CONSTRUCTION PLANS

FOR

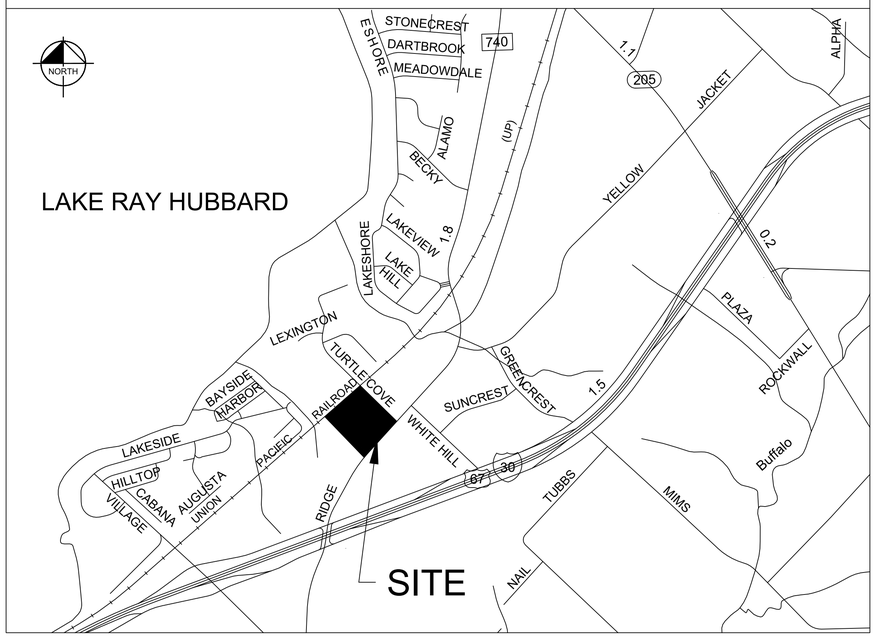
KE ANDREWS OFFICE

PLANS SUBMITTAL/REVIEW LOG

SITE PLAN SUBMITTAL -NOT FOR CONSTRUCTION	07/02/2019
DESIGN DEVELOPMENT SUBMITTAL -NOT FOR CONSTRUCTION	07/18/2019
2ND CITY SUBMITTAL -NOT FOR CONSTRUCTION	9/22/2019
BID PACKAGE -NOT FOR CONSTRUCTION	10/8/2019
3RD CITY SUBMITTAL	11/15/2019

VICINITY MAP

N.T.S.



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LP 1.01	PLANTING PLAN
LP 3.00	PLANTING DETAILS
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EXPECTED CONSTRUCTION START: NOVEMBER 2019

6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
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CITY OF ROCKWALL, TEXAS

RIDGE ROAD & TURTLE COVE BOULEVARD

March 21

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

C-001

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KH GENERAL NOTES

OVERALL:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE PLANS, CITY (OR TOWN) STANDARD DETAILS AND SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND ALL ISSUED ADDENDA, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS. THE CITY SPECIFICATIONS SHALL GOVERN WHERE OTHER SPECIFICATIONS DO NOT EXIST. IN CASE OF CONFLICTING SPECIFICATIONS OR DETAILS, THE MORE RESTRICTIVE SPECIFICATION AND DETAIL SHALL BE FOLLOWED.
2. THE CONTRACTOR SHALL COMPLY WITH CITY (OR TOWN) "GENERAL NOTES" FOR CONSTRUCTION, IF EXISTING AND REQUIRED BY THE CITY. FOR INSTANCES WHERE THEY CONFLICT WITH THESE KH GENERAL NOTES, THEN THE MORE RESTRICTIVE SHALL APPLY.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE AUTHORITIES' SPECIFICATIONS AND REQUIREMENTS.
4. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS.
5. THE EXISTING CONDITIONS SHOWN ON THESE PLANS WERE PROVIDED BY THE TOPOGRAPHIC SURVEY PREPARED BY THE PROJECT SURVEYOR, AND ARE BASED ON THE BENCHMARKS SHOWN. THE CONTRACTOR SHALL REFERENCE THESE SAME BENCHMARKS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY THE EXISTING TOPOGRAPHIC SURVEY SHOWN ON THE PLANS REPRESENTS EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES FOUND TO THE OWNER AND ENGINEER IMMEDIATELY.
7. IF THE CONTRACTOR DOES NOT WISH TO USE THE TOPOGRAPHIC SURVEY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY AT THEIR OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO THE OWNER AND ENGINEER FOR REVIEW.
8. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING AND STAKING.
9. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL, INCLUDING BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. PROPERTY LINES AND CORNERS SHALL BE HELD AS THE HORIZONTAL CONTROL.
10. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS, ELEVATIONS, AND FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ARCHITECT, ENGINEER, AND IF APPLICABLE THE CITY AND OWNER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE CITY, ENGINEER, AND OWNER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
11. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK TO HAVE THEM LOCATE THEIR EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
13. CONTRACTOR SHALL CALL TEXAS 811 AND CITY FOR WATER AND SANITARY (972-771-7730) AN ADEQUATE AMOUNT OF TIME PRIOR TO COMMENCING CONSTRUCTION OR ANY EXCAVATION.
14. CONTRACTOR SHALL USE EXTREME CAUTION AS THE SITE CONTAINS VARIOUS KNOWN AND UNKNOWN PUBLIC AND PRIVATE UTILITIES.
15. THE LOCATIONS, ELEVATIONS, DEPTH, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY MAPS AND PLANS, AND ARE CONSIDERED APPROXIMATE UNLESS NOTED OTHERWISE. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE PRESENCE, LOCATION, ELEVATION, DEPTH, AND DIMENSION OF EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE ENGINEER SHALL BE NOTIFIED WHEN A PROPOSED IMPROVEMENT CONFLICTS WITH AN EXISTING UTILITY.
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY ADJUSTMENTS AND RELOCATIONS OF EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, ADJUSTING EXISTING MANHOLES TO MATCH PROPOSED GRADE, RELOCATING EXISTING POLES AND GUY WIRES THAT ARE LOCATED IN PROPOSED DRIVEWAYS, ADJUSTING THE HORIZONTAL OR VERTICAL ALIGNMENT OF EXISTING UNDERGROUND UTILITIES TO ACCOMMODATE PROPOSED GRADE CHANGES WITH A PROPOSED UTILITY, AND TO ANY OTHERS THAT MAY BE ENCOUNTERED THAT ARE UNKNOWN AT THIS TIME AND NOT SHOWN ON THESE PLANS.
17. CONTRACTOR SHALL ARRANGE FOR OR PROVIDE, AT ITS EXPENSE, ALL GAS, TELECOMMUNICATIONS, CABLE, UNDERGROUND POWER LINE, AND UTILITY POLE ADJUSTMENTS AS NEEDED. NOTE.
18. CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF FRANCHISE UTILITIES THAT ARE NECESSARY FOR ON-SITE AND OFF-SITE CONSTRUCTION, AND SERVICE TO THE PROPOSED DEVELOPMENT.
19. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL DAMAGES DUE TO THE CONTRACTORS' FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR OWNER AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
20. BRACING OF UTILITY POLES MAY BE REQUIRED BY THE UTILITY COMPANIES WHEN TRENCHING OR EXCAVATING IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR, WITH NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE PAY ITEM.
21. CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, FEDERAL AND UTILITY OWNER REGULATIONS PERTAINING TO WORK SETBACKS FROM POWER LINES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, APPROVALS, AND BONDS PRIOR TO CONSTRUCTION.
23. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, GEOTECHNICAL REPORT AND ADDENDA, PROJECT AND CITY SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND NOI INSPECTION REPORTS.
24. ALL SHOP DRAWINGS AND OTHER DOCUMENTS THAT REQUIRE ENGINEER REVIEW SHALL BE SUBMITTED BY THE CONTRACTOR SUFFICIENTLY IN ADVANCE OF CONSTRUCTION OF THAT ITEM, SO THAT NO LESS THAN 10 BUSINESS DAYS FOR REVIEW AND RESPONSE IS AVAILABLE. THE CONTRACTOR SHALL OBTAIN CITY APPROVAL ON ALL PUBLIC ITEMS AS WELL.
25. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES, AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO USE OF THE FACILITY AND THE FINAL CONNECTION OF SERVICES.
26. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS.
27. CONTRACTORS BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
28. ALL SYMBOLS SHOWN ON THESE PLANS (E.G. FIRE HYDRANT, METERS, VALVES, INLETS, ETC....) ARE FOR PRESENTATION PURPOSES ONLY AND ARE NOT TO SCALE. CONTRACTOR SHALL COORDINATE FINAL SIZES AND LOCATIONS WITH APPROPRIATE CITY INSPECTOR.
29. THE SCOPE OF WORK FOR THE CIVIL IMPROVEMENTS SHOWN ON THESE PLANS TERMINATES 5-FEET FROM THE BUILDING. REFERENCE THE BUILDING PLANS (E.G. ARCHITECTURAL, STRUCTURAL, MEP) FOR AREAS WITHIN 5-FEET OF THE BUILDING AND WITHIN THE BUILDING FOOTPRINT
30. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL FINAL BUILDING DIMENSIONS.
31. THE PROPOSED BUILDING FOOTPRINT(S) SHOWN IN THESE PLANS WAS PROVIDED TO KIMLEY-HORN AND ASSOCIATES, INC. (KH) BY THE PROJECT ARCHITECT AT THE TIME THESE PLANS WERE PREPARED. IT MAY NOT BE THE FINAL CORRECT VERSION BECAUSE THE BUILDING DESIGN WAS ONGOING. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFIRMING THE FINAL CORRECT VERSION OF THE BUILDING FOOTPRINT WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO LAYOUT. DIMENSIONS AND/OR COORDINATES SHOWN ON THESE PLANS WERE BASED ON THE ABOVE STATED ARCHITECTURAL FOOTPRINT, AND ARE THEREFORE A PRELIMINARY LOCATION OF THE BUILDING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY WHAT PART OF THE BUILDING THE ARCHITECT'S FOOTPRINT REPRESENTS (E.G. SLAB, OUTSIDE WALL, MASONRY LEDGE, ETC.....) AND TO CONFIRM ITS FINAL POSITION ON THE SITE BASED ON THE FINAL ARCHITECTURAL FOOTPRINT, CIVIL DIMENSION CONTROL PLAN, SURVEY BOUNDARY AND/OR PLAT. ANY DIFFERENCES FOUND SHALL BE REPORTED TO KH IMMEDIATELY.
32. ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST EDITION), INCLUDING SUBSEQUENT ADDENDA.
33. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE BY OWNER. ALL MATERIALS TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR AND COMPLY WITH CITY STANDARD SPECIFICATIONS AND GEOTECHNICAL REPORT. TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING MATERIALS. OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR MATERIALS TESTING.
34. ALL COPIES OF MATERIALS TEST RESULTS SHALL BE SENT TO THE OWNER, CITY INSPECTOR, ENGINEER AND ARCHITECT DIRECTLY FROM THE TESTING AGENCY.
35. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE MATERIALS, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS.
36. DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING, IF NONE IS CURRENTLY EXISTING.
37. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA, NO ENCROACHMENTS OUTSIDE OF THE WORK AREA WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO REPAIR.
38. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, MANHOLES, POLES, GUY WIRES, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, COMMUNICATION BOXES/PEDESTALS, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES AT NO COST TO THE OWNER.
39. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY OR PUBLIC IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, FENCES, SIGNS, PAVEMENT, CURBS, SIDEWALKS, GRASS, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS, ETC... TO ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER.
40. ALL AREAS IN EXISTING RIGHT-OF-WAY DISTURBED BY SITE CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER, INCLUDING AS NECESSARY GRADING, LANDSCAPING, CULVERTS, SOD, AND PAVEMENT.
41. THE CONTRACTOR SHALL SALVAGE ALL EXISTING POWER POLES, SIGNS, WATER VALVES, FIRE HYDRANTS, METERS, ETC... THAT ARE TO BE RELOCATED DURING CONSTRUCTION.
42. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION, INCLUDING MAINTAINING EXISTING DITCHES OR CULVERTS FREE OF OBSTRUCTIONS AT ALL TIMES.
43. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.
44. THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.
45. SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
46. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE ENGINEER'S SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL REQUIRED SAFETY PROCEDURES AND PROGRAMS.
47. SIGNS RELATED TO SITE OPERATION OR SAFETY ARE NOT INCLUDED IN THESE PLANS.
48. CONTRACTOR OFFICE AND STAGING AREA SHALL BE AGREED ON BY THE OWNER AND CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS FOR THE CONSTRUCTION OFFICE, TRAILER, STORAGE, AND STAGING OPERATIONS AND LOCATIONS.
49. LIGHT POLES, SIGNS, AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED IN ACCESSIBLE ROUTES.
50. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"
51. TOP RIM ELEVATIONS OF ALL EXISTING AND PROPOSED MANHOLES SHALL BE COORDINATED WITH TOP OF PAVEMENT OR FINISHED GRADE AND SHALL BE ADJUSTED TO BE FLUSH WITH THE ACTUAL FINISHED GRADE AT THE TIME OF PAVING.
52. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED VALVES, FIRE HYDRANTS, AND OTHER UTILITY APPURTENANCES TO MATCH ACTUAL FINISHED GRADES AT THE TIME OF PAVING.
53. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SEQUENCING AND PHASING, AND SHALL CONTACT THE APPROPRIATE CITY OFFICIALS, INCLUDING BUILDING OFFICIAL, ENGINEERING INSPECTOR, AND FIRE MARSHALL TO LEARN OF ANY REQUIREMENTS.
54. CONTRACTOR IS RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY THE CITY OF A TRAFFIC CONTROL PLAN PRIOR TO THE START OF CONSTRUCTION, AND THEN THE IMPLEMENTATION OF THE PLAN.
55. CONTRACTOR SHALL KEEP A NEAT AND ACCURATE RECORD OF CONSTRUCTION, INCLUDING ANY DEVIATIONS OR VARIANCES FROM THE PLANS.
56. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT PLANS TO THE ENGINEER AND CITY IDENTIFYING ALL DEVIATIONS AND VARIATIONS FROM THESE PLANS MADE DURING CONSTRUCTION.

EROSION CONTROL:

1. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL AND WATER QUALITY REQUIREMENTS, LAWS, AND ORDINANCES THAT APPLY TO THE CONSTRUCTION SITE LAND DISTURBANCE.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE "TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000".
3. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE.
4. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT.
5. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL EROSION CONTROL DEVICES, BEST MANAGEMENT PRACTICES (BMPS), AND FOR UPDATING THE EROSION CONTROL PLAN DURING CONSTRUCTION AS FIELD CONDITIONS CHANGE.
6. CONTRACTOR SHALL DOCUMENT THE DATES OF INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL FOR EACH BMP EMPLOYED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE.
7. AS STORM SEWER INLETS ARE INSTALLED ON-SITE, TEMPORARY EROSION CONTROL DEVICES SHALL BE INSTALLED AT EACH INLET PER APPROVED DETAILS.
8. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE AREA IT PROTECTS HAS BEEN PERMANENTLY STABILIZED.
9. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES NEEDED DUE TO PROJECT PHASING.
10. CONTRACTOR SHALL OBSERVE THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND MAKE FIELD ADJUSTMENTS AND MODIFICATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. IF THE EROSION CONTROL DEVICES DO NOT EFFECTIVELY CONTROL EROSION AND PREVENT SEDIMENTATION FROM WASHING OFF THE SITE, THEN THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
11. OFF-SITE SOIL BORROW, SPOIL, AND STORAGE AREAS (IF APPLICABLE) ARE CONSIDERED AS PART OF THE PROJECT SITE AND MUST ALSO COMPLY WITH THE EROSION CONTROL REQUIREMENTS FOR THIS PROJECT. THIS INCLUDES THE INSTALLATION OF BMP'S TO CONTROL EROSION AND SEDIMENTATION AND THE ESTABLISHMENT OF PERMANENT GROUND COVER ON DISTURBED AREAS PRIOR TO FINAL APPROVAL OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP AND EROSION CONTROL PLAN TO INCLUDE BMPS FOR ANY OFF-SITE THAT ARE NOT ANTICIPATED OR SHOWN ON THE EROSION CONTROL PLAN.
12. ALL STAGING, STOCKPILES, SPOIL, AND STORAGE SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. PROTECTIVE MEASURES SHALL BE PROVIDED IF NEEDED TO ACCOMPLISH THIS REQUIREMENT, SUCH AS COVERING OR ENCIRCLING THE AREA WITH AN APPROPRIATE BARRIER.
13. CONTRACTORS SHALL INSPECT ALL EROSION CONTROL DEVICES, BMPS, DISTURBED AREAS, AND VEHICLE ENTRY AND EXIT AREAS WEEKLY AND WITHIN 24 HOURS OF ALL RAINFALL EVENTS OF 0.5 INCHES OR GREATER, AND KEEP A RECORD OF THIS INSPECTION IN THE SWPPP BOOKLET IF APPLICABLE, TO VERIFY THAT THE DEVICES AND EROSION CONTROL PLAN ARE FUNCTIONING PROPERLY.
14. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS IN ACCORDANCE WITH CITY SPECIFICATIONS. CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC USES THE STABILIZED ENTRANCE AT ALL TIMES FOR ALL INGRESS/EGRESS.
15. SITE ENTRY AND EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING AND FLOWING OF SEDIMENT AND DIRT ONTO PUBLIC ROADWAYS. ALL SEDIMENT AND DIRT FROM THE SITE THAT IS DEPOSITED ONTO AN OFF-SITE ROADWAY SHALL BE REMOVED IMMEDIATELY.
16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM THE AFFECTED OFF-SITE ROADWAYS THAT ARE A RESULT OF THE CONSTRUCTION, AS REQUESTED BY OWNER AND CITY. AT A MINIMUM, THIS SHOULD OCCUR ONCE PER DAY FOR THE OFF-SITE ROADWAYS.
17. WHEN WASHING OF VEHICLES IS REQUIRED TO REMOVE SEDIMENT PRIOR TO EXITING THE SITE, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP BMP.
18. CONTRACTOR SHALL INSTALL A TEMPORARY SEDIMENT BASIN FOR ANY ON-SITE DRAINAGE AREAS THAT ARE GREATER THAN 10 ACRES, PER TCEQ AND CITY STANDARDS. IF NO ENGINEERING DESIGN HAS BEEN PROVIDED FOR A SEDIMENTATION BASIN ON THESE PLANS, THEN THE CONTRACTOR SHALL ARRANGE FOR AN APPROPRIATE DESIGN TO BE PROVIDED.
19. ALL FINES IMPOSED FOR SEDIMENT OR DIRT DISCHARGED FROM THE SITE SHALL BE PAID BY THE RESPONSIBLE CONTRACTOR.
20. WHEN SEDIMENT OR DIRT HAS CLOGGED THE CONSTRUCTION ENTRANCE VOID SPACES BETWEEN STONES OR DIRT IS BEING TRACKED ONTO A ROADWAY, THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH-DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY INTO STORM SEWER SYSTEMS OR WATERWAYS. ANOTHER BMP TO CONTROL PERIODIC RE-GRADING OR NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFECTIVENESS OF THE CONSTRUCTION ENTRANCE.
21. TEMPORARY SEEDING OR OTHER APPROVED STABILIZATION SHALL BE INITIATED WITHIN 14 DAYS OF THE LAST DISTURBANCE OF ANY AREA, UNLESS ADDITIONAL CONSTRUCTION WILL COMMENCE WITHIN 21 DAYS OF THE LAST DISTURBANCE.
22. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING CONSTRUCTION, ALWAYS CLEANING UP DIRT, LOOSE MATERIAL, AND TRASH AS CONSTRUCTION PROGRESSES.
23. UPON COMPLETION OF FINE GRADING, ALL SURFACES OF DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED. STABILIZATION IS ACHIEVED WHEN THE AREA IS EITHER COVERED BY PERMANENT IMPERVIOUS STRUCTURES, SUCH AS BUILDINGS, SIDEWALK, PAVEMENT, OR A UNIFORM PERENNIAL VEGETATIVE COVER.
24. AT THE CONCLUSION OF THE PROJECT, ALL INLETS, DRAIN PIPE, CHANNELS, DRAINAGEWAYS AND BORROW DITCHES AFFECTED BY THE CONSTRUCTION SHALL BE DREDGED, AND THE SEDIMENT GENERATED BY THE PROJECT SHALL BE REMOVED AND DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.
25. ALL RIGHT-OF-WAYS TO BE SODDED PRIOR TO ENGINEERING ACCEPTANCE OR CERTIFICATE OF OCCUPANCY.
26. ALL DISTURBED AREAS TO HAVE 80% GRASS (NO WINTER RYE OR WEEDS) COVERAGE A MINIMUM OF 1" IN HEIGHT.

STORM WATER DISCHARGE AUTHORIZATION:

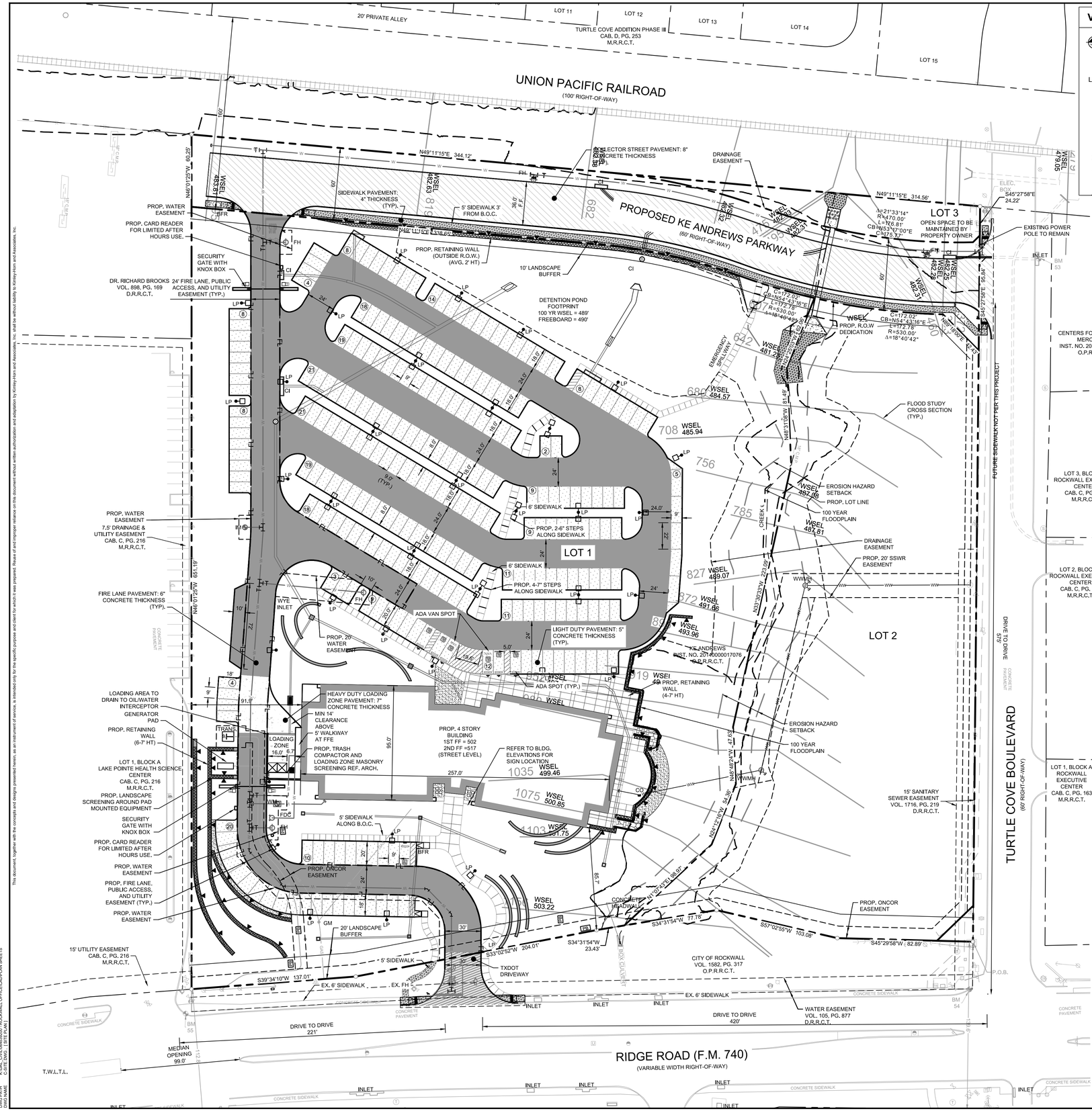
1. CONTRACTOR SHALL COMPLY WITH ALL TCEQ AND EPA STORM WATER POLLUTION PREVENTION REQUIREMENTS.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000 AND CITY ORDINANCE.
3. THE CONTRACTOR SHALL ENSURE THAT A NOTICE OF INTENT IS SUBMIT A NOI TO TCEQ AT LEAST SEVEN DAYS PRIOR TO COMMENCING CONSTRUCTION (IF APPLICABLE), ON IF UTILIZING ELECTRONIC SUBMITTAL, PRIOR TO COMMENCING CONSTRUCTION. ALL PRIMARY OPERATORS SHALL PROVIDE A COPY OF THE SIGNED NOI TO THE OPERATOR OF ANY MS4 (TYPICALLY THE CITY) RECEIVING DISCHARGE FROM THE SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE, INCLUDING POSTING SITE NOTICE, INSPECTIONS, DOCUMENTATION, AND SUBMISSION OF ANY INFORMATION REQUIRED BY THE TCEQ (E.G. NOI).
5. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN THE REQUIRED CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
6. A COPY OF THE SWPPP, AND ALL CONTRACTOR REPORTS SUBMIT A COPY OF THE SWPPP AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY BY THE CONTRACTOR AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
7. A NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO TCEQ BY ANY PRIMARY OPERATOR WITHIN 30 DAYS AFTER ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM VEGETATION COVER HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY STRUCTURES, A TRANSFER OF OPERATIONAL CONTROL HAS OCCURRED, OR THE OPERATOR HAS OBTAINED ALTERNATIVE AUTHORIZATION UNDER A DIFFERENT PERMIT. A COPY OF THE NOT SHALL BE PROVIDED TO THE OPERATOR OF ANY MS4 RECEIVING DISCHARGE FROM THE SITE.

DEMOLITION:

1. KH IS NOT RESPONSIBLE FOR THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR TO IMPLEMENT THIS DEMOLITION PLAN. THIS PRELIMINARY DEMOLITION PLAN SIMPLY INDICATES THE KNOWN OBJECTS ON THE SUBJECT TRACT THAT ARE TO BE DEMOLISHED AND REMOVED FROM THE SITE.
2. KH DOES NOT WARRANT OR REPRESENT THAT THE PLAN, WHICH WAS PREPARED BASED ON SURVEY AND UTILITY INFORMATION PROVIDED BY OTHERS, SHOWS ALL IMPROVEMENTS AND UTILITIES, THAT THE IMPROVEMENTS AND UTILITIES ARE SHOWN ACCURATELY, OR THAT THE UTILITIES SHOWN CAN BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ITS OWN SITE RECONNAISSANCE TO SCOPE ITS WORK AND TO CONFIRM WITH THE OWNERS OF IMPROVEMENTS AND UTILITIES THE ABILITY AND PROCESS FOR THE REMOVAL OF SAME.
3. THIS PLAN IS INTENDED TO GIVE A GENERAL GUIDE TO THE CONTRACTOR, NOTHING MORE. THE GOAL OF THE DEMOLITION IS TO LEAVE THE SITE IN A STATE SUITABLE FOR THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT. REMOVAL OR PRESERVATION OF IMPROVEMENTS, UTILITIES, AND STRUCTURES NOT SHOWN ON THESE PLANS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR IS STRONGLY CAUTIONED TO REVIEW THE FOLLOWING REPORTS DESCRIBING SITE CONDITIONS PRIOR TO BIDDING AND IMPLEMENTING THE DEMOLITION PLAN:
   a. ENVIRONMENTAL SITE ASSESSMENT PROVIDED BY THE OWNER,
   b. ASBESTOS BUILDING INSPECTION REPORT(S) PROVIDED BY THE OWNER,
   c. GEOTECHNICAL REPORT PROVIDED BY THE OWNER,
   d. OTHER REPORTS THAT ARE APPLICABLE AND AVAILABLE.
5. CONTRACTOR SHALL CONTACT THE OWNER TO VERIFY WHETHER ADDITIONAL REPORTS OR AMENDMENTS TO THE ABOVE CITED REPORTS HAVE BEEN PREPARED AND TO OBTAIN/REVIEW/AND COMPLY WITH THE RECOMMENDATION OF SUCH STUDIES PRIOR TO STARTING ANY WORK ON THE SITE.
6. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS REGARDING THE DEMOLITION OF OBJECTS ON THE SITE AND ALL TASKS THAT WILL NEED TO BE DEMOLISHED AND REMOVED.
7. KH DOES NOT REPRESENT THAT THE REPORTS AND SURVEYS REFERENCED ABOVE ARE ACCURATE, COMPLETE, OR COMPREHENSIVE WITH REGARD TO ALL TASKS THAT WILL NEED TO BE DEMOLISHED AND REMOVED.
8. SURFACE PAVEMENT INDICATED MAY OVERLAY OTHER HIDDEN STRUCTURES, SUCH AS ADDITIONAL LAYERS OF PAVEMENT, FOUNDATIONS OR WALLS, THAT ARE ALSO TO BE REMOVED.

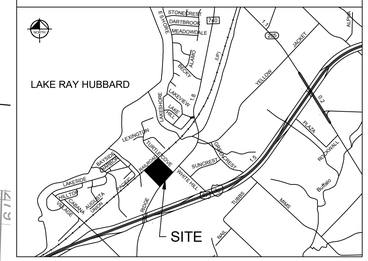
GRADING:

1. THE CONTRACTOR AND GRADING SUBCONTRACTOR SHALL VERIFY THE SUITABILITY OF EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE CIVIL ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES FOUND FOR MATERIALS TESTING.
2. CONTRACTOR SHALL OBTAIN ANY REQUIRED GRADING PERMITS FROM THE CITY.
3. UNLESS OTHERWISE NOTED, PROPOSED CONTO



VICINITY MAP

N.T.S.



GRAPHIC SCALE IN FEET
0 20 40 80

NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. PAVEMENT SECTIONS SHOWN FOR REFERENCE ONLY. SEE GEOTECH FOR DETAILS.
3. CONSTRUCTION OF THE DETENTION POND AND ASSOCIATED OUTFALL STRUCTURE SHALL BE CONSTRUCTED PRIOR TO PAVING OF THE REMAINDER OF THE SITE.

LEGEND

PROPERTY LINE	
SAWCUT LINE	
PROPOSED CURB	
LIGHT DUTY CONCRETE	
FIRE LANE / MEDIUM DUTY CONCRETE	
HEAVY DUTY CONCRETE	
PUBLIC STREET CONCRETE	
PROPOSED PUBLIC SIDEWALK	
PROPOSED TxDOT PAVEMENT	
DRY CREEK BED (REFER TO LA)	

SITE INFORMATION

OVERALL AREA			
LOT 1	279,442 SF	6.42 ACRES	(66.14%)
LOT 2	96,644 SF	2.22 ACRES	(22.87%)
LOT 3	6,103 SF	0.14 ACRES	(1.44%)
RIGHT OF WAY	40,298 SF	0.93 ACRES	(9.54%)
TOTAL	422,488 SF	9.6990 ACRES	
LOT 1			
PAVEMENT	106,403 SF	2.44 ACRES	(38.08%)
BUILDING COVERAGE	23,243 SF	0.53 ACRES	(8.32%)
LANDSCAPE AND OPEN SPACE	149,796 SF	3.44 ACRES	(53.61%)
TOTAL	279,442 SF	6.42 ACRES	

PARKING

REQUIRED PER PD		PROVIDED	
1 PER 300 SQ. FT.	268 SPACES	PROPOSED	271 SPACES
ACCESSIBLE SPOTS REQ.		**ACCESSIBLE SPOTS PROV.**	
TOTAL (INCLUDES 2 VAN SPOTS)	7 SPACES	TOTAL (INCLUDES 2 VAN SPOTS)	7 SPACES

DEVELOPMENT INFORMATION

ZONING - C, SCENIC OVERLAY DISTRICT	
BUILDING AREA 1 (HT = 60 FT)	
STORY	AREA (GSF)
LL	80,024
FLOOR AREA RATIO (FAR)	0.29
FOUNDATION TYPE	REINFORCED CONCRETE STRAIGHT SHAFT DRILLED PIERS

BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1"
ELEV. 567.70

BM 53 * ☒ * CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 482.12

BM 54 * ☒ * CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 524.67

BM 55 * ☒ * CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD.
ELEV. 527.03

BM 56 * ☒ * CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF OF LA JOLLA POINTE DRIVE APPROXIMATELY 1050 FEET SOUTHWEST OF THE CENTERLINE OF TURTLE COVE BOULEVARD AND 840 FEET NORTHWEST OF THE CENTERLINE OF RIDGE ROAD.
ELEV. 489.81

SITE PLAN
KE ANDREWS OFFICE

LOTS 1 & 2
9.6990 ACRES, E.P.GAINS CHISM SURVEY
ABSTRACT NO. 64
CITY OF ROCKWALL , ROCKWALL COUNTY, TEXAS

OWNER:
KE ANDREWS
1900 DALROCK RD.
ROWLETT, TEXAS 75088
CONTACT: KEVIN LLOYD
E-MAIL: KLLOYD@KEATAX.COM

ENGINEER/SURVEYOR:
KIMLEY-HORN AND ASSOCIATES, INC
13455 NOEL ROAD, TWO GALLERIA OFFICE TOWER, SUITE 700
DALLAS, TEXAS 75240
PHONE: 972-770-1300
CONTACT: JOSEPH HORNISHER, P.E.

