TRILOGY HEALTHCARE SERVICES, LLC.

VILLAS AND LEGACY VILLAGE CENTER AT CEDAR CREEK 18275 SOUTH BURR STREET TOWN OF LOWELL, COUNTY OF LAKE, STATE OF INDIANA

BENCHMARKS

BM-A X-NOTCH IN CONCRETE SIDEWALK, 18.5 FEET SOUTH OF NORTH EDGE OF SIDEWALK AND 12.5 FEET EAST OF BACK OF EXISTING CURB

ELEVATION: 704.16 FEET NAVD-88

◆ CONTROL POINT #1 §" IRON PIN. CASH WAGGONER & ASSOCIATES LOCATED AT THE NORTH EAST PROPERTY CORNER

NORTHING: 2200414.70 EASTING: 2866125.95

◆ CONTROL POINT #2

OF EXISTING UTILITY POLE

ELEVATION: 703.82 FEET NAVD-88

§" IRON PIN. CASH WAGGONER & ASSOCIATES LOCATED AT THE SOUTH WEST PROPERTY CORNER

BM-B X-NOTCH IN CONCRETE SIDEWALK, 1.4 FEET NORTH

OF SOUTH EDGE OF SIDEWALK AND 30.6 FEET NORTHEAST

NORTHING: 2199984.57 EASTING: 2865507.81

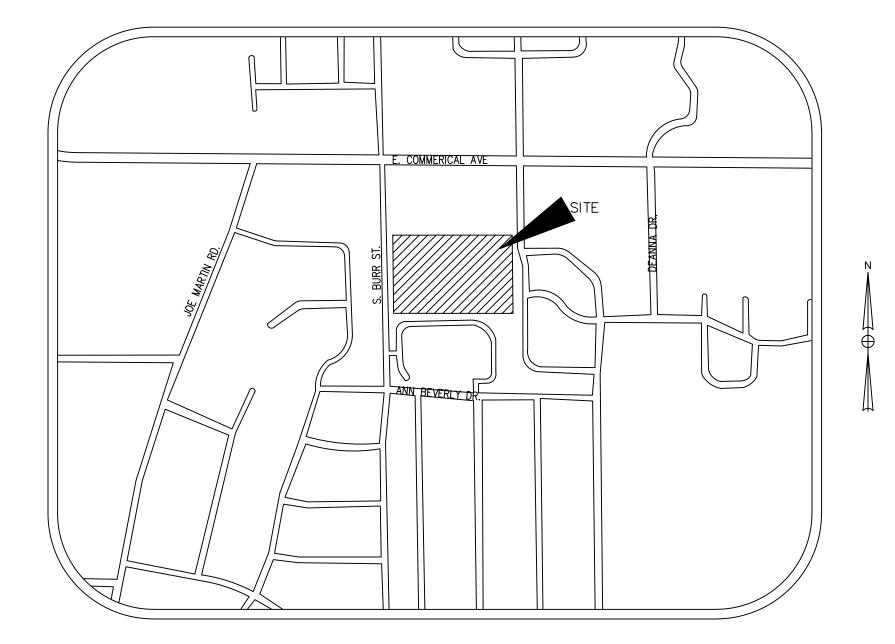
EARTHWORK NOTE

PROPOSED GRADING SCHEME DEPICTED HEREIN DOES NOT REPRESENT A 'BALANCED' SITE. CONTRACTOR SHALL INCLUDE ALL NECESSARY LABOR AND MATERIAL TO IMPORT OR EXPORT TOPSOIL AND ENGINEERING FILL MATERIAL TO ACHIEVE PROPOSED GRADES.

NEIGHBORING PARCELS NOTE

GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS SHALL NOT ACCESS NEIGHBORING PARCELS TO PERFORM WORK. CONTRACTOR SHALL NOTIFY TRILOGY REPRESENTATIVE IMMEDIATELY SHOULD THERE BE AN ENCROACHMENT OF NEIGHBORS PARCEL. ALL COST ASSOCIATED WITH CORRECTING OR REMEDIATING ISSUES WITH NEIGHBORS PROPERTY WILL BE THE SOLE RESPONSIBILITY OF THE

GENERAL CONTRACTOR IS RESPONSIBLE FOR MANAGING ALL STORM WATER RUNOFF ACCESSING AND LEAVING THE SITE. CONTRACTOR SHALL INSURE SEDIMENT CONTROL BEST MANAGEMENT PRACTICES ARE INSTALLED AND MAINTAINED PER THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL NOT ALLOW MUDDY WATER. SEDIMENT, MUD OR DEBRIS TO RUNOFF FROM SITE TO NEIGHBORS



NOT TO SCALE

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THE FOLLOWING CLOSE OUT DOCUMENT LIST IS SUPPLEMENTAL TO THE PROCEDURE OUTLINED IN THE ARCHITECTURAL PLANS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE FOLLOWING DOCUMENTS TO THE OWNER FOR REVIEW AND ACCEPTANCE PRIOR TO DEMOBILIZATION FROM THE SITE. ALL COSTS ASSOCIATED WITH REMOBILIZATION, MATERIAL, LABOR, ETC NEEDED TO RECTIFY CLOSE OUT ISSUES ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

ITEMS FOR SUBMITTAL	DATE SUBMITTED TO ENGINEER (MSG)	DATE APPROVED BY ENGINEER (MSG)	DATE SUBMITTED TO OWNER (TRILOGY)	DATE APPROVED BY OWNER (TRILOGY)
1. WATERLINE DISINFECTION REPORT				
2. WATERLINE BACTERIA TESTING REPORT				
3. WATERLINE HYDROSTATIC/PRESSURE TESTING REPORT				
4. SANITARY SEWER MANDREL TEST REPORT				
5. SANITARY SEWER LEAK DOWN TEST REPORT				
6. SANITARY MANHOLE LEAK DOWN TEST REPORT				
7. SANITARY SEWER AS-BUILT VIDEO				
8. STORM SEWER AS-BUILT VIDEO				
9. DETENTION POND AS-BUILT SURVEY				
10. SITE AS-BUILT SURVEY				
11. CIVIL PUNCH WALK REPORT				

SUPPORTING DOCUMENT NOTES:

- 1. GEOTECHNICAL INVESTIGATION REPORT WAS PREPARED BY THE MANNIK & SMITH GROUP, INC DATED AUGUST 2020.
- 2. THE TOWN OF LOWELL BOARD OF ZONING APPEALS MEETING ON 11/12/2020 PASSED APPROVALS OF THE FOLLOWING: 2.1. SPECIAL USE VARIANCE AS IDENTIFIED IN THE TOWN OF LOWELL ZONING ORDINANCE 155.034(3)(a)(2) R4 DISTRICT AND LAND USE MATRIX 155.043 -RESIDENTIAL USE PETITION TO BUILD ASSISTED LIVING FACILITY ON PARCEL
- 3. CIVIL SPECIFICATIONS DATED 01/19/2021 PREPARED BY THE MANNIK & SMITH GROUP, INC.

APPROVALS

SIGNATURES BELOW SIGNIFY CONCURRENCE WITH THE GENERAL PURPOSE AND LOCATION OF THE PROPOSED PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE DESIGN ENGINEER PREPARING THE PLANS.

PLAN SET APPROVED BY:

TOWN OF LOWELL

UTILITY CONTACTS

SANITARY SEWERS LOWELL WASTE WATER DEPARTMENT 7500 BELSHAW ROAD LOWELL, IN 46356

ATTN: KEVIN GRAY TITLE: DIRECTOR OF PUBLIC WORKS PHONE: 219-696-5050 EMAIL: PUBLICWORKS@LOWELL.NET

STORM SEWERS
CITY OF LOWELL 7500 BELSHAW ROAD LOWELL. IN 46356 ATTN: KEVIN GRAY TITLE: DIRECTOR OF PUBLIC WORKS PHONE: 219-696-5050

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<u>CIVIL ENGINEER</u> THE MANNIK & SMITH GROUP, INC. 20600 CHAGRIN BLVD., SUITE 500 SHAKER HEIGHTS, OH 44122 ATTN: JEWELIE GUSTAFSON PHONE: 216-378-1490 JGUSTAFSON@MANNIKSMITHGROUP.COM

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PROJECT CONTACTS

<u>ARCHITECT - LEGACY VILLAGE</u> COOLER DESIGN 9135 NORTH MERIDIAN STREET, SUITE A1 INDIANAPOLIS, IN 46260 ATTN: BILL COOLER PHONE: 317-816-1144 BILL@COOLERDESIGN.COM

> MEP - LEGACY VILLAGE ADVANCED ENGINEERING CONSULTANTS 8606 ALLISONVILLE ROAD, SUITE 270 INDIANAPOLIS. IN 46250 ATTN: DAREN WADE PHONE: 317-386-5012 DARENW@AECMEP.COM





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ADD ALTERNATE

1. PAVEMENT DEMOLITION/REPLACEMENT FOR INSTALLATION OF SENIOR TV CONDUIT. SEE UTILITY PLAN.

- 2. ALL CONSTRUCTION WITHIN A DOT RIGHT OF WAY SHALL COMPLY WITH ALL DEPARTMENT OF TRANSPORTATION STANDARDS.
- 3. ALL CURB RAMPS, SIDEWALKS, AND PARKING AREAS REQUIRED FOR ACCESSIBILITY SHALL BE CONSTRUCTED IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE LATEST PUBLISHED ADA STANDARDS.
- 4. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION. ANY CONFLICT BETWEEN DRAWINGS AND THE SPECIFICATIONS SHALL BE CONFIRMED WITH THE CONSTRUCTION MANAGER PRIOR TO BIDDING.
- 5. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING. IF CONDITIONS ENCOUNTERED ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 6. SHOULD ANY UNCHARTED, OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA.
- 7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS FOR THE PROJECT AND NOTIFYING THE OWNER AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION.
- 9. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER, LOCAL MUNICIPALITY AND/OR UTILITY COMPANY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY OR PERMANENT SERVICE HAS BEEN PROVIDED.
- 10. CONTRACTOR TO COORDINATE TEMPORARY UTILITY OUTAGES WITH APPLICABLE UTILITY COMPANY AND CITY AND NOTIFY NEIGHBORING EFFECTED OWNERS NO LESS THAN 72 HOURS PRIOR TO PLANNED OUTAGE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO PERFORM ALL THE WORK. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- 11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATED AND LOCAL SAFETY REQUIREMENTS INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970. THE CONTRACTOR SHALL EXERCISE PRECAUTION ALWAYS FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT SHALL ALSO BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING THE REQUIREMENTS FOR CONFINED SPACES PER 29 CFR 1910.146.
- 12. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES. CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS.
- 13. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS. LANDSCAPED AREAS. ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER, LOCAL MUNICIPALITY, AND STATE.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF PEDESTRIANS AND VEHICLES CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS IN ACCORDANCE WITH INDOT REGULATIONS AND/OR AS REQUIRED OR DIRECTED BY THE SITE ENGINEER OR CONSTRUCTION MANAGER OR LOCAL GOVERNING AUTHORITIES. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM LOCAL MUNICIPALITY, COUNTY, OR OTHER GOVERNING AUTHORITY IS RECEIVED.
- 15. THE CONTRACTOR SHALL PROMDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.
- 16. THE OWNER AT ITS DISCRETION RESERVES THE RIGHT TO MODIFY THE DETAILS AND STANDARDS OF CONSTRUCTION FOR ALL PRIVATE FACILITIES FROM THAT INDICATED ON THE APPROVED PLAN, PROVIDED THAT THE ALTERNATE STANDARD COMPLIES WITH LOCAL CODE AND/OR UTILITY COMPANY REQUIREMENTS AND THE GENERAL DESIGN INTENT OF THE PROJECT IS NOT COMPROMISED.
- 17. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS AND PLAN SPECIFICATIONS TO THE OWNER AND LOCAL UTILITY COMPANIES AS REQUIRED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 15 WORKING DAYS FOR REVIEW.
- 18. INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT INDIANA 811 AT LEAST 72 HOURS BEFORE START OF WORK AND VERIFY ALL EXISTING UTILITY LOCATIONS.
- 19. ANY DEFECTS DISCOVERED IN NEW CONSTRUCTION, WORKMANSHIP, EQUIPMENT, OR MATERIALS SHALL BE REPAIRED, OR CORRECTED BY APPROVED METHODS AS DIRECTED BY AND AT NO ADDITIONAL COST TO THE OWNER.
- 20. ALL DISTURBANCE INCURRED TO CITY OR STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF THE LOCAL AND/OR STATE DOT.
- 21. THE LIMITS OF CLEARING AND GRADING SHALL BE FIELD STAKED 48 HOURS (2 WORKING DAYS) PRIOR TO THE PRE CONSTRUCTION MEETING. AREAS BEYOND THE LIMITS OF CLEARING AND GRADING SHALL NOT BE DISTURBED INCLUDING THE STOCKPILE OF ANY MATERIALS OR CONSTRUCTION TRAFFIC.
- 22. WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE PROJECT ENGINEER AND OWNER APPROVE THE METHOD AND MATERIALS TO BE INCORPORATED INTO THE
- 23. ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED ACCORDING TO THE CITY REQUIREMENTS.
- 24. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OR ITS REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL OR ANY OTHER MATERIAL THAT MAY CREATE A HEALTH RISK IS DISCOVERED ON SITE.
- 25. ANY TRAFFIC CONTROL REQUESTED OR REQUIRED BY THE CONTRACTOR WILL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 26. IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY, OR AS REQUIRED DURING THE WORK DAY.

- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALI MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.
- 28. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHT-OF-WAYS CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER.
- 29. WHERE CONFLICT ARISES BETWEEN ALL SPECIFICATIONS (BOOK OR PLAN BASED) INCLUDING CITY REQUIREMENTS, THE MORE STRINGENT SPECIFICATION SHALL PREVAIL.
- 30. FINAL CLEANUP: THE CONTRACTOR SHALL CLEAN-UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND SHALL RESTORE ALL SURFACES, STRUCTURES DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AND ALL APPLICABLE GOVERNMENTAL AND REGULATORY AGENCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS

INCLUDE ALL MATERIAL AND LABOR TO DO SO.

REQUIRED FOR DEMOLITION WORK.

- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH. DEBRIS, ORGANIC MATERIAL, AND TOPSOIL IN A LAWFUL MANNER AND SHALL
- THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND OWNER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT, AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- 11. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING, AND/OR ABATEMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY LISTED ON THE PLANS.
- 12. ALL DEMOLISHED MATERIALS SHALL BE TAKEN FROM THE SITE IMMEDIATELY (UNLESS OTHERWISE NOTED) AND DISPOSED OFF-SITE IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND ORDINANCES. NO BURNING OF ANY MATERIALS WILL BE ALLOWED ON OR OFF SITE.
- 13. MATERIALS NOTED ON THE PLANS TO BE SALVAGED TO OWNER SHALL BE STORED IN AREAS INDICATED ON THE PLANS, OR TO THE OWNERS SATISFACTION.
- 14. USE SUITABLE METHODS TO LIMIT DUST AND DIRT TO ADJACENT STRUCTURES OR PROPERTY. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE START OF THE DEMOLITION WORK.
- 15. THE CONTRACTOR SHALL PROTECT TREES, LANDSCAPING, SITE IMPROVEMENTS, AND OTHER ITEMS NOT SCHEDULED FOR CLEARING, OR THAT MIGHT BE DAMAGED BY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ANY ITEMS THAT ARE DAMAGED.
- 16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION, POLLUTION, AND DUST CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT. REFERENCE THE SWPPP PLAN, NOTES AND DETAILS.
- 17. THE BUILDING PAD AREA IS DEFINED AS THE AREA TWENTY (20) FEET OUTSIDE OF THE PROPOSED BUILDING FOOTPRINT, INCLUDING ATTACHED WALKWAYS, CANOPIES, SIDEWALKS, LOADING DOCKS, UTILITY PADS, AND ANY OTHER SUCH APPURTENANCES.
- 18. ANY AND ALL DAMAGE TO EXISTING PAVEMENT WITHIN THE LAYDOWN AREA SHALL BE
- 19. ALL UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION SHALL REMAIN INTACT. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE TO EXISTING UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION AT THEIR SOLE EXPENSE.
- 20. CONTRACTOR SHALL PERFORM ALL CLEARING, GRUBBING, REMOVAL OF TREES, STUMPS, VEGETATION, AND DEBRIS NECESSARY TO PERFORM THE WORK INDICATED HEREIN. THAT CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO ONLY THAT REQUIRED TO COMPLETE THE PROPOSED IMPROVEMENTS. NO CLEARED OR GRUBBED MATERIAL SHALL BE BURIED OR LEFT ON SITE.
- <u>AYOUT AND PAVING NOTE</u> ALL SITE DIMENSIONS ARE REFERENCED TO THE FACE OF CURBS OR EDGE OF PAVING UNLESS OTHERWISE NOTED. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE UNLESS OTHERWISE NOTED.
- 2. THE CONTRACTOR SHALL MAKE HIS OWN PROVISIONS TO PROVIDE A SITE STAGING AREA AND JOB TRAILER (IF REQUIRED) FOR THE PROJECT IMPROVEMENTS.
- 3. THE CONTRACTOR SHALL REFERENCE ALL IRON PINS OR MONUMENTS. IF ANY PINS OR MONUMENTS ARE DESTROYED OR DAMAGED BY THE CONTRACTOR, THEY SHALL BE ACCURATELY REPLACED BY A REGISTERED SURVEYOR IN THE STATE OF INDIANA AT THE COMPLETION OF THE PROJECT.
- 4. ALL PAYING MATERIALS FURNISHED AND WORK COMPLETED SHALL BE IN STRICT ACCORDANCE WITH DOT CONSTRUCTION AND MATERIALS SPECIFICATIONS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL SUBMIT A JOB-MIX FORMULA FOR THE BITUMINOUS PAVEMENT TO THE CONSTRUCTION MANAGER FOR REVIEW AND APPROVAL AT LEAST 14 DAYS PRIOR TO THE PLACEMENT OF BITUMINOUS PAVEMENTS.
- 5. ASPHALT SURFACE COURSE SHALL BE LAID WITH THE DIRECTION OF TRAFFIC FLOW IN ALL DRIVE LANES WITHIN PARKING FIELDS.
- 6. DO NOT PLACE MIX ON FROZEN OR WET SURFACES, OR WHEN PRECIPITATION IS OCCURRING.

7. DO NOT PLACE MIX WHEN AIR OR SURFACE TEMPERATURE IS BELOW THE FOLLOWING:

7.1. BINDER COURSE AND WALKS 40 °F 7.2. WEARING COURSE, ROADWAYS AND PARKING AREAS 50 °F

250 °F SHALL NOT BE USED.

- 8. ANY MATERIAL DELIVERED TO THE SPREADER HAVING A TEMPERATURE LOWER THAN
- 9. THE MINIMUM ROLLER WEIGHT FOR PAVEMENT SHALL BE TEN (10) TON. ALL COURSES SHALL BE COMPACTED TO A MINIMUM OF NINETY-THREE (93%) PERCENT OF THEORETICAL MAXIMUM DENSITY (TMD).
- 10. ALL PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO AASHTO AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS SHALL BE CONSTRUCTED OF FLAT SHEET ALUMINUM IN ACCORDANCE WITH STATE HIGHWAY SPECIFICATIONS. STEEL SIGN POSTS SHALL BE USED AND CONFORM TO ASTM A36 OR ASTM A441 AND SHOULD BE GALVANIZED IN ACCORDANCE WITH AASHTO M111.
- 11. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS. PAVEMENT MARKINGS SHALL BE APPLIED PER MANUFACTURER RECOMMENDATIONS. APPLY PAINT TO CLEAN, DRY SURFACES TO YIELD SHARP DEFINITION OF EDGES. AIR TEMPERATURE 50°F MINIMUM. APPLY TWO (2) COATS.
- 12. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH DOT CONSTRUCTION AND MATERIALS SPECIFICATIONS AND SHALL BE EITHER COLD LAID PLASTIC TAPE OR PAINTED AS DESIGNATED ON THE PLANS OR PAVEMENT MARKING DETAILS.
- 13. THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS IN A METHOD APPROVED BY DOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.
- AND ANY PART OF A LIGHT POLE OR TRAFFIC SIGN.

14. A MINIMUM CLEARANCE OF 2 FEET SHALL BE MAINTAINED FROM THE FACE OF CURB

- 15. CONTRACTOR SHALL SAW-CUT IN A NEAT, STRAIGHT LINE FOR SMOOTH TRANSITIONS AT TIE-INS TO EXISTING EDGES OF PAVEMENT AND AT COLD JOINTS OF RECENTLY PAVED PAVEMENT.
- 16. JOINTS OR SCORE MARKS ARE TO BE SHARP AND CLEAN WITHOUT SHOWING EDGES OF JOINTING TOOL.

- 17. CONTRACTOR SHALL SAWCUT TIE-INS AT EXISTING CURBS TO ENSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAWCUT AND TRANSITION TO EXISTING PAVEMENT TO ENSURE POSITIVE DRAINAGE.
- 18. ALL CONCRETE SHALL BE 6% (+/-1%) AIR ENTRAINED, 3/4" AGGREGATE AND CONFORM TO A 28 DAY STRENGTH OF 4,000 PSI MINIMUM AND SHALL HAVE A MAXIMUM W/C OF 0.50. ALL CONCRETE SHALL BE MADE WITH TYPE I OR TYPE II CEMENT UNLESS OTHERWISE SPECIFIED.
- ALL SIDEWALKS SHALL HAVE A LIGHT BROOM FINISH. VERTICAL FACES SHALL BE
- 20. BASE AND ASPHALT THICKNESS SPECIFIED ARE THE MINIMUM REQUIRED.
- 21. ALL CONCRETE FOR CURBS SHALL BE AIR ENTRAINED TO BE 6% (+/-11/%). MADE WITH SAND AND GRAVEL AGGREGATE AND SHALL CONFORM TO A TWENTY EIGHT (28) DAY STRENGTH OF 4,000 PSI MINIMUM, SHALL HAVE A MAXIMUM W/C OF 0.40 AND
- 22. CONTRACTOR SHALL INSTALL ALL CURBING IN A TRUE LINE AND PROPER GRADE IN ACCORDANCE WITH THE APPROVED SITE PLANS AND APPROPRIATE STATE DOT SPECIFICATIONS. CURVED CURB SECTIONS SHALL BE USED FOR RADII LESS THAN 30'. ALL CURBING SHALL BE BACKFILLED WITH CLEAN AGGREGATE.
- 23. CONTRACTOR SHALL REPAIR ANY CURB DAMAGED DURING CONSTRUCTION ACTIVITIES.
- 24. BUILDING FOOTPRINTS ARE SHOWN FOR INTENT ONLY. SEE STRUCTURAL AND ARCHITECTURAL PLANS FOR BUILDING FOUNDATION AND WALL DIMENSIONS.
- 25. CONTRACTOR TO COORDINATE TRANSFORMER AND GENERATOR PAD DIMENSIONS AND SPECIFICATIONS WITH MEP PLANS AND ELECTRIC PROVIDER PRIOR TO CONSTRUCTION.
- 26. SEE ARCHITECTURAL PLANS FOR FROST SLAB DETAILS AND SPECIFICATIONS.
- 27. CONTRACTOR TO INSTALL ALL UTILITY PIPING, SEWERS, CONDUIT PRIOR TO PAYING OPERATIONS. CONTRACTOR TO COORDINATE ALL SITE UTILITIES WITH UTILITY PLAN, AND MEP PLANS.
- GENERAL GRADING & DRAINAGE NOTES: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING, OR TO BE REMOVED.
- MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE FRAMES AND COVERS, CATCH BASIN GRATES, VALVE BOXES, ETC., TO BE RAISED OR LOWERED, TO PROPOSED FINISHED GRADE, FLUSH WITH THE ADJACENT GRADE.
- 3. THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND NOTES.
- 4. THE CONTRACTOR SHALL BE ADVISED THAT ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THAT IT SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, AND MATERIALS OF CONSTRUCTION TO COMPLETE CONSTRUCTION AS DESIGNED. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OFF-SITE DISPOSAL OF ANY AND ALL EXCESS OR UNSUITABLE MATERIAL UNABLE TO BE PLACED ON SITE AND THE IMPORTATION OF ANY BORROW MATERIAL NECESSARY TO COMPLETE THE JOB.
- 5. SITE GRADING SHALL BE PERFORMED TO PROVIDE POSITIVE DRAINAGE TO CATCH BASINS OR DETENTION BASIN AND TO PRECLUDE THE PONDING OF WATER ON SITE.
- 6. VERIFY REQUIRED SPOT ELEVATIONS/GRADING IN THE VICINITY OF THE BUILDINGS WITH THE ARCHITECTURAL PLANS.
- 7. IT IS THE CONTRACTORS OBLIGATION AND RESPONSIBILITY TO CONFIRM/CONCUR WITH THE EXISTING GRADES SHOWN HEREIN. THE CONTRACTOR MUST CONFIRM ALL EXISTING GRADES PRIOR TO ANY/ALL EXCAVATION.
- . THE CONTRACTOR MUST DOCUMENT EXISTING GRADE DISPUTES BY PROVISION OF A TOPOGRAPHIC SURVEY BY A STATE OF INDIANA REGISTERED PROFESSIONAL SURVEYOR, PRIOR TO ANY EARTH DISTURBING ACTIVITIES. IN THE ABSENCE OF THE PROVISION OF TOPOGRAPHIC SURVEY BY THE CONTRACTOR, THE GRADES SHOWN HEREON WILL BE THE "TOPOGRAPHY OF RECORD" FOR ANY AND ALL SOIL VOLUME DISPUTES.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL IMPORT/EXPORT NECESSARY TO ACHIEVE THE PROPOSED GRADES.
- 10. ALL PROPOSED SLOPES 3:1 OR STEEPER AND ALL EARTHEN DRAINAGE WAYS SHALL RECEIVE JUTE OR EXCELSIOR MATTING AS PER INDOT 671 TYPE F.
- 11. ALL EXCAVATION UNDER OR NEAR EXISTING OR FUTURE PAVEMENT (INCLUDING SIDEWALKS). SUBJECT TO SETTLEMENT, WILL BE BACK FILLED WITH PREMIUM BACKFILL AS DEFINED HEREIN. AT QUESTIONABLE AREAS THE DECISION OF THE OF THE ENGINEER, OR HIS REPRESENTATIVE, WILL PREVAIL.
- 12. THE EXISTING TOPOGRAPHY SHOWN ON THESE PLANS IS THE SURVEY OF RECORD FOR THIS PROJECT. SHOULD THE CONTRACTOR TAKE EXCEPTION TO THE EXISTING TOPOGRAPHY AS SHOWN IN THESE PLANS THEY SHALL SUBMIT TOPOGRAPHIC SURVEY PREPARED BY A REGISTERED PROFESSIONAL SURVEYOR DOCUMENTING THEIR EXCEPTION PRIOR TO INITIATION OF ANY EARTH MOVING ACTIVITIES. OTHERWISE THE TOPOGRAPHY CONTAINED WITHIN THESE PLANS IS ACCEPTED BY THE CONTRACTOR AND DEEMED ACCURATE FOR ALL GRADING AND SOILS MANAGEMENT ISSUES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING THE LINES AND GRADES ILLUSTRATED WITHIN THIS PLAN SET. THE CONTRACTOR IS TO INCLUDE ALL SOILS IMPORT OR EXPORT NECESSARY TO ATTAIN THE LINES AND GRADES ILLUSTRATED HEREIN WITHIN THE BASE BID OF THIS PROJECT WITH NO ADDITIONAL COST FOR SOILS IMPORT OR EXPORT.
- 14. GENERAL CONTRACTOR SHALL SPREAD TOPSOIL MATERIAL AS DEFINED IN CIVIL SPECIFICATIONS.
- GENERAL UTILITY NOTES:
- PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY COMPANY, LOCAL MUNICIPALITY, AND LOCAL COUNTY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING AND CONFIRMING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT INDIANA 811 AT LEAST 72 HOURS BEFORE START OF WORK AND AS NECESSARY INDIVIDUAL UTILITY PROVIDERS TO VERIFY ALL EXISTING UTILITY LOCATIONS.
- 3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
- 4. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SERVICE INSTALLATIONS AND CONNECTIONS AND MAIN AND SERVICE RELOCATIONS. THE CONTRACTOR SHALL COORDINATE THE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL SECURE ALL PERMITS AND PAY ALL FEES FOR CONNECTIONS. DISCONNECTIONS. RELOCATIONS. INSPECTIONS. AND DEMOLITION, AS NECESSARY.
- RELOCATION OF ANY UTILITY COMPANY FACILITIES TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY AND LOCAL MUNICIPALITY.
- 6. ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERALS SHALL CONFORM TO THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, APPLICABLE COUNTY

- AND LOCAL DEPARTMENTS, AND APPROPRIATE UTILITY COMPANY SPECIFICATIONS.
- 7. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS, ETC. WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNER, UTILITY COMPANIES, AND GOVERNING AUTHORITIES. THE CONTRACTOR SHALL INSTALL AS NECESSARY, TEMPORARY SITE LIGHTING, GAS, SANITARY, WATER, STORM, ELECTRIC, TELEPHONE, AND CABLE SERVICES TO SERVICE BUILDING(S) TO REMAIN OPEN.
- 8. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AND REPLACED IN ACCORDANCE WITH THE PAVEMENT REPAIR REQUIREMENTS OF LOCAL MUNICIPALITY AND THE DETAILS CONTAINED HEREIN.
- 9. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
- 10. THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN MAX, 8" LOOSE LIFTS TO 95% OF THE MAXIMUM DRY DENSITY PER ASTM D1557, ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED IN AREAS OF ROCK EXCAVATION.
- 11. CONTRACTOR TO PROVIDE SLEEVES UNDER FOOTINGS OR THROUGH FOUNDATIONS FOR UTILITY CONNECTIONS.
- 12. CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC. AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING/CANOPY STUB-OUTS, INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM.
- 13. UTILITY CONDUIT PIPE SHALL BE SCHEDULE 80 PVC AND/OR AS REQUIRED BY THE LOCAL UTILITY COMPANY.
- 14. SERVICES MAY BE INSTALLED IN A COMMON TRENCH WITH 12" CLEAR SPACE BETWEEN SERVICES. MINIMUM COVER SHALL BE 36" ON ELECTRIC CONDUITS AND 24" ON TELEPHONE AND CABLE CONDUITS. SERVICES SHALL BE MARKED WITH MAGNETIC LOCATOR TAPE.
- 15. GALVANIZED STEEL ELECTRICAL CONDUIT SHALL BE USED AT POLE AND TRANSFORMER LOCATIONS. INSTALL HAND HOLES AS REQUIRED.
- 16. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION PRIOR TO APPROVAL FOR BACKFILL, IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY, LOCAL MUNICIPALITY. AND OR LOCAL COUNTY REQUIREMENTS.
- 17. MANHOLE RIMS AND CATCH BASIN GRATES SHALL BE SET TO ELEVATIONS SHOWN. SET ALL EXISTING MANHOLE FRAMES AND COVERS, CATCH BASIN GRATES, VALVE BOXES, ETC., TO BE RAISED OR LOWERED, TO PROPOSED FINISHED GRADE, FLUSH WITH THE ADJACENT GRADE.
- 18. THE CONTRACTOR SHALL RESTORE ANY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. DISTURBED DURING CONSTRUCTION TO THE ORIGINAL CONDITION OR BETTER.

19. THE CONTRACTOR MAY SUBSTITUTE MASONRY STRUCTURES FOR PRECAST STRUCTURES

IF APPROVED BY THE CONSTRUCTION MANAGER AND IF ALLOWED BY THE

- MUNICIPALITY. 20. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS NECESSARY OF MATERIALS AND STRUCTURES TO THE CONSTRUCTION MANAGER AND LOCAL GOVERNING AGENCIES FOR
- REVIEW AND APPROVAL PRIOR TO FABRICATION. 21. IN THE EVENT OF CONFLICT OF ANY REQUIREMENTS OR PROVISIONS OF THE WORK INDICATED HEREON, THE SITE ENGINEER SHALL BE NOTIFIED FOR A DETERMINATION OF
- 22. ALL UTILITIES SHALL BE CONSTRUCTED, INSPECTED, AND TESTED IN ACCORDANCE WITH CITY STANDARDS AND REGULATIONS. THE CITY ENGINEERING DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE FOR SCHEDULING OF AN INSPECTOR.
- 23. PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE CITY ENGINEERING DEPARTMENT AND THE CONSTRUCTION MANAGER.
- 24. TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AT ALL TIMES.

THE PLAN REQUIREMENTS AND INTENT THEREOF.

- 25. CONTRACTOR TO INSTALL SHORING AND/OR TEMPORARY STRUCTURES TO PROMDE SUPPORT TO ANY AND ALL EXISTING AFFECTED UTILITIES PER UTILITY PROVIDER'S MINIMUM STANDARDS.
- 26. CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS. FLECTRICAL AND TELECOMMUNICATIONS CONDUIT WITH M.E.P. PLANS PRIOR TO START OF CONSTRUCTION.
- 27. PREMIUM BACKFILL: TRENCH BACKFILL UTILIZING PREMIUM BACKFILL WILL CONSIST OF COARSE SAND, COARSE-GRADED AGGREGATE, FINE GRADED AGGREGATE, OR A MIXTURE OF THE TWO. PREMIUM BACKFILL WILL BE USED FOR ALL AREAS UNDERNEATH OR NEAR PAVEMENT OR A BUILDING STRUCTURE AND TO WITHIN ±5 FEET THEREOF. PARTICLE SIZE SHOULD NOT BE ANY LARGER THAN 2 🖟 -INCHES OR A MAXIMUM OF $\frac{1}{2}$ -THE-LOOSE-LIFT THICKNESS. PREMIUM BACKFILL DOES NOT HAVE TO BE LIMESTONE MATERIALS BUT CAN BE ANY INERT SOLID ROCK OR GRANULAR MATERIAL SUCH AS SAND, RIVER-RUN STONE OR RECYCLED CONCRETE WITH A FINE-TO-COARSE GRADATION CAPABLE OF A REASONABLE DEGREE OF INTERLOCKING AND BEING COMPACTED IN A TRENCHED INSTALLATION SUCH THAT SETTLEMENT ABOVE THE TRENCH DOES NOT OCCUR. SLAG IS NOT PERMITTED. CONTRACTOR SHALL SUBMIT GRADATION AND MATERIALS SPECIFICATIONS OR PREMIUM BACKFILL MATERIAL BETWEEN 4" TO 12" THICK, AND COMPACT EACH LIFT WITH A "HO-PAC" OR SIMILAR COMPACTIVE EFFORT AS APPROPRIATE FOR THE INSTALLED LOOSE-LIFT THICKNESS TO OBTAIN 98% STANDARD PROCTOR DENSITY OF THE PREMIUM BACKFILL PRIOR TO PLACEMENT OF THE NEXT LIFT. PREMIUM BACKFILL IS USED TO BE USED FULL-DEPTH TO PAVEMENT SUBGRADE ELEVATION OR TO FOUNDATION—BASE ELEVATION SUCH THAT THE PAVEMENT SECTION OR FOUNDATION BEARS DIRECTLY ON THE PREMIUM BACK.

STORM SEWER AND LATERAL NOTES:

- CURB INLETS ARE TO BE ALIGNED WITH FACE OF CURBS.
- NORTHINGS AND EASTINGS FOR STORM STRUCTURES GIVEN IN SITE PLANS ARE UNDERSTOOD TO REPRESENT THE CENTER OF THE INLET STRUCTURE.
- ALL INLETS/MANHOLES, UNLESS STATED OTHERWISE IN STRUCTURE SCHEDULE SHALL BE AS FOLLOWS OR APPROVED EQUAL:
- INLETS IN PAVEMENT: TYPE A CONCRETE CATCH BASIN (CB) WITH TYPE 2 GRATE CASTING
- <u>INLETS IN GRASS:</u> NYLOPLAST INLET (OR APPROVED EQUAL)
- MANHOLES: INDOT TYPE C MANHOLE (MH) WITH TYPE 2 GRATE CASTING
- 4. STORM SEWER MAINLINE SHALL BE A MINIMUM 12-INCH HDPE PIPE.
- 5. STORM SEWER LATERALS SHALL BE 6-INCH POLY VINYL CHLORIDE (PVC) PIPE. PVC PIPE FOR STORM SHALL HAVE BUILT-IN RUBBER GASKET JOINTS. PVC PIPE SHALL CONFORM TO ASTM D3034 SDR35 WITH COMPRESSION JOINTS AND APPROPRIATE FITTINGS. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL, ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE.
- 6. ALL STORM SEWERS, INLET BASINS AND MANHOLES SHALL BE JETTED, VACUUMED, AND CLEANED PRIOR TO ACCEPTANCE BY OWNER.
- CONTRACTOR SHALL INSTALL THE STORM LATERAL TO WITHIN 5' OF THE LATERAL LOCATION AT THE UNIT. CONTRACTOR SHALL MARK THE END OF EACH LATERAL WITH A CONTINUOUS 4"X4" WOODEN STAKE, FROM THE LATERAL BELOW GRADE TO 2'-"6 ABOVE GRADE. STAKE SHALL BE PAINTED GREEN AND LABELED "STORM".

SANITARY SEWER AND LATERAL NOTES:

- SANITARY MAINLINE SHALL BE 8-INCH DIAMETER, POLYMNYL CHLORIDE (PVC) PIPE, CONFORMING TO ASTM D3034, SDR 26 WITH RUBBER GASKET JOINTS. PIPE SHALL BE CONSTRUCTED AT A MINIMUM 0.4% SLOPE INSTALLED IN ACCORDANCE WITH DETAIL.
- SANITARY LATERAL SHALL BE A MINIMUM 6-INCH DIAMETER PVC PIPE, ASTM D3034 SDR 26 WITH RUBBER GASKET JOINTS. LATERALS SHALL BE CONSTRUCTED WITH A MINIMUM 1% SLOPE, AND HAVE A MINIMUM OF 3 FT. COVER. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL, ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE. CONTRACTOR SHALL INSTALL THE SANITARY LATERAL TO WITHIN 5' OF THE LATERAL LOCATION AT THE UNIT. CONTRACTOR SHALL MARK THE END OF EACH LATERAL WITH A CONTINUOUS 4"X4" WOODEN STAKE, FROM THE LATERAL BELOW GRADE TO 2'-"6 ABOVE GRADE. STAKE SHALL BE PAINTED PINK AND LABELED "SANITARY".

3. SANITARY SEWER MANHOLE:

- 3.1. MANHOLE SECTION AND CONSTRUCTION SHALL CONFORM TO ASTM C-478.
- EAST JORDAN IRON WORKS 1040 HEAVY DUTY CASTING AND COVER WITH TYPE A SOLID COVER WITH "SANITARY SEWER" ON COVER.

4. MAINLINE AND MANHOLE TESTING:

- 4.1. MAINLINE DEFLECTION TEST TEST FLEXIBLE PIPING FOR DEFLECTION THAT PREVENTS PASSAGE OF BALL OR CYLINDER OF SIZE NOT LESS THAN 95 PERCENT OF PIPING DIAMETER. DEFLECTION OF 5% SHALL NOT BE EXCEEDED. TEST SHALL BE CONDUCTED 30 DAYS AFTER FINAL BACKFILL HAS BEEN PLACED OVER PIPE.
- MAINLINE AIR TESTING AS A MINIMUM TESTING OF PVC PIPE SHALL COMPLY WITH ASTM
- MANHOLE TESTING AIR TESTING SHALL CONFORM TO ASTM C-1244
- PROVIDE TEST RESULTS TO OWNER AND TOWN UPON COMPLETION.

5. SANITARY GREASE INTERCEPTOR:

CONTRACTOR SHALL SEE MEP PLANS FOR MODEL AND SPECIFICATIONS OF REQUIRED SANITARY GREASE INTERCEPTOR.

