

GODDARD FACILITY IMPROVEMENTS

#1 - New Elementary School

GODDARD PUBLIC SCHOOLS U.S.D. No. 265
 201 S. MAIN, GODDARD, KANSAS

STORM SEWER

CITY OF WICHITA PRIVATE PROJECT NO.1559 PPS (607861)
 JIM L. ARMOUR, P.E.-CITY ENGINEER

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA

SANITARY SEWERS _____
 STORM SEWERS VRH 7/13/05
 DRIVEWAY APPROACHES _____
 PAVING _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM CONTRACTED BY THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR UNTIL SUCH INSPECTION IS ARRANGED FOR AND REQUIRED BONDS HAVE BEEN SUBMITTED TO AND APPROVED BY THE CITY. NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER. IMPROVEMENTS PERFORMED UNDER THIS PROJECT SHALL NOT BE ACCEPTED BY THE CITY UNTIL ALL APPLICABLE DOCUMENTATION HAS BEEN SUBMITTED TO THE CITY ENGINEER. THIS MAY INCLUDE: RECORD DRAWINGS, INSPECTION LOGS, TEST DOCUMENTATION, TV TAPES, AND A CERTIFICATE OF COMPLETION. THE ABOVE SHALL BE PERFORMED BY THE CONSULTING FIRM CONTRACTED TO INSPECT THIS PROJECT.

GENERAL NOTE:
 PROVIDE ALL MATERIALS IN ACCORDANCE WITH
 CITY OF WICHITA SPECIFICATIONS.

PROJECT LOCATION

STORM SEWER PER
 PLANS T-7-06
 RDP



LOCATION MAP

REVISION DATE BY



WILSON & COMPANY
 Engineers & Architects
 1700 East 10th - Salina, Kansas 67401
 Tel 785 - 827-0433 Fax 785 - 827-5949

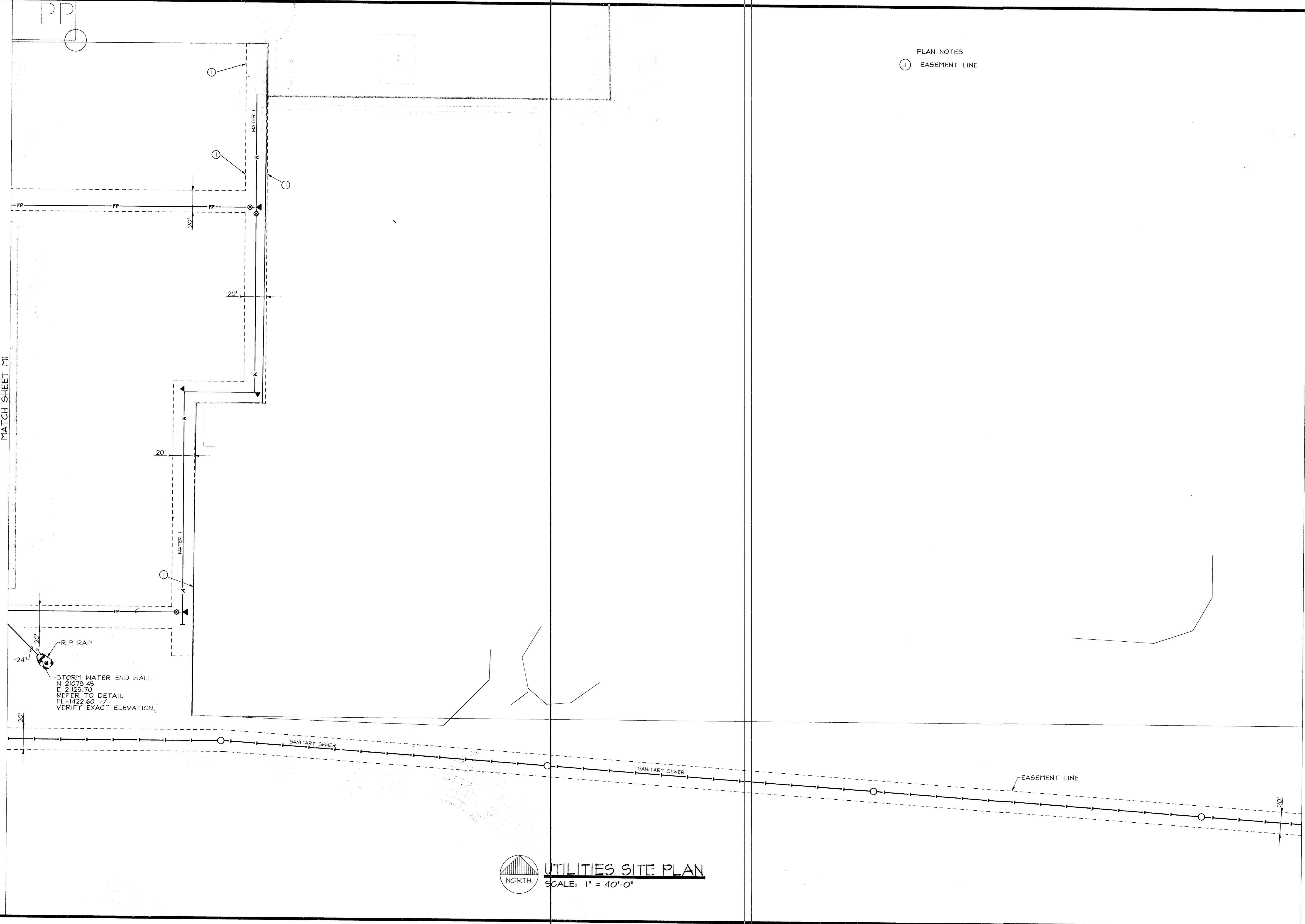
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 #1 - New Elementary School
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 201 S. MAIN, GODDARD, KANSAS

DESIGN JLL
 DRAW DFP
 DATE MAY 2005
 FILE NO. X4-420-078

SHEET NO.
M01

MATCH SHEET M1

MATCH SHEET M3



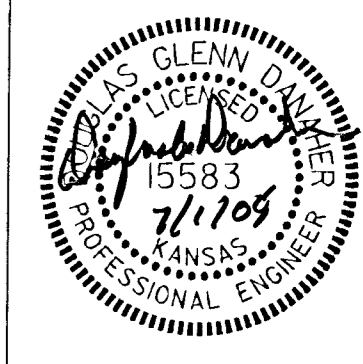
PLAN NOTES
 (1) EASEMENT LINE

PP

STORM WATER END WALL
 N 21078.45
 E 21125.70
 REFER TO DETAIL
 FL=1422.60 +/-
 VERIFY EXACT ELEVATION.

UTILITIES SITE PLAN
 SCALE: 1" = 40'-0"

REVISION	DATE	BY



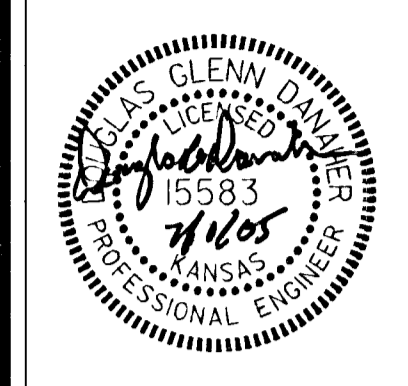
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DESIGN	JLL
DRAWN	DFP
DATE	JUNE 2005
FILE NO.	X4-420-078

SHEET NO.
M2

REVISION	DATE	BY



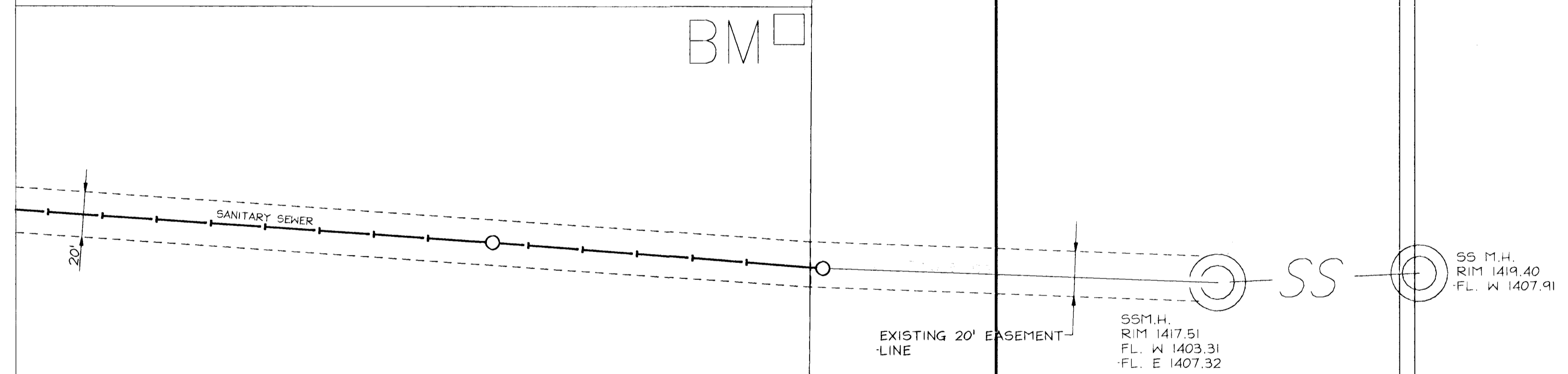
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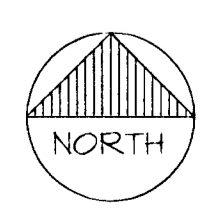
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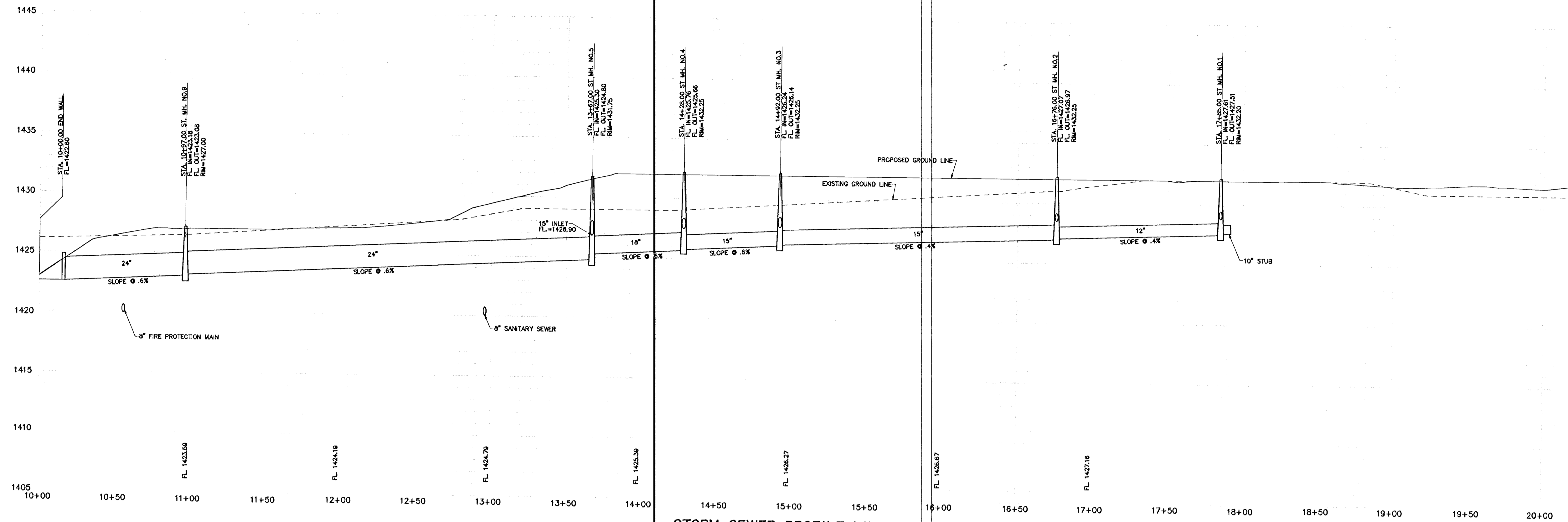
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SHEET NO.
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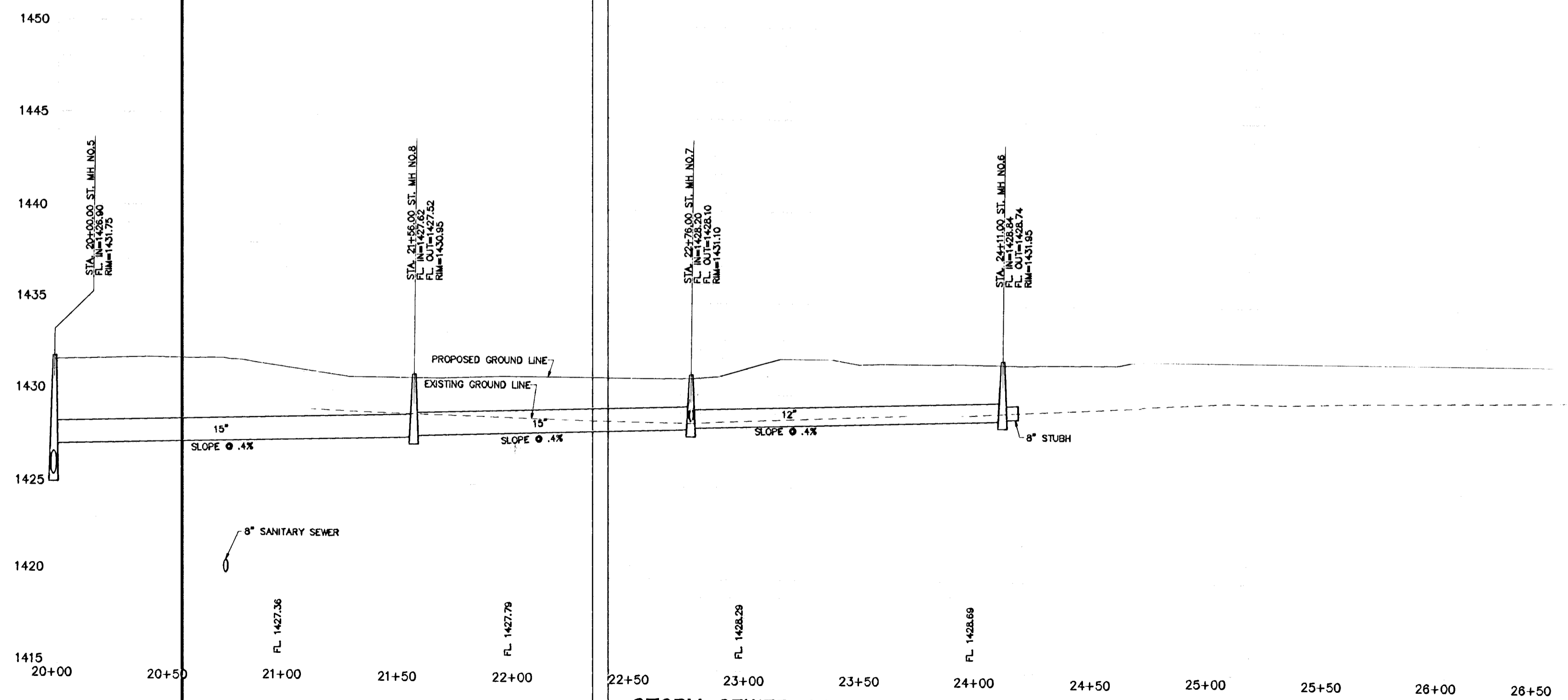


