DEPARTMENT OF THE ARMY
CHICAGO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
231 SOUTH LA SALLE STREET, SUITE 1500
CHICAGO IL 60604

Technical Services Division
Hydraulic and Environmental Engineering Section

SEP 2 9 2014

Mr. James Casey, P.E.
Illinois Department of Natural Resources
Office of Water Resources
160 N. LaSalle St.
Suite S-703
Chicago, Illinois 60601

RECEIVED
OCT 0 8
OFFICE OF ES
DIVISION OF MENT

Dear Mr. Casey:

The U.S. Army Corps of Engineers, Chicago District will be conducting an ecosystem restoration project at Ravine 8 in Highland Park. The U.S. Army Corps of Engineers, Chicago District requests a Federal Consistency Determination from the Illinois Coastal Management Program for the project. The proposed activity complies with Illinois' approved coastal management program and will be conducted in a manner consistent with such policies.

The project will restore the ravine's characteristics, reduce channel incision, and remove and prevent the recurrence of invasive species. Planned restoration measures will include cobble riffles and step pools, a cobble plunge pool and apron at the ravine connection with the beach, removal of invasive species, and native plant community reestablishment. Copies of the drawings for this project are enclosed.

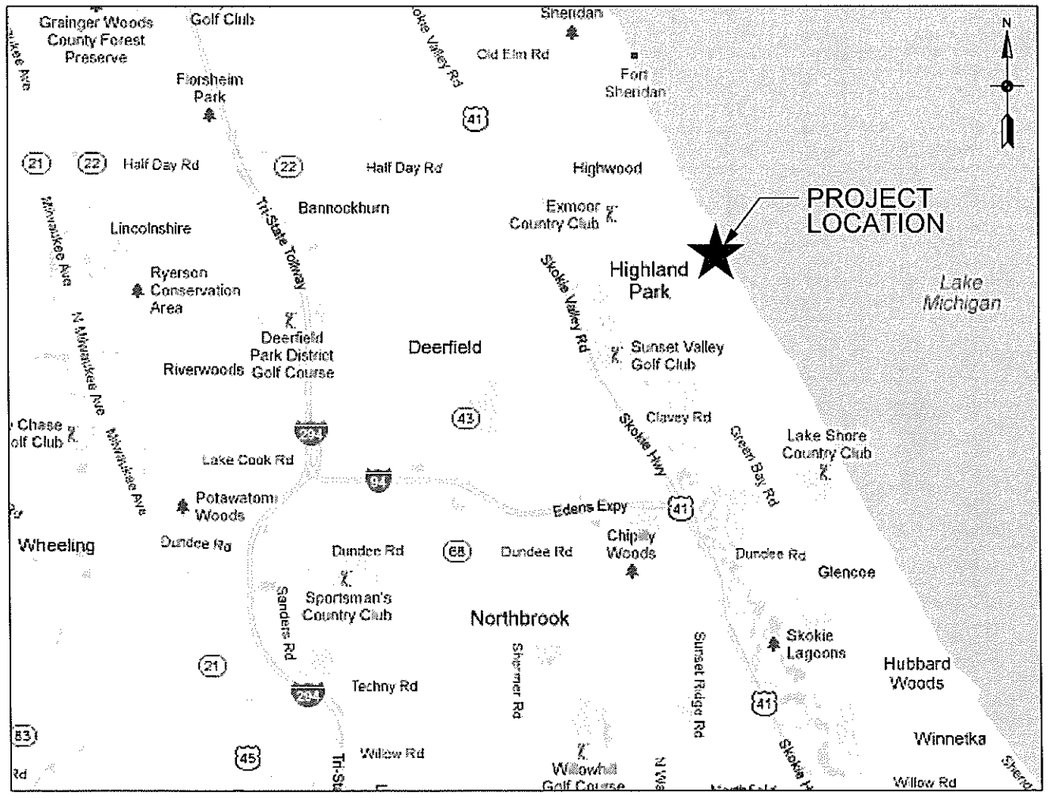
Any additional questions regarding this project may be directed to Margaret Dove at (312) 846-5502, or to Jay Semmler, Chief, Hydraulic and Environmental Engineering Section at (312) 846-5500.

Sincerely,

Christopher T. Drew
Colonel, U.S. Army
District Commander

US Army Corps of Engineers®
Chicago District

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL



LOCATION MAP
(N.T.S.)

VICINITY MAP
(N.T.S.)

CERTIFIED FINAL DOCUMENTS - RTA W912P6-14-B-0021

SEPTEMBER 03, 2014

THIS PROJECT WAS DESIGNED BY THE CHICAGO DISTRICT CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152. SIGNATURES INDICATE OFFICIAL RECOMMENDATION OF ALL DRAWINGS IN THIS SET.

REVIEWED BY:

JON S. HENDERSON, P.E. 8/8/2014
ATR TEAM LEADER DATE

SIGNATURE AFFIXED BELOW INDICATE OFFICAL RECOMMENDATION AND APPROVAL FOR ALL DRAWINGS CONTAINED IN THE SHEET INDEX.

APPROVAL RECOMMENDED BY:

KIRSTON A. BUCZAK, P.E. 8/8/2014
DATE

APPROVED BY:

JOSEPH J. SCHMIDT, P.E. 818/2014
DATE

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: N.T.S.
PLOT DATE: 9/3/2014
SIZE: ANSI D
FILE NAME: RAV8ER506PS-G-001.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P6-14-B-0021
CONTRACT NO.:
FILE NUMBER: RAV8ER506PS

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

TITLE SHEET - LOCATION AND VICINITY MAPS

SHEET IDENTIFICATION
G-001
SHEET 1 OF 19

SHEET NUMBER	SHEET I.D.	SHEET TITLE
1	G-001	TITLE SHEET - LOCATION AND VICINITY MAPS
2	G-002	SHEET INDEX, SYMBOLS, ABBREVIATIONS, AND KEY MAP
3	G-003	SITE PLAN AND WORK LIMITS
4	V-001	SURVEY CONTROL AND BENCH MARKS
5	CE101	RESTORATION PLAN - AREA 1
6	CE102	RESTORATION PLAN - AREA 2
7	CE103	RESTORATION PLAN - AREA 3
8	CE104	RESTORATION PLAN - AREA 4
9	CE105	RESTORATION PLAN - AREA 5
10	CE106	RESTORATION PLAN - AREA 6
11	CE107	RESTORATION PLAN - AREA 7
12	CE501	CONSTRUCTION DETAILS - STEP POOL
13	CE502	CONSTRUCTION DETAILS - PLUNGE POOL
14	CG101	GRADING ALIGNMENT AND PROFILE
15	CG102	CROSS SECTIONS STA. 0+54 TO STA. 2+55
16	CG103	CROSS SECTIONS STA. 2+60 TO STA. 5+80
17	CG104	CROSS SECTIONS STA. 5+90 TO STA. 7+15
18	CG105	CROSS SECTIONS STA. 7+20 TO STA. 7+85
19	CG106	LARGE SCALE POOL PROFILE
20	R-101	DOLAND ENGINEERING PLOT SURVEY

LEGEND

- 610 — PROPOSED MAJOR CONTOUR
- 609 — PROPOSED MINOR COUNTOUR
- 590 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- (S) EXISTING SANITARY MANHOLE
- EXISTING FLARED END SECTION
- EXISTING FIRE HYDRANT
- (E) EXISTING POWER POLE
- CB EXISTING CATCH BASIN/ INLET
- PROPOSED DITCH ALIGNMENT POINT
- PLUNGE POOL
- SAND/GRAVEL ALUVIUM
- NO PROPOSED WORK
- P L — PROPERTY LINE
- PROPOSED WORK LIMITS
- PROPOSED TEMPORARY SNOW/SAFETY FENCE
- EXISTING DITCH CENTERLINE
- EXISTING WOOD WALL
- EXISTING SHEET PILE
- EXISTING STONE WALL
- C C C C EXISTING CONCRETE WALL
- DEMOLISH EXISTING STRUCTURE
- RAVINE BLUFF RESTORATION
- DUNE RESTORATION
- BEACH STREAM ZONE
- STEP POOL