INDIANA AMERICAN WATER INSTALLATION NOTES:

- INSTALLATION OF WATER MAIN, FITTINGS, VALVES, FIRE HYDRANTS, AND APPURTENANCES SHALL BE IN ACCORDANCE WITH INDIANA AMERICAN WATER STANDARDS AND SPECIFICATIONS, LATEST REVISION.
- 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION, SIZE AND MATERIAL OF THE EXISTING WATER MAIN PRIOR TO CONSTRUCTION.
- . AT THE POINT OF CONNECTION TO EXISTING WATER MAINS, A TAPPING SLEEVE AND VALVE MAY BE REQUIRED TO BE INSTALLED IF THE EXISTING WATER MAIN CANNOT BE SHUT DOWN WITHOUT IMPACTING CUSTOMERS, TO BE DETERMINED AT THE PRE-CONSTRUCTION MEETING.
- . FOR PVC C900 PIPE INSTALLATION: DR14 PIPE IS REQUIRED. DEFLECTION OF PIPE JOINTS AND BENDING OF PIPES ARE NOT PERMITTED. ALL ANGLES SHALL BE MADE WITH PROPER FITTINGS. WHEN RESTRAINT OF PIPE-TO-PIPE JOINTS ARE REQUIRED, ALL JOINTS SHALL BE RESTRAINED WITH EXTERNAL SPLIT SERRATED RESTRAINT HARNESSES. SELECT FILL MATERIAL REQUIRED FOR BEDDING AND EMBEDMENT REGARDLESS OF PIPE'S PROXIMITY TO PAVEMENT. PVC C900 PIPE IS NOT ALLOWED FOR PIPES LARGER THAN 12-INCH.
- FOR DUCTILE IRON PIPE INSTALLATION: THICKNESS CLASS 52 FOR TYPICAL DISTRIBUTION MAINS 12-INCH NOMINAL SIZE AND SMALLER. WHEN RESTRAINT OF PIPE-TO-PIPE JOINTS ARE REQUIRED, PUSH-ON RESTRAINING GASKETS WITH INTEGRAL STAINLESS STEEL LOCKING SEGMENTS ARE PERMITTED ON PIPE-TO-PIPE CONNECTIONS 12-INCH NOMINAL SIZE AND SMALLER ONLY. PIPE-TO-PIPE CONNECTIONS GREATER THAN 12-INCH NOMINAL SIZE SHALL BE RESTRAINED PER SPECIFICATION
- FOR HDPE PIPE INSTALLATION: DIPS DR11 FOR SIZES 4 INCH AND LARGER, IPS DR9 FOR 3 INCH, AND CTS DR9 FOR SIZES SMALLER THAN 3 INCH. HDPE BENDS, TEES, AND CROSSES ARE NOT ACCEPTABLE. PRESSURE TESTING OF HDPE PIPE DIFFERS FROM DUCTILE IRON AND PVC PIPE, SEE SPECIFICATION SECTION 15030-3.03. PIPE FUSION MUST BE COMPLETED BY CERTIFIED TECHNICIAN; CERTIFICATION TO BE SUBMITTED PRIOR TO PRE- CONSTRUCTION MEETING.
- ENCASE ALL DUCTILE IRON PIPING, DUCTILE IRON FITTINGS, VALVES, HYDRANTS, RESTRAINT HARNESSES, AND ALL OTHER METALLIC APPURTENANCES IN 12MIL BLUE POLYETHYLENE.
- ALL FIRE HYDRANT LATERALS SHALL BE DUCTILE IRON PIPE.
- 9. ALL MJ T-BOLTS AND FLANGE BOLTS SHALL HAVE XYLAN OR FLUOROKOTE #1 CORROSION RESISTANT COATING.
- 10. ALL FITTINGS SHALL BE RESTRAINED USING MJ RETAINER GLANDS.
- THRUST RESTRAINT TO BE ACHIEVED THROUGH THE RESTRAINT OF PIPE JOINTS AND FITTINGS. THRUST BLOCKS ARE NOT AN ACCEPTABLE MEANS OF THRUST RESTRAINT, EXCEPT WHEN REQUIRED IN CONNECTING TO EXISTING WATER MAIN AND FOR INSTALLATION OF FIRE HYDRANTS. SEE SPECIFICATION SECTIONS 15105 AND 15120 FOR PIPE JOINT RESTRAINT REQUIREMENTS FOR DUCTILE IRON AND PVC
- 12. COPPER-CLAD STEEL TRACER WIRE REQUIRED ON INSTALLATION OF ALL PIPE. TRACER WIRE SHALL BE TAPED TO PIPE OR POLYETHYLENE ENCASEMENT AT A MINIMUM SPACING OF 10-FEET. SPLICES SHALL BE ENCASED IN WATERPROOF CONNECTORS. WIRE AND CONNECTORS ARE TO BE COMPATIBLE AND FROM THE SAME MANUFACTURER. DETECTABLE TAPE IS REQUIRED ONE FOOT ABOVE PIPE. CONTINUITY SHALL BE TESTED AFTER COMPLETION OF BACKFILL.
- 13. SELECT FILL MATERIAL REQUIRED FOR FINAL BACKFILL WHEN WITHIN 5-FEET OF PAVEMENT PER SPECIFICATION SECTION 02210.
- 4. MAINTAIN THE REQUIRED 10-FEET OF HORIZONTAL SEPARATION AND 18-INCHES OF VERTICAL SEPARATION FROM SANITARY AND STORM SEWERS. MAINTAIN 8-FEET OF HORIZONTAL SEPARATION FROM SANITARY AND STORM STRUCTURES. SEE 327 IAC 8-3.2-9 OF THE INDIANA ADMINISTRATIVE CODE FOR MORE INFORMATION.
- 15. MAINTAIN MINIMUM COVER DEPTH OF X" AND A MAXIMUM OF X"+24.

15.2. 42" MIN. FOR SOUTHERN INDIANA AND NEWBURGH

15.1. X" PER 327 8-3.2-17

ELECTRIC SERVICE NOTES:

- 1. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIAL AND LABOR TO INSTALL ELECTRICAL APPURTENANCES THAT ELECTRICAL COMPANY IS NOT RESPONSIBLE TO INSTALL.
- 2. REFERENCE SITE ELECTRICAL PLAN AND CONFIRM WITH ELECTRICAL PROVIDER FOR LOCATION OF ELECTRIC CONDUIT FOR ALL SITE ELECTRICAL WORK.
- 3. CONTRACTOR TO SEE MEP SITE PLAN FOR ALL ELECTRICAL CONDUIT RUNS PRIOR TO START OF CONSTRUCTION.
- 4. GENERAL CONTRACTOR SHALL REFERENCE THE SITE ELECTRIC SPECIFICATIONS FOR RESPONSIBILITY OF

COMMUNICATION SERVICE NOTES

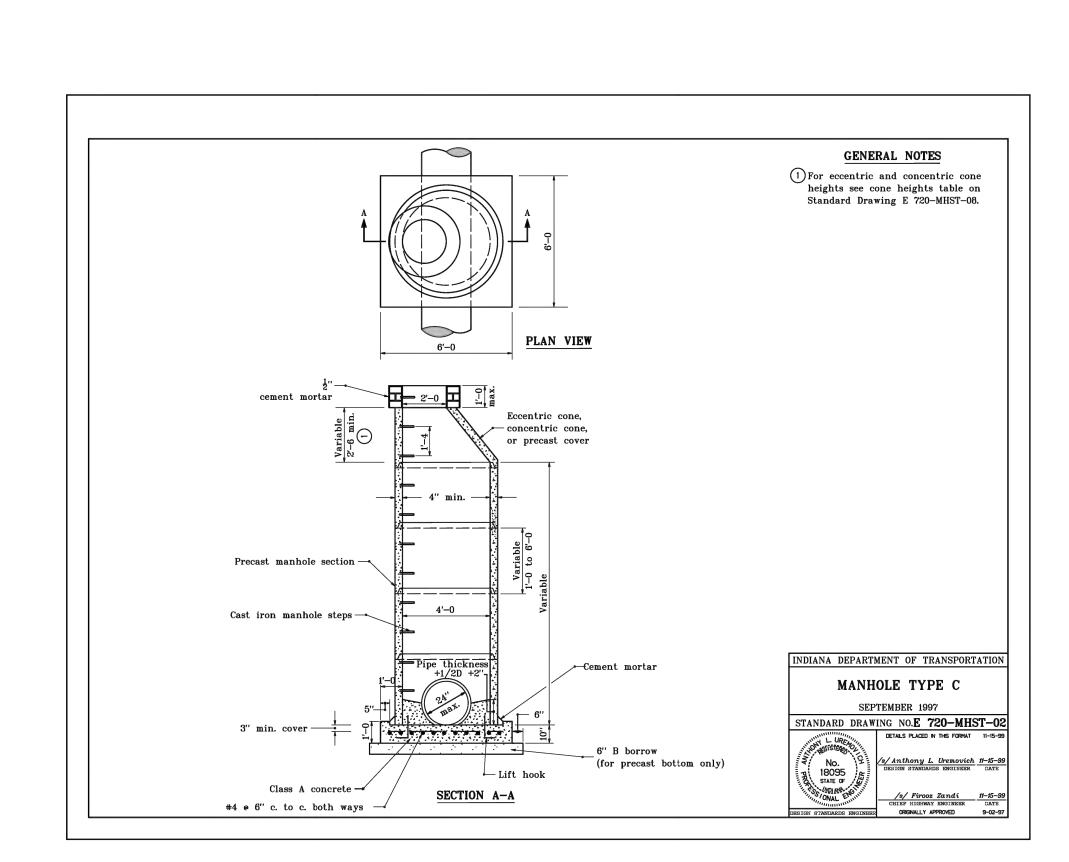
- CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR TO INSTALL NECESSARY COMMUNICATION APPURTENANCES THAT COMMUNICATION COMPANY IS NOT RESPONSIBLE TO INSTALL.
- REFERENCE SITE PLAN AND COMMUNICATION PROVIDER FOR LOCATION OF COMMUNICATION CONDUIT
- CONTRACTOR TO SEE MEP SITE PLAN FOR ALL COMMUNICATION CONDUIT RUNS PRIOR TO START OF

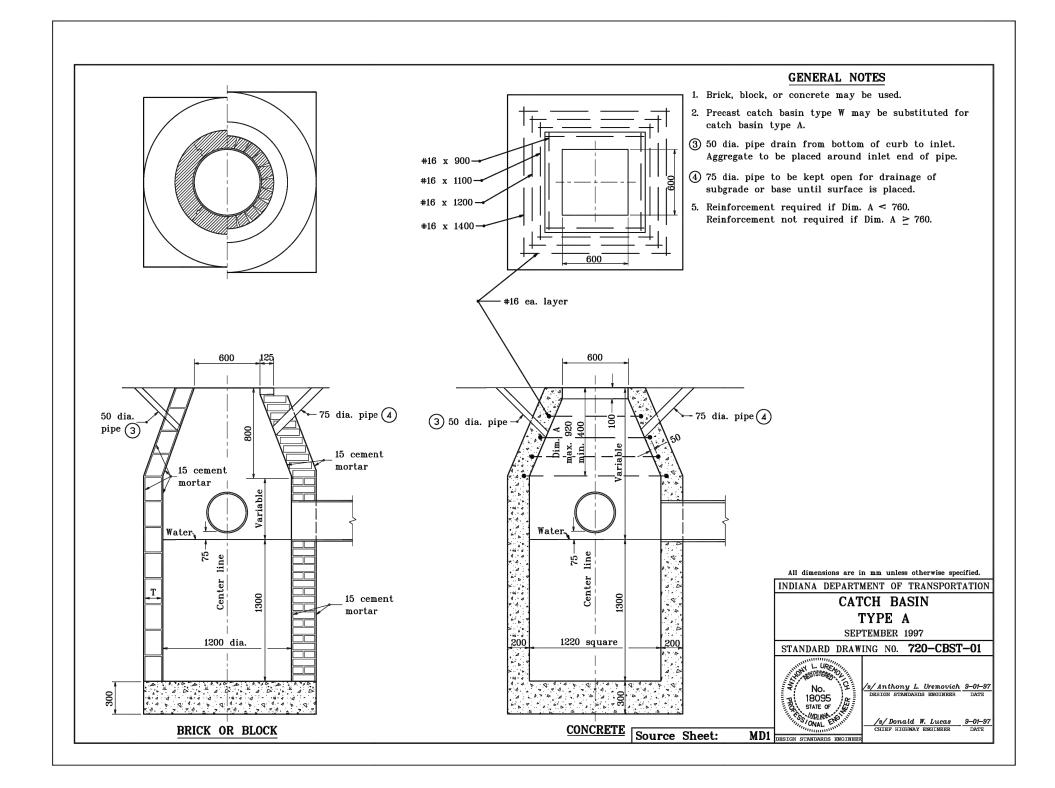
GAS UTILITY NOTES NOTES

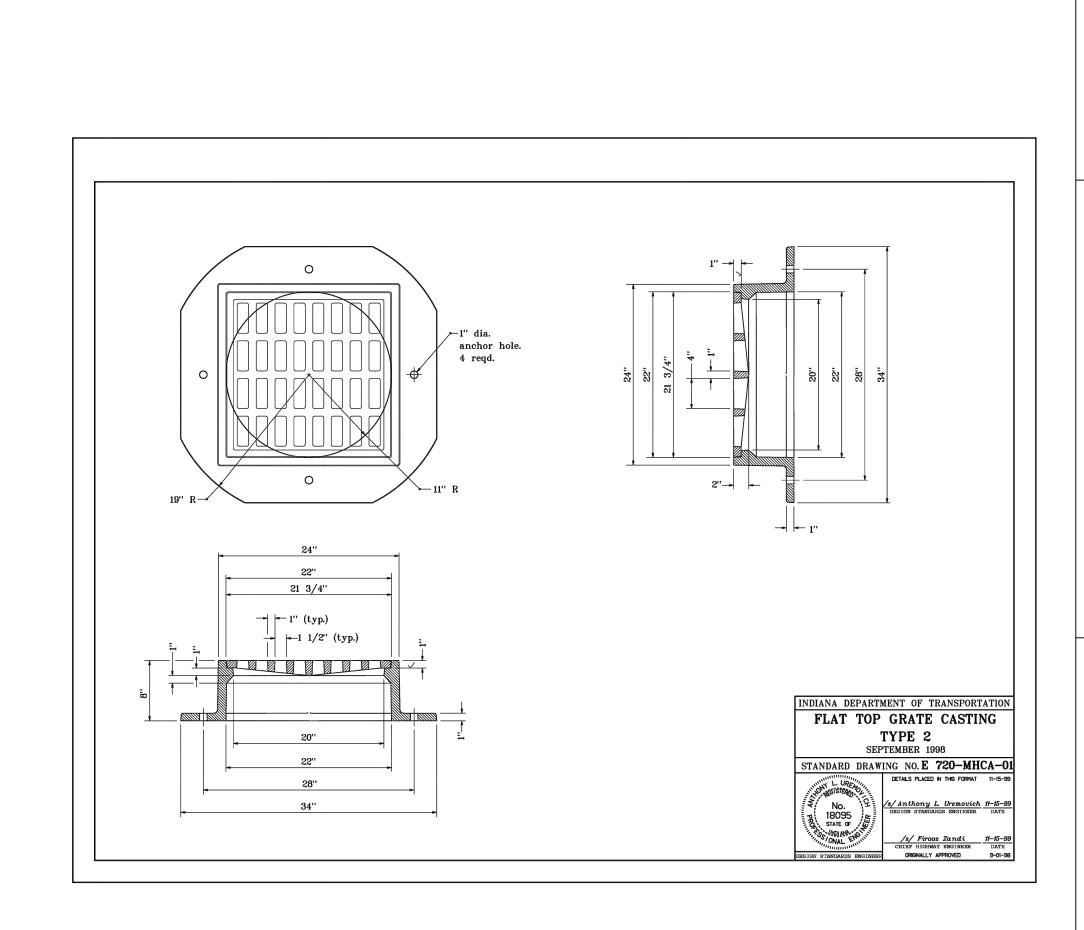
- CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR TO INSTALL NECESSARY GAS SERVICE AND APPURTENANCES THAT GAS COMPANY IS NOT RESPONSIBLE TO INSTALL.
- 2. REFERENCE SITE PLAN AND GAS PROVIDER FOR LOCATION OF GAS.
- 3. CONTRACTOR TO SEE MEP SITE PLAN FOR ALL GAS LINE PRIOR TO START OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL REFERENCE THE SITE NATURAL GAS SPECIFICATIONS FOR RESPONSIBILITY OF WORK.

SENIOR TV SERVICE

CONTRACTOR SHALL INSTALL 4" DIAMETER SCHEDULE 40 CONDUIT WITH APPROPRIATE CURVED RADIUS SWEEPS: BACKFILL AND REPAIR EXISTING CONDITIONS.







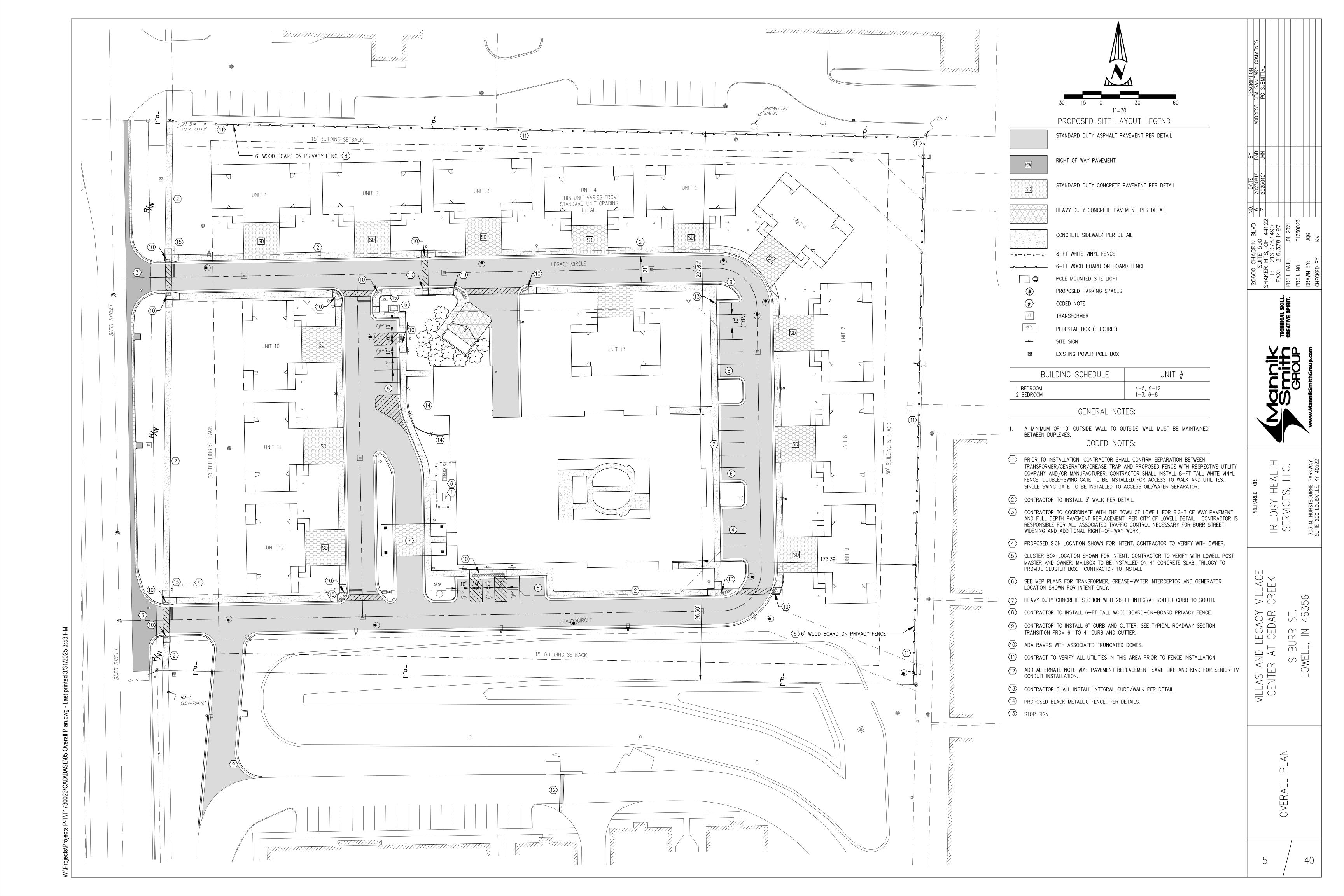


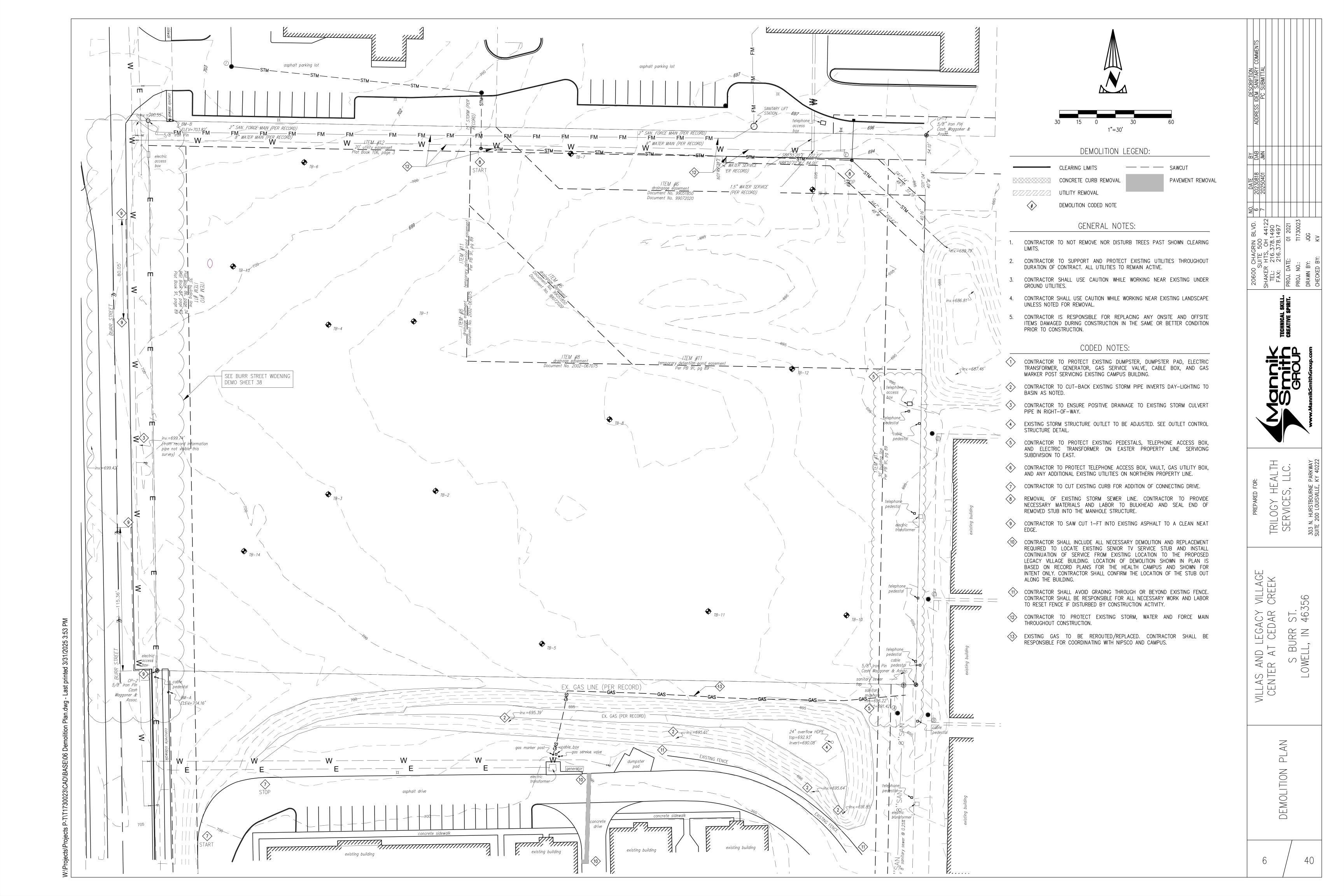
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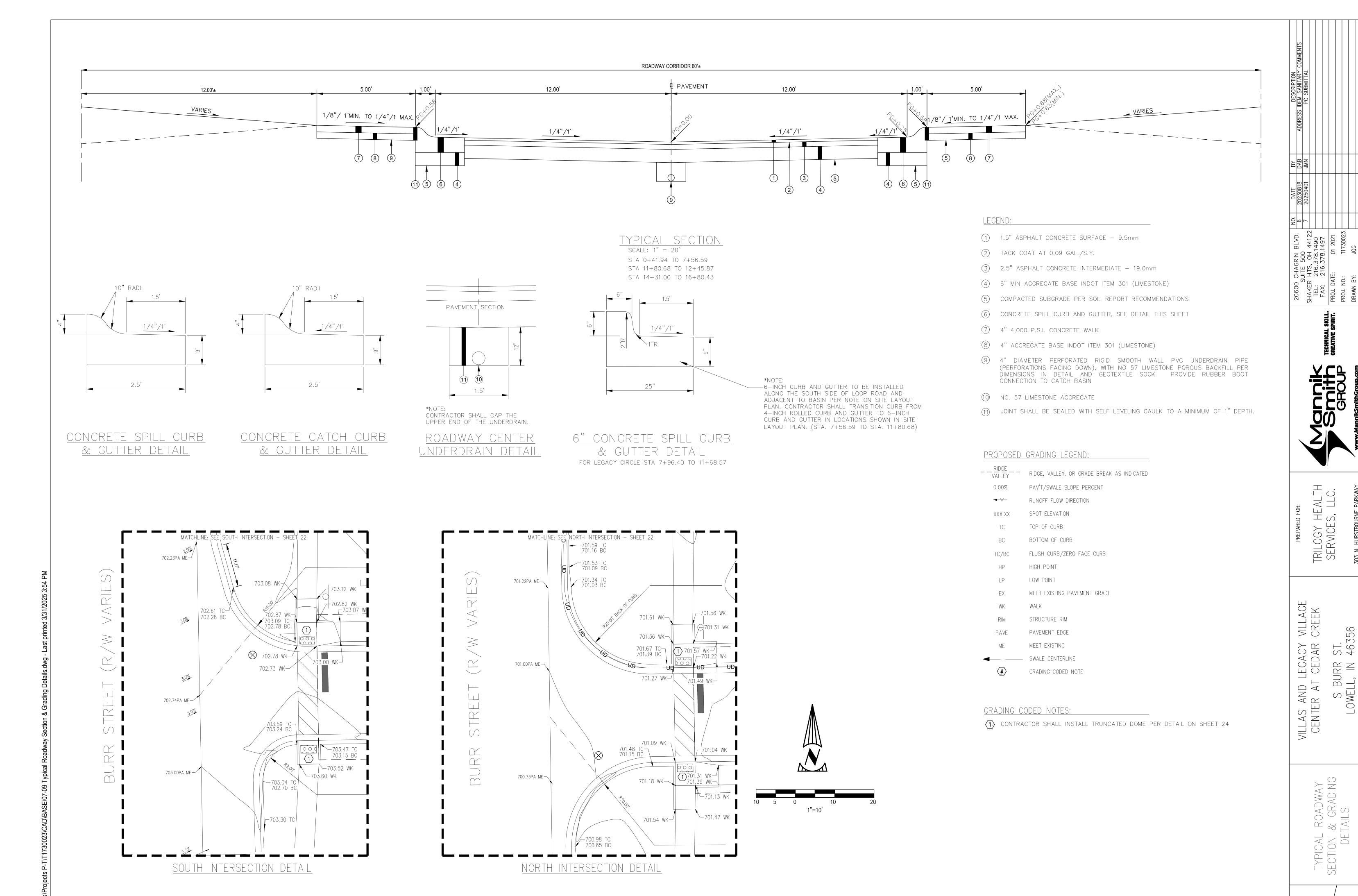
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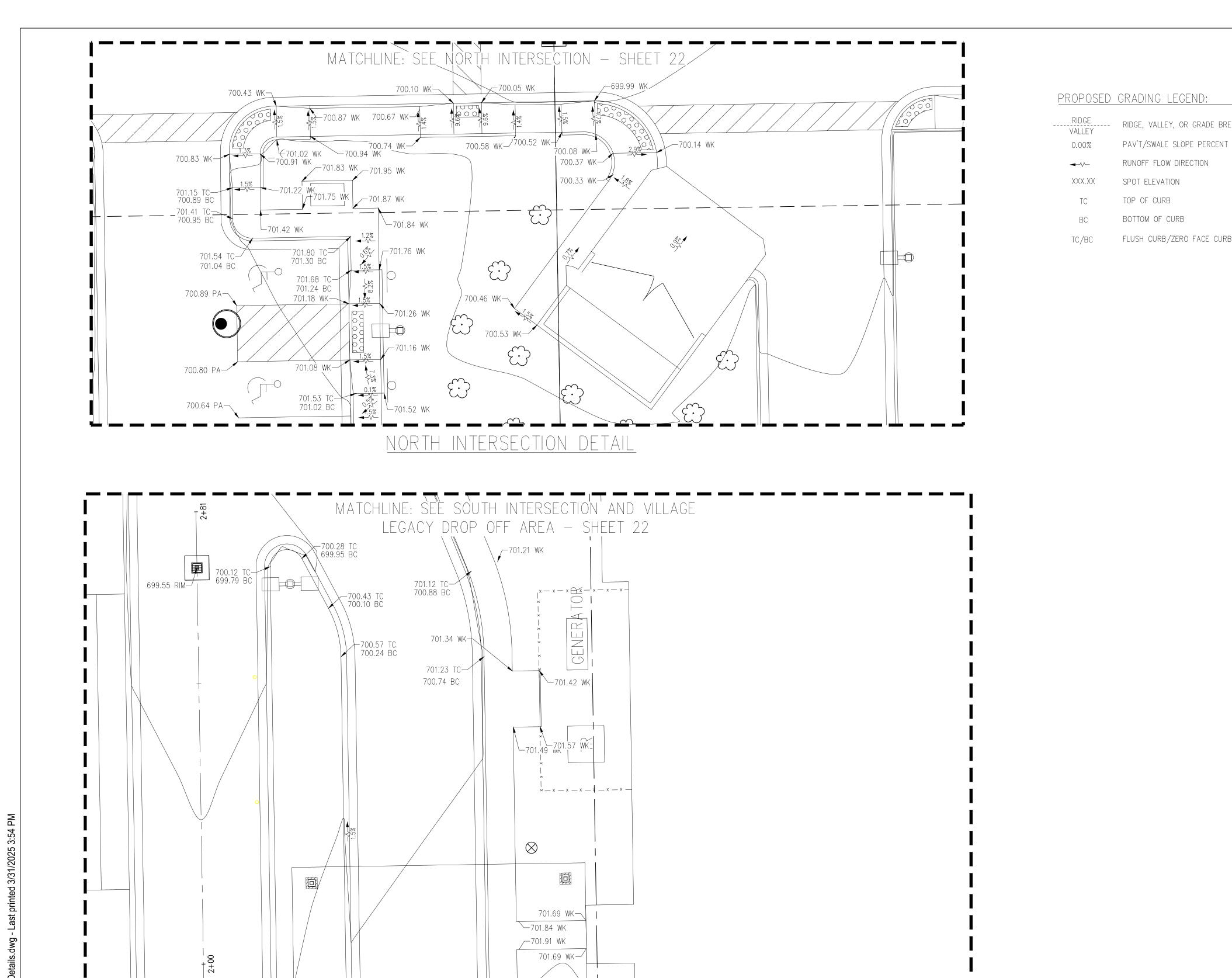
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702.26 TC-/ 701.76 BC

702.12 WK

_702.00 WK

SOUTH INTERSECTION AND VILLAGE LEGACY DROP

OFF AREA GRADING DETAIL

702.10 WK 702.03 WK 701.35 WK 701.35 WK 701.78 WK

─701.16 PA

701.99 TC 701.66 BC

701.88 TC 701.37 BC

701.79 TC≃ 701.32 BC

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701.51 TC-/ 701.19 BC

701.11 TC 700.78 BC

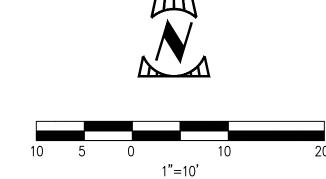
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700.68 TC 700.45 PA

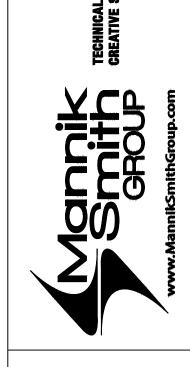
RIDGE, VALLEY, OR GRADE BREAK AS INDICATED

MEET EXISTING PAVEMENT GRADE

SIDEWALK STRUCTURE RIM FG FINISH GRADE FLUSH CURB/ZERO FACE CURB GR GROUND



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TRILOGY HEALTH SERVICES, LLC.

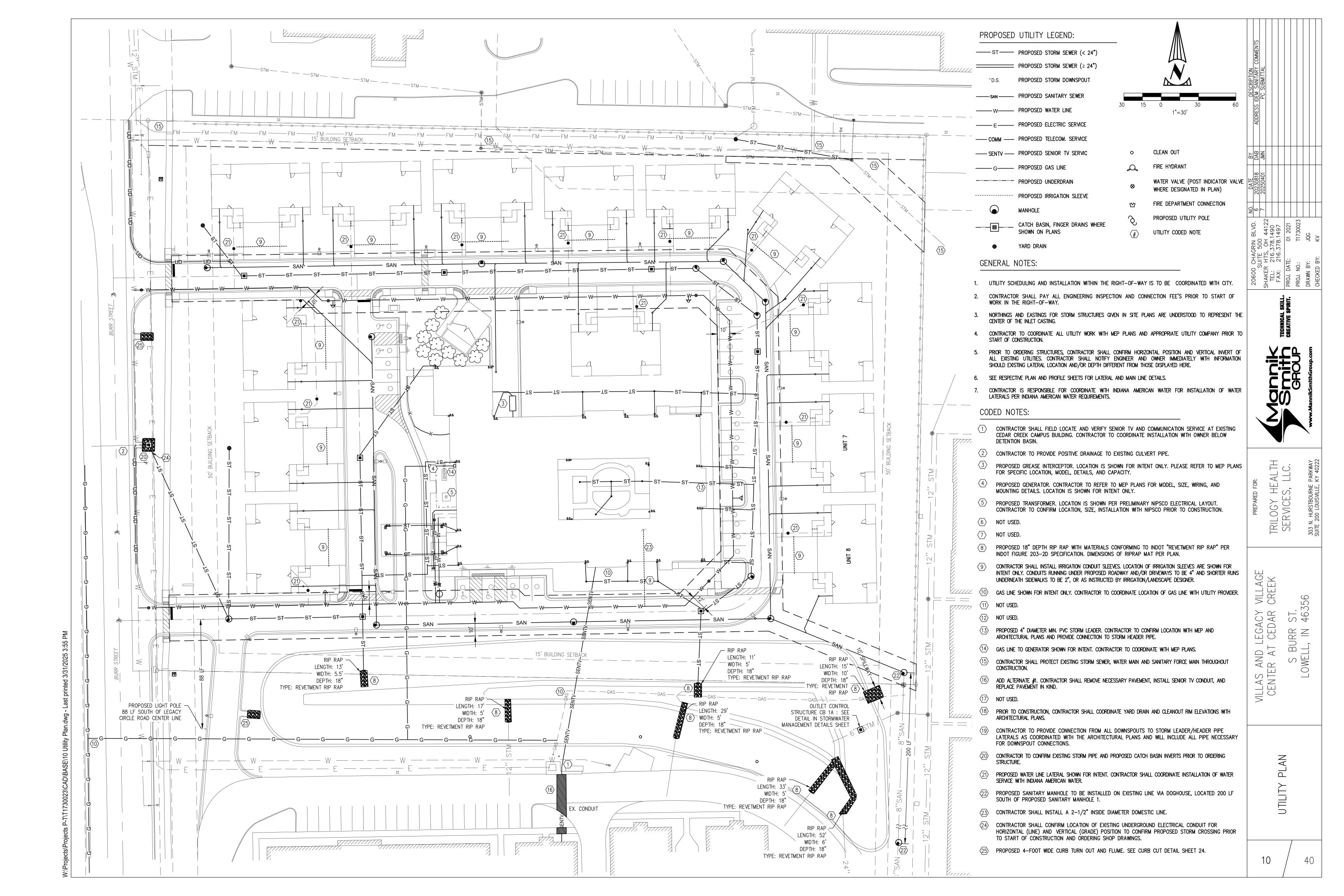
VILLAS AND LEGACY VILLAGE CENTER AT CEDAR CREEK S BURR ST. LOWELL, IN 46356

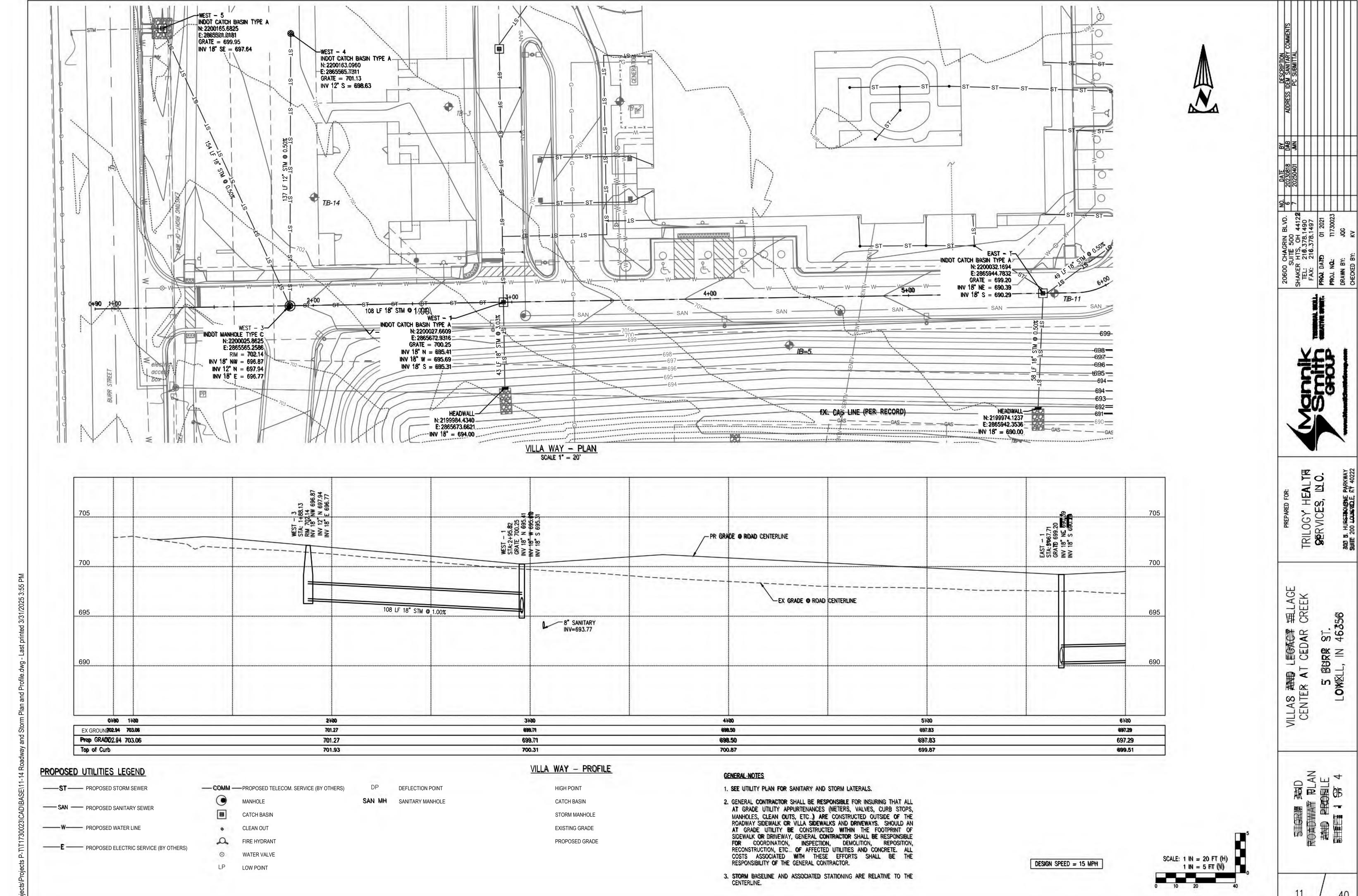
GRADING DETAILS 1 OF 2

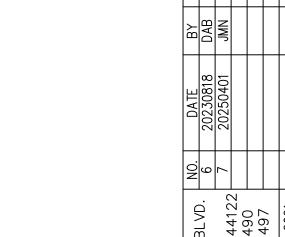
TRILOGY HEALTH SERVICES, LLC.

VILLAS AND LEGACY VILLAGE CENTER AT CEDAR CREEK S BURR ST. LOWELL, IN 46356

TYPICAL VILLA &
WILLAGE LEGACY DROP
OFF DETAILS







HEALTH S, LLC.

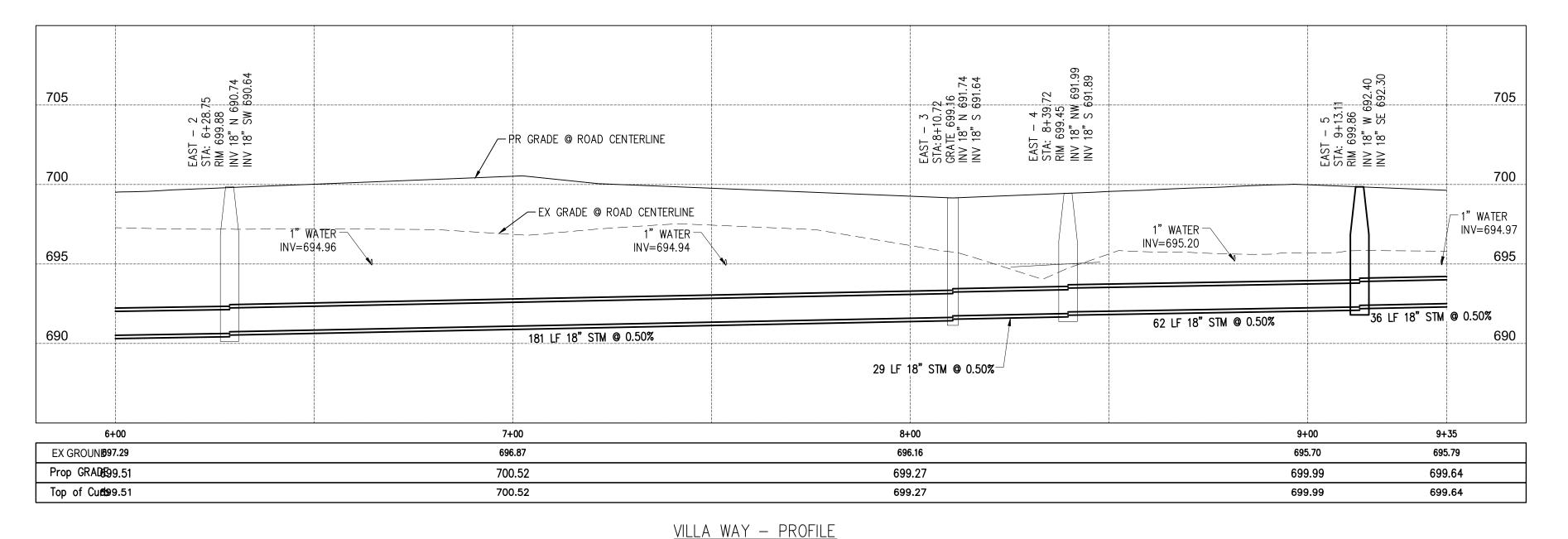
. LEGACY CEDAR ST. S BURR LOWELL, IN

VILLAS AND L CENTER AT

STORM AND
ROADWAY PLAN
AND PROFILE
SHEET 2 OF 4

SCALE: 1 IN = 20 FT (H)

DESIGN SPEED = 15 MPH



PROPOSED UTILITIES LEGEND

—— SAN —— PROPOSED SANITARY SEWER

PROPOSED ELECTRIC SERVICE (BY OTHERS)

FIRE HYDRANT

WATER VALVE

LOW POINT

—— COMM ——PROPOSED TELECOM. SERVICE (BY OTHERS) MANHOLE CATCH BASIN CLEAN OUT

DEFLECTION POINT SAN MH SANITARY MANHOLE

HIGH POINT CATCH BASIN STORM MANHOLE EX GR

EXISTING GRADE PR GR PROPOSED GRADE

3. STORM BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO THE

GENERAL NOTES

1. SEE UTILITY PLAN FOR SANITARY AND STORM LATERALS.

2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC ...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

CENTERLINE.