 **UTILITIES SITE PLAN**
 SCALE: 1" = 40'-0"



STORM SEWER PROFILE-LINE 1

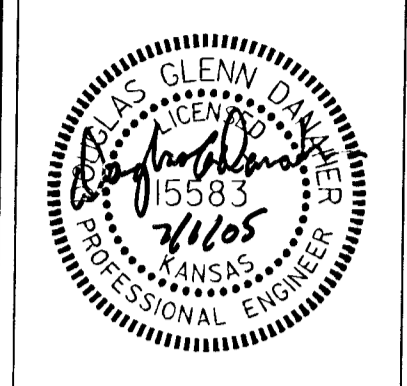
SCALE:
 1"=40' HORIZ.
 1"=5' VERT.



STORM SEWER PROFILE-LINE 2

SCALE:
 1"=40' HORIZ.
 1"=5' VERT.

REVISION	DATE	BY



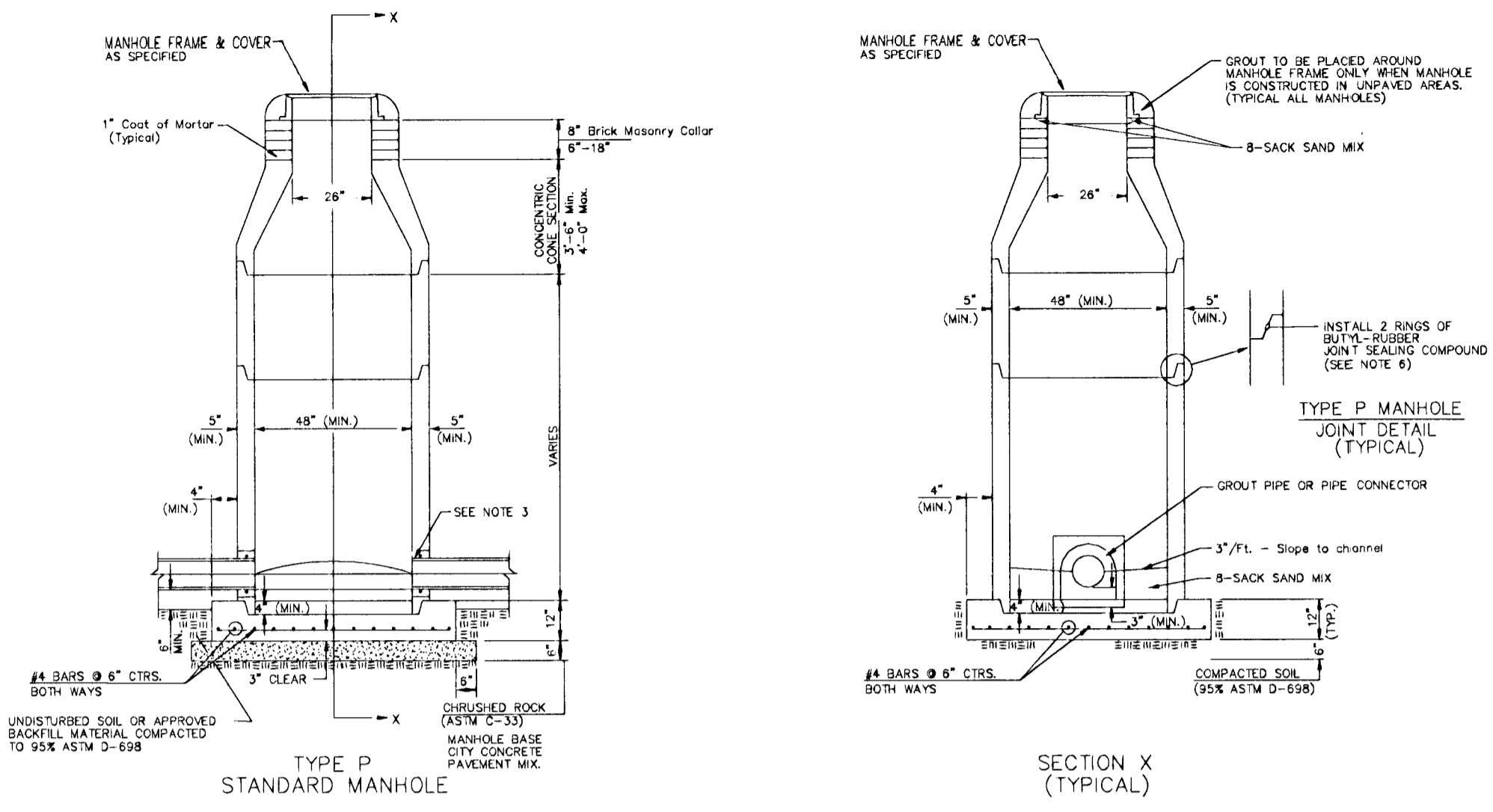
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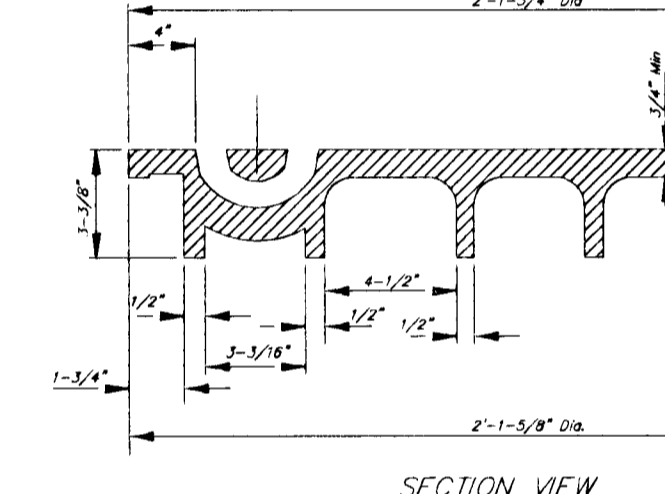
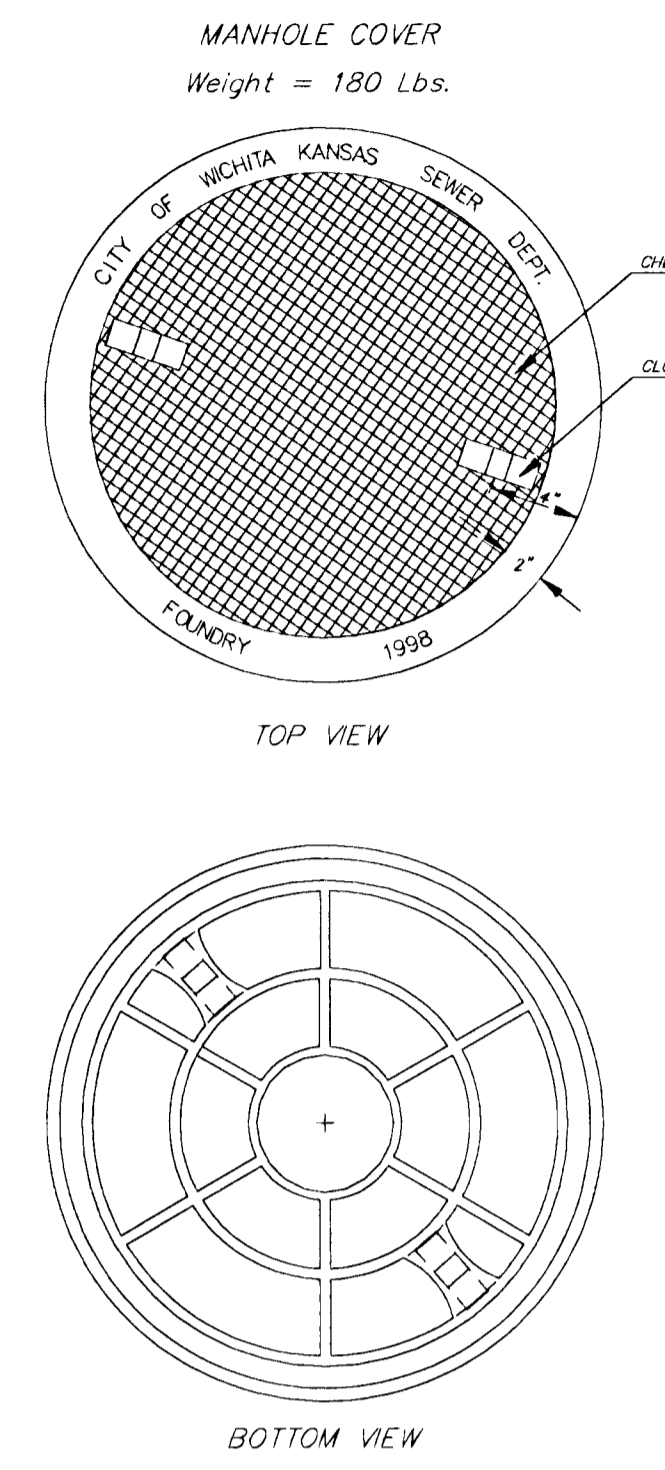
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SHEET NO.
M4

