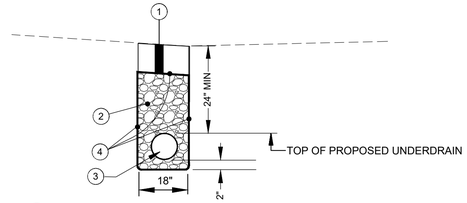
SHEET 15 OF 31



REFER TO NKSD1 REQUIREMENTS FOR SEWER TRENCH COMPACTION IN THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION

TRENCH DETAIL - YARD OR SIDEWALK

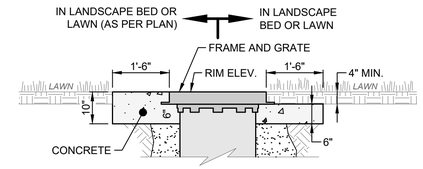
SCALE: NONE

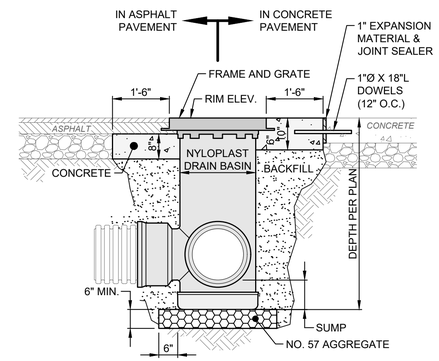


1. YARD RESTORATION OR CONCRETE PAVEMENT PER PLAN
2. CLEAN NO. 57 CRUSHED STONE (LESS THAN 3% FINES). PLACED AND COMPACTED UP TO 4" BELOW TOPSOIL OR BOTTOM OF PAVEMENT
3. ITEM 704 - 4" RIGID PERFORATED PVC PIPE UNDERDRAIN
4. MIRAFI® 140N OR EQUIVALENT NON WOVEN DRAINAGE GEOTEXTILE - CONSTRUCT AROUND BOTTOM AND SIDES OF TRENCH, ALSO LAPPED OVER TOP OF STONE BACKFILL.

UNDERDRAIN DETAIL

SCALE: NONE



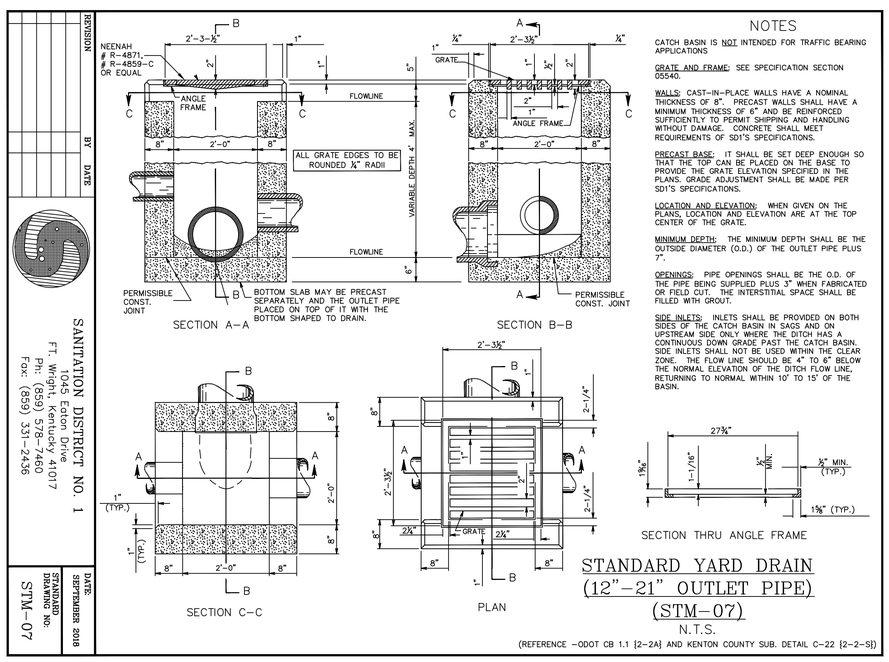


NOTES:

1. CONCRETE SHALL BE CLASS QC-1.
2. STRUCTURE SHALL MEET H-20 LOADING.
3. FRAME AND GRATE ASSEMBLY SHALL BE ROAD AND HIGHWAY 2'X2', ROAD AND HIGHWAY 2'X3', STEEL BAR 2'X2', STEEL BAR 2'X3', OR AS PER PLAN.
4. SUMP DEPTH SHALL BE 6" MIN. FOR 8" THRU 24" DIA. BASIN, 10" MIN. FOR 30" DIA. BASIN, OR PER PLAN.
5. USE APPROPRIATE PIPE ADAPTER FOR TYPE OF PIPE MATERIAL USED FOR WATER TIGHT CONNECTION.

(NYLOPLAST) INLET BASIN DETAIL

SCALE: NONE



NOTES

CATCH BASIN IS NOT INTENDED FOR TRAFFIC BEARING APPLICATIONS

GRATE AND FRAME: SEE SPECIFICATION SECTION 05540.

WALLS: CAST-IN-PLACE WALLS HAVE A NOMINAL THICKNESS OF 8". PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. CONCRETE SHALL MEET REQUIREMENTS OF SD1'S SPECIFICATIONS.

PRECAST BASE: IT SHALL BE SET DEEP ENOUGH SO THAT THE TOP CAN BE PLACED ON THE BASE TO PROVIDE THE GRATE ELEVATION SPECIFIED IN THE PLANS. GRADE ADJUSTMENT SHALL BE MADE PER SD1'S SPECIFICATIONS.

LOCATION AND ELEVATION: WHEN GIVEN ON THE PLANS, LOCATION AND ELEVATION ARE AT THE TOP CENTER OF THE GRATE.

MINIMUM DEPTH: THE MINIMUM DEPTH SHALL BE THE OUTSIDE DIAMETER (O.D.) OF THE OUTLET PIPE PLUS 7".

OPENINGS: PIPE OPENINGS SHALL BE THE O.D. OF THE PIPE BEING SUPPLIED PLUS 3" WHEN FABRICATED OR FIELD CUT. THE INTERSTITIAL SPACE SHALL BE FILLED WITH GROUT.

SIDE INLETS: INLETS SHALL BE PROVIDED ON BOTH SIDES OF THE CATCH BASIN IN SAGS AND ON UPSTREAM SIDE ONLY WHERE THE DITCH HAS A CONTINUOUS DOWN GRADE PAST THE CATCH BASIN. SIDE INLETS SHALL NOT BE USED WITHIN THE CLEAR ZONE. THE FLOW LINE SHOULD BE 4" TO 6" BELOW THE NORMAL ELEVATION OF THE DITCH FLOW LINE, RETURNING TO NORMAL WITHIN 10' TO 15' OF THE BASIN.

STANDARD YARD DRAIN (12"-21" OUTLET PIPE) (STM-07)

N.T.S.

(REFERENCE -ODOT CB 1.1 {2-2A} AND KENTON COUNTY SUB. DETAIL C-22 {2-2-S})

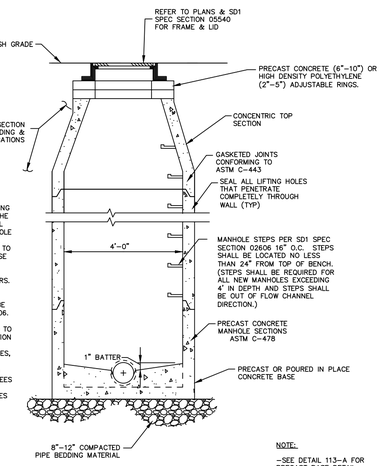
REVISION	BY	DATE

SANITATION DISTRICT NO. 1
1045 Eaton Drive
FT. Wright, Kentucky 41017
Ph: (859) 578-7460
Fax: (859) 331-2436

DATE: SEPTEMBER 2018
STANDARD DRAWING NO: STM-07

STORM INLET DETAIL

SCALE: NONE



NOTES:

1. IF THE SLOPE OF THE INCOMING SEWER EXCEEDS 10% FROM THE HORIZONTAL, A FITTING SHALL BE USED OUTSIDE THE MANHOLE WALL TO FACILITATE A MORE PERPENDICULAR CONNECTION TO THE MANHOLE WALL. THE USE OF THIS FITTING IS TO BE EVALUATED ON A CASE BY CASE BASIS BY SD1 ENGINEERS.
2. PRECAST MANHOLES SHALL BE INSTALLED PER SECTION 02606.
3. BENCHING SHALL BE SHAPED TO MAINTAIN A SMOOTH TRANSITION OF FLOW FOR PIPE ANGLES BETWEEN 90 AND 180 DEGREES, AS REFERENCED TO THE DOWNSTREAM FLOWLINE. NO ANGLES LESS THAN 90 DEGREES WILL BE ALLOWED BETWEEN INCOMING AND OUTGOING PIPES IN MHS.

NOTE:

-SEE DETAIL 113-A FOR PRECAST BASE DETAIL.

-ANTI-FLOTATION FLANGES MAY BE REQUIRED IN AREAS WHERE THE MANHOLE IS SUBJECT TO GROUND WATER PER SD1 SPEC 02606.

STANDARD MANHOLE

N.T.S.

REVISION	BY	DATE

SANITATION DISTRICT NO. 1
1045 Eaton Drive
FT. Wright, Kentucky 41017
Ph: (859) 578-7460
Fax: (859) 331-2436

DATE: AUGUST 2018
STANDARD DRAWING NO: 113

STORM MANHOLE DETAIL

SCALE: NONE

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ISSUED FOR:	BID
ISSUE DATE:	11/04/2025
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DRAWN BY:	C.BARRY
CHECKED BY:	F.TWEHUES

THE COMMONS AT HIGHLAND HEIGHTS
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HIGHLAND HEIGHTS, KY

CONSTRUCTION DETAILS

PROJECT NO. 241829
DISCIPLINE CIVIL
SHEET NAME C15
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GENERAL:

1. THESE NOTES ARE GENERAL REQUIREMENTS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

2. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREINAFTER FOR USE ON THIS PROJECT.

3. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE CONTRACTOR SHALL CONTACT THE ARCHITECT/ENGINEER FOR CLARIFICATION.

4. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON THE PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

5. SHOP DRAWINGS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE ENGINEER/ARCHITECT.

6. SHOP DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC., WILL BE REVIEWED BY THE ENGINEER/ARCHITECT ONLY FOR CONFORMANCE WITH DESIGN CONCEPT. NO WORK AFFECTED BY THE SHOP DRAWINGS SHALL BE STARTED WITHOUT SUCH REVIEW.

7. THE GENERAL CONTRACTOR SHALL COORDINATE ALL REVISIONS, CORRECTIONS, AND COMMENTS INDICATED ON THE SHOP DRAWINGS BY THE ARCHITECT/ENGINEER.

8. ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL CONFORM TO THOSE SHOWN ON THE ARCHITECTURAL DRAWINGS.

9. THE STRUCTURAL CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.

10. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER ARE SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

11. ALL STRUCTURES ARE DESIGNED TO BE STABLE AND SELF-SUPPORTING AT THE COMPLETION OF CONSTRUCTION. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE STABILITY AND SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL IS NOT INDICATED ON THE DRAWINGS AND, IF PROVIDED, SHALL BE REMOVED, AS CONDITIONS PERMIT AND REMAIN THE PROPERTY OF THE CONTRACTOR.

12. ALL MATERIALS AND EQUIPMENT FURNISHED WILL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND EQUIPMENT BEING SUBSTITUTED.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

14. COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR MISCELLANEOUS LINTELS, SIZE AND LOCATION OF FLOOR SLOPES, CHAMFERS, GROOVES, HAND RAILS, ROOF EDGES, INSERTS, ETC.

15. COORDINATE WITH CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS FOR PIPE SLEEVES, FLOOR DRAINS, INSERTS, HANGERS, WALL AND SLAB OPENINGS, CONDUIT RUNS THROUGH WALLS AND SLABS, SIZE AND LOCATION OF MACHINE OR EQUIPMENT SUPPORTS, RAILING, ETC.

16. COORDINATE WITH SITE, ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND CIVIL DRAWINGS FOR RETAINING WALLS, PADS, PAVEMENT AND OTHER SITE STRUCTURES BEYOND THE BUILDING ENVELOPE.

17. EARTHWORK, FOUNDATION DRAINS, WATERPROOFING, PERIMETER INSULATION, MASONRY AND OTHER REQUIRED NON-STRUCTURAL ITEMS ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE WITH CIVIL/SITE AND ARCHITECTURAL DRAWINGS.

GOVERNING CODES AND STANDARDS:

KENTUCKY BUILDING CODE, 2018 EDITION
ASCE 7 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, 2010 EDITION
ACI 318 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 2014 EDITION
ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE, 2010 EDITION
ACI 305R - HOT WEATHER CONCRETING, 2010 EDITION
ACI 306R - COLD WEATHER CONCRETING, 2010 EDITION
ACI SP-66 - ACI DETAILING MANUAL, 2004
ACI 530 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, 2013 EDITION
ACI 530.1 - SPECIFICATIONS FOR MASONRY STRUCTURES, 2013 EDITION

FOUNDATIONS:

1. UNLESS OTHERWISE NOTED BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW FINISHED GRADE, STEPPED DOWN AS NECESSARY TO AVOID UTILITY INTERFERENCE

2. REGARDLESS OF ELEVATIONS SHOWN, ALL FOOTINGS SHALL BEAR ON FIRM ORIGINAL SOIL OR LOAD-BEARING FILL. IN THE EVENT THAT FIELD CONDITIONS INDICATE A DEVIATION FROM DESIGN ASSUMPTIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

3. BACKFILL FOR STRUCTURES - KYTC DENSE GRADED AGGREGATE (DGA) OR GRANULAR MATERIAL WITH A MINIMUM INTERNAL FRICTION ANGLE OF 30°, A MINIMUM DENSITY OF 128 PCF AND A MAXIMUM PARTICLE SIZE OF 3".

4. PREPARE SUBGRADE BY VIBRATORY COMPACTION PRIOR TO FINAL GRADING. COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY WEIGHT DENSITY OF THE SUBGRADE MATERIAL, PER ASTM D-1557.

5. PLACE FILL IN LIFTS NOT TO EXCEED 10" LOOSE THICKNESS FOR HEAVY MECHANICAL COMPACTION EQUIPMENT AND 4" FOR MECHANICAL HAND METHODS, COMPACT TO 95% OF THE MAXIMUM DENSITY ACHEIVED PER ASTM D-1557.

6. REMOVE ALL UNSUITABLE MATERIAL OR LOOSE SOIL WHICH CANNOT BE ADEQUATELY COMPACTED AND REPLACE WITH COMPACTED KYTC DENSE GRADED AGGREGATE.

7. FOUNDATIONS ARE DESIGNED TO BEAR ON UNDISTURBED NATURAL SOILS OR PROPERLY COMPACTED ENGINEERED FILL WITH ASSUMED GROSS ALLOWABLE BEARING CAPACITY OF 2500 PSF.

8. 4. SURFACE VEGETATION, TOPSOIL, OTHER ORGANIC MATERIALS, FILL, AND/OR OTHER DELETERIOUS MATERIALS SHALL BE REMOVED FROM BENEATH THE BUILDING AREA, PLUS A MINIMUM OF 5-FEET BEYOND CONSTRUCTION LIMITS. REMOVE AND REPLACED WITH SELECT ENGINEERED FILL PER GEOTECHNICAL REPORT REQUIREMENTS. ALL EXTERIOR FOUNDATIONS SHALL EXTEND TO A MINIMUM OF 36-INCHES (FROST DEPTH) BELOW EXTERIOR GRADE OR TO ACCEPTABLE SOILS, WHICHEVER IS DEEPER. DO NOT PLACE FILL OR CONCRETE ON FROZEN GROUND.

9. OWNER SHALL EMPLOY A SOILS TESTING LABORATORY APPROVED BY THE ENGINEER TO PERFORM TESTING SERVICES AS REQUIRED BY THE SPECIFICATIONS AND TO INSPECT ALL BEARING SURFACES OF SLABS AND FOUNDATIONS. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED BEFORE CONCRETE IS POURED. THE ADEQUACY OF THE SOIL SHALL BE DETERMINED BY PROBING, TAKING HAND AUGER SAMPLES, BY USE OF A SOIL PENETROMETER OR PRE-APPROVED METHODS.

10. NOTIFY ENGINEER IF FOUNDATION CONDITIONS ENCOUNTERED DIFFER FROM SOILS EXPLORATION INFORMATION MADE AVAILABLE TO THE CONTRACTOR.

11. CONTRACTOR SHALL PROVIDE FOR ALL DE-WATERING OF EXCAVATIONS, AND DESIGN / PROVIDE ALL CRIBBING, SHORING, AND BRACING REQUIRED FOR SAFETY AND TO ALLOW CONSTRUCTION OF THE WORK PRESENTED HEREIN. CONTRACTOR SHALL KEEP ALL FREE-STANDING WATER OUT OF EXCAVATIONS. CONTRACTOR SHALL PROVIDE DEWATERING MEASURES AS NECESSARY PRIOR TO PLACING CONCRETE.

12. LOOSE OR SOFT SOIL OR ROCK, DEBRIS, OR EXCESS SURFACE WATER SHOULD BE REMOVED FROM THE FOUNDATION BOTTOMS BEFORE CONCRETE OR REINFORCING STEEL IS PLACE.

13. FOUNDATION CONCRETE SHALL BE PLACED DURING THE SAME DAY EXCAVATION IS MADE. IN THE EVENT FOOTING EXCAVATIONS ARE LEFT OPEN FOR MORE THAN ONE DAY, THEY SHALL BE PROTECTED TO REDUCE EVAPORATION OR ENTRY OF MOISTURE.

14. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE TEMPORARY SHORING, BRACING, UNDERPINNING, AND OTHER MEASURES NECESSARY TO ENSURE STABILITY AND SAFETY DURING ERECTION AND CONSTRUCTION AND TO PREVENT MOVEMENT OF SOIL THAT COULD DAMAGE EXISTING STRUCTURES, PAVEMENT, UTILITIES, ETC.

15. CENTER FOOTINGS UNDER COLUMNS AND WALLS UNLESS NOTED.

16. UNLESS NOTED OTHERWISE ON THE CIVIL/SITE DRAWINGS, PROVIDE A MINIMUM 2% GRADE WITHIN 10-FEET OF THE PERIMETER OF THE FOUNDATION SYSTEM TO ALLOW SURFACE WATER TO DRAIN AWAY.

17. CONTRACTOR SHALL SECURE AND VERIFY ALL MEASUREMENT AND CONDITIONS AT THE SITE BEFORE PROCEEDING WITH THE WORK. ALL FORMED DIMENSIONS SHALL BE VERIFIED WITH AND CONFORM TO THOSE SHOWN ON THE PROCESS AND SITE PLANS.

CAST-IN-PLACE CONCRETE AND REINFORCEMENT:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318.

2. CONCRETE SHALL HAVE THE FOLLOWING 28-DAY COMPRESSIVE STRENGTHS:
   CAST-IN-PLACE CONCRETE: 4,500 PSI
   FILL CONCRETE: 1,500 PSI

3. USE 6% ±1.5%, ENTRAINED AIR PER ASTM C260 FOR ALL CONCRETE EXPOSED TO WEATHER.

4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A706.

5. ADMIXTURES SHALL CONTAIN NO MORE THAN 0.05% CHLORIDE IONS BY WEIGHT OF CEMENT WHEN TESTED IN ACCORDANCE WITH AASHTO A706.

6. CONTRACTOR SHALL KEEP A COPY OF "FIELD REFERENCE MANUAL: STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE ACI 301 WITH SELECTED ACI REFERENCES", (ACI PUBLICATION SP-15) AT THE PROJECT FIELD OFFICE.

7. ALL REINFORCING DETAILS SHALL CONFORM TO THE ACI DETAILING MANUAL, SP-66, UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.