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

No.	REVISIONS	DATE	BY

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PHONE: 972-770-1300 FAX: 972-239-3820
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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

SITE PLAN
CASE NO. SP2019-025
RECORD DRAWINGS

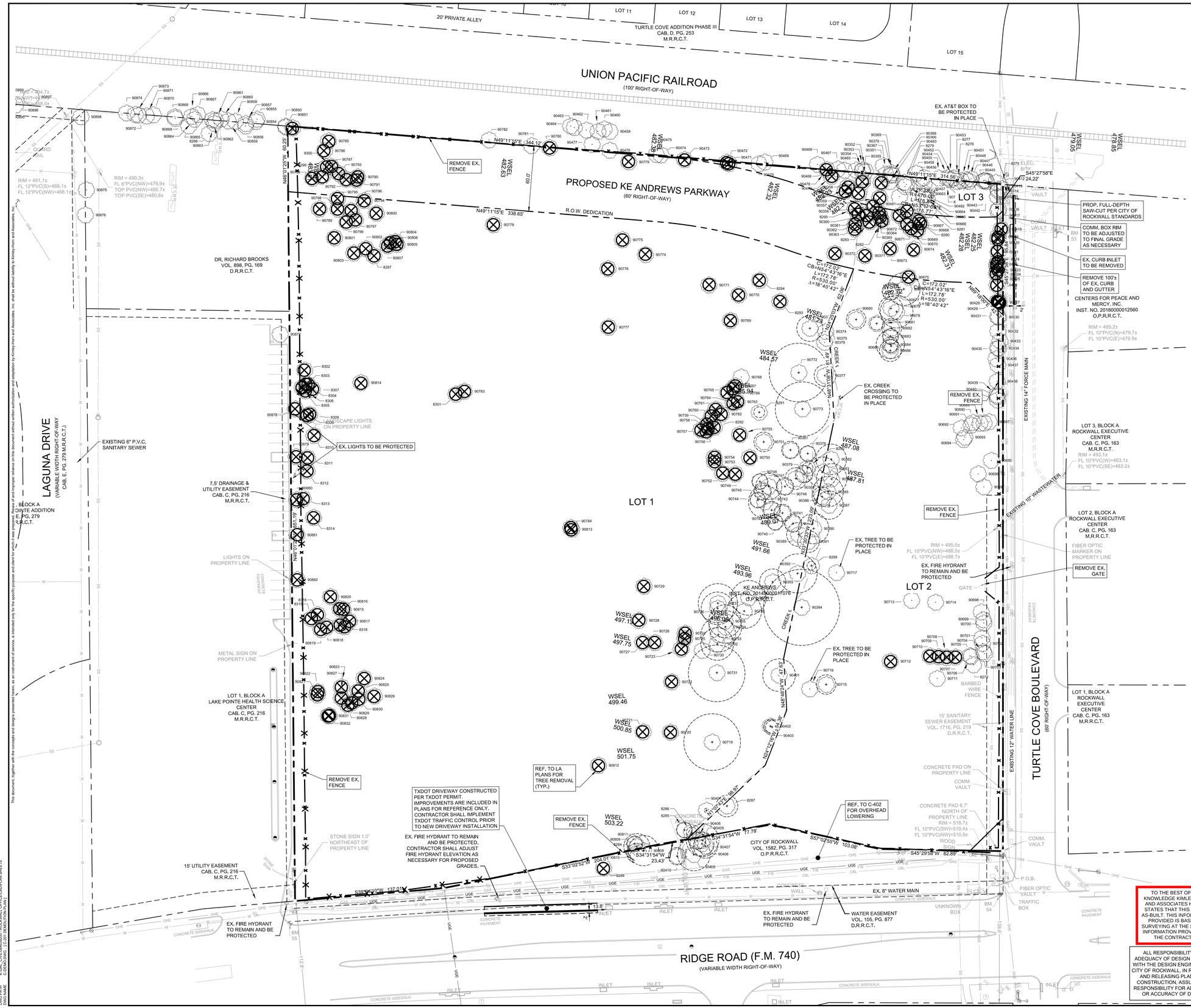
SHEET NUMBER
C-101

CASE NO. SP2019-025

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C-SITE.DWG (SITE PLAN)



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PLOT DATE
DWG NAME



GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

	PROPERTY LINE
W	EXISTING WATER
SS	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	DEMOLITION
	SAWCUT LINE
⊗	TREE REMOVAL (VERIFY WITH LA)

NOTES

1. EXISTING UTILITY APPURTENANCES TO REMAIN AND BE PROTECTED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR RIM AND/OR LID ADJUSTMENTS. REFER TO GRADING PLAN FOR PROP. RIM ELEVATIONS.
2. SAWCUTS FOR PAVEMENT REMOVAL SHALL BE FULL DEPTH.
3. SAWCUT REMOVAL LIMITS ARE FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING REQUIRED WIDTH TO COMPLETE PROPOSED CONSTRUCTION ACTIVITIES WHILE MEETING CITY PERMIT REQUIREMENTS.
4. REFER TO SHEET C-207 FOR PAVEMENT REMOVAL DETAILS. CONTRACTOR TO REFER TO LATEST CITY OF ROCKWALL STANDARDS.
5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TRAFFIC CONTROL PLAN TO CITY STANDARDS, AS REQUIRED, DURING DEMOLITION ACTIVITIES.
6. CONTRACTOR IS RESPONSIBLE TO RE-STRIPE ANY MARKINGS REMOVED DUE TO PAVEMENT REMOVAL WHICH ARE NOT SPECIFIED TO BE REMOVED.
7. RECONSTRUCTION OF TURTLE COVE AND A DRIVEWAY EXTENSION TO LAGUNA DRIVE MAY OCCUR OCCUR SIMULTANEOUSLY WITH THIS PROJECT. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ADJACENT CONTRACTOR.

BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1"
ELEV. 567.70

BM 53 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 482.12

BM 54 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 524.67

BM 55 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD.
ELEV. 527.03

BM 56 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF OF LA JOLLA POINTE DRIVE APPROXIMATELY 1050 FEET SOUTHWEST OF THE CENTERLINE OF TURTLE COVE BOULEVARD AND 840 FEET NORTHWEST OF THE CENTERLINE OF RIDGE ROAD.
ELEV. 489.81

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

No.	REVISIONS	DATE	BY

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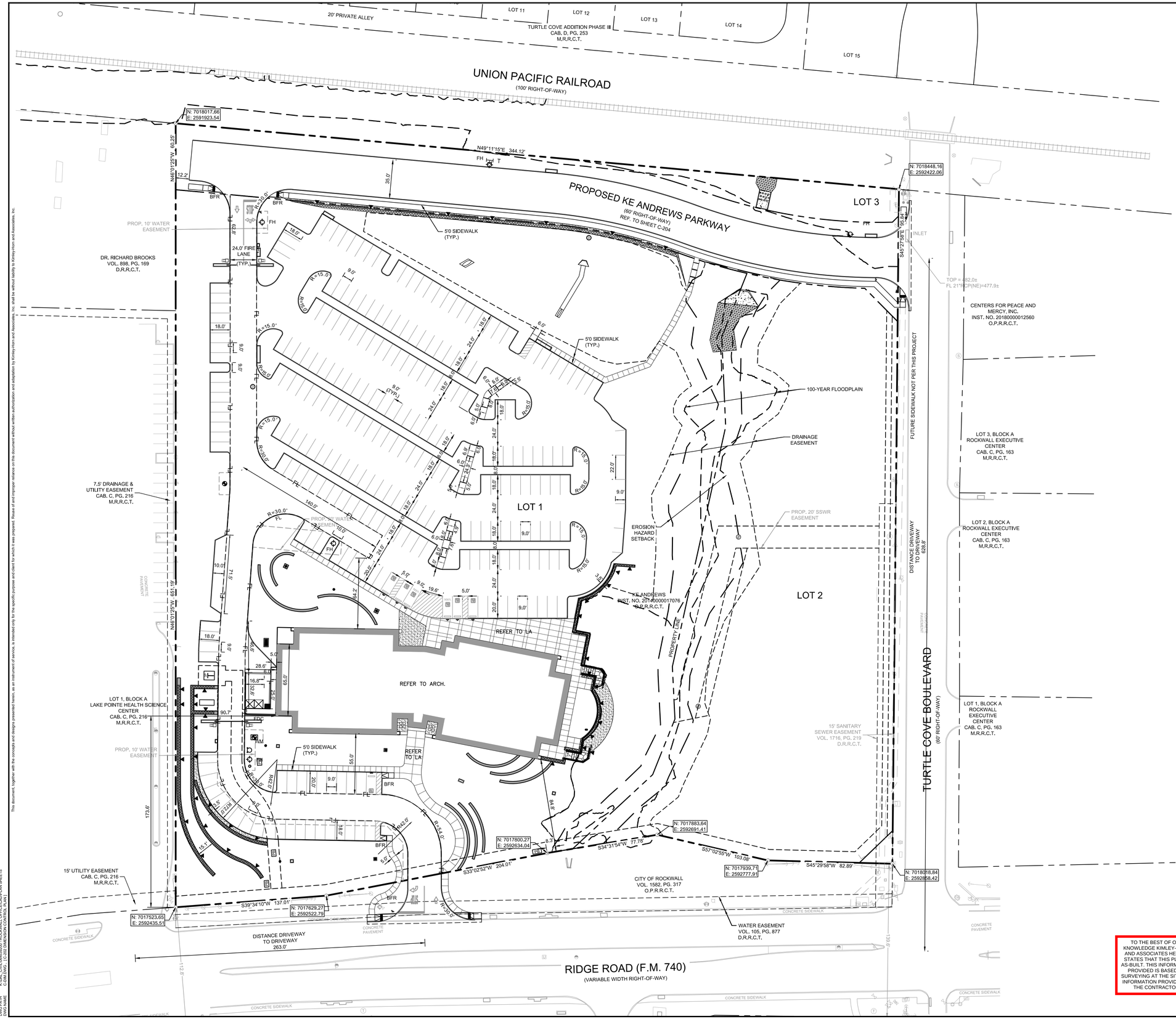
6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

DEMOLITION PLAN
RECORD DRAWINGS

SHEET NUMBER
C-201





GRAPHIC SCALE IN FEET
0 20 40 80

NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL CURB RADII ARE 3' UNLESS DIMENSIONED OTHERWISE.
3. ALL FIRE HYDRANTS ARE TO BE LOCATED IN A 20' WATER EASEMENT
4. ALL PARKING STALLS ARE 9'X18' UNLESS OTHERWISE NOTED
5. CONTRACTOR SHALL REFER TO LANDSCAPE PLANS FOR DETAIL IN OPEN AREAS OUTSIDE OF PAVING

LEGEND

PROPERTY LINE	
PROPOSED CURB	
PROPOSED FIRELANE	FL FL FL FL
PROPOSED MARKING	
CURB INLET	CI
SANITARY SEWER MANHOLE	SSMH
STORM MANHOLE	STMH
FIRE DEPARTMENT CONNECTION	FDC
GRATE INLET	GI
WATER METER	WM
IRRIGATION METER	IM
CLEANOUT	CO

BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

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ELEV. 567.70

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ELEV. 482.12

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ELEV. 524.67

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ELEV. 527.03

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ELEV. 489.81

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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

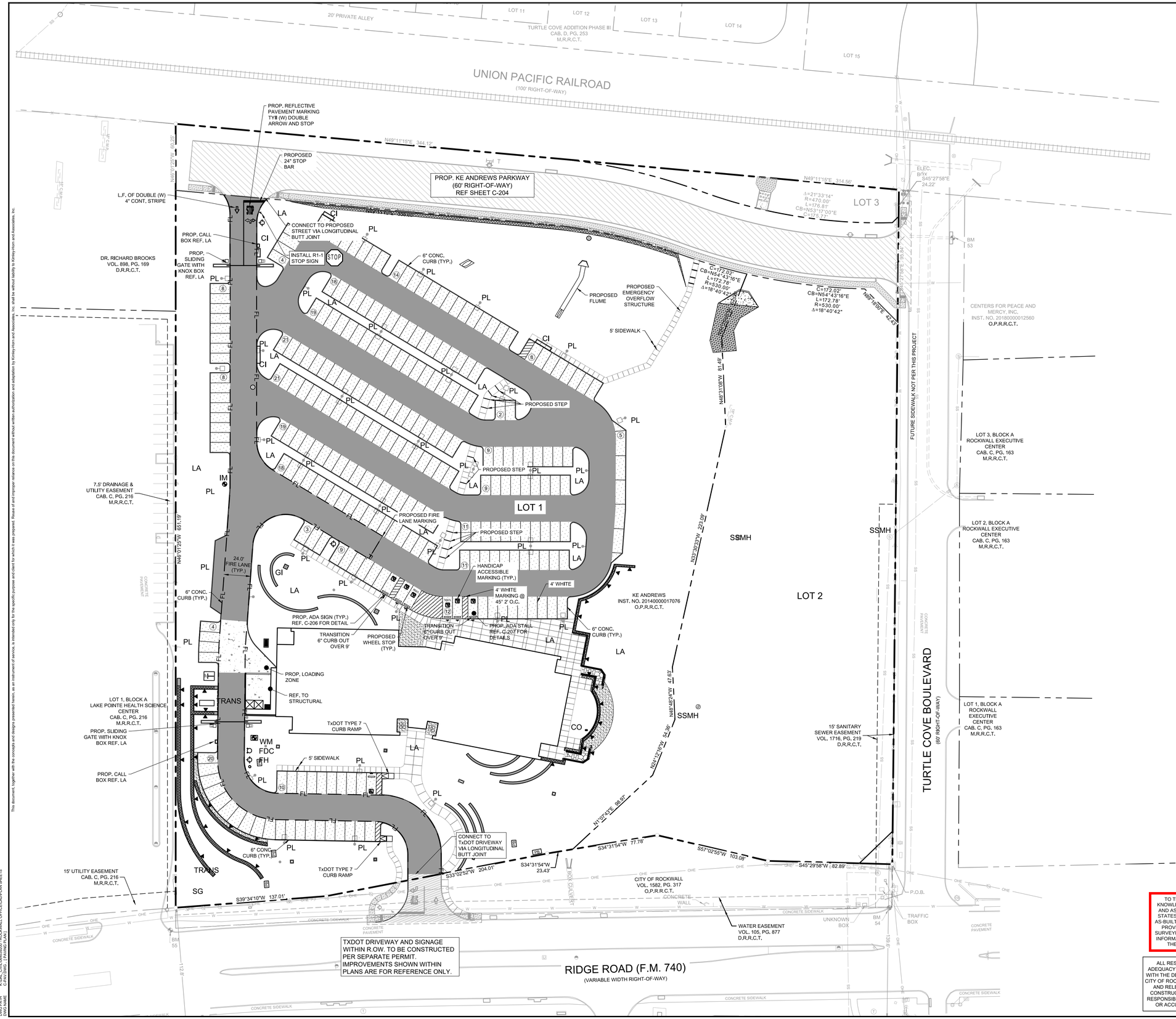
DIMENSION CONTROL PLAN
RECORD DRAWINGS

SHEET NUMBER
C-202

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C-SM.DWG (C-202 DIMENSION CONTROL PLAN)



LEGEND	
PROPERTY LINE	
SAWCUT LINE	
PROPOSED CURB	
LIGHT DUTY CONCRETE (5", 3,600 PSI - 6.5 SACK MIX) REF. PAVING DETAILS	
FIRE LANE / MEDIUM DUTY CONCRETE (6", 3,600 PSI - 6.5 SACK MIX) REF. PAVING DETAILS	
HEAVY DUTY CONCRETE (7", 3,600 PSI - 6.5 SACK MIX) REF. PAVING DETAILS	
PROPOSED PUBLIC SIDEWALK (4", 3,000 PSI - 5.5 SACK MIX) REF. PAVING DETAILS	
CITY STREET REF. SHEET C-204	
TXDOT DRIVEWAY REF. SEPARATE PLAN SET	
PROPOSED PRIVATE SIDEWALK (4" 3,000 PSI) REF. PAVING DETAILS	
DRY CREEK BED REF. LA PLANS	
MANHOLE	Ⓢ
CURB INLET	
WYE INLET	
PROPOSED ADA STALL	
REFER TO LANDSCAPE ARCHITECT	LA
PROPOSED LIGHT	PL

NOTES

1. REFER TO SHEET C-002 FOR GENERAL NOTES
2. EXISTING UTILITY APPURTENANCES TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR RIM AND/OR LID ADJUSTMENTS.
3. EXPANSION JOINTS PER CITY OF ROCKWALL STANDARD CONSTRUCTION DETAILS.
4. PEDESTRIAN CURB RAMPS (BFR) TYPES PER TxDOT DETAILS SHEET PED-18. RAMP WIDTHS SHALL MATCH WIDTH OF SIDEWALK ON HARDSCAPE PLANS. DETECTABLE WARNINGS FOR CURB RAMPS WITHIN THE R.O.W. SHALL BE FULL WIDTH OF RAMP FOR A MINIMUM OF 2'.
5. EXISTING UTILITY APPURTENANCES TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR RIM AND/OR LID ADJUSTMENTS.
6. CITY DETAILS SHALL BE UTILIZED FOR ALL IMPROVEMENTS WITHIN THE R.O.W. REFER TO SHEET C-207 FOR CITY PAVING DETAILS.
7. FLY ASH MAY BE USED IN CONCRETE PAVEMENT LOCATIONS PROVIDED THAT THE MAXIMUM CEMENT REDUCTION DOES NOT EXCEED 20% BY WEIGHT PER CUBIC YARD OF CONCRETE. THE FLY ASH REPLACEMENT SHALL BE 1.25 POUNDS PER 1.0 POUND OF CEMENT REDUCTION.
8. PAVEMENT THICKNESS SHOWN ARE MINIMUMS

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

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BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1" ELEV. 567.70

BM 53 * ☒ " CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD. ELEV. 482.12

BM 54 * ☒ " CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD. ELEV. 524.67

BM 55 * ☒ " CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD. ELEV. 527.03

BM 56 * ☒ " CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF OF LA JOLLA POINTE DRIVE APPROXIMATELY 1050 FEET SOUTHWEST OF THE CENTERLINE OF TURTLE COVE BOULEVARD AND 840 FEET NORTHWEST OF THE CENTERLINE OF RIDGE ROAD. ELEV. 489.81

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
6/1/2021

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

PAVING PLAN
RECORD DRAWINGS

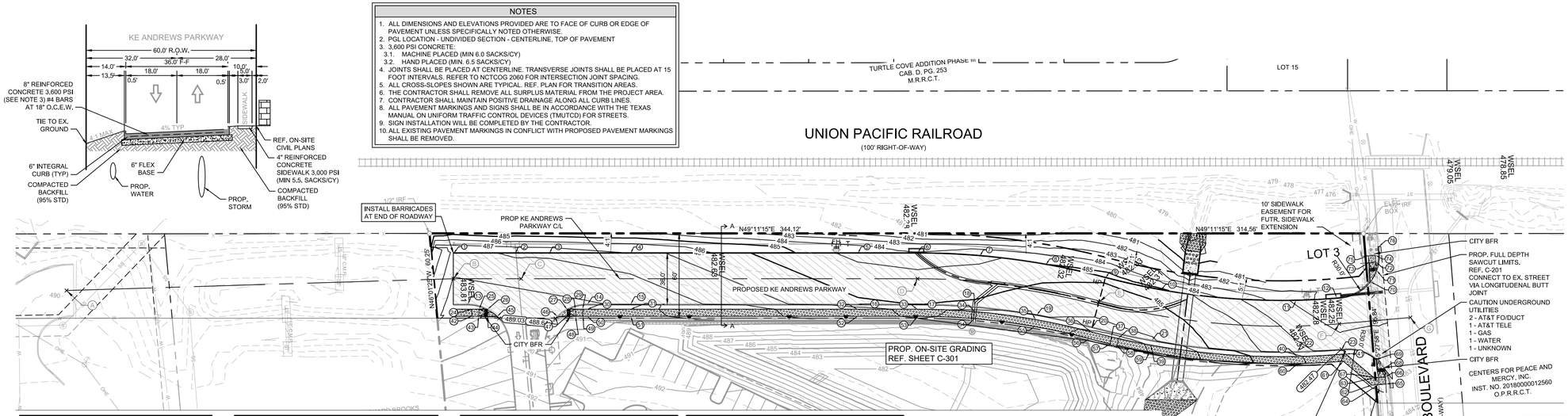
SHEET NUMBER
C-203

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FILENAME K:\DAB_Dfw\e - Kimley - Horn\Rockwall, City of\KE Andrews Office\CAD\PLAN SHEETS\C-203 PAVING PLAN.dwg
DWG NAME C-203 PAVING - (PAVING PLAN)

NOTES

1. ALL DIMENSIONS AND ELEVATIONS PROVIDED ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS SPECIFICALLY NOTED OTHERWISE.
2. PGL LOCATION - UNDIVIDED SECTION - CENTERLINE, TOP OF PAVEMENT
3. 3,600 PSI CONCRETE:
   3.1. MACHINE PLACED (MIN 6.0 SACKS/CY)
   3.2. HAND PLACED (MIN. 6.5 SACKS/CY)
4. JOINTS SHALL BE PLACED AT CENTERLINE. TRANSVERSE JOINTS SHALL BE PLACED AT 15 FOOT INTERVALS. REFER TO NCTCOG 2060 FOR INTERSECTION JOINT SPACING.
5. ALL CROSS-SLOPES SHOWN ARE TYPICAL. REF. PLAN FOR TRANSITION AREAS.
6. THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIAL FROM THE PROJECT AREA.
7. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE ALONG ALL CURB LINES.
8. ALL PAVEMENT MARKINGS AND SIGNS SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) FOR STREETS.
9. SIGN INSTALLATION WILL BE COMPLETED BY THE CONTRACTOR.
10. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED.



NAME:	STA:	ELEV:	OFFSET:	DESC:
1	2+72,88	487,33	-18,00 LT	BACK OF CURB
2	3+16,38	486,87	-18,00 LT	BACK OF CURB
3	3+40,44	486,66	-18,00 LT	BACK OF CURB
4	3+97,74	486,41	-18,00 LT	BACK OF CURB
5	5+57,98	483,75	-18,00 LT	BACK OF CURB
6	6+00,20	484,04	-18,50 LT	TOP OF CI
7	6+42,46	483,77	-18,00 LT	BACK OF CURB
8	6+87,86	484,47	-18,00 LT	BACK OF CURB
9	7+29,47	484,85	-18,00 LT	BACK OF CURB
10	7+71,01	484,66	-18,00 LT	BACK OF CURB
11	8+70,61	481,86	-18,00 LT	BACK OF CURB
12	9+00,64	481,53	-18,50 LT	TOP OF CI
13	2+82,88	488,70	18,00 RT	BACK OF CURB
14	3+67,23	488,11	18,00 RT	BACK OF CURB
15	3+97,74	487,85	18,00 RT	BACK OF CURB
16	5+57,98	485,19	18,00 RT	BACK OF CURB

NAME:	STA:	ELEV:	OFFSET:	DESC:
17	6+00,20	484,98	18,00 RT	BACK OF CURB
18	6+42,46	485,21	18,00 RT	BACK OF CURB
19	6+87,86	485,91	18,00 RT	BACK OF CURB
20	7+29,47	486,29	18,00 RT	BACK OF CURB
21	7+71,01	486,10	18,00 RT	BACK OF CURB
22	8+70,60	483,30	18,00 RT	BACK OF CURB
23	9+00,56	482,47	18,00 RT	BACK OF CURB
24	2+85,94	488,78	21,50 RT	TOP OF SIDEWALK
25	2+90,94	488,81	21,50 RT	TOP OF SIDEWALK
26	2+96,94	488,85	21,50 RT	TOP OF SIDEWALK
27	3+53,17	488,25	21,50 RT	TOP OF SIDEWALK
28	3+59,17	488,52	21,50 RT	TOP OF SIDEWALK
29	3+64,17	488,47	21,50 RT	TOP OF SIDEWALK
30	3+67,23	488,39	21,50 RT	TOP OF SIDEWALK
31	3+97,74	488,24	21,50 RT	TOP OF SIDEWALK
32	5+57,98	486,29	21,50 RT	TOP OF SIDEWALK

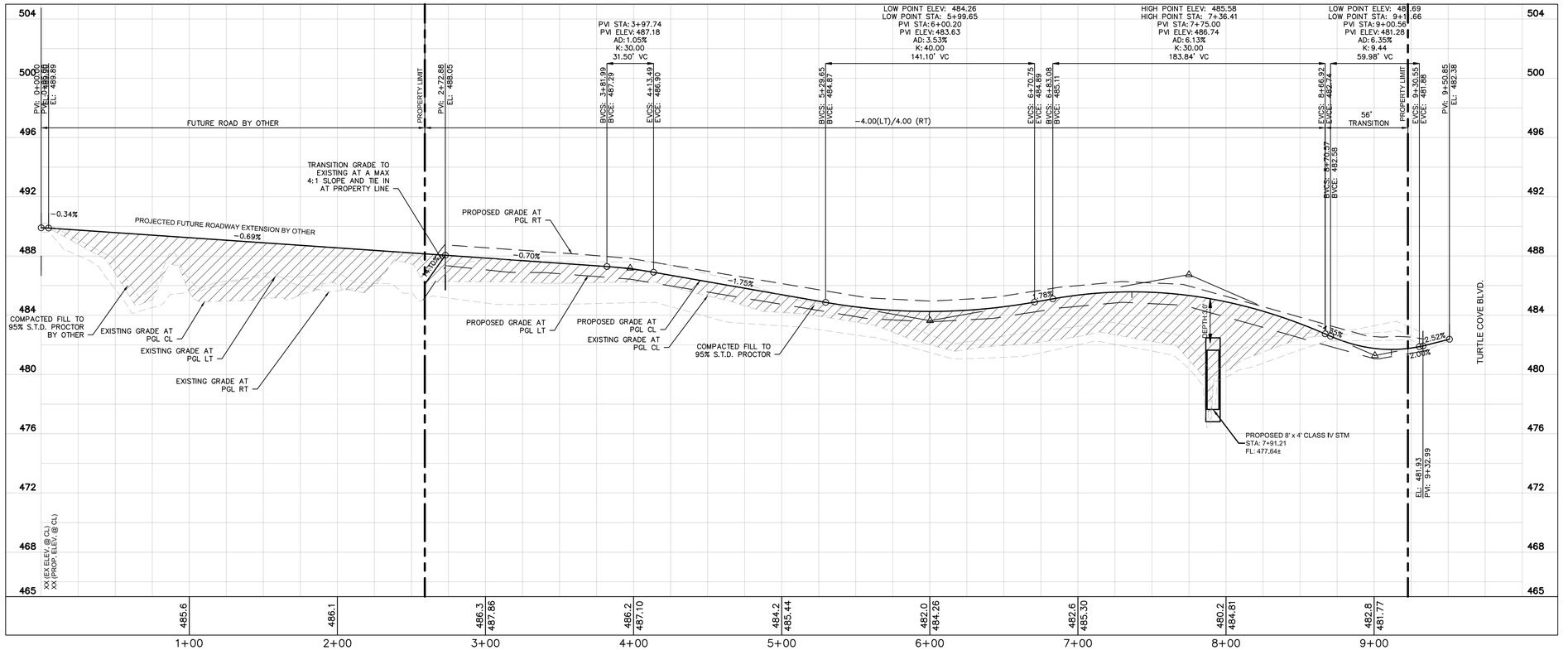
NAME:	STA:	ELEV:	OFFSET:	DESC:
33	6+00,20	485,78	21,50 RT	TOP OF SIDEWALK
34	6+42,46	486,20	21,50 RT	TOP OF SIDEWALK
35	6+87,86	486,66	21,50 RT	TOP OF SIDEWALK
36	7+29,47	487,09	21,50 RT	TOP OF SIDEWALK
37	7+43,51	487,46	21,49 RT	TOP OF SIDEWALK
38	7+48,32	487,45	21,50 RT	TOP OF SIDEWALK
39	7+70,73	486,90	21,50 RT	TOP OF SIDEWALK
40	8+70,51	484,10	21,50 RT	TOP OF SIDEWALK
41	9+03,12	483,20	21,51 RT	TOP OF SIDEWALK
42	2+85,94	488,85	26,50 RT	BOTTOM OF SIDEWALK
43	2+90,94	488,92	26,50 RT	BOTTOM OF SIDEWALK
44	2+96,94	489,11	26,50 RT	BOTTOM OF SIDEWALK
45	3+03,80	488,93	26,50 RT	BOTTOM OF SIDEWALK
46	3+46,31	488,34	26,50 RT	BOTTOM OF SIDEWALK
47	3+53,17	488,83	26,50 RT	BOTTOM OF SIDEWALK
48	3+59,17	488,85	26,50 RT	BOTTOM OF SIDEWALK

NAME:	STA:	ELEV:	OFFSET:	DESC:
49	3+64,17	488,81	26,50 RT	BOTTOM OF SIDEWALK
50	3+67,23	488,78	26,50 RT	BOTTOM OF SIDEWALK
51	3+97,74	488,41	26,50 RT	BOTTOM OF SIDEWALK
52	5+57,98	486,36	26,50 RT	BOTTOM OF SIDEWALK
53	6+00,20	485,85	26,50 RT	BOTTOM OF SIDEWALK
54	6+42,46	486,28	26,50 RT	BOTTOM OF SIDEWALK
55	6+87,86	486,74	26,50 RT	BOTTOM OF SIDEWALK
56	7+29,47	487,17	26,50 RT	BOTTOM OF SIDEWALK
57	7+43,90	487,54	26,50 RT	BOTTOM OF SIDEWALK
58	7+48,67	487,52	26,50 RT	BOTTOM OF SIDEWALK
59	7+71,01	486,97	26,50 RT	BOTTOM OF SIDEWALK
60	8+70,47	484,17	26,50 RT	BOTTOM OF SIDEWALK
61	9+01,03	483,25	26,50 RT	SIDEWALK
62	9+19,47	483,50	45,09 RT	SIDEWALK
63	9+21,57	483,45	40,11 RT	SIDEWALK
64	9+24,47	483,52	45,13 RT	SIDEWALK

LINE TABLE		
LINE	LENGTH	BEARING
L1	160,25	N49°11'14,96"E
L2	32,45	N44°03'58,61"E

CURVE TABLE			
CURVE	RADIUS	DELTA	LENGTH
C1	498,00'	14°52'22"	129,27'
C2	502,00'	19°31'39"	171,09'

Point Table		
NO.	NORTHING	EASTING
A	7017819,85	2591756,17
B	7018004,41	2591957,17
C	7018035,65	2591993,34
D	7018218,35	2592204,90
E	7018289,26	2592312,55
F	7018388,63	2592450,81
G	7018424,77	2592485,79



LEGEND	
PROPOSED CONTOURS	
EXISTING CONTOURS	
TOP OF PAVEMENT ELEVATION	506.50TP
TOP OF GRATE INLET ELEVATION	506.50TG
TOP OF LANDSCAPE ELEVATION	506.50TL
MATCH EXISTING ELEVATION	506.50ME
TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION	596.00TW 596.00BW
DRAINAGE ARROW	
SWALE	
HIGH POINT	
PROPOSED PUBLIC SIDEWALK (4", 3,000 PSI (5.5 SACK))	
PROPOSED PUBLIC ROADWAY (8", 3,600 PSI (NOTE 3))	

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1"
ELEV. 567.70

BM 53 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 482.12

BM 54 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 524.67

BM 55 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD.
ELEV. 527.03

BM 56 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF OF LA JOLLA POINTE DRIVE APPROXIMATELY 1050 FEET SOUTHWEST OF THE CENTERLINE OF TURTLE COVE BOULEVARD AND 840 FEET NORTHWEST OF THE CENTERLINE OF RIDGE ROAD.
ELEV. 489.81

No.	REVISIONS	DATE	BY

Kimley»Horn
13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928
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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT	064339200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

ROADWAY PAVING PLAN AND PROFILE
RECORD DRAWINGS

SHEET NUMBER
C-204

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

IMAGES
XREFS
LAST SAVED
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PLOT DATE
DWG NAME

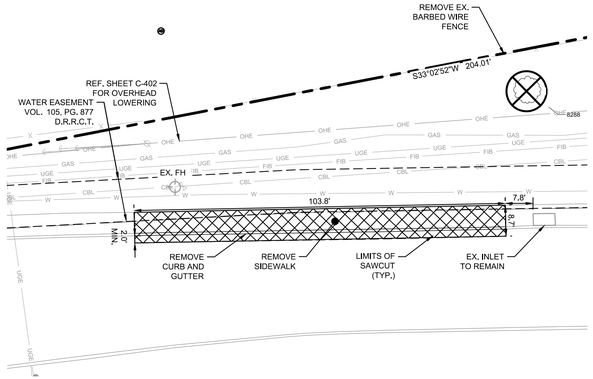
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2/10/2020 5:19 PM
I:\DALLAS\064339200_ROCKWALL OFFICE\CAD\PLAN SHEETS
[CELL CHRIS 3/5/2020 - 1:29 PM]
C:\PAV_PLAN\PROF.DWG, [C-204 ROADWAY PAVING PLAN AND PROFILE]

TX DOT CONCRETE DRIVEWAY APPROACH SECTION DETAIL

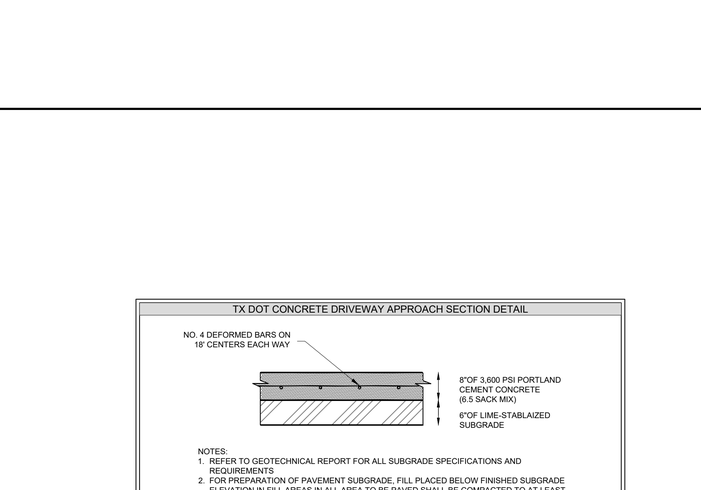
NOTES:
1. REFER TO GEOTECHNICAL REPORT FOR ALL SUBGRADE SPECIFICATIONS AND REQUIREMENTS
2. FOR PREPARATION OF PAVEMENT SUBGRADE, FILL PLACED BELOW FINISHED SUBGRADE ELEVATION IN FILL AREAS IN ALL AREA TO BE PAVED SHALL BE COMPACTED TO AT LEAST 95% OF THE MATERIALS MAXIMUM STANDARD PROCTOR DRY DENSITY (AST D-698) AT OR ABOVE +2% PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT.
3. NO. 4 SMOOTH DOWELS SHOULD BE USED AT EXPANSION AND CONSTRUCTION JOINTS ON 12" CENTERS

1



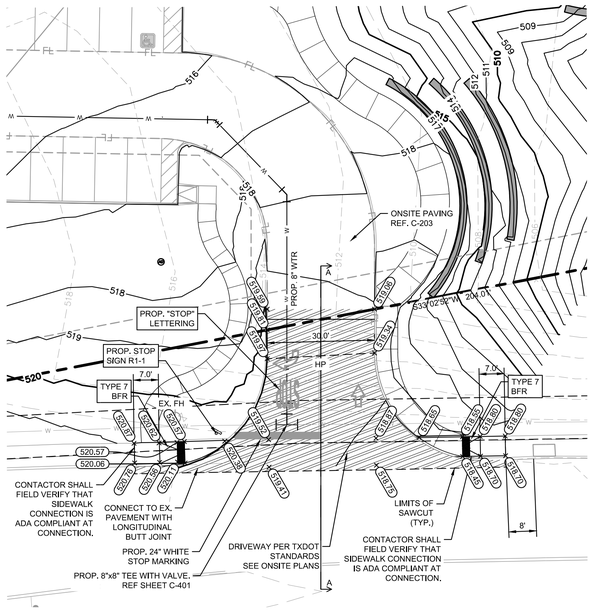
DEMOLITION PLAN

SCALE (1"-20')



CROSS SECTION A-A

N.T.S



DIMENSION CONTROL AND PAVING PLAN

SCALE (1"-20')



GRAPHIC SCALE IN FEET
0 10 20 40

NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. SAWCUTS FOR PAVEMENT REMOVAL SHALL BE FULL DEPTH AND 2.0' FROM FACE OF CURB.
3. CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLES, ELECTRICAL MANHOLES, FIRE HYDRANTS, VALVE BOXES, WATER METERS, ETC. TO MATCH PROPOSED FINISHED GRADES IF NECESSARY.
4. IMPROVEMENTS WITHIN THE R.O.W. SHALL BE CONSTRUCTED IN ACCORDANCE WITH TXDOT STANDARDS.
5. PEDESTRIAN CURB RAMPS (BFR) TYPES PER TxDOT DEATILS SHEET PED-12A. RAMP WIDTHS SHALL MATCH WIDTH OF SIDEWALK. DETECTABLE WARNING SHALL BE FULL WIDTH OF RAMP FOR A MINIMUM OF 2'.
6. CONTRACTOR SHALL DRILL HOLES WITH A CORING TYPE BIT. NO IMPACT DRILLS ARE ALLOWED.