SEWER APPURTENANCES DETAILS

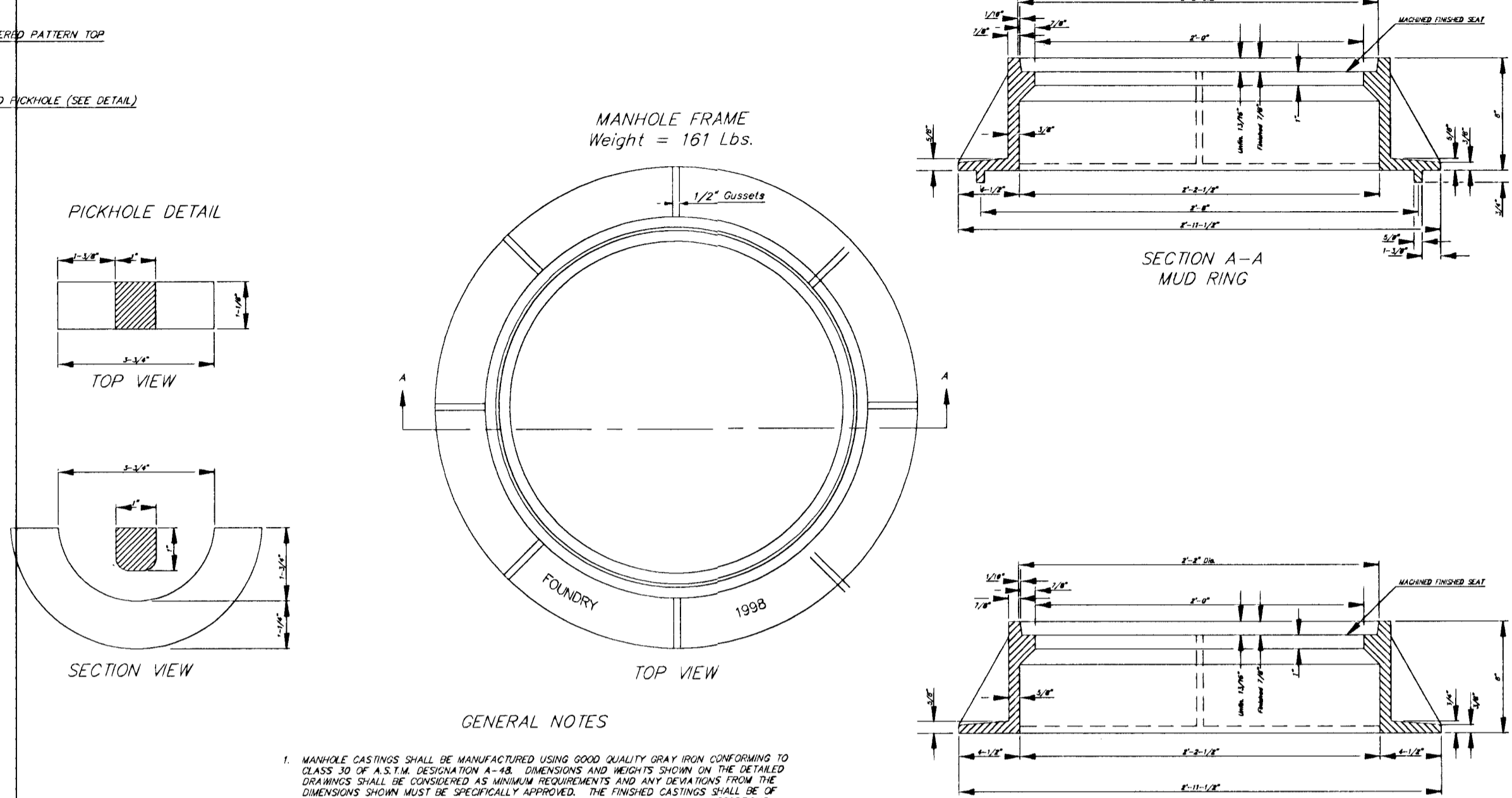


- GENERAL NOTES**
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. DATA AS MODIFIED BY THE SPECIFICATIONS.
 2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
 3. APPROVED FLEXIBLE WATERSTOP CASSETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A B.S. COMPOSITE PIPE OR PIPE FIT IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER SHALL BE SUPPORTED WITH CONCRETE CASSEMENT MINIMUM OF 2 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
 4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 3 COATS THERMAC SERIES OF 1/4" BUILD EPIDERMIC DRY THICKNESS OF 3 MILS (MIN.).
 5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 833 BITUMINOUS COATING.
 6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
 7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
 8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHARPED INVERT.
 9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
 10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 BAGS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX METHOD. AN ENTRAINING AIR ENVELOPE MORTAR SHALL BE PLACED AROUND THE MANHOLE AND AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4". MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
 11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 4" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP CASSETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED AND THE OPENING JOINED AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MADE TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTION ON EXISTING MANHOLE.
 13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLUING PIPES AND THE OUTLETING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES Laid THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO REVEAL LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
 14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE SHAPED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE GRADE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE GRADE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF GRADE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
 16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2" FOR INFLUING PIPES SIZED 12" OR SMALLER AND 2" FOR INFLUING PIPES LARGER THAN 12". THE GRADINGS OF INFLUING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
 17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4" UNLESS INDICATED OTHERWISE.
 18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCRETE PIPE. THE COLLAR WILL HAVE 2" WALLS AND A VERTICAL HEIGHT OF 8" MINIMUM AND OF MAXIMUM 4" PLUS 2" OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
 19. CHURNED ROCK CONFORMING TO ASTM C-33 WITH A GRADEATION OF NO. 57 SHALL BE INSTALLED AT THE BASE OF THE MANHOLE TO A DEPTH OF NO LESS THAN 8" AND SHALL EXTEND NO LESS THAN 8" OUTSIDE THE DIAMETER OF THE CONCRETE FLOOR OF THE MANHOLE.

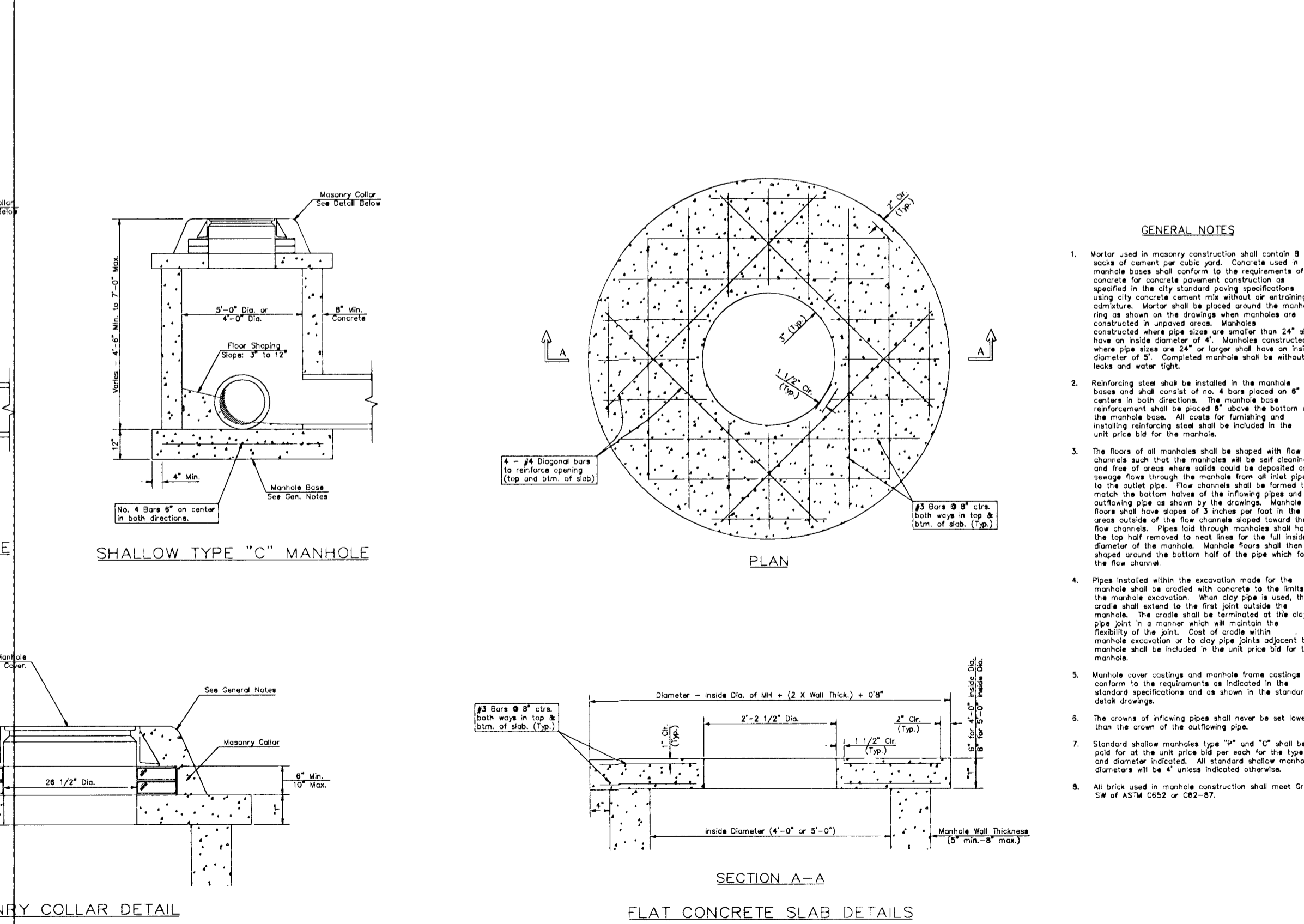
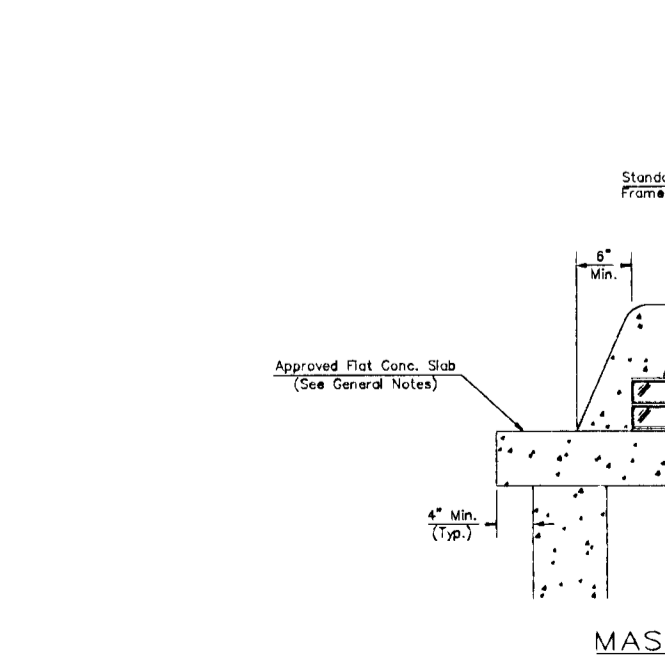
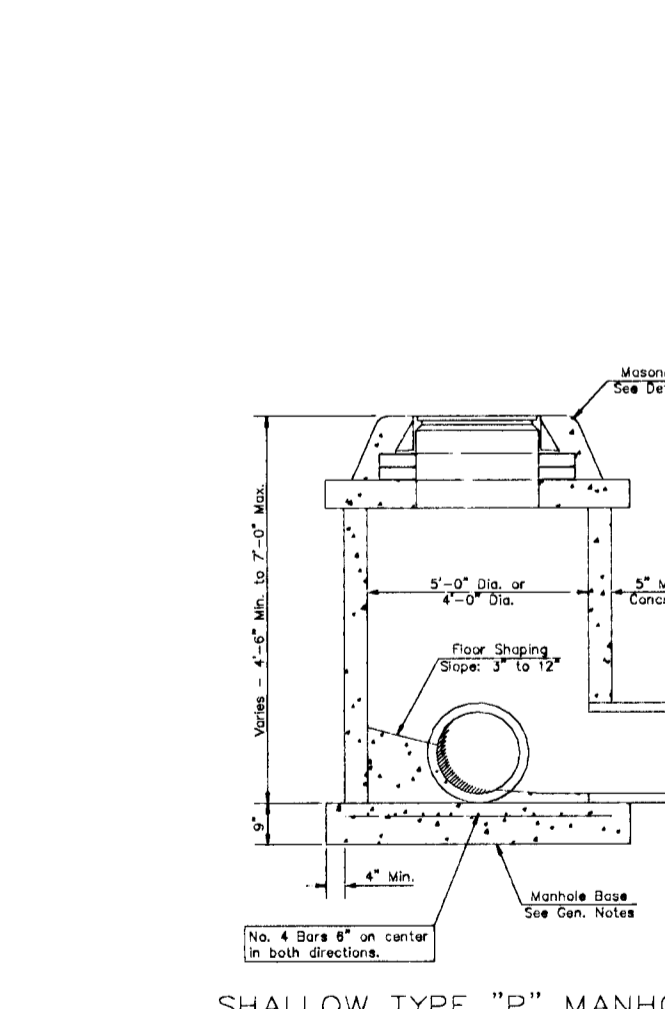


MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA, KANSAS

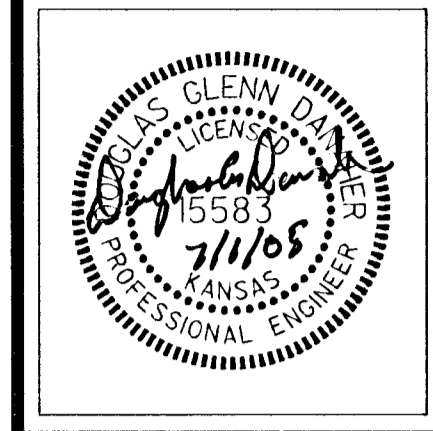


- GENERAL NOTES**
1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. SPECIFICATION A-18. DIMENSIONS AND HEIGHTS SHOWN ON THE DETAIL DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
 2. MANHOLE CASTINGS SHALL WEIGH A MINIMUM OF 180 POUNDS ON THE SOLID COVER AND 161 POUNDS ON THE MANHOLE FRAME. THIS IS A TOTAL OF 430 POUNDS ON A RING AND COVER SET. CASTINGS WEIGHING LESS THAN THE MINIMUM SPECIFICATIONS WILL NOT BE ACCEPTED.
 3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANY OTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
 4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MANHOLE SUCH THAT THEIR SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
 5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO ORIENTATION USING LETTERS AT LEAST 1" HIGH IN HEIGHT. THE ORIENTATION SHALL BE BOTH OF INTERIOR AND EXTERIOR. THE WORD ORIENTATION MAY BE APPROVED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH SURFACES SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE IN CONTACT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWINGS. HOISTING OF SMOOTH SURFACES AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.



- GENERAL NOTES**
1. Mortar used in masonry construction shall contain 8 bags of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications. Mortar shall be placed around the manhole, along as shown on the drawings when manholes are constructed in unpaved areas. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5". Completed manholes shall be without leaks and water tight.
 2. Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 8" centers in both directions. The manhole base reinforcement shall be placed 8" above the bottom of the manhole base. All costs for fabricating and installing reinforcing steel shall be included in the unit price bid for the manhole.
 3. The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the influencing pipes and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to reveal lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.
 4. Pipes installed within the excavation made for the manhole shall be shaped with concrete to the limits of the manhole excavation. When clay pipe is used, the grade shall extend to the first joint outside the manhole. The grade shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of grade within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.
 5. Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.
 6. The crown of influencing pipes shall never be set lower than the crown of the outflowing pipe.
 7. Standard shallow manholes type "P" and "C" shall be bid for at the unit price bid per inch for the size and diameter indicated. All standard shallow manhole diameters will be 4" unless indicated otherwise.
 8. All brick used in manhole construction shall meet Grade SW of ASTM C602 or C62-97.

REVISION	DATE	BY

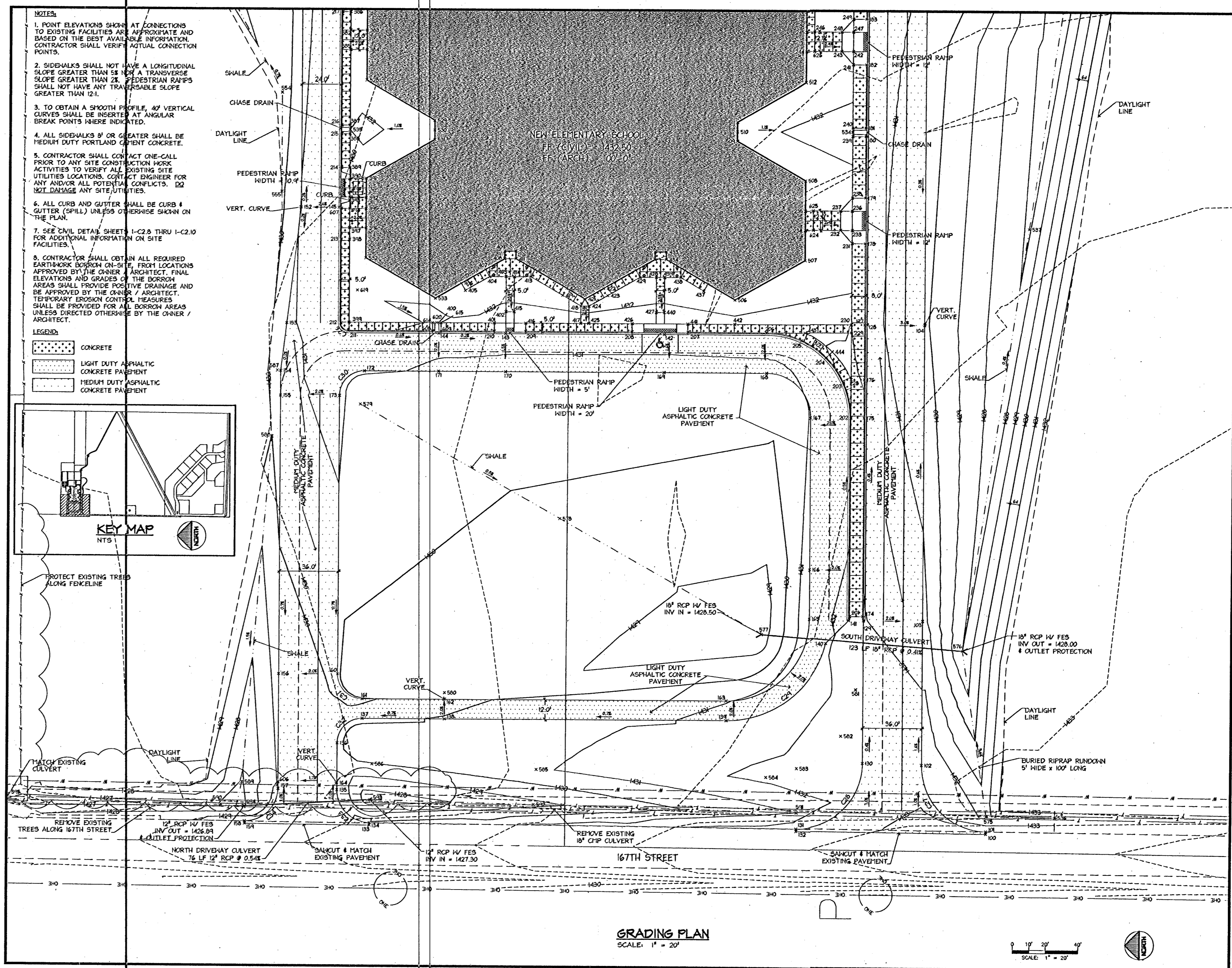


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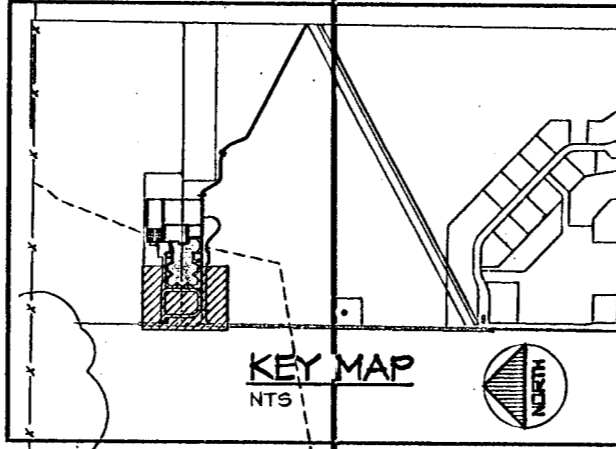
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SHEET NO. **M5**

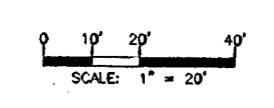


- NOTES:
1. POINT ELEVATIONS SHOWN AT CONNECTIONS TO EXISTING FACILITIES ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ACTUAL CONNECTION POINTS.
 2. SIDEWALKS SHALL NOT HAVE A LONGITUDINAL SLOPE GREATER THAN 2% OR A TRANSVERSE SLOPE GREATER THAN 2%. PEDESTRIAN RAMP SLOPE SHALL NOT HAVE ANY TRANSVERSE SLOPE GREATER THAN 2%.
 3. TO OBTAIN A SMOOTH PROFILE, 40' VERTICAL CURVES SHALL BE INSERTED AT ANGULAR BREAK POINTS WHERE INDICATED.
 4. ALL SIDEWALKS 6' OR GREATER SHALL BE MEDIUM DUTY PORTLAND CEMENT CONCRETE.
 5. CONTRACTOR SHALL CONTACT ONE-CALL PRIOR TO ANY SITE CONSTRUCTION WORK. UTILITIES LOCATIONS, CONTACT ENGINEER FOR ANY AND/OR ALL POTENTIAL CONFLICTS. DO NOT DAMAGE ANY SITE UTILITIES.
 6. ALL CURB AND GUTTER SHALL BE CURB & GUTTER (CG) UNLESS OTHERWISE SHOWN ON THE PLAN.
 7. SEE CIVIL DETAIL SHEETS 1-C2.8 THRU 1-C2.10 FOR ADDITIONAL INFORMATION ON SITE FACILITIES.
 8. CONTRACTOR SHALL OBTAIN ALL REQUIRED EARTHWORK BORROW ON-SITE FROM LOCATIONS APPROVED BY THE OWNER / ARCHITECT. FINAL ELEVATIONS AND GRADES OF THE BORROW AREAS SHALL PROVIDE POSITIVE DRAINAGE AND BE APPROVED BY THE OWNER / ARCHITECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED FOR ALL BORROW AREAS UNLESS DIRECTED OTHERWISE BY THE OWNER / ARCHITECT.