8. SUBMIT FOR APPROVAL CONCRETE MIX DESIGN AND CERTIFICATION OF CONCRETE MATERIALS CONFORMING TO THE FOLLOWING EXPOSURE CATEGORIES:

	INTERIOR SLAB-ON-GRADE	FOOTINGS, WALLS, EXTERIOR SLABS
CATEGORY	NON-AIR ENTRAINED CLASS	AIR-ENTRAINED CLASS
FREEZE AND THAWING	F0	F3
SULFATE	S1	S1
IN CONTACT WITH WATER	W1	W1
CORROSION PROTECTION	C1	C2

9. THE OWNER SHALL ENGAGE A TESTING LABORATORY APPROVED BY THE ENGINEER/ARCHITECT TO PERFORM THE TESTING SPECIFIED PER PARAGRAPH 1.6.4 OF ACI 301. THE TESTING LABORATORY SHALL MEET THE REQUIREMENTS OF ASTM E329. TESTING SHALL BE MADE BY AN ACI CONCRETE FIELD TESTING TECHNICIAN GRADE 1 OR APPROVED EQUIVALENET. A TECHNICIAN GRADE 1 SHALL BE PRESENT DURING ALL CONCRETE PLACEMENT.

10. SUBMIT SHOP DRAWINGS FOR REVIEW. THESE DRAWINGS SHALL SHOW ALL CONCRETE MEMBER DIMENSIONS AND DOWELS FOR MASONRY WALLS.

11. PROVIDE DOWELS FROM FOUNDATIONS TO MATCH WALL VERTICAL REINFORCING. WHERE SHOWN, PROVIDE DOWELS OUT OF WALLS TO MATCH SLB REINFORCING.

12. PROVIDE CLASS "B" TENSION LAP SPLICE OR FULL MECHANICAL SPLICE (ACI 318, SECT. 12.14.3) FOR ALL VERTICAL STEEL IN WALLS AND SLABS. SEE LAP SCHEDULE ON SHEET SC102 FOR LAP LENGTHS, ONE.

13. PROVIDE ADEQUATE BOLSTERS, HI-CHAIRS, SUPPORT BARS, ETC., TO MAINTAIN SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING BARS. SUPPORTS THAT BEAR DIRECTLY ON EXPOSED SURFACES SHALL BE STAINLESS STEEL.

14. ALL SLABS AND WALLS SHALL BE POURED MONOLITHICALLY, EXCEPT FOR THE REQUIRED CONSTRUCTION JOINTS.

15. PROVIDE 3/4 INCH CHAMFER ON ALL EXPOSED CORNERS OF SLABS AND WALLS UNLESS OTHERWISE INDICATED ON THE ARCHITECTURAL DRAWINGS. MINIMUM CLEARANCES FOR REINFORCING STEEL SHALL BE MAINTAINED.

16. CURE ALL CONCRETE FOR A MINIMUM 7-DAYS. APPLY CURING COMPOUND AT THE MAXIMUM COVERAGE RATE OF 300 SQUARE FEET PER GALLON. USE PRODUCT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SEE SPECIFICATIONS.

17. ALL CONSTRUCTION JOINTS SHALL BE KEYED. PROVIDE KEYWAYS AT MEMBER CENTERLINE WITH A DEPTH OF 1-1/2 INCH AND HEIGHT EQUAL TO ONE-THIRD OF THE MEMBER'S DEPTH/THICKNESS.

18. CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS OF CONSTRUCTION JOINTS NOT INDICATED ON THE DRAWINGS FOR REVIEW BY THE ENGINEER/ARCHITECT.

19. ALL ALUMINUM IN CONTACT WITH CONCRETE OR DISSIMILAR METALS SHALL BE COATED WITH GRAY EPOXY PRIMER, APPROVED BY THE ENGINEER.

20. FORMWORK, FOR ALL CONCRETE THAT WILL BE EXPOSED IN THE COMPLETED STRUCTURE, SHALL BE CONSTRUCTED FROM A METAL OR SUITABLE SURFACE PLYWOOD THAT WILL PRODUCE AN ACCEPTABLY SMOOTH SURFACE. SEE SPECIFICATIONS.

21. ALL HORIZONTAL AND VERTICAL PIPE SLEEVE OPENINGS THROUGH BEAMS SHALL BE FORMED WITH STANDARD STEEL PIPE.

22. CONCRETE PROTECTION (CLEAR COVER) FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
    a. FOUNDATIONS:
       • 3 INCHES, BOTTOM AND UNFORMED EDGES
       • 2 INCHES, FORMED EDGES
       • 2 INCHES, EXPOSED TO EARTH, WATER OR WEATHER
       • 2 INCHES, BOTTOM, ON CONCRETE MUDMAT

23. LAP SPLICE WELDED WIRE FABRIC ONE SPACE PLUS 2 INCHES AT EDGES AND ENDS AND PROVIDE ADDITIONAL REINFORCING WHERE SHOWN ON DRAWINGS. PLACE MESH 2 INCHES FROM TOP OF SLAB FOR SLABS ON GROUND AND 1 INCH FROM TOP OF SUPPORTED SLABS UNLESS NOTED OTHERWISE.

24. ALL HOOKS SHALL BE ACI STANDARD HOOKS UNLESS DIMENSIONED OTHERWISE.

CONCRETE MASONRY:

1. MASONRY IS SUPPORTED IN THE COMPLETED CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SUPPORTING THE MASONRY DURING CONSTRUCTION IN CONFORMANCE WITH LOCAL, STATE AND NATIONAL LAWS AND AS REQUIRED.

2. MASONRY CONSTRUCTION AND MATERIAL SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6) EXCEPT AS MODIFIED IN THE SPECIFICATIONS AND BELOW. A COPY OF ACI 530.1/ASCE 6 SHALL BE ON THE JOB SITE AT ALL TIMES THAT MASONRY WORK IS BEING PERFORMED.

3. SUBMIT FOR REVIEW, PRIOR TO CONSTRUCTION, SHOP DRAWINGS SHOWING A PLAN AND ELEVATION VIEW OF ALL CMU WALL, AND A PLAN THAT SHOWS ALL DOWELS REQUIRED FOR VERTICAL CMU REINFORCING THAT EXTEND OUT OF CONCRETE. SHOW WALL THICKNESS, AND DIMENSION WALL LENGTH AND LOCATION. SHOWING TOP ELEVATIONS OF WALLS, BOND BEAMS AND GROUT POURS. SHOW LOCATION OF CONTROL JOINT LOCATIONS, SOLID UNITS, CELLS TO BE GROUT FILLED, OPENING, LINTEL, JOINT REINFORCEMENT, REINFORCING BAR AND EMBEDMENT.

4. SUBMIT FOR REVIEW, PRIOR TO CONSTRUCTION, DOCUMENTATION FOR THE BLOCK, MORTAR, GROUT, ADMIXTURES, REINFORCING, BAR POSITIONER AND OTHER ACCESSORIES PROPOSED FOR USE. SUBMIT A WRITTEN DESCRIPTION OF THE METHOD OF REINFORCEMENT AND GROUT, AND OF GROUT CONSOLIDATION.

5. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT.

6. CONCRETE MASONRY UNITS WHICH CONTAIN VERTICAL REINFORCEMENT SHALL BE TWO CORE UNITS AND WITH CORES AND WEBS VERTICALLY ALIGNED.

7. MORTAR FOR CONCRETE MASONRY UNITS SHALL BE NON-AIR ENTRAINED PORTLAND CEMENT-LIME CONFORMING TO ASTM C270, TYPE S. CEMENT IN MORTAR SHALL BE LOW-ALKALI AND NON-STAINING. TYPE N MORTAR AND MASONRY CEMENT SHALL NOT BE USED FOR CMU CONSTRUCTION.

8. ADMIXTURES SHALL NOT BE USED IN THE MORTAR OR GROUT. ANTIFREEZE AND CALCIUM CHLORIDE SHALL NOT BE USED.

9. MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS SHALL BE:
   NET AREA COMPRESSIVE STRENGTH OF ASTM C90 CMU, $f'cmu$ = 2,600 PSI
   NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY, $f'm$ = 2,250 PSI

10. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

11. LOAD BEARING CONCRETE BLOCK WALLS SHALL BE REINFORCED VERTICALLY WITH (1) #5 BAR AT 40 INCHES ON CENTER, UNLESS NOTED OTHERWISE. REINFORCING SHALL BE CENTERED IN CELL.

12. PROVIDE (1) #5 VERTICAL BAR AT EVERY CORNER, FIRST CELL AT EACH SIDE OF THE CORNER, EACH SIDE OF CONTROL JOINTS, AND FIRST TWO CELL ADJACENT TO OPENINGS. OPENINGS LARGER THAN 50" SHALL HAVE, AT A MINIMUM, THREE REINFORCED CELL AT EACH END OF THE OPENINGS.

13. VERTICAL REINFORCEMENT SHALL EXTEND THROUGH BOND BEAMS AND TO WITHIN 2 INCHES OF THE TOP OF WALLS. VERTICAL REINFORCEMENT SHALL TERMINATE w/STD 90° HOOK.

14. REINFORCING STEEL SPLICES SHALL BE LAPPED AS INDICATED IN THE MASONRY REINFORCEMENT LAP SCHEDULE ON SHEET SC102, UNLESS NOTED OTHERWISE.

15. PROVIDE DOWELS INTO CONCRETE WALL BELOW OR FOUNDATION THAT MATCH VERTICAL REINFORCEMENT SIZE AND SPACING. ANCHORAGE OF REINFORCING STEEL INTO CONCRETE SHALL BE 36 BAR DIAMETERS BUT NO LESS THAN 12 INCHES, UNLESS NOTED OTHERWISE.

16. HORIZONTAL JOINT REINFORCING SHALL BE, UNLESS SHOWN OTHERWISE, STANDARD 8 GAGE, LADDER TYPE CONFORMING TO ASTM A951, SPACED VERTICALLY AT 8 INCH ON CENTERS ABOVE AND BELOW OPENINGS FOR THREE CONSECUTIVE COURSES AND AT 16 INCHES ON CENTERS ELSEWHERE. EXTEND REINFORCEMENT 2 FEET BEYOND EACH SIDE OF OPENINGS BUT DO NOT EXTEND THROUGH CONTROL JOINTS. PROVIDE FACTORY FABRICATED "T" AND "L" SHAPED PIECES AT INTERSECTIONS AND CORNERS.

17. JOINT REINFORCEMENT SHALL BE SPLICED BY LAPPING THE LONGITUDINAL WIRES AT LEAST 12 INCHES; THE CROSS-WIRES WITHIN THE LAP SHALL BE REMOVED SO THAT THE LONGITUDINAL WIRES ARE SIDE BY SIDE. ALTERNATELY WHERE JOINT REINFORCING IS NOT REQUIRED IN BETWEEN EACH COURSE, SPLICES MAY BE MADE BY ABUTTING THE ADJACENT SECTIONS OF JOINT REINFORCING AND CENTERING A 48 INCH LENGTH OF JOINT REINFORCING IN THE BED JOINT IMMEDIATELY ABOVE OR BELOW THE BUTT JOINT. SPLICE WITH "T" AND "L" SHAPED PIECES AT INTERSECTIONS AND CORNERS.

18. CONTROL JOINTS SHALL NOT BE LOCATED WITHIN 40" OF AN OPENING. SUBMIT LOCATION, IN WRITTING, TO THE ENGINEER OF CONTROL JOINT LOCATIONS ARE MODIFIED.

19. BOND BEAMS SHALL BE PROVIDED IN EACH WALL AT TOP OF WALL. FILL BOND BEAMS WITH GROUT. REINFORCE BOND BEAMS WITH (2) #5, UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS WITH 2'-0" LEGS AND BAR SUPPORTS TO OBTAIN THE REQUIRED CLEARANCE. PROVIDE A BOND BEAM WITH (1) #5 AT 8' ABOVE FINISHED FLOOR, ALIGN WITH PERSONNEL DOOR HEADER ELEVATION.

20. BOND BEAM REINFORCEMENT AND GROUT AT WALL CONTROL JOINTS SHALL BE CONTINUOUS. PROVIDE A DUMMY CONTROL JOINT IN BOTH FACES OF BOND BEAM ALIGNED WITH WALL CONTROL JOINTS. THE BLOCK FACE SHELLS AT DUMMY CONTROL JOINTS SHALL BE FREE OF MORTAR AND GROUT. THE DUMMY CONTROL JOINT IN EXPOSED FACES SHALL HAVE BACKING ROD AND CAULK SEAL AS REQUIRED FOR THE CONTROL JOINT.

21. VERTICAL CONTROL JOINTS IN CONCRETE MASONRY WALLS SHALL BE PROVIDED WHERE SHOWN ON THE PLANS AND AS GIVEN BELOW:
    a. AT 25 FEET OR LESS ON CENTERS BUT NOT MORE THAN 1 1/2 TIMES THE WALL HEIGHT
    b. AT A DISTANCE NOT OVER ONE-HALF THE ABOVE SPACING FROM BONDED INTERSECTIONS OR CORNERS.
    c. AT ONE END OF A LINTEL FOR WALL OPENINGS SIX FEET OR LESS IN WIDTH
    d. AT BOTH ENDS OF LINTELS FOR OPENINGS MORE THAN SIX FEET WIDE
    e. ALL ABRUPT CHANGES IN WALL HEIGHT.
    f. AT ALL CHANGES IN WALL THICKNESS, SUCH AS THOSE AT PIPE AND DUCT CHASES.
    g. ABOVE JOINTS IN FOUNDATIONS AND FLOORS.
    h. BELOW JOINTS IN ROOFS THAT BEAR IN THE WALL.
    i. WHERE SHOWN IN THE MASONRY VENEER.

22. CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 2'-0" OF CONCENTRATED POINTS OF BEARING, OR JAMBS OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.

23. MASONRY BELOW GRADE SHALL BE GROUTED SOLID.

24. MECHANICALLY VIBRATE GROUT IN VERTICAL SPACES IMMEDIATELY AFTER POURING AND AGAIN MINUTES LATER.

25. PROVIDE CLEANOUTS IF GROUT LIFT EXCEEDS 4'-0" IN BLOCK WALLS. MAXIMUM GROUT LIFT SHALL BE 8'-0".

26. SEE VENEER ANCHORAGE NOTES FOR ATTACHMENT OF VENEER TO BLOCK WALLS.

STRUCTURAL DRAWING ABBREVIATIONS

ADDL	ADDITIONAL
ADJ	ADJACENT
AESS	ARCH EXPOSED STRUCTURAL STEEL
ALT	ALTERNATE
&	AND
APPROX	APPROXIMATELY
ARCH	ARCHITECT or ARCHITECTURAL
@	AT or SPACING
B/	BOTTOM OF
BL	BUILDING LINE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BRDG	BRIDGING
BRG	BEARING
BTWN	BETWEEN
BOT	BOTTOM
CANT	CANTILEVER
CL	CENTERLINE
CLR	CLEAR
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CTR	CENTER
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CJ	CONTROL/CONSTRUCTION JOINT
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
CUFT	CUBIC FEET
CY	CUBIC YARDS
DBL	DOUBLE
DBA	DEFORMED BAR ANCHOR
DEG or °	DEGREE
DEMO	DEMOLITION
DET	DETAIL
DF	DOUGLAS FIR LARCH
DIAG	DIAGONAL
DIA or ø	DIAMETER
DIM	DIMENSION
DO	DITTO
DN	DOWN
DP	DEEP
DWG	DRAWING
DWL	DOWEL
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EMBED	EMBEDDED, EMBEDMENT
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EX	EXISTING
EXIST	EXISTING
(E)	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FAB	FABRICATE
FDN	FOUNDATION
FV	FIELD VERIFY
FIN	FINISH
FLG	FLANGE
FLR	FLOOR
FS	FARSIDE
FT	FOOT, FEET
FTG	FOOTING
GA	GAGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERAL
GLB	GLUE LAMINATED BEAM
GR	GRADE
GYP BD	GYPSUM BOARD
HC	HOLLOW CORE
HORIZ	HORIZONTAL
HP	HIGH POINT
HS	HIGH STRENGTH
HT	HEIGHT
HVY	HEAVY
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INFO	INFORMATION
INT	INTERIOR
INV	INVERT
JST	JOIST
JT	JOINT
K	KIPS
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
L	ANGLE
LBS	POUNDS
LF	LINEAL FEET
LG	LONG
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONG	LONGITUDINAL
LP	LOW POINT
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LT WT	LIGHT WEIGHT
MANUF	MANUFACTURER
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MK	MARK
MO	MASONRY OPENING
MTL	METAL
NO or #	NUMBER
NOM	NOMINAL
NS	NEARSIDE
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
O/O	OUT TO OUT
OPNG	OPENING
OPP	OPPOSITE
PAF	POWDER ACTUATED FASTENERS
PAR	PARALLEL
PC	PRECAST
PERP	PERPENDICULAR
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLYWD	PLY WOOD
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST TENSIONED
PTFE	POLYTETRAFLUOROETHYLENE
PTR	PRESSURE TREATED
QL	SEISMIC LOAD
QTY	QUANTITY
RAD	RADIUS
REF	REFERENCE
REINF	REINFORCEMENT, REINFORCING, REINFORCED
REQD	REQUIRED
SCHED	SCHEDULE
SECT	SECTION
SER	STRUCTURAL ENGINEER OF RECORD
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SOG	SLAB-ON-GRADE
SPA	SPACING
SPEC(S)	SPECIFICATION(S)
SPF	SPRUCE PINE FIR
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRUCTURAL
STRUCT	STRUCTURAL
SUP	SUPPORT
SYM	SYMMETRICAL
SYP	SOUTHERN YELLOW PINE
T	TOP
T/	TOP OF
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEMP	TEMPERATURE STEEL
THD	THREAD
THK	THICK
THRU	THROUGH
TOL	TOLERANCE
TRANS	TRANSVERSE
TYP	TYPICAL
UN or UNO	UNLESS NOTED (OTHERWISE)
VERT	VERTICAL
VIF	VERIFY IN FIELD
w/	WITH
w/o	WITHOUT
WD	WOOD
WP	WORKPOINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

PROJECT NORTH

verdantas

NO	REVISION	DATE

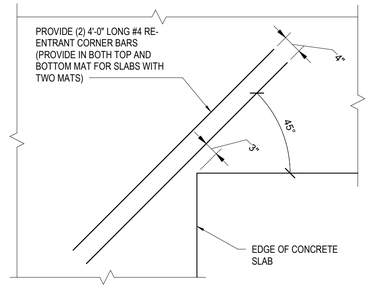
ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: 1" = 1'-0"
DESIGNED BY: G.MEHALLO
DRAWN BY: V.PETRO
CHECKED BY: G.MEHALLO

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

GENERAL NOTES

PROJECT NO. 241829
DISCIPLINE: STRUCTURAL
SHEET NAME: SC101
SHEET 17 OF 31

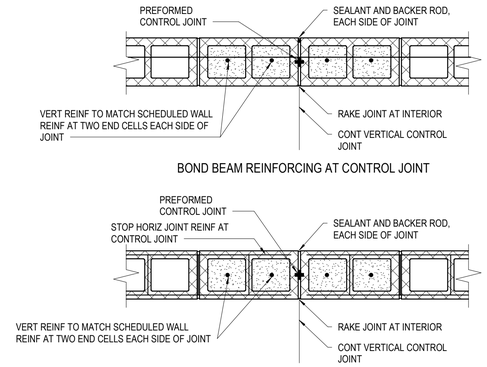
11/3/2025 1:39:19 PM



NOTE: ADDITIONAL REINFORCEMENT SHALL BE PLACED AT ALL INSIDE (RE-ENTRANT) CORNERS IN SLABS WHERE CRACK CONTROL JOINTS ARE NOT POSITIONED TO INTERSECT THE CORNER. PRIMARY REINFORCEMENT NOT SHOWN FOR CLARITY

5 / SC102 TYPICAL RE-ENTRANT CORNER DETAIL

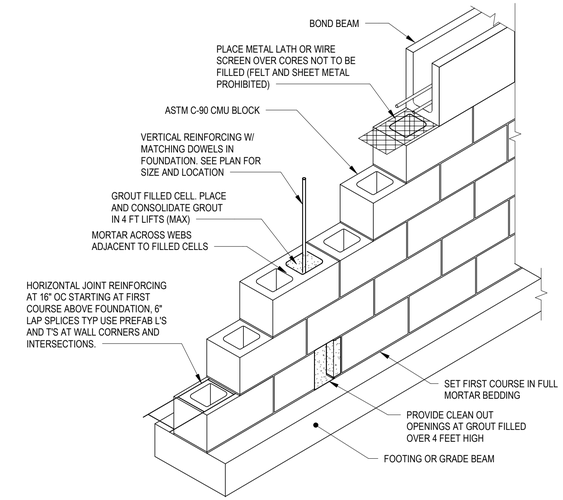
SCALE: 3/4" = 1'-0"



NOTES:
1. SEE PLAN FOR CONTROL JOINT LOCATIONS
2. ALL HORIZONTAL BOND BEAM REINFORCING SHALL BE CONTINUOUS ACROSS ALL VERTICAL CONTROL JOINTS

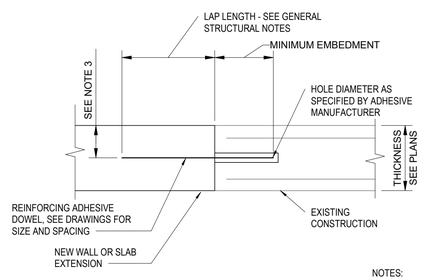
2 / SC102 MASONRY WALL CONSTRUCTION

SCALE: 1" = 1'-0"



1 / SC102 CMU WALL CONSTRUCTION

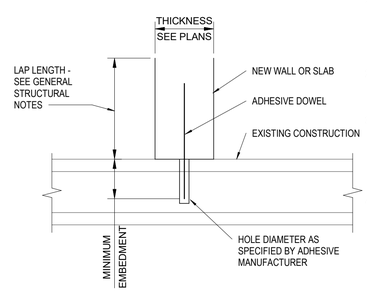
SCALE: 3/4" = 1'-0"



DOWEL SIZE	MINIMUM EMBEDMENT
#3	5"
#4	7"
#5	8"
#6	10"
#7	12"
#8	14"
#9	16"

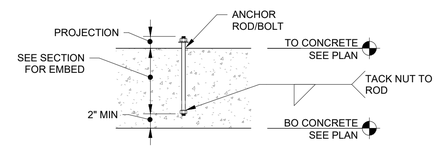
NOTES:

1. EMBEDMENT LENGTH IS BASED ON DOWELS SET WITH HILTI HIT-RE 500-V3 ADHESIVE ANCHOR SYSTEM. SUBMIT ICC EVALUATION SERVICE REPORT (ES REPORT) IF ALTERNATE PRODUCT IS PROPOSED.
2. INSTALL DOWELS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ICC ES REPORT ESR-3814.
3. LOCATE DOWELS CENTERED IN WALL OR SLAB UNLESS NOTED OTHERWISE ON DRAWINGS. WHERE 2 ROWS OF DOWELS ARE INDICATED, STAGGER SPACING AND LOCATE ALTERNATING DOWELS AT MINIMUM EDGE DISTANCE FROM OPPOSITE FACES.
4. SPECIAL INSPECTION IS REQUIRED FOR ADHESIVE DOWEL INSTALLATION.