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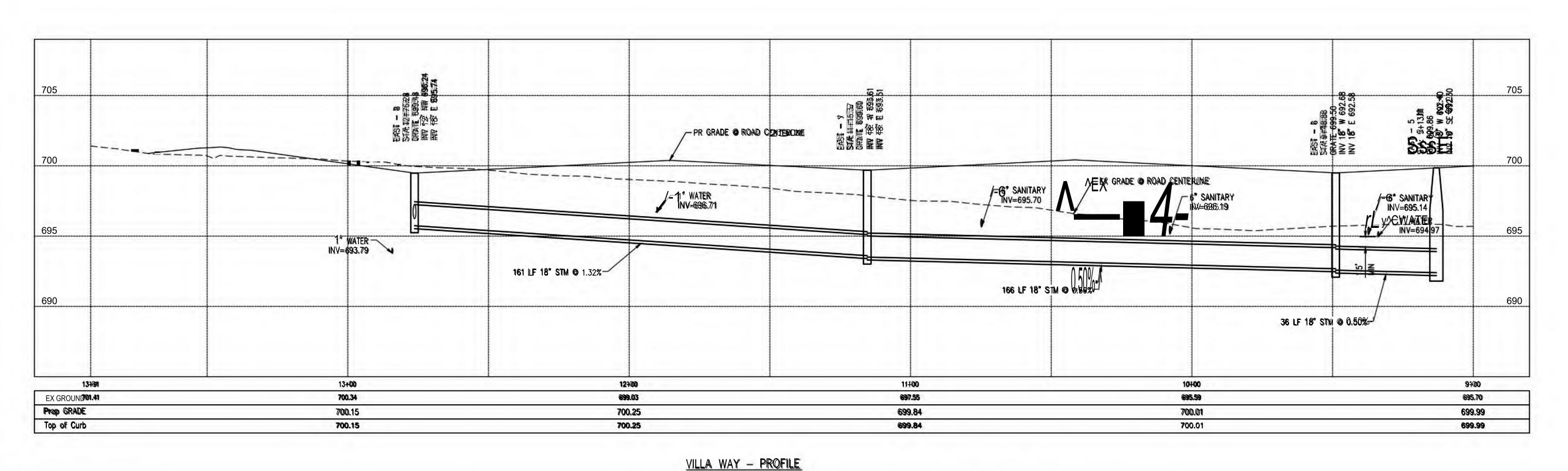
TRILOGY HEALTH SERVICES, LLC.

MLXGE CREEK

VILLAS AND LEGACE
CENTER AT CEDAR © 4 1 4 BERR LL, IN LOWEL

SCALE: 1 IN = 20 FT (H) 1 IN = 5 FT (V)

DESIGN SPEED = 15 MPH



PROPOSED UTILITIES LEGEND

——**ST** —— PROPOSED STORM SEWER —— SAN —— PROPOSED SANITARY SEWER PROPOSED ELECTRIC SERVICE (BY OTHERS) — COMM — PROPOSED TELECOM. SERVICE (BY OTHERS) MANHOLE

CATCH BASIN CLEAN OUT

FIRE HYDRANT WATER VALVE LOW POINT

DEFLECTION POINT

SANITARY MANHOLE

HIGH POINT CATCH BASIN STORM MANHOLE

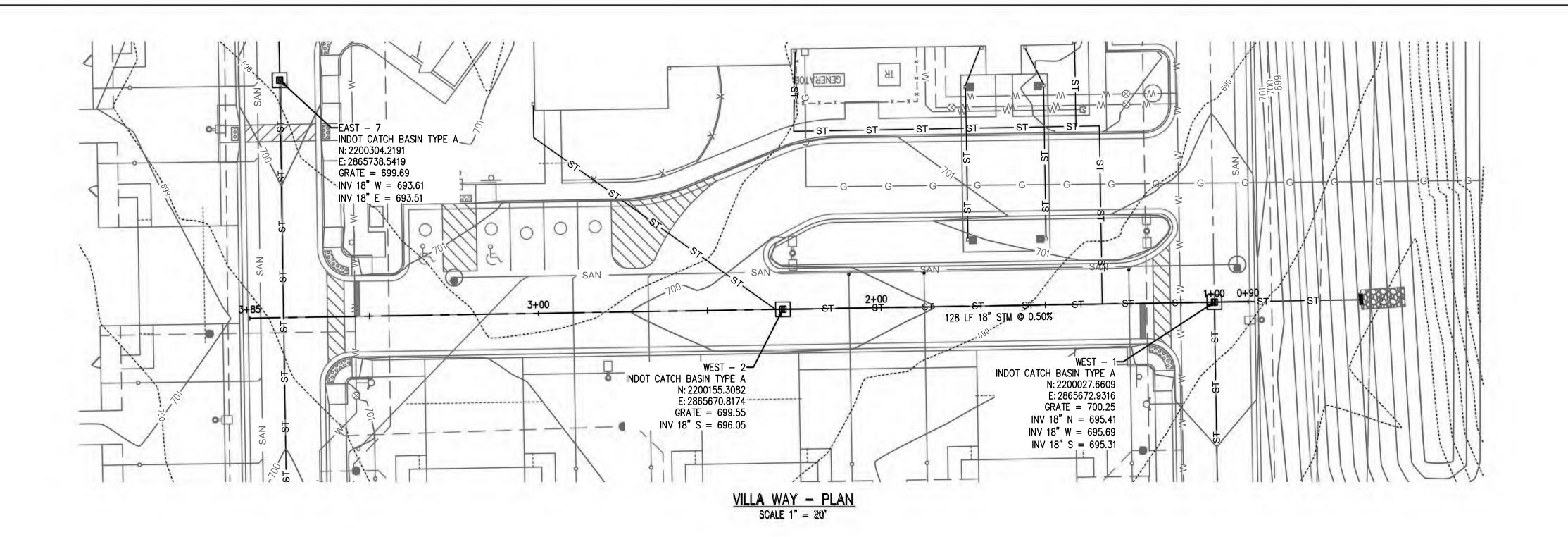
> EXISTING GRADE PROPOSED GRADE

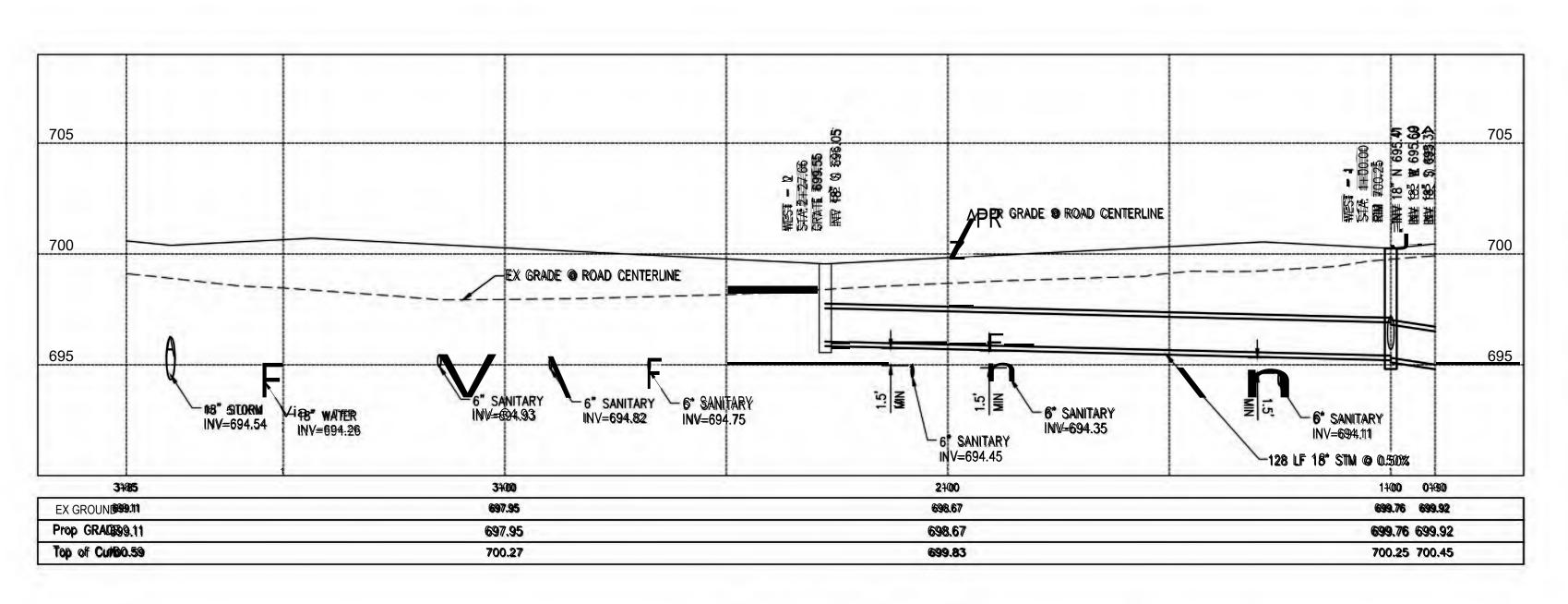
GENERAL_NOTES

1. SEE UTILITY PLAN FOR SANITARY AND STORM LATERALS.

2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILLITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

3. STORM BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO THE CENTERLINE.





<u>VILLA WAY - PROFILE</u>

——ST —— PROPOSED STORM SEWER —— SAN —— PROPOSED SANITARY SEWER PROPOSED WATER LINE PROPOSED ELECTRIC SERVICE (BY OTHERS)

PROPOSED UTILITIES LEGEND

— COMM — PROPOSED TELECOM. SERVICE (BY OTHERS) MANHOLE

CATCH BASIN CLEAN OUT

FIRE HYDRANT WATER VALVE

LOW POINT

DEFLECTION POINT **SAN MH** SANITARY MANHOLE

HIGH POINT CATCH BASIN STORM MANHOLE EXISTING GRADE

PROPOSED GRADE

CHIRRAL MOTTES

1. SEE UTILITY PLAN FOR SANITARY AND STORM LATERALS.

2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (WETERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC..) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

3. STORM BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO THE CENTERLINE.



SCALE: 1 IN = 20 FT (H) 1 IN = 5 FT (V)

HEALTH S, LLC.

VILLAGE CREEK

VILLAS AND LEGACY CENTER AT CEDAR

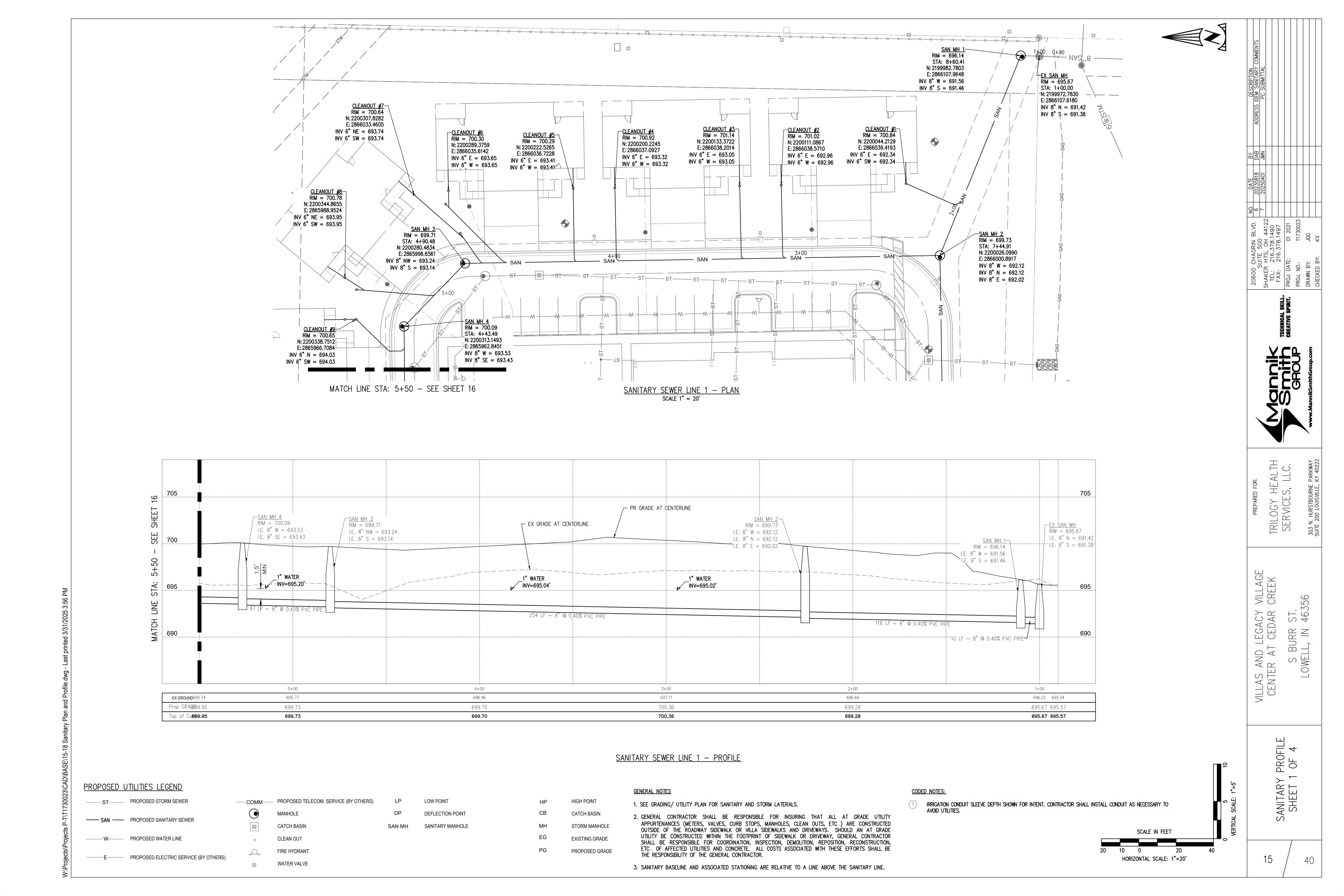
ST. 46358

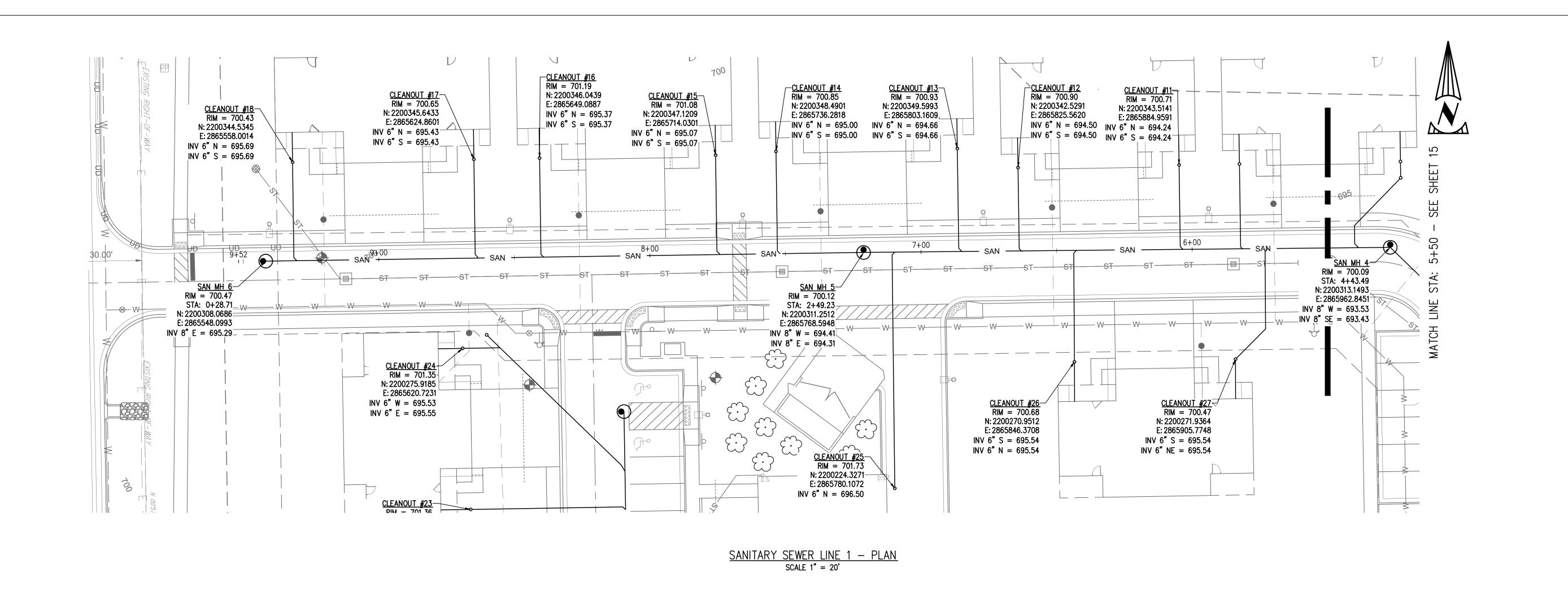
BURR LL, IN

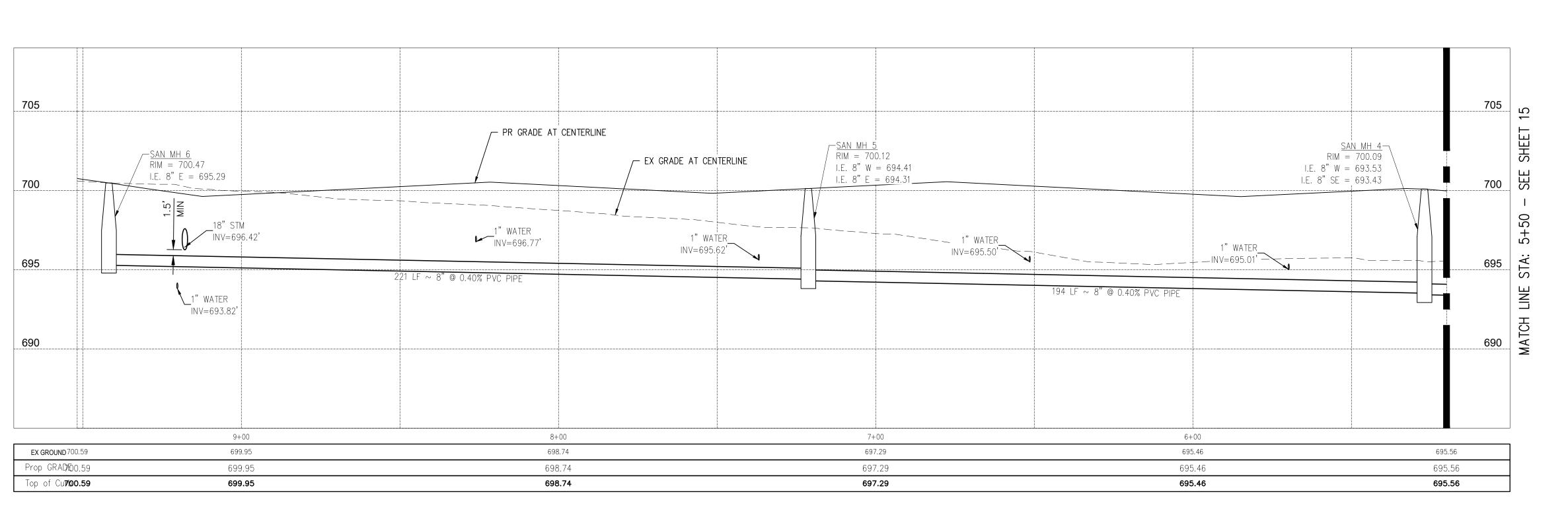
S E LOWEL

NO. DATE BY 6 20230818 DAB 7 20250401 JMN

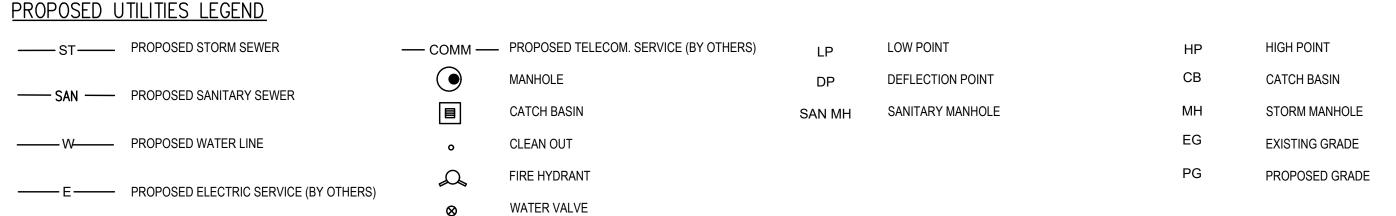
STORM AND
ROADWAY PLAN
AND PROFILE
SHEET 4 OF 4





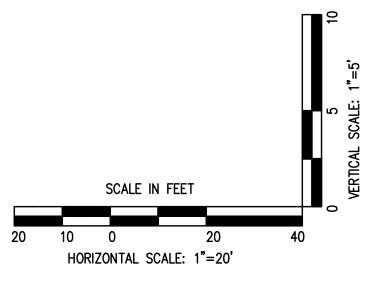


SANITARY SEWER LINE 1 - PROFILE



GENERAL NOTES

- 1. SEE GRADING/ UTILITY PLAN FOR SANITARY AND STORM LATERALS.
- 2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC. OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 3. SANITARY BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO A LINE ABOVE THE SANITARY LINE.

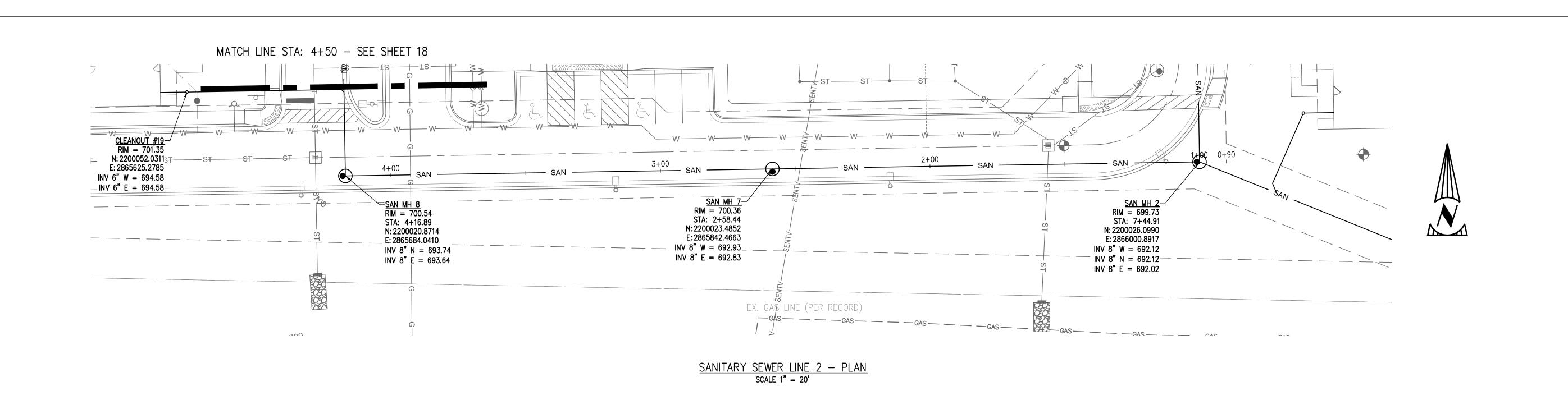


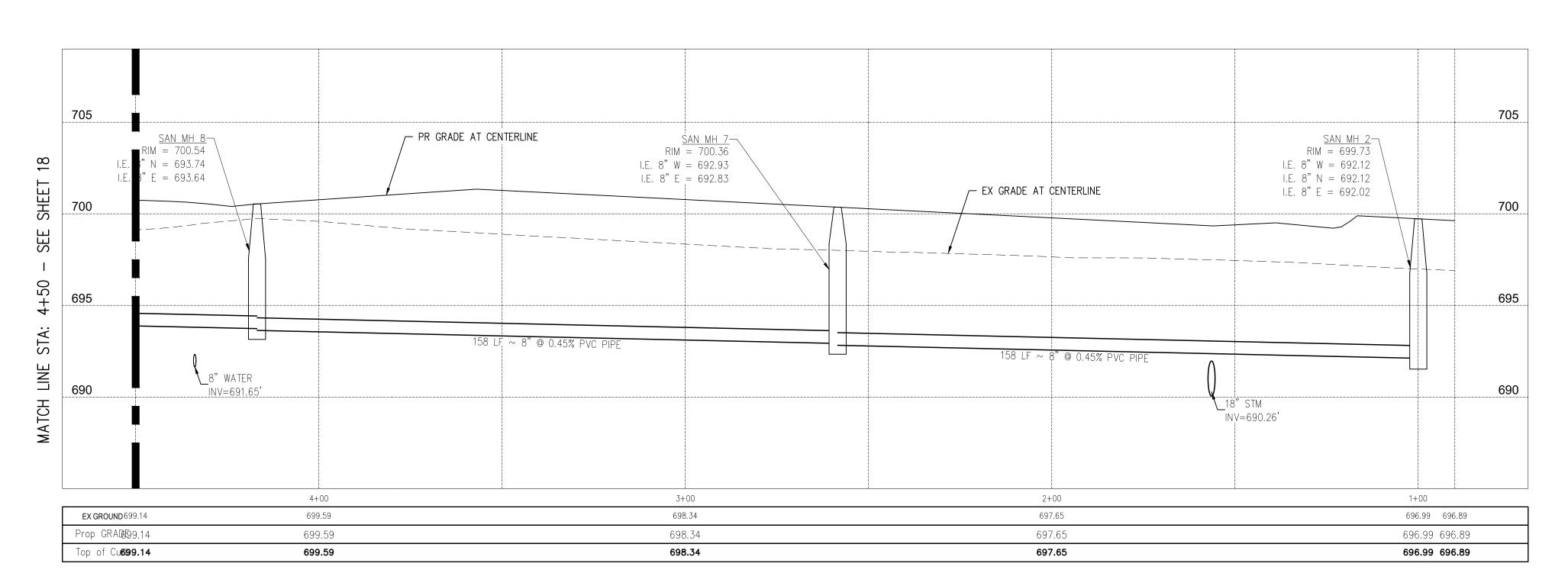
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HEAL S, LL(

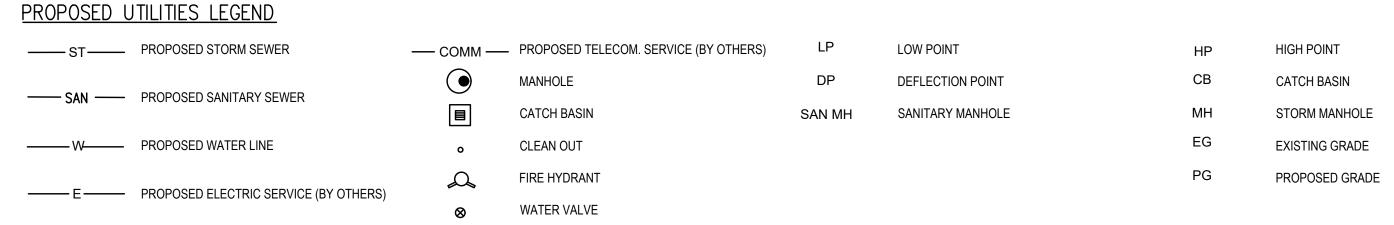
WILLAS AND LEGACY CENTER AT CEDAR

BU LL,



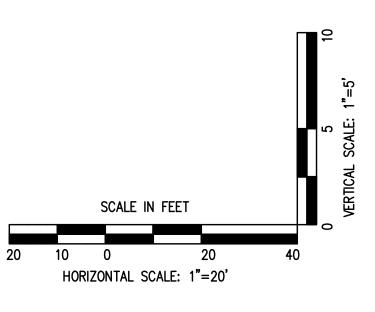


SANITARY SEWER LINE 2 - PROFILE

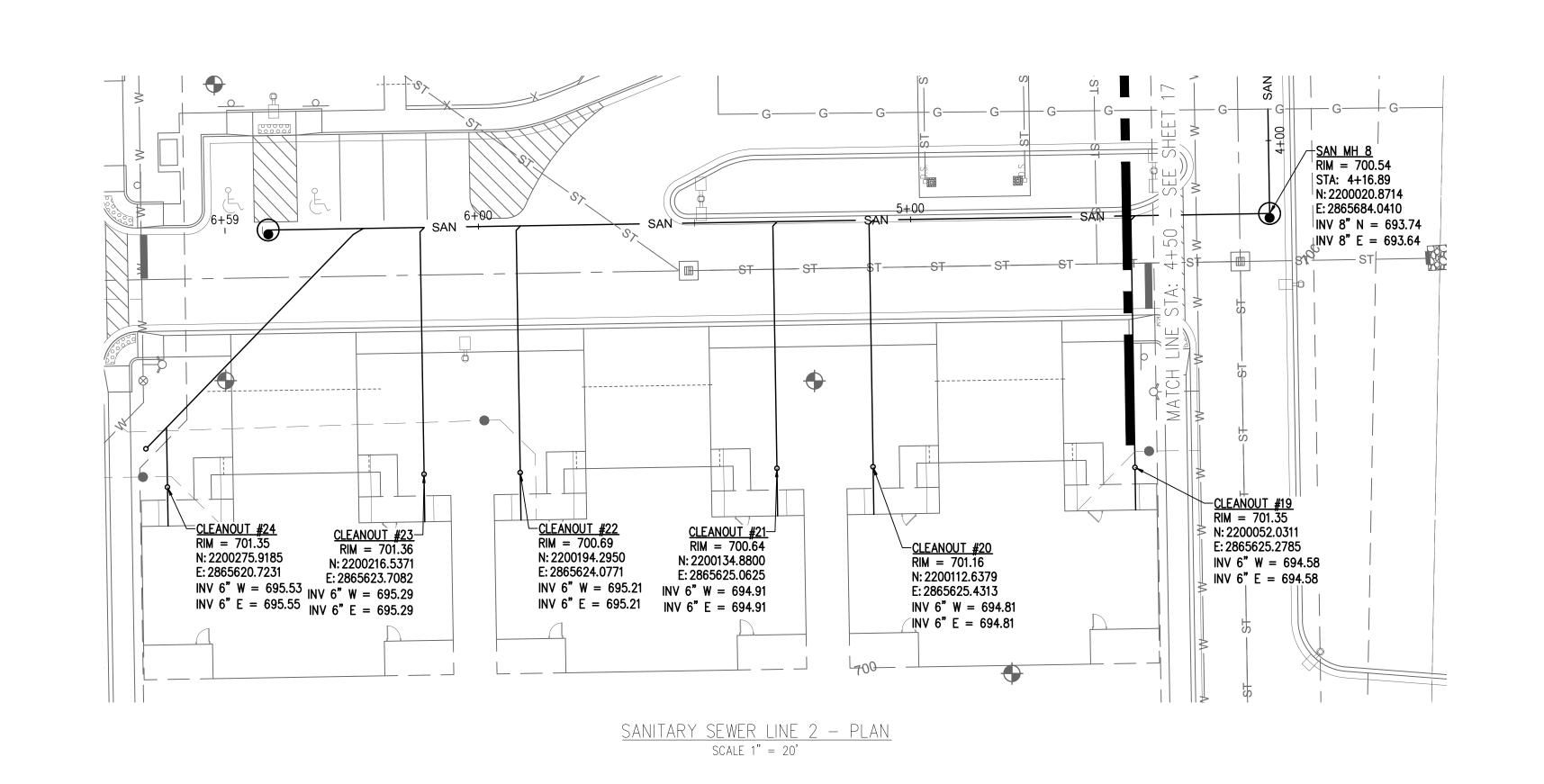


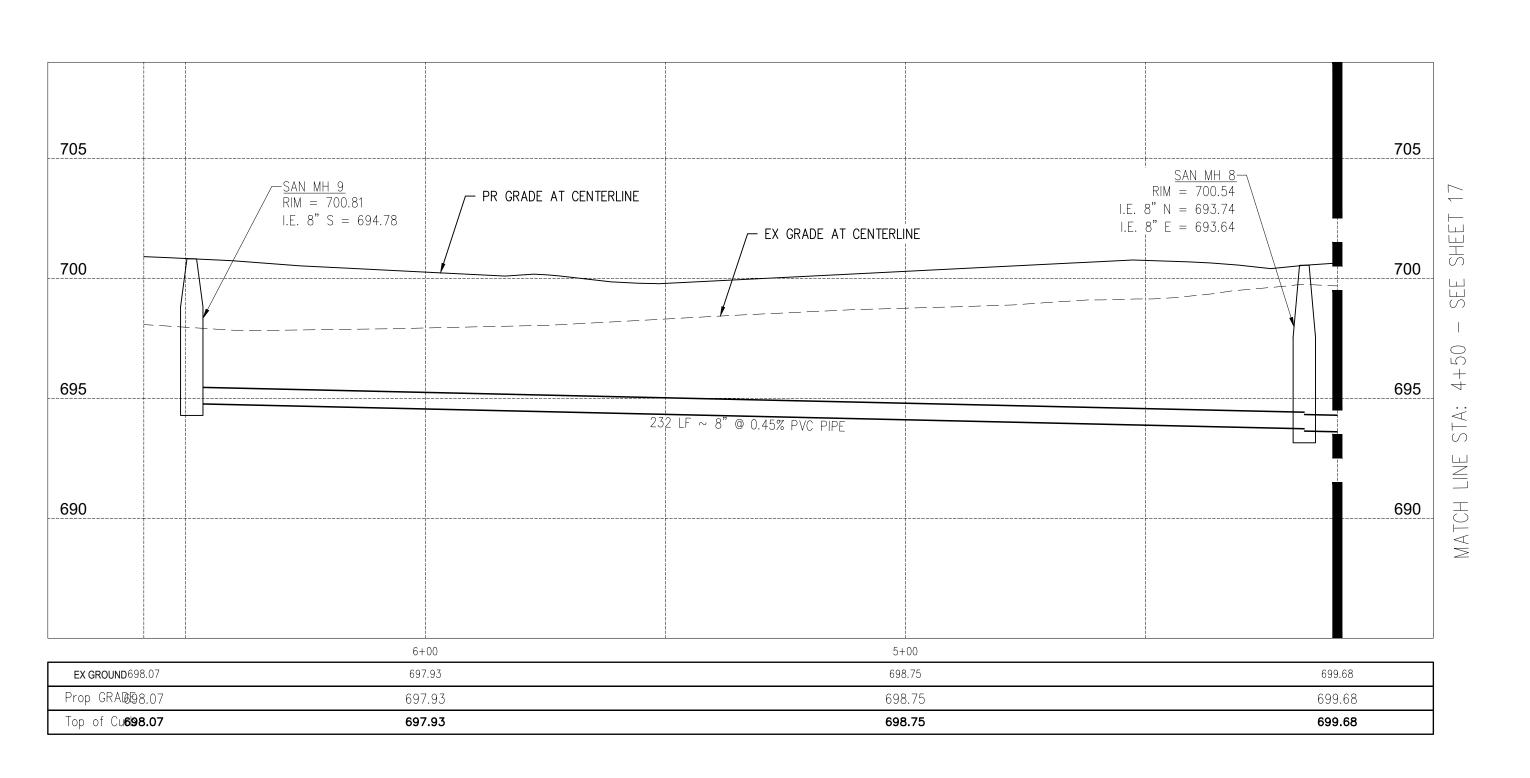
GENERAL NOTES

- 1. SEE GRADING/ UTILITY PLAN FOR SANITARY AND STORM LATERALS.
- 2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 3. SANITARY BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO A LINE ABOVE THE SANITARY LINE.



VILLAS AND LEGACY CENTER AT CEDAR





SANITARY SEWER LINE 2 - PROFILE

PROPOSED UTILITIES LEGEND						
ST PROPOSED STORM SEWER	— сомм —	PROPOSED TELECOM. SERVICE (BY OTHERS)	LP	LOW POINT	HP	HIGH POINT
		MANHOLE	DP	DEFLECTION POINT	СВ	CATCH BASIN
—— SAN —— PROPOSED SANITARY SEWER		CATCH BASIN	SAN MH	SANITARY MANHOLE	МН	STORM MANHOLE
	o	CLEAN OUT			EG	EXISTING GRADE
		FIRE HYDRANT			PG	PROPOSED GRADE

WATER VALVE

<u>GENERAL NOTES</u>

1. SEE GRADING/ UTILITY PLAN FOR SANITARY AND STORM LATERALS.

2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY SIDEWALK OR VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

3. SANITARY BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO A LINE ABOVE THE SANITARY LINE.

CODED NOTES:

- IRRIGATION CONDUIT SLEEVE DEPTH SHOWN FOR INTENT. CONTRACTOR SHALL INSTALL CONDUIT AS NECESSARY TO AVOID UTILITIES.
- SENIOR TV CONDUIT DEPTH SHOWN FOR INTENT. CONTRACTOR SHALL FIELD LOCATE AND VERIFY SENIOR TV AND COMMUNICATION SERVICE AT EXISTING CEDAR CREEK CAMPUS BUILDING.

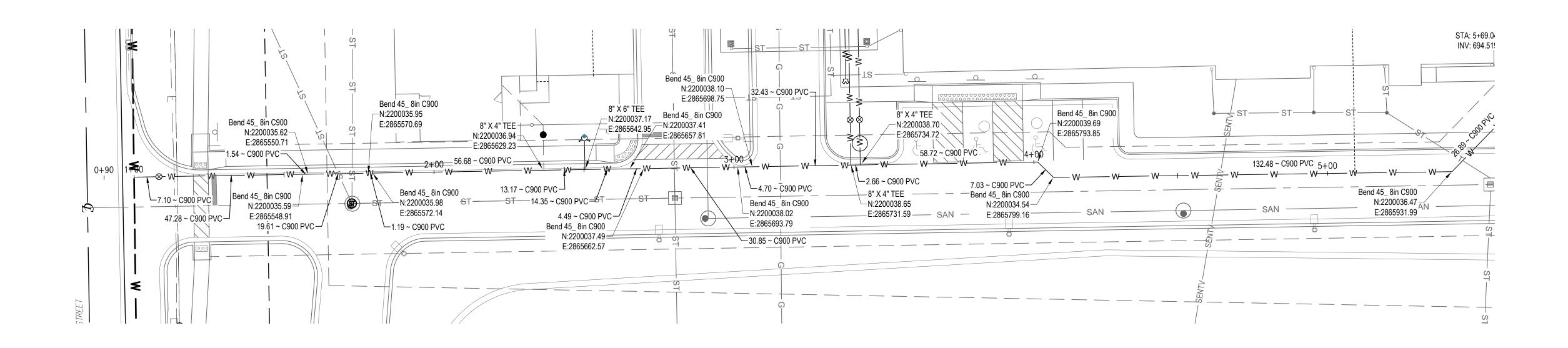
HORIZONTAL SCALE: 1"=20'

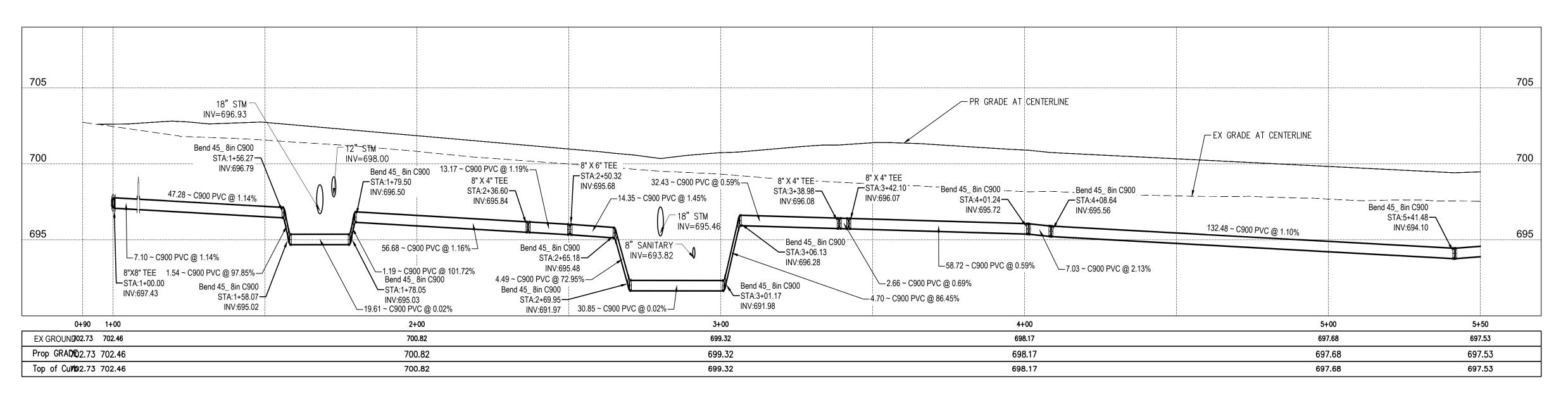
WILLAS AND LEGACY CENTER AT CEDAR

S BUF LOWELL,

PROPOSED ELECTRIC SERVICE (BY OTHERS)







LEGACY CIRCLE CONTINUED - PROFILE

PROPOSED UTILITIES LEGEND

ST	PROPOSED STORM SEWER	—— СОММ ——	PROPOSED TELECOM. SERVICE (BY OTHERS)	DP	DEFLECTION POINT	HP	HIGH POINT
SAN	PROPOSED SANITARY SEWER		MANHOLE	SAN MH	SANITARY MANHOLE	СВ	CATCH BASIN
SAN	FROFOSED SANITART SEWER		CATCH BASIN			МН	STORM MANHOLE
W	PROPOSED WATER LINE	0	CLEAN OUT			EG	EXISTING GRADE
——Е ——	PROPOSED ELECTRIC SERVICE (BY OTHERS)	0	FIRE HYDRANT			PG	PROPOSED GRADE

WATER VALVE

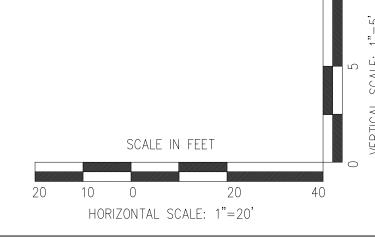
LOW POINT

<u>GENERAL NOTES</u>

- 1. CONTRACTOR SHALL REFERENCE INDIANA AMERICAN WATER NOTES ON
- 2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY, VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 3. WATERLINE BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO A LINE ABOVE THE WATERLINE.

CODED NOTES:

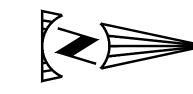
EXISTING UNDERGROUND ELECTRIC LINE SHOWN FOR INTENT. CONTRACTOR TO VERIFY ELEVATION IN THE FIELD.