LEGEND

PROPERTY LINE	
SAWCUT LINE	
PROPOSED CURB	
CONCRETE PAVEMENT REMOVAL	
DRIVEWAY PER TXDOT STANDARDS (DETAIL 1 SEE THIS SHEET)	

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

ALL IMPROVEMENTS IN TXDOT R.O.W. OF FM 740 SHALL NOT BE CONSTRUCTED UNTIL TXDOT ISSUES A SEPARATE PERMIT FOR CONSTRUCTION.

Vertical datum based on City of Rockwall Geodetic Control System

BM 50 City of Rockwall monument "Reset #1"
Elev. 567.70

BM 53 " ☒ " cut set on the middle of a concrete curb inlet located on the north side of Turtle Cove Boulevard and approximately 650 feet northwest from the intersection of TURTLE COVE BOULEVARD and Ridge Road.
Elev. 482.12

BM 54 " ☒ " cut set on the middle of a curb radius at the northwest corner of the intersection of TURTLE COVE BOULEVARD and Ridge Road.
Elev. 524.67

BM 55 " ☒ " cut set on the middle of a curb radius at on the northwest side of Ridge Road approximately 685 feet southwest from the intersection of Ridge Road and TURTLE COVE BOULEVARD.
Elev. 527.03

BM 56 " ☒ " cut set on the middle of a concrete curb inlet located on the north side of of La Jolla Pointe Drive approximately 1050 feet southwest of the centerline of TURTLE COVE BOULEVARD and 840 feet northwest of the centerline of Ridge Road.
Elev. 489.81

811 Know what's below. Call before you dig.

CAUTION!!
EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

No.	REVISIONS	DATE	BY

Kimley»Horn
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DALLAS, TEXAS 75240
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WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

Joseph Hornisher

KHA PROJECT	DATE	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
064539200	SEPT. 2019	AS SHOWN	JWH	ZEH	JWH

KEANDREWS OFFICE
TXDOT PLANS
ROCKWALL, TEXAS

DRIVEWAY IMPROVMENTS

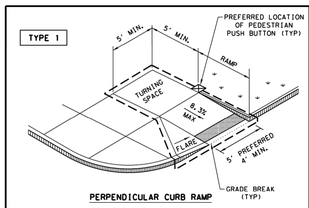
RECORD DRAWINGS

SHEET NUMBER

C-205

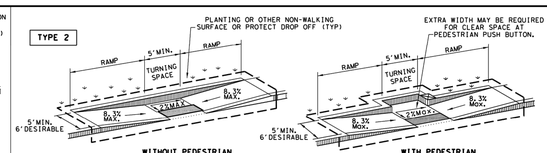
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT disclaims no responsibility for the correction of this standard to other formats or for incorrect results or damages resulting from its use.

TYPE 1



PERPENDICULAR CURB RAMP

TYPE 2

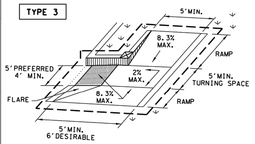


WITHOUT PEDESTRIAN PUSH BUTTON

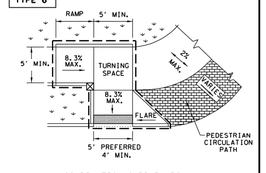
WITH PEDESTRIAN PUSH BUTTON

PARALLEL CURB RAMP

TYPE 3

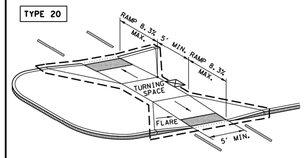


TYPE 6



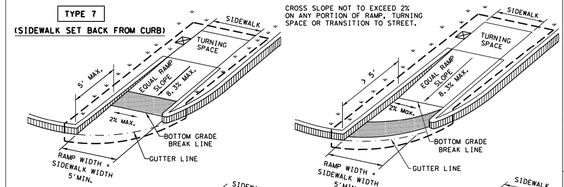
COMBINATION CURB RAMPS

TYPE 20

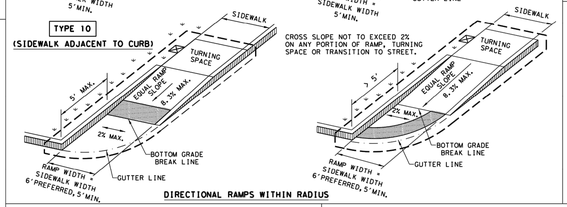


CURB RAMPS AT MEDIAN ISLANDS

TYPE 7
(SIDEWALK SET BACK FROM CURB)

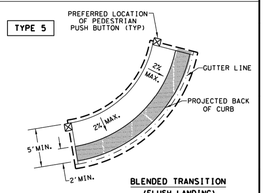


TYPE 10
(SIDEWALK ADJACENT TO CURB)



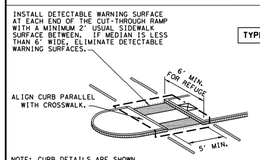
DIRECTIONAL RAMPS WITHIN RADIUS

TYPE 5



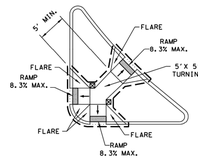
BLENDED TRANSITION
(FLUSH LANDING)

TYPE 21

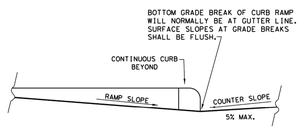


NOTE: CURB DETAILS ARE SHOWN ELSEWHERE IN THE PLANS.

TYPE 22



COMBINATION ISLAND RAMPS



TYPICAL SECTION OF PERPENDICULAR CURB RAMP AT CONNECTION TO ROADWAY

NOTES / LEGEND:

SEE GENERAL NOTES ON SHEET 2 OF 4 FOR MORE INFORMATION.

DENOTES PLANTING OR NON-WALKING SURFACE NOT PART OF PEDESTRIAN CIRCULATION PATH. — GUTTER LINE

DETECTABLE WARNING SURFACE — GRADE BREAK

DENOTES PREFERRED LOCATION OF PEDESTRIAN PUSH BUTTON IF APPLICABLE. — RAMP LIMITS OF PAYMENT

SHEET 1 OF 4

Texas Department of Transportation | Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-18

FILE: ped18	DN:TxDOT	CK: VP	CK: KM	CK: PK & JG
©TxDOT: MARCH, 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS				
9/21/23: DE, 2005 REVISIONS	DIST	COUNTY		SHEET NO.
9/21/23: DE, 2012				
9/21/23: PI, 2018				

GENERAL NOTES

CURB RAMPS

1. Install a curb ramp or blended transition at each pedestrian street crossing.
2. All slopes shown are maximum allowable. Cross slopes of 1.5% and lesser running should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
3. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
4. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is desirable. Where a 5' sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 4' for short distances. 5'x 5' passing areas at intervals not to exceed 200' are required.
5. Turning Spaces shall be 5'x 5' minimum. Cross slope shall be maximum 2%.
6. Clear space at the bottom of curb ramps shall be a minimum of 4'x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
8. Additional information on curb ramp location, design, light reflective value and texture may be found in the latest draft of the Proposed Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG) as published by the U.S. Architectural and Transportation Barriers Compliance Board (Access Board).
9. To serve as a pedestrian refuge area, the median should be a minimum of 6' wide, measured from back of curbs. Medians should be designed to provide accessible passage over or through them.
10. Small channelization islands, which do not provide a minimum 5'x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
12. Provide curb ramps to connect the pedestrian access route at each pedestrian street crossing. Handrails are not required on curb ramps.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
15. Furnish and install No. 3 reinforcing steel bars at 18" o.c. both ways, unless otherwise directed.
16. Provide a smooth transition where the curb ramps connect to the street.
17. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
18. Existing features that comply with applicable standards may remain in place unless otherwise shown on the plans.

DETECTABLE WARNING MATERIAL

19. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with PROWAG. The surface must contrast visually with adjoining surfaces, including side flares. Furnish and install an approved cast-in-place dark brown or dark red detectable warning surface material adjacent to uncolored concrete, unless specified elsewhere in the plans.
20. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the Material Producer List. Install products in accordance with manufacturer's specifications.
21. Detectable warning surfaces must be firm, stable and slip resistant.
22. Detectable warning surfaces shall be a minimum of 24 inches in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
23. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb and neither end of that edge is greater than 5 feet from the back of curb. Detectable warning surfaces may be curved along the corner radius.
24. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.

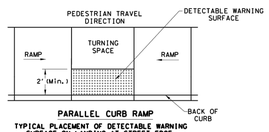
DETECTABLE WARNING PAVERS (IF USED)

25. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
26. Lay full-size units first followed by closure units consisting of at least 25 percent (25%) of a full unit. Cut detectable warning paver units using a power saw.

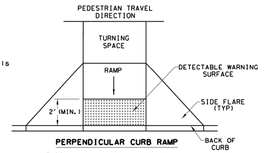
SIDEWALKS

27. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within unobstructed reach range specified in PROWAG section R406.
28. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
29. Street grades and cross slopes shall be as shown elsewhere in the plans.
30. Changes in level greater than 1/4 inch are not permitted.
31. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than five percent (5%) must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with PROWAG R409.
32. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
33. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
34. Sidewalk details are shown elsewhere in the plans.

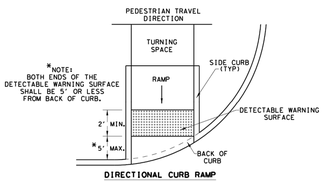
DETECTABLE WARNING SURFACE DETAILS



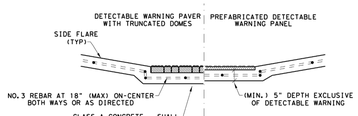
PARALLEL CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE.



PERPENDICULAR CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN.



DIRECTIONAL CURB RAMP
TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN.



SECTION VIEW DETAIL
CURB RAMP AT DETECTIBLE WARNINGS

NOTES:

1. CONTRACTOR SHALL NOT UTILIZE PAVERS WITHIN ANY PUBLIC R.O.W.. CONTRACTOR SHALL MATCH DETECTABLE WARNING SURFACE COLOR WITH EXISTING WARNING SURFACES WITHIN THE VICINITY.

SHEET 2 OF 4

Texas Department of Transportation | Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-18

FILE: ped18	DN:TxDOT	CK: VP	CK: KM	CK: PK & JG
©TxDOT: MARCH, 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS				
9/21/23: DE, 2005 REVISIONS	DIST	COUNTY		SHEET NO.
9/21/23: DE, 2012				
9/21/23: PI, 2018				

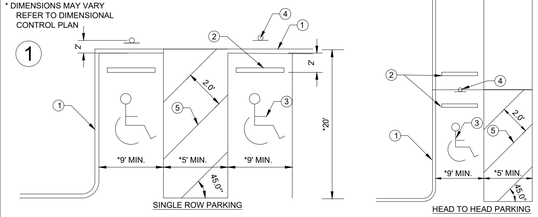
DATE:
FILE:

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IMAGES:
WIDTH: 2048
LAST SAVED: 3/4/2021 3:25 PM
PLOTTED BY: KELLE CHRISTENSEN
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...\DGN : close : dfonly : exclose : exsel : ssdt : xbsh : xdm : xtree : xlighting : xtextlocation

HANDICAP PARKING DETAIL

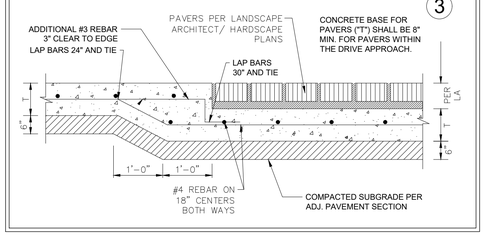
* DIMENSIONS MAY VARY REFER TO DIMENSIONAL CONTROL PLAN



LEGEND:
1. 6" CONC. CURB WHERE SPECIFIED
2. CONCRETE CAR STOP (TYP.)
3. PAINT STANDARD HANDICAP SYMBOL (TYP.)
4. HANDICAP SIGNS.
5. 4" PAINTED STRIPE (WHITE)

NOTES:
1. DIMENSIONS SHOWN ARE TO CENTERLINE OF MARKING.
2. MAXIMUM LONGITUDINAL SLOPE FOR ALL PATHS AT 4.5%, MAX CROSS SLOPE IS 1.5%; FOR THE FIRST FIVE FEET FROM THE DOOR AND AND AT THE TOP AND BOTTOM OF CURB RAMPS (BFRS), A 1.5% SLOPE (MAX) MUST BE MAINTAINED.
3. SIGNAGE AND MARKINGS TO BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS INCLUDING THE TEXAS DEPARTMENT OF LICENSING AND REGULATION TEXAS ACCESSIBILITY STANDARDS (TAS) SECTION 502.6.
4. SPACES INDICATED AS "VAN" TO BE DESIGNATED AS "VAN ACCESSIBLE SPACE" ON SIGNAGE AND PAVEMENT. VAN PARKING SPACES SHALL BE 11' WIDE WHEN ADJACENT TO A 5' ACCESS ISLE PER TAS SECTION 502.2. (EXCEPTION: VAN SPACES MAY BE 8' WIDE WHEN ADJACENT TO AN 8' ACCESS ISLE). REFER TO DIMENSIONAL CONTROL PLAN.

CONCRETE WITH PAVERS (N.T.S.)



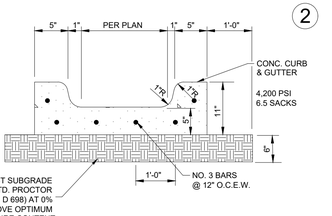
NOTE

N.C.T.C.O.G. STANDARD DETAILS HAVE BEEN MODIFIED BY THE CITY OF ROCKWALL.

CONTRACTOR SHALL REFER TO THE CITY OF ROCKWALL STANDARDS OF DESIGN AND CONSTRUCTION (OCTOBER 2016) FOR MODIFICATIONS.

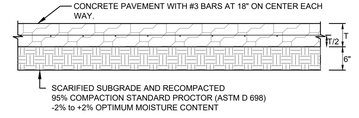
FLUME DETAIL (N.T.S)

2



TYPICAL LIGHT AND HEAVY PAVEMENT SECTION

4

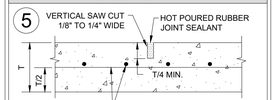


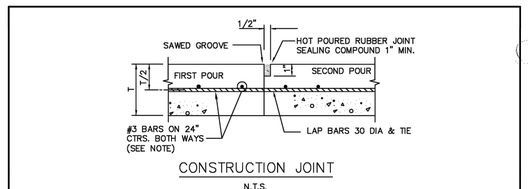
NOTE:
- PAVEMENT SECTIONS SHOWN FOR REFERENCE ONLY. SEE GEOTECH FOR DETAILS.
- ALL PUBLIC CONCRETE (INCLUDING ALL FIRE LANES, DRIVEWAYS WITHIN THE R.O.W., AND PUBLIC SIDEWALKS) SHALL BE INSTALLED PER CITY STANDARDS.
- FLY ASH MAY BE USED IN CONCRETE PAVEMENT LOCATIONS PROVIDED THAT THE MAXIMUM CEMENT REDUCTION DOES NOT EXCEED 20% BY WEIGHT PER CUBIC YARD OF CONCRETE. THE FLY ASH REPLACEMENT SHALL BE 1.25 POUNDS PER 1.0 POUND OF CEMENT REDUCTION.



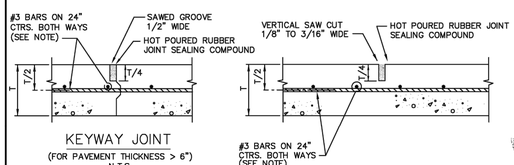
SAWED DUMMY JOINT (N.T.S)

5

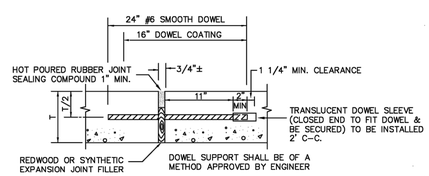




CONSTRUCTION JOINT
N.T.S.



NOTE:
ALTERNATE REINFORCEMENT #4 BARS ON 30" CTRS. BOTH WAYS.



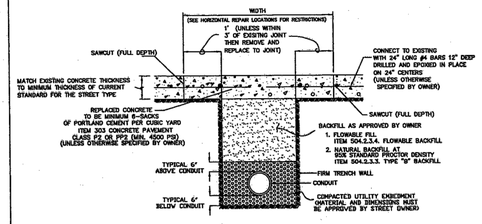
EXPANSION JOINT
(SPACED 600 FT. MAXIMUM; LOCATE AT STRUCTURES AND AT INTERSECTION P.C.'S & P.T.'S)
N.T.S.

REINFORCED CONCRETE PAVEMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 303.5.4.
JOINTS		DATE: OCT. '04

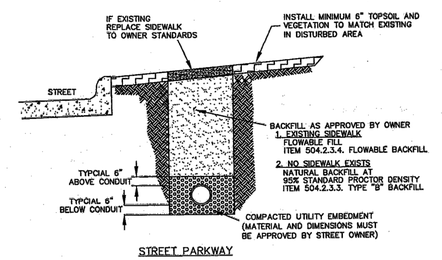
TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



CONCRETE PAVEMENT
N.T.S.



STREET PARKWAY
N.T.S.

PAVEMENT CUT AND REPAIR	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 402
CONCRETE AND PARKWAY		DATE: OCT. '04 / STANDARD DRAWING NO.: 3070A

THESE PLAN AND GENERAL NOTES REFER TO:
GEOTECHNICAL ENGINEERING REPORT
HENLEY-JOHNSTON & ASSOCIATES, INC.
REPORT NO. 19706G
MAY 20, 2019
INCLUDING ALL REVISIONS AND ADDENDA TO THIS REPORT THAT MAY HAVE BEEN RELEASED AFTER THE NOTED DATE.

No.	REVISIONS	DATE	BY

Kimley»Horn
13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928
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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

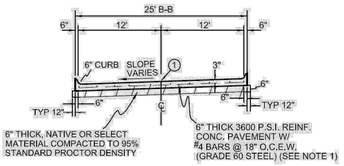
KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

PAVING DETAILS (1 OF 2)
RECORD DRAWINGS

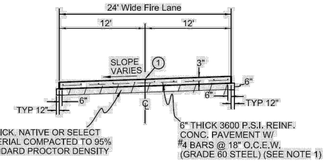
SHEET NUMBER
C-206

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1 SAWED LONGITUDINAL CONTRACTION OR CONSTRUCTION JOINT

24' Wide Fire Lane with Curbs
(Not to Scale)



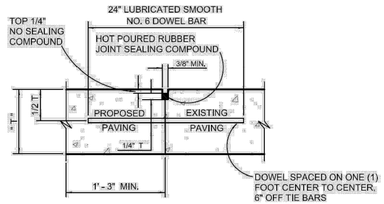
24' Wide Fire Lane
(Not to Scale)

NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic yard for hand placed.
2. Sidewalk Cement content of not less than 5.5 sack per cubic yard.
3. No sand allowed under pavement or sidewalks.

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL	
FIRE LANE		DATE: AUG. '15 / DRAWING NO.: R-2041

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NOTES: T = PAVEMENT

1. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
2. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.

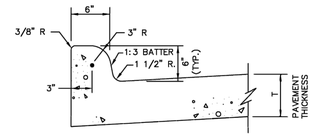
   DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE NOT ACCEPTABLE.

LONGITUDINAL BUTT JOINT
NOT TO SCALE

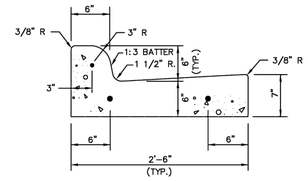
PER GEOTECH REPORT CONTRACTOR SHALL USE LIME-STABILIZATION FOR BASE COURSE

REINFORCED CONCRETE PAVEMENT	CITY OF ROCKWALL	
LONGITUDINAL BUTT JOINT		DATE: AUG. '15 / DRAWING NO.: R-2051

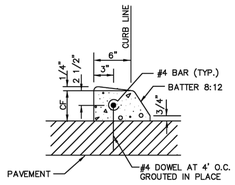
Page 214



INTEGRAL CURB & GUTTER
N.T.S.



SEPARATE CURB & GUTTER
N.T.S.

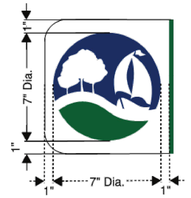


DOWELED CURB
N.T.S.

NOTES:
1. REINFORCEMENT SHALL BE NO. 4 BARS, UNLESS OTHERWISE SPECIFIED.
2. CONCRETE SHALL BE CLASS "C" OR "PC".
3. "CF" IS 6" UNLESS OTHERWISE SPECIFIED.
4. ALL CURBS ARE CONSTRUCTED OF PORTLAND CEMENT CONCRETE UNLESS OTHERWISE SHOWN.
5. GRADE SHALL BE MEASURED AT BACK OF CURB.

CONCRETE CURB & GUTTER	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 305.1
INTEGRAL, SEPARATE, & DOWELED		DATE: OCT. '04 / STANDARD DRAWING NO.: 2120





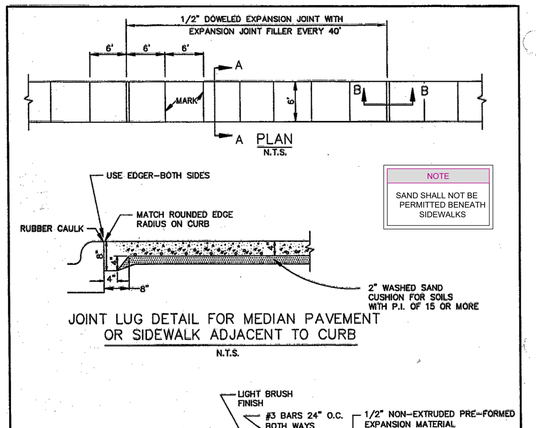
Rockwall Logo Detail
NOT TO SCALE

Notes:
1. Street name blades shall consist of white SCOTCHLITE 3930 High Intensity Prismatic Material, digitally printed using HP Latex 360 or higher.
   Green: Pantone 335C with overlay CMYK 100-0-20-0 set to darken.
   Blue: Pantone 287C.
2. Lettering to be composed of a combination of upper and lowercase letters, with initial uppercase letters. Font to be Clearview TCAD-1w with uppercase to be 6" Min. height and lowercase to be 4.5" Min. height. No more than 65% compression on font width.
3. Lettering for street designations and block numbers to be composed of initial uppercase letters at least 3" Min. height and lower-case letters at least 2.25" Min. height.
4. Sign post to be 2 3/8" O.D. galvanized steel tube sign pole.

STREET SIGN DETAIL
NOT TO SCALE

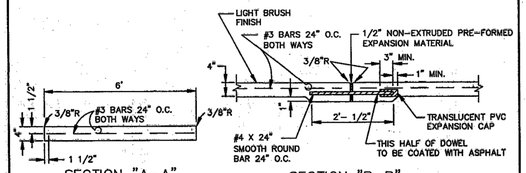
STREET REGULATORY SIGNAGE	CITY OF ROCKWALL	
TYPICAL STREET SIGN DETAIL		DATE: May 2018 / DRAWING NO.: R-2300

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NOTE
SAND SHALL NOT BE PERMITTED BENEATH SIDEWALKS

JOINT LUG DETAIL FOR MEDIAN PAVEMENT OR SIDEWALK ADJACENT TO CURB
N.T.S.

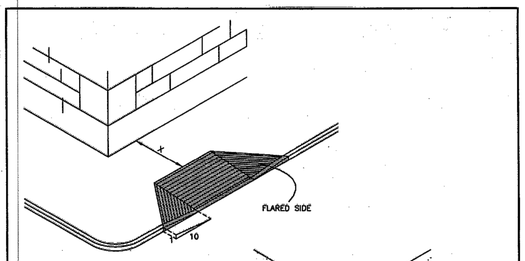


SECTION "A-A" N.T.S.

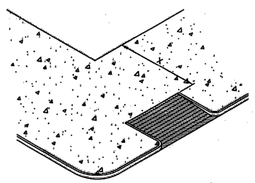
SECTION "B-B" N.T.S.

NOTE:
1. REFER TO STANDARD SPECIFICATION ITEM 305.2 FOR ALTERNATE REINFORCEMENT.
2. CROSS SLOPE OF SIDEWALK SHALL BE ± 1/4" PER FT. MIN. TO ± 3/8" PER FT. MAX.
3. OTHER THAN 6'-0" SIDEWALK WIDTH MAY BE SPECIFIED BY OWNER.
4. SIDEWALK SHALL BE CLASS "A" CONCRETE UNLESS OTHERWISE SPECIFIED BY OWNER.
5. ALL HONEYCOMB IN BACK OF CURB TO BE TROWEL-PLASTERED BEFORE POURING SIDEWALK.
6. LUG MAY BE FORMED BY SHAPING SUBGRADE TO APPROXIMATE DIMENSIONS SHOWN.

REINFORCED CONCRETE SIDEWALKS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 305.2
JOINTS AND SPACING		DATE: OCT. '04 / STANDARD DRAWING NO.: 2170



(A)
FLARED SIDES



(B)
RETURNED CURB

FIGURE 1
PARKWAY CURB RAMPS
IF "X" IS LESS THAN 48" THEN THE SLOPE OF THE FLARED SIDE SHALL NOT EXCEED 1:12.

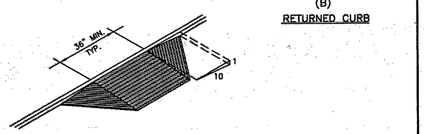


FIGURE 2
BUILT-UP CURB RAMP

CURB RAMPS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
		DATE: OCT. '04 / STANDARD DRAWING NO.: 2125A

NOTE
N.C.T.C.O.G. STANDARD DETAILS HAVE BEEN MODIFIED BY THE CITY OF ROCKWALL.

CONTRACTOR SHALL REFER TO THE CITY OF ROCKWALL STANDARDS OF DESIGN AND CONSTRUCTION (OCTOBER 2016) FOR MODIFICATIONS.

CURB RAMPS NOTES:

GENERAL REQUIREMENTS
CURB RAMPS SHALL BE CONSTRUCTED AS PER THE REQUIREMENTS AND SPECIFICATIONS OF THE TEXAS ACCESSIBILITY STANDARDS AND THE ADA & ABA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES. (FEDERAL REGISTER/ VOL. 69, NO. 141, FRIDAY, JULY 23, 2004)

LOCATION:
CURB RAMPS UNDER THESE PROVISIONS, SHALL BE WHEREVER AN ACCESSIBLE ROUTE CROSSES A CURB.

SLOPE:
SLOPES ON CURB RAMPS SHALL BE MEASURED AS FOLLOWS: (Y:X = VERTICAL:HORIZONTAL)
A) TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.
B) MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.
C) THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION SHALL BE 1:12. THE MAXIMUM RISE FOR ANY RUN SHALL BE 30" (760 MM). CURB RAMPS AND RAMPS TO BE CONSTRUCTED ON EXISTING SITES OR IN EXISTING BUILDINGS OR FACILITIES MAY HAVE SLOPES AND RISES IF SPACE LIMITATIONS PROHIBIT THE USE OF A 1:12 SLOPE OR LESS, AS FOLLOWS:
   1. A SLOPE BETWEEN 1:10 AND 1:12 IS ALLOWED FOR A MAXIMUM RISE OF 6".
   2. A SLOPE BETWEEN 1:8 AND 1:10 IS ALLOWED FOR A MAXIMUM OF 3".
   A SLOPE STEEPER THAN 1:8 IS NOT ALLOWED.

RAMP WIDTH:
THE MINIMUM WIDTH OF A CURB RAMP SHALL BE 36" EXCLUSIVE OF FLARED SIDES.

SURFACE:
SURFACES OF CURB RAMPS, SHALL BE STABLE FIRM, AND SLIP RESISTANT. SURFACE TEXTURES SHALL CONSIST OF EXPOSED CRUSHED STONE AGGREGATE, ROUGHENED CONCRETE, RUBBER, RAISED ABRASIVE STRIPS, OR GROOVES. EXTENDING THE FULL WIDTH AND DEPTH OF THE CURB RAMP. SURFACES THAT ARE RAISED, ETCHED, OR GROOVED IN A WAY THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED. FOR PURPOSES OF WARNING, THE FULL WIDTH AND DEPTH OF CURB RAMPS SHALL HAVE A LIGHT REFLECTIVE VALUE AND TEXTURE THAT SIGNIFICANTLY CONTRASTS WITH THAT OF ADJOINING PEDESTRIAN ROUTES.

SIDES OF CURB RAMPS:
IF A CURB RAMP IS LOCATED WHERE PEDESTRIANS MUST WALK ACROSS THE RAMP, OR WHERE IT IS NOT PROTECTED BY HANDRAILS OR GUARDRAILS, IT SHALL HAVE FLARED SIDES. THE MAXIMUM SLOPE OF THE FLARE SHALL BE 1:10 (SEE FIG. 1 (A)) CURB RAMPS WITH RETURNED CURBS MAY BE USED WHERE PEDESTRIANS WOULD NOT WALK ACROSS THE RAMP. (SEE FIG. 1 (B))

BUILT-UP RAMPS:
BUILT-UP CURB RAMPS SHALL BE LOCATED SO THEY DO NOT PROJECT INTO VEHICULAR TRAFFIC LANES (SEE FIG. 2)

OBSTRUCTIONS:
CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.

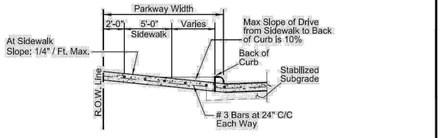
LOCATION AT MARKED CROSSINGS:
CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.

DIAGONAL CURB RAMPS:
IF DIAGONAL (OR CORNER TYPE) CURB RAMPS HAVE RETURNED CURBS OR OTHER WELL DEFINED EDGES, SUCH EDGES SHALL BE PARALLEL TO THE DIRECTION OF PEDESTRIAN FLOW. THE BOTTOM OF DIAGONAL CURB RAMPS SHALL HAVE 48" (1220 MM) MINIMUM. IF DIAGONAL CURB RAMPS ARE PROVIDED AT MARKED CROSSINGS, THE 48" (1220 MM) CLEAR SPACE SHALL BE WITHIN THE MARKINGS. IF DIAGONAL CURB RAMPS HAVE FLARED SIDES, THEY SHALL ALSO HAVE AT LEAST A 24" (610 MM) LONG SEGMENT OF STRAIGHT CURB LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING. ANY RAISED ISLANDS IN CROSSINGS SHALL BE CUT THROUGH LEVEL WITH THE STREET OR HAVE CURB RAMPS AT BOTH SIDES AND A LEVEL AREA AT LEAST 48" (1220 MM) LONG BETWEEN THE CURB RAMPS IN THE PART OF THE ISLAND INTERSECTED BY THE CROSSINGS.