6 / SC102 REBAR DOWELS SET WITH ADHESIVE

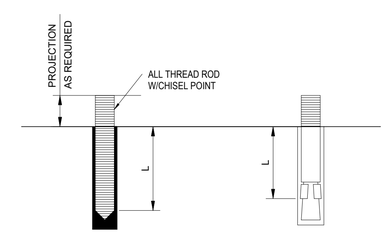
SCALE: 12" = 1'-0"



NOTES:
1. USE HEAD BOLTS OR TACK WELD
2. COORDINATE PROJECTION WITH EQUIPMENT SUPPLIER UNLESS NOTED OTHERWISE
3. DO NOT USE 'J' BOLTS. 'J' BOLTS ARE NOT ACCEPTABLE
4. ANCHOR BOLTS TO BE STAINLESS STEEL UNLESS NOTED OTHERWISE

3 / SC102 ANCHOR BOLT

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



ADHESIVE ANCHOR | EXPANSION ANCHOR

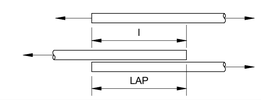
MINIMUM EMBEDMENT LENGTH, L		
DIAMETER	ADHESIVE ANCHOR	EXPANSION ANCHOR
3/8"	4 1/2"	3 1/2"
1/2"	6"	4 3/4"
5/8"	7 1/2"	5 1/2"
3/4"	9"	6 1/2"
7/8"	10 1/2"	-
1"	12"	-

NOTES:

1. CONFORM TO ICC EVALUATION SERVICE REPORT (ES REPORT) REQUIREMENTS AND MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
2. PROVIDE TYPE 316 STAINLESS STEEL ALL-THREAD ROD MATERIAL.
3. PROVIDE HOLE DIAMETER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
4. EXPANSION ANCHOR EMBEDMENT LENGTHS ARE BASED ON HILTI KWIK BOLT TZ STAINLESS STEEL ANCHORS. SUBMIT ICC EVALUATION SERVICE REPORT (ES REPORT) FOR ALTERNATE PRODUCTS.
5. ADHESIVE ANCHOR EMBEDMENT LENGTHS ARE BASED ON HILTI HIT-RE 500-V3 ADHESIVE. SUBMIT ICC ES REPORT FOR ALTERNATE PRODUCTS.

4 / SC102 CONCRETE ANCHORS

SCALE: 12" = 1'-0"



LAP TABLE (f'_c = 4,500 PSI)					
BAR SIZE	LAP CLASS	UNCOATED BARS			
		TOP BARS		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2
#3	A	18	26	14	20
	B	23	34	18	26
#4	A	24	35	18	27
	B	30	46	24	35
#5	A	29	44	23	34
	B	38	57	30	44
#6	A	35	53	27	40
	B	46	68	35	53
#7	A	51	77	39	59
	B	66	99	51	77
#8	A	58	87	45	67
	B	76	114	58	87

NOTES:
1. TABULATED VALUES ARE BASED ON A MINIMUM YIELD STRENGTH OF 60,000 PSI. LENGTHS ARE IN INCHES.
2. CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STRUCTURAL MEMBER, CONCRETE COVER, AND OC SPACING OF THE BARS ARE DEFINED AS:
   BEAMS AND COLUMNS
   - CASE 1: CONCRETE COVER AT LEAST 1.0d_b AND OC SPACING AT LEAST 2.0 d_b
   - CASE 2: CONCRETE COVER LESS THAN 1.0d_b OR OC SPACING AT LESS THAN 2.0 d_b

   OTHER BARS
   - CASE 1: CONCRETE COVER AT LEAST 1.0d_b AND OC SPACING AT LEAST 3.0 d_b
   - CASE 2: CONCRETE COVER LESS THAN 1.0d_b OR OC SPACING AT LESS THAN 3.0 d_b
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.

CMU LAP TABLE (f'_m = 2,000 PSI)			
WALL THICKNESS / BAR SIZE	8"	12"	
		SINGLE BAR	DOUBLE BAR
#3	12"	12"	19"
#4	13"	12"	35"
#5	20"	13"	58"
#6	38"	24"	79"
#7	52"	33"	111"
#8	79"	49"	174"

NOTES:
1. TABULATED VALUES ARE BASED ON A MINIMUM YIELD STRENGTH OF 60,000 PSI. LENGTHS ARE IN INCHES.
2. SINGLE REINFORCEMENT SHALL BE CENTERED IN CELL OF CONCRETE MASONRY UNIT. DOUBLE REINFORCEMENT SHALL HAVE A MASONRY COVER OF 1.5" FOR #5 BAR AND SMALLER AND 2" FOR #6 BAR AND LARGER.
3. LAP LENGTH SHALL BE THE TABULATED VALUES OR 48 BAR DIAMETER, WHICH EVER IS LARGER.

PROJECT NORTH

verdantas

NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: As indicated
DESIGNED BY: G.MEHALLO
DRAWN BY: V.PETRO
CHECKED BY: G.MEHALLO

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

TYPICAL DETAILS

PROJECT NO. 241829
DISCIPLINE STRUCTURAL
SHEET NAME SC102
SHEET 18 OF 31

11/3/2025 1:39:19 PM

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
AFF	ABOVE FINISH FLOOR
ALUM.	ALUMINUM
ARCH	ARCHITECT / ARCHITECTURAL
ASPH	ASPHALT
BD	BOARD
BLDG.	BUILDING
BLK	BLOCK(ING)
BM	BEAM
BRG	BEARING
BRK	BRICK
BS	BOTTOM OF SLAB
BTM	BOTTOM
CJ	CONTROL JOINT
CLO.	CLOSET
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
D / DRN	DRAIN
DBL	DOUBLE
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DP	DAMPROOF(ING)
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASER
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
EIFS	EXTERIOR INSUL. FINISH SYSTEM
ELECT.	ELECTRICAL
ELEV	ELEVATION
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST.	EXISTING
EX	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH
FL	FLOOR
FLUOR	FLUORESCENT
FOS	FACE OF STUDS
FR(G)	FRAME(ING)
FT	FEET OR FOOT
FUR	FURRING
FVC	FIRE VALVE CABINET
GA	GAGE OR GAUGE
GALV	GALVANIZE(D)
GC	GENERAL CONTRACTOR
GL	GLASS
GM	GALVANIZED METAL
GR	GRADE
GWB	GYPSUM WALL BOARD
GYP. BD.	GYPSUM BOARD
HC	HOLLOW CORE
"H"	HANDICAPPED ACCESSIBLE
HDW	HARDWARE
HM	HOLLOW METAL
HORZ	HORIZONTAL
HT	HEIGHT
HTR	HEATER
ID	INSIDE DIAMETER
INFO	INFORMATION
INSUL	INSULATION OR INSULATED
INT	INTERIOR
JT	JOINT
KO	KNOCKOUT
LAM	LAMINATE
LAV	LAVATORY
LP	LOW POINT
MFGR	MANUFACTURER
MANUF	MANUFACTURER
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MTL	METAL
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
N	NORTH
NIC	NOT IN CONTRACT
NOM	NOMINAL
NO	NUMBERS
NTS	NOT TO SCALE
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
OVHD	OVERHEAD
PL. LAM	PLASTIC LAMINATE
PTN	PARTITION
PL	PROPERTY LINE
PLUM	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTD	PAINTED
PTS	POINTS
R	RADIUS
REF	REFRIGERATOR
REINF	REINFORCE(ING)
REQ'D	REQUIRED
REV	REVISE / REVISION
RM	ROOM
RSTRM	RESTROOM
SAN	SANITARY
SECT	SECTION
SCHED	SCHEDULE(D)
SF	SQUARE FOOT (FEET)
SIM	SIMILAR
SPLSH BLK	SPLASH BLOCK
SPEC	SPECIFICATION
STL	STEEL
STRUCT	STRUCTURAL / STRUCTURE
SUSP	SUSPEND / SUSPENDED
TEMP	TEMPERED
TH	THRESHOLD
THK	THICK / THICKNESS
THRU	THROUGH
TOS	TOP OF SLAB
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
VCT	VINYL COMPOSITION TILE
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W/	WITH
WD	WOOD
&	AND
@	AT
'	FEET
"	INCHES

GENERAL NOTES

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CONDITIONS, LAWS, RULES, REGULATIONS AND ORDINANCES OF FEDERAL, STATE, COUNTY, OR AUTHORITIES RELATING THERE-TO. NO WORK SHALL BEGIN AT THE SITE UNTIL APPLICABLE APPROVALS AND REQUIRED PERMITS HAVE BEEN OBTAINED BY THE CONTRACTOR(S) COVERING SUCH WORK. SUBCONTRACTORS ARE TO VERIFY AND ASSURE PROPER CODE COMPLIANCE FOR ALL ASPECTS OF CONSTRUCTION WITHIN THEIR RESPECTIVE TRADES. PERMITS ARE TO BE PART OF WORK.

2. SUBCONTRACTORS SHALL VERIFY AND ASSURE PROPER CODE COMPLIANCE FOR ALL ASPECTS OF CONSTRUCTION WITHIN THEIR RESPECTIVE TRADES. OBTAINING PERMITS SHALL BE PART OF THEIR RESPONSIBILITY

3. THE SCOPE OF THE PROJECT INCLUDES ALL WORK SHOWN OR INFERRED ON THE DRAWINGS AND SPECIFICATIONS TO BE PERFORMED BY THE PRIME CONTRACTOR(S) AND THEIR QUALIFIED SUBCONTRACTORS.

4. CONTRACTOR DESIGNATIONS:
   A. GENERAL CONTRACTOR - G.C.
   B. MECHANICAL CONTRACTOR - M.C.
   C. PLUMBING CONTRACTOR - P.C.
   D. ELECTRICAL CONTRACTOR - E.C.
      a. ALL CONTRACTORS WILL:
         - SAFEGUARD THE OWNER'S PROPERTY AND THE ADJACENT PROPERTIES DURING CONSTRUCTION. CONTRACTORS SHALL REPLACE ANY AND ALL MATERIALS TO THEIR ORIGINAL CONDITIONS AT THE CONTRACTOR'S EXPENSE.
         - VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE BEFORE COMMENCEMENT OF WORK. REPORT ALL ERRORS AND OMISSIONS OR DISCREPANCIES TO THE ARCHITECT / ENGINEER IN WRITING PRIOR TO THE START OF WORK. IN ALL CASES WHERE CONFLICTS MAY OCCUR THE ARCHITECT SHALL BE NOTIFIED AND WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
         - INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS AND DIMENSIONS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT / ENGINEER OF ANY CONDITION REQUIRING MODIFICATIONS OR CHANGES BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS.
         - PROTECT AND STORE ALL FIXTURES, HARDWARE, ETC., AS WELL AS EQUIPMENT SPECIFIED HEREIN FOR THE DURATION OF THE JOB.
         - COORDINATE WITH LOCAL UTILITIES FOR WATER, DRAINAGE, GAS, ELECTRICAL SERVICES, ETC., FOR APPLICABLE CONNECTIONS AS MAY BE REQUIRED.
         - BE RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS WITH PROPER AUTHORITIES DURING CONSTRUCTION AND NOTIFYING THE ARCHITECT / ENGINEER AND OWNER OF ALL INSPECTIONS. THE G.C. IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION SO THAT OWNER MAY RECEIVE AN "OCCUPANCY PERMIT".

5. ALL CONTRACTORS WILL BE REQUIRED TO OBTAIN AND EXAMINE A FULL SET OF DRAWINGS AND WILL HAVE VISITED THE JOB SITE. THEY SHALL BE FAMILIAR WITH AND BE SATISIFIED TO THE CONDITIONS UNDER WHICH THEY WILL BE OBLIGED TO OPERATE AND PERFORM PRIOR TO SUBMITTING A BID FOR THEIR TRADE FOR SPECIFIEC CONSTRUCTION.

6. THE G.C. SHALL BE RESPONSIBLE FOR COORDINATING THE CONSTRTUCTION WITH ALL CONTRACTORS.

7. THE G.C. SHALL PREPARE, IN CONJUNCTION WITH THE OTHER CONTRACTORS A CONSTRUCTION SCHEDULE INCLUDING EACH TRADE ENGAGED FOR THE DURATION OF THE WORK AND DISTRIBUTE A COPY TO OWNER AND ARCHITECT / ENGINEER.

8. ALL CONTRACTORS SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT / ENGINEER FOR APPROVAL AS NOTED IN THE SPECIFICATIONS. MANUFACTURER'S NAMES AND MODEL NUMBERS ARE USED TO PROVIDE AN INDICATION OF QUALITY, STYLE AND SIZE DESIRED. OTHER MANUFACTURER'S MODELS, QUALITY STYLE AND SIZES MAY BE SUBMITTED BUT SHALL OTHER MANUFACTURER'S MODELS, QUALITY STYLE AND SIZES MAY BE SUBMITTED BUT SHALL PROCESS.

9. EXISTING MATERIALS SCHEDULED FOR REUSE SHALL BE STORED BY CONTRACTOR AS REQUIRED. EXISTING MATERIALS SCHEDULED FOR TURNOVER TO THE OWNER SHALL BE REMOVED BY THE CONTRACTOR; MOVED BY THE CONTRACTOR TO OWNER'S DESIGNATED AREA WITHIN THE BUILDING.

10. MATERIALS DAMAGED OR OTHERWISE DEEMED UNUSABLE BY ARCHITECT, ENGINEER OR OWNER SHALL BE DISPOSED OF BY CONTRACTOR IN A LEGAL AND SAFE MANNER.

11. INTERRUPTION OF ELECTRIC, WATER, SANITARY, GAS OR HEATING SERVICE, PHONE, CATV OR MECHANICAL EQUIPMENT TO THE BUILDING SHALL NOT BE PERMITTED WITHOUT ONE WEEK PRIOR WRITTEN NOTICE TO THE OWNER.

12. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S SHOP DRAWING APPROVAL STAMP INDICATING THAT ALL DIMENSIONS AND ASSEMBLY OF COMPONENTS HAVE BEEN CROSS-CHECKED W/ EACH RESPECTIVE TRADE FOR COMPLIANCE WITH THE PROJECT REQUIREMENTS. THE ARCHITECT / ENGINEER WILL NOT PROCESS SHOP DRAWINGS WITHOUT THE CONTRACTOR'S STAMP.

13. EACH CONTRACTOR IS RESPONSIBLE FOR CUTTING AND PATCHING THEIR OWN PENETRATIONS. MATERIALS USED FOR PATCHING SHALL THE SAME AS THE ADJACENT MATERIALS AND SHALL BE APPROVED BY THE ARCHITECT / ENGINEER.

14. THE CONTRACTOR SHALL PROVIDE MATERIAL SAFETY DATA SHEETS (M.S.D.S.) FOR ALL CHEMICALS USED AT THE SITE FOR THE REVIEW OF THE CLIENT. THIS DOCUMENTATION MUST BE KEPT ON SITE AND READILY ACCESSIBLE AT ALL TIME DURING THE PROJECT.

15. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR DEVIATIONS FROM CONTRACT DOCUMENTS REQUIREMENTS BY THE ARCHITECT'S APPROVAL OF SHOP DRAWINGS OR OTHER SUBMITTALS UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ARCHITECT IN WRITING OF SUCH DEVIATION AT THE TIME OF THE SUBMITTAL AND SUCH DEVIATION HAS BEEN APPROVED IN WRITING. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SUCH SUBMITTALS BY THE ARCHITECT'S APPROVAL THEREOF.