- LEGEND:
- CONCRETE
 - LIGHT DUTY ASPHALTIC CONCRETE PAVEMENT
 - MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT



GRADING PLAN
SCALE: 1" = 20'



REV. 5-23-05
REVISION DATE BY
WILSON & COMPANY Engineers & Architects 1700 East Iron - Salina, Kansas 67401 Tel: 785-827-0433 Fax: 785-827-5849
GODDARD FACILITY IMPROVEMENTS #1 - New Elementary School GODDARD PUBLIC SCHOOLS U.S.D. No. 265 201 S. MAIN, GODDARD, KANSAS
Construction Drawings April 2005
DESIGN: HMAK DRAWN: HMAK DATE: 4-11-05 FILE NO.: X4-420-078
SHEET NO. R 1-C2.1

REVISION	DATE	BY

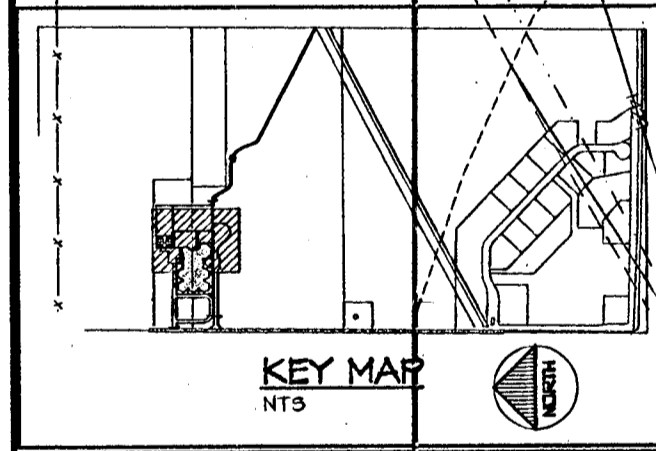
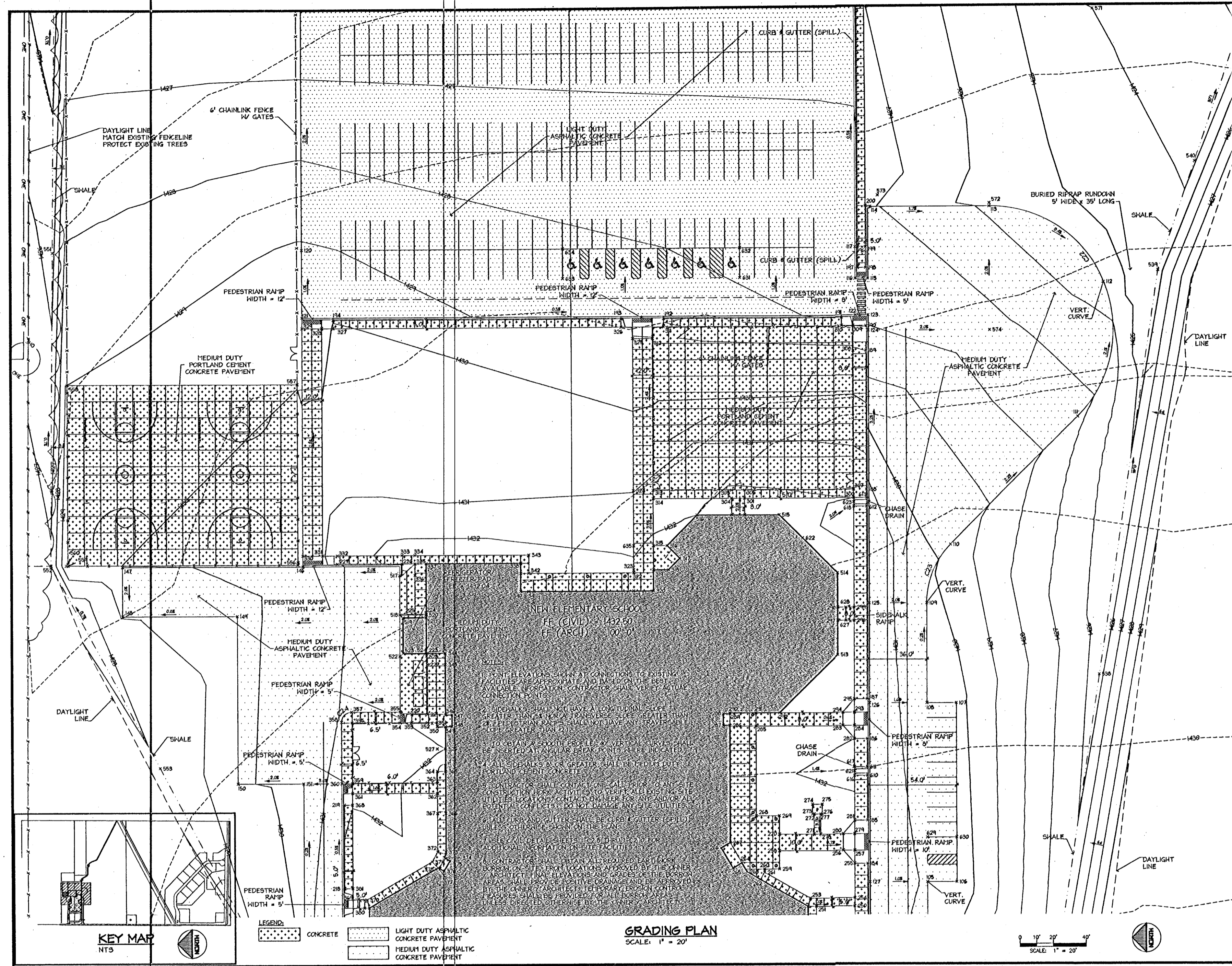
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ABOVE INFORMATION IS 1/2 SCALE.



LEGEND:
 CONCRETE
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 MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT

GRADING PLAN
 SCALE: 1" = 20'

SCALE: 1" = 20'

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Construction Drawings April 2005
DESIGN: MAK DRAWN: MAK DATE: 4-11-05 FILE NO.: X4-420-078
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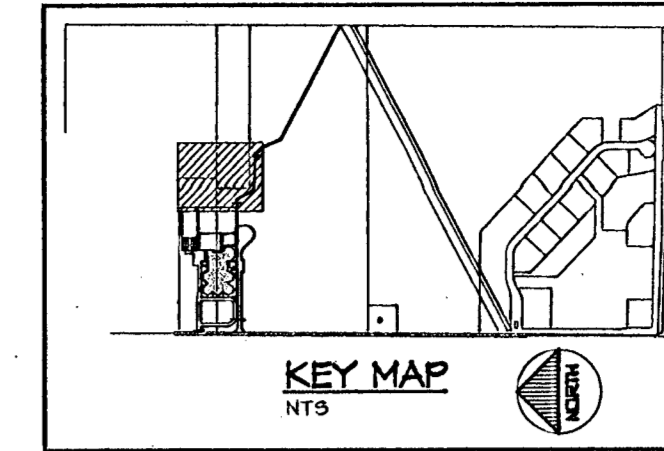
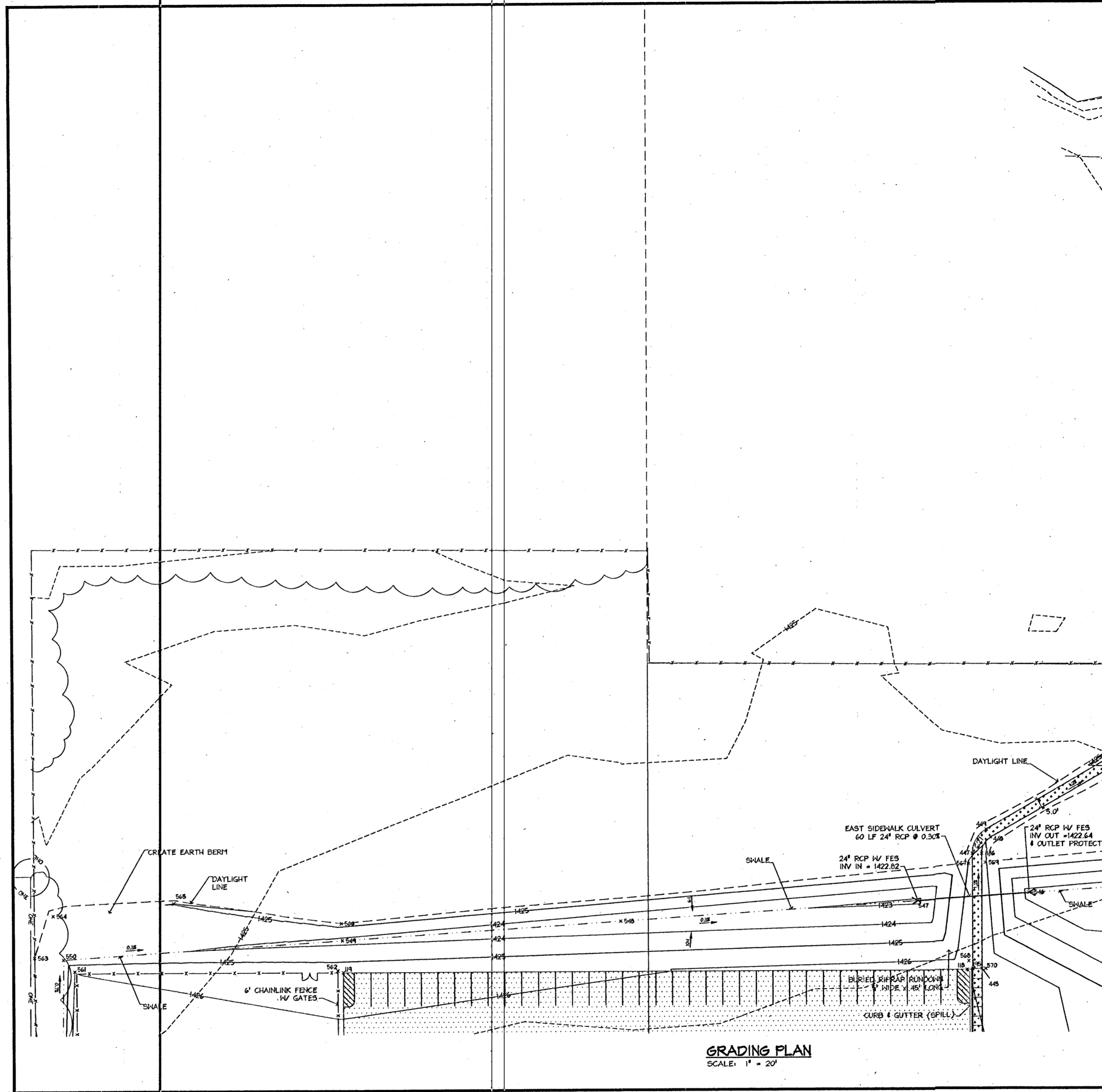
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1-C2.2

ABOVE INFORMATION IS 1/2 SCALE.



