

plotted on 7/17/2008 10:32:41 AM @ a scale of 1:11 to hp designnet 1050c by hp Administrator

BENCHMARK SQUARE CUT ON TOP OF PARKING LOT CURB, NORTHWEST CORNER OF PARKING LOT, 90' EAST OF WEST 1/4 COR. SEC. 5-275-R1W. ELEVATION = 1353.11



29TH STREET NORTH

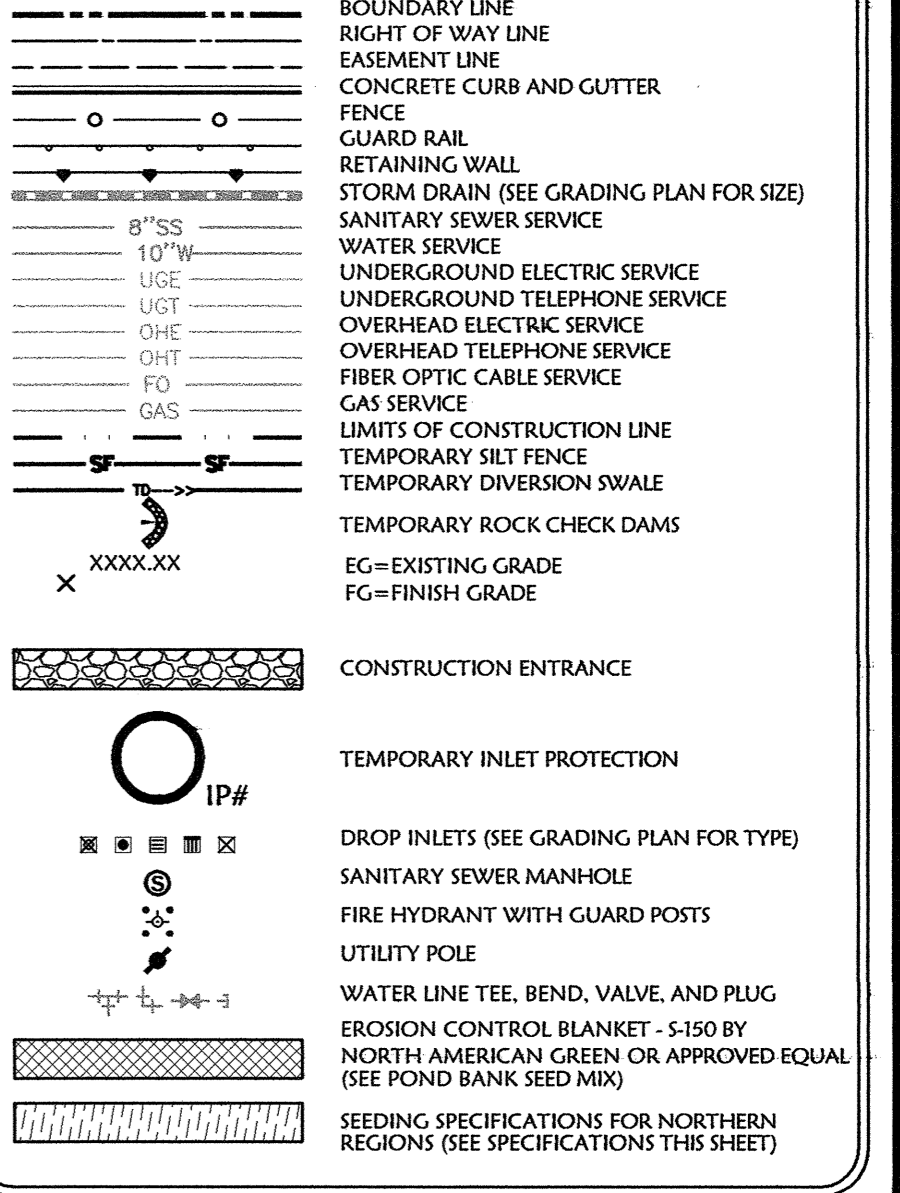
SEQUENCE OF CONSTRUCTION:

- A. CONDUCT SWPPP PRE-CONSTRUCTION MEETING. B. PULL ALL NECESSARY CITY PERMITS. C. CONTRACT TEMPORARY CONSTRUCTION EXITS AT LOCATIONS SHOWN ON THE SWPPP PLAN SHEET. D. INITIAL DOWN GRADIENT EROSION MEASURES. PERIMETER SILT FENCES AND TEMPORARY SEDIMENT BASIN BY THE LOCATIONS SHOWN ON THE SWPPP PLAN SHEET OR AS NECESSARY. E. BEGIN CLEARING AND GRUBBING OPERATIONS. CLEARING AND GRUBBING SHALL BE DONE ONLY IN AREAS WHERE EARTHWORK WILL BE PERFORMED. F. COMMENCE SITE GRADING. G. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEED AND WATERED FOR SLOPES LESS THAN 3:1. ALL SLOPES STEEPER THAN 3:1 SHALL BE TEMPORARILY SEED AND WATERED WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED. H. INITIAL REMAINING EROSION CONTROL MEASURES AND STRUCTURES. I. PREPARE TEMPORARY PARKING AND STORAGE AREA. J. GRADE REMAINDER OF SITE. K. TEMPORARILY SEED DISTURBED AREAS. L. CARRY OUT FINAL GRADING, SEEDING AND PLANTING. M. REMOVE SILT FENCING ONLY AFTER ALL EXPOSED SURFACES ARE STABILIZED. N. REMOVE TEMPORARY CONSTRUCTION EXITS.

MASS GRADING AND DRAINAGE NOTES:

INFORMATION PERTAINING TO UNDER GROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE. BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS IN ADVANCE OF MACHINE TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THESE PLANS OR IF "VOIDS" EXIST, LESS, CONTACT THE ENGINEER AND THE OWNER/DEVELOPER PRIOR TO PROCEEDING WITH CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES ON ADJUSTING EXISTING UTILITY LINE AS REQUIRED BY CUT AND FILL AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS. ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND END OF FLARED END SECTIONS. ALL DISTURBED AREAS AND SLOPES SHALL BE GRADDED SMOOTH AND 4" OF TOP SOIL APPLIED. THE AREA SHALL BE SEED AND WATERED UNTIL HARDY GRASS GROWTH HAS BEEN ESTABLISHED. (SEE LANDSCAPING PLAN FOR SEED MIX) WHERE THE WORD PIPE IS USED ON THESE PLANS, THE CONTRACTOR HAS THE OPTION TO BID MATERIAL WITH HUBS OR LESS. STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER DETAIL D326 (SEE DETAIL SHEETS) RETAINING WALLS SHALL BE CONSTRUCTED TO EXCEED A MINIMUM OF 6 INCHES ABOVE THE TOP OF FINISHED GRADE. CONTRACTOR SHALL REFER TO THE RETAINING WALL PLANS FOR CONSTRUCTION AND DESIGN SPECIFICATIONS. CONTRACTOR SHALL NOTIFY OZARK CIVIL ENGINEERING, INC. IF RETAINING WALL PLANS DIFFER FROM THIS. SEE EROSION CONTROL PLAN FOR RIP RAP PAD SIZES. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL PRACTICES IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND CONSTRUCTION SCHEDULE. REMOVE GOOD TOPSOIL FROM AREAS TO BE GRADED AND FILLED, AND PRESERVE IT FOR USE IN FINISHING THE GRADING OF ALL CRITICAL AREAS. SCARIFY AREAS TO RECEIVE TOPSOIL TO A MINIMUM DEPTH OF 2 INCHES BEFORE PLACING TOPSOIL. CLEAR AND GRUB AREAS TO BE FILLED. REMOVE TREES, VEGETATION, ROOTS, OR OTHER DEBRIS, AND OTHER MATERIALS THAT WOULD AFFECT THE STABILITY OF THE FILL. ENSURE THAT FILL MATERIAL IS FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER MATERIALS INAPPROPRIATE FOR CONSTRUCTING STABLE FILLS. DO NOT INCORPORATE FROZEN MATERIAL OR SOFT, MUCK, OR HIGHLY COMPRESSIBLE MATERIALS INTO FILL SLOPES. KEEP DIVERSIONS AND OTHER WATER CONVEYANCE MEASURES FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT. PERMANENTLY STABILIZE ALL GRADED AREAS AFTER FINAL GRADING IS COMPLETED ON EACH AREA OF THE GRADING PLAN. APPLY TEMPORARY STABILIZATION MEASURES ON ALL GRADED AREAS WHEN WORK IS TO BE INTERRUPTED OR DELAYED. (SEE EROSION CONTROL PLAN) ALL UTILITIES, INCLUDING STORM SEWER, SHOWN WITHIN PUBLIC EASEMENTS OR RIGHT OF WAYS SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCTED TO THE SPECIFICATIONS OF THE GOVERNING AGENCY'S SPECIFICATIONS. WHOEVER IS MORE STRINGENT. IF THERE IS A QUESTION AS TO WHICH SPECIFICATIONS SHOULD APPLY THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, ALL FENCING, TREES, ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE, UNLESS OTHERWISE NOTED. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES & CITY OF WICHITA SPECIFICATIONS. ALL DRAINAGE STRUCTURES SHALL BE PRECAST. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (P80) LOADING AND BE INSTALLED ACCORDING TO: CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY STATE ONE CALL SYSTEM AND LOCATE ALL UTILITIES PRIOR TO GRADING START. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH CITY OF WICHITA STANDARD SITE SPECIFICATIONS. CONTRACTOR SHALL SUBMIT A PLAN DEPICTING THE LOCATION OF PROPOSED HAUL ROUTE ACROSS WETLAND AREAS. ROUTE SHALL HAVE THE LEAST IMPACT POSSIBLE TO EXISTING WETLANDS, AND WILL BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. WITH THE EXCEPTION OF HAUL ROUTE, CONTRACTOR SHALL NOT BE ALLOWED ACCESS TO WETLAND AREAS. EARTHWORK QUANTITIES SHOWN HAVE BEEN CALCULATED AS THE VOLUME OF MATERIAL BOUNDED BY THE EXISTING GROUND LINE AND THE PROPOSED GRADING LINE. NO ALLOWANCE HAS BEEN MADE TO ACCOUNT FOR OVER-EXCAVATION OF UNSATURABLE MATERIAL. THE OVER-EXCAVATION OF MATERIAL REQUIRED FOR THE PLACEMENT OF POND LINING, OR FOR THE PLACEMENT OF TOP SOIL ABOVE THE PROPOSED GROUND LINE OR SLOPES AS IS REQUIRED BY THE PLAN.