STANDARD ABBREVIATIONS

APPROX.	APPROXIMATELY		
B/P	BOTTOM OF PIPE	IE	INVERT ELEVATION
BM	BENCH MARK	LF	LINEAR FEET
CB	CATCH BASIN	MH	MANHOLE
℄	CENTERLINE	MIN.	MINIMUM
COR	CONTRACTING OFFICER'S REPRESENTATIVE	N	NORTH
		N.T.S.	NOT TO SCALE
COE	CORPS OF ENGINEERS	PROP.	PROPOSED
CMP	CORRUGATED METAL PIPE	RCP	REINFORCED CONCRETE PIPE
CY	CUBIC YARDS	S	SOUTH
DIA.	DIAMETER	SAN	SANITARY
D.I.P	DUCTILE IRON PIPE	ST	STORM
DWG.	DRAWING	STA.	STATION
E	EAST	T/P	TOP OF PIPE
ELEV.	ELEVATION	TYP	TYPICAL
EXIST.	EXISTING	VIF	VERIFY IN FIELD
FES	FLARED END SECTION	W	WEST
FH	FIRE HYDRANT	W/	WITH
H	HORIZONTAL	W/O	WITHOUT

KEY MAP

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MUST COMPARE THE SITE CONDITIONS AS INDICATED ON THE DRAWINGS IN ACCORDANCE WITH THE CONTRACT CLAUSE 52-236-3, SITE INVESTIGATION AND CONDITIONS.
2. THE CONTRACTOR MUST CALL J.U.L.I.E AT 800-892-0123 TO LOCATE UNDERGROUND UTILITIES PRIOR TO PERFORMING ANY EXCAVATION. SEVERAL ABANDONNED 10" WATERMAIN UNCOVERED DURING PREVIOUS CONSTRUCTION ARE PRESENT AT THE BOTTOM OF THE RAVINE. CONTRACTOR SHALL REMOVE EXISTING 10" WATERMAIN IN ACCORDANCE WITH SECTION 02 41 00 DEMOLITION, IF ENCOUNTERED DURING INSTALLATION OF THE PROPOSED FEATURES.
3. UTILITIES AND SITE FEATURES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR MUST IMMEDIATELY REPORT ANY DISCREPANCIES TO THE COR.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES WITHIN THE WORK LIMITS. UTILITIES DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE GOVERNMENT.
5. THE CONTRACTOR MUST VERIFY ALL CONTOUR ELEVATIONS SHOWN ON THE DRAWINGS. IF DISCREPANCIES BECOME APPARENT, THE COR MUST BE NOTIFIED PRIOR TO START OF WORK.
6. ALL AREAS DISTURBED DUE TO CONSTRUCTION WORK MUST BE RESTORED TO PRE-CONSTRUCTION CONDITION OR AS SPECIFIED IN THE PLANS AND SPECIFICATION.
7. ALL WORK MUST BE IN ACCORDANCE WITH CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL EM 385-1-1.
8. THE CONTRACTOR MUST INSTALL AND MAINTAIN TEMPORARY EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs) INCLUDING, BUT NOT LIMITED TO, SILT FENCE, COIR LOGS, INGRESS/EGRESS PAD, AND SEDIMENT FILTER BAG, IN ACCORDANCE TO THE ILLINOIS STORM WATER QUALITY MANUAL AND SECTION 01 57 20.01 03 ENVIRONMENTAL PROTECTION OF ILLINOIS, AS NECESSARY TO CONTROL SEDIMENT AND EROSION ON THE SITE DURING CONSTRUCTION.
9. THE CONTRACTOR MUST KEEP ALL STREETS CLEAN AND CLEAR OF MUD, STONES, DEBRIS, ETC., AS DESCRIBED IN SECTION 01 57 20.01 03 ENVIRONMENTAL PROTECTION OF ILLINOIS.
10. SANITARY SEWER INFORMATION SHOWN ON CE101 THROUGH CE104 WAS TAKEN FROM "AS-BUILT SANITARY SEWER MAIN REPLACEMENT 2011" DRAWINGS PROVIDED BY THE CITY OF HIGHLAND PARK.
11. WORK DEFINED BETWEEN STA. 0+00 AND STA. 3+11.00 IS AN OPTION.

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DNS
SUBMITTED BY: JOHN A. BOSKI, P.E.
PLOT SCALE: N.T.S.
PLOT DATE: 9/2/2014
SIZE: ANSI D
FILE NAME: RAVIER506FS-C-002.dgn
DATE: JULY 2014
SOLICITATION NO.: W912DR-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAVIER506FS

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

RAVINE 6 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

SHEET INDEX, SYMBOLS, ABBREVIATIONS, AND KEY MAP

SHEET IDENTIFICATION
G-002
SHEET 2 OF 20

POINT	NORTHING	EASTING
WP1	2,010,946.96	1,131,908.62
WP2	2,010,877.13	1,131,941.99
WP3	2,010,930.26	1,132,018.55
WP4	2,010,959.99	1,132,099.93
WP5	2,011,111.01	1,132,110.13
WP6	2,011,111.01	1,132,110.13
WP7	2,011,212.99	1,132,204.20
WP8	2,011,266.25	1,132,288.90
WP9	2,011,266.25	1,132,300.10
WP10	2,011,231.02	1,132,302.09
WP11	2,011,236.44	1,132,437.88
WP12	2,011,266.05	1,132,611.33
WP13	2,011,314.69	1,132,633.43
WP14	2,011,358.24	1,132,615.85
WP15	2,011,369.73	1,132,632.50
WP16	2,011,576.68	1,132,504.21
WP17	2,011,787.92	1,132,399.16
WP18	2,011,680.58	1,132,178.79
WP19	2,011,643.47	1,132,202.74
WP20	2,011,651.51	1,132,219.60
WP21	2,011,539.12	1,132,287.52
WP22	2,011,449.12	1,132,314.51
WP23	2,011,469.69	1,132,258.51
WP24	2,011,444.40	1,132,230.52
WP25	2,011,453.21	1,132,148.72
WP26	2,011,430.06	1,132,172.65
WP27	2,011,375.92	1,132,252.96
WP28	2,011,347.43	1,132,267.84
WP29	2,011,274.27	1,132,151.89
WP30	2,011,223.77	1,132,105.31
WP31	2,011,149.10	1,132,036.43
WP32	2,011,019.62	1,132,023.96
WP33	2,011,010.60	1,132,005.35
WP34	2,010,981.78	1,132,018.51
WP35	2,010,961.32	1,131,971.68
WP36	2,010,986.65	1,131,960.12

EAST PLANTING BOUNDARY

POINT	NORTHING	EASTING
P1	2,011,725.48	1,132,378.36
P2	2,011,600.74	1,132,474.85
P3	2,011,589.48	1,132,478.44
P4	2,011,568.51	1,132,449.29
P5	2,011,514.89	1,132,470.56
P6	2,011,460.63	1,132,507.19
P7	2,011,435.65	1,132,532.54
P8	2,011,360.15	1,132,576.68
P9	2,011,334.66	1,132,581.70

LEGEND

- WORK LIMIT POINT
- WORK LIMIT
- ACCESS ROUTE
- PARCEL LINES
- SNOW SAFETY FENCE

NOTES:

1. THE PARCEL LINES SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY.
2. REMOVE EXISTING SHRUBBERY AS NECESSARY TO ACCESS SITE FROM LAKE AVENUE. RESTORE TO EXISTING CONDITION.
3. NO ONSITE OR OFFSITE STAGING AND STORAGE AREAS ARE PROVIDED BY THE GOVERNMENT. FOR ANY OFFSITE STAGING OR STORAGE, CONTRACTOR TO COORDINATE WITH HIGHLAND PARK AT NO ADDITIONAL COST TO THE GOVERNMENT.
4. THE EASTERN EDGE OF THE WORK LIMITS SHALL FOLLOW THE EXISTING WATER LINE OF THE LAKE AT THE TIME OF CONSTRUCTION. NO WORK IN LAKE MICHIGAN IS ALLOWED UNDER THIS CONTRACT.
5. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED HAUL ROAD OR SITE ACCESS IN THE WORK PLAN SUBMITTAL. THE NON-WORK AREA SHOWN IN THE DRAWINGS, IS OWNED BY HIGHLAND PARK. THIS AREA CAN POTENTIALLY BE USED TO ACCESS THE SITE, TREE REMOVAL DOWN THE BLUFF SHALL BE MINIMIZED TO A WIDTH SUFFICIENT FOR SAFE PASSAGE FOR ONE LANE OF EQUIPMENT. ANY DISTURBED AREAS ALONG THE BLUFF SHALL BE RESTORED TO THE SAME AS OTHER AREAS OF THE PROJECT DESIGNATED AS RAVINE BLUFF RESTORATION. ANY AREAS OUTSIDE OF THE BLUFF, SHALL BE RESTORED BACK TO EXISTING CONDITIONS.
6. IF AREA PATTERNED AS "NO PROPOSED WORK" IS NOT UTILIZED BY THE CONTRACTOR. THE SNOWSAFETY FENCE SHALL BE MOVED FROM (WP17, WP18, WP19) TO (WP-19, WP-20, P1). FINAL LOCATION OF SNOW FENCE ALONG BEACH MAY BE ADJUSTED BY THE COR.

N

0 50' 100'

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRB
SUBMITTED BY: JOHN A. GROSSKOPF, P.E.
PLOT SCALE: 1:1
PLOT DATE: 8/5/2014
SIZE: ANSI D
FILE NAME: RAVIERSOKPS-G-103.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P8-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAVIERSOKPS

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

SITE PLAN AND WORK LIMITS

SHEET IDENTIFICATION
G-103
SHEET 3 OF 19

EXIST. SAN MH - (62), 4FT DIA CONC. FR CL
RIM = 642.80
STA. 1+25.88 OFFSET= -4.914

EXIST. SAN MH - (51), 4FT DIA. CONC. FR CL
RIM = 660.192
STA. 0+10.46 OFFSET= -11.884
INV. = 647.25

EXIST. FENCE AND TIMBER WALL TO REMAIN

WORK LIMITS AND SNOW FENCE

EXISTING PIPE

EXIST. SAN PIPE - (35), 117.85FT
15.27%, 8" DIA, D.I.P., CL 52
INV 647.750 W
INV 629.760 E

LAKE AVENUE

EXIST. GARAGE

EXIST. TIMBER WALLS TO REMAIN (TYP)

PLUNGE POOL AT RAVINE HEAD

STEP POOL #1

WORK LIMITS AND SNOW FENCE

STEP POOL #5

MATCHLINE SEE DWG. CE102

STEP POOL #4

STEP POOL #3

EXIST. 6" SAN SERVICE

EXIST. SAN MH - (52), 4FT DIA CONC. FR CL
RIM = 637.61
STA. 2+19.19 OFFSET= 6.44

STEP POOL #2

EXIST. SAN MH - (88), 4FT DIA CONC. FR CL
RIM = 637.70
STA. 1+94.13 OFFSET= 12.963

LEGEND

RAVINE BLUFF RESTORATION

PLUNGE POOL

STEP POOL

WORK LIMITS

SNOW/SAFETY FENCE

SAND/GRAVEL ALLUVIUM

EXISTING GEOSYNTHETIC DITCH CHECK

NOTES:

1. SEE SHEET CE501 FOR STEP POOL DETAIL.
2. SEE SHEET CE502 FOR PLUNGE POOL DETAIL.
3. SEE SHEET CE501 FOR SAND/GRAVEL ALUVIUM DETAIL.
4. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.
5. REMOVE APPROXIMATELY SIX EXISTING GEOSYNTHETIC DITCH CHECKS ALONG THE CHANNEL BOTTOM. FIELD VERIFY QUANTITY AND LOCATION.
6. REMOVE MISCELLANEOUS PLASTIC DRAINAGE PIPES THAT ARE INACTIVE AND LAYING ABOVE GROUND.

0 10' 20'

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

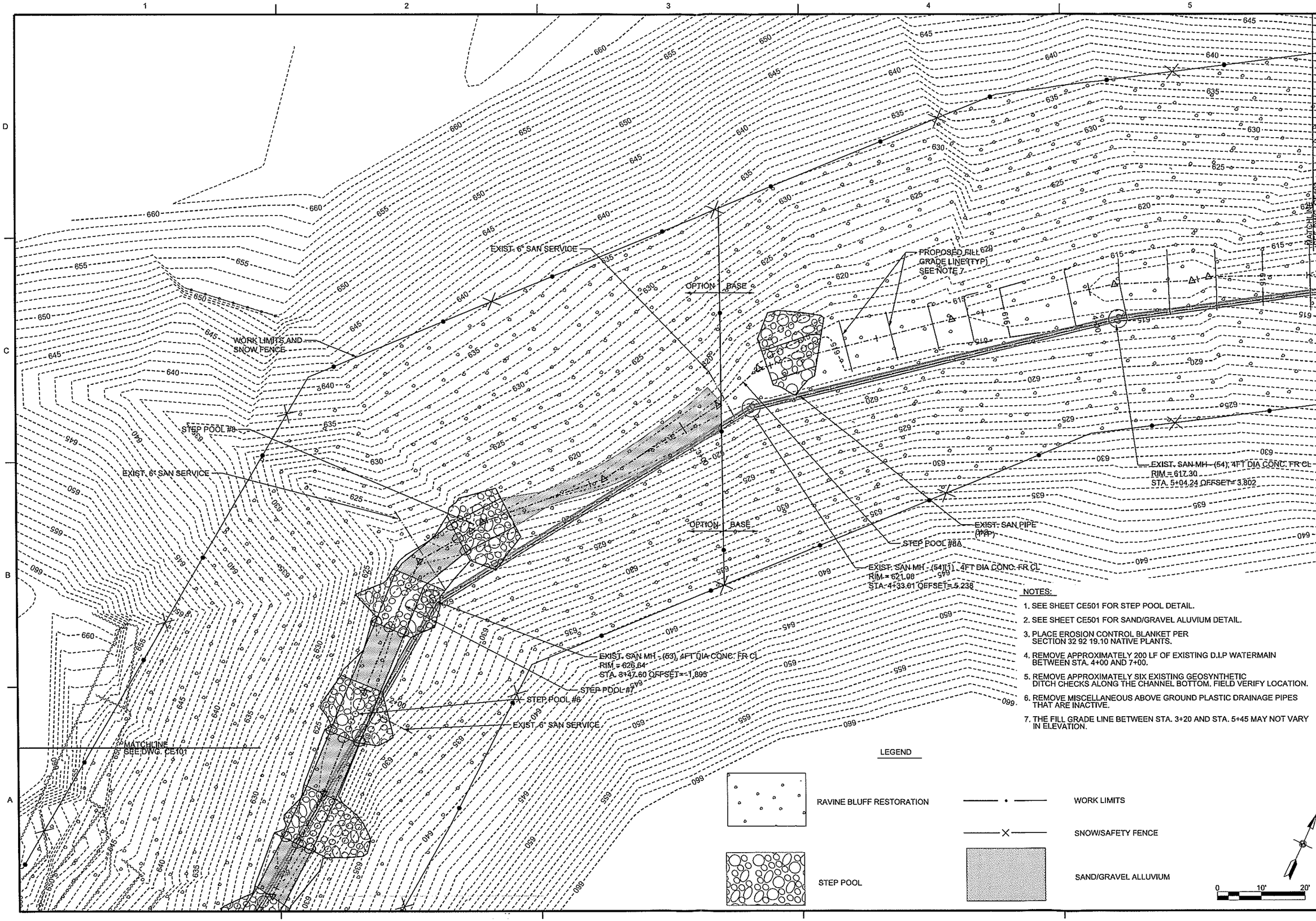
DESIGNED BY: DAMIAN ALLEN
DATE: JULY 2014
DWN BY: DGA
CKD BY: DRS
SOLICITATION NO.: W912P8-14-R-0021
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
CONTRACT NO.:
PLOT SCALE: 1 = 10'
PLOT DATE: 9/2/2014
SIZE: ANSI D
FILE NAME: FILE:E:\50GRP2-CE101.dgn
FILE NUMBER: R4168/50GRP2

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN - AREA 1

SHEET IDENTIFICATION
CE101
SHEET 5 OF 20



NOTES:

1. SEE SHEET CE501 FOR STEP POOL DETAIL.
2. SEE SHEET CE501 FOR SAND/GRAVEL ALUVIUM DETAIL.
3. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.
4. REMOVE APPROXIMATELY 200 LF OF EXISTING D.I.P WATERMAIN BETWEEN STA. 4+00 AND 7+00.
5. REMOVE APPROXIMATELY SIX EXISTING GEOSYNTHETIC DITCH CHECKS ALONG THE CHANNEL BOTTOM. FIELD VERIFY LOCATION.
6. REMOVE MISCELLANEOUS ABOVE GROUND PLASTIC DRAINAGE PIPES THAT ARE INACTIVE.
7. THE FILL GRADE LINE BETWEEN STA. 3+20 AND STA. 5+45 MAY NOT VARY IN ELEVATION.