16. THE CONTRACTOR SHALL DIRECT SPECIFIC ATTENTION IN WRITING ON SHOP DRAWINGS AND SIMILAR SUBMITTALS TO REVISIONS OTHER THAN THOSE REQUESTED BY THE ARCHITECT ON PREVIOUS SUBMITTALS. IN THE ABSENCE OF THE CONTRACTOR'S WRITTEN NOTICE, THE ARCHITECT'S APPROVAL OF A RESUBMISSION SHALL NOT APPLY TO SUCH REVISIONS

DRAWING LEGEND

ANNOTATIONS

DRAWING NAME AND TAG	X / AXXX FLOOR PLAN SCALE : 1/4" = 1'-0" X / AXXX SECTION SCALE : 1/4" = 1'-0" X / AXXX DETAIL SCALE : 1/4" = 1'-0" X / AXXX ELEVATION SCALE : 1/4" = 1'-0"
SECTION TAGS	A / A100
DETAIL TAG	1 / AXXX
TEXT APPEARANCE NOTING ELEMENTS	XXXXXXXXXXXXXXXXXXXXXXXXXX
ELEVATION TAGS	X / X X-XXX X / X
BUILDING ELEVATION TAG	FIN. 1ST. FL.
SPOT ELEVATION TAG	NEW 100.00 | EXISTING 100.00
COLUMN CENTERLINE TAG	XX
NOTE TAG	AC# CONSTRUCTION | AD# DEMOLITION
DOOR TAG	220D
WINDOW TAG	WXX
ROOM NAME / NUMBER TAG	XXXXX 230
PARTITION TAG	x
SHELF TAG	SX
NORTH ARROW	PROJECT NORTH N
REVISION TAG	A
REVISION CLOUD	
ELECTRICAL PANEL OR WALL HEATER	EP WH
ELEVATION CHANGE	HIGH / LOW
MATCH LINE TAG	A MATCH LINE REF: DWG | MATCH LINE REF: DWG A

PROJECT NORTH

verdantas

NO	REVISION	DATE

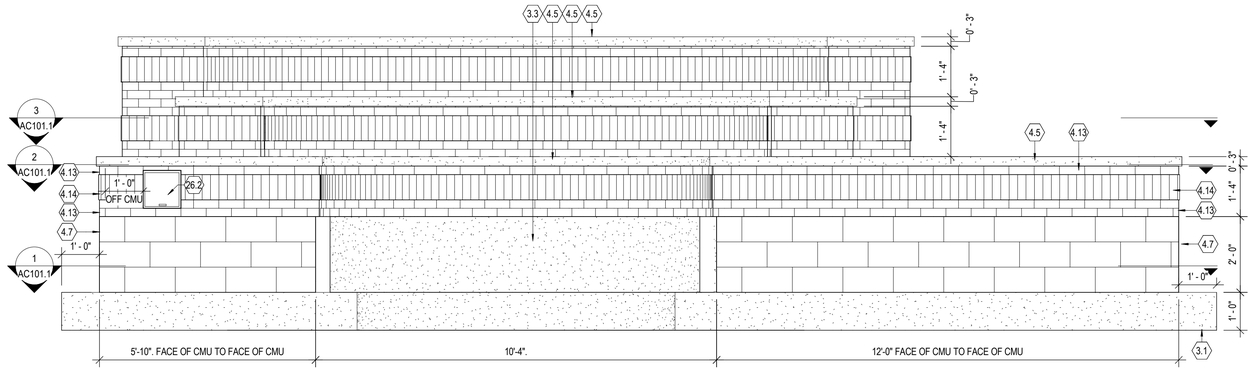
ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: 1/4" = 1'-0"
DESIGNED BY: J.DEGRAAF
DRAWN BY: V.PETRO
CHECKED BY: J.DEGRAAF

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

LEGENDS, NOTES AND ABBREVIATIONS

PROJECT NO. 241829
DISCIPLINE ARCHITECTURAL
SHEET NAME AG001
SHEET 19 OF 31

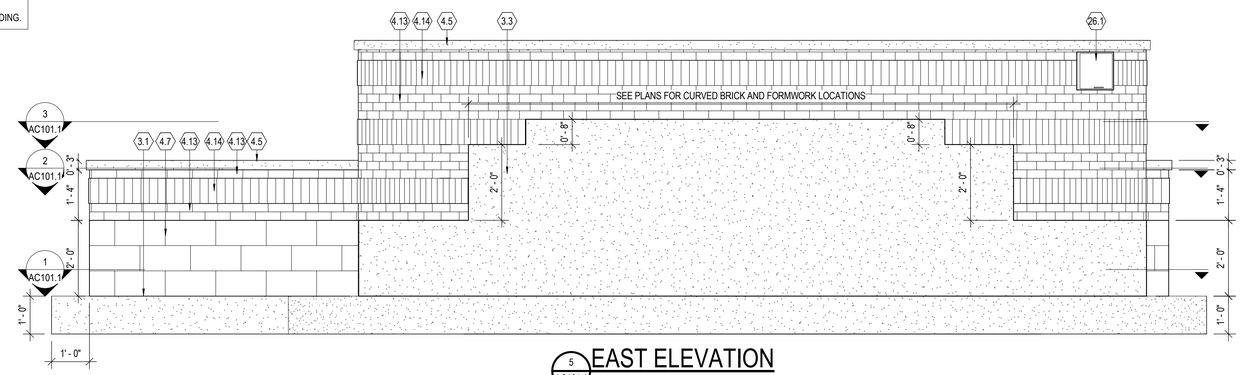
11/3/2025 1:39:19 PM



6 AC101.1 WEST ELEVATION

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

NOTE:
GRADING NOT SHOWN ON ELEVATIONS.
COORDINATE WITH CIVIL DRAWINGS FOR GRADING.



5 AC101.1 EAST ELEVATION

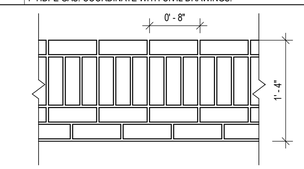
SCALE: 1/2" = 1'-0"

GENERAL PLAN NOTES

A. SEE SITE DRAWINGS FOR FINISHED FLOOR ELEVATION AND ORIENTATION OF STRUCTURES.
B. VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
C. EXTERIOR DIMENSIONS SHOWN ARE TO OUTSIDE OF FOUNDATION WALL OR MASONRY. TYPICAL UNLESS NOTED OTHERWISE.
D. PROVIDE SEALANT AT JOINTS BETWEEN ALL DISSIMILAR MATERIALS.
E. ALL EXTERIOR METALS SHOULD BE GALVANIZED AND PAINTED.
F. COORDINATE WORK BETWEEN TRADES AND OTHER DISCIPLINES. ADDITIONAL ITEMS OF WORK MAY APPEAR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
G. GROUT SOLID ALL CMU COURSES AND VOID SPACES BELOW GRADE.
H. GROUT ALL CMU CELLS WITH STEEL REINFORCING. LOCATE VERTICAL REINFORCING AT THE CENTER OF THE CELL, DEFLECT REINFORCING AS REQUIRED.
J. ROUGHEN TOP OF CONCRETE FOOTIND AT THE INTERFACE OF THE MASONRY ASSEMBLY AND THE FOOTING. ROUGHEN TO 1/4" (MIN) AMPLITUDE.

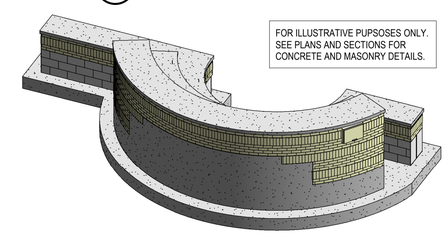
ARCH NEW WORK KEYED NOTES

NUMBER	DESCRIPTION
3.1	CONCRETE FOOTING.
3.3	CONCRETE FORMWORK. SEE PLANS AND SECTION.
3.5	1'-1" CAST-IN-PLACE CONCRETE WALL.
3.7	6" CAST-IN-PLACE CONCRETE FORM.
3.8	6" THICK CAST-IN-PLACE CONCRETE FORMWORK BENEATH CONCRETE CAP.
4.3	BRICK VENEER. BASIS OF DESIGN:
4.5	WALL CAP, SET ON TOP OF MASONRY WITH STEEL DOWELS AND FULL BED OF MORTAR.
4.6	8" (NOM.) CMU.
4.7	12" (NOM.) CMU.
4.13	RUNNING BOND BRICK VENEER. MATCH EXISTING.
4.14	SOLDIER COURSE BOND BRICK VENEER W/ 3/8" OFFSET. MATCH EXISTING.
4.21	CONTINUOUS BOND BEAM W/(1) #4, GROUT SOLID.
26.1	ELECTRICAL CONTROL PANEL. CITY USE ONLY. PAINT EXTERIOR DOOR PANEL TO MATCH BRICK COLOR. COORDINATE WITH CIVIL DRAWINGS.
26.2	ELECTRICAL FIRE PIT CONTROL PANEL. PUBLIC USE. PAINT EXTERIOR DOOR PANEL TO MATCH BRICK COLOR. COORDINATE WITH CIVIL DRAWINGS.
26.3	1/2" ELECTRICAL CONDUIT. COORDINATE WITH CIVIL DRAWINGS.
26.4	(2) 1/2" ELECTRICAL CONDUITS. COORDINATE WITH CIVIL DRAWINGS.
33.1	GAS REGULATOR. COORDINATE WITH CIVIL DRAWINGS.
33.2	1" HDPE GAS. COORDINATE WITH CIVIL DRAWINGS.



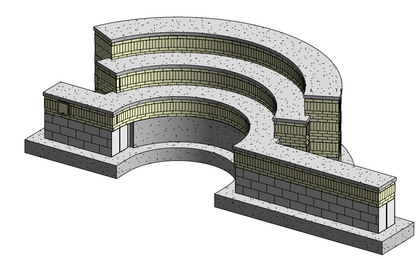
9 AC101.1 BRICK PATTERN DETAIL

SCALE: 1" = 1'-0"



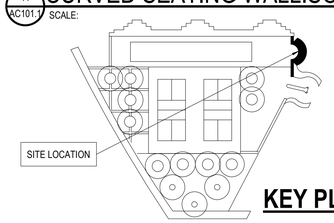
10 AC101.1 CURVED SEATING WALL ISOMETRIC -BACKSIDE

SCALE:

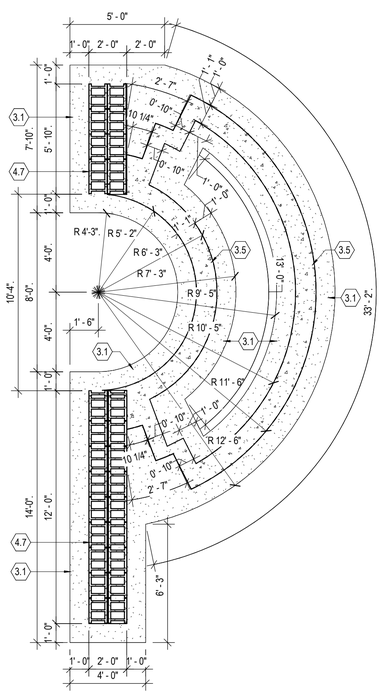


11 AC101.1 CURVED SEATING WALLISOMETRIC

SCALE:

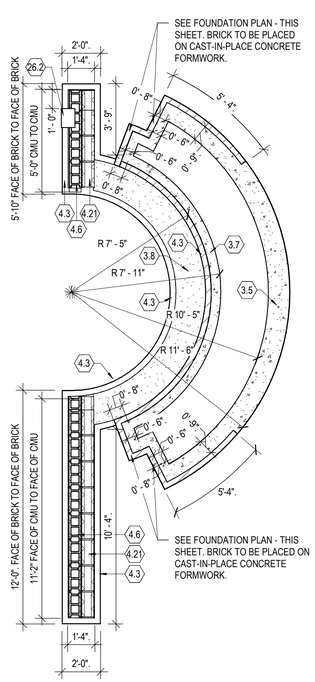


KEY PLAN



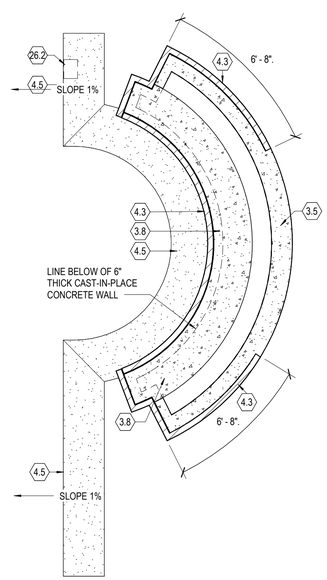
1 AC101.1 FOUNDATION PLAN

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



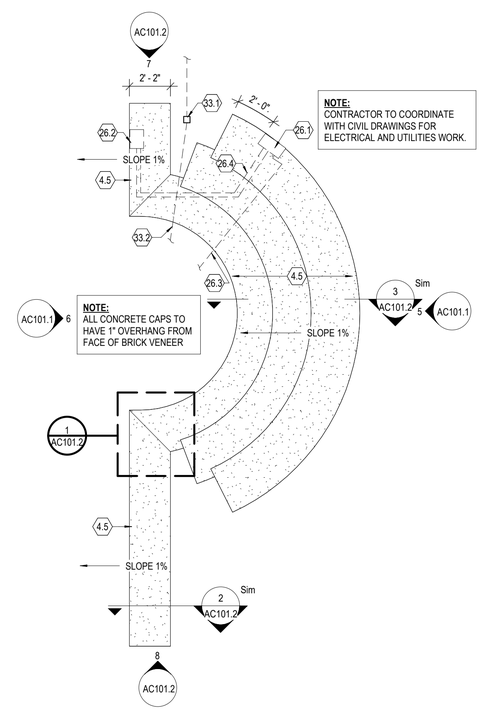
2 AC101.1 ABOVE GRADE PLAN I

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



3 AC101.1 ABOVE GRADE PLAN II

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



4 AC101.1 CONCRETE CAP PLAN

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

11/3/2025 1:39:13 PM

verdantas

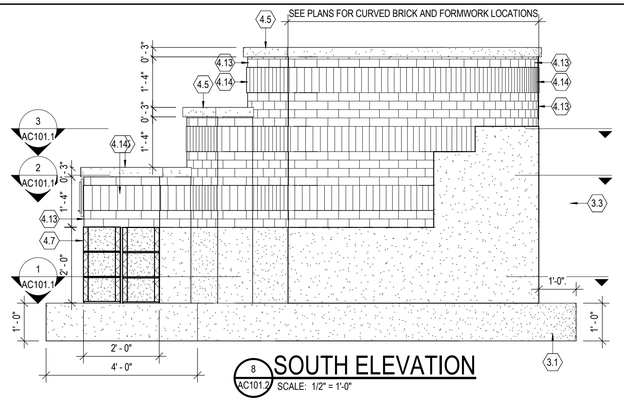
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	11/04/2025
SCALE:	As indicated
DESIGNED BY:	J.DEGRAAF
DRAWN BY:	V.PETRO
CHECKED BY:	J.DEGRAAF

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

CURVED SEATING WALL

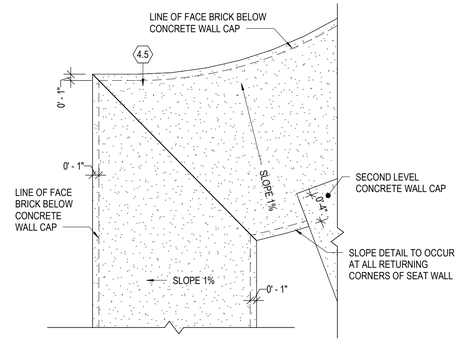
PROJECT NO. 241829
DISCIPLINE: ARCHITECTURAL
SHEET NAME: AC101.1
SHEET 20 OF 31



8 AC101.2 SCALE: 1/2" = 1'-0"

SOUTH ELEVATION

NOTE:
GRADING NOT SHOWN ON ELEVATIONS.
COORDINATE WITH CIVIL DRAWINGS FOR GRADING.



1 AC101.2 SCALE: 1" = 1'-0"

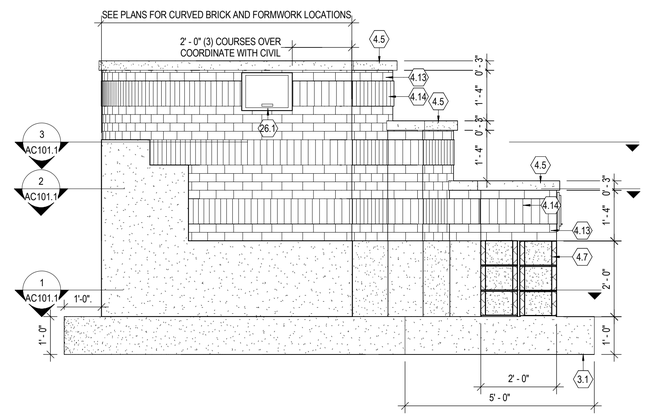
WALL CONCRETE CAP DETAIL

GENERAL PLAN NOTES

A. SEE SITE DRAWINGS FOR FINISHED FLOOR ELEVATION AND ORIENTATION OF STRUCTURES.
B. VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
C. EXTERIOR DIMENSIONS SHOWN ARE TO OUTSIDE OF FOUNDATION WALL OR MASONRY. TYPICAL UNLESS NOTED OTHERWISE.
D. PROVIDE SEALANT AT JOINTS BETWEEN ALL DISSIMILAR MATERIALS.
E. ALL EXTERIOR METALS SHOULD BE GALVANIZED AND PAINTED.
F. COORDINATE WORK BETWEEN TRADES AND OTHER DISCIPLINES. ADDITIONAL ITEMS OF WORK MAY APPEAR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
G. GROUT SOLID ALL CMU COURSES AND VOID SPACES BELOW GRADE.
H. GROUT ALL CMU CELLS WITH STEEL REINFORCING. LOCATE VERTICAL REINFORCING AT THE CENTER OF THE CELL, DEFLECT REINFORCING AS REQUIRED.
J. ROUGHEN TOP OF CONCRETE FOOTING AT THE INTERFACE OF THE MASONRY ASSEMBLY AND THE FOOTING. ROUGHEN TO 1/4" (MIN) AMPLITUDE.

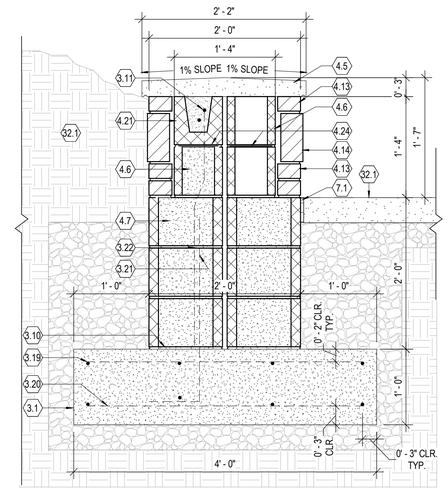
ARCH NEW WORK KEYED NOTES

NUMBER	DESCRIPTION
3.1	CONCRETE FOOTING.
3.3	CONCRETE FORMWORK. SEE PLANS AND SECTION.
3.4	8" CAST-IN=PLACE CONCRETE WALL.
3.5	1'-1" CAST-IN-PLACE CONCRETE WALL.
3.7	6" CAST-IN-PLACE CONCRETE FORM.
3.8	6" THICK CAST-IN-PLACE CONCRETE FORMWORK BENEATH CONCRETE CAP.
3.10	ROUGHEN TO 1/4" MIN. AMPLITUDE.
3.11	STANDARD 90 DEG. HOOK.
3.19	(4)#5 CONTINUOUS, TOP & BOTTOM.
3.20	#5 @ 1'-0" OC TOP & BOTTOM.
3.21	#5 DOWEL, @ 1'-0" OC.
3.22	#5 VERTICAL @ 2'-0" OC.
4.5	WALL CAP, SET ON TOP OF MASONRY WITH STEEL DOWELS AND FULL BED OF MORTAR.
4.6	8" (NOM.) CMU.
4.7	12" (NOM.) CMU.
4.13	RUNNING BOND BRICK VENEER. MATCH EXISTING.
4.14	SOLDIER COURSE BOND BRICK VENEER W/ 3/8" OFFSET. MATCH EXISTING.
4.21	CONTINUOUS BOND BEAM W/(1) #4, GROUT SOLID.
4.24	9 GAUGE GALV. LADDER TYPE JOINT REINFORCING AT 1'-4" OC.
7.1	EXPANSION JOINT FILLER MATERIAL AND/OR JOINT SEALANT.
26.1	ELECTRICAL CONTROL PANEL. CITY USE ONLY. PAINT EXTERIOR DOOR PANEL TO MATCH BRICK COLOR. COORDINATE WITH CIVIL DRAWINGS.
32.1	EXTERIOR GRADE OR PAVING. SEE CIVIL DRAWINGS.



7 AC101.2 SCALE: 1/2" = 1'-0"

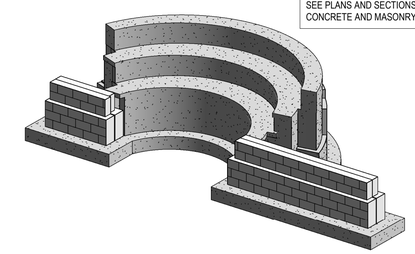
NORTH ELEVATION



2 AC101.2 SCALE: 1" = 1'-0"

NORTH AND SOUTH WALL SECTION

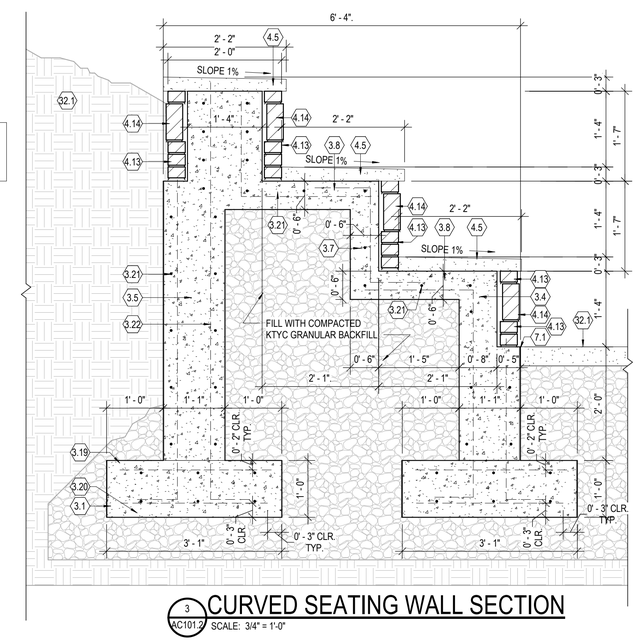
FOR ILLUSTRATIVE PUPSOSES ONLY. SEE PLANS AND SECTIONS FOR CONCRETE AND MASONRY DETAILS.