CONSTRUCTION
(A.) THE CONTRACTOR SHALL SAWCUT, REMOVE AND DISPOSE OFF-SITE THE REQUIRED EXISTING CONCRETE SIDEWALK, CURB AND GUTTER, TO CONSTRUCT THE PROPOSED RAMPS.
(B.) CONCRETE SIDEWALKS AND RAMPS SHALL BE MINIMUM 4" THICK, 4000 PSI, 5 SACK CONCRETE, REINFORCED WITH #3 BARS AT 14" CENTERS BOTH WAYS, PLACED OVER A 2" THICK SAND CUSHION EMBEDMENT.
(C.) THE CONTRACTOR SHALL USE 1" PREMOLDED EXPANSION JOINT MATERIAL BETWEEN THE PROPOSED SIDEWALKS AND RAMPS AT THE BACK OF CURBS, AND AT JOINTS AT NO EXTRA PAY.
(D.) DUMMY JOINT REQUIRED EVERY 4' IN 4' WIDE SIDEWALKS AND EVERY 5' IN 6' WIDE SIDEWALK.

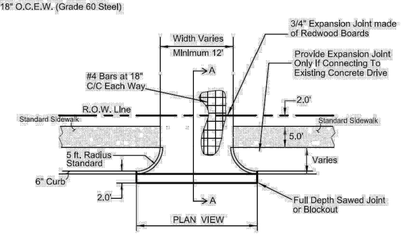
CURB RAMPS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
		DATE: OCT. '04 / STANDARD DRAWING NO.: 2125B

City of Rockwall
The New Horizon



SECTION A-A

NOTE:
Sidewalk section thru driveway to be poured same thickness as driveway - 6" Thick 3,600 P.S.I. Reinf. Conc. Pvmt. w/ #4 Bars @ 18" O.C.E.W. (Grade 60 Steel)



DRIVEWAY DETAILS
(Not to Scale)

DRIVEWAY DETAIL	CITY OF ROCKWALL	
RESIDENTIAL DRIVEWAY		DATE: AUG. '15 / DRAWING NO.: R-2150

Page 216

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

THESE PLAN AND GENERAL NOTES REFER TO:
GEOTECHNICAL ENGINEERING REPORT
HENLEY-JOHNSTON & ASSOCIATES, INC.
REPORT NO. 19706G
MAY 20, 2019
INCLUDING ALL REVISIONS AND ADDENDA TO THIS REPORT THAT MAY HAVE BEEN RELEASED AFTER THE NOTED DATE.

No.	REVISIONS	DATE	BY

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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
Joseph Hornisher

KHA PROJECT 064539200	DATE Mar-21	SCALE AS SHOWN	DESIGNED BY JWH	DRAWN BY ZBH	CHECKED BY MAD

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

PAVING DETAILS
(2 OF 2)
RECORD DRAWINGS

SHEET NUMBER
C-207

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UNION PACIFIC RAILROAD
(100' RIGHT-OF-WAY)

NORTH

GRAPHIC SCALE IN FEET
20 10 0 20
20 SCALE @ 24"x36"

REF. SHEET C-204 FOR ROAD PLAN/PROFILE

RETAINING WALLS TALLER THAN 3' MUST BE DESIGNED BY AN ENGINEER (BY OTHER), SEALED DRAWINGS MUST BE PROVIDED TO THE CITY PRIOR TO CONSTRUCTION

DETENTION POND
100 YR WSEL = 489
FREEBOARD = 490

CONTRACTOR SHALL CONSTRUCT THE DETENTION POND AND BERM PER THE GEOTECHNICAL REPORT. THE DETENTION POND INCLUDES A CLAY LINER.

MATCHLINE, SEE SHEET C-302

LOT 1

30' EMERGENCY SPILLWAY

100 YEAR FLOODPLAIN

DRAINAGE EASEMENT
EROSION HAZARD SETBACK

WSEL 483.81
WSEL 482.63
WSEL 482.38
WSEL 482.32
WSEL 482.33
WSEL 482.31
WSEL 484.57
WSEL 485.94
WSEL 487.08
WSEL 487.81
WSEL 489.07
WSEL 491.66

NOTES

1. ALL SPOT ELEVATIONS ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
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13. NO WALLS SHALL BE CONSTRUCTED WITHIN EASEMENTS, R.O.W., OR OFF-SITE.
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LEGEND

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EXISTING CONTOURS	
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TOP OF GRATE INLET ELEVATION	506.50TG
TOP OF LANDSCAPE ELEVATION	506.50TL
MATCH EXISTING ELEVATION	506.50ME
TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION	596.00TW 596.00BW
DRAINAGE ARROW	
SWALE	
HIGH POINT	
ADA ROUTE	

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BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1"
ELEV. 567.70

BM 53 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 482.12

BM 54 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 524.67

BM 55 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD.
ELEV. 527.03

BM 56 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF OF LA JOLLA POINTE DRIVE APPROXIMATELY 1050 FEET SOUTHWEST OF THE CENTERLINE OF TURTLE COVE BOULEVARD AND 840 FEET NORTHWEST OF THE CENTERLINE OF RIDGE ROAD.
ELEV. 489.81

BY	DATE	No.	REVISIONS

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STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
6/1/2021

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

GRADING PLAN (1 OF 2)

RECORD DRAWINGS

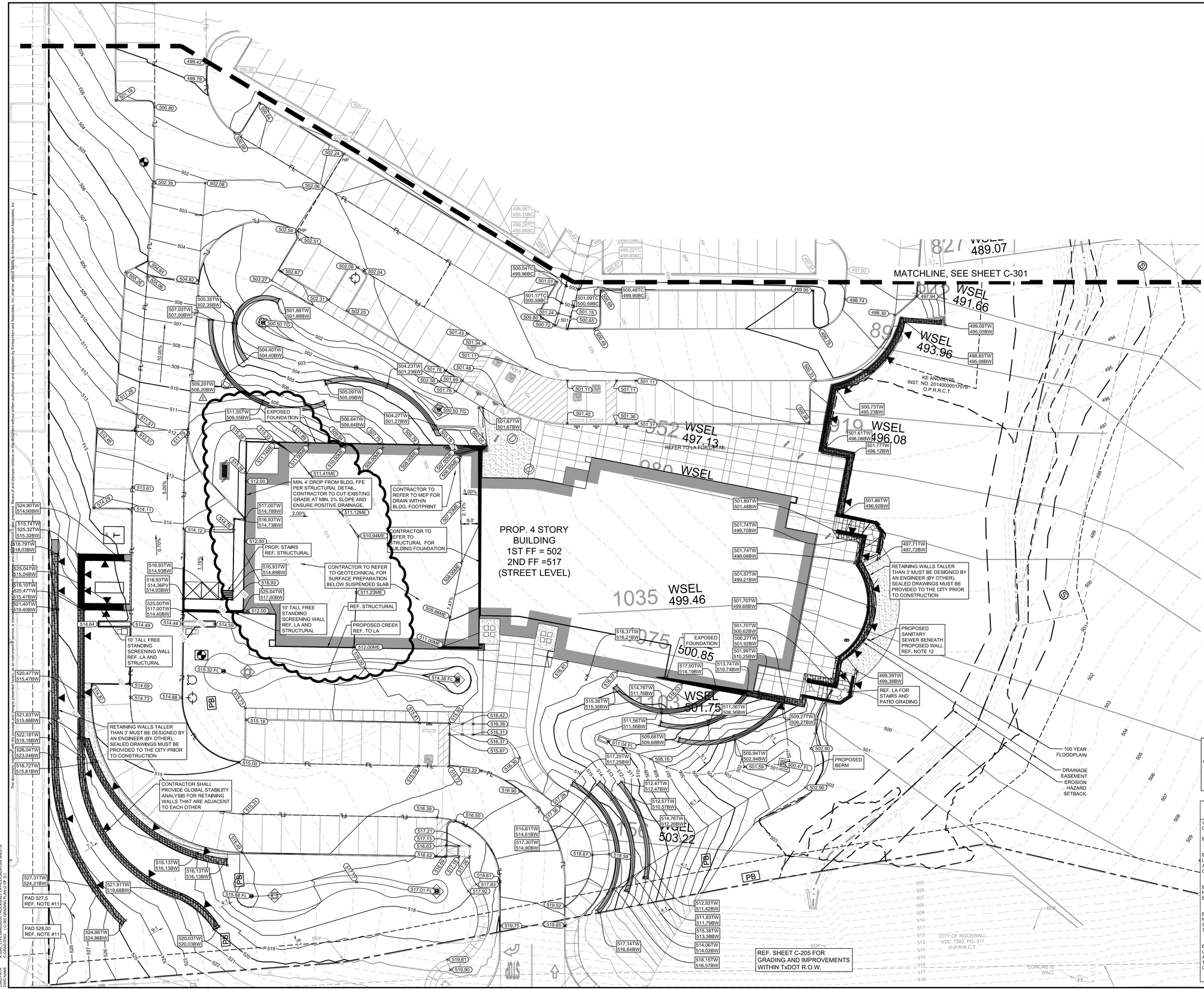
SHEET NUMBER
C-301

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P:\2018\064539200 - 1251 ROCKWALL OFFICE\CAD\PLAN SHEETS
C-GRAD.DWG [C-301 GRADING PLAN (1 OF 2)]



NOTES

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ELEV. 489.81

No.	REVISIONS	DATE	BY
1	RFI 005 - CRAWSPACE BUILDING ELEVATION	2/14/2020	

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STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
6/1/2021

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

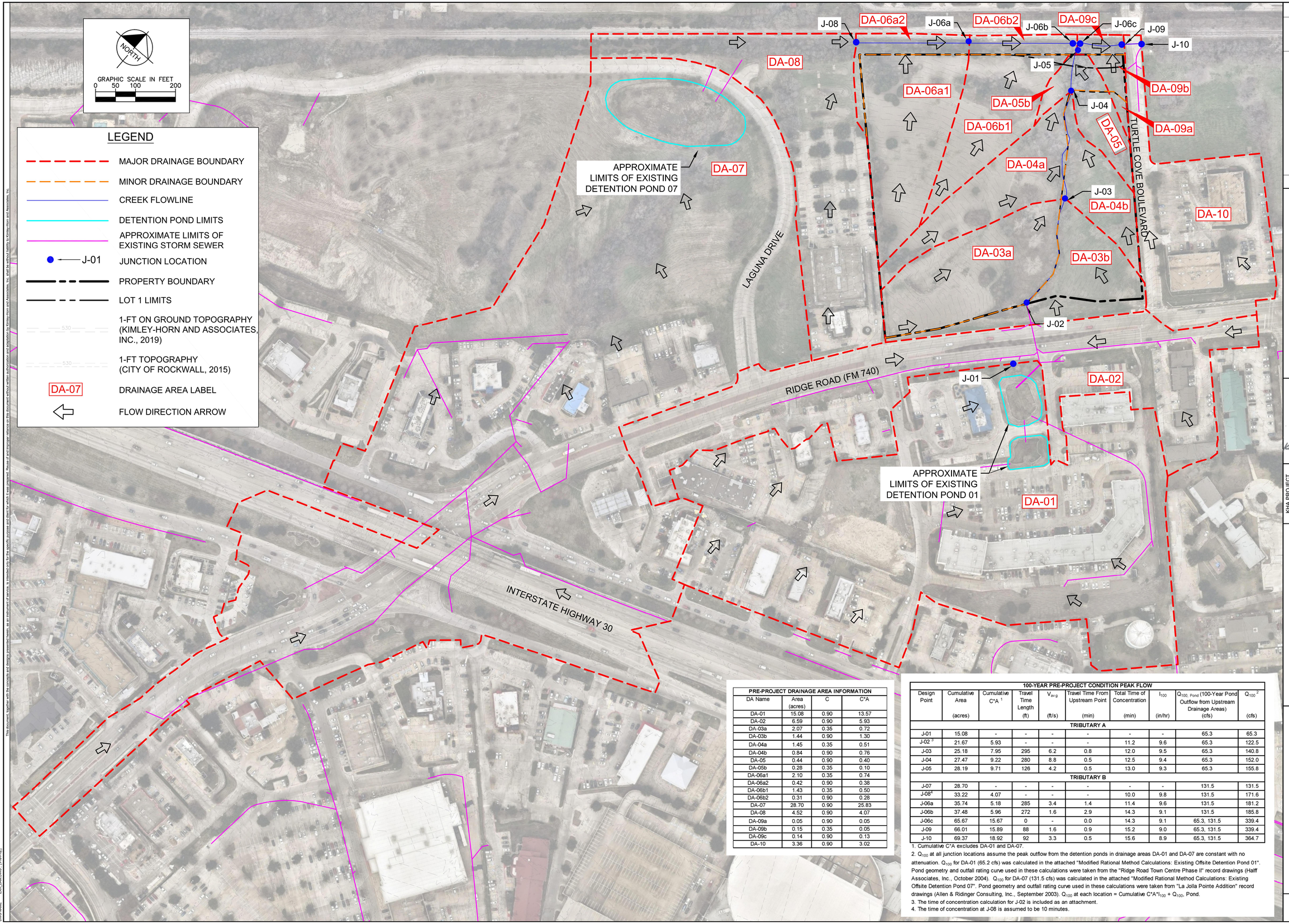
GRADING PLAN (2 OF 2)

RECORD DRAWINGS

SHEET NUMBER
C-302

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DWG NAME C:\GRADING - C-302 GRADING PLAN (2 OF 2).DWG



PRE-PROJECT DRAINAGE AREA INFORMATION

DA Name	Area (acres)	C	C*A
DA-01	15.08	0.90	13.57
DA-02	6.59	0.90	5.93
DA-03a	2.07	0.35	0.72
DA-03b	1.44	0.90	1.30
DA-04a	1.45	0.35	0.51
DA-04b	0.84	0.90	0.76
DA-05	0.44	0.90	0.40
DA-05b	0.28	0.35	0.10
DA-06a1	2.10	0.35	0.74
DA-06a2	0.42	0.90	0.38
DA-06b1	1.43	0.35	0.50
DA-06b2	0.31	0.90	0.28
DA-07	28.70	0.90	25.83
DA-08	4.52	0.90	4.07
DA-09a	0.05	0.90	0.05
DA-09b	0.15	0.35	0.05
DA-09c	0.14	0.90	0.13
DA-10	3.36	0.90	3.02

100-YEAR PRE-PROJECT CONDITION PEAK FLOW

Design Point	Cumulative Area (acres)	Cumulative C*A [1]	Travel Time Length (ft)	V_{avg} (ft/s)	Travel Time From Upstream Point (min)	Total Time of Concentration (min)	I_{100} (in/hr)	$Q_{100, Pond}$ (100-Year Pond Outflow from Upstream Drainage Areas) (cfs)	Q_{100} [2] (cfs)
TRIBUTARY A									
J-01	15.08	-	-	-	-	-	-	65.3	65.3
J-02 [3]	21.67	5.93	-	-	-	11.2	9.6	65.3	122.5
J-03	25.18	7.95	295	6.2	0.8	12.0	9.5	65.3	140.8
J-04	27.47	9.22	280	8.8	0.5	12.5	9.4	65.3	152.0
J-05	28.19	9.71	126	4.2	0.5	13.0	9.3	65.3	155.8
TRIBUTARY B									
J-07	28.70	-	-	-	-	-	-	131.5	131.5
J-08 [4]	33.22	4.07	-	-	-	10.0	9.8	131.5	171.6
J-06a	35.74	5.18	285	3.4	1.4	11.4	9.6	131.5	181.2
J-06b	37.48	5.96	272	1.6	2.9	14.3	9.1	131.5	185.8
J-06c	65.67	15.67	0	-	0.0	14.3	9.1	65.3, 131.5	339.4
J-09	66.01	15.89	88	1.6	0.9	15.2	9.0	65.3, 131.5	339.4
J-10	69.37	18.92	92	3.3	0.5	15.6	8.9	65.3, 131.5	364.7

1. Cumulative C*A excludes DA-01 and DA-07.
2. Q_{100} at all junction locations assume the peak outflow from the detention ponds in drainage areas DA-01 and DA-07 are constant with no attenuation. Q_{100} for DA-01 (65.2 cfs) was calculated in the attached "Modified Rational Method Calculations: Existing Offsite Detention Pond 01". Pond geometry and outfall rating curve used in these calculations were taken from the "Ridge Road Town Centre Phase II" record drawings (Halff Associates, Inc., October 2004). Q_{100} for DA-07 (131.5 cfs) was calculated in the attached "Modified Rational Method Calculations: Existing Offsite Detention Pond 07". Pond geometry and outfall rating curve used in these calculations were taken from "La Jolla Pointe Addition" record drawings (Allen & Ridinger Consulting, Inc., September 2003). Q_{100} at each location = Cumulative C*A*I_{100} + $Q_{100, Pond}$.
3. The time of concentration calculation for J-02 is included as an attachment.
4. The time of concentration at J-08 is assumed to be 10 minutes.

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
KATE E. PLOETZNER
112902
LICENSED PROFESSIONAL ENGINEER
11-15-19

KHA PROJECT	064539200
DATE	NOV. 2019
SCALE	AS SHOWN
DESIGNED BY	MDJ
DRAWN BY	ELM
CHECKED BY	KEP

KE ANDREWS OFFICE

PREPARED FOR
KE ANDREWS

CITY OF ROCKWALL, TEXAS

PRE-PROJECT CONDITION DRAINAGE AREA MAP

SHEET NUMBER
C-303

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DRAINAGE AREA TABLE

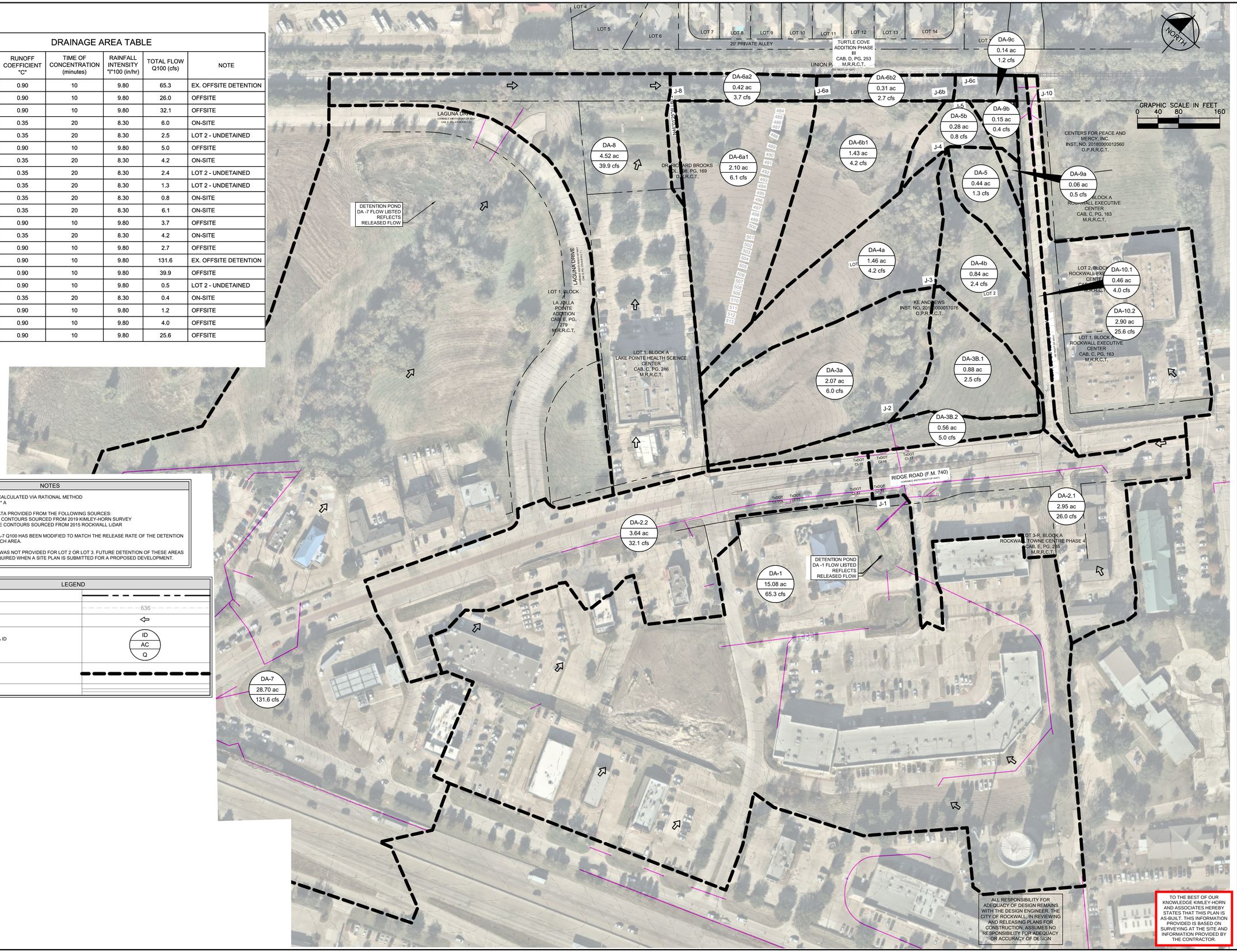
DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	TIME OF CONCENTRATION (minutes)	RAINFALL INTENSITY "I"100 (in/hr)	TOTAL FLOW Q100 (cfs)	NOTE
DA-1	15.08	0.90	10	9.80	65.3	EX. OFFSITE DETENTION
DA-2.1	2.95	0.90	10	9.80	26.0	OFFSITE
DA-2.2	3.64	0.90	10	9.80	32.1	OFFSITE
DA-3a	2.07	0.35	20	8.30	6.0	ON-SITE
DA-3B.1	0.88	0.35	20	8.30	2.5	LOT 2 - UNDETAINED
DA-3B.2	0.56	0.90	10	9.80	5.0	OFFSITE
DA-4a	1.46	0.35	20	8.30	4.2	ON-SITE
DA-4b	0.84	0.35	20	8.30	2.4	LOT 2 - UNDETAINED
DA-5	0.44	0.35	20	8.30	1.3	LOT 2 - UNDETAINED
DA-5b	0.28	0.35	20	8.30	0.8	ON-SITE
DA-6a1	2.10	0.35	20	8.30	6.1	ON-SITE
DA-6a2	0.42	0.90	10	9.80	3.7	OFFSITE
DA-6b1	1.43	0.35	20	8.30	4.2	ON-SITE
DA-6b2	0.31	0.90	10	9.80	2.7	OFFSITE
DA-7	28.70	0.90	10	9.80	131.6	EX. OFFSITE DETENTION
DA-8	4.52	0.90	10	9.80	39.9	OFFSITE
DA-9a	0.06	0.90	10	9.80	0.5	LOT 2 - UNDETAINED
DA-9b	0.15	0.35	20	8.30	0.4	ON-SITE
DA-9c	0.14	0.90	10	9.80	1.2	OFFSITE
DA-10.1	0.46	0.90	10	9.80	4.0	OFFSITE
DA-10.2	2.90	0.90	10	9.80	25.6	OFFSITE

NOTES

1. EX. FLOWS CALCULATED VIA RATIONAL METHOD
   - Q = C * I * A
2. EXISTING DATA PROVIDED FROM THE FOLLOWING SOURCES:
   - ON SITE CONTOURS SOURCED FROM 2019 KIMLEY-HORN SURVEY
   - OFF SITE CONTOURS SOURCED FROM 2015 ROCKWALL LIDAR
3. DA-1 AND DA-7 Q100 HAS BEEN MODIFIED TO MATCH THE RELEASE RATE OF THE DETENTION POND OF EACH AREA.
4. DETENTION WAS NOT PROVIDED FOR LOT 2 OR LOT 3. FUTURE DETENTION OF THESE AREAS WILL BE REQUIRED WHEN A SITE PLAN IS SUBMITTED FOR A PROPOSED DEVELOPMENT.

LEGEND

PROPERTY LINE	
EXISTING CONTOURS	636
EXISTING FLOW ARROW	
- EXISTING DRAINAGE AREA ID - EXISTING AREA (ACRES) - EXISTING FLOW (CFS)	ID / AC / Q
EXISTING DRAINAGE AREA	
EXISTING STORM SEWER	



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C-EXISTING DRAINAGE AREA MAP.DWG

No.	REVISIONS
DATE	
BY	

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13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928
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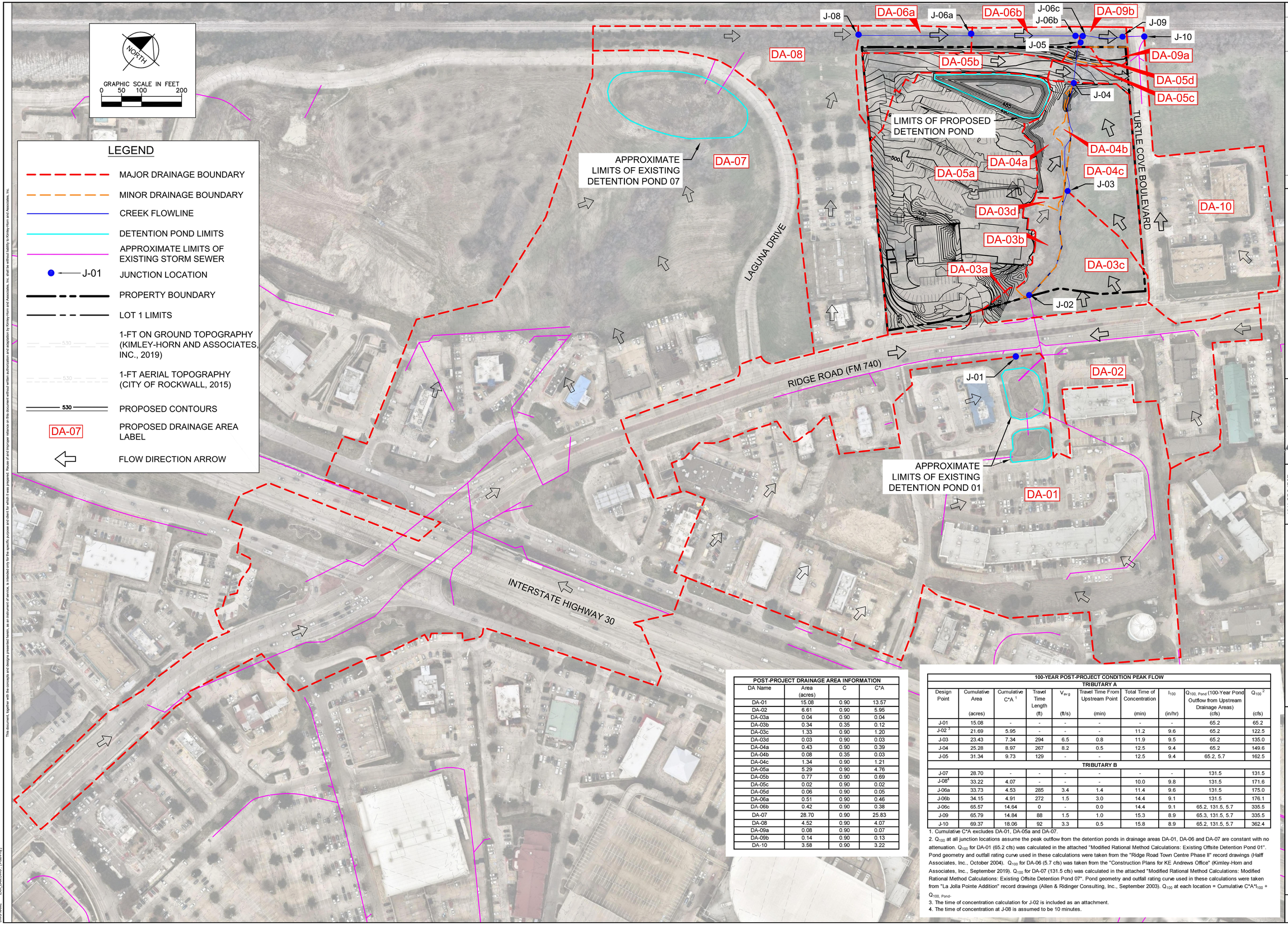
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

EXISTING DRAINAGE AREA MAP
RECORD DRAWINGS

SHEET NUMBER
C-304



POST-PROJECT DRAINAGE AREA INFORMATION			
DA Name	Area (acres)	C	C*A
DA-01	15.08	0.90	13.57
DA-02	6.61	0.90	5.95
DA-03a	0.04	0.90	0.04
DA-03b	0.34	0.35	0.12
DA-03c	1.33	0.90	1.20
DA-03d	0.03	0.90	0.03
DA-04a	0.43	0.90	0.39
DA-04b	0.08	0.35	0.03
DA-04c	1.34	0.90	1.21
DA-05a	5.29	0.90	4.76
DA-05b	0.77	0.90	0.69
DA-05c	0.02	0.90	0.02
DA-05d	0.06	0.90	0.05
DA-06a	0.51	0.90	0.46
DA-06b	0.42	0.90	0.38
DA-07	28.70	0.90	25.83
DA-08	4.52	0.90	4.07
DA-09a	0.08	0.90	0.07
DA-09b	0.14	0.90	0.13
DA-10	3.58	0.90	3.22

100-YEAR POST-PROJECT CONDITION PEAK FLOW								
TRIBUTARY A								
Design Point	Cumulative Area (acres)	Cumulative C*A [1]	Travel Time Length (ft)	V_{avg} (ft/s)	Travel Time From Upstream Point (min)	Total Time of Concentration (min)	I_{100} (in/hr)	$Q_{100, Pond}$ (100-Year Pond Outflow from Upstream Drainage Areas) (cfs)	Q_{100} [2] (cfs)
J-01	15.08	-	-	-	-	-	-	65.2	65.2
J-02 [3]	21.69	5.95	-	-	-	11.2	9.6	65.2	122.5
J-03	23.43	7.34	294	6.5	0.8	11.9	9.5	65.2	135.0
J-04	25.28	8.97	267	8.2	0.5	12.5	9.4	65.2	149.6
J-05	31.34	9.73	129	-	-	12.5	9.4	65.2, 5.7	162.5
TRIBUTARY B									
J-07	28.70	-	-	-	-	-	-	131.5	131.5
J-08 [4]	33.22	4.07	-	-	-	10.0	9.8	131.5	171.6
J-06a	33.73	4.53	285	3.4	1.4	11.4	9.6	131.5	175.0
J-06b	34.15	4.91	272	1.5	3.0	14.4	9.1	131.5	176.1
J-06c	65.57	14.64	0	-	0.0	14.4	9.1	65.2, 131.5, 5.7	335.5
J-09	65.79	14.84	88	1.5	1.0	15.3	8.9	65.3, 131.5, 5.7	335.5
J-10	69.37	18.06	92	3.3	0.5	15.8	8.9	65.2, 131.5, 5.7	362.4

1. Cumulative C*A excludes DA-01, DA-05a and DA-07.
2. Q_{100} at all junction locations assume the peak outflow from the detention ponds in drainage areas DA-01, DA-06 and DA-07 are constant with no attenuation. Q_{100} for DA-01 (65.2 cfs) was calculated in the attached "Modified Rational Method Calculations: Existing Offsite Detention Pond 01". Pond geometry and outfall rating curve used in these calculations were taken from the "Ridge Road Town Centre Phase II" record drawings (Halff Associates, Inc., October 2004). Q_{100} for DA-06 (5.7 cfs) was taken from the "Construction Plans for KE Andrews Office" (Kimley-Horn and Associates, Inc., September 2019). Q_{100} for DA-07 (131.5 cfs) was calculated in the attached "Modified Rational Method Calculations: Modified Rational Method Calculations: Existing Offsite Detention Pond 07". Pond geometry and outfall rating curve used in these calculations were taken from "La Jolla Pointe Addition" record drawings (Allen & Ridinger Consulting, Inc., September 2003). Q_{100} at each location = Cumulative C*A*I_{100} + $Q_{100, Pond}$.
3. The time of concentration calculation for J-02 is included as an attachment.
4. The time of concentration at J-08 is assumed to be 10 minutes.