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	DATE	MARK	DESCRIPTION	DATE

TRACKING NO.	ACTION

TRACKING NO.	ACTION

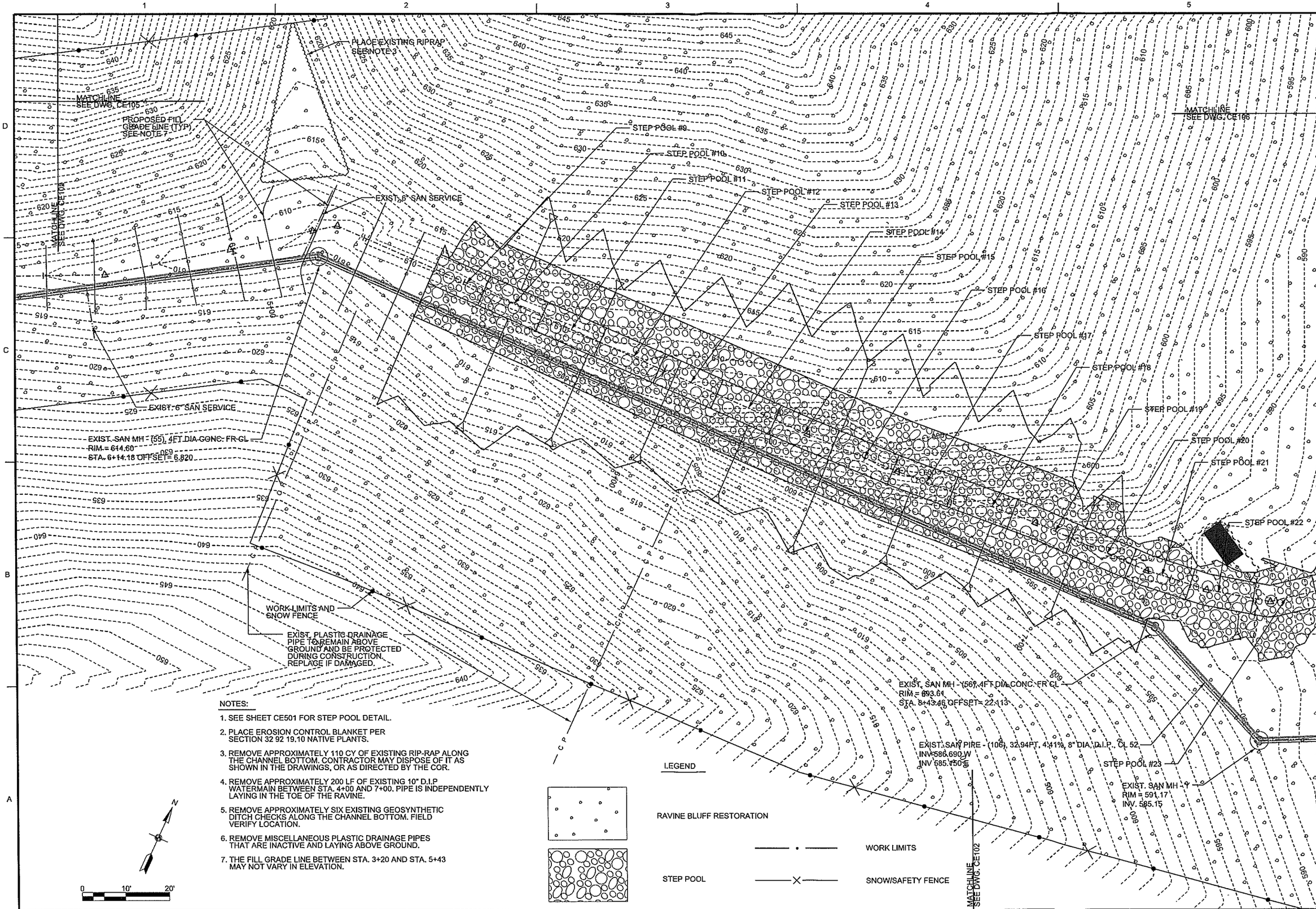
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DATE: JULY 2014
DWN BY: DGA
CKD BY: DRS
SOLICITATION NO.: W912P5-14-R-0021
SUBMITTED BY: JOHN A. GROSSSH, P.E.
CONTRACT NO.:
PLOT SCALE: 1" = 10'
PLOT DATE: 8/2/2014
FILE NUMBER: R4W3E3S0W1S
SIZE: ANSI D
FILE NAME: R4W3E3S0W1S-CE102.dgn

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN-
AREA 2

SHEET IDENTIFICATION
CE102
SHEET 6 OF 20



NOTES:

1. SEE SHEET CE501 FOR STEP POOL DETAIL.
2. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.
3. REMOVE APPROXIMATELY 110 CY OF EXISTING RIP-RAP ALONG THE CHANNEL BOTTOM. CONTRACTOR MAY DISPOSE OF IT AS SHOWN IN THE DRAWINGS, OR AS DIRECTED BY THE COR.
4. REMOVE APPROXIMATELY 200 LF OF EXISTING 10" D.I.P WATERMAIN BETWEEN STA. 4+00 AND 7+00. PIPE IS INDEPENDENTLY LAYING IN THE TOE OF THE RAVINE.
5. REMOVE APPROXIMATELY SIX EXISTING GEOSYNTHETIC DITCH CHECKS ALONG THE CHANNEL BOTTOM. FIELD VERIFY LOCATION.
6. REMOVE MISCELLANEOUS PLASTIC DRAINAGE PIPES THAT ARE INACTIVE AND LAYING ABOVE GROUND.
7. THE FILL GRADE LINE BETWEEN STA. 3+20 AND STA. 5+43 MAY NOT VARY IN ELEVATION.

LEGEND

RAVINE BLUFF RESTORATION

STEP POOL

WORK LIMITS

SNOW/SAFETY FENCE

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: 1" = 10'
SIZE: ANSI D
PLOT DATE: 9/2/2014
FILE NAME: RAV8ER506PS-CE103.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P8-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAV8ER506PS

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN - AREA 3

SHEET IDENTIFICATION
CE103
SHEET 7 OF 20

MATCHLINE SEE DWG. CE106

MATCHLINE SEE DWG. CE103

LAKE MICHIGAN

SEET NOTE 5

SEE NOTE 8

APPROXIMATE LOCATION OF CONCRETE RUBBLE CURRENTLY BEING USED AS A CHECK DAM

EXIST. SHEET PILE WALL

PLUNGE POOL AT RAVINE MOUTH

STEP POOL #24

EXIST. ROCK PILE.