4 AC101.2 SCALE:

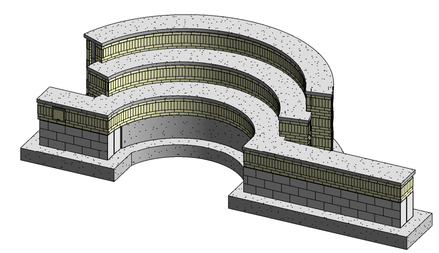
CURVED SEATING WALL ISOMETRIC - FORM WORK

NOTE:
CONTRACTOR TO COORDINATE WITH CIVIL DRAWINGS FOR ELECTRICAL AND UTILITIES WORK.



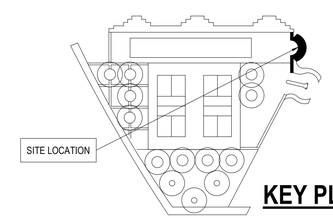
3 AC101.2 SCALE: 3/4" = 1'-0"

CURVED SEATING WALL SECTION



5 AC101.2 SCALE:

CURVED SEATING WALL ISOMETRIC



KEY PLAN

PROJECT NORTH

verdantas

NO	REVISION	DATE

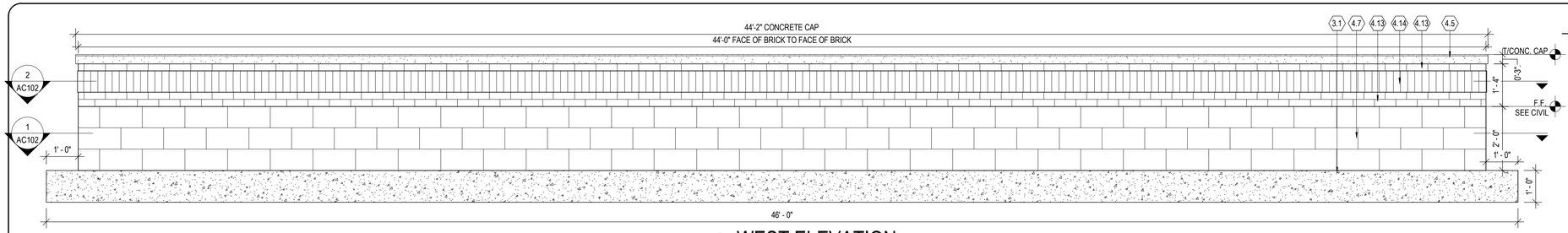
ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: As indicated
DESIGNED BY: J.DEGRAAF
DRAWN BY: V.PETRO
CHECKED BY: J.DEGRAAF

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

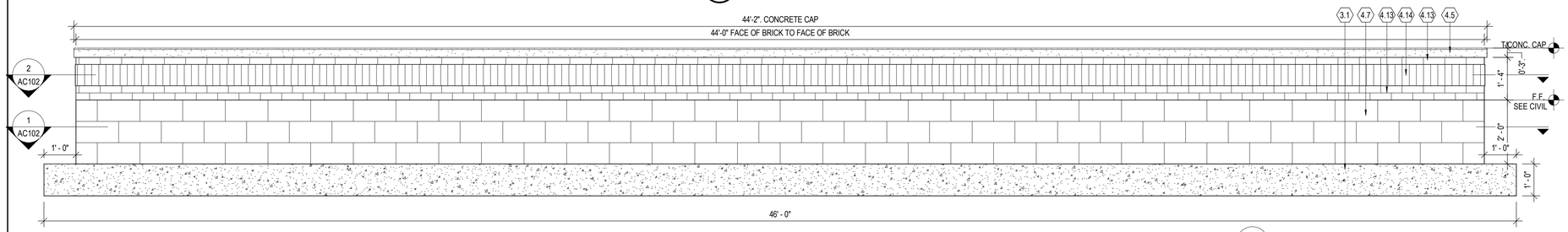
CURVED SEATING WALL

PROJECT NO. 241829
DISCIPLINE: ARCHITECTURAL
SHEET NAME: AC101.2
SHEET 21 OF 31

11/3/2025 1:39:18 PM



4 AC102 WEST ELEVATION
SCALE: 1/2" = 1'-0"



5 AC102 EAST ELEVATION
SCALE: 1/2" = 1'-0"

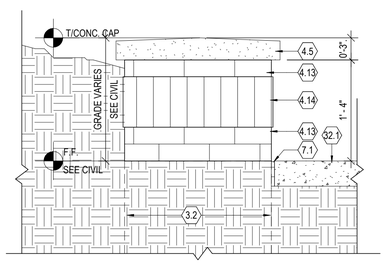
GENERAL PLAN NOTES

A. SEE SITE DRAWINGS FOR FINISHED FLOOR ELEVATION AND ORIENTATION OF STRUCTURES.
B. VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
C. EXTERIOR DIMENSIONS SHOWN ARE TO OUTSIDE OF FOUNDATION WALL OR MASONRY. TYPICAL UNLESS NOTED OTHERWISE.
D. PROVIDE SEALANT AT JOINTS BETWEEN ALL DISSIMILAR MATERIALS.
E. ALL EXTERIOR METALS SHOULD BE GALVANIZED AND PAINTED.
F. COORDINATE WORK BETWEEN TRADES AND OTHER DISCIPLINES. ADDITIONAL ITEMS OF WORK MAY APPEAR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
G. GROUT SOLID ALL CMU COURSES AND VOID SPACES BELOW GRADE.
H. GROUT ALL CMU CELLS WITH STEEL REINFORCING. LOCATE VERTICAL REINFORCING AT THE CENTER OF THE CELL, DEFLECT REINFORCING AS REQUIRED.
J. ROUGHEN TOP OF CONCRETE FOOTIND AT THE INTERFACE OF THE MASONRY ASSEMBLY AND THE FOOTING. ROUGHEN TO 1/4" (MIN) AMPLITUDE.

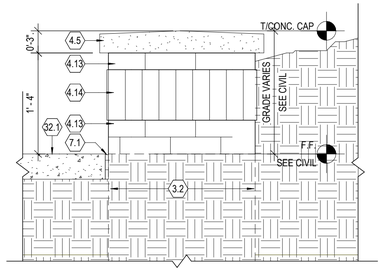
ARCH NEW WORK KEYED NOTES

NUMBER	DESCRIPTION
3.1	CONCRETE FOOTING.
3.2	STRUCTURAL FOOTING. SEE SECTION DETAIL THIS SHEET.
3.10	ROUGHEN TO 1/4" MIN. AMPLITUDE.
3.11	STANDARD 90 DEG. HOOK.
3.19	(4)#5 CONTINUOUS, TOP & BOTTOM.
3.20	#5 @ 1'-0" OC TOP & BOTTOM.
3.21	#5 DOWEL. @ 1'-0" OC.
3.22	#5 VERTICAL @ 2'-0" OC.
4.5	WALL CAP, SET ON TOP OF MASONRY WITH STEEL DOWELS AND FULL BED OF MORTAR.
4.6	8" (NOM.) CMU.
4.7	12" (NOM.) CMU.
4.13	RUNNING BOND BRICK VENEER. MATCH EXISTING.
4.14	SOLDIER COURSE BOND BRICK VENEER W/ 3/8" OFFSET. MATCH EXISTING.
4.21	CONTINUOUS BOND BEAM W/(1) #4, GROUT SOLID.
4.24	9 GAUGE GALV. LADDER TYPE JOINT REINFORCING AT 1'-4" OC.
7.1	EXPANSION JOINT FILLER MATERIAL AND/OR JOINT SEALANT.
32.1	EXTERIOR GRADE OR PAVING. SEE CIVIL DRAWINGS.

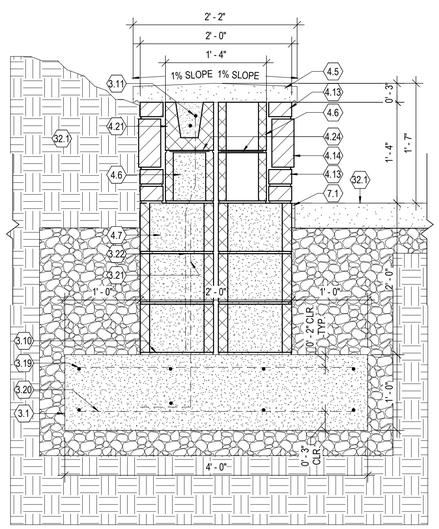
NOTE:
GRADING NOT SHOWN ON ELEVATIONS.
COORDINATE WITH CIVIL DRAWINGS FOR GRADING.



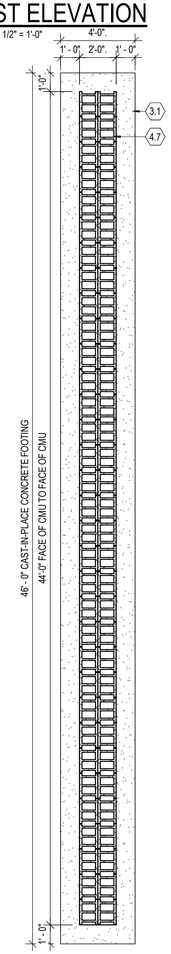
6 AC102 NORTH ELEVATION
SCALE: 1" = 1'-0"



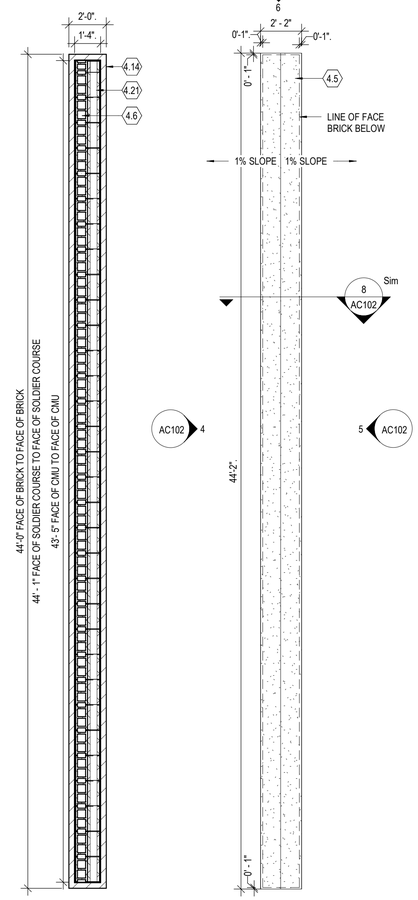
7 AC102 SOUTH ELEVATION
SCALE: 1" = 1'-0"



8 AC102 EAST SIDE SEATING WALL - SECTION
SCALE: 1" = 1'-0"

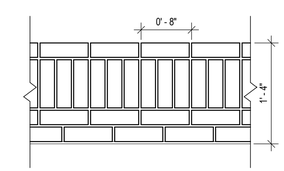


1 AC102 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

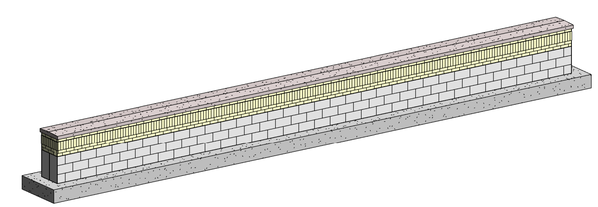


2 AC102 ABOVE GRADE PLAN
SCALE: 1/4" = 1'-0"

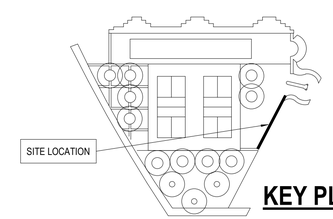
3 AC102 CONCRETE CAP PLAN
SCALE: 1/4" = 1'-0"



9 AC102 BRICK PATTERN DETAIL
SCALE: 1" = 1'-0"



10 AC102 EAST SEATING WALL ISOMETRIC
SCALE:



KEY PLAN

PROJECT NORTH

verdantas

NO	REVISION	DATE

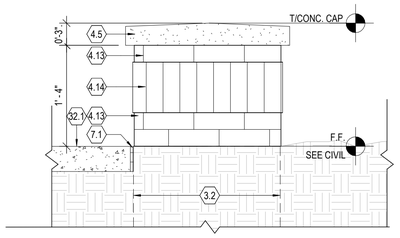
ISSUED FOR: BID
ISSUE DATE: 11/04/2025
SCALE: As indicated
DESIGNED BY: J.DEGRAAF
DRAWN BY: V.PETRO
CHECKED BY: J.DEGRAAF

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

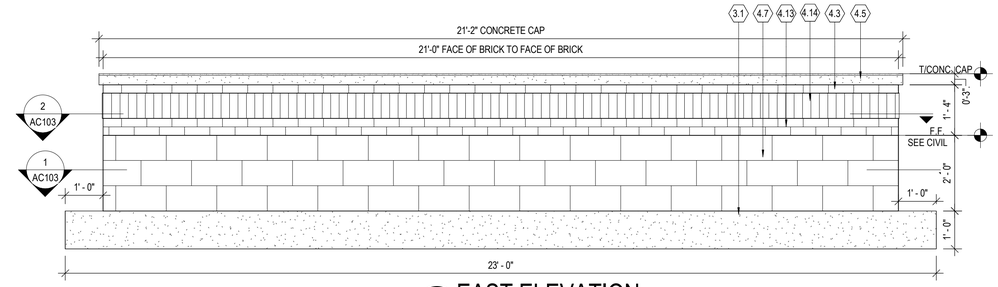
EAST SEATING WALL

PROJECT NO. 241829
DISCIPLINE ARCHITECTURAL
SHEET NAME AC102
SHEET 22 OF 31

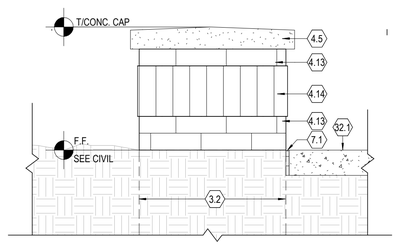
11/3/2025 4:18:10 PM



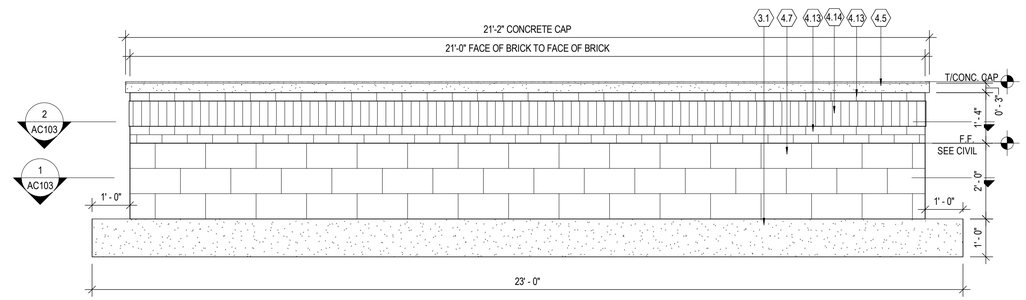
7 AC103 NORTH ELEVATION
SCALE: 1" = 1'-0"



6 AC103 EAST ELEVATION
SCALE: 1/2" = 1'-0"



8 AC103 SOUTH ELEVATION
SCALE: 1" = 1'-0"



5 AC103 WEST ELEVATION
SCALE: 1/2" = 1'-0"

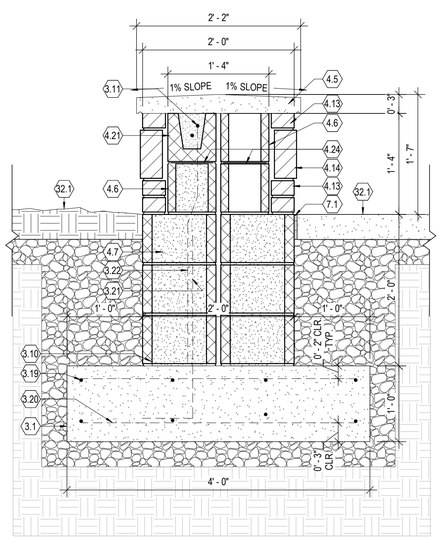
GENERAL PLAN NOTES

A. SEE SITE DRAWINGS FOR FINISHED FLOOR ELEVATION AND ORIENTATION OF STRUCTURES.
B. VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
C. EXTERIOR DIMENSIONS SHOWN ARE TO OUTSIDE OF FOUNDATION WALL OR MASONRY. TYPICAL UNLESS NOTED OTHERWISE.
D. PROVIDE SEALANT AT JOINTS BETWEEN ALL DISSIMILAR MATERIALS.
E. ALL EXTERIOR METALS SHOULD BE GALVANIZED AND PAINTED.
F. COORDINATE WORK BETWEEN TRADES AND OTHER DISCIPLINES. ADDITIONAL ITEMS OF WORK MAY APPEAR ELSEWHERE IN THE CONSTRUCTION DOCUMENTS.
G. GROUT SOLID ALL CMU COURSES AND VOID SPACES BELOW GRADE.
H. GROUT ALL CMU CELLS WITH STEEL REINFORCING. LOCATE VERTICAL REINFORCING AT THE CENTER OF THE CELL, DEFLECT REINFORCING AS REQUIRED.
J. ROUGHEN TOP OF CONCRETE FOOTIND AT THE INTERFACE OF THE MASONRY ASSEMBLY AND THE FOOTING. ROUGHEN TO 1/4" (MIN) AMPLITUDE.

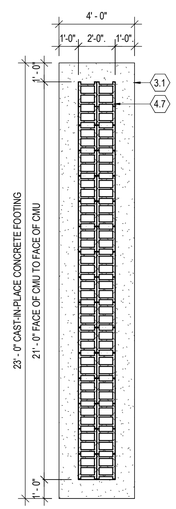
ARCH NEW WORK KEYED NOTES

NUMBER	DESCRIPTION
3.1	CONCRETE FOOTING.
3.2	STRUCTURAL FOOTING. SEE SECTION DETAIL THIS SHEET.
3.10	ROUGHEN TO 1/4" MIN. AMPLITUDE.
3.11	STANDARD 90 DEG. HOOK.
3.19	(4)#5 CONTINUOUS, TOP & BOTTOM.
3.20	#5 @ 1'-0" OC TOP & BOTTOM.
3.21	#5 DOWEL, @ 1'-0" OC.
3.22	#5 VERTICAL @ 2'-0" OC.
4.3	BRICK VENEER. BASIS OF DESIGN:
4.5	WALL CAP, SET ON TOP OF MASONRY WITH STEEL DOWELS AND FULL BED OF MORTAR.
4.6	8" (NOM.) CMU.
4.7	12" (NOM.) CMU.
4.13	RUNNING BOND BRICK VENEER. MATCH EXISTING.
4.14	SOLDIER COURSE BOND BRICK VENEER W/ 3/8" OFFSET. MATCH EXISTING.
4.21	CONTINUOUS BOND BEAM W/(1) #4, GROUT SOLID.
4.24	9 GAUGE GALV. LADDER TYPE JOINT REINFORCING AT 1'-4" OC.
7.1	EXPANSION JOINT FILLER MATERIAL AND/OR JOINT SEALANT.
32.1	EXTERIOR GRADE OR PAVING. SEE CIVIL DRAWINGS.

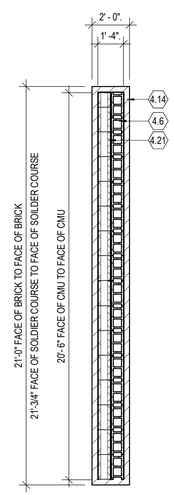
NOTE:
GRADING NOT SHOWN ON ELEVATIONS.
COORDINATE WITH CIVIL DRAWINGS FOR GRADING.