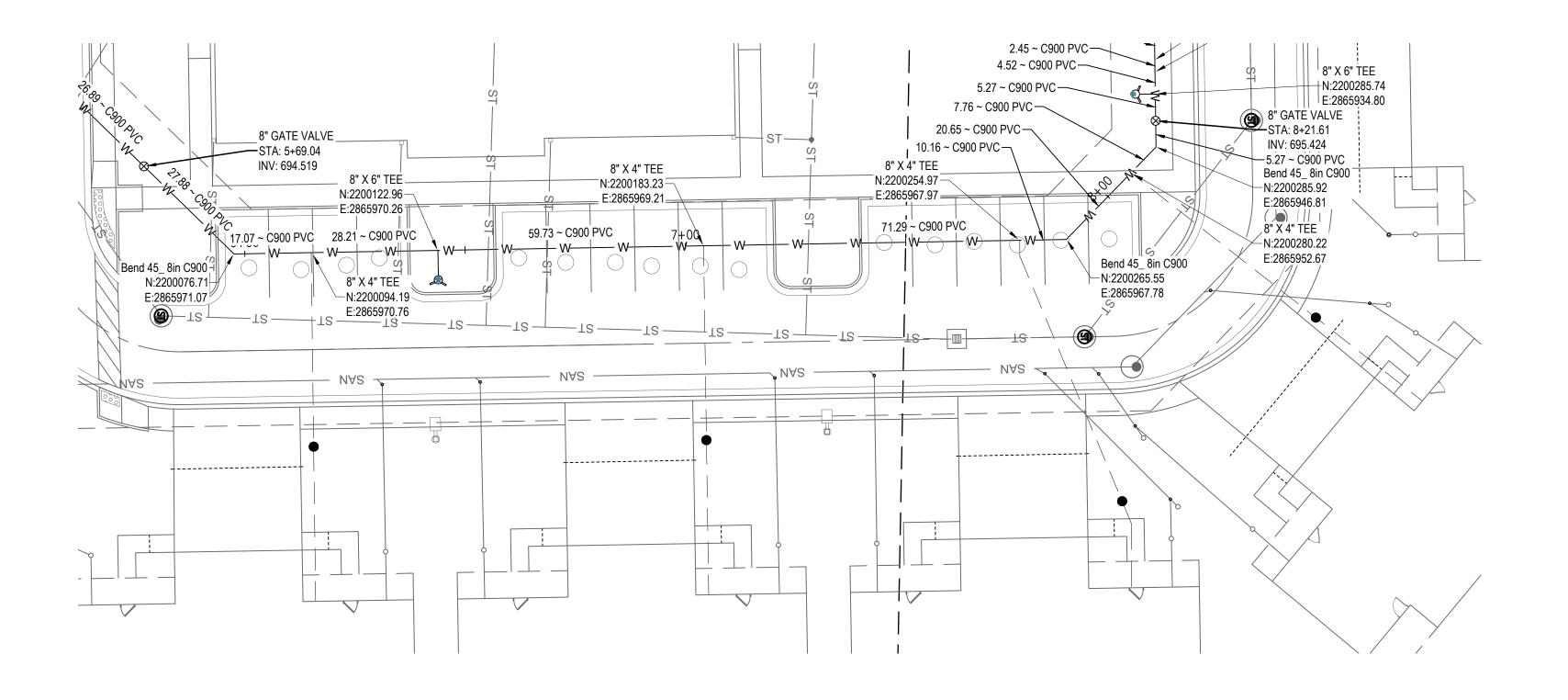


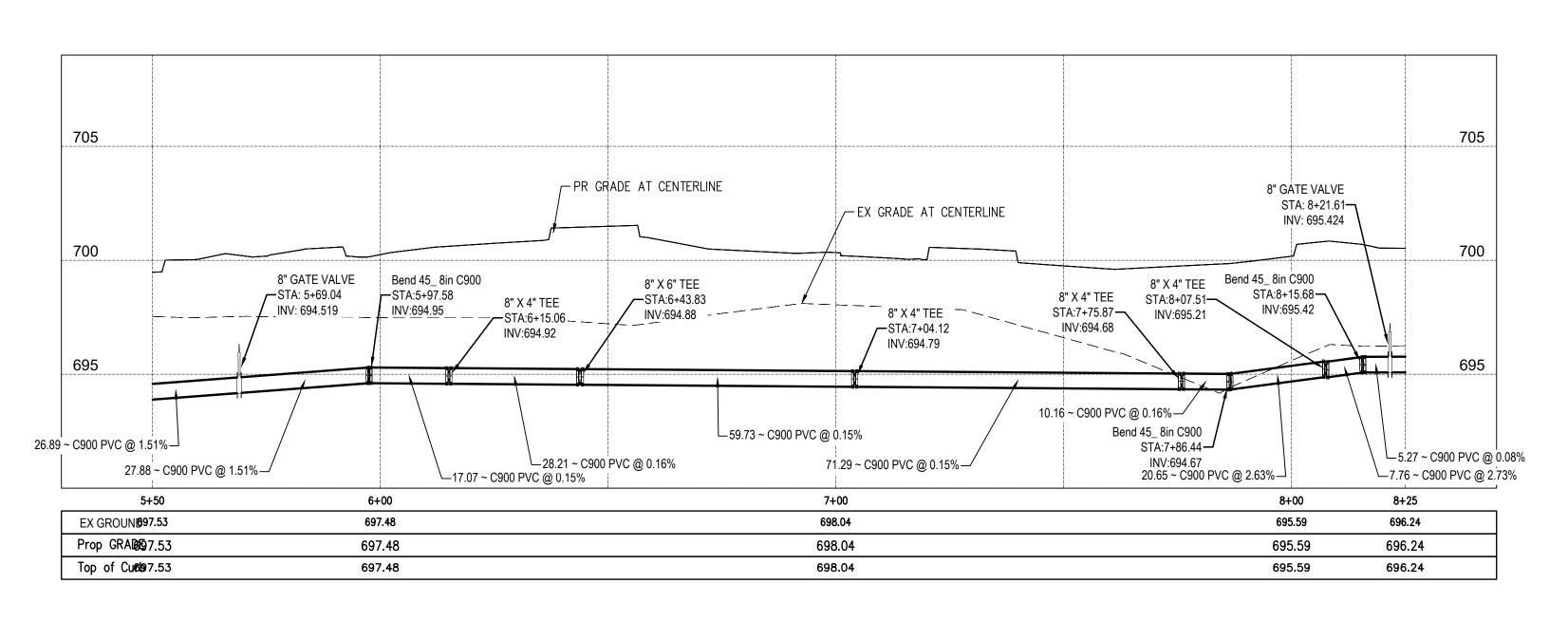


TRILOGY HEALTH SERVICES, LLC.

LEGACY CEDAR ST. S BURR LOWELL, IN VILLAS AND L CENTER AT







LEGACY CIRCLE CONTINUED - PROFILE

PROPOSED UTILITIES LEGEND

ST	PROPOSED STORM SEWER	— COMM —	PROPOSED TELECOM. SERVICE (BY OTHERS)	DP	DEFLECTION POINT	HP	HIGH POINT
SAN	PROPOSED SANITARY SEWER		MANHOLE	SAN MH	SANITARY MANHOLE	СВ	CATCH BASIN
SAN	FROFOSED SANITART SEWER		CATCH BASIN			МН	STORM MANHOLE
W	PROPOSED WATER LINE	0	CLEAN OUT			EG	EXISTING GRADE
——Е ——	PROPOSED ELECTRIC SERVICE (BY OTHERS)		FIRE HYDRANT			PG	PROPOSED GRADE

WATER VALVE

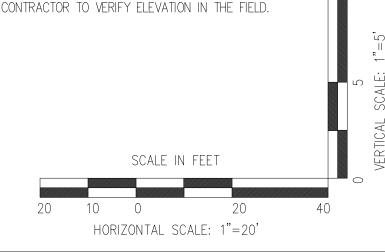
LOW POINT

<u>GENERAL NOTES</u>

- 1. CONTRACTOR SHALL REFERENCE INDIANA AMERICAN WATER NOTES ON
- 2. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THAT ALL AT GRADE UTILITY APPURTENANCES (METERS, VALVES, CURB STOPS, MANHOLES, CLEAN OUTS, ETC...) ARE CONSTRUCTED OUTSIDE OF THE ROADWAY, VILLA SIDEWALKS AND DRIVEWAYS. SHOULD AN AT GRADE UTILITY BE CONSTRUCTED WITHIN THE FOOTPRINT OF SIDEWALK OR DRIVEWAY, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, INSPECTION, DEMOLITION, REPOSITION, RECONSTRUCTION, ETC... OF AFFECTED UTILITIES AND CONCRETE. ALL COSTS ASSOCIATED WITH THESE EFFORTS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- 3. WATERLINE BASELINE AND ASSOCIATED STATIONING ARE RELATIVE TO A LINE ABOVE THE WATERLINE.

CODED NOTES:

EXISTING UNDERGROUND ELECTRIC LINE SHOWN FOR INTENT. CONTRACTOR TO VERIFY ELEVATION IN THE FIELD.



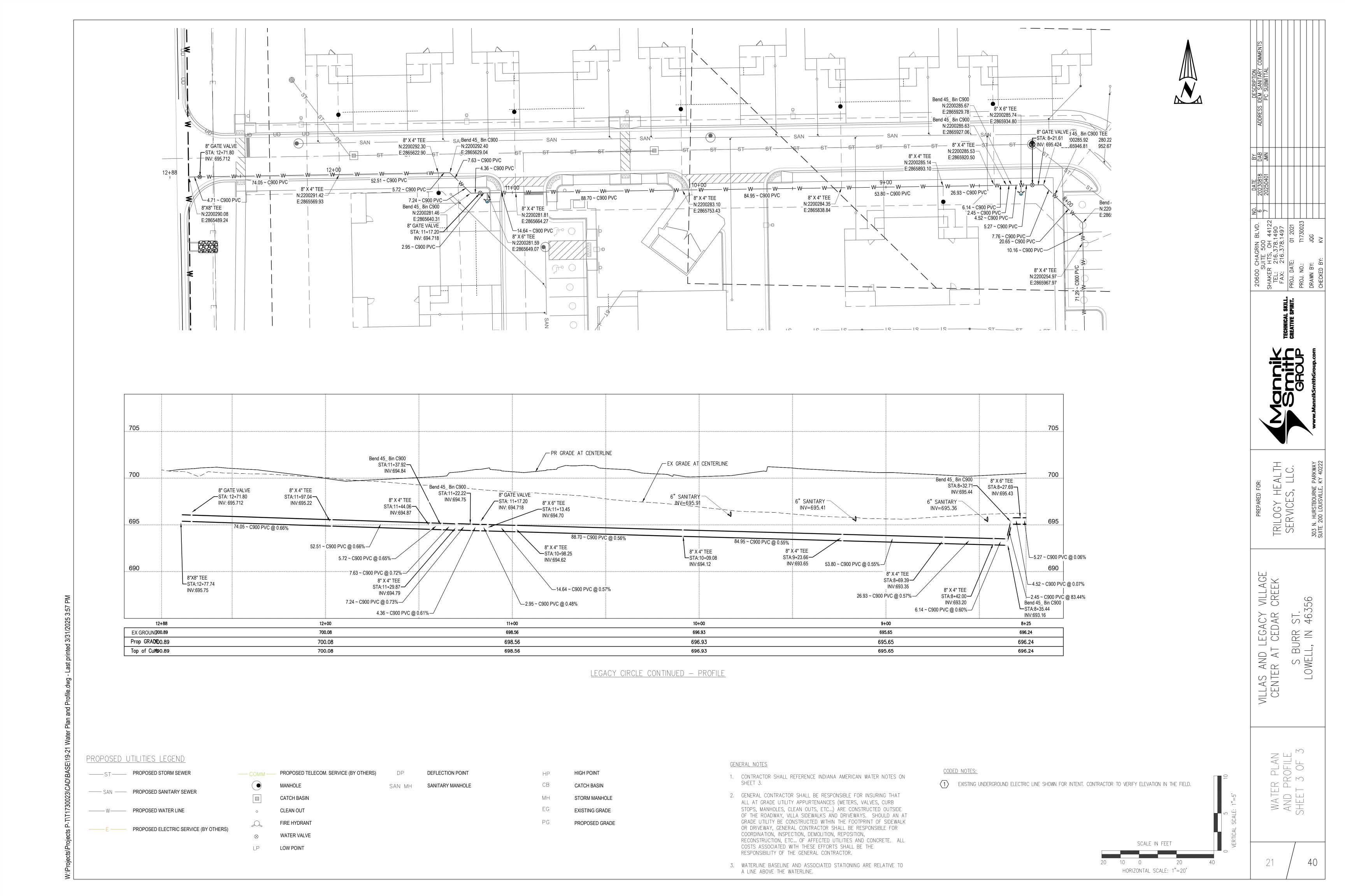
WATER PLAN AND PROFILE SHEET 2 OF 3

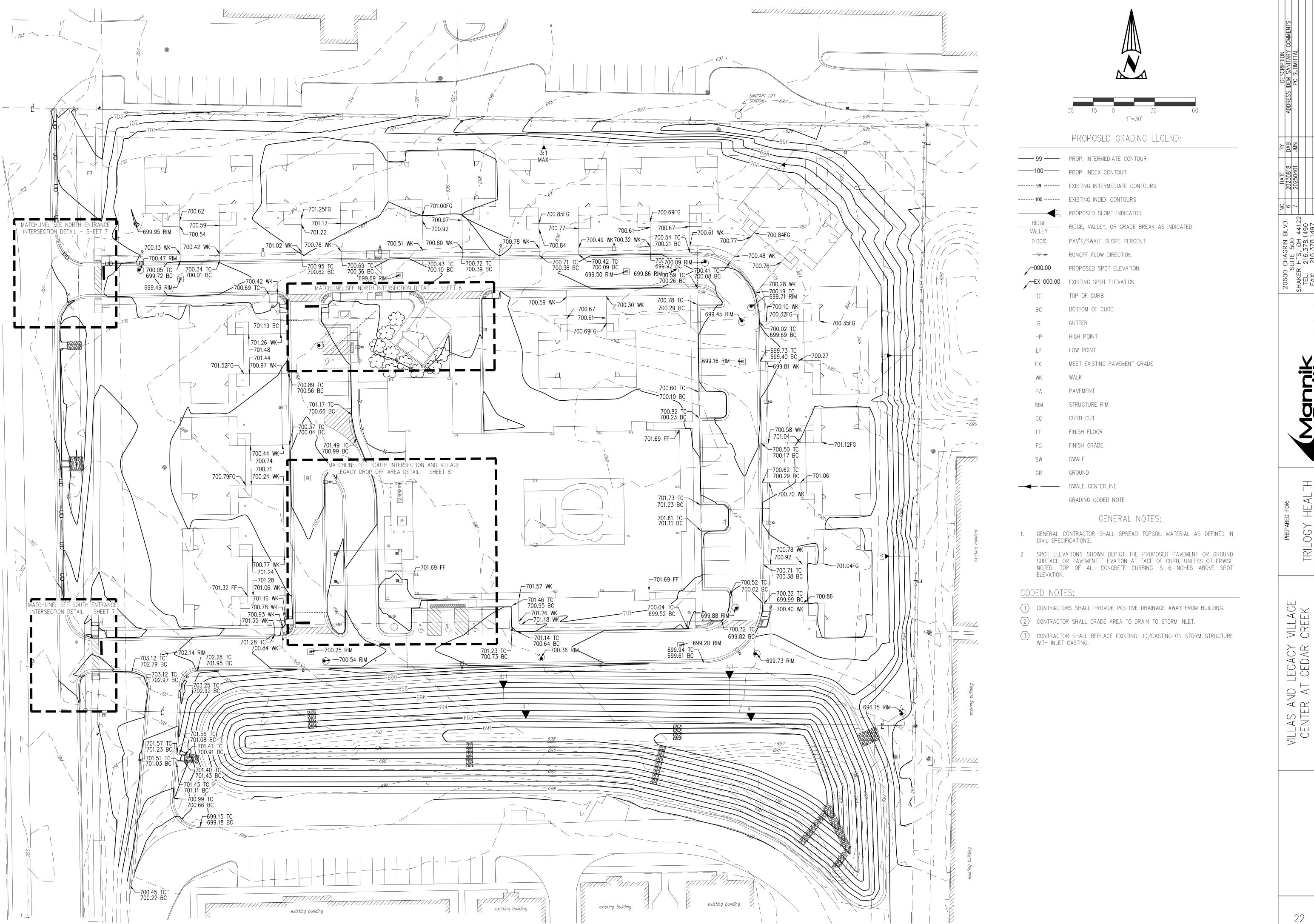
TRILOGY HEALTH SERVICES, LLC.

ST. 46356

S BURR LOWELL, IN

VILLAS AND LEGACY CENTER AT CEDAR

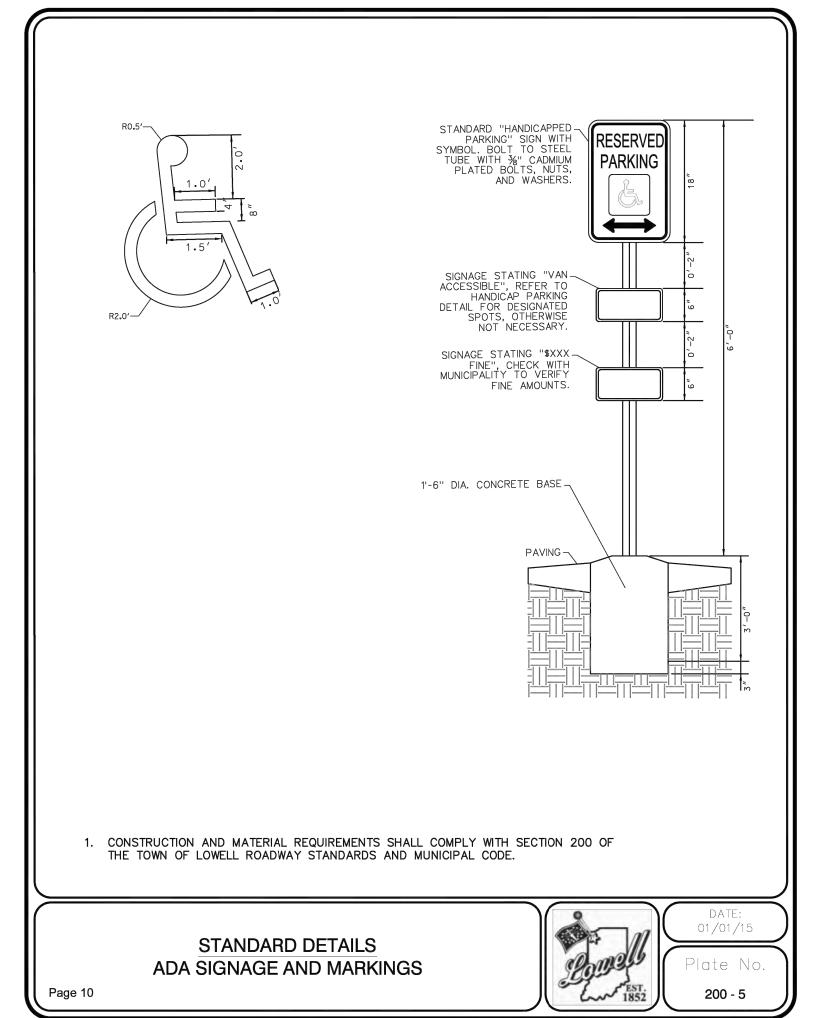


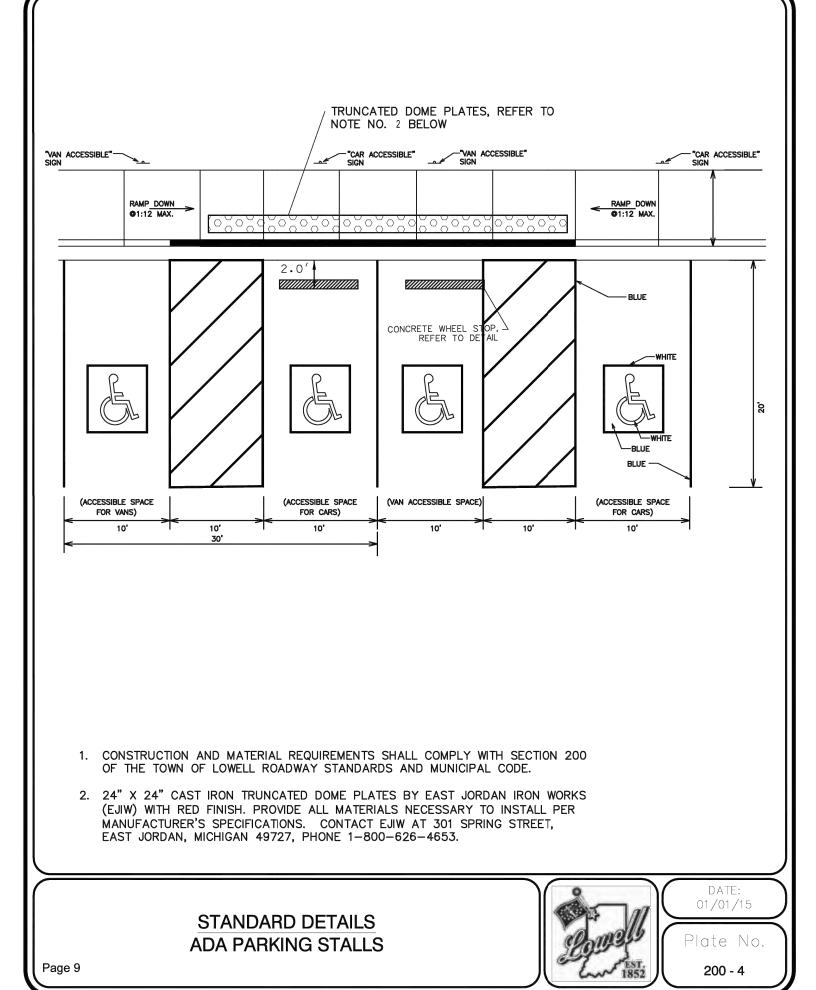


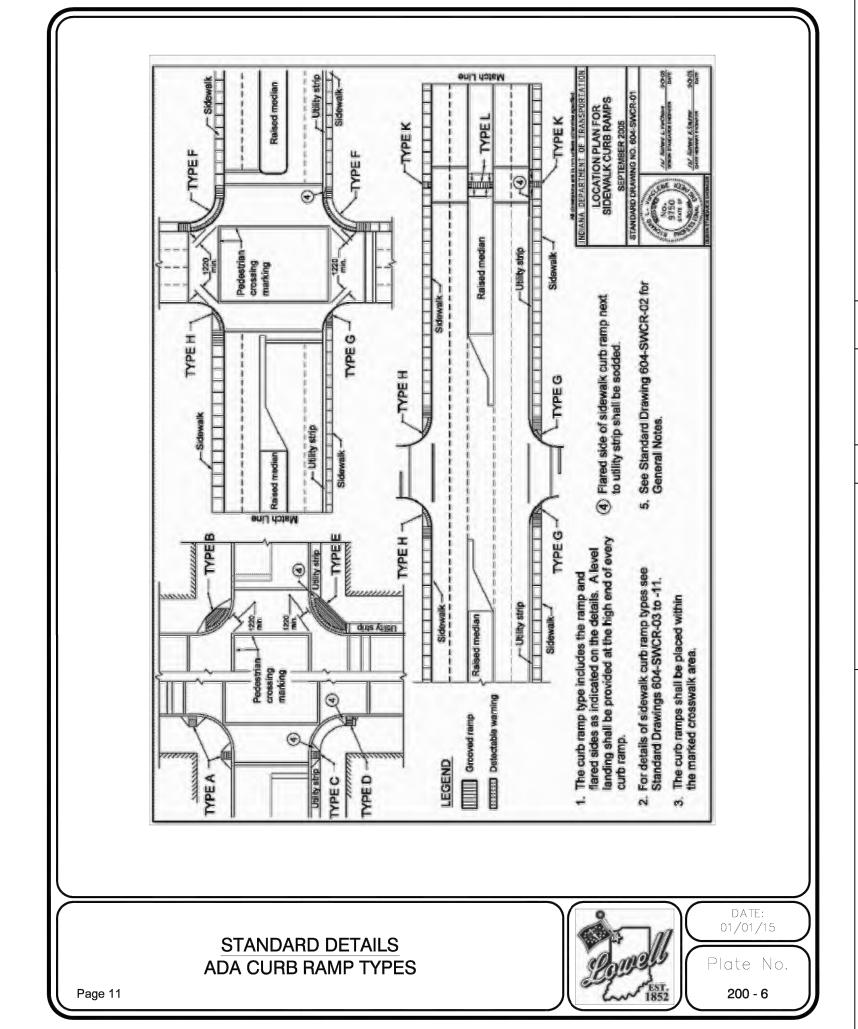
TRILOGY HEALTH SERVICES, LLC.

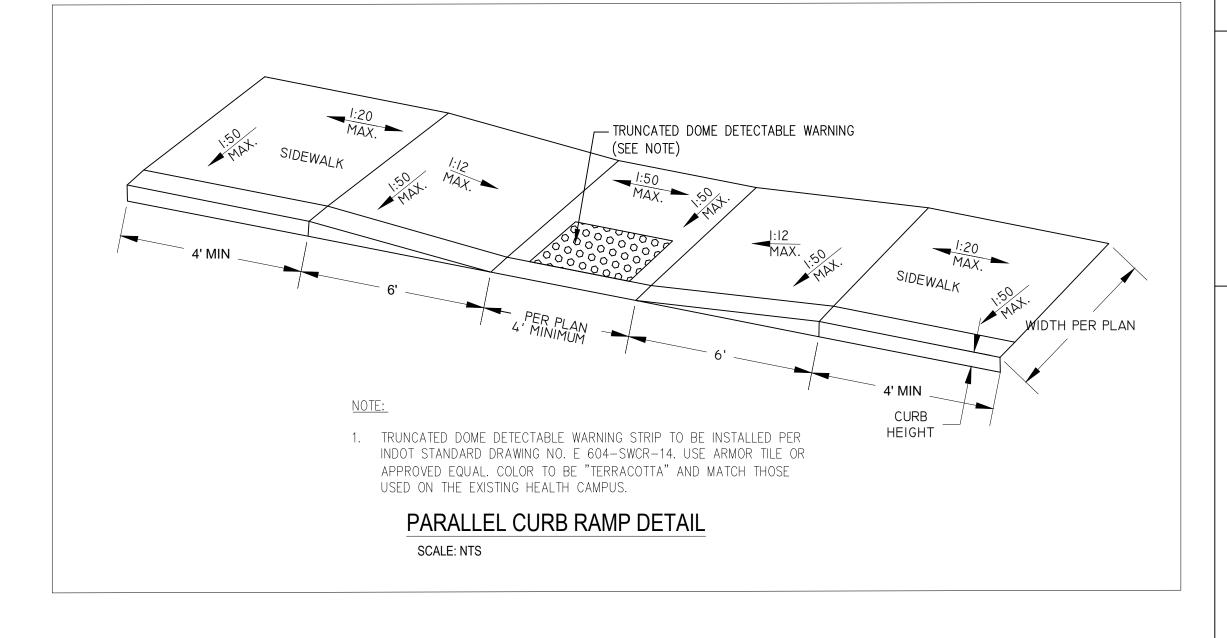
ST. 46356 $\frac{1}{2}$ S BUF LOWELL,

> A N GRADING





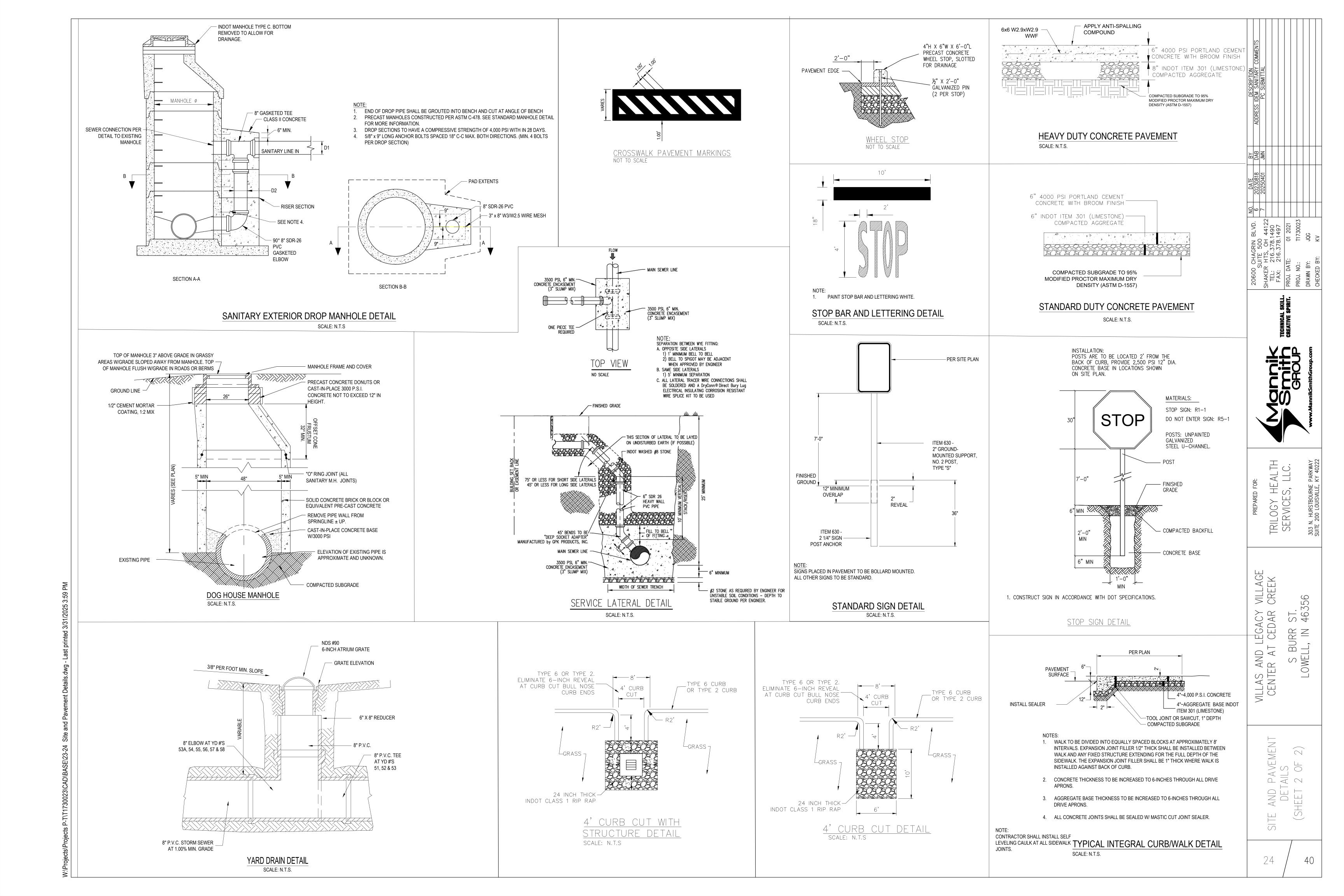


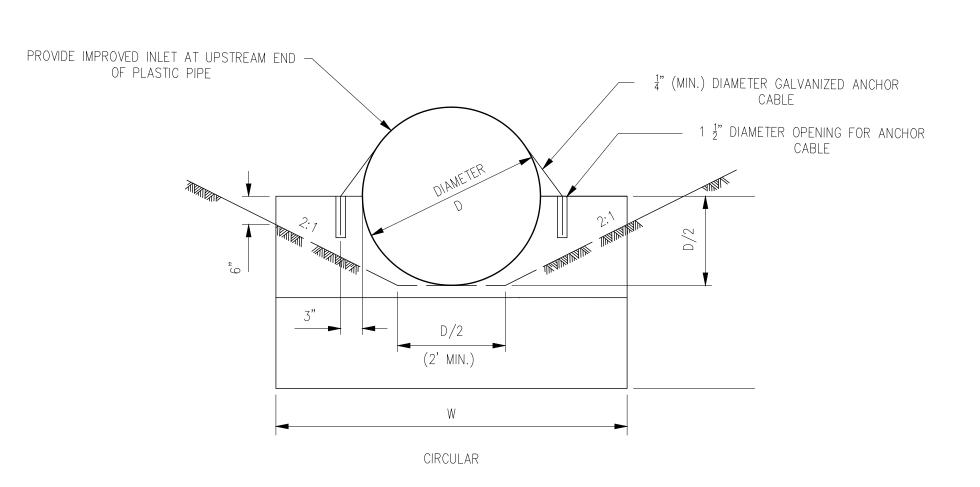


VILLAGE CREEK S BURR ST. LOWELL, IN 46356 VILLAS AND LEGACY CENTER AT CEDAR

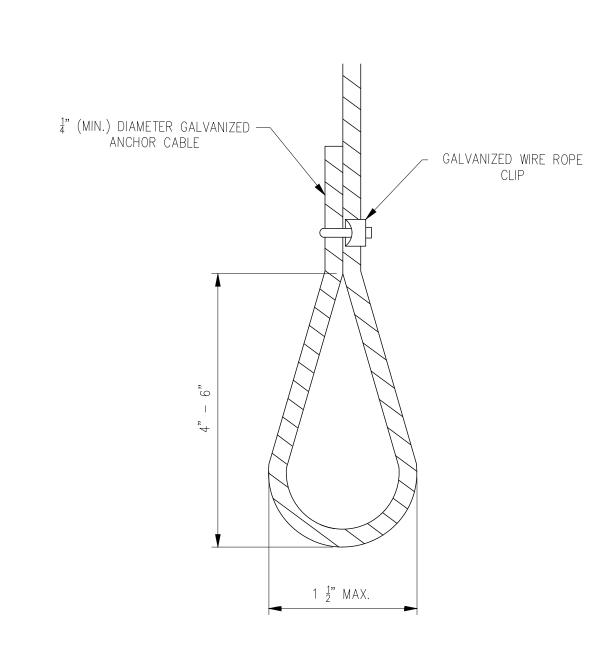
TRILOGY HEALTH SERVICES, LLC.

ITE AND PAVEMENT DETAILS (SHEET 1 OF 2) SITE



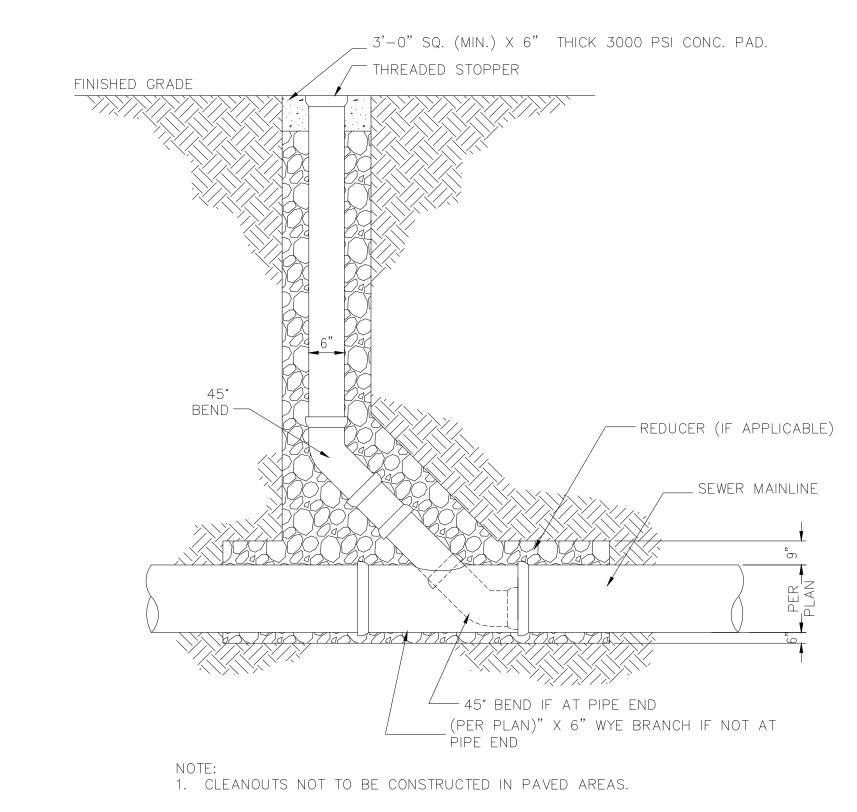


PLASTIC & METAL PIPE END TREATMENT 'A' W/ ANCHOR CABLE OPTION

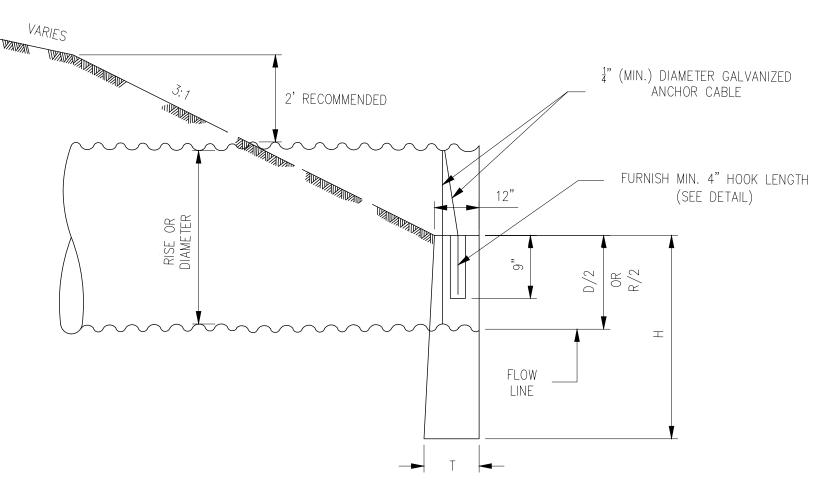


ANCHOR CABLE DETAIL

- 1. TIGHTLY WRAP GALVANIZED ANCHOR CABLE ONE TIME COMPLETELY AROUND THE CIRCUMFERENCE OF THE CONDUIT. FURNISH HOOK AT LEAST 4" LONG AT THE ENDS OF THE ANCHOR CABLE AS SHOWN ABOVE.
- 2. CUT GALVANIZED ANCHOR CABLE TO LENGTH REQUIRED.
- 3. FORM OR DRILL 1 $\frac{1}{2}$ " DIAMETER OPENINGS FOR ANCHOR CABLE AT LOCATIONS SHOWN. ALTERNATIVELY, PLACE ANCHOR CABLE IN WET CONCRETE AT THE DIMENSIONS SHOWN ABOVE TO SECURE CONDUIT TO HEADWALL.
- 4. FILL ANY OPENINGS MADE FOR ANCHOR CABLES WITH GROUT AFTER THE CABLES ARE PLACED TO A TAUT FIT.
- 5. SECURE CABLES SUCH THAT THEY ARE TAUT AFTER THE GROUT OR CONCRETE HAS CURED.

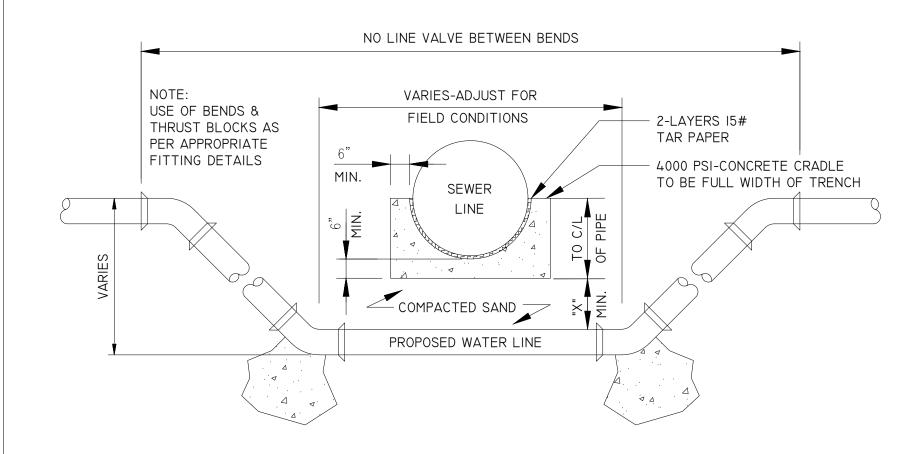


CLEANOUT DETAIL NOT TO SCALE



HEADWALL NOTES

120	2 J U		ا د
132"	23'-0"	8'-6"	28"
138"	24'-1"	8'-9"	30"
144"	25'-2"	9'-0"	32"
150"	26'-4"	9'-3"	34"
156"	27′-5″	9'-6"	36"
162"	28'-7"	9'-9"	38"



CONCRETE CRADLE CONDITIONS A) IF SANITARY OR STORM SEWER PIPE JOINT IS WITHIN PROPOSED IMPROVEMENT TRENCH LIMITS

B) IF CROSSING A WATER LINE AT ANY POINT c) IF CROSSING SPACE IS LESS THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS "X" DIMENSION THEN OMIT SAND FILL AND USE CONCRETE

PRECAST OR FIELD POURED INVERT

SLOPE 4% (MIN.)

6" PRECAST

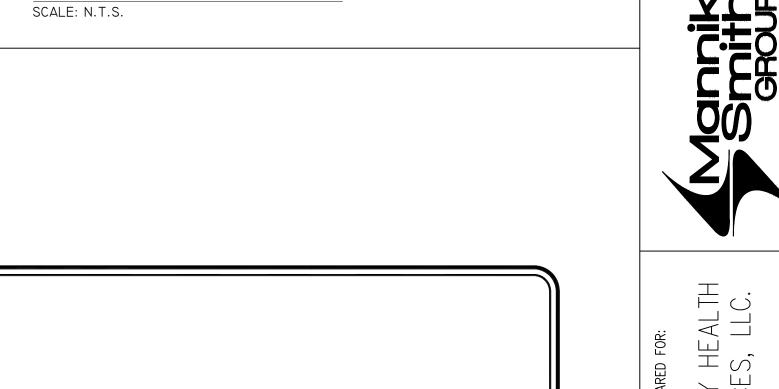
6" COMPACTED #8 CRUSHED -STONE AS NECESSARY

STANDARD DETAILS SANITARY MANHOLE "X" DIMENSION REQUIREMENTS:

A) 6" FOR WATER LINE CROSSING (ALSO FOR GAS & O.B.T. LINES W/NO CRADLE NEEDED) B) 18" FOR SANITARY OR STORM SEWER PIPE

c) IF CROSSING SPACE IS MORE THAN MIN. SPACE OF CRADLE BELOW PIPE BOTTOM PLUS AFOREMENTIONED "X" DIMENSION THEN EXTEND "X" DIMENSION TO MAKE UP DIFFERENCE.