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
KATE E. PLOETZNER
112902
LICENSED PROFESSIONAL ENGINEER
11-15-19

KHA PROJECT	064539200
DATE	NOV. 2019
SCALE	AS SHOWN
DESIGNED BY	MDJ
DRAWN BY	ELM
CHECKED BY	KEP

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

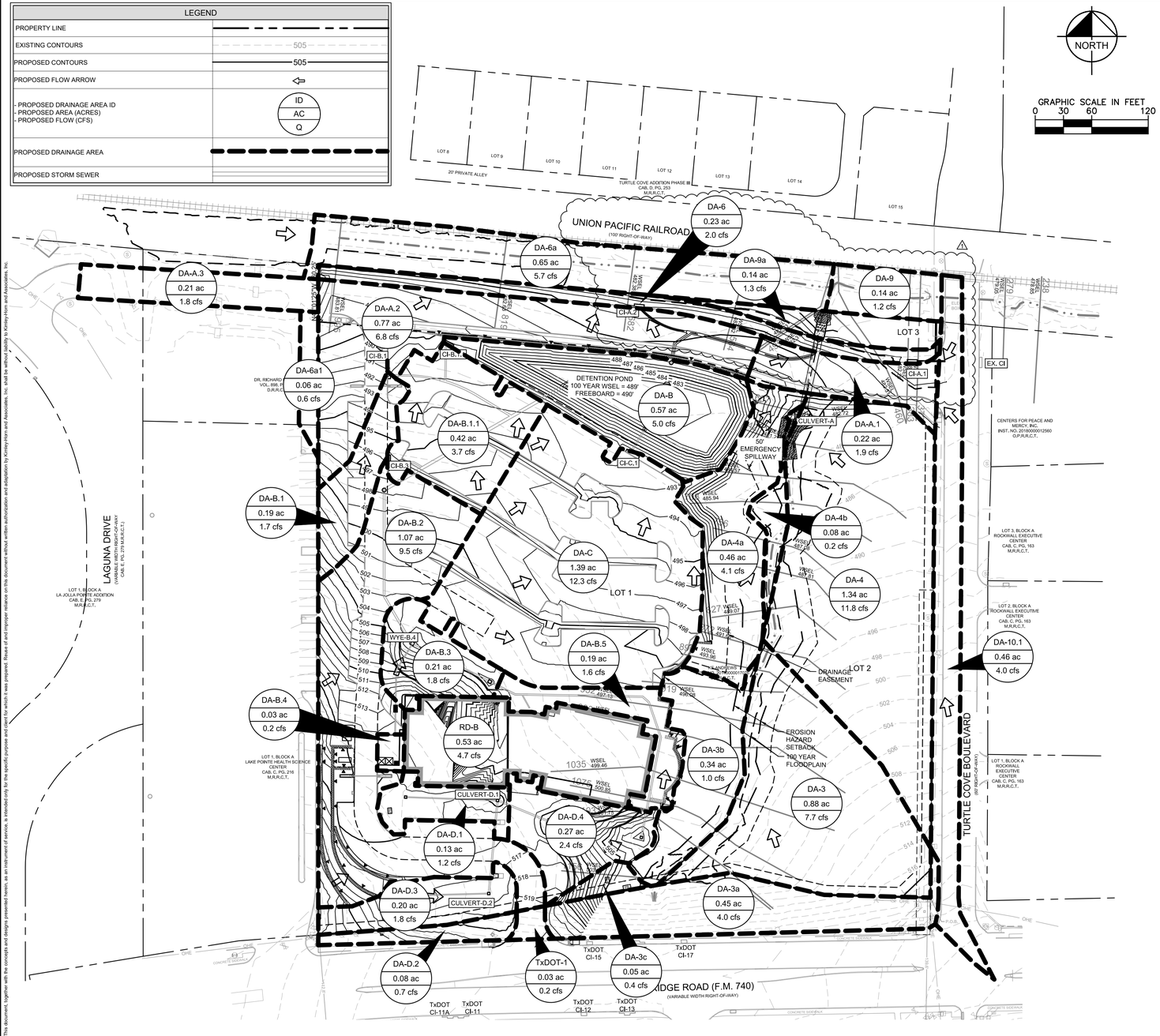
POST-PROJECT CONDITION DRAINAGE AREA MAP

SHEET NUMBER
C-206

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100-Year Event

Existing						Proposed			
Lot 1 + R.O.W.		**Pass Through**		**Lot 1 Floodplain**		**Bypass**		**Proposed to Pond**	
Area	6.93 acres	Area	0.08 acres	Area	0.42 acres	Area	1.72 acres	Area	5.29 acres
Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	10.0 minutes
C value	0.35	C value	0.90	C value	0.35	C value	0.90	C value	0.90
I_{100}	8.30 in/hr	I_{100}	9.80 in/hr	I_{100}	8.30 in/hr	I_{100}	9.80 in/hr	I_{100}	9.80 in/hr
Q_{100}	**20.14 cfs**	**Q_{100}**	**0.74 cfs**	**Q_{100}**	**1.22 cfs**	**Q_{100}**	**15.15 cfs**	**Q_{100}**	**46.67 cfs**
		Q_{allow}	**20.88 cfs**					**Q_{allow}**	**5.73 cfs**
								Q_{actual}	**5.68 cfs**

Runoff per Storm Event - Proposed

Time (min.)	I_{100}	C value	Area (ac)	Runoff (cfs)	Inflow (ft^3)	Release	Outflow (ft^3)	Storage (ft^3)	Storage (Ac-Ft)	
10	9.80	0.90	5.29	46.67	28,003	5.68	3,408	24,595	0.56	
15	9.00	0.90	5.29	42.86	38,576	5.68	4,260	34,316	0.79	
20	8.30	0.90	5.29	39.53	47,434	5.68	5,112	42,322	0.97	
30	6.90	0.90	5.29	32.86	59,150	5.68	6,816	52,334	1.20	
40	5.80	0.90	5.29	27.62	66,293	5.68	8,520	57,773	1.33	
50	5.00	0.90	5.29	23.81	71,437	5.68	10,224	61,213	1.41	
60	4.50	0.90	5.29	21.43	77,152	5.68	11,928	65,224	1.50	
70	4.00	0.90	5.29	19.05	80,009	5.68	13,632	66,377	1.52	
80	3.70	0.90	5.29	17.62	84,581	5.68	15,336	69,245	1.59	
90	3.50	0.90	5.29	16.67	90,010	5.68	17,040	72,970	1.68	
100	3.40	0.90	5.29	16.19	97,154	5.68	18,744	78,410	1.80	
110	3.20	0.90	5.29	15.24	100,583	5.68	20,448	**80,135**	1.84	<--- Max
120	2.60	0.90	5.29	12.38	89,153	5.68	22,152	67,001	1.54	
130	2.50	0.90	5.29	11.91	92,868	5.68	23,856	69,012	1.58	
140	2.45	0.90	5.29	11.67	98,011	5.68	25,560	72,451	1.66	

Proposed Pond: Stage v. Storage v. Discharge Relationship

Stage (ft)	Volume (ac-ft)	Storage (ac-ft)	Discharge 100-yr (cfs)	Discharge 25-yr (cfs)	Discharge 10-yr (cfs)	Discharge 5-yr (cfs)	Notes:
481.00	0.00	0.00	0.00	0.00	0.00	0.00	Dead Storage
482.00	0.03	0.00	0.00	0.00	0.00	0.00	
482.62	0.12	0.00	0.00	0.00	0.00	0.00	
483.00	0.18	0.06	0.32	0.49	0.72	0.88	Available Storage
484.00	0.38	0.26	1.53	1.60	1.68	1.72	
485.00	0.61	0.49	2.01	2.06	2.13	2.16	
486.00	0.88	0.77	2.40	2.44	2.50	2.53	
487.00	1.20	1.08	2.73	2.77	2.82	2.84	
488.00	1.56	1.44	3.03	3.06	3.10	3.13	
489.00	1.96	1.85	5.88	5.91	5.95	5.97	
490.00	2.43	2.32	8.60	8.63	8.66	8.69	

Proposed Pond Results Summary

Event	Peak Storage (ac-ft)	Peak Elevation (ft)	Peak Discharge (cfs)	Tailwater Elevation (ft)
5-Yr	1.09	487.03	2.85	482.26
10-Yr	1.52	488.20	3.16	482.35
25-Yr	1.71	488.66	3.34	482.50
100-Yr	1.84	488.98	5.68	482.62

Detention Pond - Outfall Structure Summary

Design Storm	Elevation	Tailwater	Opening #1			Opening #2			Total	
			Weir[1] (cfs)	Orifice[2] (cfs)	Actual (cfs)	Weir[1] (cfs)	Orifice[2] (cfs)	Actual (cfs)	Actual (cfs)	Max (cfs)
5-year	487.03	482.26	14.38	2.85	2.85	0.00	0.00	0.00	2.85	2.92
10-year	488.20	482.35	19.53	3.16	3.16	0.00	0.00	0.00	3.16	3.88
25-year	488.66	482.50	21.07	3.24	3.24	0.10	0.91	0.10	3.34	3.81
100-year	488.98	482.62	22.14	3.29	3.29	2.39	2.61	2.39	5.68	5.73

[1] Weir Equation: $Q=C_{weir}LH^{(3/2)}$; C_{weir} = 2.65

[2] Orifice Equation: $Q=C_{orifice}A(2gH)^{(1/2)}$; g=32.2 ft^2/s, $C_{orifice}$ = 0.6

Emergency Spillway Summary

Flow (cfs)	Weir Coefficient	Length (ft)	Height (ft)
46.67	2.65	50	0.49
Q = C * L * H ^ (3/2)			

Opening #1 (Orfice)
Height (ft)= 0.52 = 6.25 inches
Width (ft)= 0.52 = 6.25 inches
Area (ft)= 0.27
Centroid (ft) = 481.26
Invert Elevation (ft) = 481

Opening #2 (Inltet)
Length (ft)= 1 = 12.00 inches
Width (ft)= 1 = 12.00 inches
Area (ft)= 0.89 Open area
Invert Elevation (ft) = 488.61

Tailwater
$Tailwater_{100yr}$ (ft) = 482.62
$Tailwater_{25yr}$ (ft) = 482.50
$Tailwater_{10yr}$ (ft) = 482.35
$Tailwater_{5yr}$ (ft) = 482.26

DRAINAGE AREA TABLE

DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	RAINFALL INTENSITY "I"100 (in/hr)	TIME OF CONCENTRATION (minutes)	TOTAL FLOW Q100 (cfs)	DESCRIPTION
DA-3	0.88	0.90	9.80	10.0	7.7	OFFSITE - LOT 2
DA-3a	0.45	0.90	9.80	10.0	4.0	OFFSITE
DA-3b	0.34	0.35	8.30	20.0	1.0	FLOODPLAIN
DA-3c	0.05	0.90	9.80	10.0	0.4	BYPASS
DA-4	1.34	0.90	9.80	10.0	11.8	OFFSITE - LOT 2
DA-4a	0.46	0.90	9.80	10.0	4.1	BYPASS
DA-4b	0.08	0.35	8.30	20.0	0.2	FLOODPLAIN
DA-6	0.23	0.90	9.80	10.0	2.0	BYPASS
DA-6a	0.65	0.90	9.80	10.0	5.7	OFFSITE
DA-6a1	0.06	0.90	9.80	10.0	0.6	OFFSITE

DRAINAGE AREA TABLE

DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	RAINFALL INTENSITY "I"100 (in/hr)	TIME OF CONCENTRATION (minutes)	TOTAL FLOW Q100 (cfs)	DESCRIPTION
DA-9	0.14	0.90	9.80	10.0	1.2	OFFSITE
DA-9a	0.14	0.90	9.80	10.0	1.3	OFFSITE - LOT 3
DA-10.1	0.46	0.90	9.80	10.0	4.0	OFFSITE
DA-A.1	0.22	0.90	9.80	10.0	1.9	BYPASS
DA-A.2	0.77	0.90	9.80	10.0	6.8	BYPASS
DA-A.3	0.21	0.90	9.80	10.0	1.8	OFFSITE
DA-B	0.57	0.90	9.80	10.0	5.0	DETENTION
DA-B.1	0.19	0.90	9.80	10.0	1.7	DETENTION
DA-B.1.1	0.42	0.90	9.80	10.0	3.7	DETENTION
DA-B.2	1.07	0.90	9.80	10.0	9.5	DETENTION

DRAINAGE AREA TABLE

DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	RAINFALL INTENSITY "I"100 (in/hr)	TIME OF CONCENTRATION (minutes)	TOTAL FLOW Q100 (cfs)	DESCRIPTION
DA-B.3	0.21	0.90	9.80	10.0	1.8	DETENTION
DA-B.4	0.03	0.90	9.80	10.0	0.2	DETENTION
DA-B.5	0.19	0.90	9.80	10.0	1.6	DETENTION
DA-C	1.39	0.90	9.80	10.0	12.3	DETENTION
DA-D.1	0.13	0.90	9.80	10.0	1.2	DETENTION
DA-D.2	0.08	0.90	9.80	10.0	0.7	PASS THROUGH
DA-D.3	0.20	0.90	9.80	10.0	1.8	DETENTION
DA-D.4	0.27	0.90	9.80	10.0	2.4	DETENTION
RD-B	0.53	0.90	9.80	10.0	4.7	DETENTION
TxDOT-1	0.03	0.90	9.80	10.0	0.2	OFF-SITE

NOTES

1. DRAINAGE RUNOFF IS CALCULATED PER THE RATIONAL METHOD
   •1. Q = C * i * A
2. DETENTION HAS ONLY BEEN PROVIDED FOR AREAS MARKED "DETENTION" OR "BYPASS". ALL OTHER AREAS WILL NEED TO BE EVALUATED ON THEIR OWN TO DETERMINE IF FUTURE DETENTION IS REQUIRED. DETENTION FOR KE ANDREWS EXTENSION TO THE WEST (DA-A.3) IS NOT INCLUDED IN THE PROPOSED DESIGN. THE ADJACENT DEVELOPMENT WILL BE REQUIRED TO REDIRECT THIS AREA TO A DETENTION POND OR TREAT IT AS BYPASS.
3. DA 3b IS PART OF THE LOT BEING DEVELOPED. DETENTION FOR THE AREA IS NOT PROPOSED SINCE THE AREA IS PART OF THE FLOODPLAIN AND A DRAINAGE EASEMENT IS BEING DEDICATED WITH THE FINAL PLAT. NO DEVELOPMENT MAY OCCUR WITHIN THE FLOODPLAIN WITHOUT STUDY AND MODIFICATION OF DETENTION PONDS.
4. REFER TO SHEET C-309 AND C-403 FOR DETENTION POND OUTFALL CONTROL. OPENING #1 (RESTRICTOR PLATE) IS LOCATED ON THE HEADWALL AT CULVERT A STA 3+03.63. OPENING #2 (GRATE INLET) IS LOCATED AT CULVERT A STA 2+77.81.
5. REFER TO SHEET C-307 FOR DRAINAGE CALCS AND THE 5, 10, AND 25 YEAR DETENTION POND CALCULATIONS.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

No.	REVISIONS	DATE	BY
1	CURB INLET RFI 011	6/11/2020	

Kimley»Horn
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SUITE 700 DALLAS, TX 75240
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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
Joseph Hornisher

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

DRAINAGE AREA MAP

RECORD DRAWINGS

SHEET NUMBER
C-306

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IMAGES
XREFS
LAST SAVED 6/11/2020 3:58 PM
PLOTTED BY Joseph Hornisher
PLOT DATE 6/11/2020 3:59 PM
DWG NAME C:\KHA\PWD_1C-5K\DRAINAGE AREA MAP.DWG
LTYle > xBar: xDrop: xEvDA: xX36: xDnDy: exAsse: xstrc: xAvoBasin: xsection: _SolidFactor

RUNOFF COLLECTION POINT INFORMATION			No. of Barrels	RCP	RCB		Type	Area	Wetted Perimeter	Hydraulic Radius	Manning's N	Invert Elev U/S	Invert Elev D/S	Slope	DRAINAGE AREA INFORMATION						Flow Time at U/S	Design Storm Freq-uency	Rainfall Intensity "I"	Storm Water Runoff "Q"	Capacity	Flow Type	Velocity "V"	Hydrau lic Grade Slope "S"	Friction Head Loss	Hydraulic Gradient Elevations		Incoming Velocity Head	Outgoing Velocity Head	Jct. Type	Coeff. Kj	Head Loss at U/S Junction	Top of Curb Elev.	HGL Depth Below T/C
U/S	D/S	Length		Pipe Dia.	Box Span	Box Rise									Area ID	Interc-epted Area "A"	Runoff Coeff. "C"	Ante-cedent Factor "K"	Incre-mental "KCA"	Accum-ulated "KCA"									U/S	D/S								
(ft.)	(ft.)	(ft.)	(ea)	(in.)	(ft.)	(ft.)		(ft^2)	(ft)	(ft)		(ft.)	(ft.)	(ft/ft)		(ac.)			(ac.)	(ac.)	(min)	(yrs)	(in/hrs)	(cfs)	(cfs)		(fps)	(ft/ft)	Ft	(ft.)	(ft.)	(ft.)	(ft.)		(ft.)	(ft.)	(ft.)	(ft.)
SD CULVERT A																																					
1+94.29	1+36.51	57.78	1	0	8	4	RCBC	32.00	24.00	1.33	0.013	478.45	476.92	0.0264	Upstream	25.34	0.90	0.70	15.93	15.93	12.30	100	9.40	149.70	721.9	Full Flow	4.68	0.0011	0.066	482.53	482.46	0.00	0.34	-	0.00	0.00	0.00	-
1+36.51	1+31.51	5.00	1	0	8	4	RCBC	32.00	24.00	1.33	0.013	476.92	476.79	0.0264	SD LAT A.2	-	-	-	1.47	17.39	12.30	100	9.40	163.48	721.9	Full Flow	5.11	0.0014	0.007	482.36	482.35	0.34	0.41	60 Wye	0.35	0.10	0.00	-
1+31.51	1+25.00	6.51	1	0	8	4	RCBC	32.00	24.00	1.33	0.013	476.79	476.62	0.0264	0.00	-	-	-	0.00	17.39	12.30	100	9.40	163.48	721.9	Full Flow	5.11	0.0014	0.009	482.35	482.34	0.41	0.41	-	0.00	0.00	0.00	-
1+25.00	1+00.00	25.00	1	0	8	4	RCBC	32.00	24.00	1.33	0.013	476.62	475.96	0.0264	Stilling Basin	-	-	-	0.00	17.39	12.30	100	9.40	163.48	721.9	Full Flow	5.11	0.0014	0.034	482.34	482.31	0.41	0.41	-	0.00	0.00	0.00	-
SD LAT A.1																																					
1+29.26	1+00.00	29.26	1	18	0	0	RCP	1.77	4.71	0.38	0.013	478.05	477.90	0.0050	CI-A1	0.68	0.90	1.00	0.61	0.61	10.00	100	9.80	5.97	7.4	Full Flow	3.38	0.0032	0.094	479.84	479.75	0.00	0.18	Inlet	1.25	0.10	481.61	1.77
SD LAT A.2																																					
3+03.63	2+57.02	46.61	1	36	0	0	RCP	7.07	9.42	0.75	0.013	480.75	478.85	0.0407	Pond Outflow	5.38	0.90	0.12	0.59	0.59	10.00	100	9.80	5.75	134.9	Full Flow	0.81	0.0001	0.003	482.63	482.62	0.00	0.01	Inlet	1.25	0.10	489.00	6.37
2+57.02	2+36.45	20.57	1	36	0	0	RCP	7.07	9.42	0.75	0.013	478.85	478.02	0.0407	0.00	-	-	-	0.00	0.59	11.00	100	-	5.75	134.9	Full Flow	0.81	0.0001	0.002	482.52	482.52	0.00	0.01	45 Bend	0.37	0.10	0.00	-
2+36.45	1+52.29	84.16	1	36	0	0	RCP	7.07	9.42	0.75	0.013	478.02	477.34	0.0080	SD LAT A.3	-	-	-	0.88	1.47	11.40	100	9.80	14.37	59.8	Full Flow	2.03	0.0005	0.039	482.52	482.48	0.00	0.06	45 Wye	0.50	0.00	0.00	-
1+52.29	1+00.00	52.29	1	36	0	0	RCP	7.07	9.42	0.75	0.013	477.34	476.92	0.0080	0.00	-	-	-	0.00	1.47	12.10	100	-	14.37	59.8	Full Flow	2.03	0.0005	0.024	482.48	482.46	0.01	0.06	-	0.00	0.00	0.00	-
SD LAT A.3																																					
1+62.35	1+11.84	50.51	1	24	0	0	RCP	3.14	6.28	0.50	0.013	479.54	478.30	0.0244	CI-A.2	0.98	0.90	1.00	0.88	0.88	10.00	100	9.80	8.61	35.4	Full Flow	2.74	0.0014	0.073	482.71	482.64	0.00	0.12	Inlet	1.25	0.10	484.04	1.33
1+11.84	1+00.00	11.84	1	24	0	0	RCP	3.14	6.28	0.50	0.013	478.30	478.02	0.0244	0.00	-	-	-	0.00	0.88	10.30	100	-	8.61	35.4	Full Flow	2.74	0.0014	0.017	482.54	482.52	0.12	0.12	45 Bend	0.37	0.10	0.00	-
SD LINE B																																					
9+13.99	8+05.63	108.36	1	18	0	0	RCP	1.77	4.71	0.38	0.013	497.93	496.70	0.0113	GI-B	0.70	0.90	1.00	0.63	0.63	10.00	100	9.80	6.14	11.2	Full Flow	3.47	0.0034	0.368	497.76	497.39	0.00	0.19	Inlet	1.25	0.10	500.45	2.69
8+05.63	7+65.99	39.64	1	18	0	0	RCP	1.77	4.71	0.38	0.013	496.70	496.25	0.0113	0.00	-	-	-	0.00	0.63	10.50	100	-	6.14	11.2	Full Flow	3.47	0.0034	0.135	497.29	497.16	0.19	0.19	30 Bend	0.25	0.10	0.00	-
7+65.99	7+57.39	8.60	1	18	0	0	RCP	1.77	4.71	0.38	0.013	496.25	496.16	0.0113	0.00	-	-	-	0.00	0.63	10.70	100	-	6.14	11.2	Full Flow	3.47	0.0034	0.029	497.06	497.03	0.19	0.19	30 Bend	0.25	0.10	0.00	-
7+57.39	6+29.32	128.07	1	18	0	0	RCP	1.77	4.71	0.38	0.013	496.16	494.71	0.0113	DA-B.5	0.19	0.90	1.00	0.17	0.79	10.70	100	9.80	7.79	11.2	Full Flow	4.41	0.0055	0.700	496.93	496.23	0.19	0.30	30 Bend	0.25	0.10	0.00	-
6+29.32	6+21.91	7.41	1	18	0	0	RCP	1.77	4.71	0.38	0.013	494.71	494.62	0.0113	SD Lat B.5	-	-	-	0.48	1.27	11.20	100	9.80	12.49	11.2	Full Flow	7.07	0.0141	0.104	495.75	495.65	0.30	0.78	60 Wye	0.35	0.47	0.00	-
6+21.91	5+91.86	30.05	1	18	0	0	RCP	1.77	4.71	0.38	0.013	494.62	494.29	0.0113	0.00	-	-	-	0.00	1.27	11.20	100	-	12.49	11.2	Full Flow	7.07	0.0141	0.423	495.55	495.13	0.78	0.78	30 Bend	0.25	0.10	0.00	-
5+91.86	5+00.28	91.58	1	18	0	0	RCP	1.77	4.71	0.38	0.013	494.29	493.25	0.0113	0.00	-	-	-	0.00	1.27	11.30	100	-	12.49	11.2	Full Flow	7.07	0.0141	1.289	494.74	493.45	0.78	0.78	Inlet	1.25	0.39	0.00	-
5+00.28	4+41.43	58.85	1	24	0	0	RCP	3.14	6.28	0.50	0.013	493.25	492.66	0.0100	SD Lat B.4	-	-	-	0.21	1.49	11.50	100	9.80	14.57	22.7	Full Flow	4.64	0.0041	0.243	493.21	492.97	0.78	0.33	Manhole	0.25	0.24	0.00	-
4+41.43	3+28.76	112.67	1	24	0	0	RCP	3.14	6.28	0.50	0.013	492.66	491.54	0.0100	0.00	-	-	-	0.00	1.49	11.70	100	-	14.57	22.7	Full Flow	4.64	0.0041	0.465	492.87	492.41	0.33	0.33	30 Bend	0.25	0.10	0.00	-
3+28.76	2+81.14	47.62	1	36	0	0	RCP	4.17	5.14	0.81	0.013	490.54	488.82	0.0360	0.00	-	-	-	0.00	1.49	12.10	100	-	14.57	78.8	Partial	3.50	0.0005	0.023	492.25	491.13	0.33	0.19	Manhole	0.25	0.16	0.00	-
2+81.14	1+73.32	107.82	1	36	0	0	RCP	5.13	5.83	0.88	0.013	488.82	484.94	0.0360	SD LINE B.3	-	-	-	0.96	2.45	12.30	100	9.80	24.00	102.6	Partial	4.68	0.0013	0.139	490.87	489.26	0.19	0.34	60 Wye	0.35	0.26	0.00	-
1+73.32	1+00.00	73.32	1	36	0	0	RCP	7.07	9.42	0.75	0.013	484.94	482.30	0.0360	SD Lat B.1	-	-	-	0.55	3.00	12.70	100	9.80	29.38	126.9	Full Flow	4.16	0.0019	0.142	489.14	489.00	0.34	0.27	60 Wye	0.35	0.12	0.00	-
SD Lat B.1																																					
2+38.51	2+21.16	17.35	1	18	0	0	RCP	1.77	4.71	0.38	0.013	487.41	487.16	0.0142	CI-B.1	0.19	0.90	1.00	0.17	0.17	10.00	100	9.80	1.68	12.6	Full Flow	0.95	0.0003	0.004	489.52	489.52	0.00	0.01	Inlet	1.25	0.10	491.87	2.35
2+21.16	1+79.86	41.30	1	18	0	0	RCP	1.77	4.71	0.38	0.013	487.16	486.57	0.0142	0.00	-	-	-	0.00	0.17	10.30	100	-	1.68	12.6	Full Flow	0.95	0.0003	0.010	489.42	489.41	0.01	0.01	30 Bend	0.25	0.10	0.00	-
1+79.86	1+42.62	37.24	1	24	0	0	RCP	3.14	6.28	0.50	0.013	486.07	485.54	0.0142	SD Lat B.1.1	-	-	-	0.38	0.55	11.00	100	9.80	5.38	27.0	Full Flow	1.71	0.0006	0.021	489.31	489.29	0.01	0.05	60 Wye	0.35	0.10	0.00	-
1+42.62	1+00.00	42.62	1	24	0	0	RCP	3.14	6.28	0.50	0.013	485.54	484.94	0.0142	0.00	-	-	-	0.00	0.55	11.40	100	-	5.38	27.0	Full Flow	1.71	0.0006	0.024	489.29	489.26	0.05	0.05	-	0.00	0.00	0.00	-
SD Lat B.1.1																																					
1+39.95	1+00.00	39.95	1	18	0	0	RCP	1.77	4.71	0.38	0.013	487.05	486.57	0.0119	CI-B.1.1	0.42	0.90	1.00	0.38	0.38	10.00	100	9.80	3.70	11.5	Full Flow	2.10	0.0012	0.049	489.46	489.41	0.00	0.07	Inlet	1.25	0.10	491.26	1.80
SD LINE B.3																																					
1+35.21	1+11.55	23.66	1	18	0	0	RCP	1.49	3.28	0.46	0.013	491.67	489.76	0.0809	CI-B.3	1.07	0.90	1.00	0.96	0.96	10.00	100	9.80	9.44	28.8	Partial	6.32	0.0080	0.190	492.85	491.22	0.00	0.62	Inlet	1.25	0.31	496.51	3.66
1+11.55	1+00.00	11.55	1	18	0	0	RCP	1.49	3.28	0.46	0.013	489.76	488.82	0.0809	0.00	-	-	-	0.00	0.96	10.10	100	-	9.44	28.8	Partial	6.32	0.0080	0.093	491.22	491.13	0.62	0.62	-	0.00	0.00	0.00	-
SD Lat B.4																																					
1+98.46	1+56.05	42.41	1	12	0	0	RCP	0.39	1.57	0.25	0.013	510.56	510.13	0.0100	TD-B.4.1	0.03	0.90	1.00	0.02	0.02	10.00	100	9.80	0.22	1.8	Partial	0.57	0.0000	0.002	511.06	510.73	0.00	0.01	Inlet	1.25	0.10	514.64	3.58
1+56.05	1+31.35	24.70	1	12	0	0	RCP	0.39	1.57	0.25	0.013	510.13	497.01	0.5314	0.00	-	-	-	0.00	0.02	11.20	100	-	0.22	13.0	Partial	0.57	0.0000	0.001	510.63	497.78	0.01	0.01	30 Bend	0.25	0.10	0.00	-
1+31.35	1+00.00	31.35	1	12	0	0	RCP	0.65	2.14	0.30	0.013	497.01	492.66	0.1386	GI-B.4	0.21	0.90	1.00	0.19	0.21	11.90	100	9.80	2.07	12.5	Partial	3.19	0.0034	0.106	497.78	493.45	0.01	0.16	-	0.00	0.00	0.00	-
SD Lat B.5																																					
1+16.20	1+00.00	16.20	1	12	0	0	RCP	0.79	3.14	0.25	0.013	494.79	494.71	0.0050	RD-B	0.53	0.90	1.00	0.48	0.48	10.00	100	9.80	4.71	2.5	Full Flow	5.99	0.0174	0.281	496.51	496.23	0.00	0.56	60 Wye	0.35	0.00	501.86	5.35
SD LINE C																																					
1+42.41	1+32.41	10.00	1	18	0	0	RCP	1.77	4.71	0.38	0.013	486.97	486.92	0.0050	CI-C	1.39	0.90	1.00	1.25	1.25	10.00	100	9.80	12.26	7.4	Full Flow	6.94	0.0135	0.135	489.77	489.64	0.00	0.75	Inlet	1.25	0.37	492.28	2.51
1+32.41	1+20.00	12.41	1	18	0	0	RCP	1.77	4.71	0.38	0.013	486.92	483.30	0.2921	-	-	-	-	0.00	1.25	10.00	100	-	12.26	56.9	Full Flow	6.94	0.0135	0.168	489.54	489.37	0.75	0.75	30 Bend	0.25	0.10	0.00	-
1+20.00	1+00.00	20.00	1	18	0	0	RCP	1.77	4.71	0.38	0.013	483.30	482.30	0.0500	0.00	-	-	-	0.00	1.25	10.00	100	-	12.26	23.6	Full Flow	6.94	0.0135	0.271	489.27	489.00	0.75	0.75	30 Bend	0.25	0.10	0.00	-
Culvert D.1																																					
2+85.37	1+76.09	109.28	1	12	0	0	RCP	0.79	3.14	0.25	0.013	512.32	510.41	0.0175	DA-D.1	0.13	0.90	1.00	0.12	0.12	10.00	100	9.80	1.18	4.7	Partial	1.51	0.0011	0.120	513.32	512.01	0.00	0.04	Inlet	1.25	0.10	515.32	2.00
1+76.09	0+92.52	83.57	1	18	0	0	RCP	1.77	4.71	0.38	0.013	510.41	510.00	0.0049	Culvert D.2	-	-	-	0.26	0.38	11.20	100	9.80	3.73	7.4	Partial	2.11	0.0013	0.105	511.91	511.50	0.04	0.07	Manhole	0.25	0.10	514.38	2.47
Culvert D.2																																					
2+85.77	1+99.29	86.48	1	12	0	0	RCP	0.79	3.14	0.25	0.013	512.41	512.05	0.0042	DA-D.3	0.20	0.90	1.00	0.18	0.18	10.00	100	9.80	1.80	2.3	Full Flow	2.30	0.0025	0.220	513.87	513.65	0.00	0.08	Inlet	1.25	0.10	515.88	2.01
1+99.29	1+00.00	99.29	1	18	0	0	RCP	1.77	4.71	0.38	0.013	512.05	510.41	0.0165	DA-D.2	0.08	0.90	1.00	0.08	0.26	10.60	100	9.80	2.55	13.5	Partial	1.44	0.0006	0.058	513.55	512.01	0.08	0.03	Manhole	0.25	0.10	517.01	3.46

Inlet ID	Location			Design Storm Frequ-ency	Area Runoff					Storm Water Runoff	Upstream Bypass	Total Flow	Thoroughfare Type	Inlet Condition	PAVEMENT INFORMATION									Max. Allowable Flow based on Max. Allowable Ponding Width	Inlet Capacity													To Inlet ID
	Alignment	Station	Offset		Runoff Coeff.	Drainage Area	Time of Concen-tration	Rainfall Intensity	Area						Mann-ing's	Slope of Road	Cross Slope	Depression		Ponding Width/Spread		Depth of Gutter Flow			Depressed Gutter Section		Section Beyond Depression		Conveyance		Ratio of Depression flow to Total Flow	Equivalent Cross Slope	Inlet Length		Inlet Capacity	Flow	C*A	
																		Depth	Width	T allow	T Actual	Y Allow	Y Actual		Area	Wetted Perimeter	Area	Wetted Perimeter	Depression Section	Section Beyond Depression			Required	Actual				
					"C"		Tc Min.	"I" in/hr	"A" Ac.	"Q" cfs	"Q_B" cfs	"Q_T" cfs			"n"	"S_L" ft/ft	"S_x" ft/ft	a ft	W ft	ft.	ft.	ft.	ft.	"Q_{allow}" cfs	Aw ft^2	Pw ft	Aw ft^2	Pw ft	Kw cfs	Kg cfs	Eo	Se ft/ft	Lr ft	La ft	Qc cfs	Qbypass cfs		
100-YEAR STORM ANALYSIS																																					
CI A.1	SD LAT A.1	1+29.26	0	100	0.9	DA-A.1.1 + 10.1	10	9.8	0.67	5.95	0.00	5.95	Minor Collector	SAG	0.0175	0.007	0.04	0.50	2	24	10.06	0.96	0.40	60.03	1.23	2.08	1.30	8.06	73.05	32.73	0.69	0.21	6.53	10	7.99	0.00	0.82	N/A
CI A.2	SD LAT A.3	1+62.35	0	100	0.9	DA A.2 + A.3	10	9.8	0.98	8.61	0.00	8.61	Minor Collector	SAG	0.0175	0.007	0.04	0.50	2	24	11.56	0.96	0.46	60.03	1.34	2.08	1.83	9.56	85.33	51.54	0.62	0.20	8.31	10	9.84	0.00	1.00	N/A
CI B.1	SD Lat B.1	2+38.51	0	100	0.9	DA-B.1	10	9.8	0.19	1.68	0.00	1.68	Parking	On-Grade	0.0175	0.010	0.02	0.50	2	24	9.03	0.48	0.18	22.60	0.82	2.07	0.49	7.03	37.62	7.14	0.84	0.23	5.12	10	8.25	0.00	0.84	N/A
CI B.1.1	SD Lat B.1.1	1+39.95	0	100	0.9	DA-B.1.1	10	9.8	0.42	3.70	0.00	3.70	Parking	SAG	0.0175	0.010	0.02	0.50	2	24	12.15	0.48	0.24	22.60	0.95	2.07	1.03	10.15	47.65	19.05	0.71	0.20	9.84	10	3.75	0.00	0.38	N/A
CI B.3	SD LINE B.3	1+35.21	0	100	0.9	DA-B.2	10	9.8	1.07	9.44	0.00	9.44	Parking	On-Grade	0.0175	0.010	0.02	0.50	2	24	17.26	0.48	0.35	22.60	1.15	2.07	2.33	15.26	65.99	56.45	0.54	0.15	13.43	15	12.28	0.00	1.25	N/A
CI C	SD LINE C	1+42.41	0	100	0.9	DA-C.1	10	9.8	1.39	12.26	0.00	12.26	Parking	SAG	0.0175	0.010	0.03	0.50	2	24	14.78	0.72	0.44	44.42	1.33	2.08	2.45	12.78	83.54	69.10	0.55	0.17	14.46	15	12.63	0.00	1.29	N/A