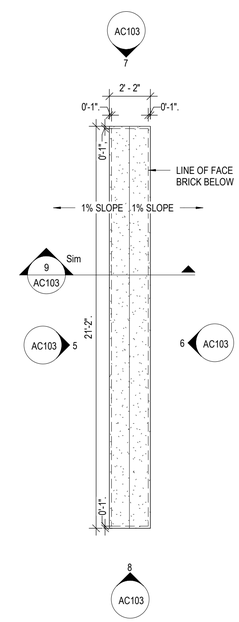
9 AC103 WEST SIDE SEATING WALL - SECTION
SCALE: 1" = 1'-0"



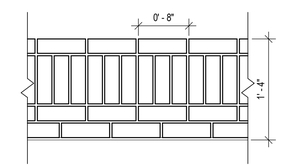
1 AC103 FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



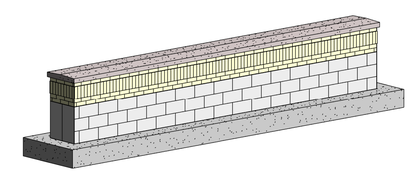
2 AC103 ABOVE GRADE PLAN
SCALE: 1/4" = 1'-0"



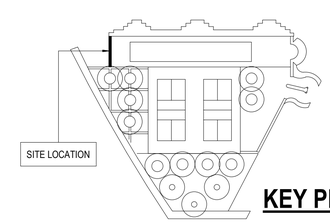
3 AC103 CONCRETE CAP PLAN
SCALE: 1/4" = 1'-0"



10 AC103 BRICK PATTERN DETAIL
SCALE: 1" = 1'-0"



11 AC103 WEST SEATING WALL ISOMETRIC
SCALE:



KEY PLAN

PROJECT NORTH

verdantas

NO	REVISION	DATE

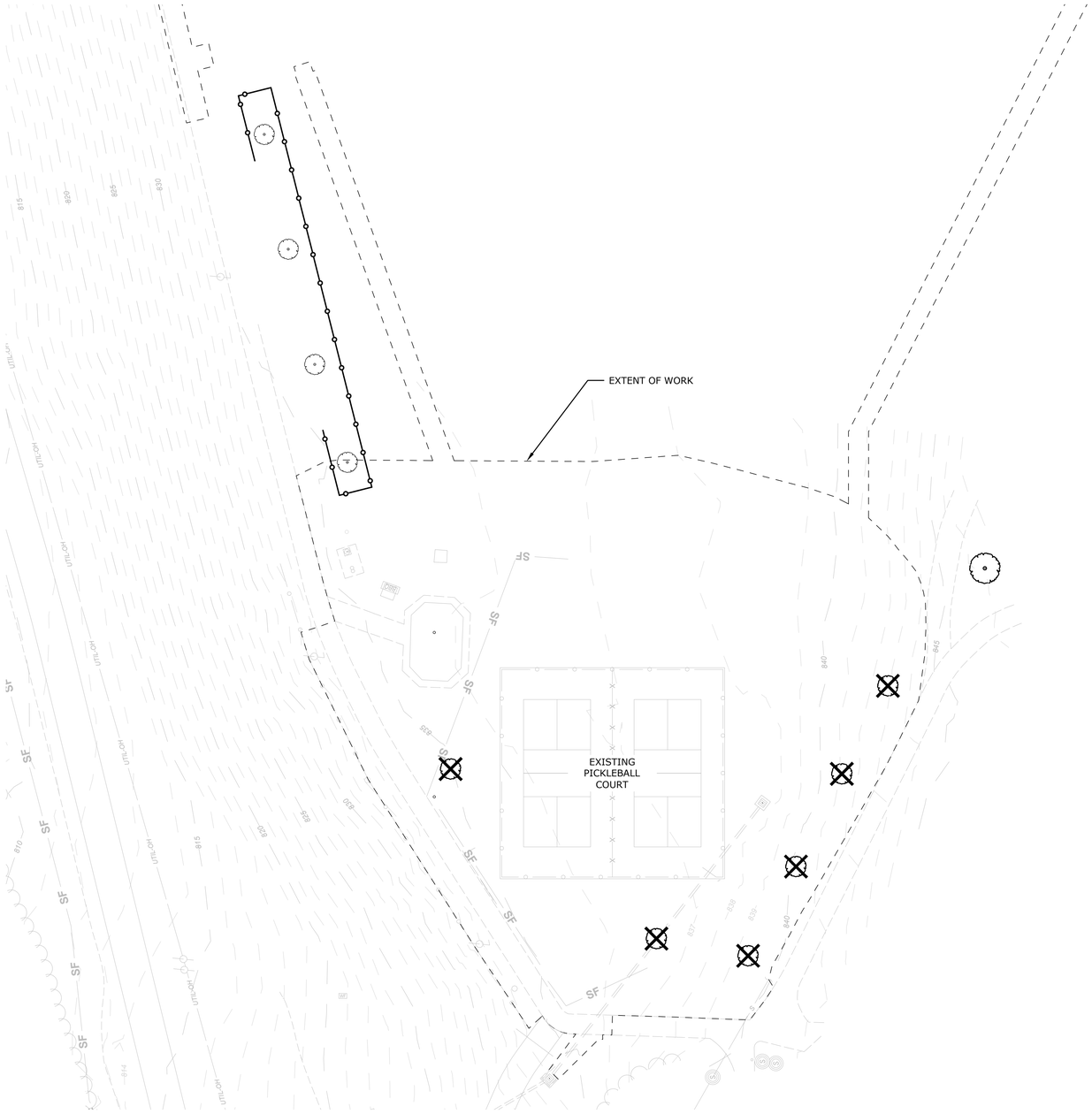
ISSUED FOR:	BID
ISSUE DATE:	11/04/2025
SCALE:	As indicated
DESIGNED BY:	J.DEGRAAF
DRAWN BY:	V.PETRO
CHECKED BY:	J.DEGRAAF

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

WEST SEATING WALL

PROJECT NO. 241829
DISCIPLINE ARCHITECTURAL
SHEET NAME AC103
SHEET 23 OF 31

11/3/2025 4:18:55 PM



1 LTP100 TREE PRESERVATION AND REMOVAL PLAN

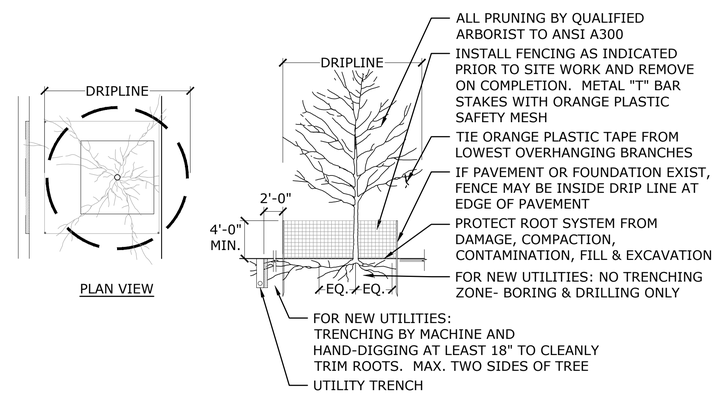
SCALE: 1" = 20'-0"

GRAPHIC SCALE
10 5 0 10 20
(IN FEET)
1 inch = 20 ft.

LEGEND - TREE PRESERVATION SYMBOLS		
KEY	ITEM	COMMENTS
	EXISTING TREE TO BE REMOVED	COORDINATE WITH CERTIFIED ARBORIST PROVIDED BY CONTRACTOR
	EXISTING TREE TO REMAIN & BE PROTECTED	SEE NOTES; COORDINATE WITH CERTIFIED ARBORIST PROVIDED BY CONTRACTOR
	TREE PRESERVATION FENCING	ORANGE CONSTRUCTION TYPE FENCING, 4' HIGH WITH METAL POSTS SUPPORTING FENCE MATERIAL APPROX. 6' O.C.

GENERAL NOTES

1. THIS PLAN REPRESENTS TREES TO BE REMOVED AND TREE PROTECTION DURING REMOVAL AND DEMOLITION.
2. PRESERVE ALL TREES NOT INDICATED FOR REMOVAL AS SPECIFIED. HAND EXCAVATE/PRUNE ROOTS WHERE NOTED, IN COORDINATION WITH CERTIFIED ARBORIST.
3. TREE PRESERVATION FENCING LAYOUT AS SHOWN ON TREE PRESERVATION PLAN. REVIEW FENCE LOCATION WITH OWNER AND LANDSCAPE ARCHITECT PRIOR TO ANY EXCAVATION.
4. CONTRACTOR RESPONSIBLE FOR REMOVING TREES AS INDICATED ON PLAN IN A SAFE MANNER WITHOUT DAMAGE TO PROPERTY AND SURROUNDING TREES. ANY DAMAGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR TO THE OWNER'S SATISFACTION. FOLLOW ALL SAFETY REGULATIONS, ISA & OSHA STANDARDS ANSI Z133.1, SAFETY OF THE PUBLIC AND WORKERS IS TO BE PRIMARY CONSIDERATION IN THE WORK.
5. CONTRACTOR TO RECOMMEND & MANAGE CONSTRUCTION ACCESS WITH MINIMUM IMPACT TO TREES AND EXISTING SITE ELEMENTS. COMPLETE RESTORATION OF THE ACCESS IS REQUIRED. OWNER TO APPROVE ACCESS BY CONTRACTOR.
6. WHERE WORK IS TO OCCUR CLOSE TO AN EXISTING TREE TO BE PRESERVED, ROOT CUTS SHALL BE MARKED IN THE FIELD BY THE CONTRACTOR AND REVIEWED BY THE OWNER, CERTIFIED ARBORIST AND OWNER'S REPRESENTATIVE PRIOR TO CUTTING. CONTRACTOR TO USE AIR SPADE TO LOCATE TREE ROOTS.
7. DURING THE EXCAVATION PROCESS, IF ROOTS GREATER THAN 2" DIA. THAT HAVE NOT BEEN ROOT PRUNED ARE ENCOUNTERED, THEY SHALL BE CUT WITH A SAW OR SHARP AXE AND NOT RIPPED WITH THE EARTH MOVING EQUIPMENT, AS DIRECTED BY THE CERTIFIED ARBORIST.
8. ASSESSMENT BY THE CONTRACTOR IS REQUIRED PER AREA OF WORK TO ENSURE THERE IS ADEQUATE CLEARANCE TO DO WORK UNDER EXISTING TREES TO REMAIN. REVIEW ANY CLEARANCE ISSUES WITH THE CERTIFIED ARBORIST. ALL REQUIRED TRIMMING SHALL BE PERFORMED BY A CERTIFIED ARBORIST AS NEEDED.
9. EVERY WORKER ON SITE SHALL BE MADE AWARE OF ALL TREE PRESERVATION MEASURES AND THE IMPORTANCE OF ADHERING TO THE MEASURES OUTLINED IN THESE DOCUMENTS.
10. CONTRACTOR SHALL PROVIDE TREE PRESERVATION PLAN THAT SUPPLEMENTS AND ADDS DETAIL TO THIS PLAN IN COORDINATION WITH CONSTRUCTION SEQUENCE, SCHEDULE, AND CERTIFIED ARBORIST. THE CONTRACTOR'S PLAN SHALL SUPPLEMENT THIS PLAN. THE PLAN PRODUCED BY THE CONTRACTOR SHALL BE REVIEWED BY THE CERTIFIED ARBORIST, OWNER, AND LANDSCAPE ARCHITECT.
11. ALL DISTURBANCE TO EXISTING TREES SHALL BE LIMITED DURING THE TREES ACTIVE GROWING SEASON. IF DISTURBANCE IS REQUIRED DURING ACTIVE GROWING SEASON, ADDITIONAL MEASURES MAY BE NEEDED TO PROTECT THE TREE IN ACCORDANCE WITH THE CERTIFIED ARBORIST. THESE MEASURES INCLUDE BUT ARE NOT LIMITED TO: MULCHING DISTURBED ROOTS AND TEMPORARY IRRIGATION OF DISTURBED TREES. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TREE PRESERVATION MEASURES THROUGHOUT THE DURATION OF THE PROJECT. VIOLATIONS OF ANY TREE PRESERVATION MEASURE WILL BE FINED ACCORDING TO SPECIFICATIONS.
13. FOR FULL TREE PRESERVATION SPECIFICATIONS SEE 02 41 01.



2 LTP100 TREE PROTECTION FENCING

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

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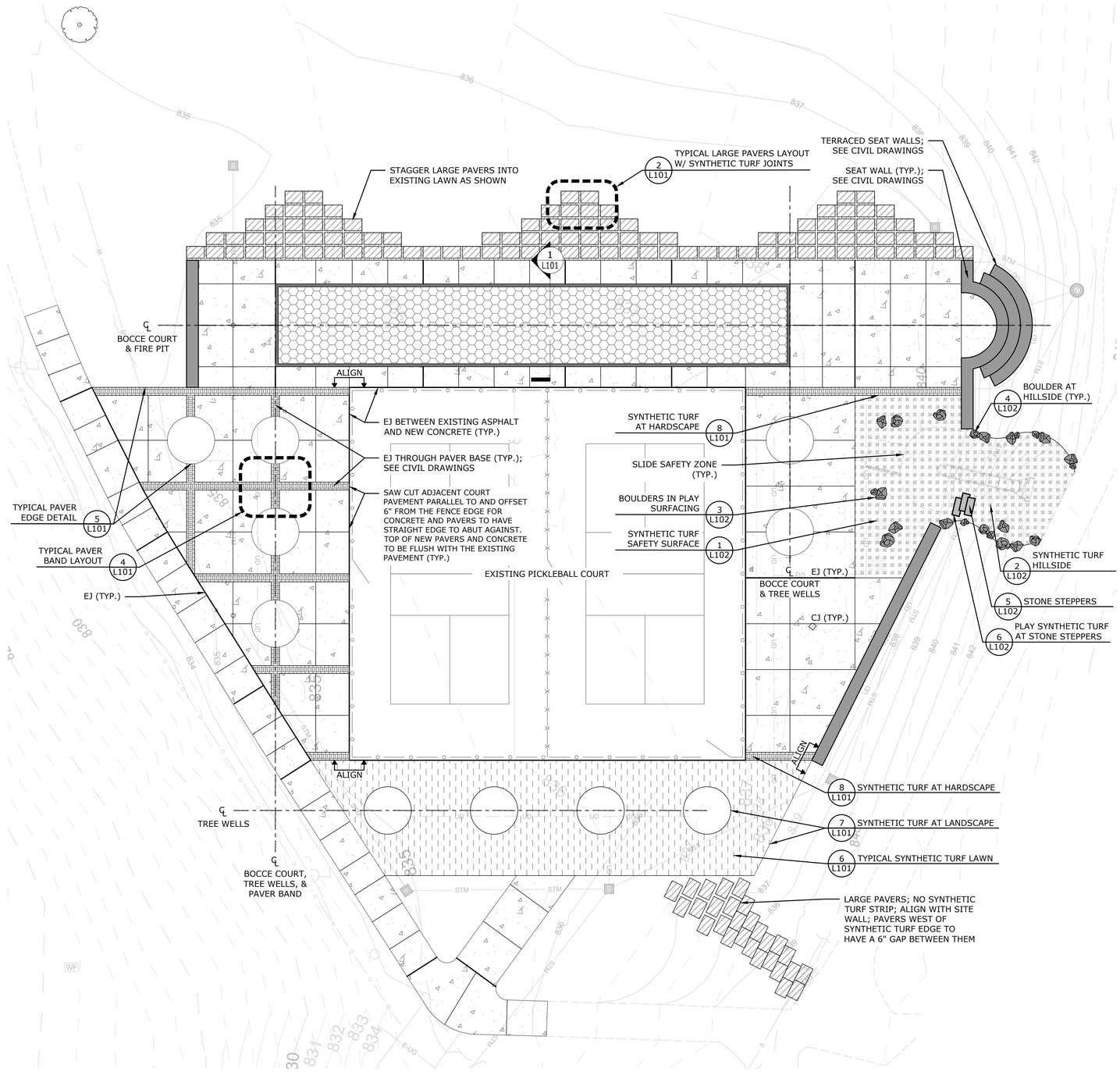
ISSUE DATE:	11/4/25
SCALE:	AS SHOWN
DESIGNED BY:	JR
DRAWN BY:	JR
CHECKED BY:	ND

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

TREE PRESERVATION

PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME LTP100
SHEET 24 OF 31



1 L100 **HARDSCAPE MATERIALS PLAN**

SCALE: 1" = 10'-0"

GRAPHIC SCALE
5 2.5 0 5 10
(IN FEET)
1 inch = 10 ft.

GENERAL NOTES

1. BASE INFORMATION PROVIDED BY CT CONSULTANTS, 4420 COOPER ROAD, SUITE 200, BLUE ASH, OHIO 45242, 513.791.1700.
2. CONTRACTOR SHALL LOCATE ALL UTILITIES, STRUCTURES, PAVEMENT AND VEGETATION TO REMAIN, AND TAKE THE NECESSARY PRECAUTIONS FOR THEIR PROTECTION DURING CONSTRUCTION. ANY FIELD ADJUSTMENTS REQUIRED SHALL BE REVIEWED BY THE LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ORDINANCES, RULES AND REGULATIONS DURING THE COURSE OF THIS PROJECT, INCLUDING BUT NOT LIMITED TO OSHA REQUIREMENTS FOR PUBLIC AND WORKER SAFETY.
4. CONTRACTOR SHALL COORDINATE WITH THE WORK OF OTHER TRADES TO ENSURE PROPER AND TIMELY EXECUTION OF THE WORK.
5. THESE NOTES APPLY TO ALL L SERIES SHEETS.

HARDSCAPE NOTES

1. SEE CIVIL ENGINEER DRAWINGS FOR ALL PAVING CROSS SECTIONS AND BASE REQUIREMENTS AND JOINTING TYPES. JOINTING LOCATIONS AS SHOWN ON HARDSCAPE PLAN.
2. ALL ANGLES ARE 90° UNLESS OTHERWISE NOTED.
3. 4'x4' MOCK-UP REQUIRED FOR ALL PAVING TYPES. MOCK-UP MAY ULTIMATELY BE PART OF FINISHED PAVED AREA IF APPROVED. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. DIGITAL LAYOUT INFORMATION PROVIDED BY CIVIL ENGINEER. SEE CIVIL ENGINEER'S DRAWINGS FOR MORE INFORMATION.
5. COORDINATE ALL ELECTRICAL UTILITIES & DRAINAGE STRUCTURES WITH HARDSCAPE ELEMENTS; CONTRACTOR TO NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS AND RESOLVE ISSUES IN THE FIELD.
6. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL CONTROL JOINTING. ALL JOINTS TO BE SAWCUT. EXPANSION JOINT MATERIAL AT RIGHT-OF-WAY.
7. 1/2" EXPANSION JOINTS TO BE PLACED AT BUILDING EDGES, ALL FIXED FOUNDATIONS OR OBJECTS AND WHERE SHOWN ON PLAN.
8. ALL SYNTHETIC TURF AREAS WILL HAVE UNDERDRAINS AND TIED INTO THE STORM SYSTEM, COORDINATE WITH CIVIL ENGINEER'S DRAINAGE PLANS.
9. ALL UNIT PAVERS THAT MEET SOFT LANDSCAPE EDGE, RATHER THAN BUILDING, WALL OR CONCRETE SHALL REQUIRE EDGING AS SPECIFIED AND SHOWN IN HARDSCAPE DETAILS.
6. PROVIDE OWNER WITH 10% OF PAVERS IN PROJECT FOR ATTIC STOCK.