WATER LINE LOWERING DETAIL



 SELF SEALING LID WITH CONSEALED PICK HOLE.
 EAST JORDAN 1020 A.
 "SANITARY SEWER" IS TO BE LETTERED ON THE CASTING. PAVEMENT OR GROUND LINE 3 RISERS (MAX.). "CANUSA" WRAP -- ECCENTRIC PRE-CAST CONE SECTION RUBBER GASKETS ALL JOINTS, —9" "CANUSA" WRAP (TYP. ALL JOINTS) - MANHOLE PER ASTM C-478 STEEL REINFORCED PLASTIC -STEPS 16" O.C. IN LINE WITH DOWNSTREAM INVERT 4 MIN. --

— "A-LOK" GASKET

GREATER THAN 14'

BASE TO BE CAST INTEGRALLY WITH
BOTTOM BARREL SECTION. MINIMUM
THICKNESS OF PRECAST BASE IS 6"
FOR 14' DEEP OR LESS, AND INCREASES
1" IN THICKNESS FOR EVERY 4' OF DEPTH

WILLAS AND LEGACY CENTER AT CEDAR S BUF LOWELL,

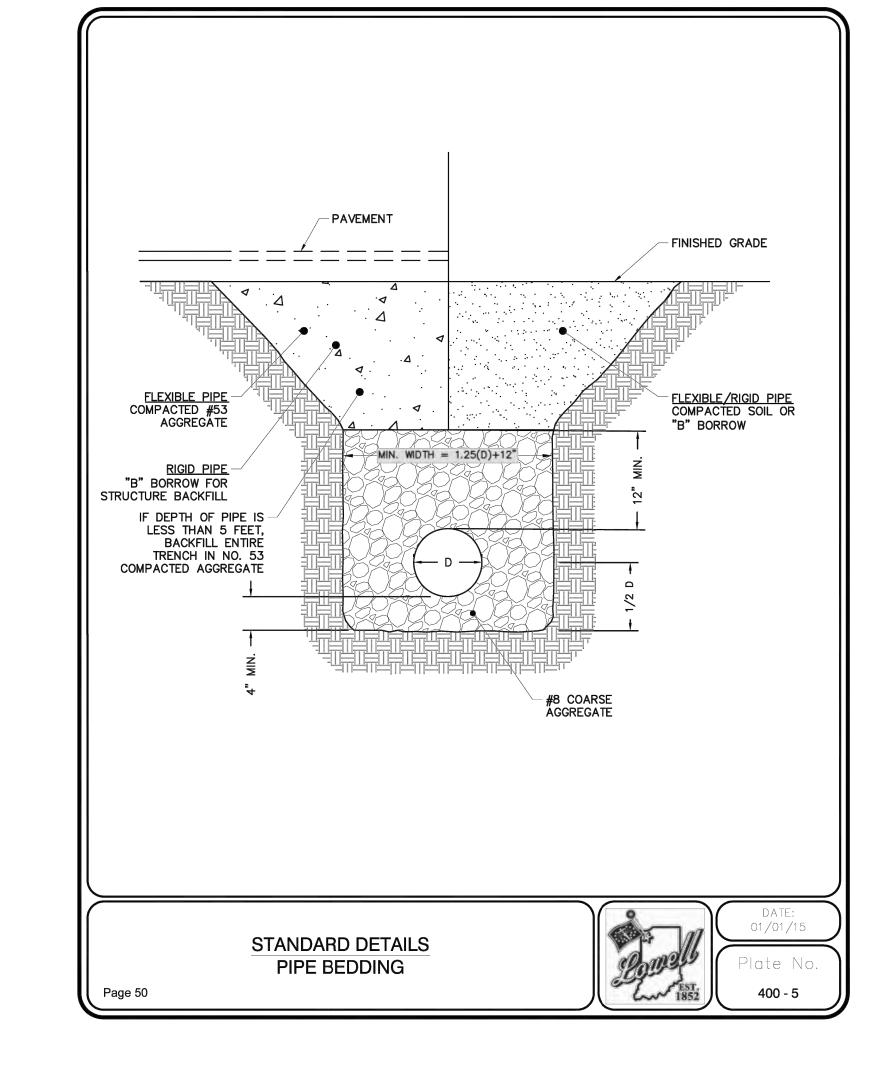
DETAILS 1 OF 4)

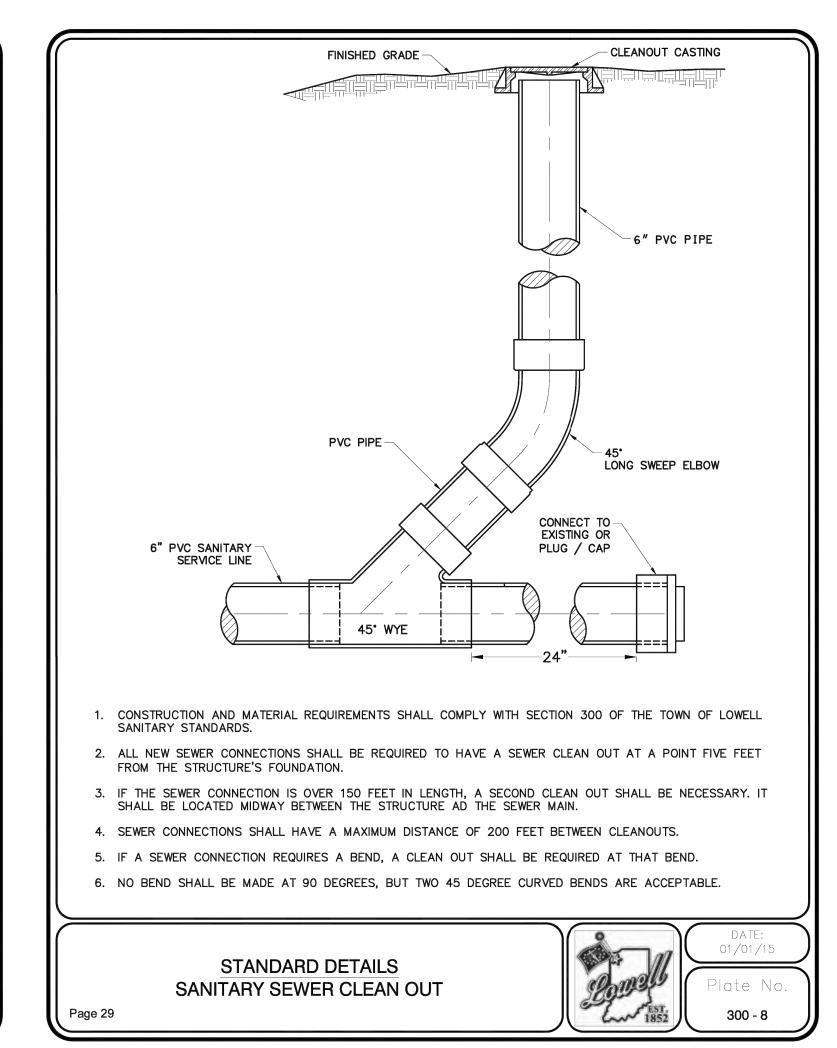
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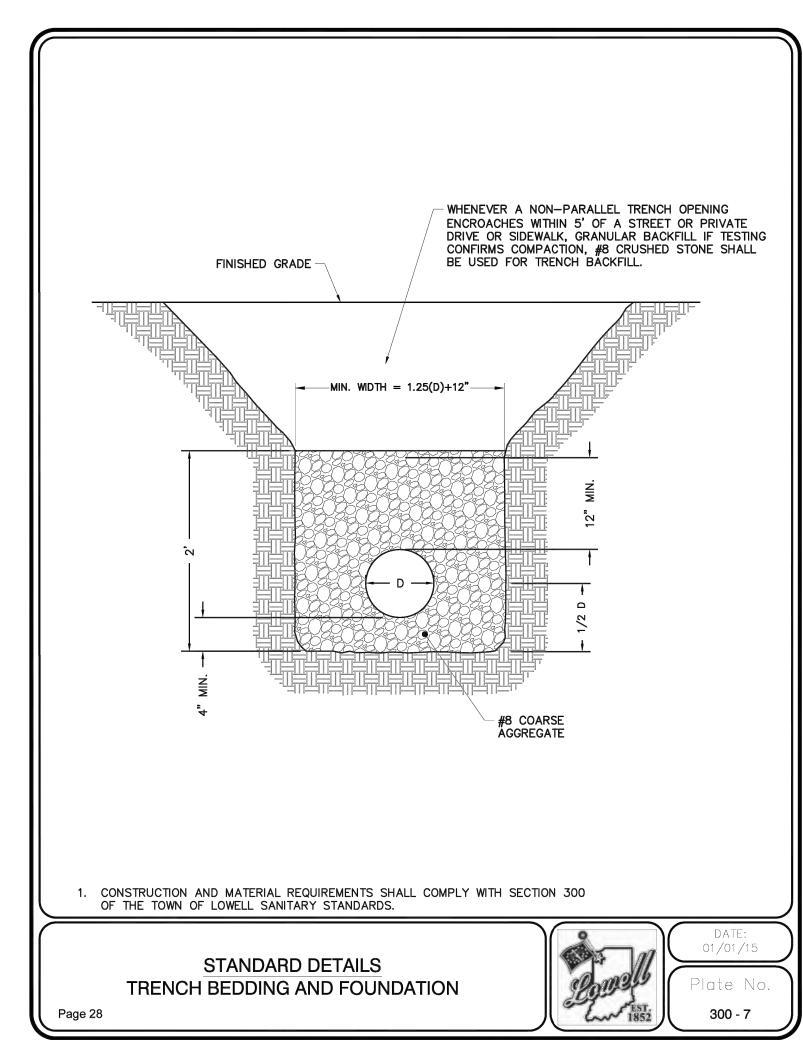
PLASTIC & METAL PIPE PROFILE W/ ANCHOR CABLE OPTION

> HW-D STANDARD HEADWALL DETAIL SCALE: N.T.S.

> > CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL COMPLY WITH SECTION 300
> > OF THE TOWN OF LOWELL SANITARY STANDARDS.







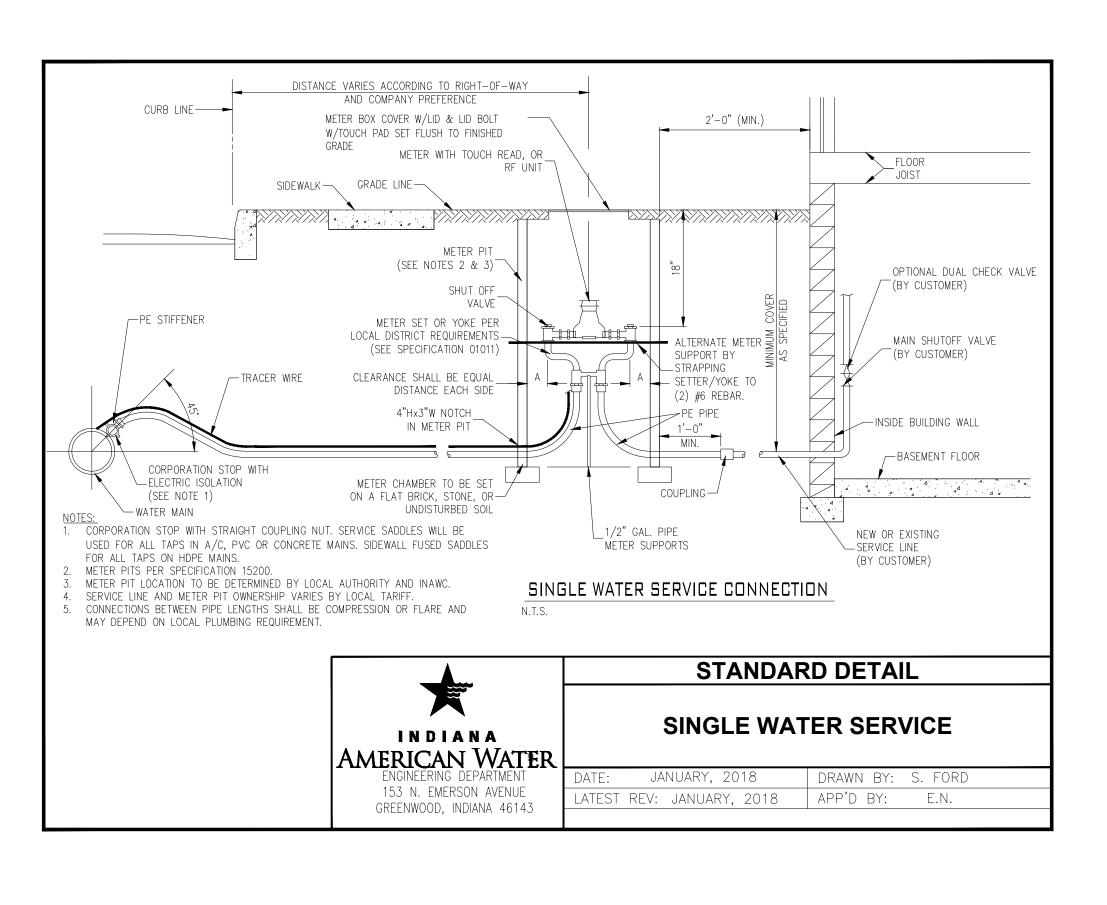


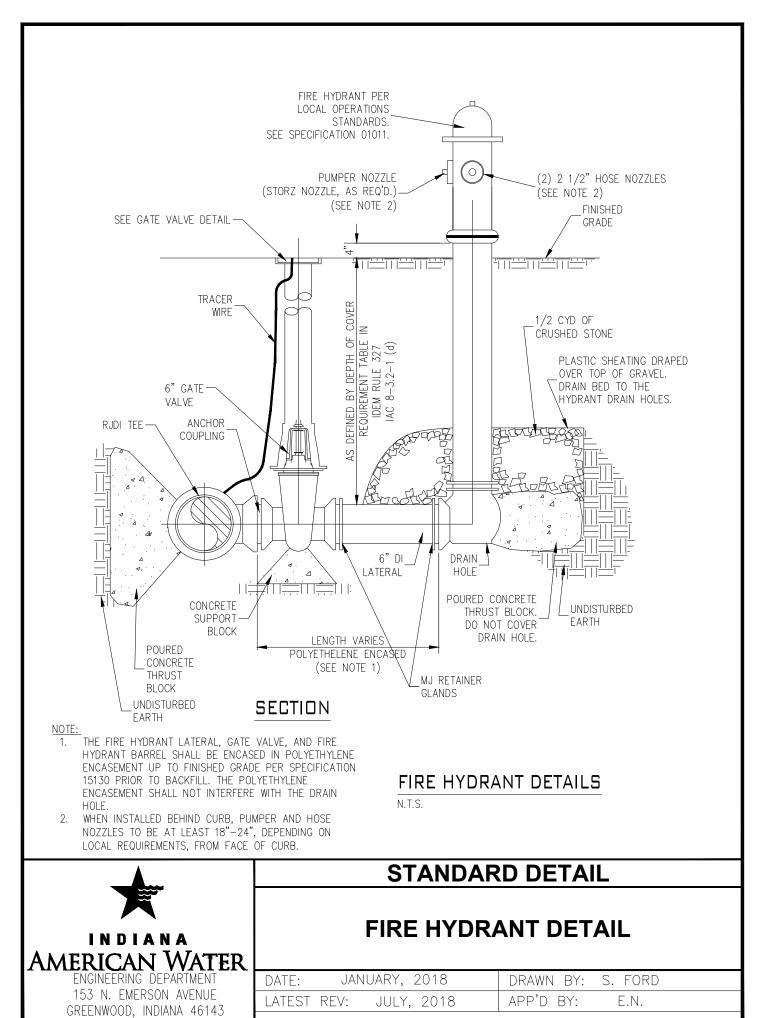
TRILOGY HEALTH SERVICES, LLC.

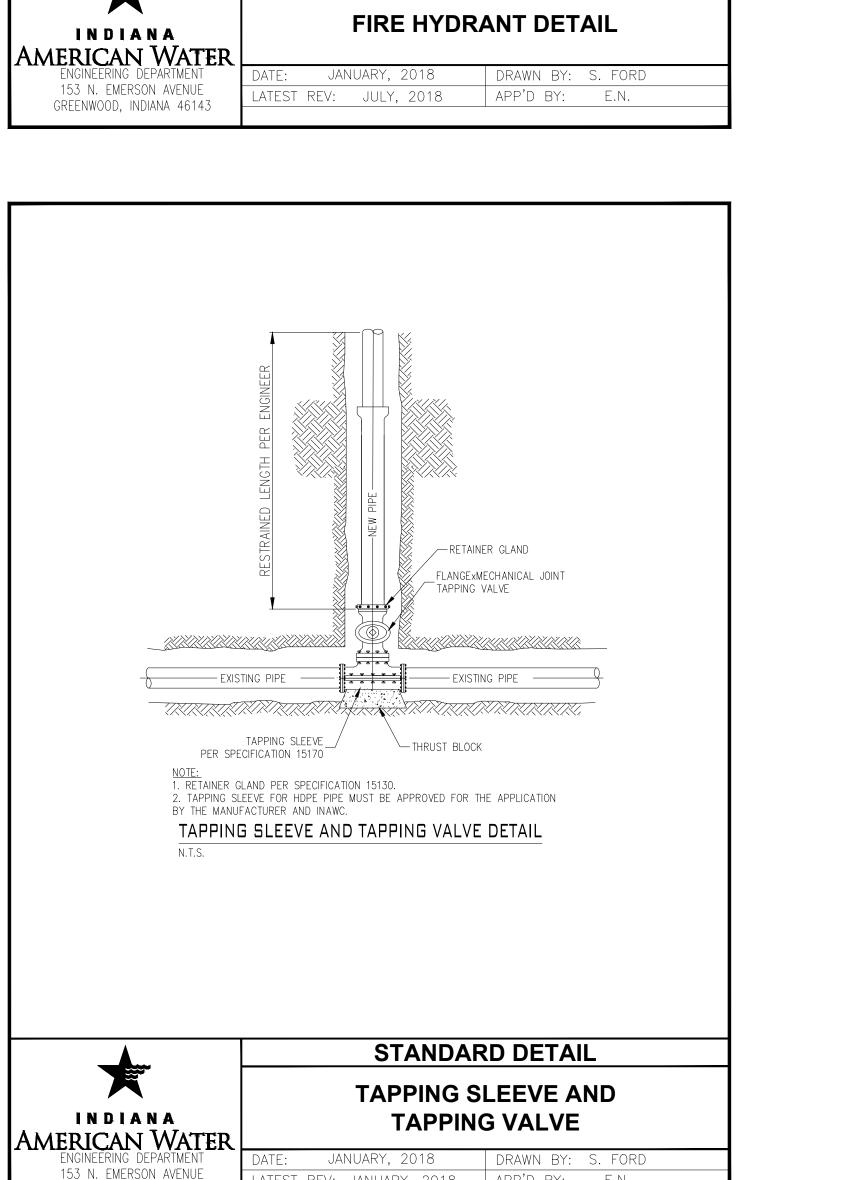
VILLAS AND LEGACY VILLAGE CENTER AT CEDAR CREEK

S BURR ST. LOWELL, IN 46356

DETAILS 2 OF 4) UTILITY (SHEET

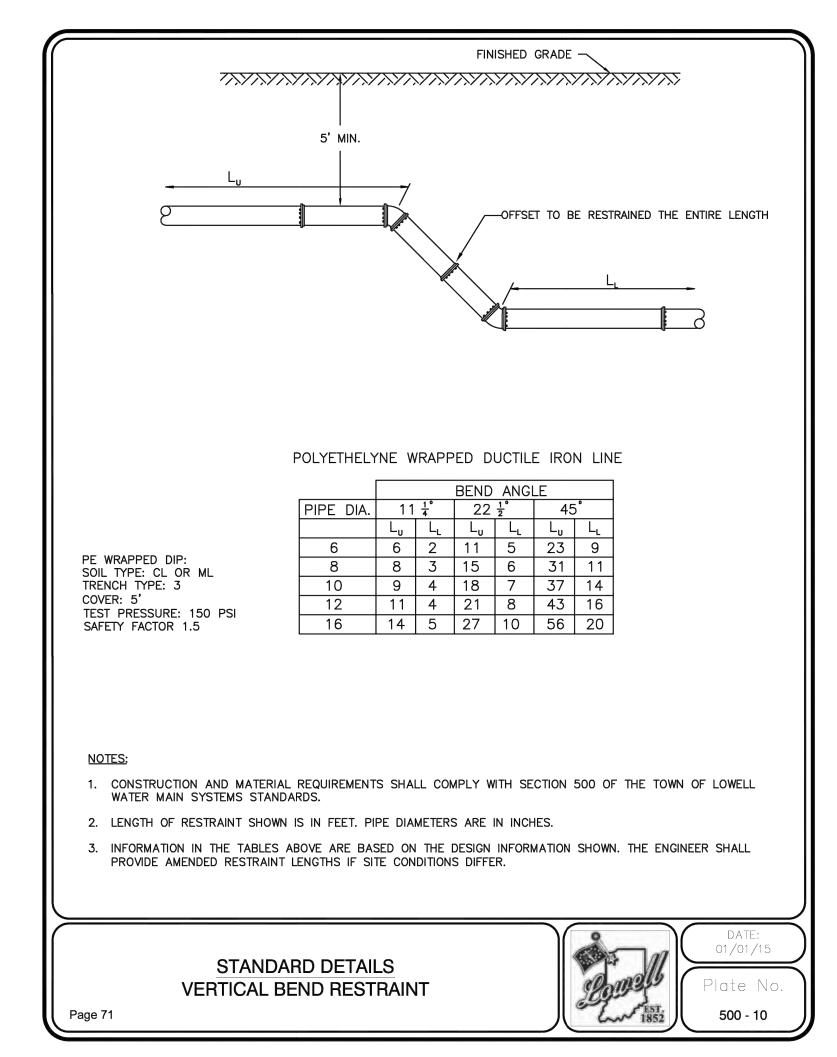


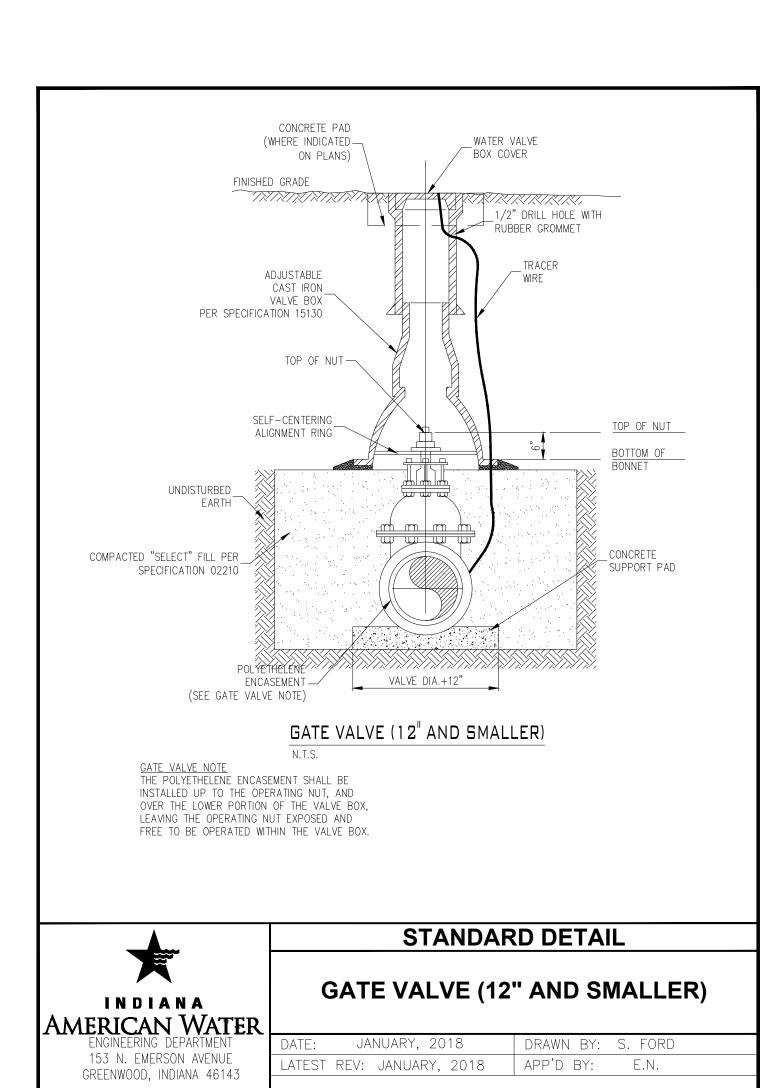




LATEST REV: JANUARY, 2018 APP'D BY:

GREENWOOD, INDIANA 46143







TRILOGY HEALT SERVICES, LLC

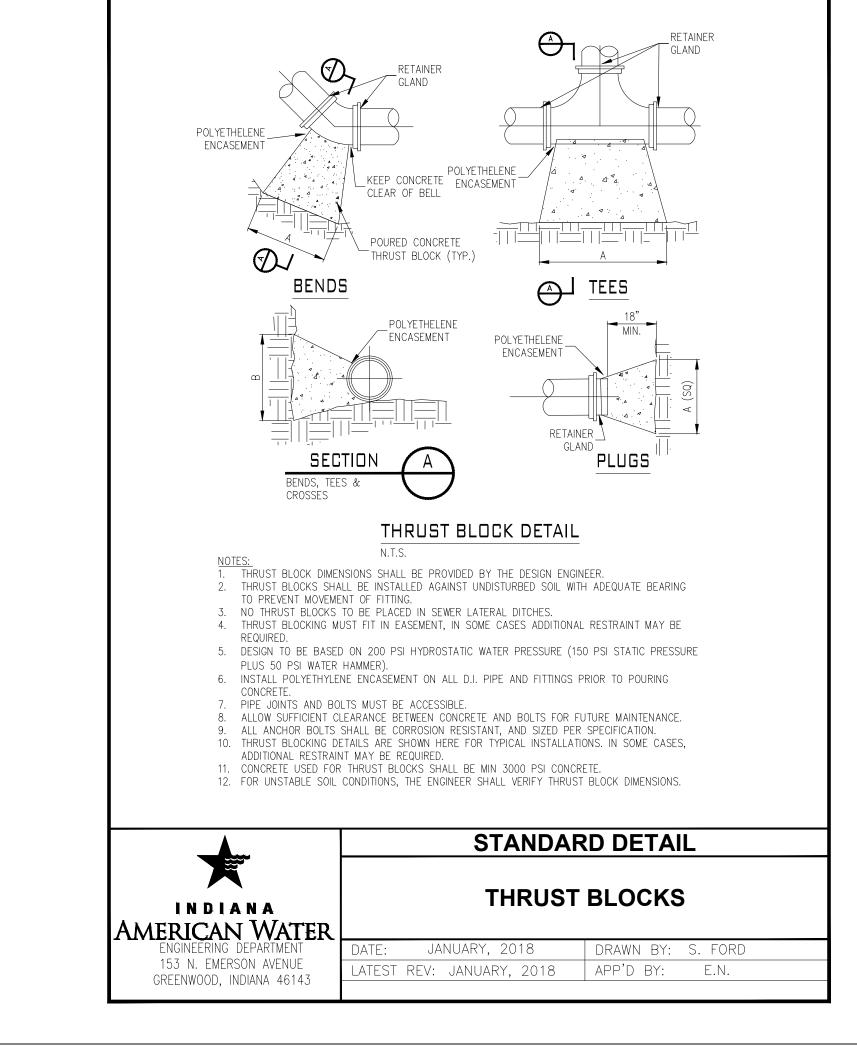
ST. 46356

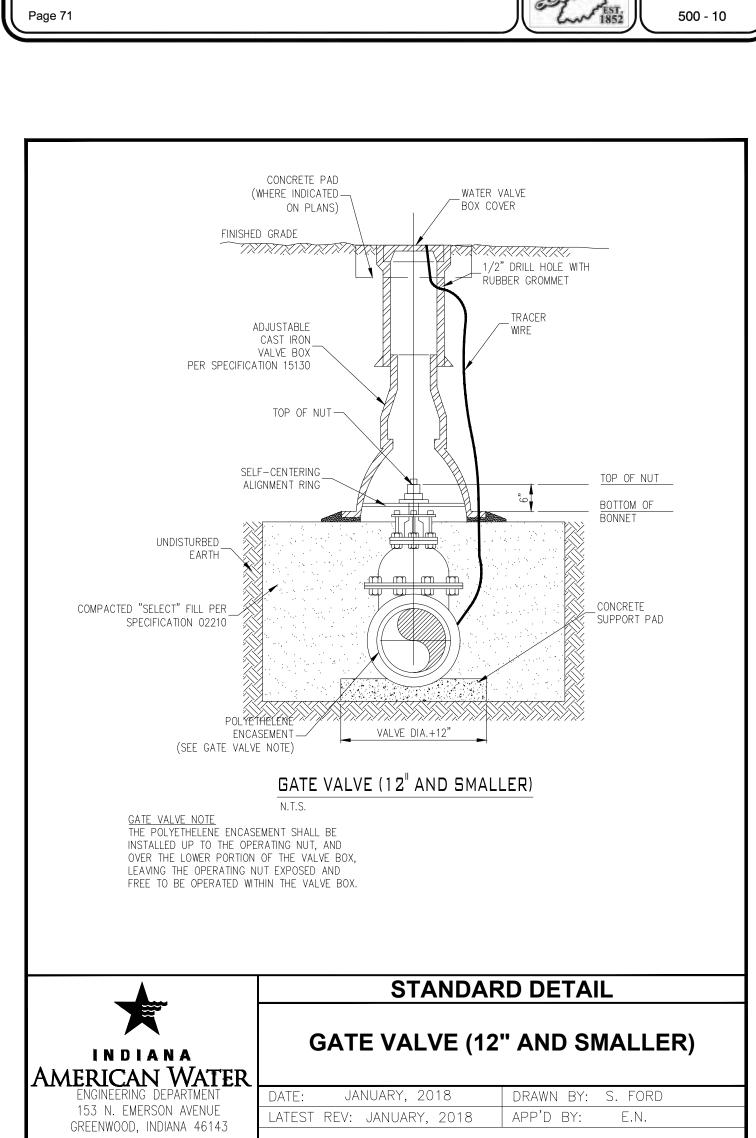
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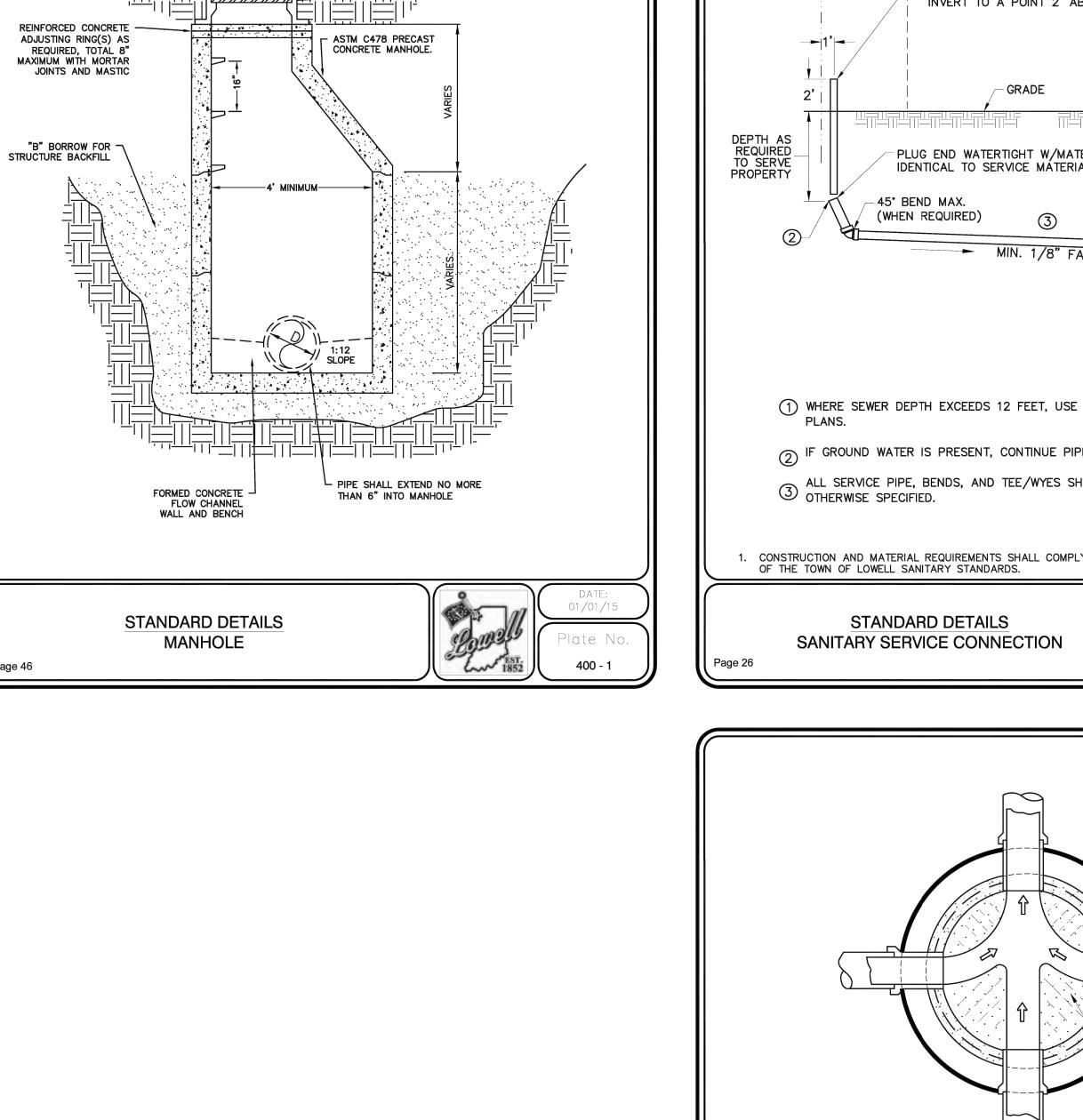
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3

VILLAS AND LEGACY CENTER AT CEDAR



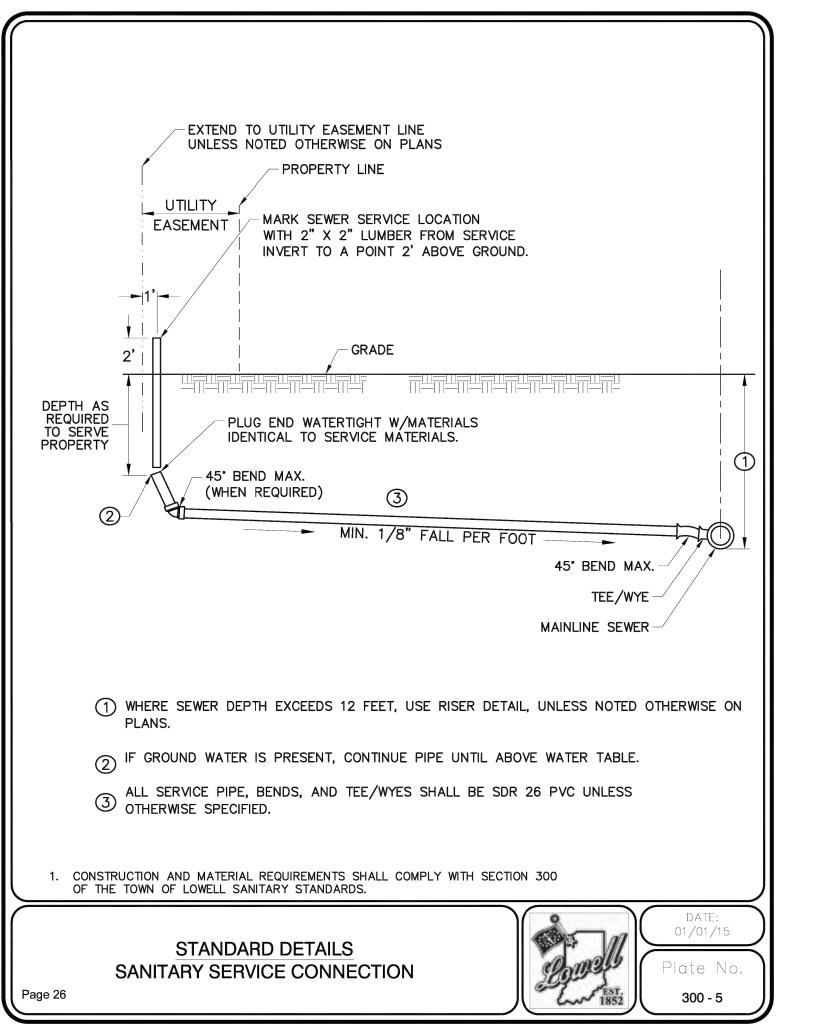




- TOP OF MANHOLE FRAME EAST JORDAN TYPE 1020 A

GROUND LINE

GROUND LINE -



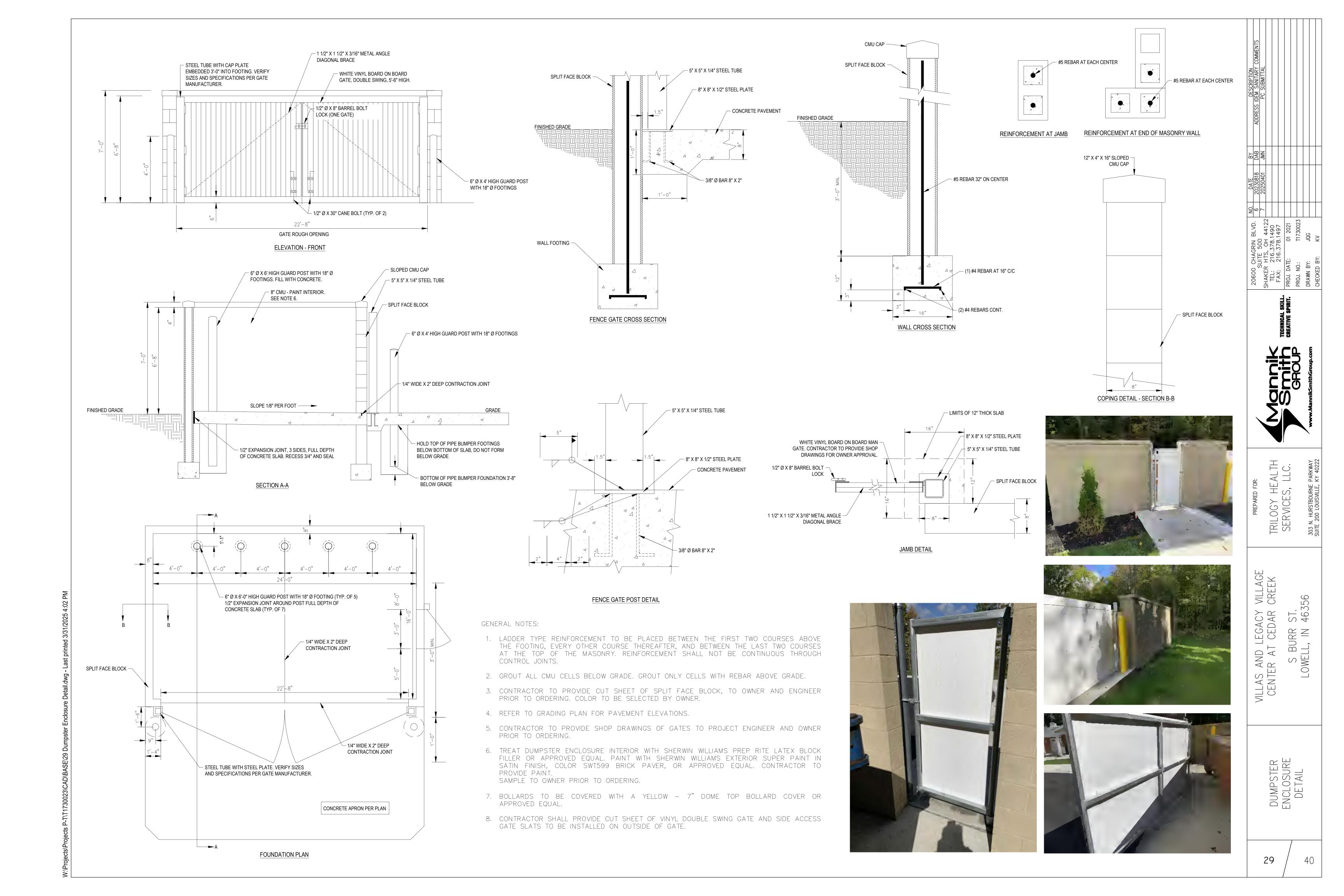
TRILOGY HEALTH SERVICES, LLC.

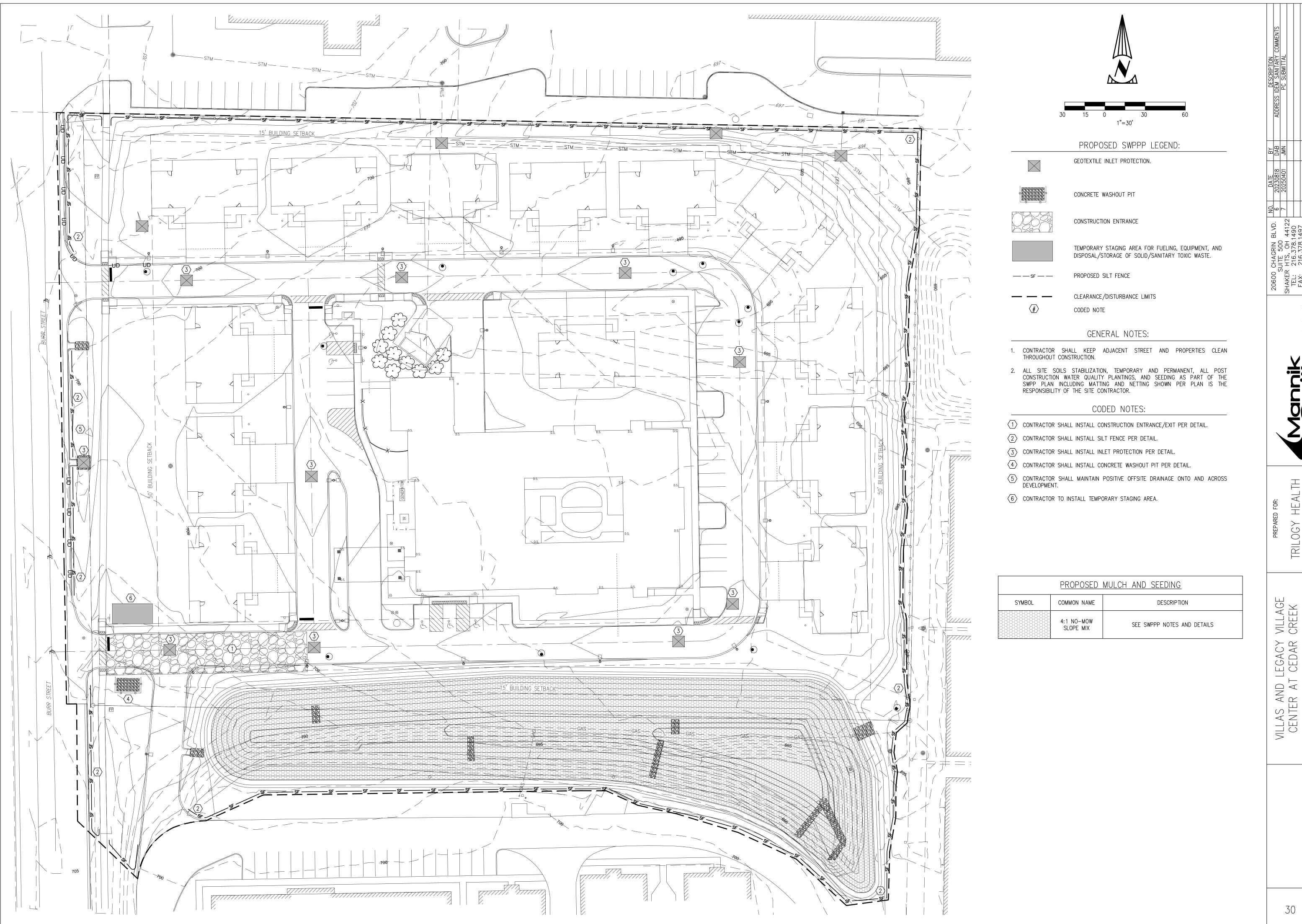
VILLAS AND LEGACY VILLAGE CENTER AT CEDAR CREEK S BURR ST. LOWELL, IN 46356

GROUT BOTTOM CROWN
OF PIPE AND
SLOPE UP 4% TO
MANHOLE WALL

CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL COMPLY WITH SECTION 300
OF THE TOWN OF LOWELL SANITARY STANDARDS.