EROSION PROPOSED FEATURES

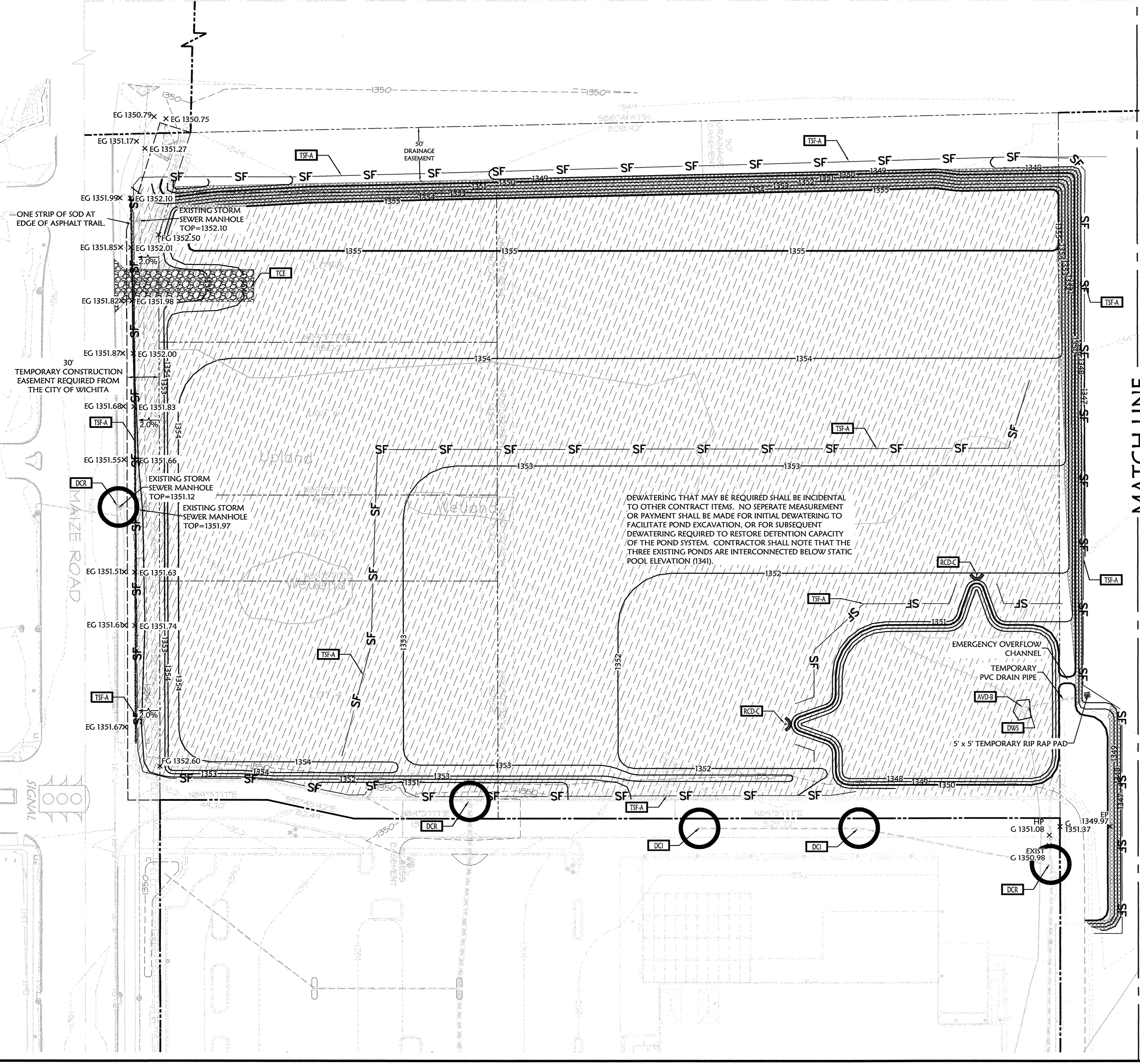


EROSION DETAILS

- AVD-B ANTI-VORTEX DEVICE FOR SILT BASIN
DCI DANDY SACK (OR APPROVED EQUAL)
DCR DANDY CURB FILTER (OR APPROVED EQUAL)
DWS SEDIMENT BASIN DEWATERING SYSTEM
D233 NON-GASKETED FLARED END SECTION
RR-C TYPICAL RIP-RAP PAD FOR SLOPE PROTECTION
RCD-C ROCK CHECK DAM DETAIL
TCE TEMPORARY CONSTRUCTION ENTRANCE
TSF-A TEMPORARY SILT FENCE

EROSION CONTROL GENERAL NOTES:

THE CONTRACTOR SHALL INSPECT, REPAIR AND ADD STONE TO THE STONE CONSTRUCTION ENTRANCE WHEN IT BECOMES SATURATED WITH MUD TO INSURE IT FUNCTIONS AS INTENDED. THE TOPSOIL STOCKPILE SHALL BE GRADED TO DRAIN AND SEEDED WITH A TEMPORARY SEED MIX. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED, CLEANED REPAIRED IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN. TEMPORARY SEDIMENT CONTROL MEASURES (SILT FENCE, CONSTRUCTION ENTRANCE, ETC.) SHALL BE MAINTAINED UNTIL ALL CONTRIBUTING AREAS ARE GRADED AND STABILIZED. A COMPLETE PLAN FOR MAINTENANCE OF CONTROL DEVICES IS CONTAINED WITHIN THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS PART OF THE SITE WORK SPECIFICATIONS. MOST CONTROL ON SITE SHALL BE MAINTAINED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF OIL AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS STRICTLY PROHIBITED. IF THE MAJORITY OF MUD OR DIRT IS NOT REMOVED FROM DIRTING TRAFFIC, CONTRACTOR SHALL ESTABLISH VEHICLE WASH AREAS AT CONSTRUCTION TRAFFIC EXIT POINTS AND VEHICLE OPERATION SHALL BE INTERCEPTED AND TRAPPED BEFORE WASH WATER IS ALLOWED TO BE DISCHARGED OFF SITE. RENEWAL WILL NOT BE ALLOWED UNTIL THE PROJECT CONSTRUCTION LIMITS. REPAIR ERODED AREAS IMMEDIATELY. RESEED AS NECESSARY TO MAINTAIN GOOD VEGETATIVE COVER. MOW VEGETATIVE COVER TO MAINTAIN A MAXIMUM HEIGHT OF SIX INCHES, AND REMOVE TRASH AS NEEDED. INSPECT AND REPAIR THE COLLECTION SYSTEM (I.E. CATCH BASIN, PIPING, SWALES, RIP RAP, ETC.) AFTER SIGNIFICANT RAINFALL TO MAINTAIN PROPER FUNCTIONING. ALL EXISTING STRUCTURES, FENCING, TREES, ETC., WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFF SITE PER STATE AND LOCAL ORDINANCES. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES. ALL WASH WATER (CONCRETE TRUCK, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DISPOSED OF IN A MANNER THAT PREVENTS CONTACT BETWEEN THESE MATERIALS AND STORM WATER THAT IS DISCHARGED FROM THE SITE. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL, DISCONTINUED AND DISPOSE OF RIP RAP FOR FINAL GRADE. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL EXPOSED AREAS SHALL BE SEED AS SPECIFIED WITHIN 14 DAYS OF FINAL GRADING. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEED AS SPECIFIED. AFTER EVERY SIGNIFICANT RAINFALL PRODUCING RAINFALL EVENT OF 1/2" OR GREATER AND AT LEAST ONCE A WEEK. A. INSPECT THE DETENTION BASIN SYSTEM FOR SEDIMENT ACCUMULATION, BROODING, TRASH ACCUMULATION, VEGETATED COVER, AND GENERAL CONDITION. B. CHECK AND CLEAR THE OUTFALL DEVICE OF ANY OBSTRUCTIONS. THIS PLAN SHALL NOT BE CONSIDERED AS INCLUDING AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DETERMINED NECESSARY BY ON SITE INSPECTION. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC. COMPACT AND MAINTAIN 25' WIDE DRIVE FROM DETENTION POND TO NORTH LOT. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN BEFORE IT IS 25% FULL. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH CITY OF WICHITA STANDARD SITE SPECIFICATIONS.



DEWATERING THAT MAY BE REQUIRED SHALL BE INCIDENTAL TO OTHER CONTRACT ITEMS. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR INITIAL DEWATERING TO FACILITATE POND EXCAVATION, OR FOR SUBSEQUENT DEWATERING REQUIRED TO RESTORE DETENTION CAPACITY OF THE POND SYSTEM. CONTRACTOR SHALL NOTE THAT THE THREE EXISTING PONDS ARE INTERCONNECTED BELOW STATIC POOL ELEVATION (1341).

MATCH LINE

Project information including drawing title 'CADILLAC LAKE DRAINAGE IMPROVEMENTS', lot information 'LOT 1 AND LOTS 4-7', location 'MAIZE ROAD AND 29TH STREET NORTH WICHITA, KS', and a table for revision control with columns for 'DATE', 'DESCRIPTION', and 'BY'. Includes a signature block for Scott P. McGehee, Professional Engineer, dated 7/17/08.

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