HARDSCAPE AND MATERIALS SCHEDULE

KEY	ITEM	FINISH/ PRODUCT	COLOR	SUPPLIER (BASIS OF DESIGN OR APPROVED EQUAL)
	CONCRETE	SAW CUT JOINTS; LIGHT BROOM FINISH; NO TOOL MARKS	STANDARD	N/A
	SYNTHETIC TURF SAFETY SURFACE	PLAYGROUND GRASS ULTRA	GREEN	FOREVERLAWN KENTUCKIANA 10319 IN-62, Charlestown, IN 47111 CONTACT: Kerri Vaughn 502.379.1180 kerri@kyin.foreverlawn.com
	SYNTHETIC TURF BOCCE COURT	BOCCEGRASS COURT	GREEN	FOREVERLAWN KENTUCKIANA 10319 IN-62, Charlestown, IN 47111 CONTACT: Kerri Vaughn 502.379.1180 kerri@kyin.foreverlawn.com
	SYNTHETIC TURF LAWN	FUSION ELITE	GREEN	FOREVERLAWN KENTUCKIANA 10319 IN-62, Charlestown, IN 47111 CONTACT: Kerri Vaughn 502.379.1180 kerri@kyin.foreverlawn.com
	LARGE PAVERS	24"'x36" ARCHITECTURAL PAVER	PAVERS: PG-27	NITTERHOUSE MASONRY PRODUCTS 859 Cleveland Ave., Chambersburg, PA 17201 717.268.4137 nitterhousemasonry.com
	PAVER BAND	4"x8" TRADITIONAL PREST BRICK PAVER	TAN; PRIOR TO ORDERING, PROVIDE SAMPLE BRICK TO LA FOR FINAL COLOR CONFIRMATION TO BE COORDINATED WITH ARCHITECT'S BRICK SELECTION	HANOVER PAVERS 5000 Hanover Rd, Hanover, PA 17331 800.426.4242 hanoverpavers.com
	BOULDERS	GLACIAL GRANITE	SIZE: 24"- 48" LA TO SELECT BOULDERS AT SUPPLIER	SEMCO OUTDOOR 11864 Chesterdale Rd, Cincinnati, OH, 45246 937-464-9094 www.semcooutdoor.com
	STONE STEPS	CANYON GRAY	SIZE: VARIES 6"-8" THICK; 3' LONG	SEMCO OUTDOOR 11864 Chesterdale Rd, Cincinnati, OH, 45246 937-464-9094 www.semcooutdoor.com
	SEAT WALL	SEE CIVIL DRAWINGS		

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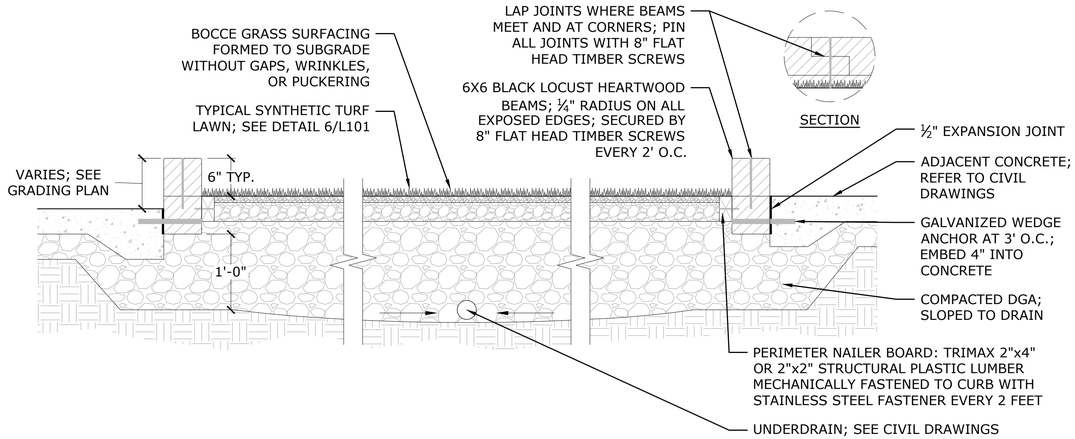
SCALE: AS SHOWN
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: ND

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

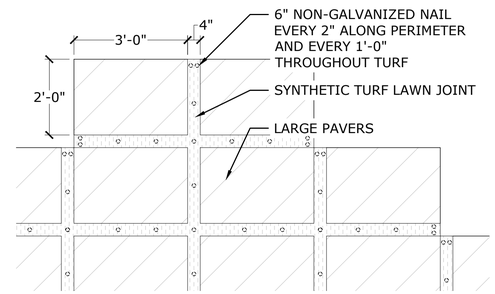
HARDSCAPE

PROJECT NO. 241829
DISCIPLINE: LANDSCAPE
SHEET NAME: L100
SHEET 25 OF 31

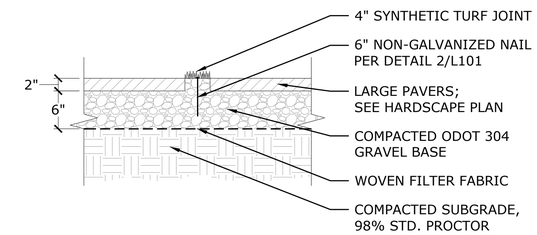


NOTES:
1. ALL CUT EDGES TO BE SEALED WITH CLEAR PEEL-AND-STICK WATERPROOF MEMBRANE PRIOR TO INSTALLATION.
2. ALL WOOD ADJACENT TO CONCRETE TO BE WRAPPED IN EPDM MEMBRANE OR APPROVED EQUAL PRIOR TO EXPANSION JOINT AND CONCRETE INSTALLATION. TRIM SO EPDM IS NOT VISIBLE.

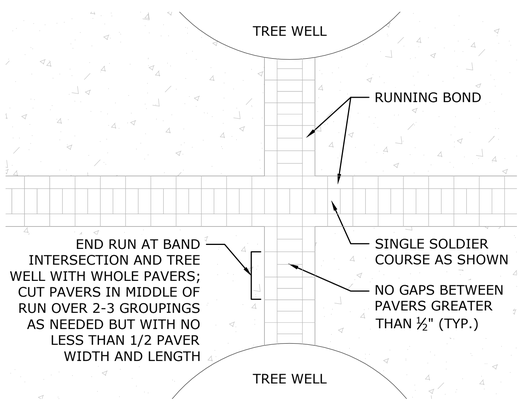
1 / L101 BOCCE BALL COURT
SCALE: 1" = 1'-0"



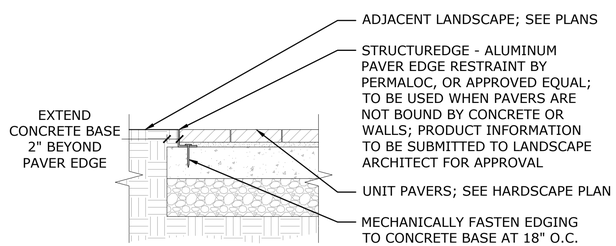
2 / L101 TYPICAL LARGE PAVERS LAYOUT
SCALE: 1/2" = 1'-0"



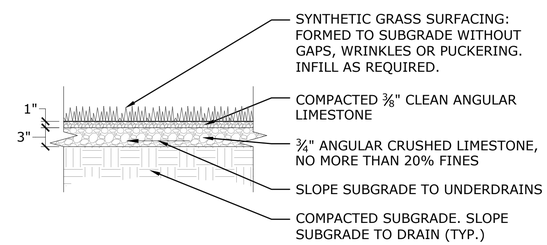
3 / L101 TYPICAL LARGE PAVERS W/ SYNTHETIC TURF JOINTS
SCALE: 1" = 1'-0"



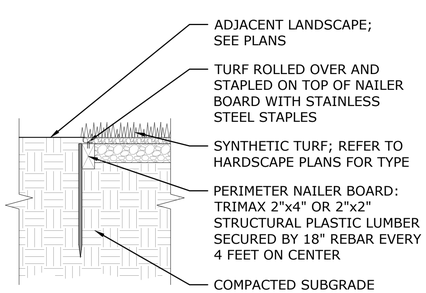
4 / L101 TYPICAL PAVER BAND LAYOUT
SCALE: 1/2" = 1'-0"



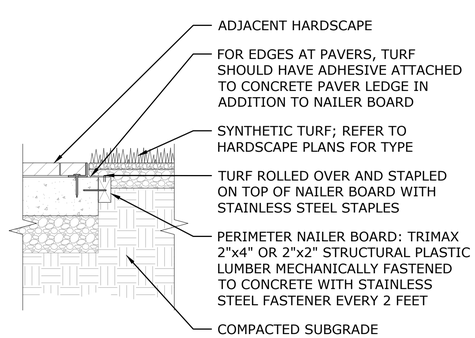
5 / L101 TYPICAL PAVER EDGE DETAIL
SCALE: 1" = 1'-0"



6 / L101 TYPICAL SYNTHETIC TURF LAWN
SCALE: 1" = 1'-0"



7 / L101 SYNTHETIC TURF AT LANDSCAPE
SCALE: 1" = 1'-0"



8 / L101 SYNTHETIC TURF AT HARDSCAPE
SCALE: 1" = 1'-0"

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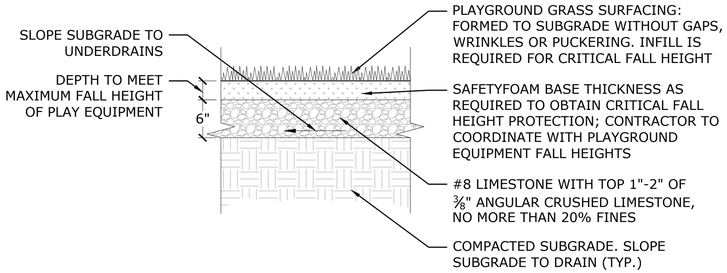
SCALE:	AS SHOWN
DESIGNED BY:	JR
DRAWN BY:	JR
CHECKED BY:	ND

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

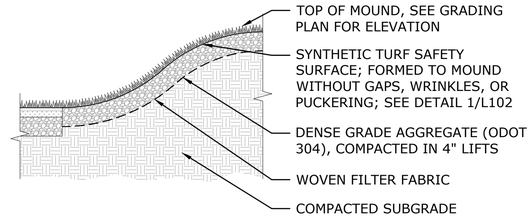
HARDSCAPE DETAILS

PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME L101
SHEET 26 OF 31

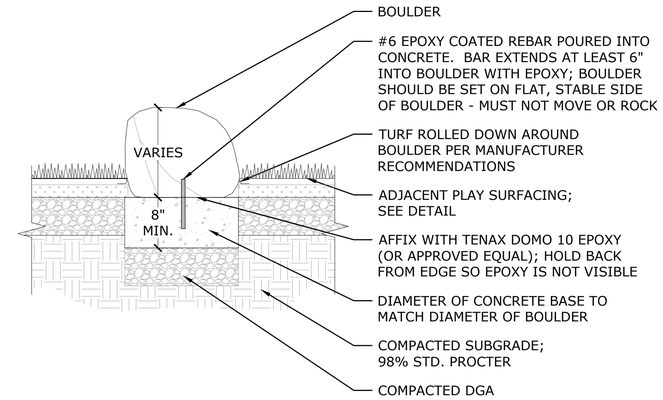


NOTE:
SYNTHETIC TURF CONTRACTOR TO COORDINATE WITH PLAY STRUCTURES TO ACCOMMODATE PLAY STRUCTURE POSTS/SUPPORTS AND TO MEET CRITICAL FALL HEIGHT REQUIREMENTS FOR IMPACT ATTENUATION

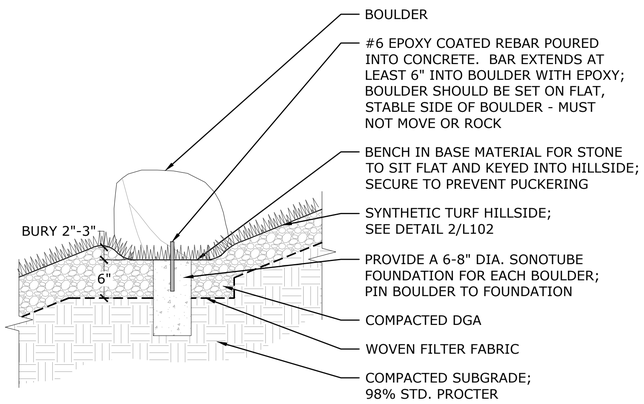
1 / L102 SYNTHETIC TURF SAFETY SURFACE
SCALE: 1" = 1'-0"



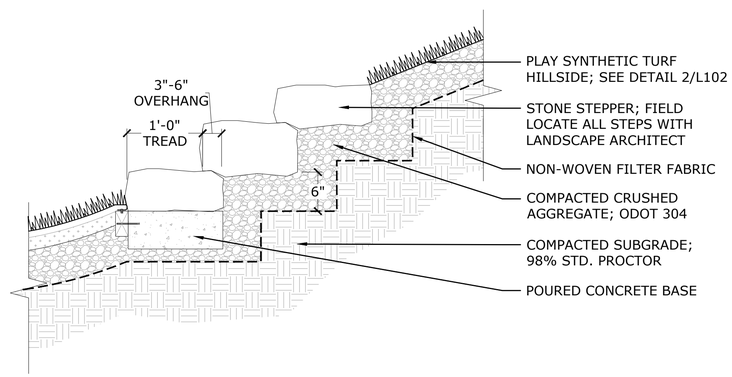
2 / L102 SYNTHETIC TURF HILLSIDE
SCALE: 1/2" = 1'-0"



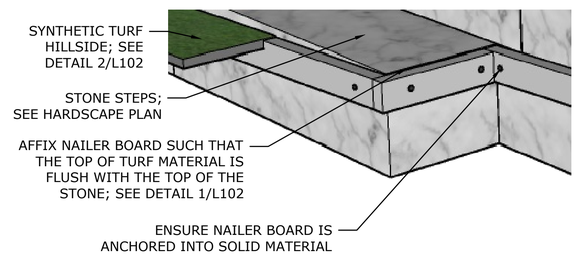
3 / L102 BOULDERS IN PLAY SURFACING
SCALE: 1" = 1'-0"



4 / L102 BOULDER AT HILLSIDE
SCALE: 1" = 1'-0"



5 / L102 STONE STEPPERS
SCALE: 1" = 1'-0"



6 / L102 PLAY SYNTHETIC TURF AT STONE STEPPERS
SCALE: 1/2" = 1'-0"

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THE COMMONS AT HIGHLAND HEIGHTS
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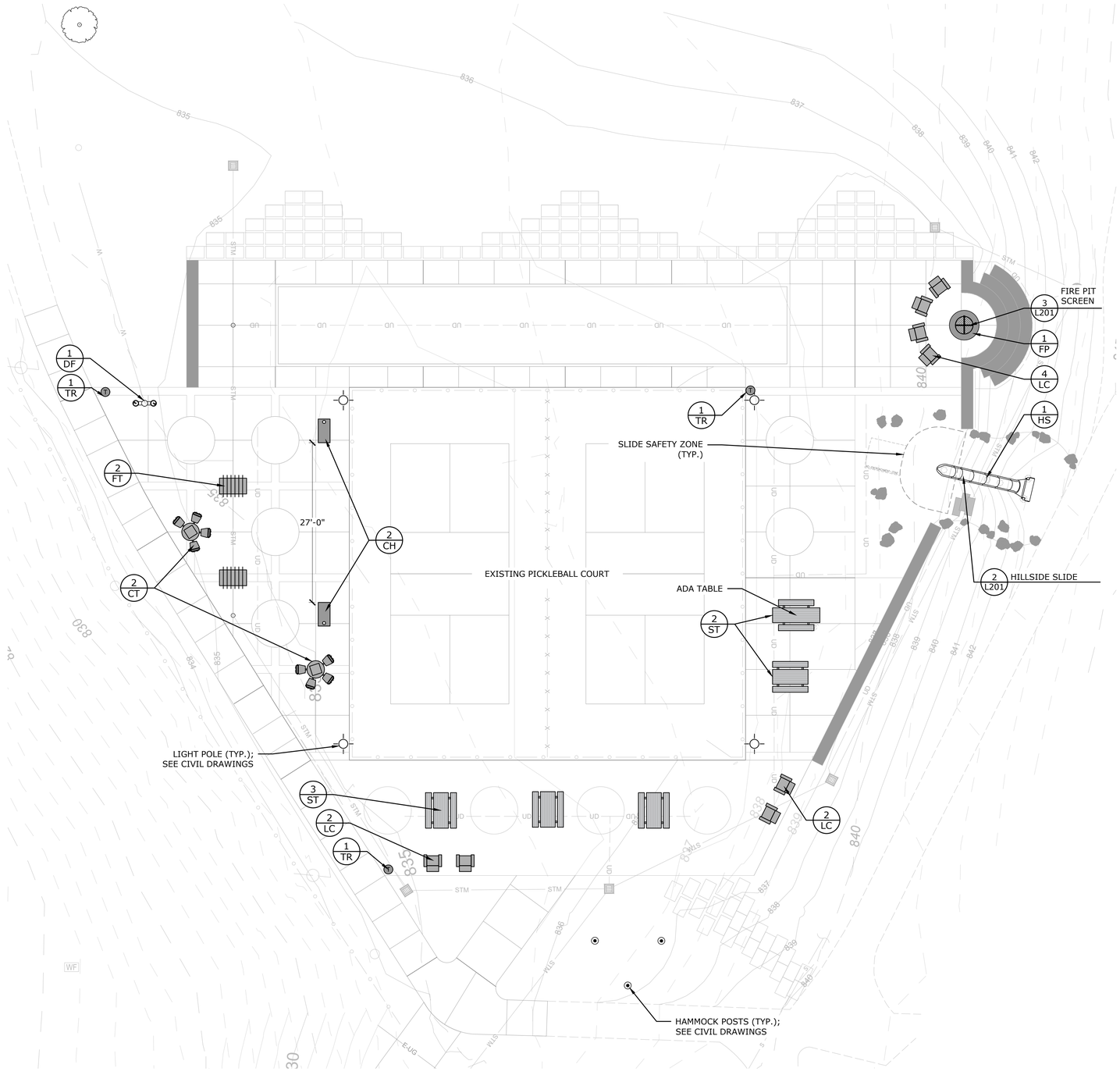
HIGHLAND HEIGHTS, KY

HARDSCAPE DETAILS

PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME L102
SHEET 27 OF 31



1 L200 **FURNISHINGS PLAN**

SCALE: 1" = 10'-0"

GRAPHIC SCALE
5 2.5 0 5 10
(IN FEET)
1 inch = 10 ft.

PLANTING NOTES

1. INSTALLATION OF ALL FURNISHINGS PER MANUFACTURER'S RECOMMENDATIONS.
2. ALL METAL FINISHES TO BE AS NOTED IN THE FURNISHINGS SCHEDULE. SUBMIT SAMPLES FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO ORDERING.
3. FIELD LOCATE AND STAKE ALL FURNISHINGS AND REVIEW LOCATION WITH LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. SUBMIT SHOP DRAWINGS AND MANUFACTURER'S PRODUCT DATA FOR ALL FURNISHINGS INCLUDING, FENCE, AND PLAYGROUND EQUIPMENT FOR REVIEW BY LANDSCAPE ARCHITECT. SUPPLIER/CONTRACTOR RESPONSIBLE FOR STRUCTURAL INTEGRITY OF FENCING.