5-Year Event

Existing						Proposed					
Lot 1		Pass Through		Undeveloped		Bypass		Proposed to Pond	
Area	6.93 acres		0.08 acres		0.42 acres	Area	1.72 acres		5.29 acres
Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	10.0 minutes
C value	0.35	C value	0.90	C value	0.35	C value	0.90	C value	0.90
I_5	4.90 in/hr	I_5	6.10 in/hr	I_5	4.90 in/hr	I_5	6.10 in/hr	I_5	6.10 in/hr
Q_5	11.89 cfs	Q_5	0.46 cfs	Q_5	0.72 cfs	Q_5	9.43 cfs	Q_5	29.05 cfs
		Q_{allow}	12.35 cfs					Q_{allow}	2.92 cfs
								Max Detention	1.09 Ac-Ft.
								Q_{actual}	2.85 cfs

10-Year Event

Existing						Proposed					
Lot 1		Pass Through		Undeveloped		Bypass		Proposed to Pond	
Area	6.93 acres		0.08 acres		0.42 acres	Area	1.72 acres		5.29 acres
Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	10.0 minutes
C value	0.35	C value	0.90	C value	0.35	C value	0.90	C value	0.90
I_{10}	5.90 in/hr	I_{100}	7.10 in/hr	I_{10}	5.90 in/hr	I_{10}	7.10 in/hr	I_{10}	5.90 in/hr
Q_{10}	14.32 cfs	Q_{10}	0.54 cfs	Q_{10}	0.87 cfs	Q_{10}	10.98 cfs	Q_{10}	28.10 cfs
		Q_{allow}	14.86 cfs					Q_{allow}	3.88 cfs
								Max Detention	1.52 Ac-Ft.
								Q_{actual}	3.16 cfs

25-Year Event

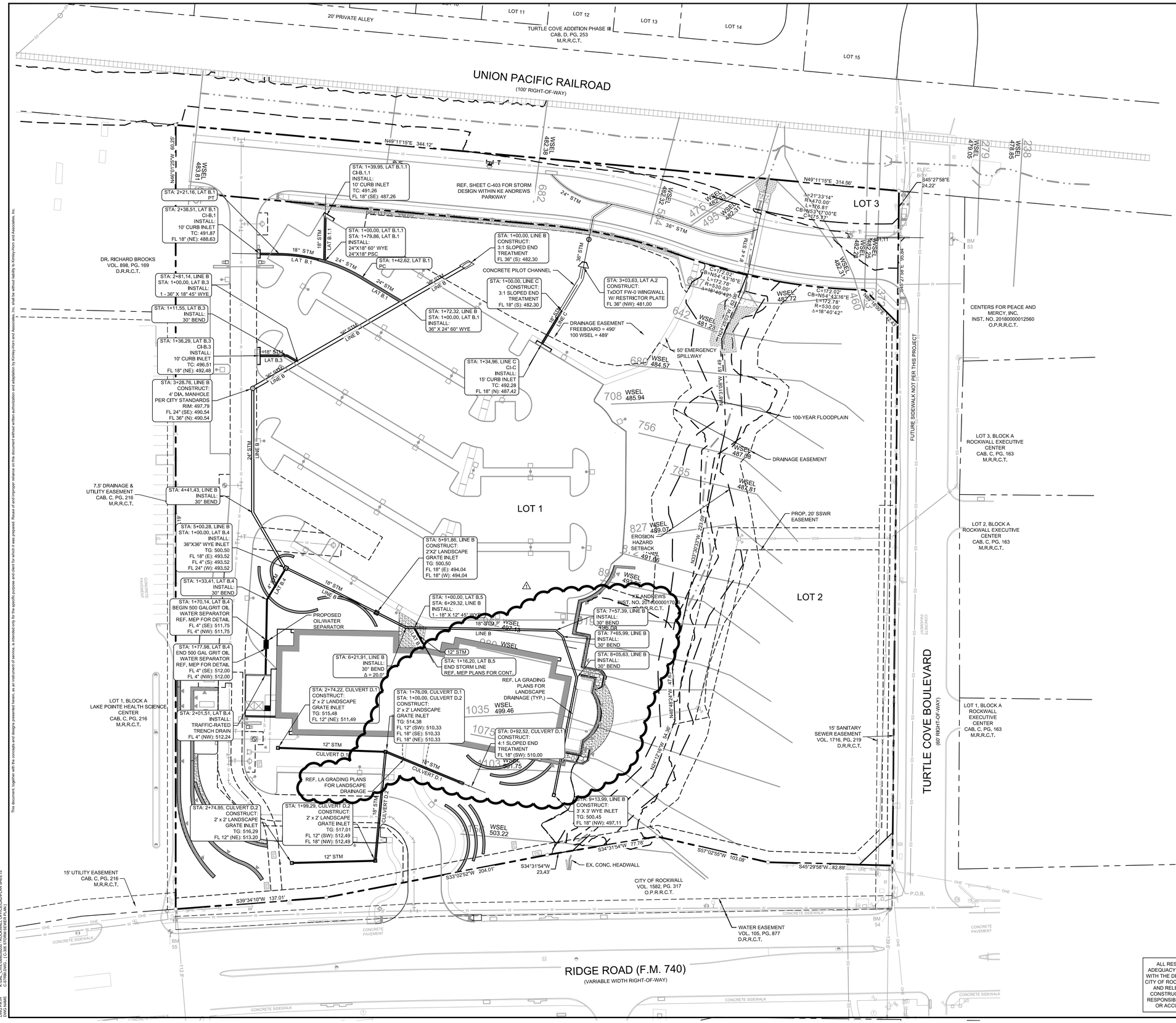
Existing						Proposed					
Lot 1		Pass Through		Undeveloped		Bypass		Proposed to Pond	
Area	6.93 acres		0.08 acres		0.42 acres	Area	1.72 acres		5.29 acres
Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	20.0 minutes	Time (T_c)	10.0 minutes	Time (T_c)	10.0 minutes
C value	0.35	C value	0.90	C value	0.35	C value	0.90	C value	0.90
I_{25}	6.60 in/hr	I_{25}	8.30 in/hr	I_{25}	6.60 in/hr	I_{25}	8.30 in/hr	I_{25}	8.30 in/hr
Q_{25}	16.02 cfs	Q_{25}	0.63 cfs	Q_{25}	0.97 cfs	Q_{25}	12.83 cfs	Q_{25}	39.53 cfs
		Q_{allow}	16.64 cfs					Q_{allow}	3.81 cfs
								Max Detention	1.71 Ac-Ft.
								Q_{actual}	3.34 cfs

Runoff per Storm Event - Proposed

Time (min.)	I_{100}	C value	Area (ac)	Runoff (cfs)	Inflow (ft^3)	Release	Outflow (ft^3)	Storage (ft^3)	Storage (Ac-Ft)	
10	6.10	0.90	5.29	29.05	17,431	2.85	1,710	15,721	0.36	
15	5.50	0.90	5.29	26.19	23,574	2.85	2,138	21,437	0.49	
20	4.90	0.90	5.29	23.34	28,003	2.85	2,565	25,438	0.58	
30	4.10	0.90	5.29	19.53	35,147	2.85	3,420	31,727	0.73	
40	3.40	0.90	5.29	16.19	38,862	2.85	4,275	34,587	0.79	
50	2.80	0.90	5.29	13.33	40,004	2.85	5,130	34,874	0.80	
60	2.60	0.90	5.29	12.38	44,576	2.85	5,985	38,591	0.89	
70	2.40	0.90	5.29	11.43	48,005	2.85	6,840	41,165	0.95	
80	2.30	0.90	5.29	10.95	52,577	2.85	7,695	44,882	1.03	
90	2.10	0.90	5.29	10.00	54,006	2.85	8,550	45,456	1.04	
100	1.90	0.90	5.29	9.05	54,292	2.85	9,405	44,887	1.03	
110	1.80	0.90	5.29	8.57	56,578	2.85	10,260	46,318	1.06	
120	1.70	0.90	5.29	8.10	58,292	2.85	11,115	47,177	1.08	
130	1.60	0.90	5.29	7.62	59,435	2.85	11,970	**47,465**	1.09	<--- Max
140	1.50	0.90	5.29	7.14	60,007	2.85	12,825	47,182	1.08	

Runoff per Storm Event - Proposed

Time (min.)	I_{100}	C value	Area (ac)	Runoff (cfs)	Inflow (ft^3)	Release	Outflow (ft^3)	Storage (ft^3)	Storage (Ac-Ft)	
10	7.10	0.90	5.29	33.81	20,288	3.16	1,896	18,392	0.42	
15	6.50	0.90	5.29	30.96	27,860	3.16	2,370	25,490	0.59	
20	5.90	0.90	5.29	28.10	33,718	3.16	2,844	30,874	0.71	
30	4.80	0.90	5.29	22.86	41,147	3.16	3,792	37,355	0.86	
40	4.00	0.90	5.29	19.05	45,719	3.16	4,740	40,979	0.94	
50	3.50	0.90	5.29	16.67	50,006	3.16	5,688	44,318	1.02	
60	3.00	0.90	5.29	14.29	51,434	3.16	6,636	44,798	1.03	
70	2.80	0.90	5.29	13.33	56,006	3.16	7,584	48,422	1.11	
80	2.60	0



NOTES

1. REFER TO SHEET C-002 FOR GENERAL NOTES.
2. REFER TO THE CITY OF ROCKWALL STANDARD CONSTRUCTION DETAILS FOR STORM SEWER STRUCTURES AND EMBEDMENT.
3. REF TO SHEET C-311 FOR STORM DETAILS
4. REFER TO MEP PLANS FOR ROOF DRAIN CONNECTIONS WITHIN 5' OF BUILDING.
5. STORM DRAIN CROSSINGS WITH SANITARY SEWER AND WATER ARE SHOWN ON PROFILES.
6. CONTRACTOR SHALL UTILIZE D50 BEDDING FOR ROCK RIP RAP.
7. ALL STORM LINES ARE CONSIDERED PRIVATE UNLESS OTHERWISE NOTED.

LEGEND

PROPERTY LINE	
PROPOSED WATER	W W
EXISTING WATER	W W
PROPOSED SANITARY SEWER	SS SS
EXISTING SANITARY SEWER	SS SS
PROPOSED STORM SEWER	
EXISTING STORM SEWER	
PROPOSED UNDERGROUND ELECTRIC LINE	UGE
EXISTING UNDERGROUND ELECTRIC LINE	UGE
PROPOSED NATURAL GAS LINE	GAS GAS
EXISTING NATURAL GAS LINE	GAS GAS
PROPOSED WATER VALVE	
EXISTING WATER VALVE	
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED WATER METER	
PROPOSED SANITARY SEWER CLEANOUT	
PROPOSED SANITARY SEWER MANHOLE	S
EXISTING SANITARY SEWER MANHOLE	S

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TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

No.	REVISIONS	DATE	BY
1	PERMIT SET	2/14/2020	

Kimley»Horn
13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928

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STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
6/1/2021

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

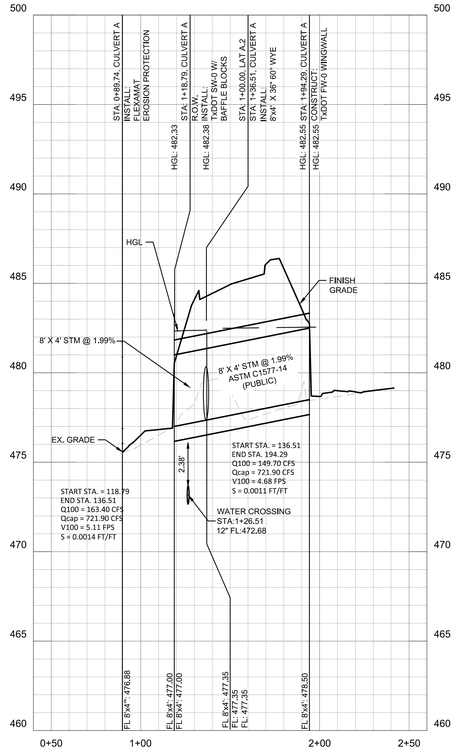
STORM SEWER PLAN

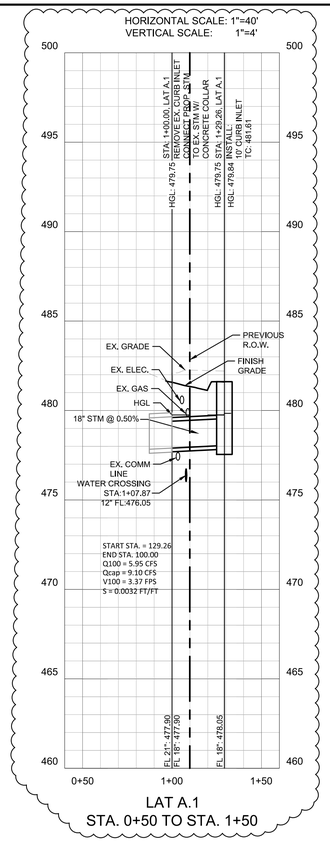
RECORD DRAWINGS

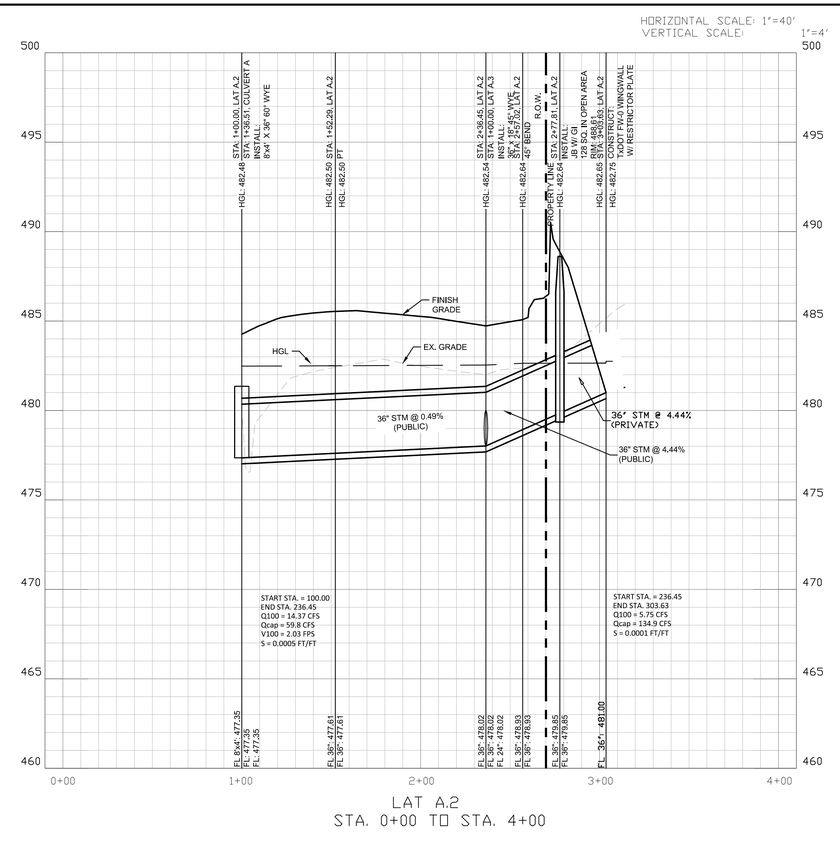
SHEET NUMBER
C-308

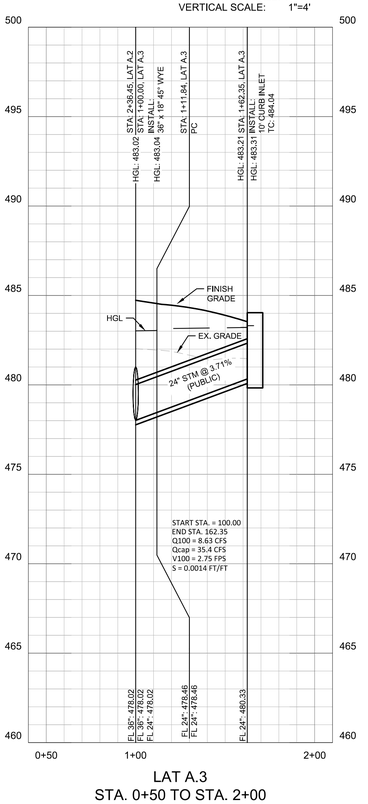
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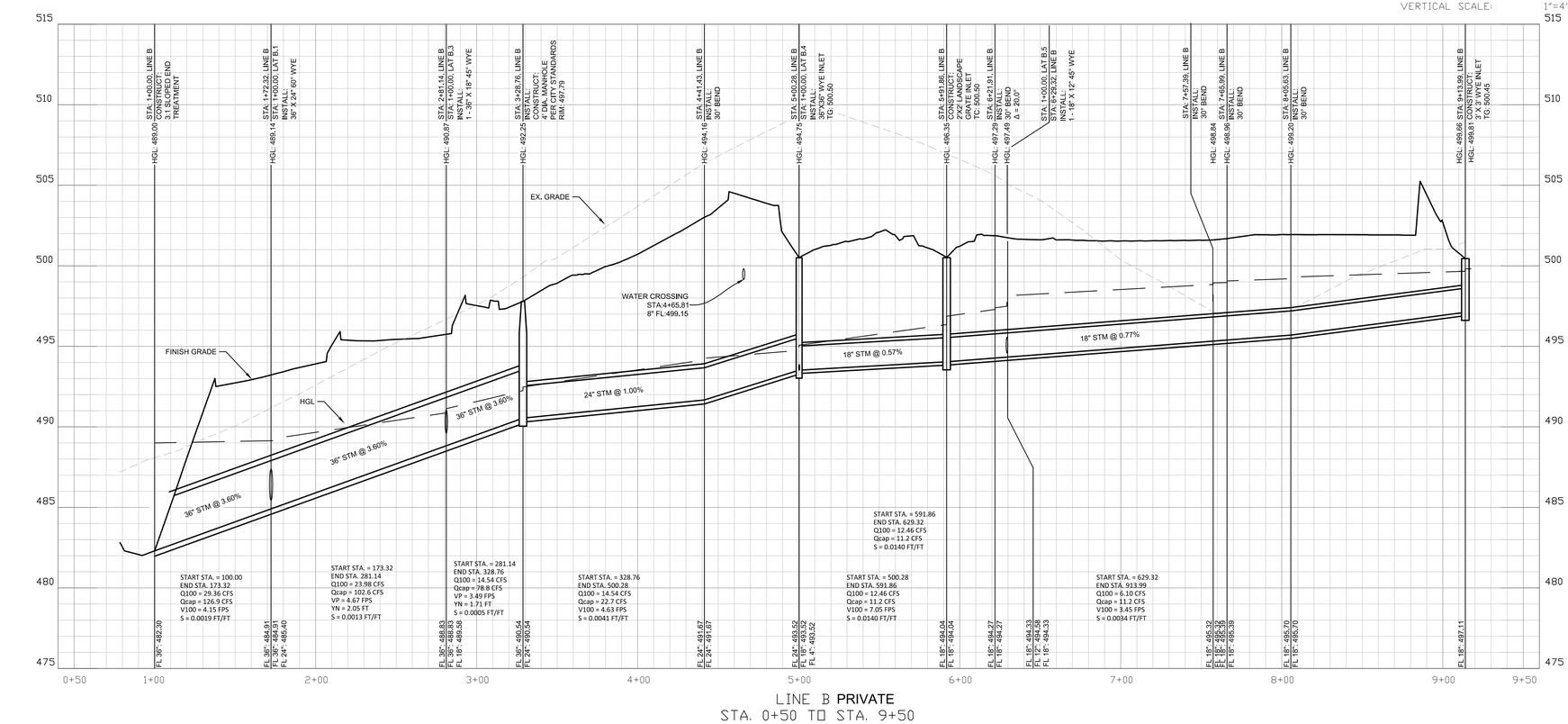
IMAGES
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DWG NAME C-STRM (DWG - TC-308 STORM SEWER PLAN)











GRAPHIC SCALE IN FEET
0 20 40 80
HORIZONTAL
VERTICAL
8
4
2
0

ALL STORM SHALL BE CONSIDERED PRIVATE UNLESS OTHERWISE NOTED.

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

1. DRAINAGE STRUCTURE RESTRICTOR PLATE FOR OUTFALL STRUCTURE AT STA 3+03.63 LAT A2 SHALL HAVE A 6.25" (H) X 6.25" (W) OPENING AT THE FL.
2. DRAINAGE STRUCTURE AT STA 2+77.81 LAT A2 SHALL HAVE A GRATE INLET WITH THE OPEN AREA SHOWN. IF THE CONTRACTOR ELECTS TO UTILIZE A LARGER GRATE INLET THE RIM, THE CONTRACTOR WILL NEED TO COORDINATE WITH THE ENGINEER ON RAISING THE RIM ELEVATION.

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

No.	REVISIONS	DATE	BY
1	CURB INLET RFI 011	6/1/2020	

Kimley»Horn
13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
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WWW.KIMLEY-HORN.COM TX F-928
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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
Joseph Hornisher

KHA PROJECT 064539200
DATE: Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

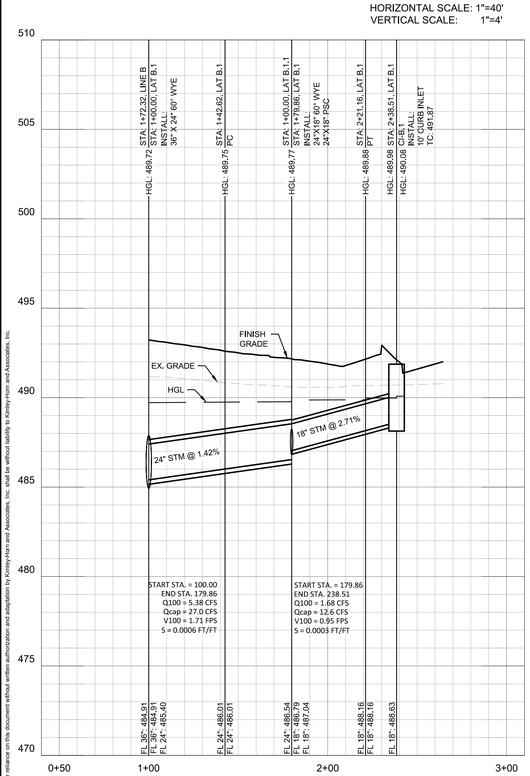
STORM SEWER PROFILES (1 OF 2)
RECORD DRAWINGS

SHEET NUMBER
C-309

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PLOTTED BY
PLOT DATE
DWG NAME

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GRAPHIC SCALE IN FEET
0 20 40 80
HORIZONTAL
VERTICAL
8
4
2
0

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

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6/1/2021
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LICENSED PROFESSIONAL ENGINEER
Joseph Hornisher

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
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KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

STORM SEWER PROFILES (2 OF 2)

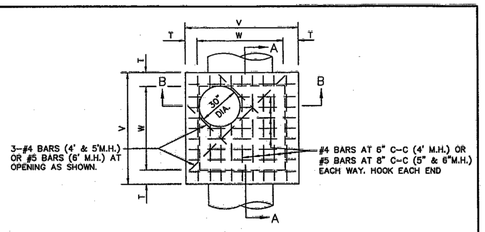
RECORD DRAWINGS

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IMAGES
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PLOTTED BY JOSEPH HORNISHER
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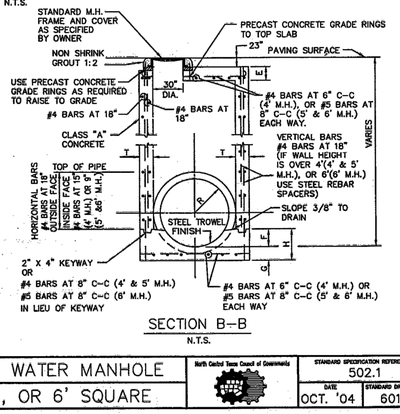
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PLAN
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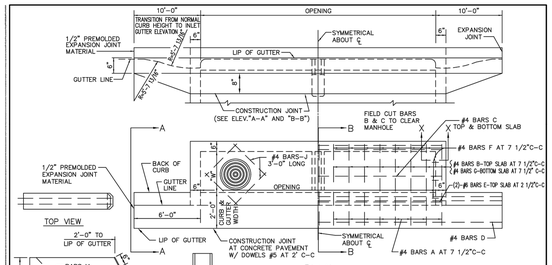
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5'	6'–4"	8"	6"	12"	8"	1'–8"
6'	7'–6"	9"	9"	16"	10"	2'–2"

TABLE OF DIMENSIONS
N.T.S.



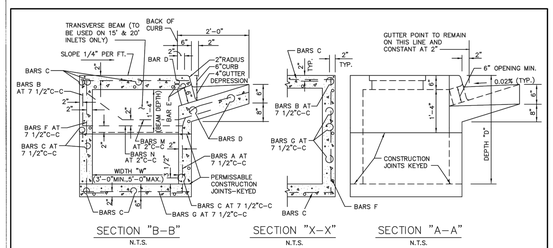
SECTION B–B
N.T.S.

STORM WATER MANHOLE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.1
4', 5', OR 6' SQUARE		DATE OCT. '04 / STANDARD DRAWING NO. 6010A



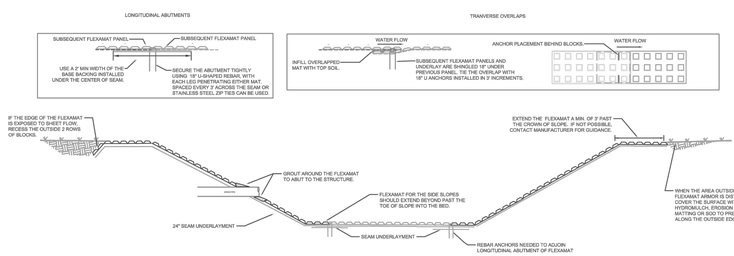
NOTES:
1. LOCATION OF MANHOLE OPENING TO BE AT OUTFALL END, UNLESS OTHERWISE DIRECTED BY THE OWNER.
2. INLETS OVER 10' IN WIDTH SHALL HAVE A MANHOLE OPENING AT EACH END.

V0209 (ALL DRAWINGS APPROVED)	CURB INLET 5', 10', 15' OR 20' OPENING	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 702 / DATE OCT. '04 / STANDARD DRAWING NO. 6020A



GENERAL NOTES:
1. ALL CONCRETE SHALL BE CLASS "A" CONCRETE.
2. REINFORCING BARS SHALL BE STANDARD GRADE STEEL, DEFORMED REINFORCING BARS OF A DIAMETER AND LENGTH AS SHOWN.
3. CHAMFER ALL EXPOSED CORNERS 3/4" EXCEPT WHERE OTHERWISE NOTED.
4. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
5. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMODATE STORM SEWER PIPE.
6. RING AND COVER SHALL BE APPROVED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.

80209 (ALL DRAWINGS APPROVED)	CURB INLET CROSS SECTION & INLET THROAT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 702 / DATE OCT. '04 / STANDARD DRAWING NO. 6020B



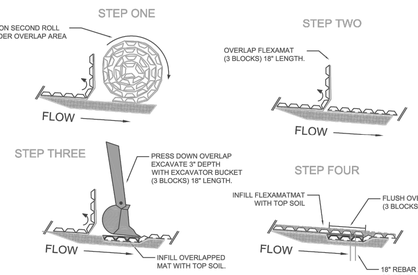
CONSTRUCTION NOTES:
1. AN ENGINEER OR MANUFACTURES REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. GRADE THE SITES SO THAT WATER WILL NOT FLOW ABOVE, BELOW, OR AROUND THE OUTSIDE OF THE AREA PROTECTED WITH FLEXAMAT. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. APPLY SITE SPECIFIC SEED, INCLUDING NATIVE GRASSES DIRECTLY TO THE PREPARED SOIL PRIOR TO FLEXAMAT INSTALLATION.
4. FLEXAMAT ROLLS ARE AVAILABLE IN WIDTHS OF 4', 5.5', 8', 10', 12', & 16'. IT IS THE MANUFACTURERS RECOMMENDATION TO UTILIZE THE WIDEST MATS POSSIBLE TO REDUCE AN ABUNDANCE OF SEAMS OR OVERLAPS.
   a. TO ACHIEVE WIDER WIDTHS, INSTALL MATS ADJACENT TO ONE ANOTHER. INSTALL ADDITIONAL UNDERLAYMENT UNDER ALL ADJOINING MATS. A MINIMUM OF 12" OF UNDERLAYMNET SHALL EXTEND UNDER EACH SIDE OF THE MAT AND DIRECTLY AGAINST THE SUBGRADE.
   b. INSTALL 18" #3 REBAR U-ANCHORS OR STAINLESS STEEL ZIP TIES IN 3' INCREMENTS THE LENGTH OF THE LONGITUDINAL SEAM.
5. AT THE BEGINNING OF THE FLEXAMAT, TRANSITION THE INITIAL LEADING EDGE PROPERLY WITH EROSION MATTING OR SOD. IF EXPOSED TO CONCENTRATED FLOWS EMBED 18" VERTICALLY INTO THE SUB GRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER (AS SPECIFIED BY EOR).
6. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. LIGHTLY SPREAD TOPSOIL, SEED AND FERTILIZER OVER INITIAL EDGE. FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
7. INSTALL 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #3 REBAR "U" ANCHOR WITH 18" LEGS.
8. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SOIL (DETERMINED BY EOR).

FLEXAMAT INFORMATION

Manufacturer: Motz Enterprises, Inc.
Product Name: Flexamat
Address: 3153 Madison Road, Cincinnati, OH 45209
Telephone: 513-772-6689
Email: info@Flexamat.com
Website: www.Flexamat.com

FLEXAMAT CHANNEL WIDER THAN 16' NTS

Flexamat PERMANENT EROSION CONTROL



CONSTRUCTION NOTES:
1. AN ENGINEER OR MANUFACTURES REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. GRADE THE SITES SO THAT WATER WILL NOT FLOW ABOVE, BELOW, OR AROUND THE OUTSIDE OF THE AREA PROTECTED WITH FLEXAMAT. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. APPLY SITE SPECIFIC SEED, INCLUDING NATIVE GRASSES DIRECTLY TO THE PREPARED SOIL PRIOR TO FLEXAMAT INSTALLATION.
4. FLEXAMAT ROLLS ARE AVAILABLE IN WIDTHS OF 4', 5.5', 8', 10', 12', & 16'. IT IS THE MANUFACTURERS RECOMMENDATION TO UTILIZE THE WIDEST MATS POSSIBLE TO REDUCE AN ABUNDANCE OF SEAMS OR OVERLAPS.
   a. TO ACHIEVE WIDER WIDTHS, INSTALL MATS ADJACENT TO ONE ANOTHER. INSTALL ADDITIONAL UNDERLAYMENT UNDER ALL ADJOINING MATS. A MINIMUM OF 12" OF UNDERLAYMNET SHALL EXTEND UNDER EACH SIDE OF THE MAT AND DIRECTLY AGAINST THE SUBGRADE.
   b. INSTALL 18" #3 REBAR U-ANCHORS OR STAINLESS STEEL ZIP TIES IN 3' INCREMENTS THE LENGTH OF THE LONGITUDINAL SEAM.
5. AT THE BEGINNING OF THE FLEXAMAT, TRANSITION THE INITIAL LEADING EDGE PROPERLY WITH EROSION MATTING OR SOD. IF EXPOSED TO CONCENTRATED FLOWS EMBED 18" VERTICALLY INTO THE SUB GRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER (AS SPECIFIED BY EOR).
6. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. LIGHTLY SPREAD TOPSOIL, SEED AND FERTILIZER OVER INITIAL EDGE. FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
7. INSTALL 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #3 REBAR "U" ANCHOR WITH 18" LEGS.
8. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SOIL (DETERMINED BY EOR).

FLEXAMAT INFORMATION

Manufacturer: Motz Enterprises, Inc.
Product Name: Flexamat
Address: 3153 Madison Road, Cincinnati, OH 45209
Telephone: 513-772-6689
Email: info@Flexamat.com
Website: www.Flexamat.com

FLEXAMAT TRANSVERSE SEAMS NTS

Flexamat PERMANENT EROSION CONTROL

CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS PRIOR TO INSTALLING FLEXAMAT. CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT FOR APPROVAL BY CITY/ENGINEER; HOWEVER, A LOCAL CONTACT FOR THE PRODUCT MUST BE PRESENT ON-SITE DURING CONSTRUCTION.

LOCAL CONTACT:
SIRISH TULADHAR
CONTACT: 817-805-5341
SIRISH.TULADHAR@HANESCOMPANIES.COM
HANES GEO COMPONENTS
615 WESTPORT PWKY.

TO THE BEST OF OUR KNOWLEDGE KIMLEY-HORN AND ASSOCIATES HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

NOTE
ALL DRAINAGE STRUCTURES SHALL UTILIZED 4,200 PSI CONCRETE (6.5 SACK)

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN

NOTE
N.C.T.C.O.G. STANDARD DETAILS HAVE BEEN MODIFIED BY THE CITY OF ROCKWALL. CONTRACTOR SHALL REFER TO THE CITY OF ROCKWALL STANDARDS OF DESIGN AND CONSTRUCTION (OCTOBER 2016) FOR MODIFICATIONS.