EXIST. SAN MH - (56), 4FT DIA CONC. FR CL RIM = 593.61, STA. 8+43.46 OFFSET= 22.113

EXIST. SAN PIPE - (106), 32.94FT, 4.41%, 8" DIA. D.I.B., CL 52 INV 586.690 W INV 585.150 E

EXIST. SAN MH - Y RIM = 591.17 INV. 585.15

EXIST. SAN PIPE (TYP)

WORK LIMITS AND SNOW FENCE

LEGEND

- RAVINE BLUFF RESTORATION
- DUNE RESTORATION
- BEACH STREAM ZONE
- PLUNGE POOL
- STEP POOL
- NO PROPOSED WORK
- WORK LIMITS
- SNOW/SAFETY FENCE

NOTES:

1. SEE SHEET CE501 FOR STEP POOL DETAIL.
2. SEE SHEET CE502 FOR PLUNGE POOL DETAIL.
3. AFTER REMOVAL OF THE CHECK DAM AT THE MOUTH OF THE RAVINE, THE STEP-POOLS BELOW ITS CREST ELEVATION MUST BE COMPLETED IMMEDIATELY. REMOVAL OF THE CHECK DAM SHALL NOT BE INITIATED IF RAIN IS FORECASTED DURING THE PERIOD REQUIRED FOR THE CONSTRUCTION OF THESE STEP-POOLS.
4. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.
5. REMOVE APPROXIMATELY 110 CY OF EXISTING RIP-RAP ALONG THE CHANNEL BOTTOM. CONTRACTOR MAY DISPOSE OF IT AS SHOWN IN THE DRAWINGS, OR AS DIRECTED BY THE COR.
6. REMOVE APPROXIMATELY SIX EXISTING GEOSYNTHETIC DITCH CHECKS ALONG THE CHANNEL BOTTOM. FIELD VERIFY LOCATION.
7. REMOVE MISCELLANEOUS PLASTIC DRAINAGE PIPES THAT ARE INACTIVE AND LAYING ABOVE GROUND.
8. IN AREAS OF NO GRADING, REMOVE THE SHEET PILE WALL 1' BELOW EXISTING GRADE. IN AREAS OF GRADING, REMOVE THE SHEET PILE WALL 1' BELOW THE PROPOSED GRADE.

0 10' 20'

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRB
SUBMITTED BY: SOPHIA GRODSKIN, P.E.
SIZE: ANSI D
FILE NAME: RAVIBERSONPS-CE104.dgn
PLOT SCALE: 1:1 "=20'
PLOT DATE: 8/5/2014
DATE: JULY 2014
SOLICITATION NO.: W912P8-14-A-0021
CONTRACT NO.:
FILE NUMBER: RAVIBERSONPS

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN - AREA 4

SHEET IDENTIFICATION
CE104
SHEET 8 OF 20

LEGEND

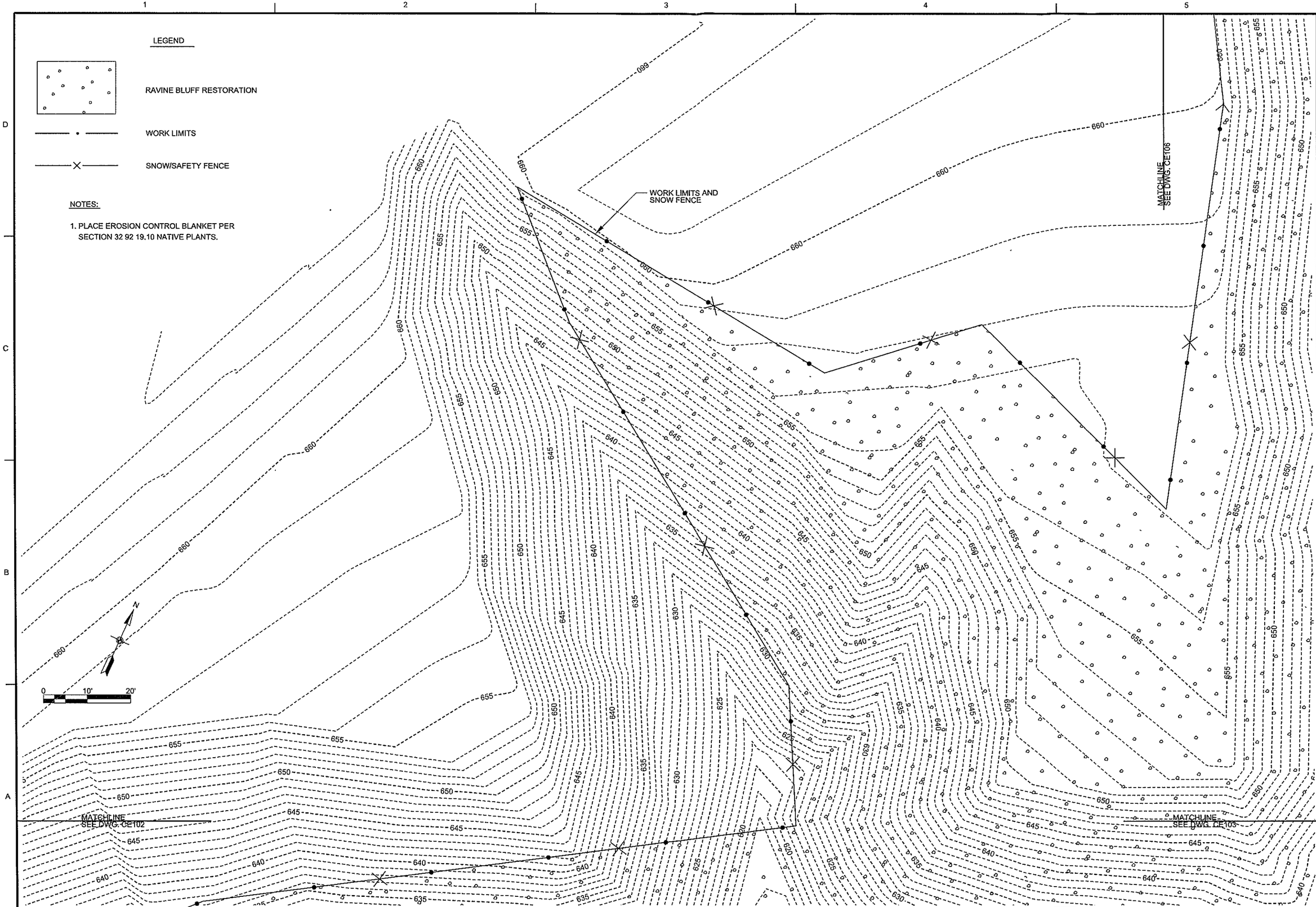
RAVINE BLUFF RESTORATION

WORK LIMITS

SNOW/SAFETY FENCE

NOTES:

1. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.