- NOTES:**
1. POINT ELEVATIONS SHOWN AT CONNECTIONS TO EXISTING FACILITIES ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ACTUAL CONNECTION POINTS.
 2. SIDEWALKS SHALL NOT HAVE A LONGITUDINAL SLOPE GREATER THAN 5% NOR A TRANSVERSE SLOPE GREATER THAN 2%. PEDESTRIAN RAMPWAYS SHALL NOT HAVE ANY TRAVERSABLE SLOPE GREATER THAN 1:24.
 3. TO OBTAIN A SMOOTH PROFILE, 40' VERTICAL CURVES SHALL BE INSERTED AT ANGULAR BREAK POINTS WHERE INDICATED.
 4. ALL SIDEWALKS 5' OR GREATER SHALL BE MEDIUM DUTY PORTLAND CEMENT CONCRETE.
 5. CONTRACTOR SHALL CONTACT ONE-CALL PRIOR TO ANY SITE CONSTRUCTION WORK ACTIVITIES TO VERIFY ALL EXISTING SITE UTILITIES LOCATIONS. CONTACT ENGINEER FOR ANY AND/OR ALL POTENTIAL CONFLICTS. DO NOT DAMAGE ANY SITE UTILITIES.
 6. ALL CURB AND GUTTER SHALL BE CURB & GUTTER (SPILL) UNLESS OTHERWISE SHOWN ON THE PLAN.
 7. SEE CIVIL DETAIL SHEETS I-C2.0 THRU I-C2.10 FOR ADDITIONAL INFORMATION ON SITE FACILITIES.
 8. CONTRACTOR SHALL OBTAIN ALL REQUIRED EARTHWORK BORROW ON-SITE, FROM LOCATIONS APPROVED BY THE OWNER / ARCHITECT. FINAL ELEVATIONS AND GRADES OF THE BORROW AREAS SHALL PROVIDE POSITIVE DRAINAGE AND BE APPROVED BY THE OWNER / ARCHITECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED FOR ALL BORROW AREAS UNLESS DIRECTED OTHERWISE BY THE OWNER / ARCHITECT.

LEGEND:

[Pattern]	CONCRETE
[Pattern]	LIGHT DUTY ASPHALTIC CONCRETE PAVEMENT
[Pattern]	MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT

REV. 5-23-05
REVISION DATE BY
WILSON & COMPANY Engineers & Architects 1700 East Iron - Salina, Kansas 67401 Tel: 785-827-0433 Fax: 785-827-5649
GODDARD FACILITY IMPROVEMENTS #1 - New Elementary School GODDARD PUBLIC SCHOOLS U.S.D. No. 265 201 S. MAIN, GODDARD, KANSAS
Construction Drawings April 2005
DESIGN: MIAK DRAWN: MIAK DATE: 4-11-05 FILE NO.: X4-420-078
SHEET NO.: R 1-C2.3

REVISION	DATE	BY
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WILSON & COMPANY
Engineers & Architects
1700 East Iron - Salina, Kansas 67401
Tel: 785-827-0433 Fax: 785-827-5649

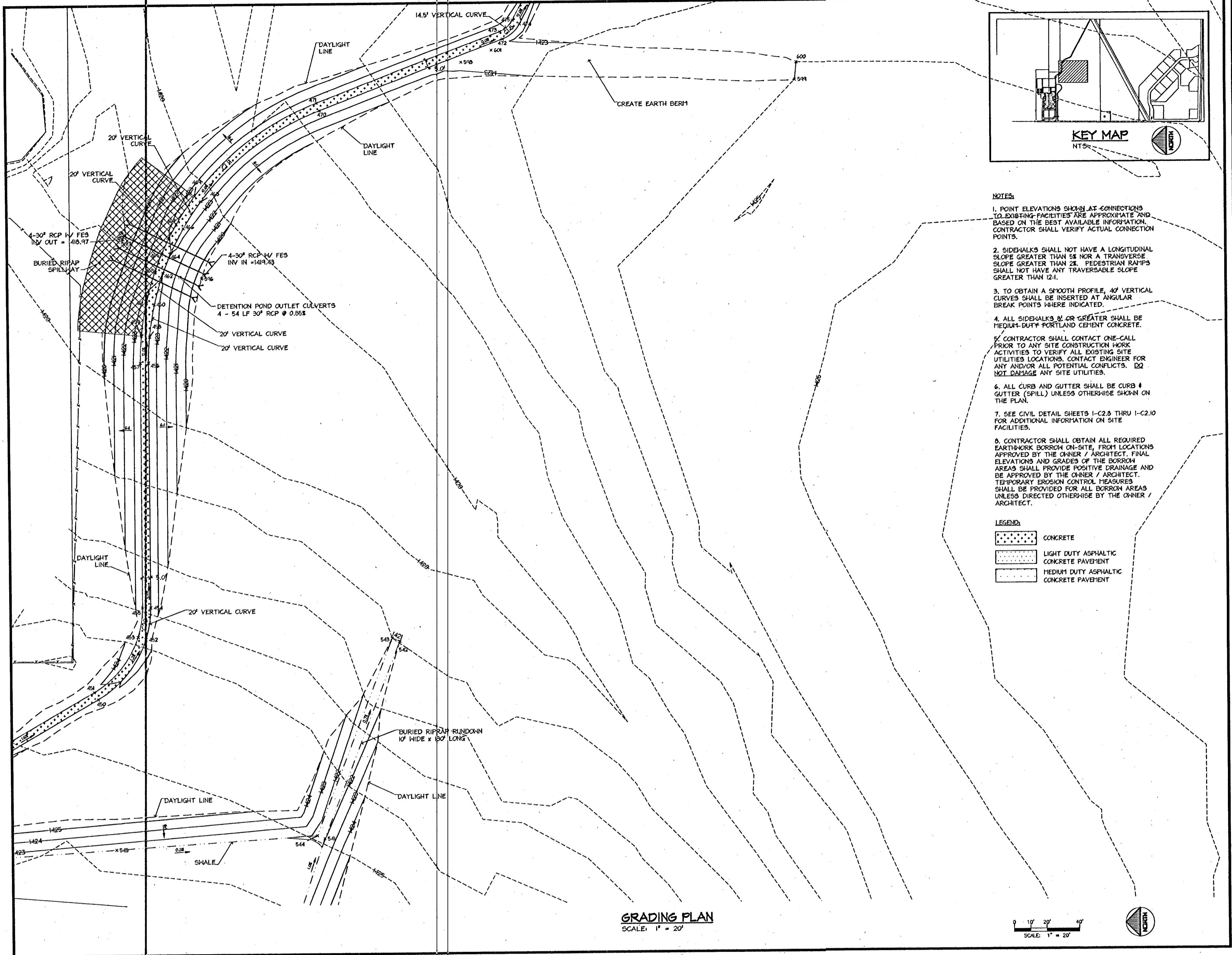
GODDARD FACILITY IMPROVEMENTS
#1 - New Elementary School
GODDARD PUBLIC SCHOOLS U.S.D. No. 265
201 S. MAIN, GODDARD, KANSAS

DESIGN
DRAWN
DATE MAY 2005
FILE NO. X4-420-078

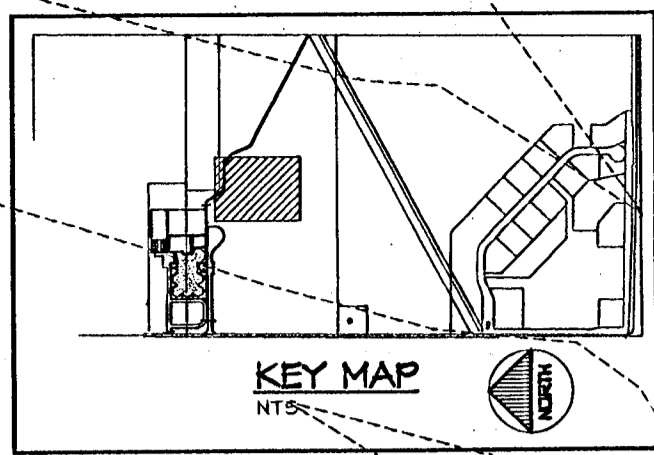
SHEET NO.
1-C2.3

ABOVE INFORMATION IS 1/2 SCALE.

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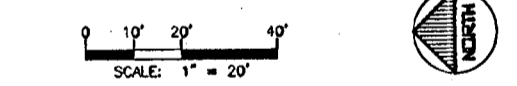


GRADING PLAN
SCALE: 1" = 20'



- NOTES:**
1. POINT ELEVATIONS SHOWN AT CONNECTIONS TO EXISTING FACILITIES ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ACTUAL CONNECTION POINTS.
 2. SIDEWALKS SHALL NOT HAVE A LONGITUDINAL SLOPE GREATER THAN 5% NOR A TRANSVERSE SLOPE GREATER THAN 2%. PEDIESTRIAN RAMP'S SHALL NOT HAVE ANY TRAVERSABLE SLOPE GREATER THAN 2%.
 3. TO OBTAIN A SMOOTH PROFILE, 45' VERTICAL CURVES SHALL BE INSERTED AT ANGULAR BREAK POINTS WHERE INDICATED.
 4. ALL SIDEWALKS 36" OR GREATER SHALL BE MEDIUM-DUTY PORTLAND CEMENT CONCRETE.
 5. CONTRACTOR SHALL CONTACT ONE-CALL PRIOR TO ANY SITE CONSTRUCTION WORK ACTIVITIES TO VERIFY ALL EXISTING SITE UTILITIES LOCATIONS. CONTACT ENGINEER FOR ANY AND/OR ALL POTENTIAL CONFLICTS. DO NOT DAMAGE ANY SITE UTILITIES.
 6. ALL CURB AND GUTTER SHALL BE CURB & GUTTER (CGU) UNLESS OTHERWISE SHOWN ON THE PLAN.
 7. SEE CIVIL DETAIL SHEETS I-C2.3 THRU I-C2.10 FOR ADDITIONAL INFORMATION ON SITE FACILITIES.
 8. CONTRACTOR SHALL OBTAIN ALL REQUIRED EARTHWORK BORROW ON-SITE, FROM LOCATIONS APPROVED BY THE OWNER / ARCHITECT. FINAL ELEVATIONS AND GRADES OF THE BORROW AREAS SHALL PROVIDE POSITIVE DRAINAGE AND BE APPROVED BY THE OWNER / ARCHITECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED FOR ALL BORROW AREAS UNLESS DIRECTED OTHERWISE BY THE OWNER / ARCHITECT.

- LEGEND:**
- CONCRETE
 - LIGHT DUTY ASPHALTIC CONCRETE PAVEMENT
 - MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT



REV. 5-23-05

REVISION	DATE	BY

WILSON & COMPANY
Engineers & Architects
1700 East Iron - Salina, Kansas 67401
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GODDARD FACILITY IMPROVEMENTS
#1 - New Elementary School
GODDARD PUBLIC SCHOOLS U.S.D. No. 265
201 S. MAIN, GODDARD, KANSAS