TABLE OF DIMENSIONS & REINFORCING STEEL (Wings for One Structure End)												
Dimensions					Variable Reinforcing				Estimated Quantities per ft of wing length (2-Wings)	
					Bars J1		Bars J2			
Maximum Wingwall Height Hw	W	X	Y	Z	Size	Spa	Size	Spa	Reinf (Lb/Ft)	Conc (CY/Ft)
2'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	33.73	0.248
3'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.07	0.261
3'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.74	0.273
4'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	38.41	0.285
4'-6"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	41.75	0.330
5'-0"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.09	0.343
5'-6"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.75	0.355
6'-0"	3'-2"	1'-6"	1'-0"	7"	#4	1'-0"	#4	1'-0"	46.42	0.367
7'-0"	3'-8"	1'-9"	1'-3"	7"	#4	1'-0"	#4	1'-0"	52.77	0.414
8'-0"	4'-2"	2'-3"	1'-6"	8"	#5	1'-0"	#4	1'-0"	60.19	0.486
9'-0"	4'-8"	2'-3"	1'-9"	8"	#4	6"	#4	6"	81.49	0.535
10'-0"	5'-2"	2'-6"	2'-0"	8"	#5	6"	#4	6"	97.25	0.584
11'-0"	5'-8"	2'-9"	2'-3"	8"	#6	6"	#5	6"	133.65	0.634
12'-0"	6'-2"	3'-0"	2'-6"	9"	#7	6"	#5	6"	162.29	0.721
13'-0"	6'-8"	3'-3"	2'-9"	11"	#7	6"	#5	6"	178.80	0.856
14'-0"	7'-2"	3'-6"	3'-0"	11"	#8	6"	#5	6"	216.78	0.959
15'-0"	7'-8"	4'-0"	3'-0"	1'-1"	#9	6"	#6	6"	283.06	1.068
16'-0"	8'-2"	4'-6"	3'-0"	1'-3"	#9	6"	#6	6"	297.02	1.234

TABLE OF WINGWALL REINFORCING (2-Wings)

Bar	Size	No.	Spa
D	#5	~	1'-0"
E	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	4	~
M	#4	4	~
P	#4	~	1'-0"
R	#5	6	~
V	#4	~	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	~	1'-6"
Q	#4	1	~
Reinf (Lb/Ft)			2.45
Conc (CY/Ft)			0.037

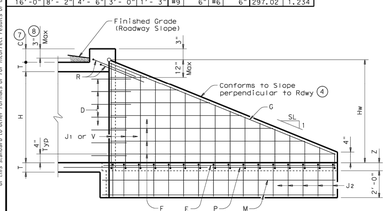
WING DIMENSION CALCULATIONS:

Formulas: (All values are in Feet)
Hw = H + T + C – 0.250'
A = (Hw – 0.333') (SL)
B = (A) Tangent (30°)
Lw = (A) ÷ Cosine (30°)
For Cast-in-place culverts:
Ltw = (N) (S) + (N+1) (U)
For Precast culverts:
Ltw = (N) (2U+S) + (N–1) (0.500')
Total Wingwall Area (Two Wings ~ S.F.) = (Hw + 0.333') (Lw)

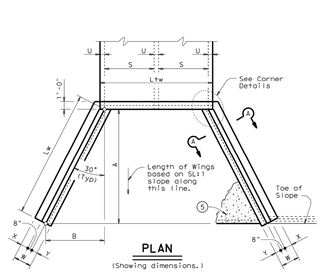
Hw = Height of Wingwall
SL1 = Side Slope Ratio (Horizontal:1 Vertical)
Lw = Length of Wingwall
Ltw = Culvert Toewall Length
N = Number of Culvert Spans

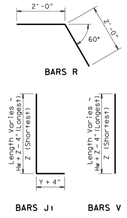
See applicable box culvert standard for H, S, T, and U values.

1. Extend Bars P 3'-0" minimum into bottom slab of Box Culvert.
2. Adjust to fit as necessary to maintain 1 1/4" clear cover and 4" minimum between bars.
3. Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings multiply the tabulated values by Lw.
4. Recommended values of Slope are: 2:1, 3:1, 4:1, & 6:1.
5. When shown elsewhere on the plans, a 5" deep concrete riprap shall be constructed. Payment for riprap shall be as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, the riprap shall have a 6" wide by 1'-6" deep reinforced concrete toewall along all edges adjacent to natural grounds. The toewall will be reinforced by extending typical riprap reinforcing into the toewall; construction joints or grooved joints, oriented in the direction of flow, shall extend across the full distance of the riprap, at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B–B will not be required.
6. At Contractor's option, Culvert Toewall may be ended flush with Wingwall Toewall. Adjust reinforcing from that shown as necessary.
7. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to EC0 standard. For structures with T6 bridge rail, refer to T6-0M standard. For structures with traffic rail, other than T6, refer to RAC standard.
8. For vehicle safety, curb heights and wall heights shall be reduced, if necessary, to provide a maximum 3" projection above finished grade. No changes will be made in quantities and no additional compensation will be allowed for this work.

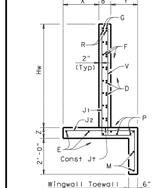


INSIDE ELEVATION
(Showing reinforcing. Culvert and Culvert Toewall reinforcing not shown for clarity.)

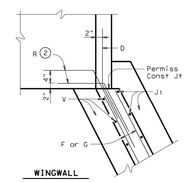




GENERAL NOTES:
Designed according to AASHTO LRFD Specifications.
All reinforcing steel shall be Grade 60.
Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.
All reinforcing bars shall be adjusted to provide a minimum of 1 1/2" clear cover.
When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer.
See BCS sheet for additional dimensions and information.
The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

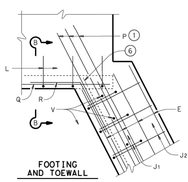


SECTION A-A

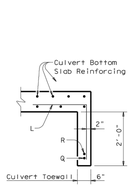


WINGWALL

CORNER DETAILS
(Culvert and Culvert Toewall reinforcing not shown for clarity.)



FOOTING AND TOEWALL



SECTION B-B

Texas Department of Transportation — Bridge Division Standard
CONCRETE WINGWALLS WITH FLARED WINGS FOR 0° SKEW BOX CULVERTS
FW-0
FILE: fw-0d06.dgn — DN: GAF — CK: GAF — DW: TxDOT — CK: GAF
©TxDOT February 2010 — CONT / SECT / JOB / HIGHWAY
REVISIONS 11-10: Add data for synthetic fibers — DIST / COUNTY / SHEET NO.

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No.	REVISIONS	DATE	BY

Kimley»Horn
13455 NOEL RD. TWO GALLERIA OFFICE TOWER
SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928
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6/1/2021
STATE OF TEXAS — JOSEPH HORNISHER — 124909 — LICENSED PROFESSIONAL ENGINEER

KHA PROJECT 064539200
DATE: Mar-21
SCALE: AS SHOWN
DESIGNED BY: JWH
DRAWN BY: ZEH
CHECKED BY: MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

STORM DETAILS (1 OF 2)
RECORD DRAWINGS

SHEET NUMBER
C-311

TABLE OF DIMENSIONS & REINFORCING STEEL
(Wings for One Structure End)

Dimensions					Variable Reinforcing				Estimated ③ Quantities per ft of wing length (2-Wings)	
					Bars J1		Bars J2			
Maximum Wingwall Height Hw	W	X	Y	Z	Size	Spa	Size	Spa	Reinf (Lb/Ft)	Conc (CY/Ft)
2'-6"	2'- 5"	1'- 0"	9"	7"	#4	1'-0"	#4	1'-0"	33.73	0.248
3'-0"	2'- 5"	1'- 0"	9"	7"	#4	1'-0"	#4	1'-0"	37.07	0.261
3'-6"	2'- 5"	1'- 0"	9"	7"	#4	1'-0"	#4	1'-0"	37.74	0.273
4'-0"	2'- 5"	1'- 0"	9"	7"	#4	1'-0"	#4	1'-0"	38.41	0.285
4'-6"	3'- 2"	1'- 6"	1'- 0"	7"	#4	1'-0"	#4	1'-0"	41.75	0.330
5'-0"	3'- 2"	1'- 6"	1'- 0"	7"	#4	1'-0"	#4	1'-0"	45.09	0.343
5'-6"	3'- 2"	1'- 6"	1'- 0"	7"	#4	1'-0"	#4	1'-0"	45.75	0.355
6'-0"	3'- 2"	1'- 6"	1'- 0"	7"	#4	1'-0"	#4	1'-0"	46.42	0.367
7'-0"	3'- 8"	1'- 9"	1'- 3"	7"	#4	1'-0"	#4	1'-0"	52.77	0.414
8'-0"	4'- 2"	2'- 0"	1'- 6"	8"	#5	1'-0"	#4	1'-0"	60.19	0.486
9'-0"	4'- 8"	2'- 3"	1'- 9"	8"	#4	6"	#4	6"	81.49	0.535
10'-0"	5'- 2"	2'- 6"	2'- 0"	8"	#5	6"	#4	6"	97.25	0.584
11'-0"	5'- 8"	2'- 9"	2'- 3"	8"	#6	6"	#5	6"	133.65	0.634
12'-0"	6'- 2"	3'- 0"	2'- 6"	9"	#7	6"	#5	6"	162.29	0.721
13'-0"	6'- 8"	3'- 3"	2'- 9"	11"	#7	6"	#5	6"	178.80	0.856
14'-0"	7'- 2"	3'- 6"	3'- 0"	1'- 0"	#8	6"	#5	6"	216.78	0.959
15'-0"	7'- 8"	4'- 0"	3'- 0"	1'- 1"	#9	6"	#6	6"	283.06	1.068
16'-0"	8'- 2"	4'- 6"	3'- 0"	1'- 3"	#9	6"	#6	6"	297.02	1.234

TABLE OF WINGWALL REINFORCING (2-Wings)

Bar	Size	No.	Spa
D	#5	~	1'-0"
E	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	4	~
M	#4	4	~
P	#4	~	1'-0"
R	#5	6	~
V	#4	~	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	~	1'-6"
Q	#4	1	~
Reinf (Lb/Ft)			2.45
Conc (CY/Ft)			0.037

WING DIMENSION CALCULATIONS:

Formulas: (All values are in Feet)
Hw = H + T + C - 0.250'
Lw = (Hw - 0.333') (SL)
For Cast-In-place culverts:
Ltw = (N) (S) + (N+1) (U)
For Precast culverts:
Ltw = (N) (2U + S) + (N - 1) (0.5')
Total Wingwall Area (Two Wings ~ S.F.)=(Hw + 0.333') (Lw)

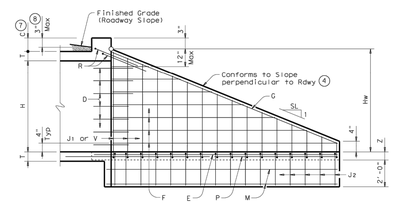
Hw = Height of Wingwall
SL:1 = Side Slope Ratio (Horizontal:1 Vertical)
Lw = Length of Wingwall
Ltw = Culvert Toewall Length
N = Number of Culvert Spans

See applicable box culvert standard for H, S, T, and U values.

1. Extend Bars P 3'-0" minimum into bottom slab of Box Culvert.
2. Adjust to fit as necessary to maintain 1 ¼" clear cover and 4" minimum between bars.
3. Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings multiply the tabulated values by Lw.
4. Recommended values of Slope are: 2:1, 3:1, 4:1, & 6:1.
5. When shown elsewhere on the plans, a 5" deep concrete riprap shall be constructed. Payment for riprap shall be as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, the riprap shall have a 6" wide by 1'-6" deep reinforced concrete toewall along all edges adjacent to natural ground; the toewall shall be reinforced by extending typical riprap reinforcing into the toewall; construction joints or grooved joints, oriented in the direction of flow, shall extend across the full distance of the riprap, at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.
6. At Contractor's option, Culvert Toewall may be ended flush with Wingwall Toewall. Adjust reinforcing from that shown as necessary.
7. 0" min to 5'-0" max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail or curbs taller than 1'-0", refer to ECD standard. For structures with T6 bridge rail, refer to T6-TM standard. For structures with traffic rail, other than T6, refer to RAC standard.
8. For vehicle safety, curb heights and wall heights shall be reduced, if necessary, to provide a maximum 3" projection above finished grade. No changes will be made in quantities and no additional compensation will be allowed for this work.

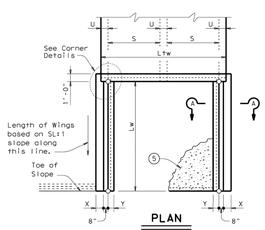
GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.
All reinforcing steel shall be Grade 60.
Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.
All reinforcing bars shall be adjusted to provide a minimum of 1 ¼" clear cover.
When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated as directed by the Engineer.
See BCS sheet for additional dimensions and information.
The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.



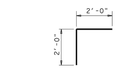
INSIDE ELEVATION

(Showing reinforcing. Culvert and Culvert Toewall reinforcing not shown for clarity.)



PLAN

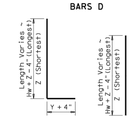
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BARS R

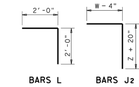


BARS D



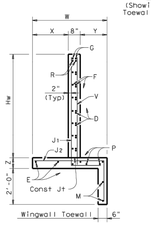
BARS J1

BARS V

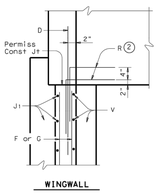


BARS L

BARS J2

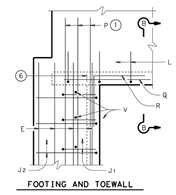


SECTION A-A

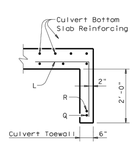


WINGWALL

CORNER DETAILS



FOOTING AND TOEWALL



SECTION B-B ⑤

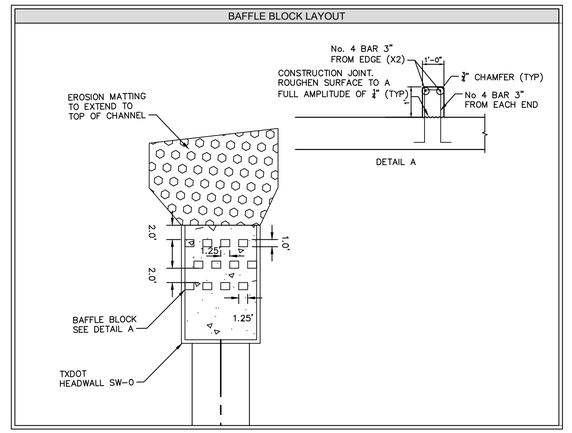
Texas Department of Transportation — Bridge Division Standard

CONCRETE WINGWALLS WITH STRAIGHT WINGS FOR 0° SKEW BOX CULVERTS

SW-O

FILE: sw-0skb.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: GAF
©TxDOT February 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS				
11-20: Add note for synthetic fibers.	DIST	COUNTY		SHEET NO.

BAFFLE BLOCK LAYOUT



NOTE
ALL DRAINAGE STRUCTURES SHALL UTILIZED 4,200 PSI CONCRETE (6.5 SACK)

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by the Texas Department of Transportation for any purpose whatsoever. The Texas Department of Transportation assumes no responsibility and shall not be liable for any damages resulting from the use of this standard or for any errors or for incorrect results, or damages resulting from its use.

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No.	REVISIONS	DATE	BY

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SUITE 700 DALLAS, TX 75240
PHONE: 972-770-1300 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928

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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

Joseph Hornisher

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

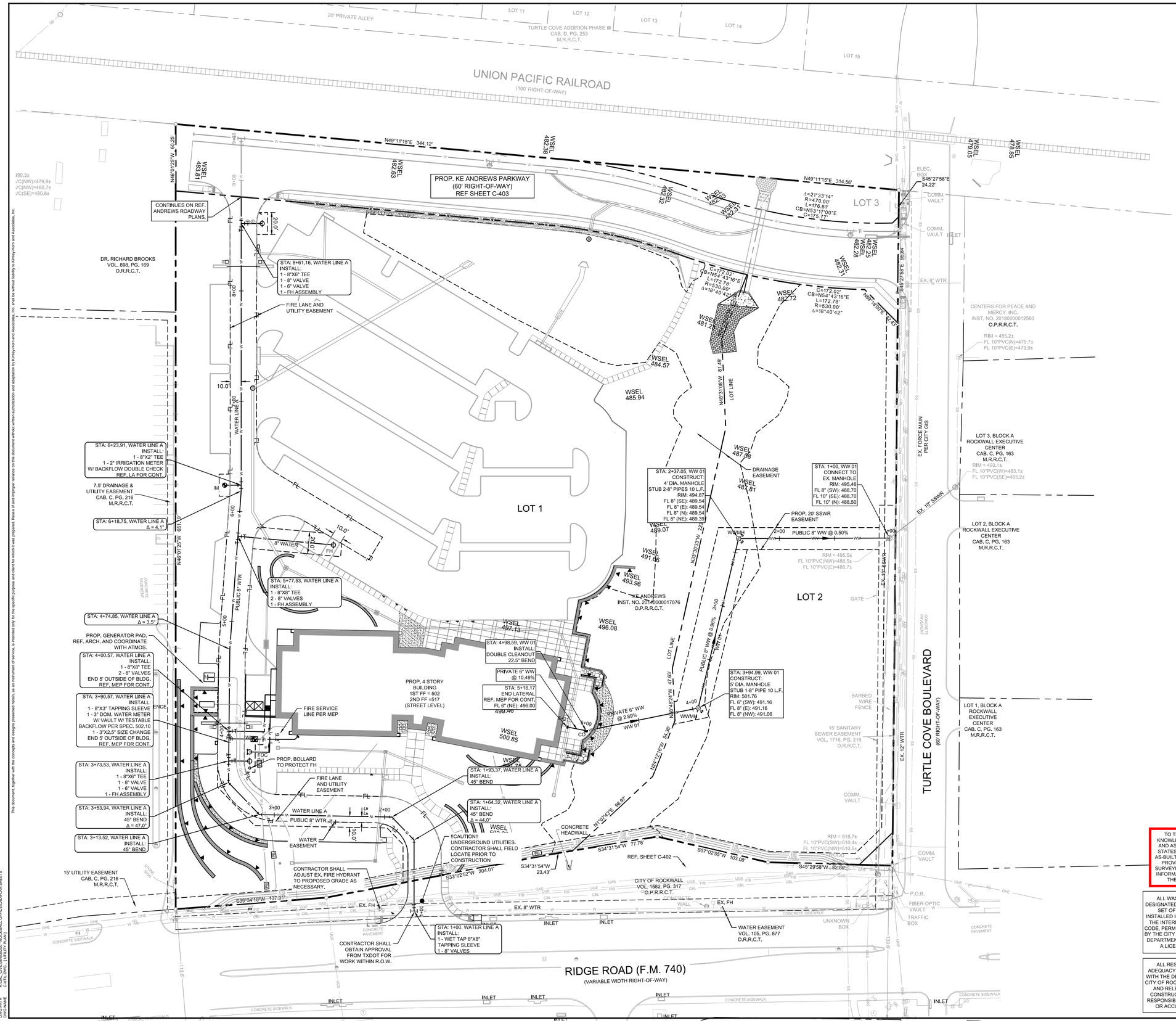
KE ANDREWS OFFICE
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CITY OF ROCKWALL, TEXAS

STORM DETAILS (2 OF 2)

RECORD DRAWINGS

SHEET NUMBER
C-312

IMAGES Logo Only
XREFS ADA.dwg
LAST SAVED 3/4/2021 4:12 PM
PLOTTED BY DELLS, CHRIS 3/5/2021 1:25 PM
PLOTSTYLE KLEINFELDER.ctb
DWG NAME K:\DAL_PROJECTS\ROCKWALL OFFICE\CAD\PLAN SHEETS UTILITY DETAILS.DWG | C-308 STORM DETAILS (2 OF 2)



NOTES

1. REFER TO SHEET C-002 FOR GENERAL NOTES.
2. UTILITY CONNECTIONS TERMINATE 5' FROM BUILDING ENVELOPE. SEE ARCHITECT AND MEP PLANS FOR CONTINUATION.
3. VALVES 12" AND UNDER WILL BE RESILIENT SEAT GATE VALVES (RSGV).
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6. TRANSFORMER LOCATIONS SUBJECT TO CHANGE.
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8. SEE MEP PLANS FOR FRANCHISE UTILITIES SITE ROUTING.
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10. ALL FITTINGS SHALL BE OF DOMESTIC MANUFACTURE AND SHALL BE MECHANICALLY RESTRAINED.
11. REFER TO TCEQ DESIGN GUIDELINES (CHAPTER 217 AND 290) FOR ALL UTILITY CROSSINGS.

LEGEND

PROPERTY LINE	
PROPOSED WATER	W W
EXISTING WATER	W W
PROPOSED SANITARY SEWER	SS SS
EXISTING SANITARY SEWER	SS SS
PROPOSED STORM SEWER	
PROPOSED UNDERGROUND ELECTRIC LINE	UGE
EXISTING UNDERGROUND ELECTRIC LINE	UGE
PROPOSED NATURAL GAS LINE	GAS GAS
EXISTING NATURAL GAS LINE	GAS GAS
PROPOSED WATER VALVE	
EXISTING WATER VALVE	
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED WATER METER	
PROPOSED SANITARY SEWER CLEANOUT	
PROPOSED SANITARY SEWER MANHOLE	
EXISTING SANITARY SEWER MANHOLE	

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BENCH MARK LIST

VERTICAL DATUM BASED ON CITY OF ROCKWALL GEODETIC CONTROL SYSTEM

BM 50 CITY OF ROCKWALL MONUMENT "RESET #1"
ELEV. 567.70

BM 53 "X" CUT SET ON THE MIDDLE OF A CONCRETE CURB INLET LOCATED ON THE NORTH SIDE OF TURTLE COVE BOULEVARD AND APPROXIMATELY 650 FEET NORTHWEST FROM THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 482.12

BM 54 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT THE NORTHWEST CORNER OF THE INTERSECTION OF TURTLE COVE BOULEVARD AND RIDGE ROAD.
ELEV. 524.67

BM 55 "X" CUT SET ON THE MIDDLE OF A CURB RADIUS AT ON THE NORTHWEST SIDE OF RIDGE ROAD APPROXIMATELY 685 FEET SOUTHWEST FROM THE INTERSECTION OF RIDGE ROAD AND TURTLE COVE BOULEVARD.
ELEV. 527.03

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ELEV. 489.81

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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

No.	REVISIONS	DATE	BY

KHA PROJECT 064539200
DATE May-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

WATER & SANITARY PLAN
RECORD DRAWINGS

SHEET NUMBER
C-401

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DEMOLITION PLAN

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ELEV. 489.81

LOT 1, BLOCK A
LAKE POINTE HEALTH SCIENCE CENTER
CAB. C, PG. 216
M.R.R.C.T.

15' UTILITY EASEMENT
CAB. C, PG. 216
M.R.R.C.T.

REMOVE EX. POLE W/ TRANSFORMER - EP - 3

REMOVE EX. POLE W/ GUY WIRE - EP - 2

REMOVE EX. POLE W/ GUY WIRE - EP - 4

EX. POLE TO REMAIN EP - 1

REMOVE EX. POLE W/ GUY WIRE - EP - 5

EX. POLE TO REMAIN EP - 6

EXISTING OVERHEAD TO BE REMOVED

S39°34'10"W 137.01'
S33°02'52"W 204.01'
S34°31'54"W 23.43'
S34°31'54"W 77.78'
S57°02'55"W 103.08'
S45°29'58"W 82.89'
N1°07'43"E 98.97'
N48°48'24"W 47.63'
N39°12'16"W 54.36'

BARBED WIRE FENCE
COMM. VAULT
FIBER OPTIC VAULT
P.O.B.
CONCRETE PAVEMENT

TURTLE COVE BOULEVARD
(60' RIGHT-OF-WAY)

RIDGE ROAD (F.M. 740)
(VARIABLE WIDTH RIGHT-OF-WAY)

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

PROPOSED LAYOUT

80,000 S.F.
SINGLE TENANT
OFFICE BUILDING

PROP, THREE PHASE TRANSFORMER PAD = 515.00'

PROP, 10' ELECTRICAL EASEMENT BY SEPARATE INSTRUMENT

2-4" CONDUITS PER ONCOR STANDARDS

PRIMARY PULL BOX PER ONCOR STANDARDS (48"X72"X36")

COMMUNICATION CONDUIT AND JUNCTION BOX SHOWN FOR REF ONLY, REF. TO T1.00 FOR DETAIL

GAS SERVICE LINE SHOWN FOR REF, ONLY REF. TO ATMOS/MEP FOR DETAILS

COMMUNICATION CONDUIT AND JUNCTION BOX SHOWN FOR REF ONLY, REF. TO T1,00 FOR DETAIL

2-6" CONDUITS PER ONCOR STANDARDS

PRIMARY PULL BOX PER ONCOR STANDARDS (48"X96"X48")

10' UTILITY EASEMENT ALONG PL

1-4" CONDUITS PER SUDDENLINK STANDARDS

1-4" CONDUITS PER AT&T STANDARDS

2-2" CONDUITS PER CHARTER STANDARDS

15' UTILITY EASEMENT
CAB. C, PG. 216
M.R.R.C.T.

PROP. COMM. MANHOLE

EX. POWER POLE FOR COMM. RISER

PROP. POLE FOR TRANSFORMER SERVICE PP - 1

PROP, RISER W/ GUY WIRE PP - 2

SECONDARY PULL BOX PER ONCOR STANDARDS TO BE FIELD LOCATED (17"X30")

1-2" CONDUIT FOR EXISTING STREET LIGHT PER ONCOR STANDARDS

PROP, RISER W/ GUY WIRE PP - 3

WATER EASEMENT
VOL. 105, PG. 877
D.R.R.C.T.

15' SANITARY SEWER EASEMENT
VOL. 1716, PG. 219
D.R.R.C.T.

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RECORD DRAWINGS

No.	REVISIONS	DATE	BY
1	PERMIT SET	2/14/2020	
2	PCCO-08	3/31/2020	

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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
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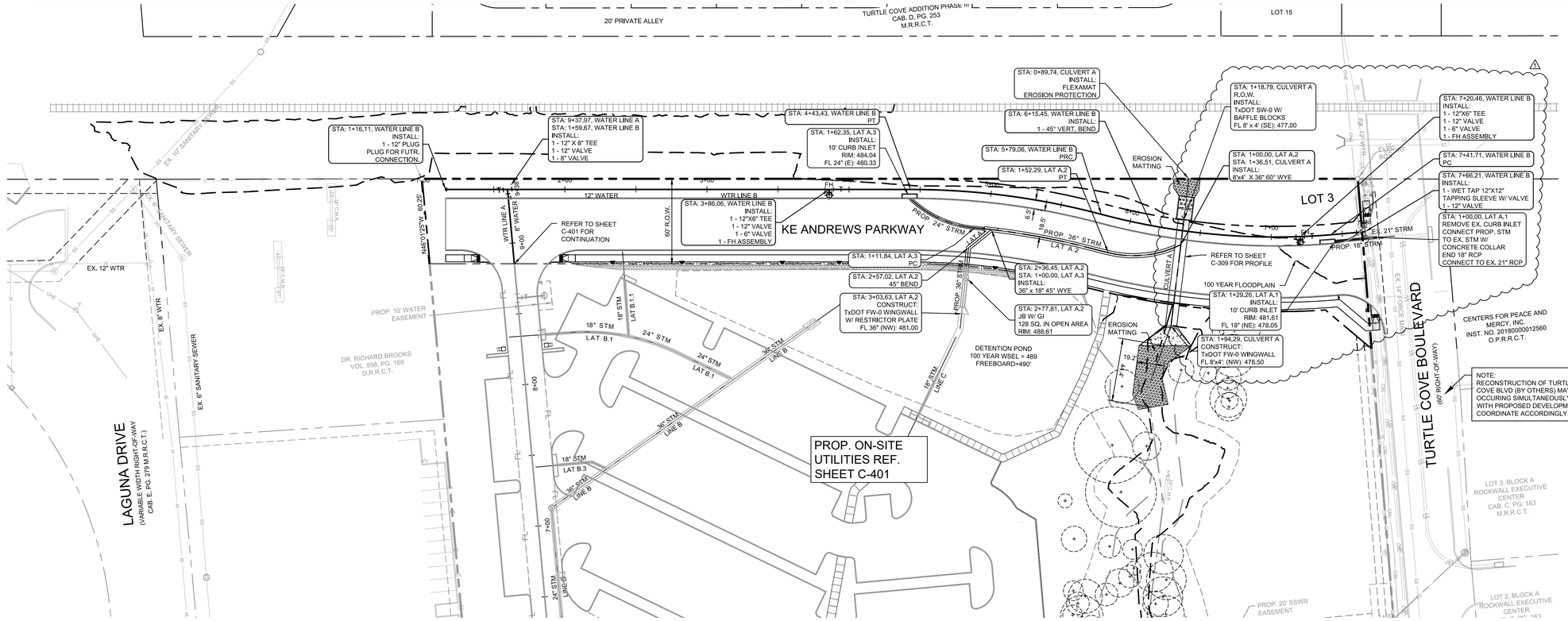
DRY UTILITY PLAN

SHEET NUMBER
C-402

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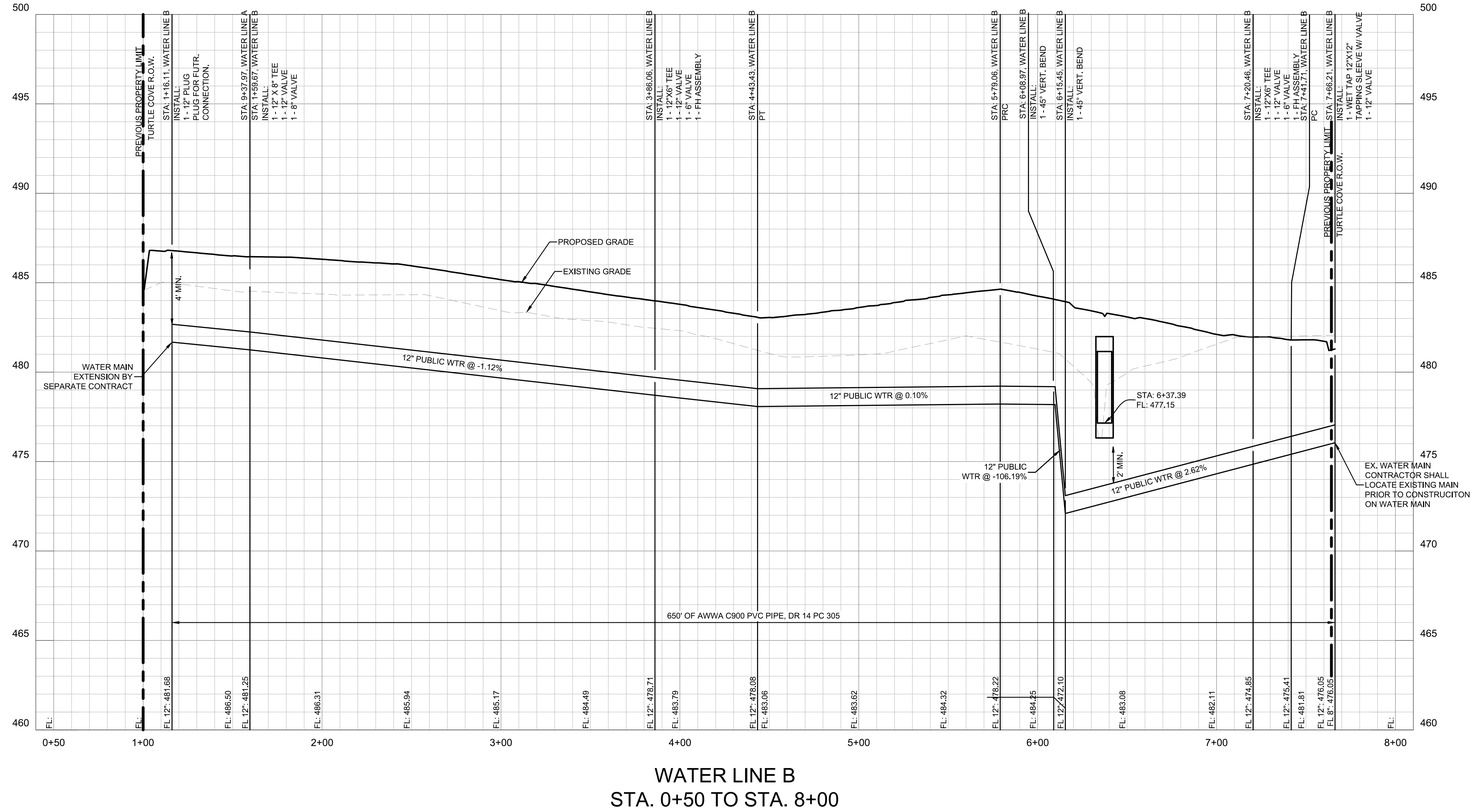
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C-DRY UTILITY PLAN.DWG - [C-402(DRY UTILITY PLAN)]



1. DRAINAGE STRUCTURE RESTRICTOR PLATE FOR OUTFALL STRUCTURE AT STA 3+03.63 LAT A2 SHALL HAVE A 6.25" (H) X 6.25" (W) OPENING AT THE FL.

2. DRAINAGE STRUCTURE AT STA 2+77.81 LAT A2 SHALL HAVE A GRATE INLET WITH THE OPEN AREA SHOWN. IF THE CONTRACTOR ELECTS TO UTILIZE A LARGER GRATE INLET THE RIM, THE CONTRACTOR WILL NEED TO COORDINATE WITH THE ENGINEER ON RAISING THE RIM ELEVATION.