US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

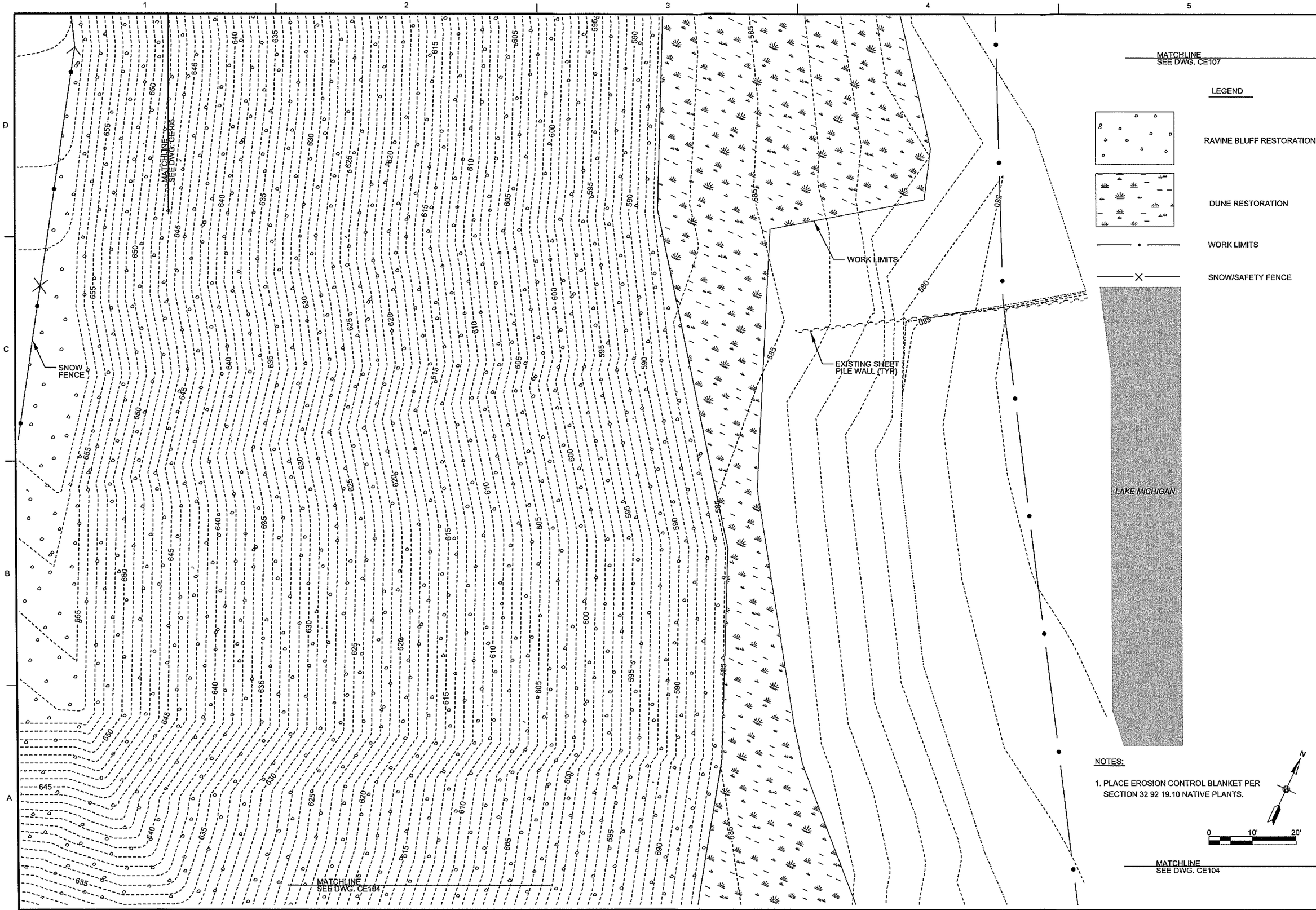
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: 1" = 10'
PLOT DATE: 9/3/2014
SIZE: ANSI D
FILE NAME: RAV8ER506PS-CE105.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P6-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAV8ER506PS

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN - AREA 5

SHEET IDENTIFICATION
CE105
SHEET 8 OF 19



LEGEND

RAVINE BLUFF RESTORATION

DUNE RESTORATION

WORK LIMITS

SNOW/SAFETY FENCE

NOTES:

1. PLACE EROSION CONTROL BLANKET PER SECTION 32 92 19.10 NATIVE PLANTS.

0 10' 20'

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

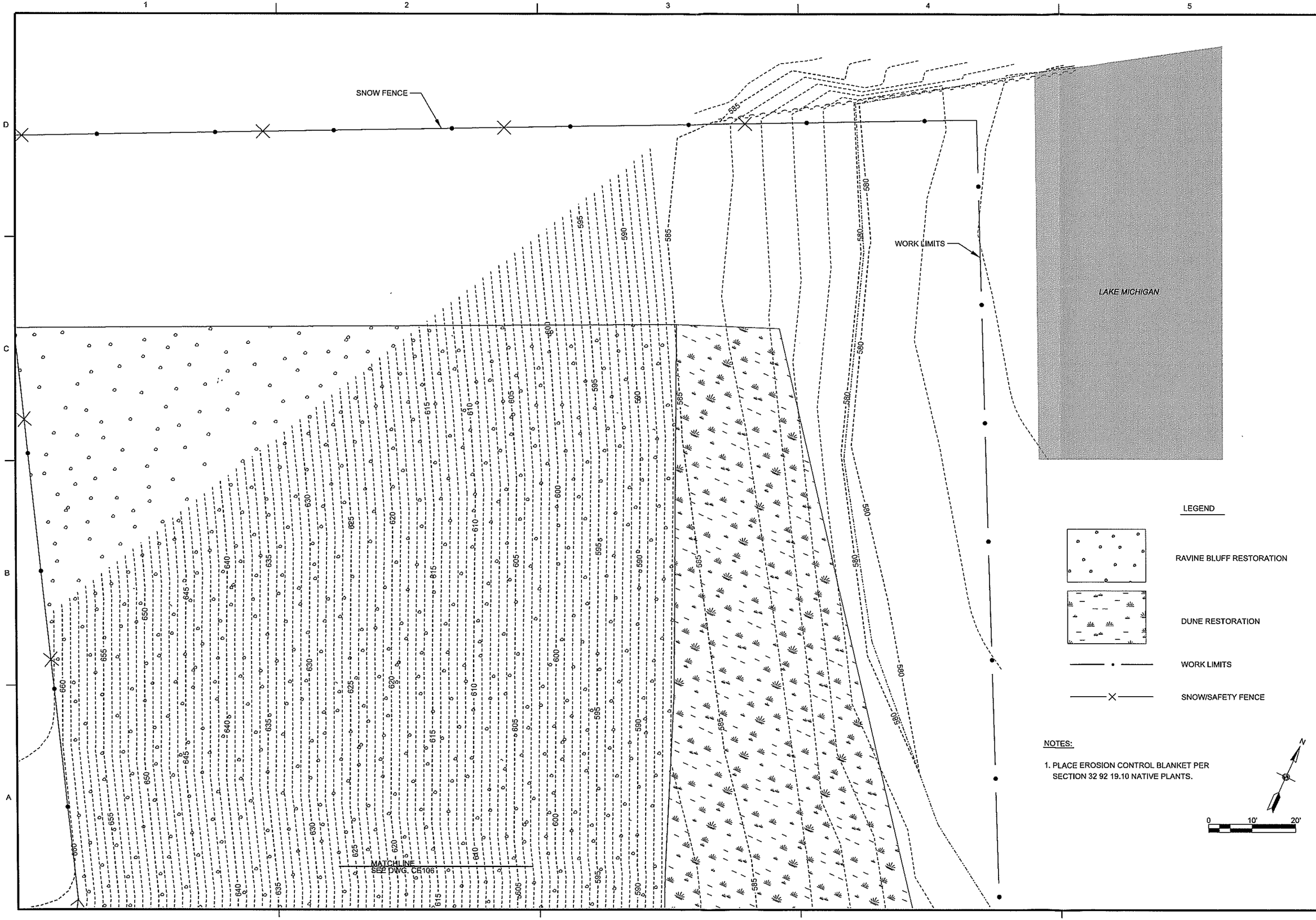
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: 1" = 10'
PLOT DATE: 9/3/2014
SIZE: ANSI D
FILE NAME: RAV8ER506PS-CE106.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P8-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAV8ER506PS

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

RESTORATION PLAN - AREA 6

SHEET IDENTIFICATION
CE106
SHEET 9 OF 19



US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

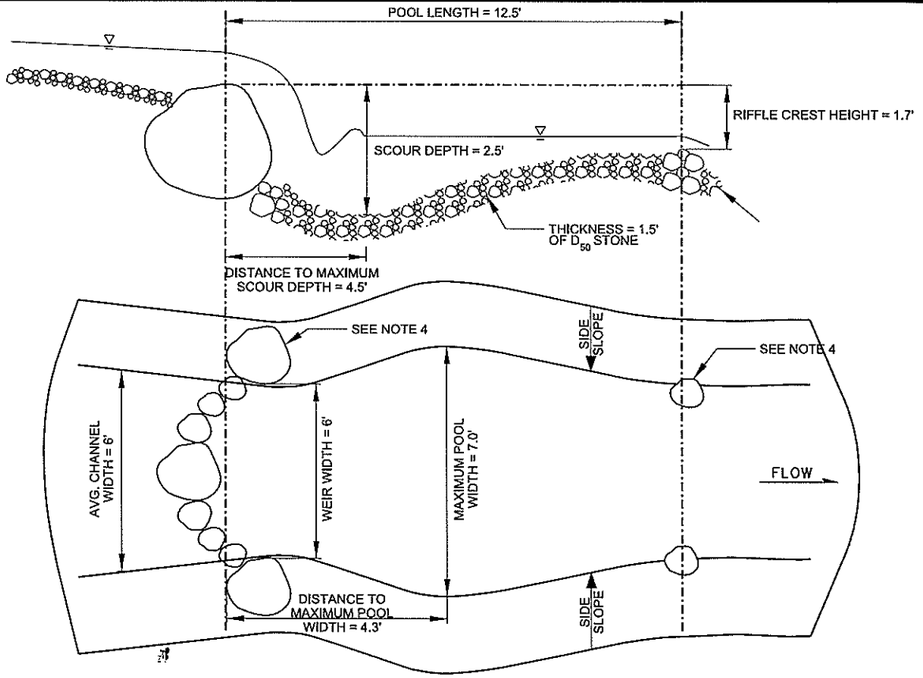
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: DGA
CKD BY: DRB
SUBMITTED BY: JOHN A. GRUBISICH, P.E.
PLOT SCALE: 1" = 10'
PLOT DATE: 9/22/2014
FILE SIZE: ANSI D
FILE NAME: RAVINE8CORP-CE107.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P6-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAVINE8CORPS