Construction Drawings
April 2005

DESIGN	MAK
DRAWN	MAK
DATE	4-11-05
FILE NO.	X4-420-078

SHEET NO.
R 1-C2.4

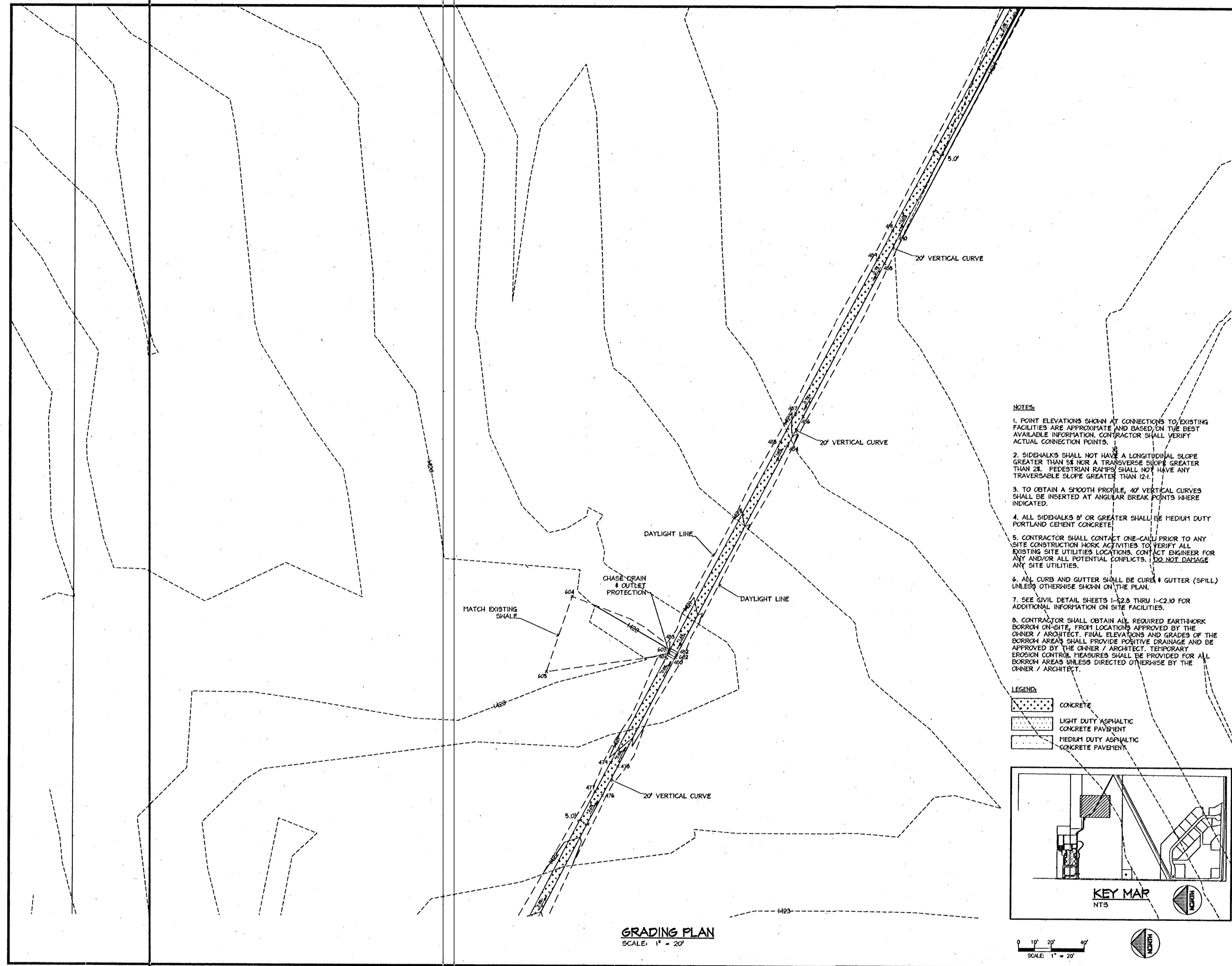
REVISION	DATE	BY

WILSON & COMPANY
Engineers & Architects
1700 East Iron - Salina, Kansas 67401
Tel 785-827-0433 Fax 785-827-5949

GODDARD FACILITY IMPROVEMENTS
#1 - New Elementary School
GODDARD PUBLIC SCHOOLS U.S.D. No. 265
201 S. MAIN, GODDARD, KANSAS

DESIGN	MAK
DRAWN	MAK
DATE	MAY 2005
FILE NO.	X4-420-078

SHEET NO.
1-C2.4



- NOTES:**
1. POINT ELEVATIONS SHOWN AT CONNECTIONS TO EXISTING FACILITIES ARE APPROPRIATE AND BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ACTUAL CONNECTION POINTS.
 2. SIDEWALKS SHALL NOT HAVE A LONGITUDINAL SLOPE GREATER THAN 1% NOR A TRANSVERSE SLOPE GREATER THAN 2%. PEDESTRIAN RAMP(S) SHALL NOT HAVE ANY TRAVERSABLE SLOPE GREATER THAN 1:20.
 3. TO OBTAIN A SMOOTH PROFILE, 40' VERTICAL CURVES SHALL BE INSERTED AT ANGULAR BREAK POINTS WHERE INDICATED.
 4. ALL SIDEWALKS 6' OR GREATER SHALL BE MEDIUM DUTY PORTLAND CEMENT CONCRETE.
 5. CONTRACTOR SHALL CONTACT ONE-CALL PRIOR TO ANY SITE CONSTRUCTION WORK ACTIVITIES TO VERIFY ALL EXISTING SITE UTILITIES LOCATIONS. CONTACT ENGINEER FOR ANY AND/OR ALL POTENTIAL CONFLICTS. DO NOT DAMAGE ANY SITE UTILITIES.
 6. ALL CURB AND GUTTER SHALL BE CURB & GUTTER (SPILL) UNLESS OTHERWISE SHOWN ON THE PLAN.
 7. SEE CIVIL DETAIL SHEETS 1-C2.8 THRU 1-C2.10 FOR ADDITIONAL INFORMATION ON SITE FACILITIES.
 8. CONTRACTOR SHALL OBTAIN ALL REQUIRED EARTHWORK BORROW ON-SITE, FROM LOCATIONS APPROVED BY THE OWNER / ARCHITECT. FINAL ELEVATIONS AND GRADES OF THE BORROW AREAS SHALL PROVIDE POSITIVE DRAINAGE AND BE APPROVED BY THE OWNER / ARCHITECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE PROVIDED FOR ALL BORROW AREAS UNLESS DIRECTED OTHERWISE BY THE OWNER / ARCHITECT.

LEGEND:

- CONCRETE
- LIGHT DUTY ASPHALTIC CONCRETE PAVEMENT
- MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT

KEY MAP
NTS

SCALE: 1" = 20'

REV. 5-23-05

REVISION DATE BY

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GODDARD FACILITY IMPROVEMENTS
#1 - New Elementary School
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201 S. MAIN, GODDARD, KANSAS

Construction Drawings
April 2005

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DATE 4-11-05
FILE NO. X4-420-078

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R 1-C2.5

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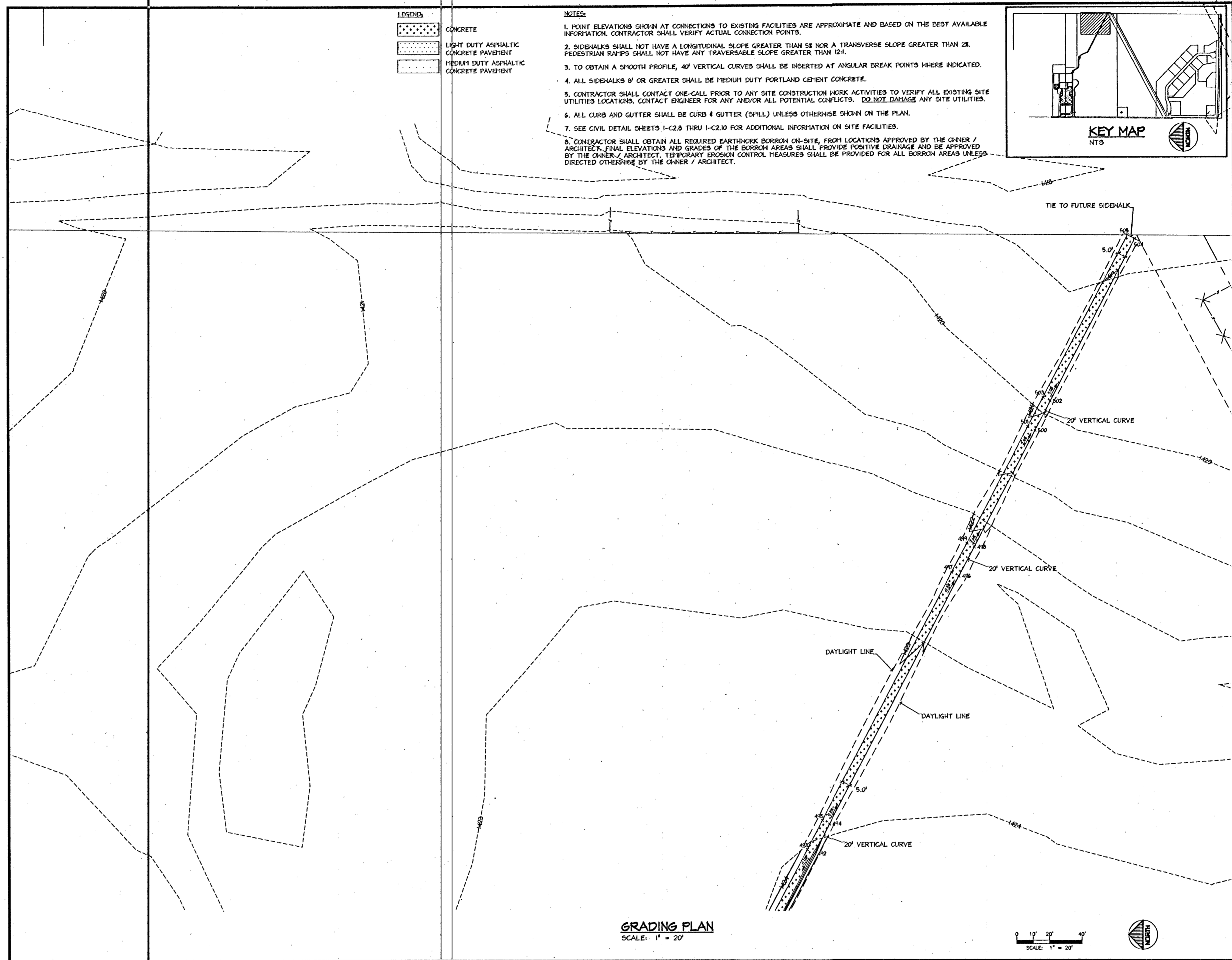
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GODDARD FACILITY IMPROVEMENTS
#1 - New Elementary School
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201 S. MAIN, GODDARD, KANSAS

DESIGN
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DATE MAY 2005
FILE NO. X4-420-078

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1-C2.5

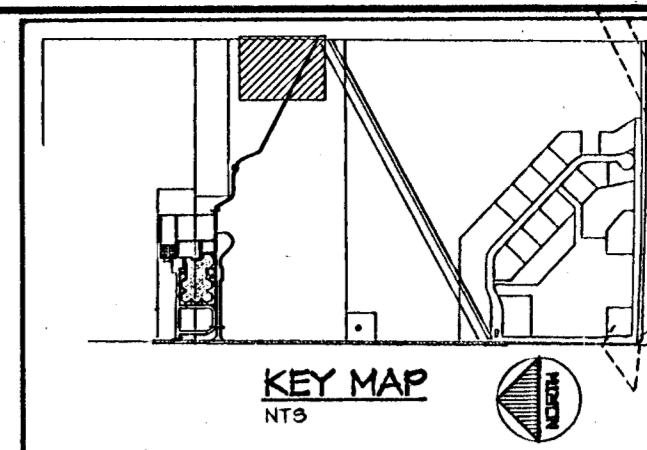
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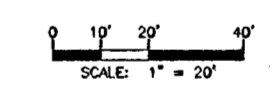
LEGEND

[Pattern]	CONCRETE
[Pattern]	LIGHT DUTY ASPHALTIC CONCRETE PAVEMENT
[Pattern]	MEDIUM DUTY ASPHALTIC CONCRETE PAVEMENT

- NOTES**
1. POINT ELEVATIONS SHOWN AT CONNECTIONS TO EXISTING FACILITIES ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY ACTUAL CONNECTION POINTS.
 2. SIDEWALKS SHALL NOT HAVE A LONGITUDINAL SLOPE GREATER THAN 5% NOR A TRANSVERSE SLOPE GREATER THAN 2%. PEDESTRIAN RAMPS SHALL NOT HAVE ANY TRAVERSABLE SLOPE GREATER THAN 1:24.
 3. TO OBTAIN A SMOOTH PROFILE, 40' VERTICAL CURVES SHALL BE INSERTED AT ANGULAR BREAK POINTS WHERE INDICATED.
 4. ALL SIDEWALKS 6' OR GREATER SHALL BE MEDIUM DUTY PORTLAND CEMENT CONCRETE.
 5. CONTRACTOR SHALL CONTACT ONE-CALL PRIOR TO ANY SITE CONSTRUCTION WORK ACTIVITIES TO VERIFY ALL EXISTING SITE UTILITIES LOCATIONS. CONTACT ENGINEER FOR ANY AND/OR ALL POTENTIAL CONFLICTS. **DO NOT DAMAGE ANY SITE UTILITIES.**
 6. ALL CURB AND GUTTER SHALL BE CURB & GUTTER (SPILL) UNLESS OTHERWISE SHOWN ON THE PLAN.
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GRADING PLAN
SCALE: 1" = 20'