WATER LINE B
STA. 0+50 TO STA. 8+00

LEGEND	
PROPERTY LINE	
PROPOSED WATER	W W
EXISTING WATER	W W
PROPOSED SANITARY SEWER	SS SS
EXISTING SANITARY SEWER	SS SS
PROPOSED STORM SEWER	
PROPOSED UNDERGROUND ELECTRIC LINE	UGE
EXISTING UNDERGROUND ELECTRIC LINE	UGE
PROPOSED NATURAL GAS LINE	GAS GAS
EXISTING NATURAL GAS LINE	GAS GAS
PROPOSED WATER VALVE	
EXISTING WATER VALVE	
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED WATER METER	
PROPOSED SANITARY SEWER CLEANOUT	
PROPOSED SANITARY SEWER MANHOLE	
EXISTING SANITARY SEWER MANHOLE	

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ELEV. 489.81

No.	REVISIONS	DATE	BY
1	CURB INLET RFI 011	6/11/2020	

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Joseph Hornisher

KHA PROJECT 064539200
DATE Mar-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

KE ANDREWS
UTILITIES PLAN
AND PROFILE
RECORD DRAWINGS

SHEET NUMBER
C-403

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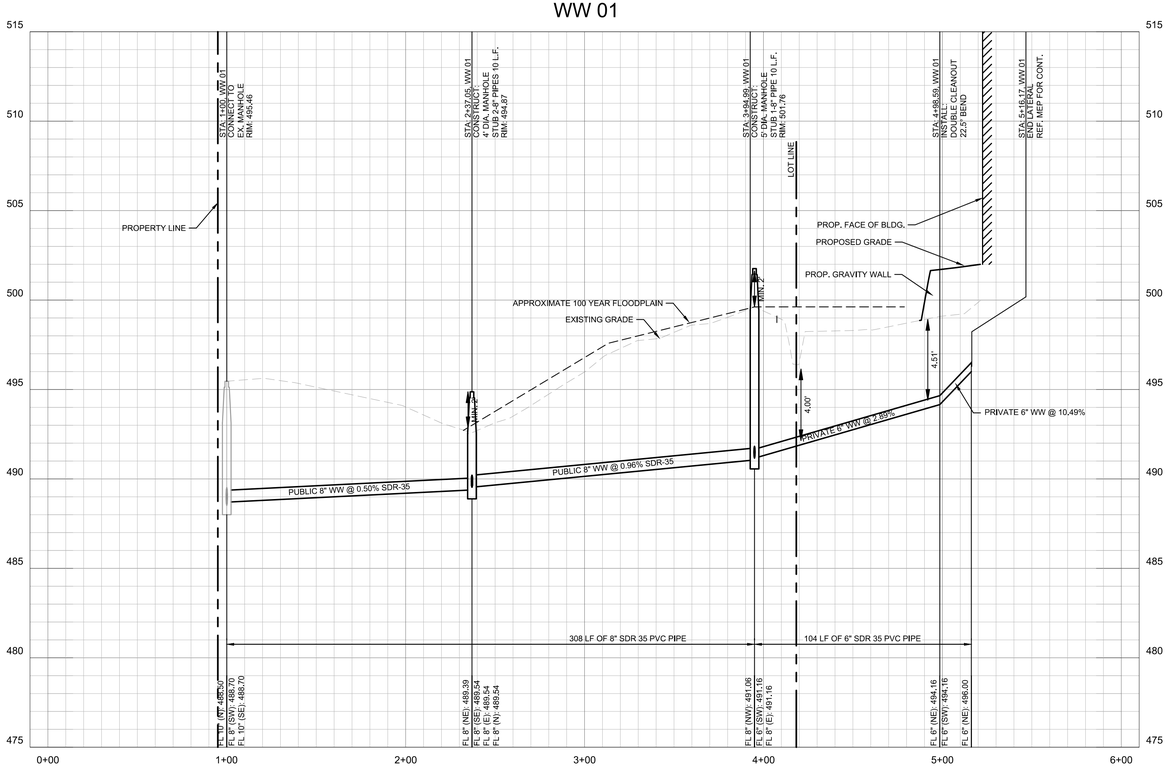
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DWG NAME C:\JTIL_PLAN\PROJ DWG - [C-403 ROADWAY UTILITIES PLAN AND PROFILE]

idraw - iDont - iDuhh - iDuvv - uDid - xattwas - xfoodplain - xpnetmaptax - xtrees - xuld - xzhxdy - txurfcg - txstrn - cstsrr - xzhdtrh - twxdr - cstrn - charlsoupe

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xGrid xbase xBndy xwbase xexcel xutil xsewr xwatr xfaoth xfloodplain xstm xlandscape
J:\PROJECTS\KE ANDREWS OFFICE\CAD\PLAN SHEETS

WW 01





GRAPHIC SCALE IN FEET
0 20 40 80

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ELEV. 489.81

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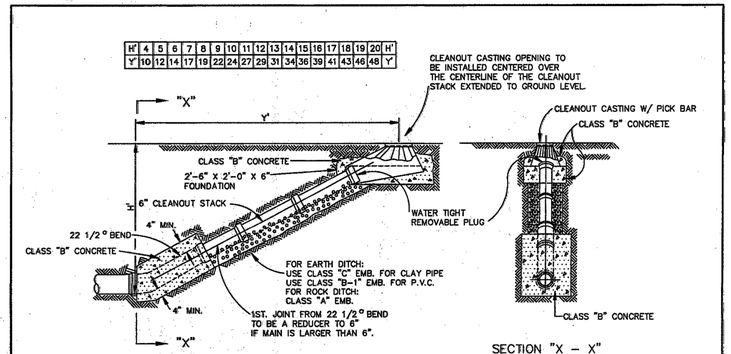
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CHECKED BY MAL

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PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

WASTEWATER PROFILE

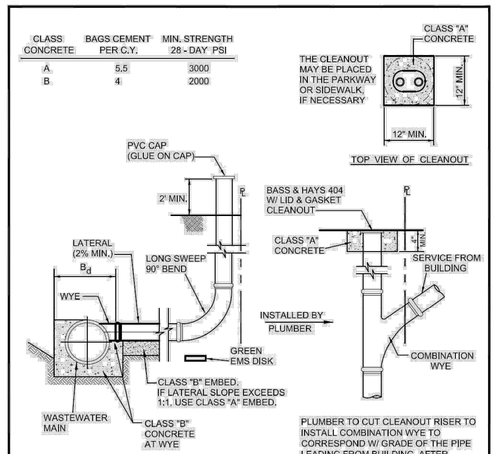
RECORD DRAWINGS

SHEET NUMBER
C-404

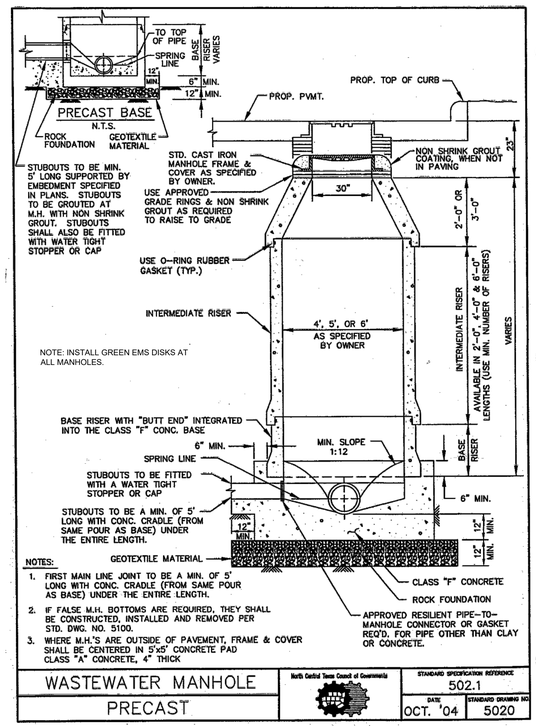


STANDARD DRAWING NO.	WASTEWATER MAIN	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE	
5110	CLEANOUT		502.2	
			DATE: OCT. '04	STANDARD DRAWING NO.: 5110

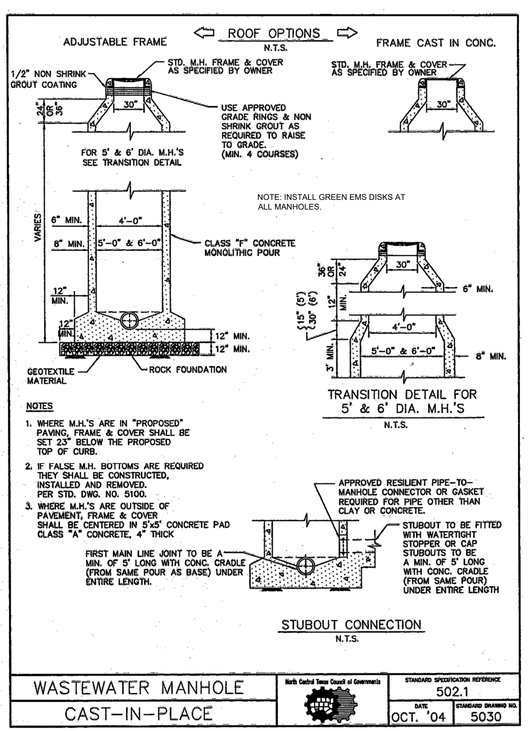
City of Rockwall
The New Horizon



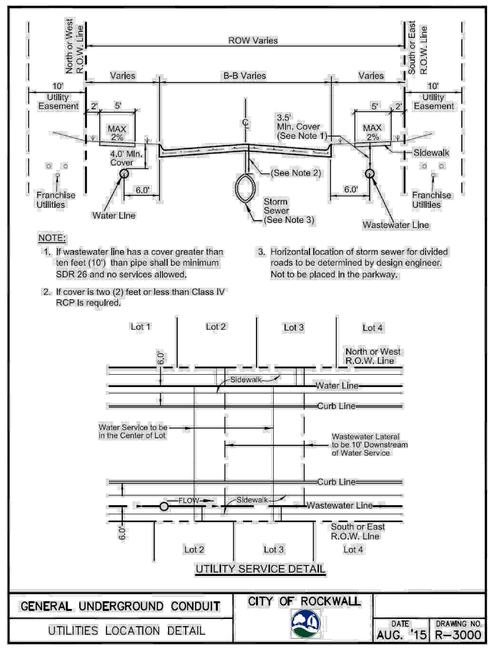
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CONNECTIONS – RESIDENTIAL		DATE: AUG. '15 / DRAWING NO.: R-5120



WASTEWATER MANHOLE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE	
PRECAST		502.1	
		DATE: OCT. '04	STANDARD DRAWING NO.: 5020



WASTEWATER MANHOLE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE	
CAST-IN-PLACE		502.1	
		DATE: OCT. '04	STANDARD DRAWING NO.: 5030



GENERAL UNDERGROUND CONDUIT	CITY OF ROCKWALL	
UTILITIES LOCATION DETAIL		DATE: AUG. '15 / DRAWING NO.: R-3000

NOTE
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NOTE
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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER

KHA PROJECT 064539200	DATE Mar-21	SCALE AS SHOWN	DESIGNED BY JWH	DRAWN BY ZEH	CHECKED BY MAL

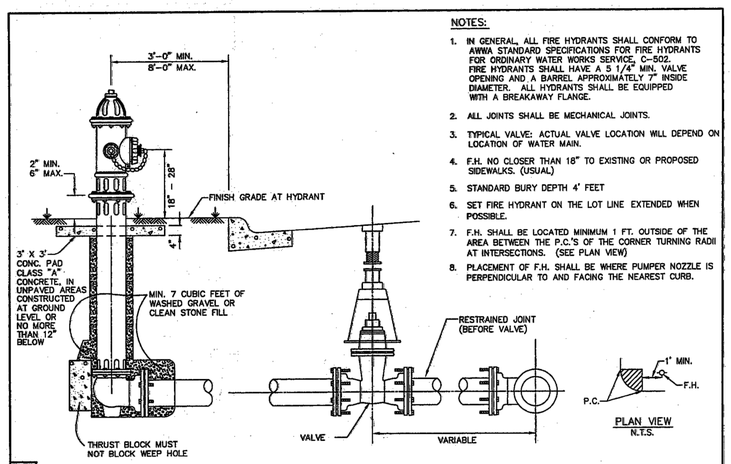
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WASTEWATER DETAILS
RECORD DRAWINGS

SHEET NUMBER
C-405

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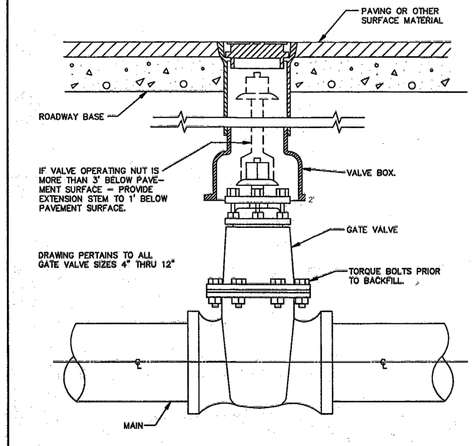


NOTES:

1. IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502. FIRE HYDRANTS SHALL HAVE A 5 1/4" MIN. VALVE OPENING AND A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE.
2. ALL JOINTS SHALL BE MECHANICAL JOINTS.
3. TYPICAL VALVE: ACTUAL VALVE LOCATION WILL DEPEND ON LOCATION OF WATER MAIN.
4. F.H. NO CLOSER THAN 18" TO EXISTING OR PROPOSED SIDEWALKS. (USUAL)
5. STANDARD BURY DEPTH 4' FEET
6. SET FIRE HYDRANT ON THE LOT LINE EXTENDED WHEN POSSIBLE.
7. F.H. SHALL BE LOCATED MINIMUM 1 FT. OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADII AT INTERSECTIONS. (SEE PLAN VIEW)
8. PLACEMENT OF F.H. SHALL BE WHERE PUMPER NOZZLE IS PERPENDICULAR TO AND FACING THE NEAREST CURB.

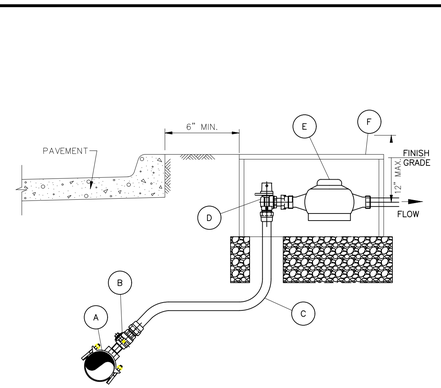
FIRE HYDRANT INSTALLATION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.3	
		DATE OCT. '04	STANDARD DRAWING NO. 4120

NOTE:
IN UNPAVED AREAS, INSTALL 2' x 2' x 6" CONCRETE VALVE PAD FLUSH WITH THE TOP OF VALVE BOX. REINFORCE WITH #3 BARS ON 6" CENTERS BOTH WAYS.



GATE VALVE BOX AND EXTENSION STEM
N.T.S.

GATE VALVE 4" TO 12" BOX & EXTENSION STEM	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.6	
		DATE OCT. '04	STANDARD DRAWING NO. 4050



NOTES:

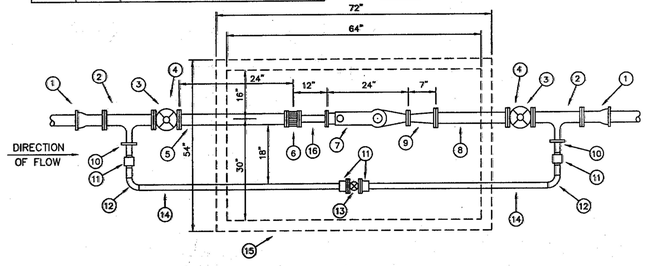
1. SERVICE PIPE SHALL BE 1" OR 2" SEAMLESS 250 PSI BLUE COLORED POLYETHYLENE ASTM D2737, SDR 9, CTS WATER SERVICE PIPE, NSF61 APPROVED.
2. TOP OF METER BOXES SHALL BE 1" ABOVE FINISHED GRADE.
3. METER BOX SHALL HAVE A MINIMUM OF 6" OF GRAVEL BENEATH METER BOX AS ILLUSTRATED.
4. LOCATION OF THE METER BOX SHALL BE LOCATED TO ALLOW 6" CLEARANCE FROM CURB.

MATERIAL LIST:
A. SERVICE SADDLE SHALL BE BRASS WITH DOUBLE BRONZE FLATTENED STRAPS OR STAINLESS STEEL DOUBLE BOLT WIDE STRAPS. NO BANDED OR HINGED STRAPS SHALL BE ALLOWED. SERVICE SADDLES SHALL MEET AWWA/CC TAPPING OUTLET (TAPERED THREADS) REQUIREMENTS. ALL SERVICE SADDLES SHALL BE PER APPROVED WATER MATERIALS LIST.
B. 1" OR 2" CORPORATION STOP PER APPROVED WATER MATERIALS LIST.
C. 1" OR 2" SERVICE PIPE SHALL BE SEAMLESS 250 PSI BLUE COLORED POLYETHYLENE ASTM D2737, SDR9, CTS WATER SERVICE PIPE, NSF61 APPROVED.
D. 1" OR 2" LOCKING ANGLE METER VALVE (STOP) PER APPROVED WATER MATERIALS LIST.
E. WATER METERS CENTERED IN BOX AS ILLUSTRATED.
F. ROUND METER BOX PER APPROVED WATER MATERIALS LIST.

WATER SERVICE INSTALLATION 1" OR 2" LINE	CITY OF ROCKWALL	DATE AUG '19	DRAWING NO. R-4130

MATERIALS LIST		
PART NO.	QUANTITY	DESCRIPTION
①	2 EA.	4" X 12" D.I. NIPPLE M.J. X F.
②	2 EA.	4" X 2" D.I. TEE F. X F.
③	2 EA.	4" GATE VALVE F. X F.
④	2 EA.	VALVE STACK RISER COVER & LID
⑤	1 EA.	4" X 24" D.I. NIPPLE F. X SLEEVE
⑥	1 EA.	4" X 3" FLANGED RED. COUPLING ADAPTER
⑦	1 EA.	3" METER AS SPECIFIED (TYPE C.T. SHOWN)
⑧	1 EA.	4" X 18" D.I. NIPPLE F. X F.
⑨	1 EA.	4" X 3" D.I. REDUCER F. X F.

MATERIALS LIST		
PART NO.	QUANTITY	DESCRIPTION
⑩	2 EA.	2" COMPANION FLANGE
⑪	4 EA.	2" SOL. X OSIP UNION
⑫	2 EA.	2" SOL. 90° ELL
⑬	1 EA.	2" BALL VALVE
⑭	2 EA.	2" COPPER PIPE, APPROX. 5'
⑮	1 EA.	PRECAST METER VAULT
	1 EA.	VAULT FLOOR (NOT SHOWN)
	1 EA.	ACCESS HATCH (NOT SHOWN)
⑯	1 EA.	3"x12" D.I. NIPPLE F. x SLEEVE



4" DOMESTIC SERVICE WITH 3" METER	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 502.10	
		DATE OCT. '04	STANDARD DRAWING NO. 4180

NOTE
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6/1/2021
STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED PROFESSIONAL ENGINEER
Joseph Hornisher

KHA PROJECT 064539200
DATE M6-21
SCALE AS SHOWN
DESIGNED BY JWH
DRAWN BY ZEH
CHECKED BY MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

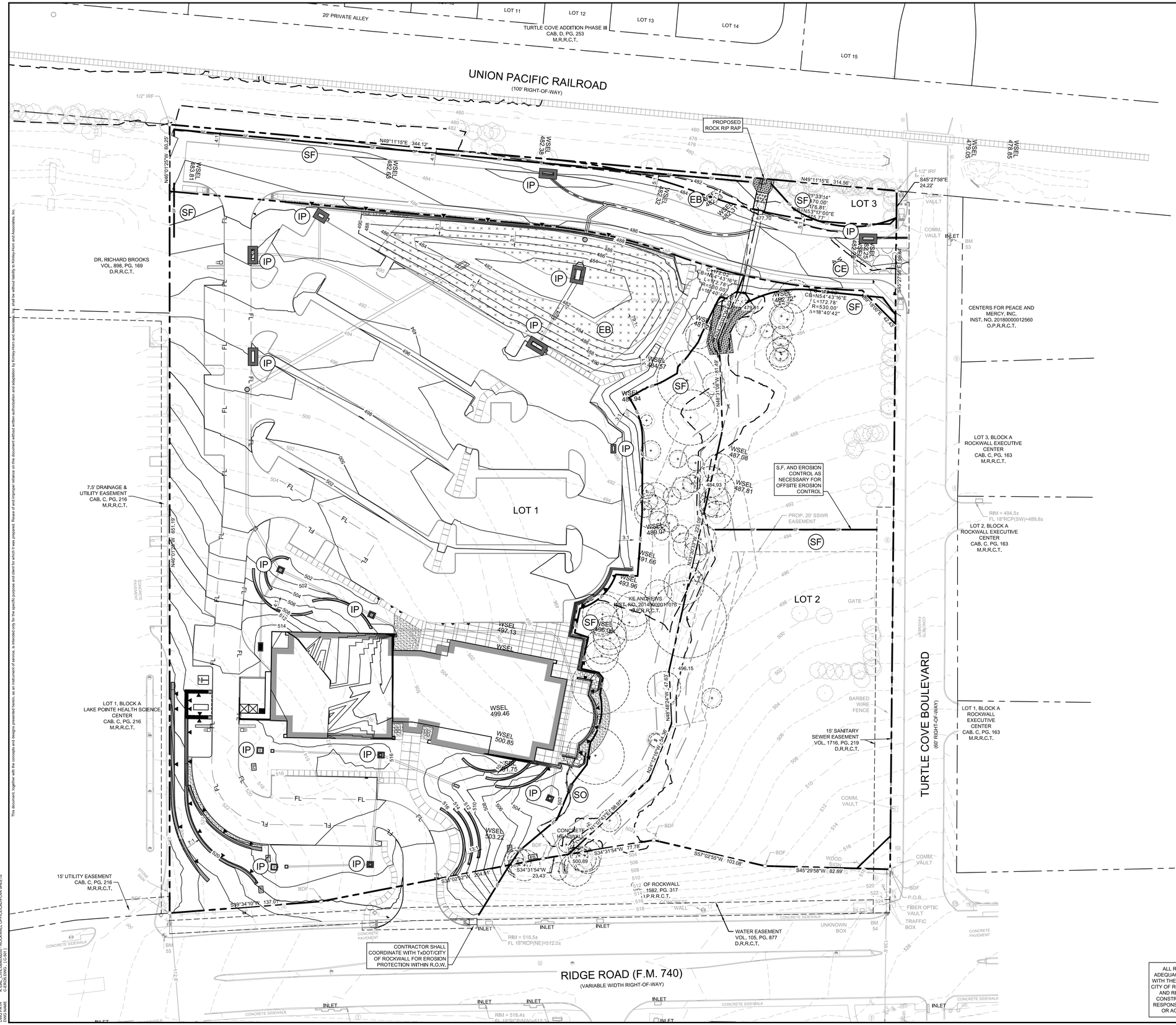
WATER DETAILS

RECORD DRAWINGS

SHEET NUMBER
C-406

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UTILITY DETAILS.DWG [C-406 WATER DETAILS]



NOTES

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR SELECTION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
2. CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
3. DRAINAGE PATTERNS ARE SHOWN ON THIS PLAN BY PROPOSED AND EXISTING CONTOURS, FLOW ARROWS, AND SLOPES.
4. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
5. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
6. SANITARY SEWER EFFLUENT IS DISPOSED OF VIA AN ONSITE SEWER SYSTEM CONNECTED TO A MUNICIPAL SEWER SYSTEM.
7. IN AREAS WITH 4:1 SLOPES, CONTRACTOR TO INSTALL SOIL RETENTION BLANKET IF NECESSARY.
8. ALL SAWCUT WATER SHALL BE VACUUMED AND DISPOSED PROPERLY (I.E. CONCRETE WASHOUT PIT).
9. ALL HYPERCHLORINATED WATER AND BLOW OFF WATER SHALL BE DISCHARGED INTO SANITARY SEWER SYSTEM.
10. ALL DISTURBED AREAS, WHETHER ON-SITE OR OFF-SITE, SHALL RECEIVE A FULL STAND OF GRASS (PERMANENT GRASS) PRIOR TO ISSUANCE OF ANY OCCUPANCY BY THE BUILDING AND CODE DIVISION OF COMMUNITY DEVELOPMENT.

LEGEND

PROPERTY LINE	
PROPOSED CONTOURS	
EXISTING CONTOURS	
SILT FENCE	SF
CONSTRUCTION ENTRANCE	CE
WYE INLET PROTECTION	WP
CURB INLET PROTECTION	IP
STONE OVERFLOW STRUCTURE	SO
EROSION BLANKET	EB

PHASING

PHASE	EROSION CONTROL MEASURES
1. GRADING	ALL SILT FENCE AND CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING. CONSTRUCTION ENTRANCE TO BE INSTALLED AT THIS TIME.
2. UTILITY INSTALLATION	ALL SILT FENCE SHALL BE INSTALLED PRIOR TO THE INITIATION OF ALL UTILITY CONSTRUCTION. UPON THE COMPLETION OF STORM SEWER INSTALLATION, INLET PROTECTORS TO BE INSTALLED.
3. PAVING/BUILDING	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.
4. SOIL STABILIZATION /LANDSCAPING	AFTER SITE CONSTRUCTION AND PAVING PHASE, CONTRACTOR TO EXCAVATE BOTTOM OF POND AND REMOVE SEDIMENT TRAP. REMOVE TEMPORARY ENTRANCE/EXIT AND INLET PROTECTION. ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED DURING FINE GRADING AND THROUGH OUT THE REMAINDER OF THE PROJECT.

TOTAL DISTURBED AREA

6.82 ACRES

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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE

PREPARED FOR
KE ANDREWS

CITY OF ROCKWALL, TEXAS

EROSION CONTROL PLAN

RECORD DRAWINGS

SHEET NUMBER
C-501

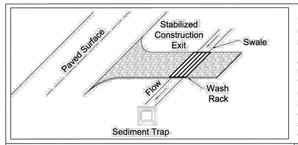
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3.16 Wheel Cleaning Systems

Sediment Control



Description: Wheel cleaning systems are used with a stabilized construction exit to remove soil from vehicle wheels and undercarriages prior to leaving the construction site. The cleaning system may be as simple as uneven, steel racks that "rumble" the vehicle or as complex as a pre-manufactured wash bay. Systems that include wash water must provide for collecting the water and removing sediments and other pollutants prior to discharge.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Locate within the stabilized construction exit
- Design according to type of soil and the number and size of vehicles using the cleaning system
- Provide a means of collecting wash water and removing sediment before discharge

ADVANTAGES / BENEFITS:

- Effectively reduces off-site sediment tracking
- Components of the system may be re-used on different projects

DISADVANTAGES / LIMITATIONS:

- Requires separate construction entrances and exits
- Requires frequent cleaning to remain functional
- Effectiveness dependent on operator training
- Sediment trapping controls won't remove oils or other pollutants in the wash water
- Potential overflows and discharges of wash water if sediment controls not carefully designed for the maximum amount of wash water to be generated

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Remove sediment from wheel cleaning device before sediment accumulates to half the depth of the device
- Remove sediment from sediment traps before it reaches a depth of half the design depth or 12 inches, whichever is less
- Dewater and clean wash basins using dewatering controls

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization
Waste Management
Housekeeping Practices

Fe=N/A

IMPLEMENTATION CONSIDERATIONS

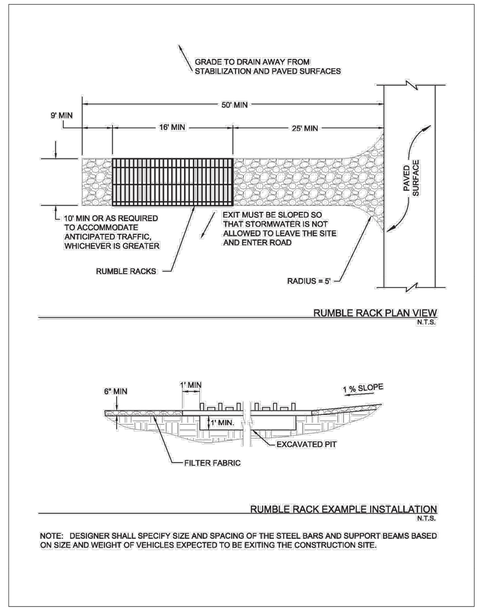
- ● Capital Costs
- ● Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Other Considerations:

- *Management of wash water*
- *Prohibitions on the discharge of soaps and petroleum products*

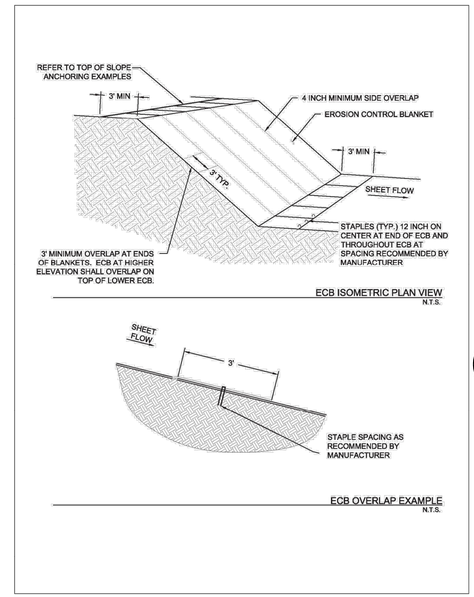
STONE TO BE 4"-6" DIA. NO CRUSHED CONCRETE ALLOWED

CE



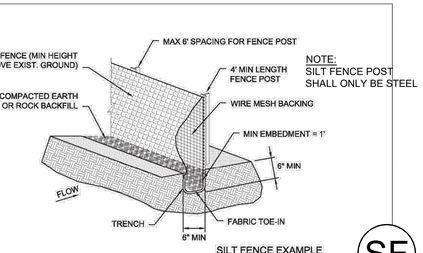
NOTE: DESIGNER SHALL SPECIFY SIZE AND SPACING OF THE STEEL BARS AND SUPPORT BEAMS BASED ON SIZE AND WEIGHT OF VEHICLES EXPECTED TO BE EXITING THE CONSTRUCTION SITE.

Figure 3.36 Schematics of Rumble Rack Wheel Cleaning



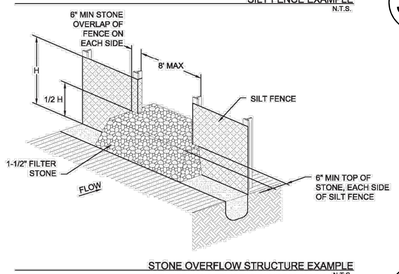
EB

Figure 2.7 Schematics of Erosion Control Blankets



NOTE:
SILT FENCE POST SHALL ONLY BE STEEL

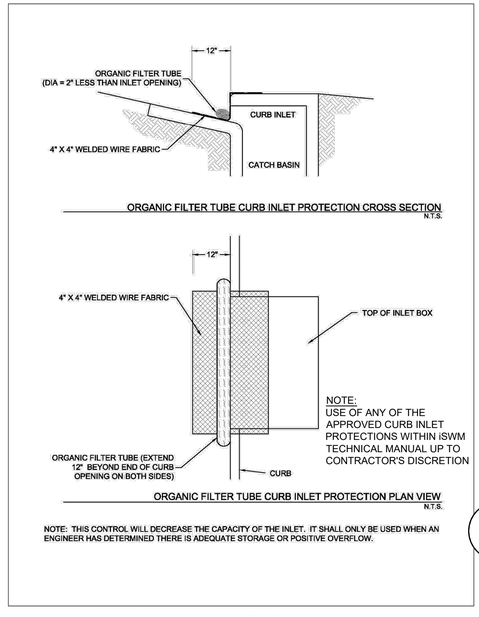
SF



NOTES:
1. DESIGN SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE OVERFLOW STRUCTURES SHALL BE INSTALLED. OVERFLOW STRUCTURES ARE REQUIRED AT ALL LOW POINTS AND AT A SPACING OF APPROXIMATELY 300 FT WHERE NO LOW POINT IS APPARENT.
2. DESIGNER SHALL ON THE DRAWINGS THE LOCATIONS WHERE SILT FENCE IS TO BE TURNED UPSLOPE. UPSLOPE LENGTHS SHALL BE A MINIMUM OF 10 FEET.

SO

Figure 3.28 Schematics of Silt Fence

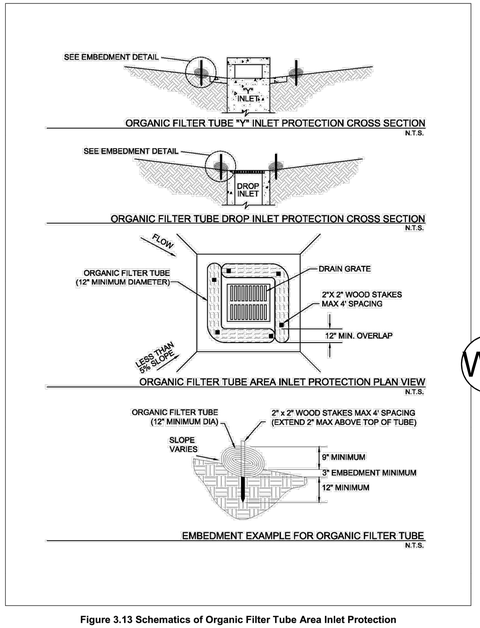


NOTE:
USE OF ANY OF THE APPROVED CURB INLET PROTECTIONS WITHIN iSWM TECHNICAL MANUAL UP TO CONTRACTOR'S DISCRETION

NOTE: THIS CONTROL WILL DECREASE THE CAPACITY OF THE INLET. IT SHALL ONLY BE USED WHEN AN ENGINEER HAS DETERMINED THERE IS ADEQUATE STORAGE OR POSITIVE OVERFLOW.

IP

Figure 3.6 Schematics of Organic Filter Tube Curb Inlet Protection
(Source: Modified from City of Plano BMP SP-4)



WP

Figure 3.13 Schematics of Organic Filter Tube Area Inlet Protection

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6/1/2021

STATE OF TEXAS
JOSEPH HORNISHER
124909
LICENSED
PROFESSIONAL ENGINEER

KHA PROJECT	064539200
DATE	Mar-21
SCALE	AS SHOWN
DESIGNED BY	JWH
DRAWN BY	ZEH
CHECKED BY	MAL

KE ANDREWS OFFICE
PREPARED FOR
KE ANDREWS
CITY OF ROCKWALL, TEXAS

EROSION CONTROL DETAILS
RECORD DRAWINGS

SHEET NUMBER
C-502

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