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

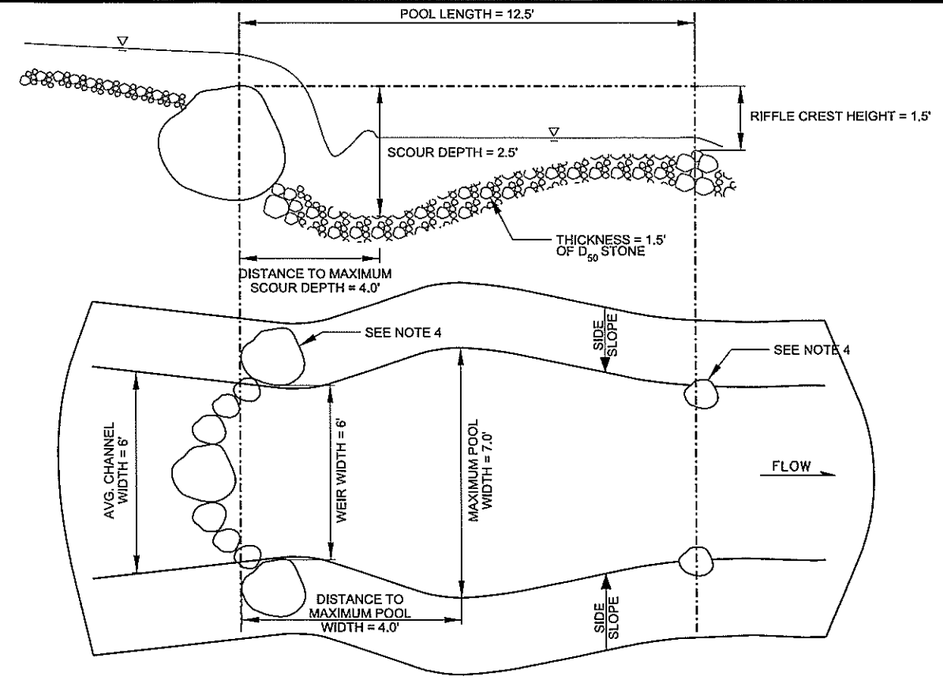
RESTORATION PLAN - AREA 7

SHEET IDENTIFICATION
CE107
SHEET 10 OF 19



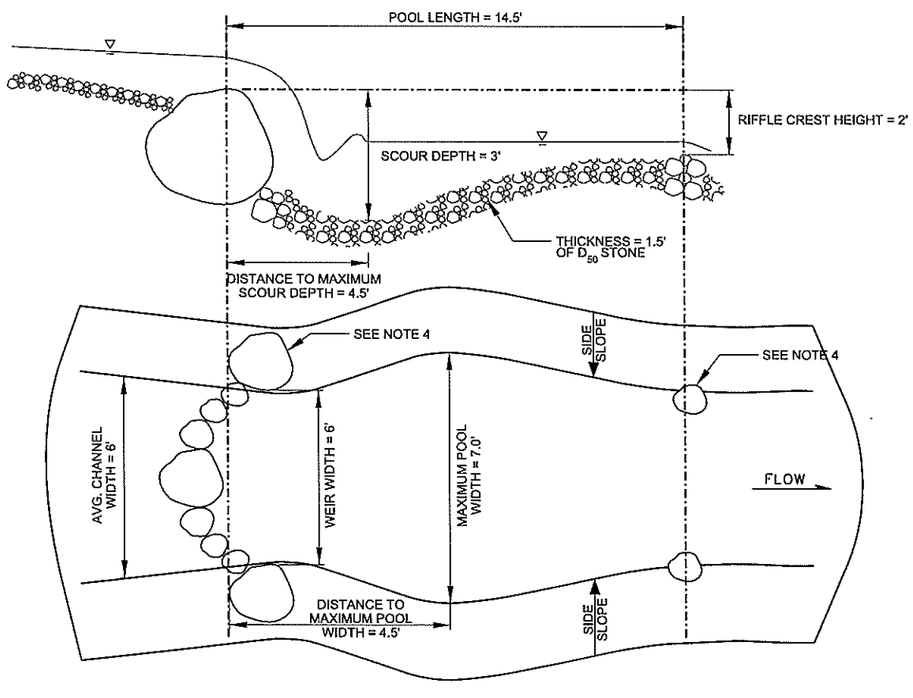
STEP POOL #1 THROUGH #8A

N.T.S



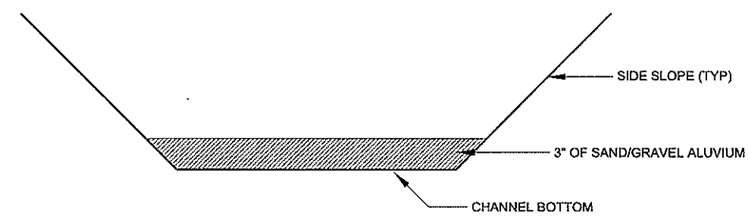
STEP POOL #9

N.T.S



STEP POOL #10 THROUGH #24

N.T.S



TYPICAL SECTION FOR SAND/GRAVEL ALLUVIUM LAYER

NOTE: PLACEMENT OF SAND/GRAVEL ALLUVIUM AS SHOWN ON PLAN SHEETS CE101 AND CE102, MATERIAL TO BE PLACED BETWEEN STEP POOLS 1 THROUGH 8A. MATERIAL TO BE EXCAVATED FROM THE BEACH AT A LOCATION IDENTIFIED BY THE COR.

NOTES:

1. BOULDERS USED FOR STEP POOL CONSTRUCTION SHOULD HAVE DIAMETERS BETWEEN 1 FT AND 2 FT.
2. BOULDERS TO BE USED FOR PLUNGE POOL SHOULD HAVE DIAMETERS BETWEEN 1 FT AND 2 FT.
3. A DECREASE OF 6" IN ELEVATION FROM THE TOP OF OUTSIDE BOULDERS TO THE MIDDLE BOULDERS IS REQUIRED.
4. END BOULDERS KEYED INTO RAVINE SLOPE TO FUNCTION AS REVETMENT CUTOFF.
5. COBBLE TO EXTEND ON SLOPED SURFACES IN THE RAVINE AS SHOWN IN CROSS SECTIONS.