FURNISHINGS SCHEDULE

KEY	ITEM	MODEL	COLOR/ OPTIONS	SUPPLIER (BASIS OF DESIGN OR APPROVED EQUAL)
# LC	LOUNGE CHAIR	533-22 ADIRONDACK CHAIR W/ ARMRESTS	SLATS: IPE FRAME: RECYCLE BLUE	DUMOR 138 Industrial Circle, Mifflintown, PA 17059 800.598.4018 dumor.com
# CT	CAFE TABLE	N-H-364; SURFACE MOUNT; SOLID TOP W/ GAMEBOARD	SLATS: IPE FRAME: BLACK	VICTOR STANLEY 2103 Brickhouse Rd, Dunkirk, MD 20754 301.855.8300 victorstanley.com
# ST	PICNIC TABLE	PT-2; SURFACE MOUNT; 1 TABLE TO BE ADA ACCESSIBLE	SLATS: IPE FRAME: BLACK	VICTOR STANLEY 2103 Brickhouse Rd, Dunkirk, MD 20754 301.855.8300 victorstanley.com
# FT	FOOSBALL TABLE	OUTDOOR CONCRETE FOOSEBALL TABLE	NATURAL CONCRETE GRAY	ANOVA FURNISHINGS 1424 Talmage Ave, St. Louis, MO 36110 800.325.3047 anovafurnishings.com
# CH	CORNHOLE	CORN HOLE	IRON; SMOOTH FINISH	SPRUCE AND GANDER 1780 La Costa Meadows Dr, Suite104, San Marcos, CA 92078 CONTACT: Greg LaVal 760.650.5911 greg@spruceandgander.com
# FP	FIRE PIT WITH FIRE SCREEN	60" DIA X 18"H BLOCK INFINITY FIRE PIT	IRON; SMOOTH FINISH FILL: MIXED FIREBALLS	SPRUCE AND GANDER 1780 La Costa Meadows Dr, Suite104, San Marcos, CA 92078 CONTACT: Greg LaVal 760.650.5911 greg@spruceandgander.com
		36" ROUND LIFT OFF DOME W/ 6" RISE WELDED TO BOTTOM FRAME; 12" SCREEN CENTER HEIGHT; 1 SIDE HANDLE; ANCHOR TO FIRE PIT PER MANUFACTURERS RECOMMENDATION	304 STAINLESS STEEL BLACK HIGH TEMPERATURE POWDER COAT	FIRE PIT SCREENS 215 E. Jefferson St. New Buffalo, MI 49117 847.293.4684 firepitscreens.net
# TR	TRASH RECEPTACLE	REN-36SDSD-EJ	SIDING: IPE FRAME: BLACK	VICTOR STANLEY 2103 Brickhouse Rd, Dunkirk, MD 20754 301.855.8300 victorstanley.com
# DF	DRINKING FOUNTAIN	GY SERIES, MODEL GYQ84-FRU3; SEE CIVIL PLANS FOR CONNECTIONS	SATIN STAINLESS	MURDOCK MANUFACTURING 15125 Poctor Ave. City of Industry, CA 91746 800-453-7465
# HS	HILLSIDE SLIDE	STRAIGHT SLIDEWINDER	SLIDE: TAN POSTS: TAN	LANDSCAPE STRUCTURES 601 7th St South, Delano, MI 55328 CONTACT: Livia McCrady, PlayPros 866-959-7866 Livia@playpros.com

PLAYGROUND NOTES

1. SUBMIT SHOP DRAWINGS AND MANUFACTURER'S PRODUCT DATA FOR SLIDE FOR REVIEW BY OWNER & LANDSCAPE ARCHITECT.
2. SLIDE SHALL MEET ASTM F1487-12 STANDARDS FOR SAFETY. IPEMA CERTIFICATION DOCUMENT SHALL BE SUBMITTED WITH PRODUCT CUT SHEETS, SEE SPECIFICATIONS.
3. CONTRACTOR TO HIRE A CERTIFIED PLAYGROUND SAFETY INSPECTOR (CPSI) TO ENSURE PROPER SLIDE INSTALLATION AND PROVIDE OWNER A LETTER STATING SUCCESSFUL COMPLETION OF INSPECTIONS.
4. SLIDE SHOWN ARE FOR DESIGN INTENT. PRIOR TO ORDERING AND INSTALLATION, CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS, COLOR SAMPLES, MORE DETAILED LAYOUT PLAN, AND INSTALLATION REQUIREMENTS FOR REVIEW BY OWNER AND LANDSCAPE ARCHITECT .
5. CONTRACTOR, FABRICATOR, AND INSTALLER ARE RESPONSIBLE FOR STRUCTURAL INTEGRITY OF SLIDE, FOR PROPER INSTALLATION OF ALL EQUIPMENT, AND FOR MEETING ALL APPLICABLE SAFETY REQUIREMENTS.
6. ALL SAFETY SURFACING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND TO MEET CRITICAL FALL ZONE REQUIREMENTS AS DETERMINED BY THE EQUIPMENT MANUFACTURER.
7. CONTRACTOR TO STAKE LOCATION OF SLIDE AND REVIEW WITH OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THIS INCLUDES BUT IS NOT LIMITED TO ALL EQUIPMENT, CURBS, EDGES OF SAFETY SURFACES, CONCRETE, STONE WORK, AND LANDSCAPING. CONTRACTOR TO MAKE FIELD ADJUSTMENT AFTER REVIEW.
8. ALL RADII CONNECTIONS SHALL BE SMOOTH, TANGENT ARCS AS SHOWN.
9. CONTRACTOR TO PROVIDE A SAMPLE OF SYNTHETIC TURF PRIOR TO ORDERING AND DELIVERY. CONTRACTOR TO ALSO PROVIDE MOCK UPS FOR PLAY SURFACE AND PAVING FOR REVIEW BY OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

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NO	REVISION	DATE

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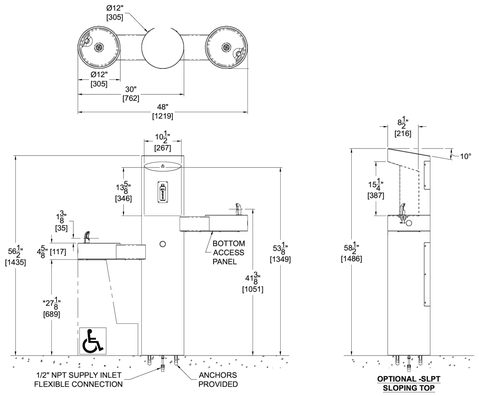
SCALE: AS SHOWN
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: NN

THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

FURNISHINGS

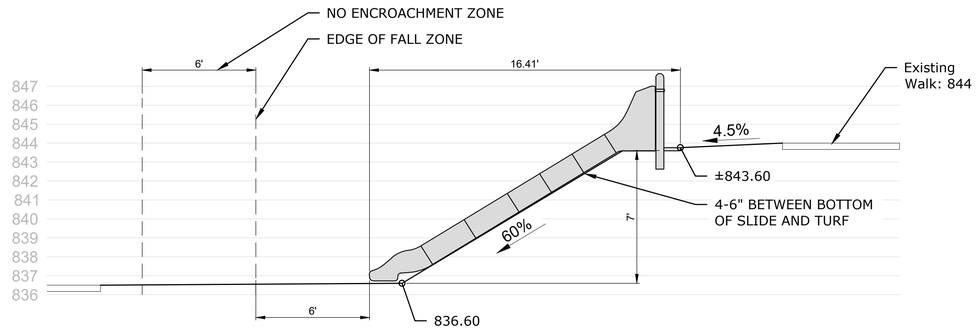
PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME L200
SHEET 28 OF 31

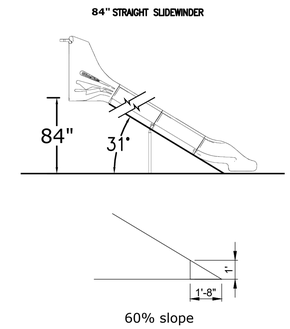


GENERAL NOTES:
1. ALL DIMENSIONS ARE IN INCHES [MM]
2. STOP VALVE NOT PROVIDED
3. MODELS MANUFACTURED FROM JANUARY 2025 TO PRESENT INCLUDE LARGER BOTTLE FILL AREA.
4. SEE CIVIL PLAN FOR WATER AND DRAINAGE CONNECTION

1 L201 DRINKING FOUNTAIN

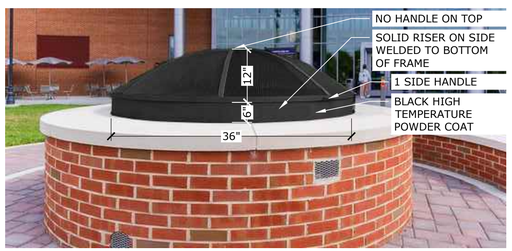
SCALE: NTS





2 L201 HILLSIDE SLIDE

SCALE: NTS



3 L201 FIRE PIT SCREEN

SCALE: NTS

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THE COMMONS AT HIGHLAND HEIGHTS
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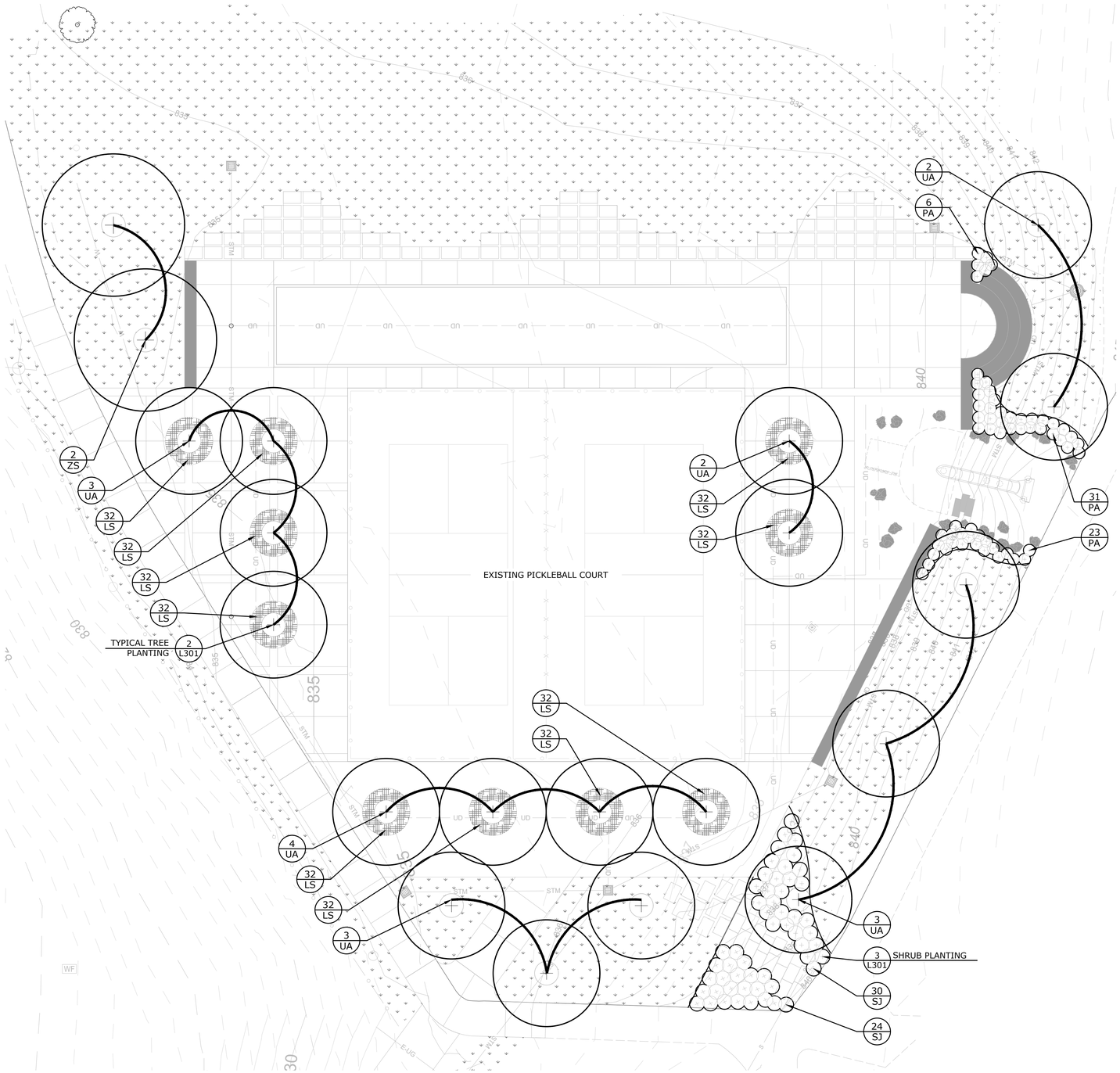
HIGHLAND HEIGHTS, KY

FURNISHING DETAILS

PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME L201
SHEET 29 OF 31



1 L300 **PLANTING PLAN**

SCALE: 1" = 10'-0"

GRAPHIC SCALE
5 2.5 0 5 10
(IN FEET)
1 inch = 10 ft.

PLANTING NOTES

1. FINAL GRADING AND SITE PREPARATION SHALL BE COMPLETED PRIOR TO PLANTING. THIS SHOULD INCLUDE DRAINAGE PER THE GRADING PLAN, REMOVAL OF MISCELLANEOUS DEBRIS, ELIMINATION OF EXISTING PLANT MATERIAL AS DIRECTED, AND PLACEMENT OF ADDITIONAL TOPSOIL REQUIRED FOR PLANT ESTABLISHMENT.
2. COORDINATE ALL ELECTRICAL UTILITIES & DRAINAGE STRUCTURES WITH PLANTINGS; CONTRACTOR TO NOTIFY OWNER AND LANDSCAPE ARCHITECT OF ANY CONFLICTS AND RESOLVE ISSUES IN THE FIELD.
3. CONTRACTOR TO STAKE ALL TREE LOCATIONS & PLANTING BED LINES PRIOR TO INSTALLATION. REVIEW STAKING LOCATIONS WITH OWNER AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
4. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADVISE THE OWNER OF ANY CONDITION FOUND ON THE SITE WHICH PROHIBITS THE INSTALLATION OF PLANTS AS SHOWN ON THE DRAWINGS.
6. PLANT SPACING IS AS INDICATED ON 'PLANT SCHEDULE' UNLESS OTHERWISE NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FULL COVERAGE IN ALL PLANTING AREAS.
7. CONTRACTOR TO WATER-IN ALL PLANTS ON THE SAME DAY THEY ARE INSTALLED. CONTRACTOR SHALL NOT INSTALL MORE PLANTS THAN CAN BE WATERED-IN ON THE SAME DAY.
8. APPLY SHREDDED HARDWOOD MULCH TO A DEPTH OF 2 INCHES IN ALL TREE AND SHRUB PLANTING AREAS.
9. TREES LOCATED IN AREAS WITH ADJACENT SEEDING OR SODDING SHOULD HAVE A MINIMUM 4 FOOT DIAMETER MULCH RING AROUND THE TRUNK TO A MAXIMUM DEPTH OF 2 INCHES.
10. LANDSCAPED AREAS SHALL BE KEPT FREE OF TRASH, LITTER, AND WEEDS AT ALL TIMES DURING CONSTRUCTION.
11. SEE SHEET L301 FOR TYPICAL PLANTING REQUIREMENTS.
12. SEE SPECIFICATIONS FOR ADDITIONAL PLANTING AND SOD REQUIREMENTS.
13. LAWN SOIL TO BE NATIVE TOP SOIL; PLANT BED AND TREE SOIL TO BE EVANS SUPERSOIL OR APPROVED EQUAL; SOIL DEPTH AS FOLLOWS: LAWN 4", PLANTING BEDS 24"', TREES 36".
14. SOD ALL DISTURBED AREAS.

PLANT SCHEDULE

KEY	SPECIES	SIZE	COMMENTS
SHADE TREES			
UA	*Ulmus americana 'Princeton'* Princeton Elm	3" CAL.	SPECIMEN; SINGLE STEM, B&B, LIMB UP TO 6'
ZS	*Zelkova serrata* Japanese Zelkova	3" CAL.	SPECIMEN; SINGLE STEM, B&B, LIMB UP TO 6'
PLANT BEDS			
LS	*Liriope spicata* Creeping Lilyturf	1 GAL.	18" O.C.
PA	*Pennisetum alopecuroides 'Hameln'* Hameln Fountain Grass	1 GAL.	24" O.C.
SJ	*Spirea japonica 'Little Princess'* Little Princess Spirea	2 GAL.	30" O.C.

* BID ALTERNATE: SEED ALL DISTURBED AREAS.

LEGEND

KEY	VEGETATION TYPE
	RELOCATED EXISTING TREE
	SHADE TREE
	PLANT BED
	SOD

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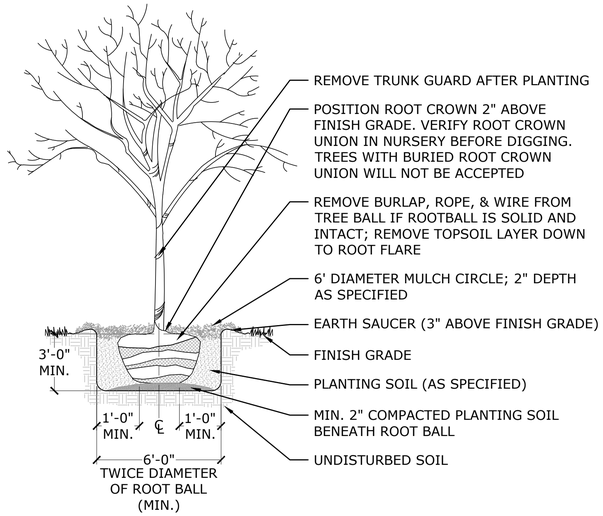
THE COMMONS AT HIGHLAND HEIGHTS
CENTRAL COMMONS IMPROVEMENTS
HIGHLAND HEIGHTS, KY

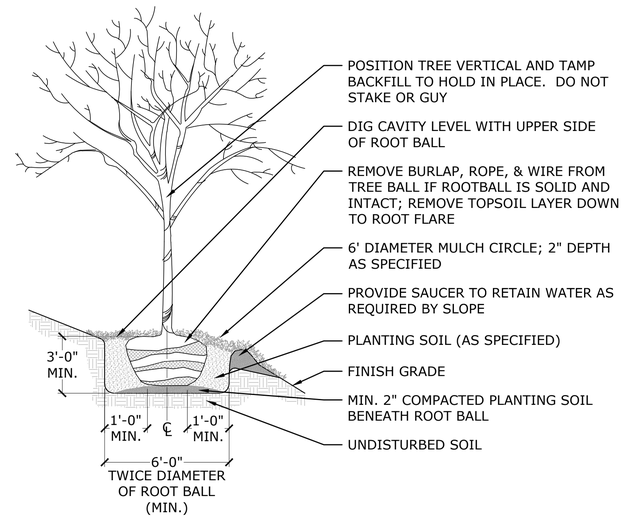
PLANTING

PROJECT NO. 241829
DISCIPLINE: LANDSCAPE
SHEET NAME: L300
SHEET 30 OF 31

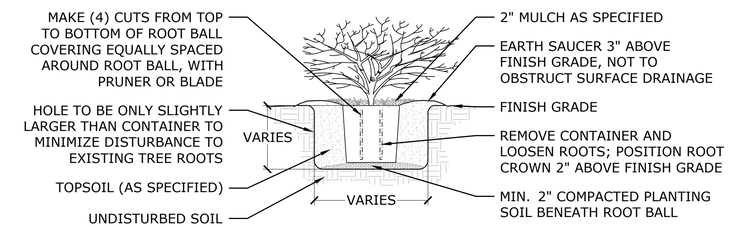


NOTES:
1. EXCAVATE A PIT FOR TREE WHICH IS THREE TIMES THE DIAMETER OF THE ROOTBALL AND THE SAME DEPTH-NO DEEPER. HANDLE THE TREE BY THE ROOTBALL, NOT THE TRUNK. BE SURE THE ROOTBALL RESTS ON SOLID GROUND.
2. BACKFILL WITH PLANTING SOIL.
3. SATURATE THE ENTIRE BACKFILL SOIL WITH WATER. ADD MORE SOIL IF NEEDED TO COMPENSATE FOR SETTLING.
4. MULCH: COVER PLANTING SOIL WITH 2 INCHES OF MULCH. LEAVE GAP NEAR THE TRUNK. REPLACE AS NEEDED.
5. PRUNE ONLY BROKEN OR BADLY DEFORMED BRANCHES TO RETAIN SHAPE OF THE SPECIES. PRUNE OUT SECONDARY AND COMPETING GROWTH. DO NOT SHEAR. DO NOT CUT LEADER. BEGIN A REGULAR PRUNING PROGRAM THE SECOND YEAR AFTER PLANTING.
6. CHAFING GUARDS: REMOVE GUARDS AS SOON AS THE TREE CAN STAND ALONE ABOUT 3 MONTHS OR LONGER IF NEEDED.

1 / L301 TYPICAL TREE PLANTING
SCALE:1/4" = 1'-0"

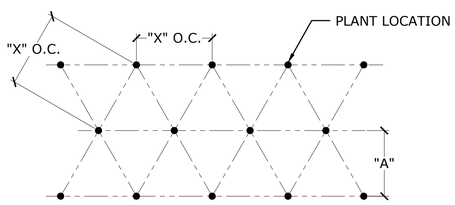


2 / L301 TREE PLANTING ON SLOPE
SCALE:1/4" = 1'-0"



NOTES:
1. DO NOT EXCAVATE LARGE AREAS FOR BED PREP OR ROTOTILL AROUND EXISTING TREE/ROOTS.
2. COORDINATE ALL PLANTINGS UNDER DRIPLINE OR EXISTING TREES WITH CERTIFIED ARBORIST.
3. ADJUST LAYOUT AS NECESSARY TO AVOID ROOTS. DO NOT DAMAGE TRUNKS OR ROOTS.
4. HAND DIG ALL PLANT PITS.

3 / L301 TYPICAL SHRUB PLANTING
SCALE:1/2" = 1'-0"



SPACING SCHEDULE	
SPACING "X"	ROW "A"
8" O.C.	7"
12" O.C.	10 ½"
18" O.C.	15 ½"
24" O.C.	20 ½"
30" O.C.	26"
36" O.C.	31"
42" O.C.	3'-0"
5' O.C.	4'-4"

4 / L301 PLANT SPACING CHART
SCALE:1" = 1'-0"

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PLANTING DETAILS

PROJECT NO. 241829
DISCIPLINE LANDSCAPE
SHEET NAME L301
SHEET 31 OF 31