REV. 9-23-05

REVISION	DATE	BY
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WILSON & COMPANY
Engineers & Architects
1700 East Iron - Salina, Kansas 67401
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GODDARD FACILITY IMPROVEMENTS
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Construction Drawings
April 2005

DESIGN	MAK
DRAWN	MAK
DATE	4-11-05
FILE NO.	X4-420-078

SHEET NO.
R 1-C2.6

REVISION	DATE	BY
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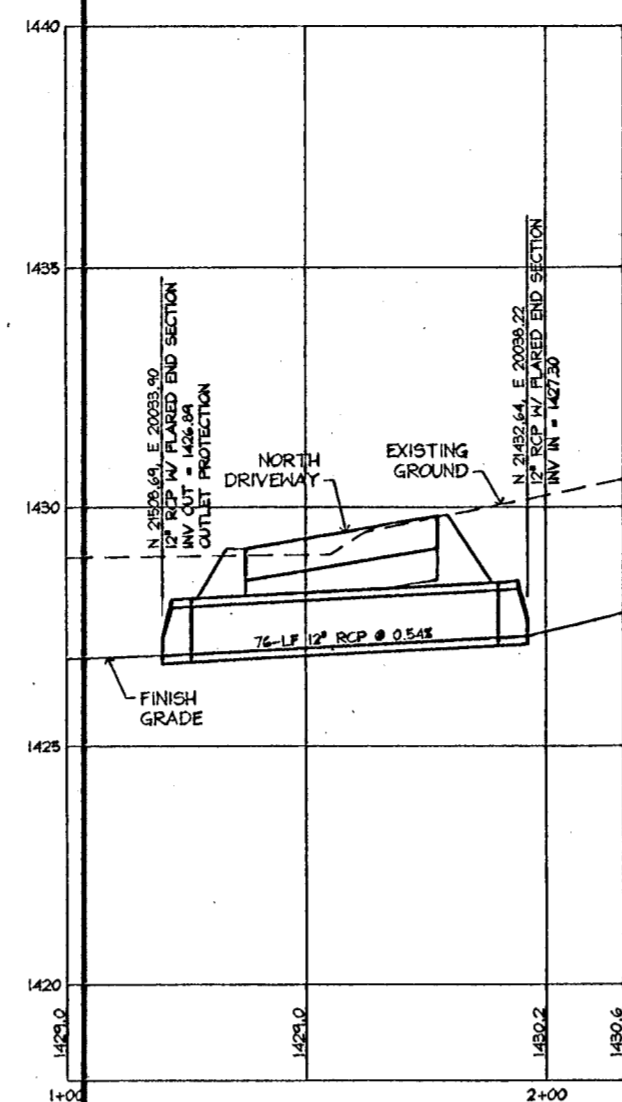
WILSON & COMPANY
Engineers & Architects
1700 East Iron - Salina, Kansas 67401
Tel: 785-827-0433 Fax: 785-827-0440

GODDARD FACILITY IMPROVEMENTS
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GODDARD PUBLIC SCHOOLS U.S.D. No. 265
201 S. MAIN, GODDARD, KANSAS

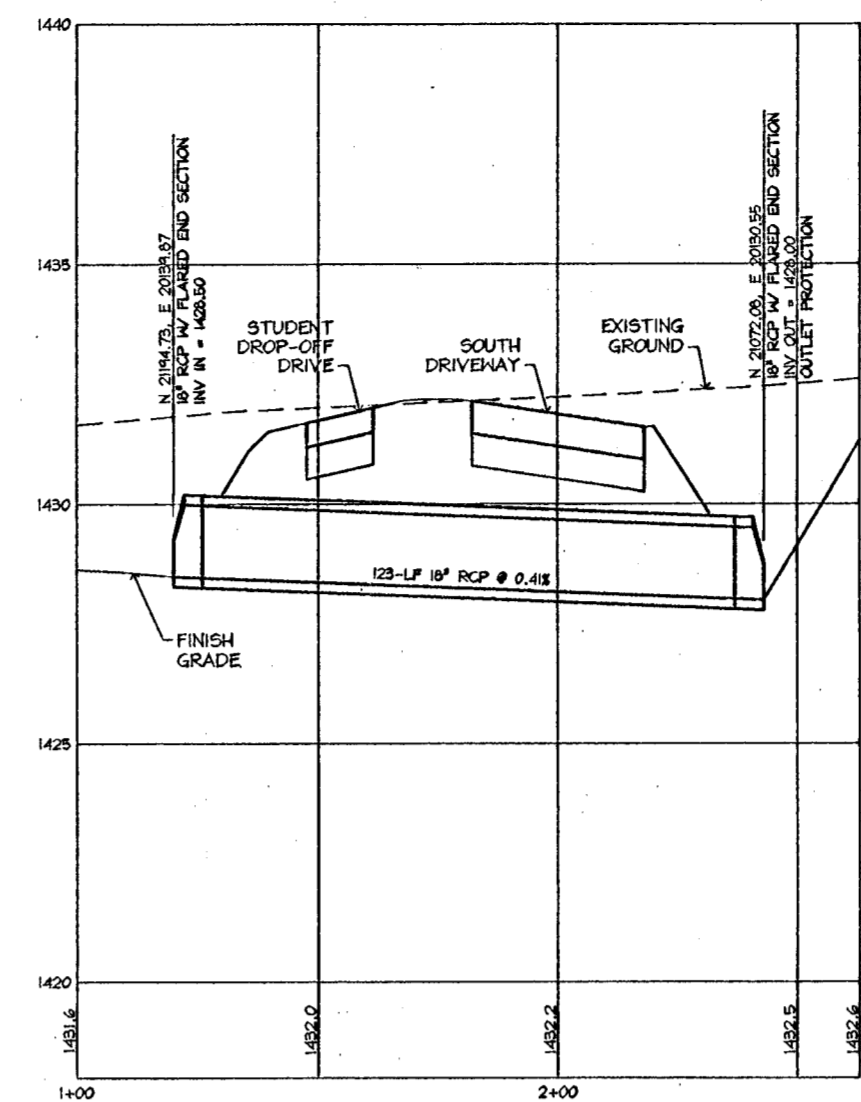
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DATE	MAY 2005
FILE NO.	X4-420-078

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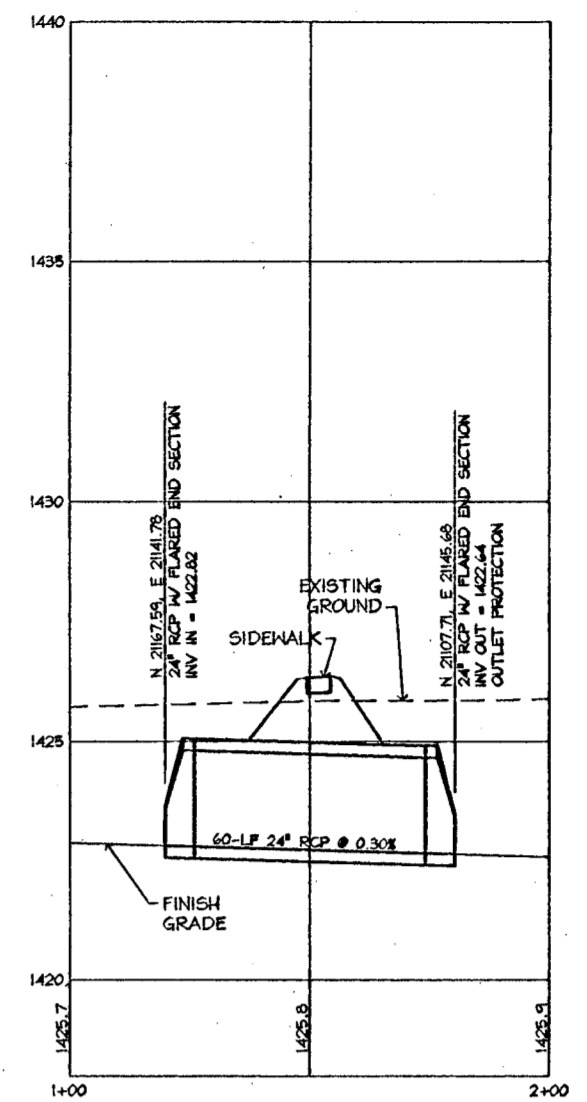
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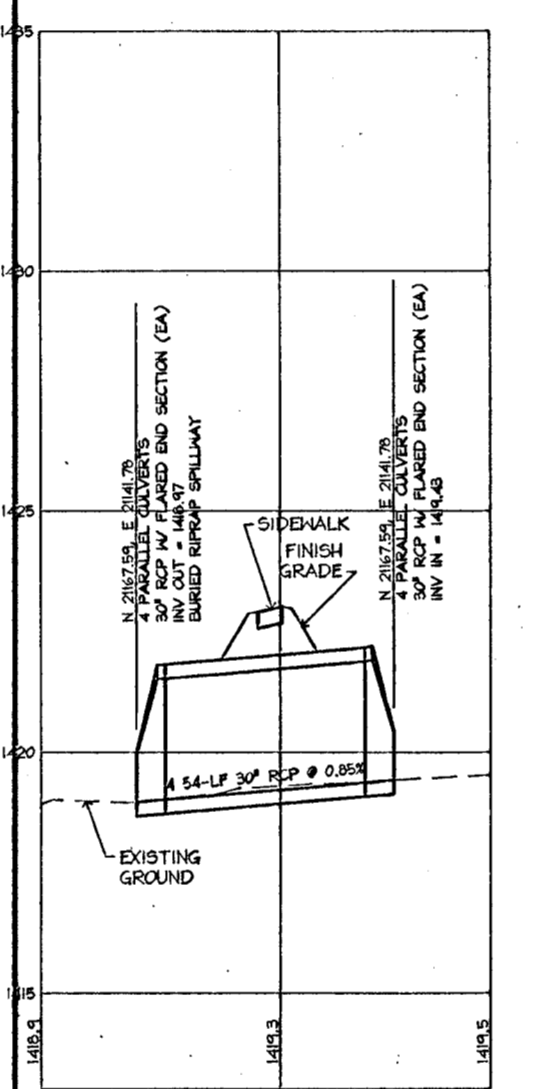
NORTH DRIVEWAY CULVERT
SCALE: H 1" = 20', V 1" = 5'



SOUTH DRIVEWAY CULVERT
SCALE: H 1" = 20', V 1" = 5'



EAST SIDEWALK CULVERT
SCALE: H 1" = 20', V 1" = 5'



TYPICAL DETENTION POND OUTLET CULVERT (4 PARALLEL PIPES)
SCALE: H 1" = 20', V 1" = 5'

CULVERT PROFILES
SCALE: H 1" = 20', V 1" = 5'

REV. 5-23-05

REVISION	DATE	BY

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201 S. MAIN, GODDARD, KANSAS

Construction Drawings
April 2005

DESIGN	HAK
DRAWN	HAK
DATE	4-11-05
FILE NO.	X4-420-07D
SHEET NO.	R 1-C2.11

REVISION	DATE	BY

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Engineers & Architects
1700 East Iron - Salina, Kansas 67401
Tel: 785-827-0433 Fax: 785-827-5949

GODDARD FACILITY IMPROVEMENTS
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201 S. MAIN, GODDARD, KANSAS

DESIGN
DRAWN
DATE MAY 2005
FILE NO. X4-420-07B

SHEET NO.
1-C2.11

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