STANDARD DETAILS SANITARY TYPICAL INVERT DETAILS DETAILS 4 OF 4) UTILITY (SHEET





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GY MEALIM 10ES, LLC.

SERVICE 303 N. HURSTB

S BURR ST. LOWELL, IN 46356

SWPP PLAN

30 /

PROJECT LOCATION

THE PROPERTY IS LOCATED AT 18275 SOUTH BURR STREET, BETWEEN SOUTH BURR STREET AND ANN BEVERLY DRIVE, AT A LATITUDE OF 41°17'18" N AND A LONGITUDE OF 87°23'59" W.

PROJECT ACREAGE

PROPOSED LAND DISTURBANCE: 7.59 ACRES TOTAL IMPERVIOUS SURFACE AREA(DISTURBED): 3.72 ACRES

OWNER'S INFORMATION

TRILOGY HEALTH SERVICES, LLC 303 NORTH HURSTBOUNE PARKWAY LOUISVILLE, KENTUCKY 40222

<u>PLAN DESIGNER</u>

THE MANNIK & SMITH GROUP, INC. 20600 CHAGRIN BLVD. SHAKER HEIGHTS, OH 44122

NOTICE OF INTENT

ALL PARTIES DEFINED AS OWNERS OR OPERATORS MUST SUBMIT A NOTICE OF INTENT (NOI) AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF ON-SITE CONSTRUCTION ACTIVITIES. SUBMITTAL OF LATE NOI'S IS NOT PROHIBITED; HOWEVER, AUTHORIZATION UNDER THE CONSTRUCTION GENERAL PERMIT IS ONLY FOR DISCHARGES THAT OCCUR AFTER PERMIT COVERAGE IS GRANTED. UNPERMITTED DISCHARGES MAY BE SUBJECT TO ENFORCEMENT ACTIONS BY THE EPA. FOR THE PURPOSES OF THIS PERMIT, AN OPERATOR IS DEFINED AS ANY PARTY MEETING EITHER OF THE FOLLOWING REQUIREMENTS:

- a) THE PARTY HAS OPERATIONAL CONTROL OVER CONSTRUCTION PLANS AND SPECIFICATIONS, INCLUDING THE ABILITY TO MAKE MODIFICATIONS TO THOSE PLANS AND SPECIFICATIONS.
- b) THE PARTY HAS DAY-TO-DAY OPERATIONAL CONTROL OF THOSE ACTIVITIES AT A PROJECT THAT ARE NECESSARY TO ENSURE COMPLIANCE WITH A STORMWATER POLLUTION PREVENTION PLAN FOR THE SITE

A2 11" X 17" PLAT

REFER TO THE SITE PLAN.

A3 PROJECT NARRATIVE

THE PROPOSED PROJECT CONSISTS OF THE CONSTRUCTION OF 12 NEW DUPLEX-STYLE LIVING HOMES, LEGACY VILLAGE CENTER FOR THE MEMORY IMPAIRED, SITE GRADING, UTILITIES, LIGHTING AND MODIFICATIONS TO AN EXISTING STORM WATER FACILITY THAT SERVICES THE EXISTING CAMPUS BUILDING. THE MODIFIED STORM WATER BASIN WILL MANAGE BOTH THE PROPOSED AND EXISTING TRILOGY SITE.

A4 VICINITY MAP

REFER TO TITLE SHEET

A5 LEGAL DESCRIPTION OF THE PROJECT SITE

OR OTHER PERMIT CONDITIONS.

A6 LOCATION OF ALL LOTS AND PROPOSED SITE IMPROVEMENTS

THE SITE WILL NOT BE SUBDIVIDED; THEREFORE, THERE ARE NO INDIVIDUAL LOTS ON THE PROPERTY. THE PROPOSED SITE IMPROVEMENTS ARE SHOWN ON THE INCLUDED PLANS.

A7 HYDROLOGIC UNIT CODE (HUC)

07120001130040

A8 STATE AND FEDERAL WATER QUALITY PERMITS

A9 SPECIFIC POINT WHERE STORMWATER DISCHARGE WILL LEAVE THE SITE

STORMWATER DRAINAGE FROM THE SITE WILL BE CONVEYED THROUGH A PROPOSED STORM SEWER TO THE REDESIGNED EXISTING DRY DETENTION POND ALONG THE SOUTHEAST SIDE OF THE SITE. THE DRY DETENTION POND WILL DISCHARGE TO THE EXISTING STORM SEWER SYSTEM.

A10 LOCATION AND NAME OF ALL WETLANDS, LAKES, AND WATERCOURSES ON AND ADJACENT TO THE SITE THERE ARE NO WETLANDS ON SITE.

A13 100-YEAR FLOODPLAINS, FLOODWAYS, AND FLOODWAY FRINGES

THE LOT IS LOCATED IN AN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN) AS INDICATED ON THE LAKE COUNTY, INDIANA, FLOOD INSURANCE RATE MAP 18089C0342E DATED JANUARY 18, 2012.

A14 PRE-CONSTRUCTION AND POST-CONSTRUCTION ESTIMATE OF PEAK DISCHARGE

POST-CONSTRUCTION 10-YEAR DISCHARGE: 2.27 CFS

A15 ADJACENT LAND USE NORTH: COMMERCIAL PROPERTIES

EAST: RESIDENTIAL PROPERTY WEST: RESIDENTIAL PROPERTY

SOUTH: RESIDENTIAL PROPERTY

A16 LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS

APPROXIMATE BOUNDARIES OF DISTURBED AREAS ARE AS IDENTIFIED ON THE EROSION CONTROL PLAN.

A17 IDENTIFICATION OF EXISTING VEGETATIVE COVER

APPROXIMATE AREAS OF EXISTING VEGETATIVE COVER ARE AS SHOWN ON THE EXISTING TOPOGRAPHY SHEETS.

A18 SOILS MAP INCLUDING SOIL DESCRIPTION AND LIMITATIONS

THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY OF LAKE COUNTY, INDIANA, INDICATES ELLIOTT SILT LOAM AND PEWAMA SILTY CLAY LOAM ARE LOCATED ON THE SITE THE ON-SITE SOIL WILL BE TREATED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER IF THE CONDITIONS ARE UNSUITABLE FOR THE PROPOSED CONSTRUCTION. REMEDIAL TREATMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO, REMOVAL OF UNSUITABLE SOIL AND BACKFILLING WITH ENGINEERED MATERIAL AND/OR

INSTALLATION OF A GEOFABRIC WITHIN OR UNDER THE PAVEMENT SYSTEM. A19 LOCATIONS, SIZE, AND DIMENSIONS FOR PROPOSED STORMWATER SYSTEMS

LOCATIONS OF STORMWATER SYSTEMS: REFER TO THE UTILITY PLAN OR STORM SEWER PLAN AND SI7F OF STORM SEWER: REFER TO THE UTILITY PLAN OR STORM SEWER PLAN AND PROFILES

DETAILS OF STORM INLETS AND MANHOLES: REFER TO SITE DETAILS A21 LOCATIONS OF PROPOSED SOIL STOCKPILES AND/OR BORROW/DISPOSAL

EXCESS SOIL SHALL BE IMMEDIATELY STOCKPILED, SURROUNDED WITH SILT FENCE AND SEEDED AND/OR REMOVED FROM THE CONSTRUCTION SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS. IF TOPSOIL STOCKPILES ARE ANTICIPATED FOR THIS PROJECT, THEY ARE SHOWN ON THE EROSION CONTROL PLAN.

TEMPORARY DIRT STOCKPILES SHALL BE MAINTAINED WITH A SLOPE NO GREATER THAN 3:1 AND A HEIGHT OF NO GREATER THAN TWENTY (20) FEET ABOVE GRADE OF THE ADJACENT ROADWAY. PERMANENT DIRT STOCKPILES SHALL BE MAINTAINED WITH A SLOPE OF NO GREATER THAN 4:1 AND A HEIGHT OF NO GREATER THAN FIFTEEN (15) FEET ABOVE THE GRADE OF THE ADJACENT ROADWAY. - ORD #24-04-15

"TEMPORARY DIRT STOCKPILES" MEANS ANY STOCKPILE ASSOCIATED WITH THE SAME PHASE OF CONSTRUCTION AND WILL GONE AT THE END OF THE PERMITTED PHASE THAT IT WAS CREATED.

"PERMANENT DIRT STOCKPILES" MEANS AND STOCKPILE LEFT AFTER A PARTICULAR PHASE OF CONSTRUCTION HAS ACHIEVED ITS OWN DIRT BALANCE AND IS SURPLUS OR LEFT FOR FUTURE PHASE.

A22 EXISTING SITE TOPOGRAPHY

REFER TO THE DEMOLITION PLAN

A23 PROPOSED FINAL SITE TOPOGRAPHY

REFER TO THE GRADING PLAN

B1 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

THE FOLLOWING POTENTIAL POLLUTANT SOURCES MAY BE ASSOCIATED WITH CONSTRUCTION ACTIVITIES ON

- MATERIAL STORAGE AREAS (MORE SPECIFICALLY DESCRIBED BELOW)
- CONSTRUCTION WASTE MATERIAL
- FUEL STORAGE AREAS AND FUELING STATIONS
- LEAKING VEHICLES AND EQUIPMENT SANITARY WASTE FROM TEMPORARY TOILET FACILITIES
- WINDBLOWN DUST SOIL TRACKING OFF SITE FROM CONSTRUCTION EQUIPMENT
- THE FOLLOWING CONSTRUCTION MATERIALS MAY BE STAGED OR STORED ON SITE AT VARIOUS POINTS DURING DEVELOPMENT OF THE SITE:
- PAVEMENT BASE STONE HDPE, PVC, RCP OR DUCTILE IRON PIPE
- PRECAST CONCRETE, HDPE OR PVC DRAINAGE AND SANITARY STRUCTURES

B2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND-DISTURBING

- SCHEDULE PRE-CONSTRUCTION MEETING WITH LOCAL STORMWATER AUTHORITY.
- INSTALL CONSTRUCTION ENTRANCE. UTILIZE THE GRAVEL CONSTRUCTION ENTRANCE FOR INSTALLATION OF THE PERIMETER SILT FENCE. ADD STONE IF NEEDED. POST THE NOI AT THE ENTRANCE. ADD PROTECTION MEASURES TO EXISTING INLETS.
- INSTALL STAGING AREA, FUELING STATION, MATERIAL STORAGE AREA AND CONCRETE TRUCK WASHOUT. CONTACT THE TOWN OF LOWELL TO CONDUCT AN INITIAL EROSION INSPECTION FOR FULL SIGN OFF ON THE IMPROVEMENT OF LOCATION PERMIT PRIOR TO ANY MASS EARTHWORK
- STRIP THE TOP SOIL AND GRADE. COMPLETE THE CUT AND FILLS ON THE SITE. FINAL GRADE AND SEED THE POND SLOPES. INSTALL CHECK DAMS OR STABILIZE THE SLOPES WITH EROSION CONTROL BLANKETS.
- INSTALL STORM SEWER AND OTHER UTILITIES, PROVIDE INLET PROTECTION IMMEDIATELY UPON COMPLETION OF THE INLET AND INSTALL RIPRAP OUTLET PROTECTION PRIOR TO INSTALLING OUTLETS. FINAL GRADE AND STABILIZE SLOPES WHEN INLETS ARE FUNCTIONING.
- PRIOR TO BUILDING CONSTRUCTION INSTALL STONE SURFACE FOR PAVED AREAS.
 BUILDING PADS LEFT DORMANT FOR MORE THAN 15 DAYS, MUST BE TEMPORARILY SEEDED. START BUILDING CONSTRUCTION. INSTALL STAGING AREA FOR BUILDING MATERIALS.
- COMPLETE UTILITY INSTALLATION, CURBS, PAVING AND BUILDING CONSTRUCTION. 14. INSTALL LANDSCAPING PLANT MATERIAL AND STABILIZE ALL DISTURBED AREAS. 15. REMOVE ALL EROSION AND SEDIMENT CONTROL PRACTICES WHEN AREAS HAVE A UNIFORM GRASS

B3 STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS

CONSTRUCTION ENTRANCES WILL BE IN PLACE PRIOR TO ANY SITE CONSTRUCTION OR DEMOLITION. ENTRANCES ARE SHOWN ON THE EROSION CONTROL PLAN, REFER TO THE EROSION CONTROL DETAILS FOR

B4 SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS

SEED THE PERIMETER OF THE SITE.

SHEET FLOW AREAS WILL BE PROTECTED BY SEED AND MULCH OR HYDROSEEDING. EROSION CONTROL BLANKETS WILL BE INSTALLED ON SLOPED AREAS WHERE THE SLOPE EXCEEDS 6:1 (HORIZONTAL TO VERTICAL). SILT FENCING WILL BE UTILIZED TO PREVENT SEDIMENTATION FROM LEAVING THE SITE. REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS AND THE EROSION CONTROL DETAILS FOR DETAILS.

B5 SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS

PROPOSED SWALES WILL BE STABILIZED WITH EROSION CONTROL BLANKETS, AND ROCK DONUTS WILL BE INSTALLED TO SLOW RUNOFF TO INLETS. STRAW BALES AND SILT FENCES <u>WILL NOT</u> BE ALLOWED AS CONCENTRATED FLOW PROTECTION MEASURES. REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS AND THE EROSION CONTROL DETAILS FOR DETAILS.

B6 STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS

THE CONTRACTOR SHALL INSTALL APPROPRIATE INLET PROTECTION MEASURES AT EACH INLET. REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS AND THE EROSION CONTROL DETAILS FOR DETAILS. STRAW BALES <u>WILL NOT</u> BE ALLOWED AS INLET PROTECTION MEASURES.

B7 RUNOFF CONTROL MEASURES

REFER TO SWPP PLAN FOR DETAILS

B8 STORMWATER OUTLET PROTECTION SPECIFICATIONS

STORMWATER OUTLETS WILL BE PROTECTED BY RIPRAP APRONS TO PREVENT SCOUR EROSION. REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS AND THE EROSION CONTROL DETAILS FOR DETAILS.

B9 GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS

RIP RAP APRONS AT OUTLETS WILL BE UTILIZED TO PREVENT GRADE DESTABILIZATION. REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS AND THE EROSION CONTROL DETAILS FOR DETAILS.

BIO LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY

REFER TO THE EROSION CONTROL PLAN FOR LOCATIONS OF EACH STORMWATER QUALITY MEASURE AND THE EROSION CONTROL DETAILS.

B11 TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON

SURFACE STABILIZATION IS REQUIRED ON ANY BARE OR THINLY VEGETATED AREA THAT IS SCHEDULED OR LIKELY TO REMAIN INACTIVE FOR A PERIOD OF 15 DAYS OR MORE. REFER TO THE TEMPORARY SEEDING DETAIL WITHIN EROSION CONTROL DETAILS FOR SPECIFICS ON SOIL AMENDMENTS, SEED MIXTURES AND MULCHING.

B12 PERMANENT SURFACE STABILIZATION SPECIFICATIONS

- A. LOOSEN LAWN AREA TO A MINIMUM DEPTH OF 6 INCHES. MIX SOIL AMENDMENTS AND FERTILIZERS WITH TOPSOIL AT RATES SPECIFIED. ORGANIC SOIL AMENDMENTS SUCH AS PEAT, COMPOST OR MANURE SHALL BE APPLIED AT 2" DEPTH EVENLY OVER SOIL AND INCORPORATED INTO THE TOP 6" OF TOPSOIL. PROVIDE FERTILIZER WITH PERCENTAGE OF NITROGEN REQUIRED TO PROVIDE NOT LESS THAN 1 POUND OF ACTUAL NITROGEN PER 1,000 SQ. FT. OF LAWN AREA AND NOT LESS THAN 4 PERCENT PHOSPHORIC ACID AND 2 PERCENT POTASSIUM. AT LEAST 50 PERCENT OF NITROGEN TO BE ORGANIC FORM. DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN A FEW DAYS.
- FERTILIZER FOR LAWNS: PROVIDE A FAST RELEASE FERTILIZER WITH A COMPOSITION OF 1 LB PER 1,000 SQ. T. OF ACTUAL NITROGEN, 4 PERCENT PHOSPHOROUS, AND 2 PERCENT POTASSIUM BY WEIGHT. C. SLOW-RELEASE FERTILIZER FOR TREES AND SHRUBS: GRANULAR FERTILIZER CONSISTING OF 50 PERCENT WATER-INSOLUBLE NITROGEN, PHOSPHOROUS AND POTASSIUM MADE UP OF A COMPOSITION BY WEIGHT OF 5
- **PERCENT** GRADE LAWN AND GRASS AREAS TO A SMOOTH, EVEN SURFACE WITH LOOSE, UNIFORMLY FINE TEXTURE LIMIT FINE GRADING TO AREAS THAT CAN BE PLANTED WITHIN IMMEDIATE FUTURE. REMOVE TRASH, DEBRIS, STONES LARGER THAN 1 INCH DIAMETER, AND OTHER OBJECTS THAT MAY INTERFERE WITH PLANTING OR MAINTENANCE OPERATIONS. SOW SEED USING A SPREADER OR SEEDING MACHINE. DO NOT SEED WHEN WIND
- VELOCITY EXCEEDS 5 MILES PER HOUR. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. RAKE SEED LIGHTLY INTO TOP 1/8 INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY.
- G. INSTALL EROSION CONTROL BLANKETS AS INDICATED ON THE PLAN. H. PROTECT SEEDED AREAS AGAINST EROSION BY SPREADING CLEAN, SEED-FREE STRAW MULCH AFTER COMPLETION OF SEEDING OPERATIONS. SPREAD UNIFORMLY TO FORM A CONTINUOUS BLANKET NOT LESS THAN 1-1/2 INCHES LOOSE MEASUREMENTS OVER SEEDED AREAS.
- I. WATER NEWLY PLANTED LAWN AREAS AND KEEP MOIST UNTIL NEW GRASS IS ESTABLISHED. IMMEDIATELY REPAIR ANY LAWN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES INCLUDING TREE AND SHRUB
- J. REFER TO THE PERMANENT SEEDING DETAILS WITHIN THE EROSION CONTROL DETAIL SHEET, FOR TIMING OF PERMANENT SEEDING, GRASS SEED SPECIFICATIONS AND MULCHING SPECIFICATIONS.

B13 MATERIAL HANDLING AND SPILL PREVENTION PLAN

NO SOLID MATERIAL, INCLUDING BUILDING MATERIALS, IS PERMITTED TO BE DISCHARGED TO SURFACE WATERS OR BURIED ON SITE. ALL SOLID WASTE MATERIALS, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE CONSTRUCTION ACTIVITY, MUST BE COLLECTED IN CONTAINERS OR CLOSED DUMPSTERS. THE COLLECTION CONTAINERS MUST BE EMPTIED PERIODICALLY AND THE COLLECTED MATERIAL HAULED TO A LANDFILL PERMITTED BY THE STATE AND/OR APPROPRIATE LOCAL MUNICIPALITY TO ACCEPT THE WASTE FOR

A FOREMAN OR SUPERVISOR SHOULD BE DESIGNATED IN WRITING TO OVERSEE, ENFORCE, AND INSTRUCT CONSTRUCTION WORKERS ON PROPER SOLID WASTE PROCEDURES.

WHENEVER POSSIBLE, MINIMIZE THE USE OF HAZARDOUS MATERIALS AND GENERATION OF HAZARDOUS WASTES. ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED IN THE MANNER SPECIFIED BY FEDERAL, STATE, OR LOCAL REGULATIONS OR BY THE MANUFACTURER.

USE CONTAINMENT BERMS IN FUELING AND MAINTENANCE AREAS AND WHERE POTENTIAL FOR SPILLS IS HIGH. A FOREMAN OR SUPERVISOR SHOULD BE DESIGNATED IN WRITING TO OVERSEE. ENFORCE AND INSTRUCT CONSTRUCTION WORKERS ON PROPER HAZARDOUS WASTE PROCEDURES. THE LOCATION OF ANY HAZARDOUS WASTE STORAGE AREAS SHOULD BE INDICATED ON THE STORMWATER POLLUTION PREVENTION PLAN BY THE OPERATOR FOLLOWING ON-SITE LOCATION OF THE FACILITY.

DUST CONTROL/OFF-SITE VEHICLE TRACKING

DURING CONSTRUCTION, WATER TRUCKS SHOULD BE USED, AS NEEDED, BY EACH CONTRACTOR OR SUBCONTRACTOR TO REDUCE DUST. AFTER CONSTRUCTION, THE SITE SHOULD BE STABILIZED TO REDUCE

CONSTRUCTION TRAFFIC SHOULD ENTER AND EXIT THE SITE AT A CONSTRUCTION ENTRANCE WITH A ROCK PAD OR EQUIVALENT DEVICE. THE PURPOSE OF THE ROCK PAD IS TO MINIMIZE THE AMOUNT OF SOIL AND MUD THAT IS TRACKED ONTO EXISTING STREETS. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE

SANITARY/SEPTIC
CONTRACTORS AND SUBCONTRACTORS MUST COMPLY WITH ALL STATE AND LOCAL SANITARY SEWER, PORTABLE TOILET, OR SEPTIC SYSTEM REGULATIONS. SANITARY FACILITIES SHALL BE PROVIDED AT THE SITE BY EACH CONTRACTOR OR SUBCONTRACTOR THROUGHOUT CONSTRUCTION ACTIVITIES. THE SANITARY FACILITIES SHOULD BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND BE SERVICED REGULARLY. ALL EXPENSES ASSOCIATED WITH PROVIDING SANITARY FACILITIES ARE THE RESPONSIBILITY OF THE CONTRACTORS AND SUBCONTRACTORS. THE LOCATION OF ANY SANITARY FACILITIES SHOULD BE INDICATED ON THE STORMWATER POLLUTION PREVENTION PLAN BY THE OPERATOR FOLLOWING ON-SITE LOCATION OF SAID

WATER USED TO ESTABLISH AND MAINTAIN GRASS, TO CONTROL DUST, AND FOR OTHER CONSTRUCTION PURPOSES MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE OR LOCAL HEALTH DEPARTMENT.

EQUIPMENT FUELING AND STORAGE AREAS EQUIPMENT FUELING, MAINTENANCE, AND CLEANING SHOULD ONLY BE COMPLETED IN PROTECTED AREAS (I.E., BERMED AREA). LEAKING EQUIPMENT AND MAINTENANCE FLUIDS WILL BE COLLECTED AND NOT ALLOWED TO DISCHARGE ONTO SOIL WHERE THEY MAY BE WASHED AWAY DURING A RAIN EVENT.

EQUIPMENT WASH DOWN (EXCEPT FOR WHEEL WASHES) SHOULD TAKE PLACE WITHIN AN AREA SURROUNDED BY A BERM. THE USE OF DETERGENTS IS PROHIBITED.

CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC OR HAZARDOUS MATERIALS SHOULD BE STORED IN THEIR ORIGINAL CONTAINERS (IF ORIGINAL CONTAINER IS NOT RESEALABLE, STORE THE PRODUCTS IN CLEARLY LABELED, WATERPROOF CONTAINERS). EXCEPT DURING APPLICATION, THE CONTAINERS SHOULD BE KEPT IN TRUCKS OR IN BERMED AREAS WITHIN COVERED STORAGE FACILITIES. RUNOFF CONTAINING SUCH MATERIALS SHALL BE COLLECTED, REMOVED FROM THE SITE, AND DISPOSED OF IN ACCORDANCE WITH THE FEDERAL, STATE, AND LOCAL REGULATIONS.

AS MAY BE REQUIRED BY FEDERAL, STATE OR LOCAL REGULATIONS, THE CONTRACTOR SHOULD HAVE A HAZARDOUS MATERIALS MANAGEMENT PLAN AND/OR HAZARDOUS MATERIALS SPILL AND PREVENTION PROGRAM IN PLACE. A FOREMAN OR SUPERVISOR SHOULD BE DESIGNATED IN WRITING TO OVERSEE, ENFORCE, AND INSTRUCT CONSTRUCTION WORKERS ON PROPER HAZARDOUS MATERIALS STORAGE AND HANDLING PROCEDURES. THE LOCATION OF ANY HAZARDOUS MATERIAL STORAGE AREAS SHOULD BE INDICATED ON THE STORMWATER POLLUTION PREVENTION PLAN BY THE OPERATOR FOLLOWING ON-SITE LOCATION OF THE STORAGE AREAS.

MATERIAL HANDLING AND SPILL PREVENTION
DISCHARGE OF HAZARDOUS SUBSTANCES OR OIL INTO STORMWATER IS SUBJECT TO REPORTING REQUIREMENTS. IN THE EVENT OF A SPILL OF A HAZARDOUS SUBSTANCE, THE OPERATOR IS REQUIRED TO NOTIFY THE NATIONAL RESPONSE CENTER (1-800-424-8802) TO PROPERLY REPORT THE SPILL. IN ADDITION, THE OPERATOR SHALL SUBMIT A WRITTEN DESCRIPTION OF THE RELEASE (INCLUDING THE TYPE AND AMOUNT OF MATERIAL RELEASED, THE DATE OF THE RELEASE, THE CIRCUMSTANCES OF THE RELEASE, AND THE STEPS TO BE TAKEN TO PREVENT FUTURE SPILLS) TO THE LOCAL GOVERNING AUTHORITY. THE SWPPP MUST BE REVISED WITHIN 14 CALENDAR DAYS AFTER THE RELEASE TO REFLECT THE RELEASE, STATING THE INFORMATION ABOVE ALONG WITH MODIFICATIONS TO MINIMIZE THE POSSIBILITY OF FUTURE OCCURRENCES. EACH CONTRACTOR AND SUBCONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THESE REPORTING

ALL CONCRETE TRUCKS WASTE MATERIAL SHALL BE COMPLETELY CONTAINED AND DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. A PIT OR CONTAINER IS REQUIRED WHEN CLEANING CONCRETE CHUTES.

MINOR - SMALL SPILLS THAT TYPICALLY INVOLVE OIL, GASOLINE, PAINT, HYDRAULIC FLUID, ETC., CAN BE CONTROLLED BY THE FIRST RESPONDER AT THE DISCOVERY OF THE SPILL

 CONTAIN SPILL TO PREVENT MATERIAL FROM ENTERING STORM OR GROUND WATER. DO NOT FLUSH WITH WATER OR BURY. USE ABSORBENT MATERIAL TO CLEAN-UP SPILL MATERIAL AND ANY SUBSEQUENTLY CONTAMINATED SOIL AND DISPOSE OF PROPERLY.

SEMI-SIGNIFICANT SPILLS - APPROXIMATELY TEN GALLONS OR LESS OF POLLUTANT WITH NO CONTAMINATION OF GROUND OR SURFACE WATERS. MINOR SPILLS CAN BE GENERALLY CONTROLLED BY THE FIRST RESPONDER WITH HELP FROM OTHER SITE PERSONNEL. THIS RESPONSE MAY REQUIRE OTHER OPERATIONS TO STOP TO MAKE SURE THE SPILL IS QUICKLY AND SAFELY ADDRESSED. AT THE DISCOVERY OF THE SPILL

- CONTAIN SPILL TO PREVENT MATERIAL FROM ENTERING STORM OR GROUND WATER. DO NOT FLUSH USE ABSORBENT MATERIAL TO CLEAN-UP SPILLS AND DISPOSE OF PROPERLY. SPILLS ON IMPERVIOUS SURFACES SHOULD BE DISPOSED OF AS SOON AS POSSIBLE TO PREVENT MIGRATION DEEPER INTO THE SOIL AND GROUNDWATER. DISPOSE OF CONTAMINATED SOILS OR ABSORBENTS
- CONTACT 911 IF THE SPILL COULD BE A SAFETY ISSUE. CONTACT SUPERVISORS AND DESIGNATED SITE INSPECTORS IMMEDIATELY

 CONTAMINATED SOLIDS ARE TO BE REMOVED TO AN APPROVED LANDFILL. MAJOR OR HAZARDOUS SPILLS - MORE THAN TEN GALLONS, THERE IS THE POTENTIAL FOR DEATH, INJURY OR ILLNESS TO HUMANS OR ANIMALS, OR HAS THE POTENTIAL FOR SURFACE OR GROUNDWATER POLLUTION.

- DRAINS IF POSSIBLE TO PREVENT MIGRATION OF THE SPILL INTO THE STORMWATER SYSTEM. IMMEDIATELY CONTACT THE LOCAL FIRE DEPARTMENT AT 911 TO REPORT ANY HAZARDOUS MATERIAL CONTACT SUPERVISORS AND DESIGNATED SITE INSPECTORS IMMEDIATELY. GOVERNING AUTHORITIES
- RESPONSIBLE FOR STORM WATER FACILITIES SHOULD BE CONTACTED AS WELL. THE CONTRACTOR IS RESPONSIBLE FOR HAVING THESE CONTACT NUMBERS AVAILABLE AT THE JOB SITE. A WRITTEN REPORT SHOULD BE SUBMITTED TO THE OWNER AS SOON AS POSSIBLE. AS SOON AS POSSIBLE BUT WITHIN 2 HOURS OF DISCOVERY, CONTACT THE LOCAL AGENCY

CONTROL OR CONTAIN THE SPILL WITHOUT RISKING BODILY HARM. TEMPORARILY PLUG STORM

- RESPONSIBLE FOR SPILL MANAGEMENT. THE FOLLOWING INFORMATION SHOULD BE NOTED FOR FUTURE REPORTS TO THE AGENCY: .. NAME, ADDRESS AND PHONE NUMBER OF PERSON MAKING THE SPILL REPORT
- THE TIME OF THE SPILL IDENTIFICATION OF THE SPILLED SUBSTANCE APPROXIMATE QUANTITY OF THE SUBSTANCE THAT HAS BEEN SPILLED OR MAY BE FURTHER

THE LOCATION OF THE SPILL

- THE DURATION AND SOURCE OF THE SPILL NAME AND LOCATION OF THE DAMAGED WATERS
- NAME OF SPILL RESPONSE ORGANIZATION WHAT MEASURES WERE TAKEN IN THE SPILL RESPONSE OTHER INFORMATION THAT MAY BE SIGNIFICANT

ADDITIONAL REGULATIONS OR REQUIREMENTS MAY BE PRESENT. A SPILL RESPONSE PROFESSIONAL SHOULD BE CONSULTED TO MAKE SURE ALL APPROPRIATE AND REQUIRED STEPS HAVE BEEN TAKEN. CONTAMINATED SOLIDS SHOULD ONLY BE REMOVED FROM THE SITE AFTER APPROVAL IS GIVEN BY THE APPROPRIATE

B14 MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE

INSPECTION SCHEDULE/REPORTING ALL IMPACTED AREAS, AS WELL AS ALL EROSION AND SEDIMENT CONTROL DEVICES, WILL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER A RAINFALL OF 0.5 INCH OR GREATER. WHERE SITES HAVE BEEN FINAL OR TEMPORARILY STABILIZED OR ON SITES WHERE RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (E.G., SITE IS COVERED WITH SNOW, ICE, OR FROZEN GROUND EXISTS), SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

INSPECTIONS SHALL BE CONDUCTED AND A WRITTEN REPORT PREPARED, BY A DESIGNATED AND QUALIFIED PERSON FAMILIAR WITH THE USEPA NPDES STORM WATER GENERAL PERMIT, THIS SWPPP, AND THE PROJECT.

INSPECTION REPORTS SHALL BE COMPLETED INCLUDING SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE OF THE INSPECTION, OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP, AND ANY ACTIONS TAKEN AS A RESULT OF INCIDENTS OF NONCOMPLIANCE NOTED DURING THE INSPECTION. THE INSPECTION REPORT SHOULD STATE WHETHER THE SITE WAS IN COMPLIANCE OR IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE. THE CONTRACTOR SHALL KEEP A COPY OF THE INSPECTION REPORTS ON SITE AND PERMANENTLY FOR A PERIOD OF TWO YEARS FOLLOWING CONSTRUCTION. THE ON-SITE REPORTS MAY BE REQUESTED BY INSPECTIONS CONDUCTED BY THE LOCAL

CONSTRUCTION ENTRANCE

LOCATIONS WHERE VEHICLES EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. EACH CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION ENTRANCE AND OTHER CONTROLS AS DESCRIBED IN THIS SWPPP. MATERIAL STORAGE INSPECTIONS

PRECIPITATION. THE PURPOSE IS TO ENSURE THAT MATERIALS ARE PROTECTED AND/OR IMPOUNDED SO THAT

POLLUTANTS CANNOT DISCHARGE FROM STORAGE AREAS. OFF-SITE MATERIAL STORAGE AREAS USED SOLELY

INSPECTORS MUST EVALUATE AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO

BY THE SUBJECT PROJECT ARE CONSIDERED TO BE PART OF THE PROJECT AND MUST BE INCLUDED IN THE EROSION CONTROL PLANS AND THE SITE INSPECTION REPORTS.

<u>SOIL STABILIZATION INSPECTIONS</u> SEEDED AREAS WILL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH PAVEMENT OR HAVE A STAND OF VEGETATION WITH AT LEAST 70% OF THE BACKGROUND VEGETATION DENSITY. THE DENSITY OF

70% OR GREATER MUST BE MAINTAINED TO BE CONSIDERED AS STABILIZED. THE OPERATOR OR THEIR

REPRESENTATIVE WILL WATER, FERTILIZE, AND RESEED DISTURBED AREAS AS NEEDED TO ACHIEVE THIS GOAL.

ALL CONTROLS SHOULD BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND FOLLOWING ANY STORM EVENT OF 0.5 INCH OR GREATER. THE FOLLOWING IS A LIST OF INSPECTION/MAINTENANCE PRACTICES THAT WILL BE USED FOR SPECIFIC CONTROLS:

- 1. GEOTEXTILES/EROSION CONTROL MATS: MISSING OR LOOSE MATTING MUST BE REPLACED OR RE-ANCHORED INLET PROTECTION: IF SILT FENCE INLET PROTECTION IS TO BE USED, SEDIMENT SHOULD BE REMOVED
- WHEN IT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN THE VOLUME OF THE BASIN IS REDUCED BY 50%.
- 3. DIVERSION SWALES: CLEAN DEBRIS OR OTHER OBSTRUCTIONS AS NEEDED. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES (I.E., TIRE RUTS) SHALL BE REPAIRED IMMEDIATELY.
 MULCHING: INSPECT FOR THIN OR BARE SPOTS CAUSED BY NATURAL DECOMPOSITION OR
- WEATHER-RELATED EVENTS. MULCH IN HIGH TRAFFIC AREAS SHOULD BE REPLACED ON A REGULAR BASIS TO MAINTAIN UNIFORM PROTECTION. 5. SEDIMENT TRAP: ACCUMULATED SILT SHALL BE REMOVED AND THE BASIN SHALL BE RE-GRADED TO ITS
- ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE IMPOUNDMENT HAS BEEN REDUCED TO ONE—HALF OF ITS ORIGINAL STORAGE CAPACITY. THE REMOVED SEDIMENT SHALL BE STOCKPILED OR REDISTRIBUTED IN AREAS THAT ARE PROTECTED FROM EROSION. 6. SEDIMENT BASIN: INSPECT FREQUENTLY TO CHECK FOR DAMAGE AND TO ENSURE OBSTRUCTIONS ARE NOT DIMINISHING THE EFFECTIVENESS OF THE STRUCTURES. SEDIMENT SHALL BE REMOVED AND THE BASIN SHALL BE RE-GRADED TO ITS ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE
- IMPOUNDMENT HAS BEEN REDUCED TO 20% OF ITS ORIGINAL STORAGE CAPACITY. THE REMOVED SEDIMENT SHALL BE STOCKPILED OR REDISTRIBUTED IN AREAS THAT ARE PROTECTED FROM EROSION. SILT FENCE: REMOVAL OF BUILT-UP SEDIMENT WILL OCCUR WHEN THE SEDIMENT REACHES ONE-THIRD
- THE HEIGHT OF THE FENCE. 8. STABILIZED CONSTRUCTION ENTRANCE: PERIODIC RE-GRADING AND TOP DRESSING WITH ADDITIONAL
- STRAW BALES: REPLACE STRAW BALES THAT SHOW SIGNS OF DETERIORATION. VEGETATION: PROTECT NEWLY SEEDED AREAS FROM EXCESSIVE RUNOFF AND TRAFFIC UNTIL VEGETATION IS ESTABLISHED. ESTABLISH A WATERING AND FERTILIZING SCHEDULE. 11. GOOD HOUSEKEEPING: LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER

DISCHARGES THROUGH SCREENING OF OUTFALLS AND DAILY PICKUP OF LITTER.

IN THE EVENT THAT SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE ADVERSE IMPACTS. AN EXAMPLE OF THIS MAY BE THE SITUATION WHERE SEDIMENT HAS WASHED INTO THE STREET AND COULD BE CARRIED INTO THE STORM SEWERS BY THE NEXT RAINFALL AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS. MODIFICATIONS/REVISIONS TO SWPPP.

BASED ON INSPECTION RESULTS, ANY NECESSARY MODIFICATION TO THIS SWPPP SHALL BE IMPLEMENTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. A MODIFICATION IS NECESSARY IF A CONTROL MEASURE OR OPERATIONAL PROCEDURE DOES NOT PROVIDE ADEQUATE POLLUTANT CONTROL. ALL REVISIONS SHALL BE RECORDED ON A RECORD OF REVISIONS WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. IT IS THE RESPONSIBILITY OF THE OPERATOR TO MAINTAIN EFFECTIVE POLLUTANT DISCHARGE CONTROLS.

PHYSICAL SITE CONDITIONS OR CONTRACTOR/SUBCONTRACTOR PRACTICES COULD MAKE IT NECESSARY TO INSTALL MORE CONTROLS THAN WERE ORIGINALLY PLANNED. FOR EXAMPLE, LOCALIZED CONCENTRATIONS OF SURFACE RUNOFF OR UNUSUALLY STEEP AREAS COULD REQUIRE ADDITIONAL SILT BARRIER OR OTHER STRUCTURAL CONTROLS. ASSESSING THE NEED FOR AND INSTALLING ADDITIONAL CONTROLS WILL BE A CONTINUING CONTRACTOR/SUBCONTRACTOR RESPONSIBILITY UNTIL FINAL STABILIZATION IS ACHIEVED. CONTRACTORS AND SUBCONTRACTORS IMPLEMENTING THIS SWPPP MUST REMAIN ALERT TO THE NEED TO PERIODICALLY REFINE AND UPDATE THIS SWPPP IN ORDER TO ACCOMPLISH THE INTENDED GOALS.

COMPLIANCE OF THE SITE WITH THE GENERAL CONSTRUCTION PERMIT REMAINS THE RESPONSIBILITY OF ALL OPERATORS THAT HAVE SUBMITTED AN NOI UNTIL SUCH TIME AS THEY HAVE SUBMITTED A NOTICE OF TERMINATION (NOT). THE PERMITTEE'S AUTHORIZATION TO DISCHARGE UNDER THE GENERAL CONSTRUCTION PERMIT TERMINATES AT MIDNIGHT OF THE DAY THE NOT IS SIGNED.

ALL PERMITTEES MUST SUBMIT AN NOT WITHIN THIRTY (30) DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:

- 1. FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE
- ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE 3. IN RESIDENTIAL CONSTRUCTION OPERATIONS, TEMPORARY STABILIZATION HAS BEEN COMPLETED AND THE
- RESIDENCE HAS BEEN TRANSFERRED TO THE HOMEOWNER. B15 EROSION AND SEDIMENT CONTROL SPECIFICATIONS FOR INDIVIDUAL BUILDING LOTS
- SINCE THE ENTIRE SITE IS UNDER A SINGLE OWNERSHIP, THERE ARE NOT ANY INDIVIDUAL BUILDING LOTS. C1 DESCRIPTION OF POLLUTANTS AND THEIR SOURCES ASSOCIATED WITH THE PROPOSED LAND USE

NORMALLY EXPECTED FROM THIS TYPE OF LAND USE ARE LISTED BELOW: POLLUTANT SOURCE: PASSENGER VEHICLES, DELIVERY VEHICLES. TYPE OF POLLUTANT: OIL, GASOLINE, DIESEL FUEL, ANY HYDROCARBON ASSOCIATED WITH VEHICULAR FUELS

THE PROPOSED LAND USE IS A MULTI VILLA SITE. THE POLLUTANTS AND SOURCES OF EACH POLLUTANT

AND LUBRICANTS, GREASE, ANTIFREEZE, WINDSHIELD CLEANER SOLUTION, BRAKE FLUID, BRAKE DUST,

RUBBER, GLASS, METAL AND PLASTIC FRAGMENTS, GRIT, ROAD DE-ICING MATERIALS. POLLUTANT SOURCE: BUILDING TYPE OF POLLUTANT: CLEANING SOLUTIONS OR SOLVENTS, LEAKS FROM HVAC EQUIPMENT, GRIT FROM ROOF

DRAINAGE, AGGREGATE OR RUBBER FRAGMENTS FROM ROOFING SYSTEM. POLLUTANT SOURCE: TRASH DUMPSTER TYPE OF POLLUTANT: CLEANING SOLUTIONS OR SOLVENTS, LITTER (PAPER, PLASTIC, GENERAL REFUSE ASSOCIATED WITH DISTRIBUTION OPERATIONS), UNEATEN FOOD PRODUCTS, BACTERIA.

POLLUTANT SOURCE: PARKING LOT TYPE OF POLLUTANT: ANY POLLUTANT ASSOCIATED WITH VEHICULAR SOURCES, GRIT FROM ASPHALT WEARING SURFACE, BITUMINOUS COMPOUNDS FROM PERIODIC MAINTENANCE (SEALING, RESURFACING AND PATCHING), PAVEMENT DE-ICING MATERIALS, PAINT FRAGMENTS FROM PARKING STALL STRIPES, CONCRETE FRAGMENTS, WIND-BLOWN LITTER FROM OFF-SITE SOURCES, ELEVATED WATER TEMPERATURES FROM CONTACT WITH

POLLUTANT SOURCE: LAWN AND LANDSCAPE AREAS TYPE OF POLLUTANT: FERTILIZERS, SOIL, ORGANIC MATERIAL (LEAVES, MULCH, GRASS CLIPPINGS).

C2 SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION THE STORMWATER DETENTION PONDS WILL REMAIN IN PLACE AS PERMANENT FEATURES AFTER CONSTRUCTION

RUNOFF, WET PONDS CONTROL BOTH STORM WATER QUALITY AND QUANTITY.

MAINTENANCE MANUAL FOR MORE DETAILED MAINTENANCE REQUIREMENTS.

PROVIDE A SEDIMENT REMOVAL FUNCTION. C3 DESCRIPTION OF PROPOSED POST—CONSTRUCTION STORMWATER QUALITY MEASURES VEGETATED SWALES ARE DESIGNED TO REDUCE POLLUTANTS AND SEDIMENT LOADS IN STORM WATER RUNOFF.

STORM WATER RUNOFF IS DIRECTED INTO THE SWALE WHICH CONVEYS THE RUNOFF FROM THE SITE. WHILE

OF NUTRIENTS BY PLANTS), INFILTRATION (PERCOLATION OF WATER THROUGH THE SWALE'S POROUS SOIL

MOVING THROUGH THE SWALE, RUNOFF VELOCITY IS GREATLY DECREASED ALLOWING BIOFILTRATION (UPTAKE

IS COMPLETED. THE PURPOSE OF THE THESE MEASURES IS TO RESTRICT STORMWATER DISCHARGES AND

SUBSTRATE), AND SEDIMENTATION (SETTLING OUT OF LATER SUSPENDED PARTICLES.

IMPERVIOUS SURFACES.

A DRY DETENTION POND DETAINS STORM WATER RUNOFF LONG ENOUGH FOR CONTAMINATED SEDIMENTS TO SETTLE AND REMAIN IN THE POND AND ALLOW THE WATER IN THE POND TO BE DISPLACED BY THE NEXT RAIN EVENT. THE SEDIMENTATION PROCESS REMOVES PARTICULATES, ORGANIC MATTER, AND METALS FROM THE WATER WHILE NUTRIENTS ARE REMOVED THROUGH BIOLOGICAL UPTAKE. BY CAPTURING AND RETAINING

GOOD HOUSEKEEPING MEASURES
GOOD HOUSEKEEPING MEASURES SUCH AS REGULAR STREET SWEEPING, INSTALLATION OF TRASH RECEPTACLES, AND REDUCTION IN FERTILIZER OVERSPRAY CAN BE INCORPORATED BY THE OWNER AND/OR

LOCATION, DIMENSIONS, SPECIFICATIONS, AND CONSTRUCTION DETAILS OF EACH STORMWATER QUALITY THE FOLLOWING ITEMS ARE STORMWATER QUALITY MEASURES THAT WILL BE INSTALLED DURING CONSTRUCTION. THESE ITEMS WILL REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETED AND ARE

CONSIDERED TO SERVE AN INCIDENTAL FUNCTION AS POST-CONSTRUCTION STORMWATER QUALITY BMPS. <u>VEGETATED SWALE</u>
THE VEGETATED SWALE IS LOCATED BEHIND VILLAS SIX AND SEVEN THE RUNS IN BETWEEN 5 AND SIX TO A CATCH BASIN IN THE MIDDLE OF THE YARDS.

DRY DETENTION POND
THE DRY DETENTION POND IS LOCATED ON THE SOUTHWEST PORTION OF THE SITE. MODIFICATIONS ARE PROPOSED TO THE EXISTING BASIN ON SITE.

C5 DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST—CONSTRUCTION STORMWATER QUALITY MEASURES MAINTENANCE REQUIREMENTS FOR THE STORMWATER QUALITY MEASURES WHICH WILL REMAIN IN PLACE AFTER CONSTRUCTION IS COMPLETE, ARE DESCRIBED BELOW. REFER TO THE BMP OPERATIONS AND

VEGETATED SWALES REQUIRE LITTLE MAINTENANCE IF PROPERLY DESIGNED. MOW AS NEEDED DURING THE GROWING SEASON; INSPECT FOR EROSION PROBLEMS TWICE DURING THE FIRST YEAR, ANNUALLY THEREAFTER; AND REMOVE SEDIMENT, TRASH AND DEBRIS ANNUALLY OR MORE FREQUENTLY IF NEEDED.

<u>DETENTION PONDS (WET OR DRY)</u>
INSPECT PERIODICALLY AS NEEDED OR AT LEAST EVERY SIX MONTHS. SEDIMENT SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH ALL APPLICABLE LAWS. AREAS THAT SHOW SIGN OF EROSION SHALL BE STABILIZED WITH EROSION CONTROL BLANKET AND/OR SEED AS NECESSARY.

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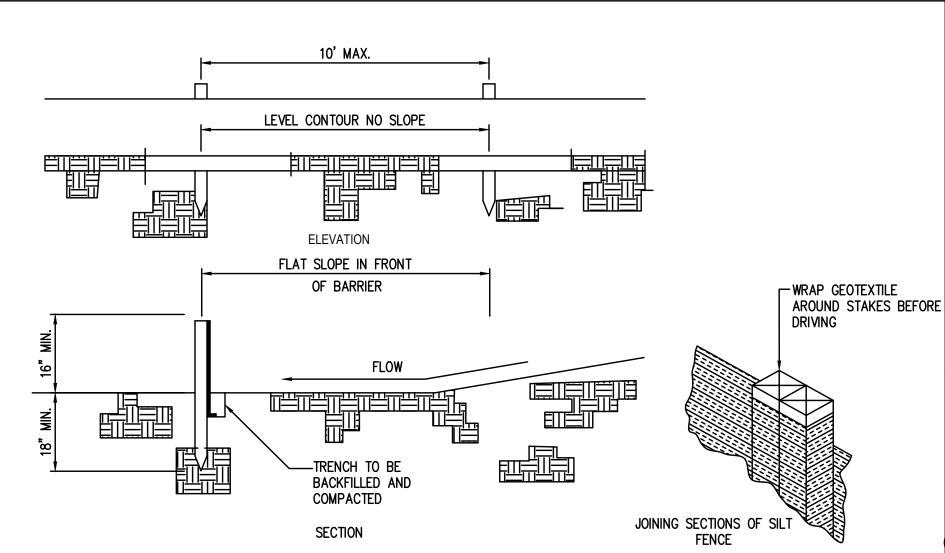
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1. THE CONTRACTOR IS RESPONSIBLE TO PREVENT DISCHARGE OF WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS FROM MIXING WITH RUN-OFF AND LEAVING THE SITE. THE CONTRACTOR SHALL SIZE THE CONCRETE WASHOUT PIT TO HANDLE HIS PROPOSED CONCRETE OPERATIONS AND SHALL MAINTAIN THE PIT SUCH THAT ALL CONCRETE TRUCKS CAN USE IT TO WASHOUT. CONCRETE WASHOUT REQUIRES 10 MIL LINER. ALL CURED RESIDUE FROM THE PIT SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. A GENERAL LOCATION FOR THE WASHOUT PIT IS SHOWN ON THE PLAN AND MAY BE MOVED TO BETTER FIT THE CONTRACTOR'S METHODS.

STREET

CONCRETE WASHOUT AREA



- 1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND 9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED DISTURBANCE BEGINS.
- 2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
- SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
- THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
- 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.

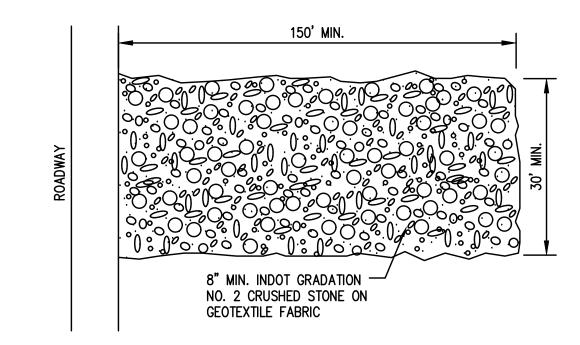
- TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND, (SEE DETAILS).
- 10. MAINTENANCE--SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3)
- OTHER PRACTICES SHALL BE INSTALLED. SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.
- SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.
- CRITERIA FOR SILT FENCE MATERIALS 1. FENCE POST - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
- 2. SILT FENCE FABRIC SEE CHART BELOW.

EXHIBIT 105C: SECTION 5.1 COMMON PRACTICES FOR SITE ASSESSMENT AND PREPARATION

FABRIC PROPERTIES	WOVEN FABRIC NO	N-WOVEN FABRIC
FILTERING EFFICIENCY	85%	85%
TENSILE STRENGTH AT 20% ELONGATION:		
STANDARD STRENGTH	30 LBS/L.IN.	50 LBS/L.IN.
EXTRA STRENGTH	50 LBS/L.IN.	70 LBS/L.IN.
SLURRY FLOW RATE	0.3 GAL./MIN./SQ.FT.	4.5 GAL./MIN./SQ.F1
WATER FLOW RATE	15 GAL./MIN./SQ.FT.	220 GAL./MIN./SQ.FT.
UV RESISTANCE	70%	85%

SILT FENCE

SCALE: N.T.S.



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE INSTALLATION REQUIREMENTS:

- AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.
- . REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA, AND GRADE AND CROWN FOR POSITIVE DRAINAGE.
- 3. IF SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A 6-8 in. HIGH WATER BAR (RIDGE) WITH 3:1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 ft. FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD.
- 4. INSTALL PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
- 5. PLACE STONE TO DIMENSIONS AND GRADE SHOWN IN THE EROSION/SEDIMENT
- CONTROL PLAN. LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE. 6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A

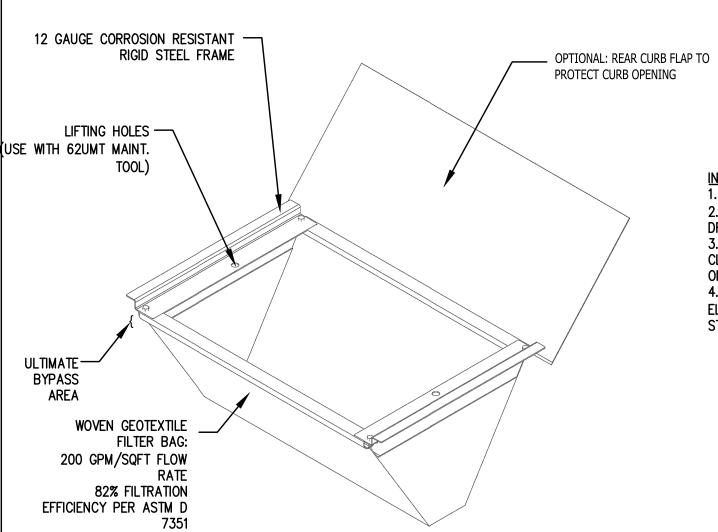
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE MAINTENANCE REQUIREMENTS:

- INSPECT ENTRANCE PAD AND SEDIMENT AREA WEEKLY AND AFTER STORM EVENTS
- OF HEAVY USE. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
- TOP DRESS WITH CLEAN STONE AS NEEDED.
- IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT ROCK TRAP OR BASIN.
- 5. REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

NOT TO SCALE

SEDIMENT TRAP OR BASIN.

GRAVEL CONSTRUCTION ENTRANCE



MEETS ASTM D8057 STANDARDS

FLEXSTORM FX FABRIC SPECS

Woven Geotextile Filter B	ag Properties (Minir	num Average Roll Val	ues)
PROPERTY	TEST METHOD	ENGLISH	METRIC
MECHANICAL			
TENSILE STRENGTH	ASTM D4632	350 x 225 Lbs	1557 x 1001 N
ELONGATION	ASTM D4632	20% x 15%	20% x 15%
CBR PUNCTURE	ASTM D6241	1000 Lbs	4448 N
TRAPEZOIDAL TEAR	ASTM D4533	110 x 75 Lbs	483 x 334 N
ENDURANCE			_
UV RESISTANCE	ASTM D4355	90%	90%
% RETAINED AT 500 HRS			
HYDRAULIC			
APPARENT OPENING SIZE	ASTM D4751	20 US STD SIEVE	.850 mm
(AOS)			
PERCENT OPEN AREA	CW-02215 MOD ¹	17%	17%
(POA)			
PERMITTIVITY	ASTM D4491	1.5 Sec ⁻¹	1.5 Sec ⁻¹
WATER FLOW RATE	ASTM D4491	200 gal/min/ft ²	8145 l/min/m ²

-RIGID FRAME AND REMOVABLE GEOSYNTHETIC BAG

INSTALLATION INSTRUCTIONS:

ON THE LIP OF THE STRUCTURE.

DRAINAGE STRUCTURE

STEEL HANGERS.

1. REMOVE GRATE FROM THE DRAINAGE STRUCTURE

3. DROP THE FLEXSTORM INLET FILTER THROUGH THE

ELEVATED MORE THAN 1/8", THE THICKNESS OF THE

CLEAR OPENING SUCH THAT THE HANGERS REST FIRMLY

2. CLEAN STONE AND DIRT FROM LEDGE (LIP) OF

4. REPLACE THE GRATE AND CONFIRM IT IS NOT

-SIZED TO MEET TREATMENT FLOW RATE. -BAG MAINTAINS SHAPE TO BE EXTRACTED WHEN COMPLETELY FILLED WITH SEDIMENT -RIGID FRAME CAPABLE OF SUPPORTING FULL LOAD OF SEDIMENT WITHOUT DEFORMING. -DOES NOT INTERFERE OR ELEVATE GRATE BY MORE THAN -BYPASS FLOW EXCEEDS DESIGN FLOW OF DRAINAGE LOCATION

-FILTER BAG ACHIEVES +80% GROSS REMOVAL EFFICIENCY PER ASTM D7351.

FLEXSTORM CATCH-IT LITE© **ASTM D8057**

SCALE: N.T.S.

TEMPORARY STABILIZATION					
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS				
ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS				
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA. FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOTS.				
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER				
	AREA REQUIRING TEMPORARY STABILIZATION ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE DISTURBED AREAS THAT WILL BE IDLE OVER				

PERMANENT STABILIZATION					
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS				
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE				
ANY AREA WITH IN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAY IF REACHING FINAL GRADE				
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA				

SLOPE MIX (VENDOR OHIO PRAIRIE NURSERY OR EQUIV.)

RECOMMENDED SEED RATES:

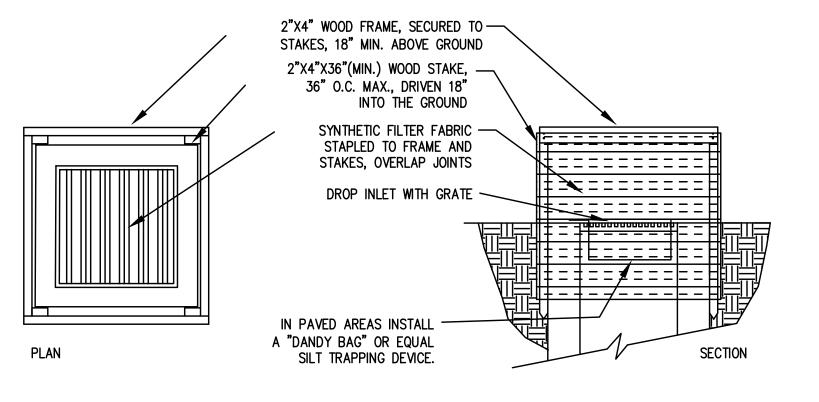
ASCLEPIAS INCARNATA

HYDRO SEED/BROADCASTDRILLED

15.0 POUNDS/ACRE 10.0 POUNDS/ACRE 0.34 POUNDS/1000 SQ. FT. 73 SEEDS/SQ. FT. 109 SEEDS/SQ. FT.

CATEGORY		% BY WEIGHT		% BY	SEED	
FORB		49.90%		75.089	%	
GRASS/GRASSLIKE	50.10%	%	24.92	%		
CDEOIEC NAME	001111	ON NAME			or .	
SPECIES NAME	СОММ	ON NAME			<u>%</u>	
ANDROPOGON GERARDI		BIG BLUESTEM			25.00%	·
SORGHASTRUM NUTANS	3	INDIAN GRASS			18.80%	
CHAMAECRISTA FASCIC	ULATA	PARTRIDGE PEA		12.50%	6	
PANICUM VIRGATUM		SWITCH G	RASS		(6. 30%
ECHINACEA PURPUREA		PURPLE CONEFL	.OWER	6.30%		
RUDBECKIA TRILOBA		BROWN-E		٩N	5.00%	
RUDBECKIA HIRTA		BLACK-EYED SU	JSAN		5.00%	
HELIOPSIS HELIANTHOID	ES	OX EYE SUNFLO	WER		5.00%	
LIATRIS SPICATA		DENSE BLAZINGS	STAR		3.10%	
COREOPSIS LANCEOLAT	Ά	LANCELEAF COR	EOPSIS	3.00%		
RATIBIDA PINNATA		YELLOW CONEFL	OWER	2.50%		
PENSTEMON DIGITALIS		FOXGLOVE BEAR	DTONGUE	2.50%		
MONARDA FISTULOSA		WILD BERGAMOT		2.50%		

ROSE MILKWEED



2.50%

- 1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
- 2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER. THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN ONE (1) FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
- WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- 5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- 6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.

- 7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME. 8. ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS
- (INLET PROTECTION), WHICH WILL BE MAINTAINED AND MODIFIED AS REQUIRED AS CONSTRUCTION PROGRESSES. 9. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAINFALL AND
- REPAIRS MADE AS NEEDED. 10. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF (1/2) THE DESIGN OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE.
- ANY SEDIMENT BLOCKING DRAINAGE AT INLETS THAT CREATES STANDING WATER ON ROADWAYS AND/OR DRIVEWAYS SHALL BE REMOVED IMMEDIATELY.
- 12. INLET PROTECTION STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY

GEOTEXTILE INLET PROTECTION

SCALE: N.T.S.



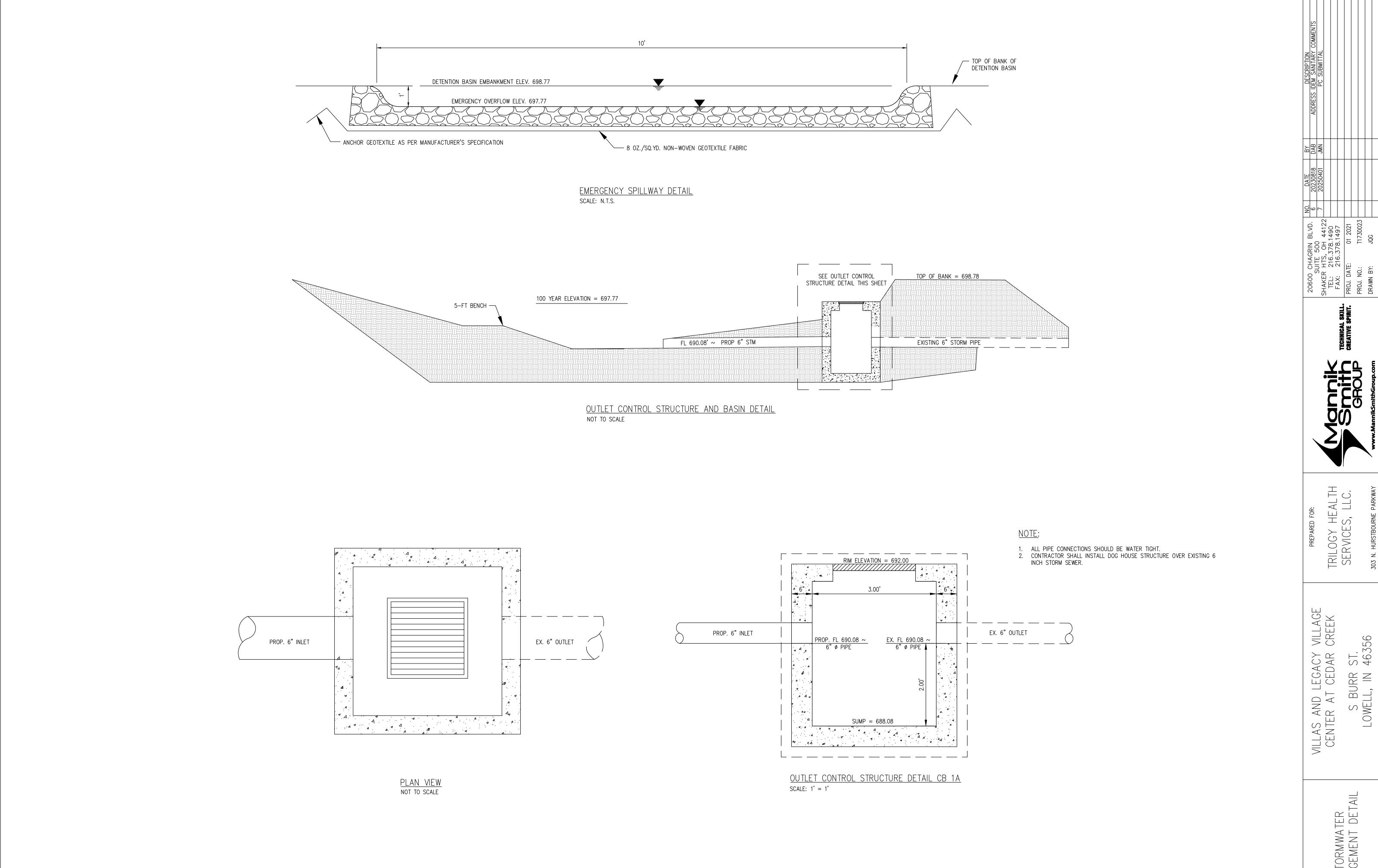
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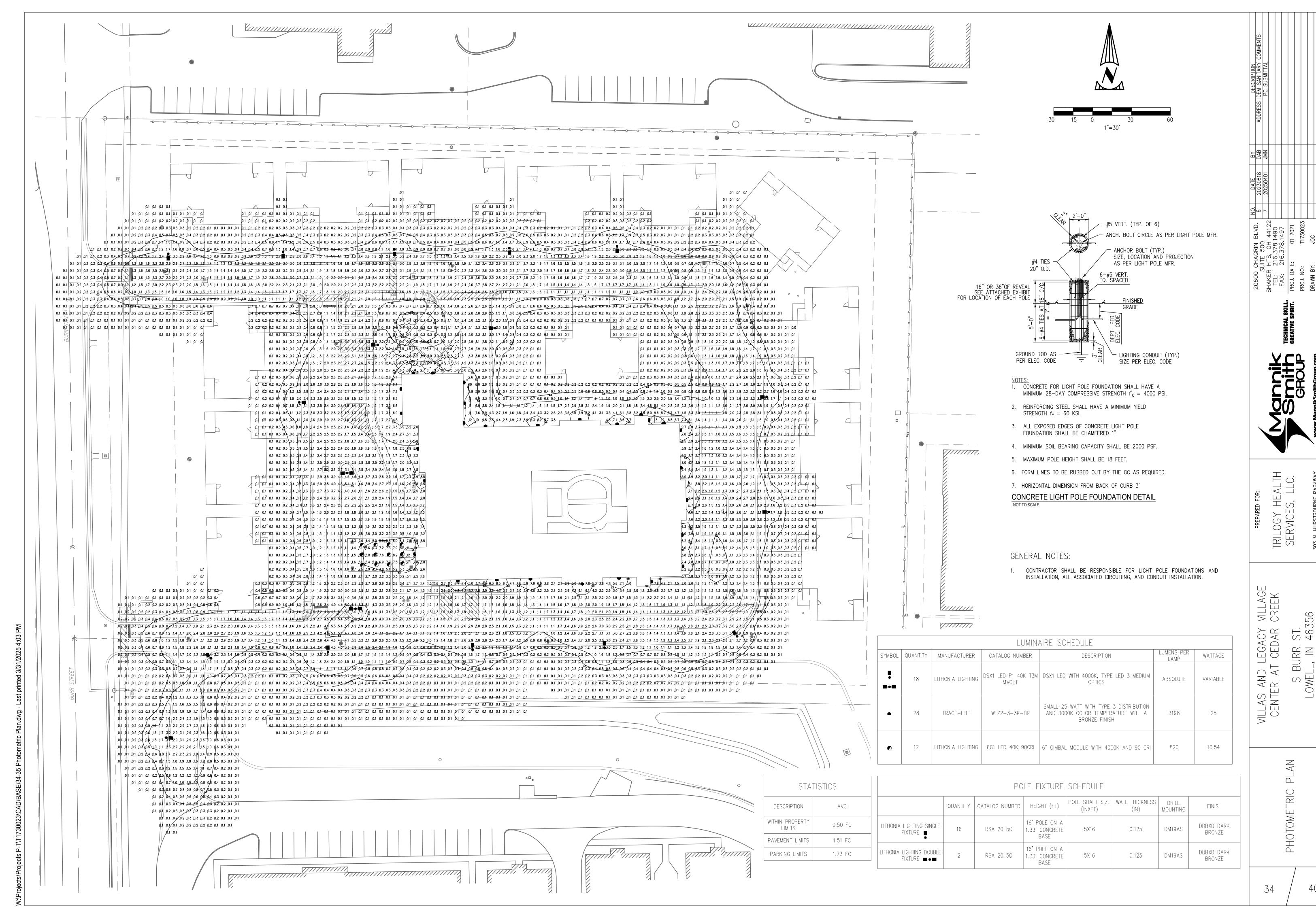
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STORMWATER Management Detail



FEATURES & SPECIFICATIONS

INTENDED USE — The adjustable LED Gimbal downlighting module is 80% more efficient than incandescent luminaries, performing for 35,000 hours or more with exceptional energy efficiency and near zero and the second energy efficiency except energy efficiency except energy efficiency efficiency energy energy efficiency energy energy efficiency energy energy efficiency energy efficiency energy efficiency energy efficiency energy efficiency energy energy energy efficiency energy efficiency energy energy energy efficiency energy efficiency energy enmaintenance. Multiple trim finish options are available to pick the style that matches the décor for any office or home. The LED Gimbal is intended for sloped ceiling applications, grazing textured surfaces, wall washing, and highlighting artwork or other architectural features. Retrofits into most existing recessed downlighting installations or new construction and remodel applications.

CONSTRUCTION — Spun steel gimbal reflectors with 180° of rotation and at least 35° of adjustable tilt in both directions. Driver affixed to a static yoke to allow maximization of LED light engine rotation and pivot movements.

OPTICS — Diffused lens at end of mixing chamber to provide even light distribution for general illumination, equivalent to 65W incandescent flood lamp. Wide flood beam angle at >90°. CRI >90. Equivalent to 65-watt incandescent. The LED module maintains

at least 70% light output for 35,000 hours. **ELECTRICAL** — Primary power disconnect provided for simple connection to a dedicated LED connector in the housing. Dimming down to 15%. For compatible dimmers, refer to <u>Compatible Dimmers Chart</u>.

INSTALLATION — Suitable for installation in standard height rough-in sections. E26 socket adapter (except in the state of California for configurations specified in footnotes on ordering information) and splice kit ships standard. This enables easy installation or permanent conversion to an LED source for Title 24 compliance. Trim retention is achieved by utilizing two side-mounted torsion springs to ensure a consistently tight fit with the ceiling and easy installation.

LISTINGS — CSA certified to US and Canadian safety standards. California T24 compliant. Damp location

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

3-7/16 (8.6)

6-1/8 (15.5)

4-1/2 (11.4)

Specifications

Ceiling opening: as rough-in

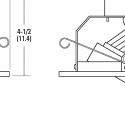
Overlap trim: 7-1/4 (18.41)

Aperture:

Length:

DOWNLIGHTING

All dimensions are inches (centimeters) unless otherwise indicated.







Retrofit Gimbal



Example: 6G1MW LED 40K 90CRI L7XLED T24 CCT/CRI/W/Lumens² (blank) 3000K/83CRI/10.8W/620L (**blank**) 120V **L/SKTWHIP** No E26 Adapter (CA only) 27K 90CRI 2700K/91CRI/11W/680L³ L7XLED T24 IC/Non-IC rated, new construction rough-in LED base 30K 90CRI 3000K/91CRI/10.3W/790L L7XRLED T24 IC/Non-IC rated, remodel rough-in LED base ⁵ MB Matte black BN Brush nickel 40K 90CRI 4000K/94CRI/10.5W/820L LC6LED T24 IC/Non-IC rated, new construction rough-in LED base ORB Oil-rubbed L7X IC/Non-IC rated, new construction rough-in 4 IC/Non-IC rated, remodel rough-in 4,5 IC/Non-IC rated, new construction rough-in 4

Accessor	ies: Order as separate catalog number.		
TSA6	Makes non-bracket housings compatible with LED module	RK1 CG52178 E26 ADAPTER/MALE PLUG BAL DISC ASM	E26 Adapter
FL2LED	Makes L7XF housings compatible with LED module		



2 Total system delivered lumens. 3 L/SKTWHIP must be selected for 27K product shipping to California. 4 Must be ordered on separate line. 5 Must order wtih CTR6 accessory.

1 Available in 90CRI only.

6G1 LED 90CRI GIMBAL

The WLZ Series features an architecturally relevant low-profile LED design in lumen packages ranging from 1500 lumens to over 12,000 lumens. Its highefficiency light engine is designed for optimal light control and distribution with zero uplight. This family of product is offered in several size housings to complement any building exterior and accommodates mounting heights up to 35'. Integral emergency battery backup available for path of egress with Cold

Location operation down to -20°C. **SPECIFICATIONS**

• Sleek die-cast aluminum housing with stainless steel hardware and powder coated black, bronze, silver or white finish

 UV-stabilized polycarbonate optical lens · Integral heat sink for maximized heat dissipation • Back box houses drivers away from LEDs and includes three 3/4" hubs (WLZ1 and WLZ2 - two ¾" hubs)

Optics/LEDs Zero uplight design to minimize light pollution • 15 to 100 Watt models replace up to 400 Watt HID for up to 70% energy

• Efficacies up to 123 LPW at 5000K to maximize utility rebates Type III and Type IV distributions for optimal light distribution (WLZ1 - Type III only)

 Available in 3000K, 3500K, 4000K and 5000K CCT L70 of 50,000 hours at 40°C CRI of ≥70 Electrical

Class 2 power supply, 120-277VAC, 50/60Hz • 347/480VAC Dedicated driver option for WLZ4, WLZ7 and WLZ10 • 0-10V Dimming driver (120-277VAC only) Power supply rated Class A EMI rating

· Housing hinges to back box and is secured with set screws • Back box is complete with three 3/4" hubs and internal bubble level for easy installation (WLZ1 and WLZ2 - two 3/4" hubs) Mounts to a standard 3-1/2" or 4" square electrical J-box Suitable for downlight installation only

Battery Backup

Installation

• Integral battery backup (BB) provides over 700 lumens and 90 minutes of runtime for path of egress. Rated for ambient temperatures of 0°C to 40°C (32°F to 104°F). Not available on WLZ1 • Integral Battery Backup with Internal Heater (BB-IH) provides over 700

lumens and 90 minutes of runtime for path of egress in Cold Locations down to -20°C. Not available on WLZ1 or WLZ2. • Factory installed dual driver options for WLZ4 and WLZ10 (WLZ7 is standard with two drivers)

• Factory installed 120/277VAC button type photocontrol option (PC) • Factory installed 10kVA surge protection options (SP or SPH) Accessories (Field Installed)

• Bluetooth PIR motion sensor with photocontrol, black finish, (LE-WLZ-BL-12V-KIT) • 120/277VAC Button type universal photocontrol options accessory (PCU)

 Bluetooth capable easily controlled with a smartphone Testing & Compliance cULus Listed for Wet Locations • International Dark Sky friendly approved product. (IDA) 3000K only • Operating temperatures: -40°C to 40°C (-40°F to 104°F)

Five year warranty (terms and conditions apply)

WLZ Series Zero Uplight LED Wallpack





Specs At A Glance*							
Model	WLZ1	WLZ1 WLZ2 WLZ4 WLZ7 WLZ1					
Wattage (nominal)	15W	100W					
Lumens (Im)	1745	3198	5021	8729	12,393		
Efficacy (LPW)	115 118 123 120				116		
Equivalency (HID)	50W 100W 150W			250W	400W		
Distribution	Type III, IV (WLZ1 Type III only)						
ССТ	3000K, 3500K, 4000K, 5000K						
CRI	≥70						
Input Voltage	120-277VAC, 50/60Hz, 347/480V option						
Operating Temp	-40°C to 40°C (-40°F to 104°F)						
Certifications	UL Listed for Wet Locations, IDA						
Warranty	5 Years						
Weight	2.6 lbs	3.3 lbs	6.0 lbs	9.9 lbs	12.1 lbs		

See performance table for more detailed lumen information. Note: Environment and application will affect actual performance. Typical values and

Installation must be performed in accordance with Barron Lighting Group installation instructions. 10810369 Rev 26

Specifications are subject to change without notice.

Page 1 of 3





Introduction The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstand-14.26" ing photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours. ds design select Items marked by a shaded background qualify for the Design Select program and ship in 15

US byt	ign Select aptions indica his color background.		EX	AMPLE: DSX1 LE	*See ordering tree fo	r details	it www.acuitybrands.com/designselect. A NLTAIR2 PIRHN DDBX
DSX1 LED							
Series	LEDs	Color temperature ²	Color Rendering Index ²	Distribution		Voltage	Mounting
DSX1 LED	Forward optics P1 P6 P2 P7 P3 P8 P4 P9 P5 Rotated optics P101 P121 P111 P131	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare 3 T4M Type IV medium T4LG Type IV low glare 3 TFTM Forward throw medium	TSM Type V medium TSLG Type V low glare TSW Type V wide BLC3 Type III backlight control 3 BLC4 Type N backlight control 1 LCCO Left corner cutoff 3 RCCO Right corner cutoff 3	MWOLT (120V-277V)* HVOLT (347V-480V)** XVOLT (277V-480V)** 120 16, 26 208 16, 26 240 16, 26 277 16, 26 347 16, 26 480 16, 26	Shipped included SPA Square pole mounting (#8 drilling RPA Bound pole mounting #5 drilling SPA5 Square pole mounting #5 drilling SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket ** MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

ontrol options				Other option	ons	Finish (regu	
Shipped install NLTAIR2 PIRHN PIR PER	nLight AR gen 2 enabled with bi-level motion / ambient sensor 8-40 mounting height, ambient sensor enabled at 26 mars at	PER7 FA0 BL30 BL50 DMG	Sever-pin receptacle only (controls ordered separate) ^{10,21} Field adjustable output ^{13,21} Bi-level switched dimming, 30% ^{16,21} Bi-level switched dimming, 50% ^{16,21} O-10v dimming wires pulled outside fixture (for use witth an external control, ordered separately) ¹⁷ Dual switching ^{16,19,21}	Shipped in SPD20KV HS L90 R90 CCE HA BAA SF DF Shipped s EGSR BSDB	20KV surge protection Houseside shield (black first) standard) ²² Left rotated optics ¹ Right rotated optics ¹ Coastal Construction ²³ 50°C ambient operation ²⁴ Buy America(n) Act and/or Build America Buy America Qualified Single fuse (120, 277, 347V) ²⁶ Double fuse (208, 240, 480V) ²⁶	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark Bronze Black Natural Aluminum White Textured dark bronze Textured black Textured natural aluminu Textured white

COMMERCIAL OUTDOOR

/A LITHONIA LIGHTING®

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Check with factory for Canadian **specifications.** Round Straight Aluminum is a general purpose light pole for up to 30-foot mounting heights. This pole provides a lighter and naturally corrosion-resistant option for mounting area light fixtures and

CONSTRUCTION — **Pole Shaft:** The pole shaft is of uniform wall thickness and is one-piece extruded 6063 aluminum alloy with T6 temper. The shaft is uniform in cross-section down length of pole with no taper. Available shaft diameters are 4", 4.5" 5", and 6".

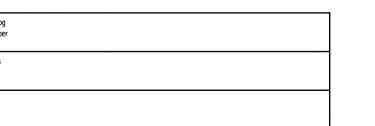
Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable aluminum top cap secured with three stainless-steel screws. The top cap resists intrusion of moisture or environmental contaminants. Handhole: A non-reinforced handhole with grounding provision is provided near the base. Standard positioning varies with shaft width as follows: 4", 4.5", and 5" shaft, handhole at 12"; 6" shaft, handhole at 18" on side A. Positioning the handhole lower than standard may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. All handholes for a pole specified with openings wfor 4" through 6" shaft width has nominal dimension of 2" x 4" with surface mount overlap design.

Bolt Caps/Base Cover: Pole base plate utilizes cast aluminum bolt caps to cover anchor bolt and nut assembly. Spun aluminum covers available as an option.

Anchor Base/Bolts: Anchor base is cast from 356 alloy aluminum and is heat treated to a T6 temper after welding. Anchor bolts are manufactured to ASTM F1554 Standards Grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Upper portion of anchor bolt is galvanized per ASTM A-153; bolts have an "L" bend on bottom end and are galvanized a minimum of 12" on the threaded end. Each hot-dipped galvanized anchor bolt is furnished with two hex nuts and two flat washers. $\label{eq:hardware-all} \textbf{HARDWARE} - \textbf{All structural and non-structural fasteners are stainless-steel}.$

 $\textbf{FINISH} - \text{Extra durable painted finish is coated with polyester powder that meets 5A and 5B classifications of the polyester powder powder that meets 5A and 5B classifications of the polyester powder that meets 5A and 5B classifications of the polyester powder powder that meets 5A and 5B classifications of the polyester powder that meets 5A and 5B classifications of the polyester powder that meets 5A and 5B classifications of the polyester powder powder that meets 5A and 5B classifications of the polyester pow$ ASTM D3359. Standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Other finishes include Brushed Aluminum, and Anodized Dark Bronze, Anodized Natural Aluminum and Anodized Black. Architectural Colors and Special Finishes are available by quote and include, but are not limited to RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

WARRANTY — 1-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms and conditions.aspx NOTE: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.





ROUND STRAIGHT ALUMINUM

RSA Round Straight Aluminum Poles

Nominal fixture Scries Series Nominal shaft base Size/wall thickness Size/wa	RSA								
Increments, add - 6 to the pole height	Series			Mounting ¹		Options		Finish ¹⁰	
6 to the pole height Ex 20-6 equals 2-56 d 1/2" (188") 72 2-3/8" 0.0. (2" NPS) 72 2-3/8" 0.0. (2" NPS) 72 2-3/8" 0.0. (2" NPS) 73 3-1/2" 0.0. (3" NPS) 73 3-1/2" 0.0. (3" NPS) 73 3-1/2" 0.0. (3" NPS) 74 0.0. (3" NPS) 75 75 5" (156") 75 75 5" (156") 75 75 75 75 75 75 75 7	RSA		4C 4" (.125")	Tenon mounting]	Shipped in	stalled	Standard	colors
DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90°		8'-30' (for 1/2 ft increments, add - 6 to the pole height. Ex: 20-6 equals 20ft 6in.) (See technical information table for complete ordering	4C 4" (.125") 4-5C 4 1/2" (.125") 4-5G 4 1/2" (.188") 5C 5" (.125") 5E 5" (.156") 6G 6" (.188") (See technical information table for complete ordering	Tenon mounting PT T20 T25 T30 T35 KAC/KAD/KSE/K DM19 DM28 DM28PL DM29 DM32 DM39 DM49 CSX/DSX/RSX/A mounting³ DM19AS DM28AS DM29AS DM32AS DM39AS DM32AS DM39AS DM49AS ARD drill mount DM19RAD DM28RAD DM28RAD DM32RAD DM32RAD DM32RAD DM32RAD DM32RAD DM32RAD DM39RAD DM32RAD DM39RAD DM49RAD AERIS™ Suspence DM19AST DM28AST	Dpen top 2-3/8" O.D. (2" NPS) 2-7/8" O.D. (2-1/2" NPS) 3-1/2" O.D. (3" NPS) ² 1" O.D. (3-1/2" NPS) ² 2 (SF/KVR/KVF Drill mounting ³ 1 at 90° 2 at 180° with one side plugged 2 at 90° 3 at 120° 3 at 120° 4 at 90° 4 at 90° 4 at 90° 5 at 180° 2 at 180° 2 at 180° 2 at 180° 2 at 180° 3 at 120° 3 at 90° 4 at 90° 5 at 120° 6 at 130°	Shipped in L/AB VD TP HAxy FDLxy CPL12/xy CPL34/xy CPL1/xy NPL12/xy NPL12/xy NPL1/xy EHHxy MAEX USPOM UL NEC Shipped se (blank) FBC (blank) T	Less anchor bolts (Include when anchor bolts are not needed) Vibration damper Tamper resistant handhole cover fasteners Horizontal arm bracket (1 fixture) ^{5,6} Festoon outlet less electrical ⁵ 1/2" coupling ⁵ 3/4" coupling ⁵ 1" coupling ⁵ 1" coupling ⁵ 1" threaded nipple ⁵ 3/4" threaded nipple ⁵ 1" threaded nipple ⁵ Extra handhole ^{5,7} Match existiing ⁸ United States point of manufacture ⁹ UL listed with label (Includes NEC compliant cover) NEC 410.30 compliant gasketed handhole (Not UL Labeled) Exparately (replacement kit available) BIC Bolt caps Full base cover (spun aluminum) IC Top cap (with drillmount poles)	Standard DDBXD DWH DBLXD DMB DNA BA Classic co DSS DGC DTG DBR DSB Class 1 ar ABL ADB ANA Architect Duranodi Anodize,	Dark bronze White Black Medium bronze Natural aluminum Brushed aluminum slors Sandstone Charcoal gray Tennis green Bright red Steel blue cchitectural anodized Black Dark bronze Natural cural Colors and Special Finishe

. Wall thickness will be signified with a "C", "E" or a "G" in nomenclature. "C" - 0.125 | "E" - 0.156 | "G" - 0.188. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20. The combination includes a required extra handhole. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility
 Insert "1" or "2" to designate fixture size; e.g. DM19AST2. . Specify location and orientation when ordering option

For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-" Example: 5ft = 5 and 20ft 3in = 20-3For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below

Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C

6. Horizontal arm is 18" x 2-3/8" O.D. tenon standard with radius curve providing 12' rise. If ordering two horizontal arm at the same height, specify with HAxyy. Example: HA20BD Combination of tenon-top and drill mount includes extra handhole. 8. Must add original order number of existing pole(s).9. Use when mill certifications are required.

Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3).
 Available by formal quote only, consult factory for details.

/ LITHONIA LIGHTING*

OUTDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com

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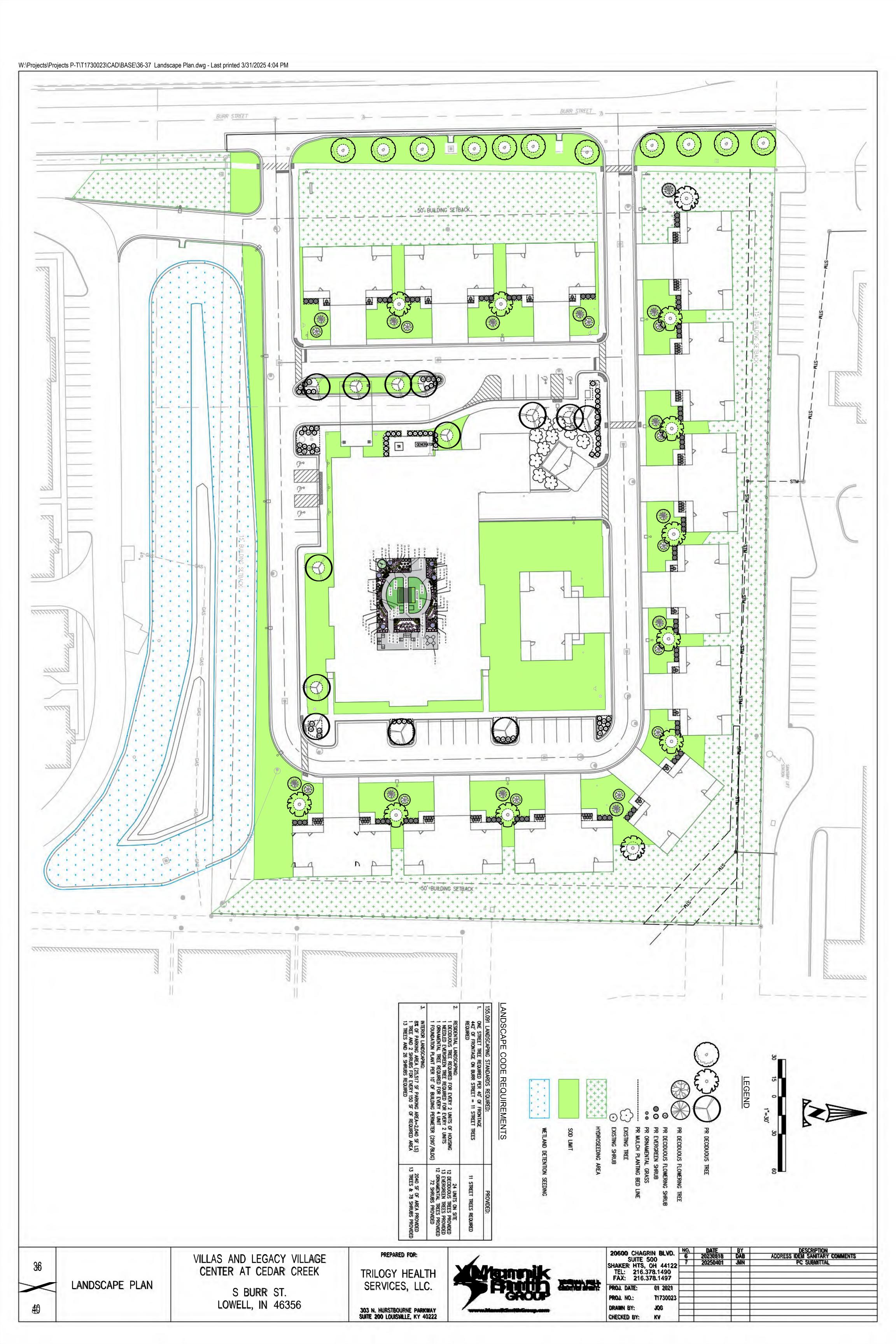
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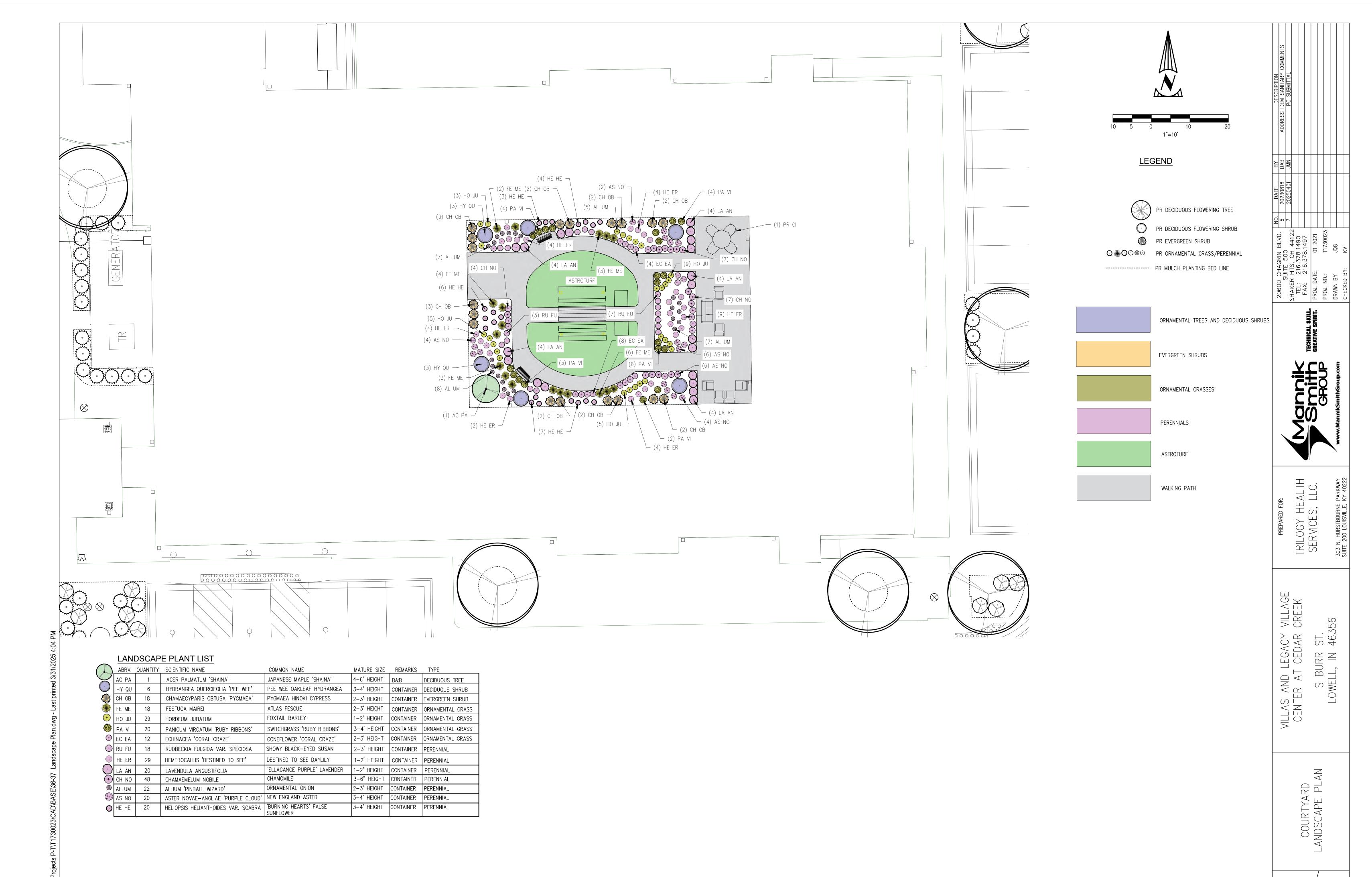
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. THE CONTRACTOR SHALL PROVIDE A ONE YEAR WARRANTY ON ALL PLANTS AND VEGETATION PROPOSED ON THE LANDSCAPING PLAN. ANY TREES, SHRUBS, GROUND COVER OR OTHER VEGETATION PLANTED AS PART OF THIS PROJECT THAT DO NOT SURVIVE ONE YEAR FROM PLANTING SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PERTINENT UTILITY COMPANIES THREE WORKING DAYS IN ADVANCE OF ANY DIGGING. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF ANY UTILITIES.

3. REFER TO THE LANDSCAPE PLAN FOR ADDITIONAL NOTES. LANDSCAPE IMPROVEMENTS SHALL CONFORM TO THE LATEST EDITION OF INDOT CONSTRUCTION SPECIFICATIONS.

4. ALL PLANTING MATERIALS: SHALL BE PLANTED PER INDOT SPECIFICATIONS. EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE BROKEN, LOW HANGING AND OTHER UNDESIRABLE GROWTH TO ENSURE HEALTHY AND SYMMETRICAL NEW GROWTH.

5. PLANTING BEDS. ONE MONTH BEFORE CULTIVATION AND AFTER DAYTIME TEMPERATURES HAVE WARMED TO 60° CONSISTENTLY, TREAT ALL PLANTING BEDS THAT ARE TO BE DEVELOPED IN AREAS OF EXISTING TURF WITH PRE-EMERGENT AND POST-EMERGENT TYPE HERBICIDES. USE A STATE-LICENSED PESTICIDE APPLICATOR TO APPLY THE HERBICIDE. REPEAT HERBICIDE APPLICATION TWO WEEKS LATER AND UNTIL ALL HERBACEOUS MATERIALS HAVE BEEN KILLED. BEFORE PLANTING. TOP DRESS ALL PLANTING BEDS WITH A MINIMUM OF 6 INCHES OF BACKFILL MIX, THEN CULTIVATE PLANTING AREA TO A DEPTH OF 6 INCHES USING A PLOW, DISC, OR ROTO-TILLER.

6. BACKFILL MIX. FOR ALL PLANTINGS, USE BACKFILL MIX CONSISTING OF THE FOLLOWING:

A. ONE PART EXCAVATED SOIL.

B. ONE PART TOPSOIL. C. ONE PART EPA RATED CLASS IV COMPOST.

D. A SLOW RELEASE COMMERCIAL FERTILIZER (0-20-20 OR EQUAL) ADDED AT A RATE OF 5 POUNDS PER CUBIC YARD TO THE BACKFILL MIX.

E. IF SOIL AREAS ARE OF HIGH PH (GREATER THAN 6.5), APPLY 1.25 POUNDS OF ELEMENTAL SULFUR PER CUBIC YARD OF BACKFILL MIX. NOTE: CONTRACTOR SHALL SUPPLY A DETAILED SOIL ANALYSIS PRIOR TO ALL PLANT BED PREPARATION. ANALYSIS SHALL

INDICATE SOIL PH, TEXTURE, MAJOR NUTRIENTS, SALTS, ETC. SOIL ANALYSIS SHALL BE FROM A REPUTABLE, INDEPENDENT

LAB. SOIL AMENDMENTS SHALL BE INCORPORATED INTO BACKFILL/PLANT MIX AS RECOMMENDED BY THE INDEPENDENT LAB. 7. MULCH. SMOOTH AND SHAPE THE BACKFILL MIX TO FORM A SHALLOW BASIN SLIGHTLY LARGER THAN THE PLANTING HOLE. MULCH ALL PLANTING AREAS WITH A LAYER OF FINELY SHREDDED HARDWOOD BARK OF UNIFORM TEXTURE & SIZE. PLANTS GROUPED IN MASSES SHALL HAVE THE ENTIRE CONTIGUOUS PLANTING BED OR ISLAND MULCHED. USE SHREDDED HARDWOOD BARK AGED MIN. ONE YEAR. RAKE AND SMOOTH THE ENTIRE AREA OF THE PLANTING BEDS, MULCH TO A DEPTH OF 3 INCHES. AFTER MULCHING AND BEFORE WATERING, ADD A SLOW RELEASE COMMERCIAL FERTILIZER (12-12-12 OR EQUAL), IN GRANULAR FORM, TO THE TOP OF THE MULCH AT A RATE OF 5 POUNDS PER 1000 SQUARE FEET. DO NOT ALLOW FERTILIZER

8. PERIOD OF ESTABLISHMENT. BEFORE FINAL INSPECTION, PLACE ALL PLANTS AND CARE FOR THEM FOR A PERIOD OF ESTABLISHMENT. THE PERIOD OF ESTABLISHMENT BEGINS IMMEDIATELY UPON COMPLETION OF THE PLANTING OPERATIONS AND CONTINUES UNTIL OCTOBER 1. THE MINIMUM PERIOD OF ESTABLISHMENT IS ONE GROWING SEASON, JUNE 1 THROUGH OCTOBER . DURING THE PERIOD OF ESTABLISHMENT, FOLLOW STANDARD HORTICULTURAL PRACTICES TO ENSURE THE VIGOR AND GROWTH OF THE TRANSPLANTED MATERIAL. WATER, REMULCH, RESTAKE, GUY, AND CULTIVATE AS NECESSARY. PERFORM AT LEAST TWO WEEDING AND MOWING PROGRAMS (AROUND TREES, GUY STAKES, SHRUBS, AND BED EDGES) OF SUCH INTENSITY AS TO COMPLETELY RID THE PLANTED AND MULCHED AREAS OF WEEDS AND GRASSES. BEGIN THE FIRST PROGRAM ON OR ABOUT JUNE 15 AND THE SECOND APPROXIMATELY 8 WEEKS LATER. ON OR ABOUT AUGUST 15, THE ENGINEER WILL INSPECT THE PLANTING AND SUPPLY THE CONTRACTOR WITH A LIST OF MISSING AND DEAD PLANTS AND THOSE THAT HAVE DIED BACK BEYOND NORMAL PRUNING LINES. REPLANT AS REQUIRED ACCORDING TO THE SPECIFICATIONS OF THE ORIGINAL MATERIAL. REPLACEMENT PLANTS ARE SUBJECT TO A NEW PERIOD OF ESTABLISHMENT. IMMEDIATELY REPLACE PLANTS PLANTED INITIALLY IN THE FALL THAT HAVE DIED BEFORE THE SPRING PLANTING SEASON. CARE FOR THE REPLACEMENT PLANTS DURING THE NEW ESTABLISHMENT PERIOD.

9. RESTORATION OF DISTURBED AREAS FOR NEW LAWN:

TO CONTACT THE STEMS, BRANCHES, ROOTS OR LEAVES.

ALL DISTURBED AREAS NOT COVERED BY BUILDING, PAVEMENT OR LANDSCAPE PLANTING BEDS SHALL BE SHALL BE PREPARED FOR GRASS SEED AND SEEDED. LOOSEN RUTS AND WORK THE SOIL AREAS TO A MINIMUM OF 6" DEEP PRIOR TO FINE GRADING AND SEEDING WORK. AREAS TO RECEIVE GRASS SEED SHALL HAVE A MIN. 4" TOPSOIL PLACED, SEEDED AND A STRAW/MULCH BLANKET COVER PLACED OVER THE SEEDED AREAS PER INDOT SPECIFICATIONS. FERTILIZE WITH ONE POUND OF ACTUAL NITROGEN PER 1000 SQUARE FEET WITH A SLOW RELEASE COMMERCIAL STARTER FERTILIZER (LESCO 18-24-12 OR EQUAL).

10. LANDSCAPE TREES, SHRUBS AND PERENNIAL WATERING:

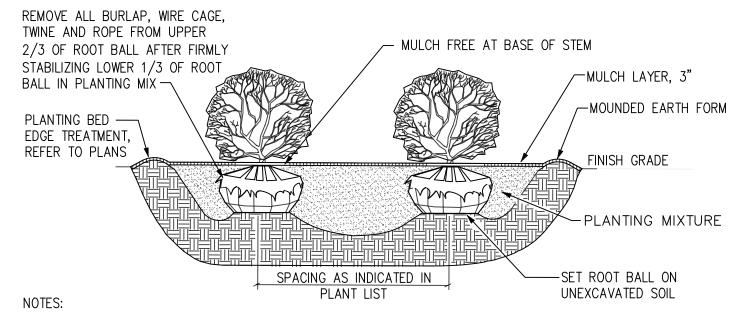
THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, DELIVERING, APPLYING, MEASURING AND SCHEDULING A SUFFICIENT AMOUNT OF WATER NECESSARY TO KEEP EACH PLANT IN A HEALTHY GROWING CONDITION THROUGHOUT THE PERIOD OF ESTABLISHMENT. THE CONTRACTOR SHALL APPLY 1" OF WATER PER WEEK TO ALL NEW PLANTS. THE CONTRACTOR SHALL INSTALL & MAINTAIN SUPPLEMENTAL DRIP WATERING TREE BAGS (SUCH AS 20 GALLON TREE GATOR WATER BAG) TO PROVIDE ADEQUATE, SLOW RELEASE OF WATER. WATER BAGS SHALL BE REMOVED AT THE END OF THE SECOND GROWING

11. TURF GROUNDCOVER (SODDING, SEEDING AND SEED MULCHING):

ALL SEEDING INSTALLATION SHALL CONFORM TO INDOT SPECIFICATIONS AND NOTE 9 ABOVE. SEED AT 202.5 LB/AC WITH

THE FOLLOWING SEED MIXTURE (INDOT SEED MIXTURE R): LOW ENDOPHYTE TALL FESCUE

PERENNIAL RYEGRASS 50 LB/AC 50 LB/AC CREEPING RED FESCUE 2.5 LB/AC WHITE DUTCH CLOVER

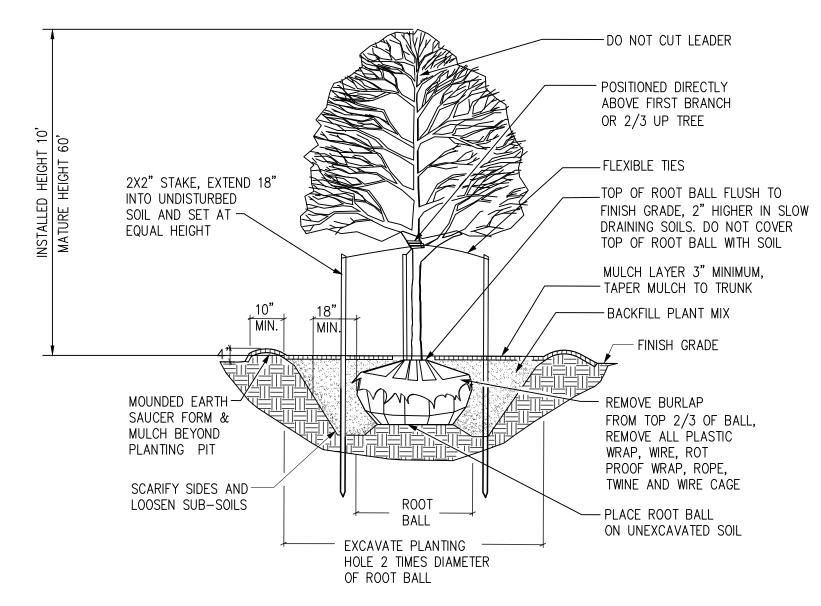


ALL SHRUBS PLANTED IN ROWS OR MASSES SHALL BE MATCHED IN SIZE AND FORM.

SHRUBS SHALL BEAR SAME RELATION TO FINISH GRADE AS THEY BORE TO EXISTING GRADE IN THE PREVIOUSLY PLANTED CONDITION.

MASS SHRUB PLANTING DETAIL (B&B OR CONTAINER)

NO SCALE



DECIDUOUS TREE PLANTING DETAIL

NO SCALE

REMARKS

CONTAINER

DECIDUOUS TREE

DECIDUOUS TREE

DECIDUOUS TREE

EVERGREEN TREE

PERENNIAL

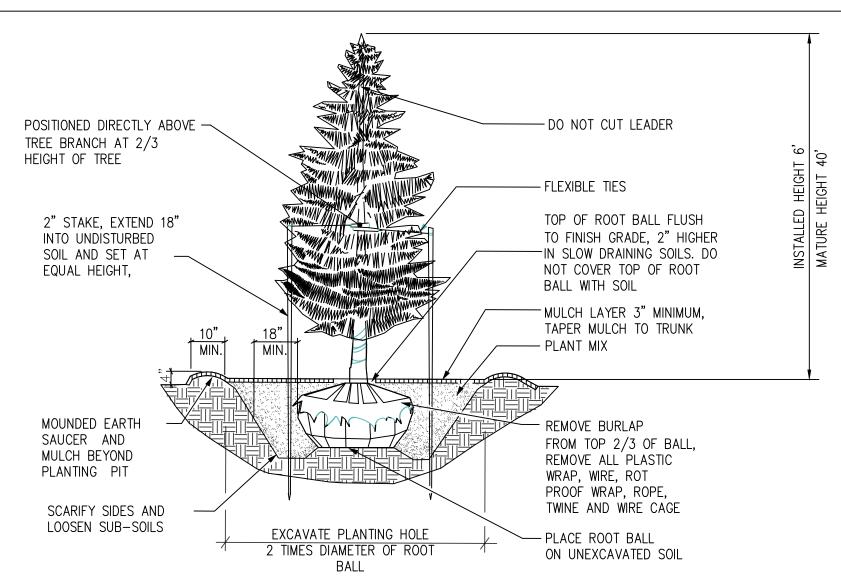
2.5" CALIPER

2.5" CALIPER

2.5" CALIPER

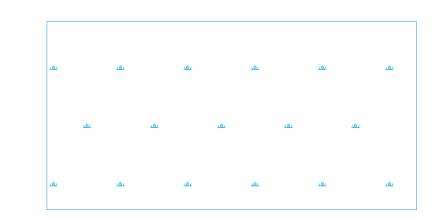
6' HEIGHT

1 GALLON



EVERGREEN TREE PLANTING DETAIL

NO SCALE



WETLAND EDGE SEED MIX:

APPLY THE SEED MIX BELOW AT THE RATE OF 36.63 PLS POUNDS PER ACRE. 60 DAYS BEFORE SEEDING, PROVIDE A WRITTEN DESCRIPTION OF THE NATIVE SHORT MEADOW MIXTURE SHOWING THE PERCENTAGE BY WEIGHT OF EACH KIND OF SEED FOR THE ENGINEER'S APPROVAL. INCLUDE THE FOLLOWING WITH THE DESCRIPTION: -NAME AND LOCATION OF SEED SUPPLIER

-ORIGIN AND DATE OF HARVEST OF EACH KIND OF SEED -A STATEMENT OF THE PURITY AND GERMINATION OF EACH SEED

-TESTING DATE FOR EACH SEED TYPE -HOW AND WHEN THE SEEDS WERE MIXED

WETLAND EDGE (VENDOR STANTEC OR EQUIV.)

BOTANICAL NAME	COMMON NAME		PLS
CARZEX VULPINOIDEA ELEOCHARIS PALUSTRIS ELYMUS VIRGINICUS GLYCERIA STRIATA JUNCUS EFFUSUS LEERSIA ORYZOIDES SCHOENOPLECTUS PUNGENS SCH. TABERNAEMONTANI SCIRPUS ATROVIRENS SCIRPUS CYPERINUS	RIVER BULRUSH BRISTLEY SEDGE CRESTED OVAL SEDGE COMMON TUSSOCK SEDGE BROWN FOX SEDGE GREAT SPIKE RUSH VIRGINIA WILD RYE FOWL MANNA GRASS COMMON RUSH RICE CUT GRASS CHAIRMAKER'S RUSH GREAT BULRUSH DARK GREEN RUSH WOOL GRASS	1.50 0.50 0.50 2.00 0.50 16.00 1.00 0.50 1.00 2.50 1.00	
TEMPORARY COVER: AVENA SATIVA	COMMON OAT 5	512.00	
FORBS: ACORUS AMRERICANUS ALISMA SUBCORDATUM ASCLEPIAS INCARNATA BIDENS SPP. BOEHMERIA CYLINDRICA DOELLINGERIA UMBELLATA EUPATORIUM PERFOLIATUM HELENIUM AUTUMNALE HIBISCUS SPP. IRIS SPP. LOBELIA CARDINALIS LOBELIA SIPHILITICA LYCOPUS AMERICANUS MIMULUS RINGENS PENTHORUM SEDOIDES PERSICARIA LACINIATA SAGITTARIA LATIFOLIA SENNA HEBECARPA SPARGANIUM EURYCARPUM SYMPHYOTRICUM LANCEOLATUM SYMPHYOTRICHUM PUNICEUM THALICTRUM DASYCAROUM VERBENA HASTATA VERBESINA ALTERNIFOLIA	FLAT—TOP ASTER COMMON BONESET SNEEZEWEED ROSE MALLOW SPECIES BLUE FLAG SPECIES CARDINAL FLOWER GREAT BLUE LOBELIA COM. WATER HOREHOUND MONKEY FLOWER DITCH STONECROP WILD GOLDEN GROW COMMON ARROWHEAD WILD SENNA COMMON BUR REED	0.25 1.00 1.00 2.00 4.00 0.25 0.25	

37.00

ABRV.	QUANTITY	SCIENTIFIC NAME
PL OC	11	PLATANUS OCIDENTALIS
GL TR	13	GLEDITSIA TRIACANTHOS 'SUNBURST'
FA SY	12	FAGUS SYLVATICA 'PURPUREA TRICOLOR'
TH OC	13	THUJA OCCIDENTALIS 'NORTH POLE'

72

HEMEROCALLIS 'DESTINED TO SEE'

HE CA

LANDSCAPE PLANT LIST

ABRV.	QUANTITY	SCIENTIFIC NAME	COMMON NAME	SIZE	REMARKS	TYPE
CA CE	12	CERCIS CANADENSIS 'BURGUNDY HEARTS'	'BURGUNDY HEARTS' EASTERN REDBUD	2" CALIPER	B&B	ORNAMENTAL TREE
TA ME	49	TAXUS X MEDIA	DENSE YEW	12" HEIGHT	CONTAINER	EVERGREEN SHRUB
JU PF	72	JUNIPERUS X PFIZERIANA	PFITZER JUNIPER	12" HEIGHT	CONTAINER	EVERGREEN SHRUB
WE FL	29	WEIGELA FLORIDA 'SONIC BLOOM'	'SONIC BLOOM' PINK WEIGELA	12" HEIGHT	CONTAINER	DECIDUOUS SHRUB
FE MA	48	FESTUCA MAIREI	ATLAS FESCUE	1 GALLON	CONTAINER	ORNAMENTAL GRASS

'DESTINED TO SEE' DAYLILY'

COMMON NAME

AMERICAN SYCAMORE

'SUNBURST' HONEY LOCUST

PURPUREA TRICOLOR EUROPEAN BEECH

'NORTH POLE' AMERICAN ARBORVITAE

_ANDSCAPE ES & DETAILS

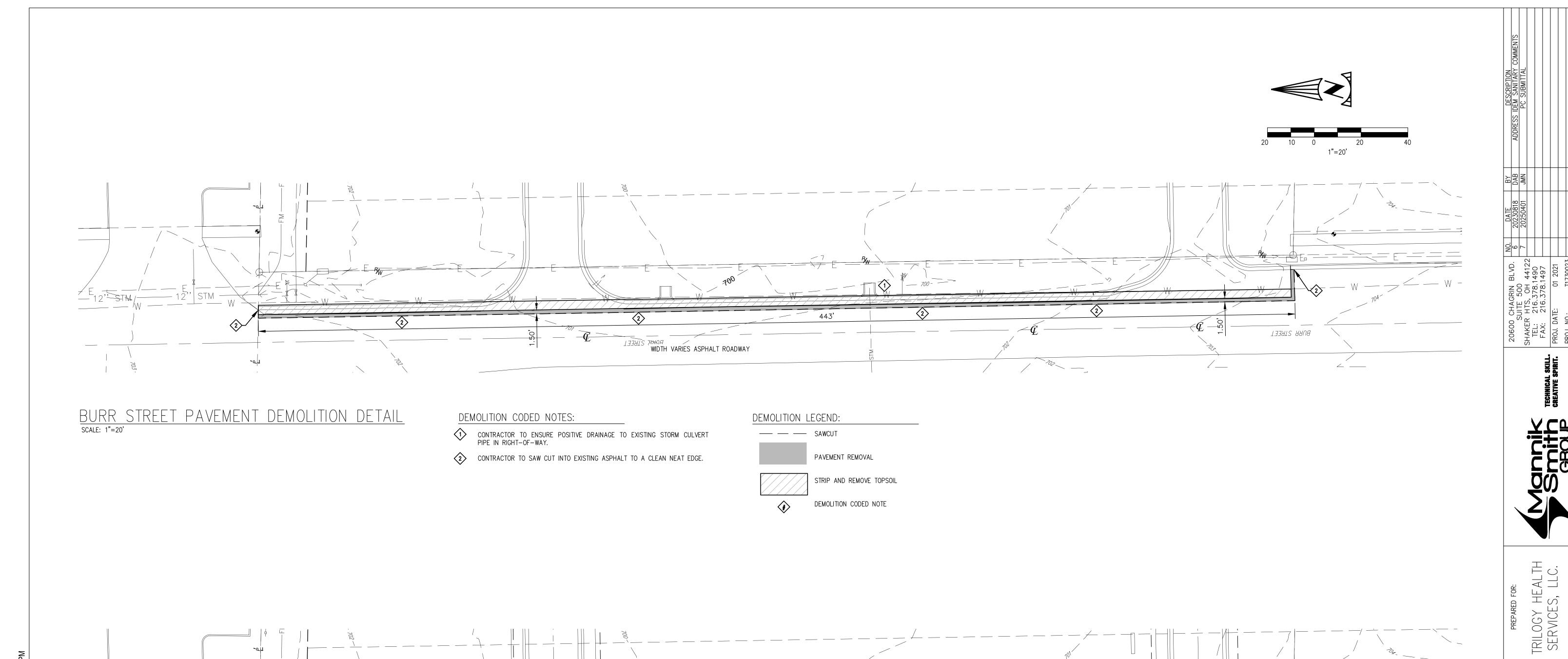
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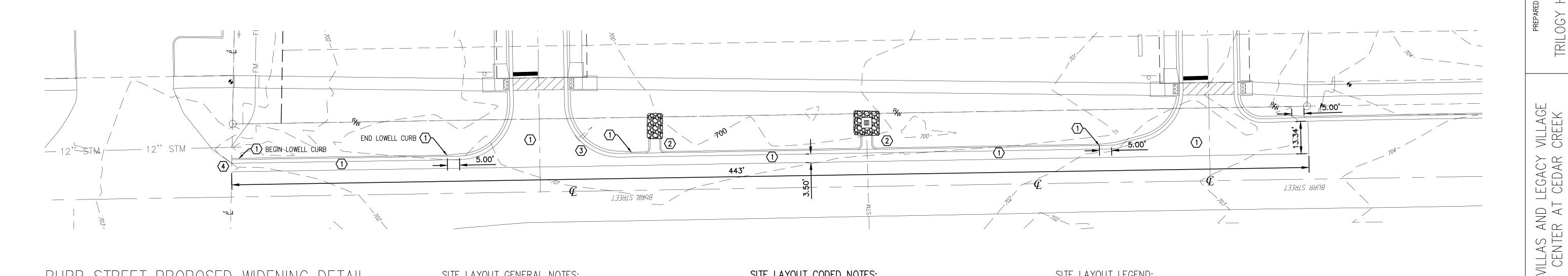
LA OTE

TRILOGY HEALT SERVICES, LLC

WILLAS AND LEGACY CENTER AT CEDAR

BU LL,





BURR STREET PROPOSED WIDENING DETAIL

SITE LAYOUT GENERAL NOTES:

- 1. CONTRACTOR TO SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT DURATION OF CONTRACT. ALL UTILITIES TO REMAIN ACTIVE.
- CONTRACTOR SHALL USE CAUTION WHILE WORKING NEAR EXISTING UNDER GROUND UTILITIES.
- 3. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY ONSITE AND OFFSITE ITEMS DAMAGED DURING CONSTRUCTION IN THE SAME OR BETTER CONDITION PRIOR TO CONSTRUCTION.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC PLAN PER INDOT STANDARDS.

SITE LAYOUT CODED NOTES:

- CONTRACTOR TO INSTALL 2 FOOT WIDE COMBINED CONCRETE CURB AND GUTTER PER TOWN OF LOWELL DETAIL ALONG BURR STREET FOR PROPOSED PAVEMENT WIDENING. SEE TOWN OF LOWELL TYPICAL ROADWAY SECTION FOR PAVEMENT AND CURB INTERACTION. TRANSITION FROM ONSITE ROLLED CURB TO TOWN STANDARD COMBINED CURB AND GUTTER OVER 5 FOOT LENGTH PER LOCATIONS SHOWN IN PLAN.
- PROPOSED 4-FOOT WIDE CURB TURN OUT AND FLUME. SEE CURB CUT DETAILS SHEET 24.
- CONTRACTOR SHALL INSTALL PROPOSED WATER VALVE TO BE FLUSH WITH NEW PAVEMENT GRADE.
- CONTRACTOR SHALL BE RESPONSIBLE TO CONNECT CONCRETE CURB AND GUTTER TO EXISTING WALGREENS DRIVE APRON PER TOWN OF LOWELL REQUIREMENTS.

SITE LAYOUT LEGEND:



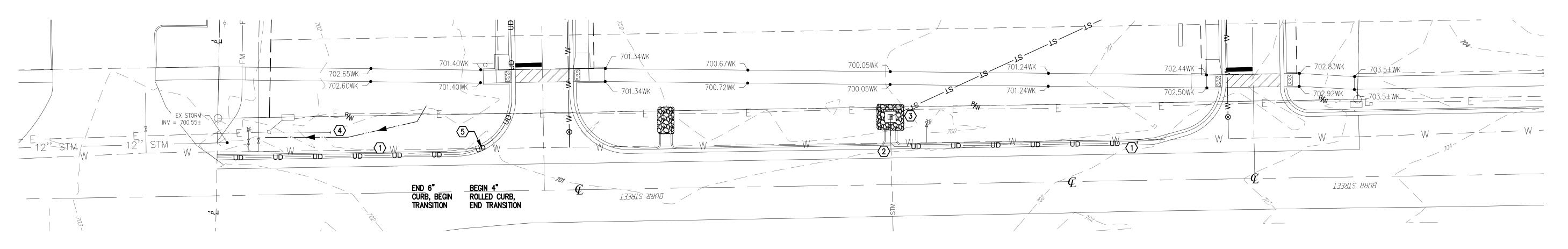
RIGHT OF WAY PAVEMENT PER TOWN OF LOWELL STANDARD

CODED NOTE

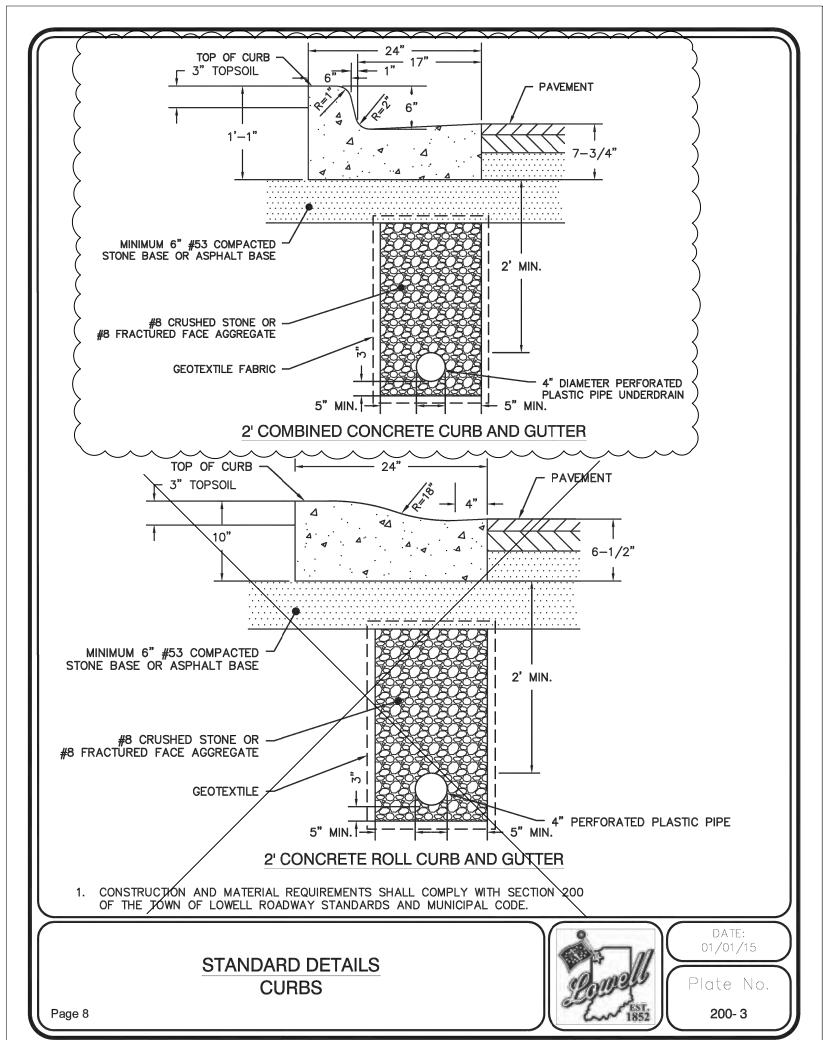
BURR STREET WIDENING DEMOLITION PLAN & SITE PLAN

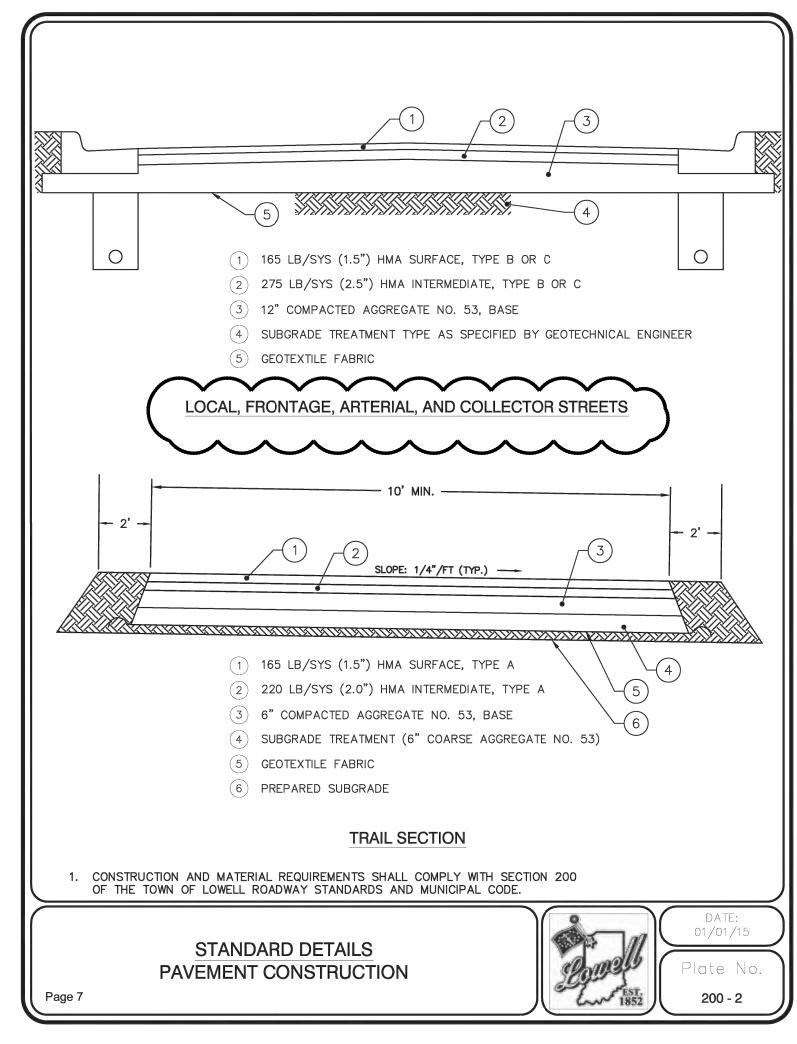
ST. 46356

S BUF LOWELL,



WIDENING GRADING AND UTILITY DETAIL SCALE: 1"=20'





PROPOSED UTILITY LEGEND:

———ST——— PROPOSED STORM SEWER

SAN	PROPOSED SANITARY SEWER
——— W ———	PROPOSED WATER LINE
——Е——	PROPOSED ELECTRIC SERVICE
—— СОММ ——	PROPOSED TELECOM. SERVICE
——G——	PROPOSED GAS LINE
——— UD ———	UDERDRAIN
	MANHOLE
	CATCH BASIN
\otimes	YARD DRAIN
2	FIRE HYDRANT
8	WATER VALVE

CODED NOTES:

- 1 CONTRACTOR TO INSTALL 4-INCH UNDERDRAIN PER TOWN OF LOWELL DETAIL BENEATH COMBINED CURB AND GUTTER (TYP.)
- (2) CONTRACTOR TO CONNECT UNDERDRAIN INTO PROPOSED INLET.
- 3 SEE UTILITY PLAN (SHEET 10) FOR STRUCTURE INFORMATION.
- 4 GRADE PROPOSED SWALE AROUND EXISTING DOWN GUY ANCHOR.
- CONTRACTOR SHALL CONFIRM PROPOSED UNDERDRAIN CAN CROSS WATER LINE PRIOR TO START OF CONSTRUCTION. NOTIFY ENGINEER AND OWNER IF THERE APPEARS TO BE A CONFLICT.

PROPOSED	GRADING LEGEND:
RIDGE VALLEY 0.00%	RIDGE, VALLEY, OR GRADE BREAK AS PAV'T/SWALE SLOPE PERCENT
← -\\-	RUNOFF FLOW DIRECTION
_XXX.XX	SPOT ELEVATION
TC	TOP OF CURB
ВС	BOTTOM OF CURB
TC/BC	FLUSH CURB/ZERO FACE CURB
HP	HIGH POINT
LP	LOW POINT
EX	MEET EXISTING PAVEMENT GRADE
DP	DEFLECTION POINT
RIM	STRUCTURE RIM
WK	SIDEWALK GRADE
ME	MATCH FYISTING

INDICATED

MATCH EXISTING

◄ SWALE CENTERLINE CODED NOTE

> ST. 46356 WILLAS AND LEGACY CENTER AT CEDAR S BU WELL,

HEAL S, LL

BURR STREET WIDENING
UTILITY PLAN &
GRADING PLAN