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

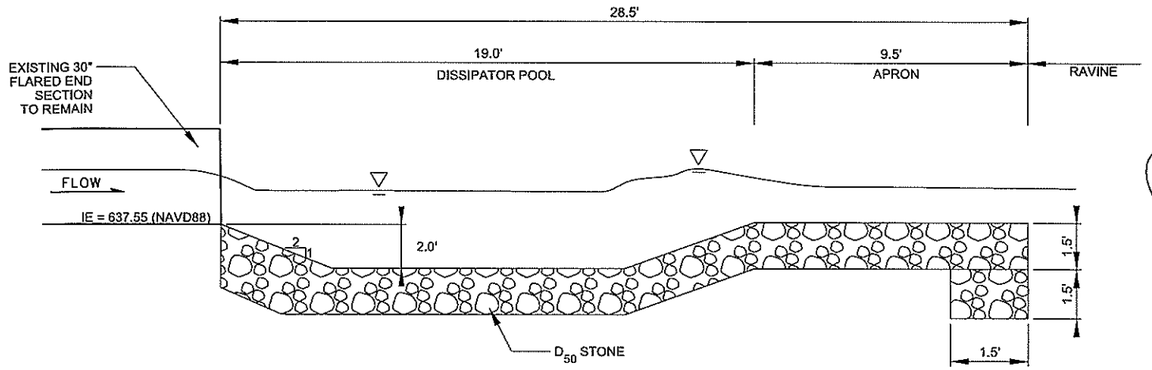
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DATE: JULY 2014
DWN BY: AK
CKD BY: DRS
SOLICITATION NO.: W912P6-14-R-0021
SUBMITTED BY: JOHN A. GROSSKI, P.E.
CONTRACT NO.:
PLOT SCALE: N.T.S.
PLOT DATE: 9/8/2014
FILE NUMBER: RAVINES/SHPS
FILE NAME: RAVERSSHPS-CE501.dgn
SHEET NAME: NSED

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

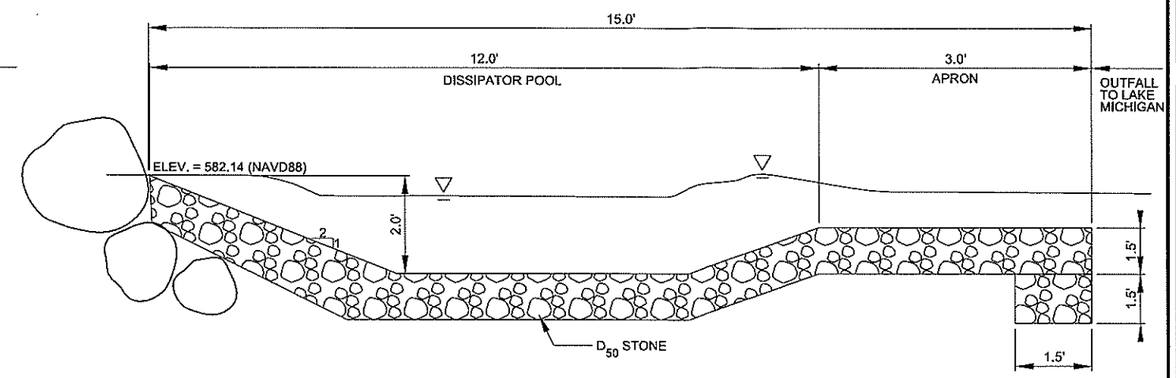
CONSTRUCTION DETAILS - STEP POOL

SHEET IDENTIFICATION
CE501
SHEET 12 OF 20



PLUNGE POOL AT RAVINE HEAD - SECTION DETAIL

N.T.S.

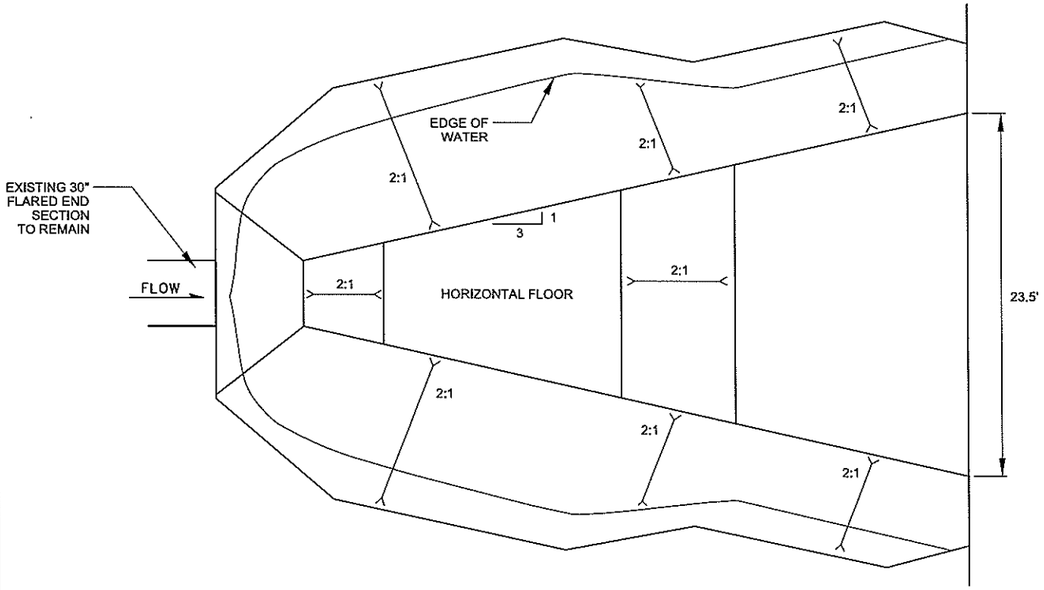


PLUNGE POOL AT RAVINE MOUTH - SECTION DETAIL

N.T.S.

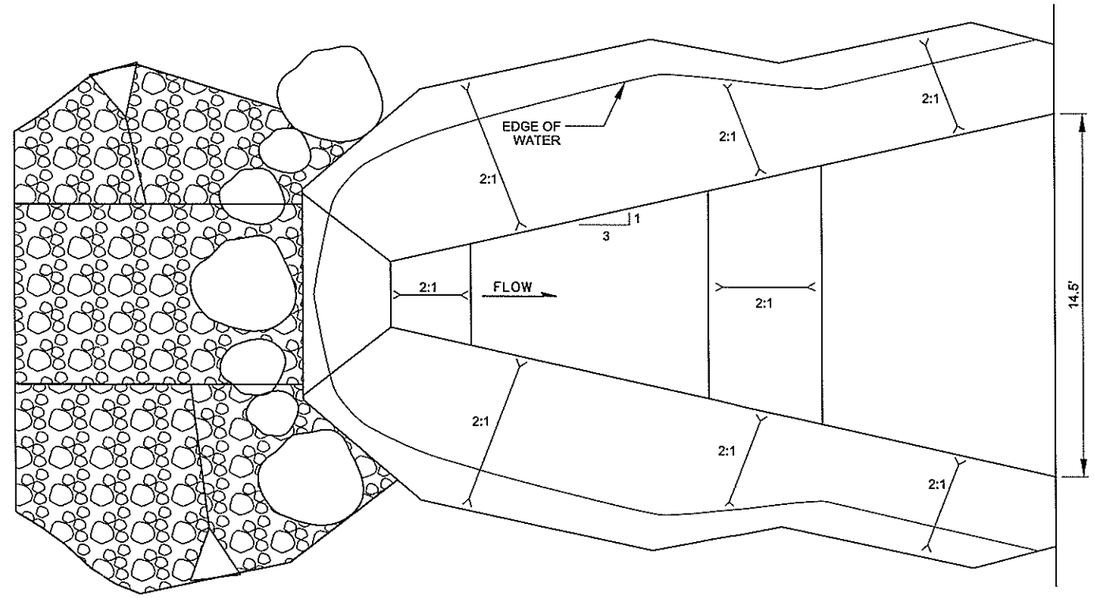
NOTES:

1. BOULDERS TO BE USED FOR PLUNGE POOL SHOULD HAVE DIAMETERS BETWEEN 1 FT AND 2 FT.
2. A DECREASE OF 6" IN ELEVATION FROM THE TOP OF OUTSIDE BOULDERS TO THE MIDDLE BOULDERS IS REQUIRED.
3. END BOULDERS KEYED INTO RAVINE SLOPE TO FUNCTION AS REVETMENT CUTOFF.



PLUNGE POOL AT RAVINE HEAD - PLAN VIEW

N.T.S.



PLUNGE POOL AT RAVINE MOUTH - PLAN VIEW

N.T.S.

NOTE:

END BOULDERS KEYED INTO RAVINE SLOPE TO FUNCTION AS REVETMENT CUTOFF.

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

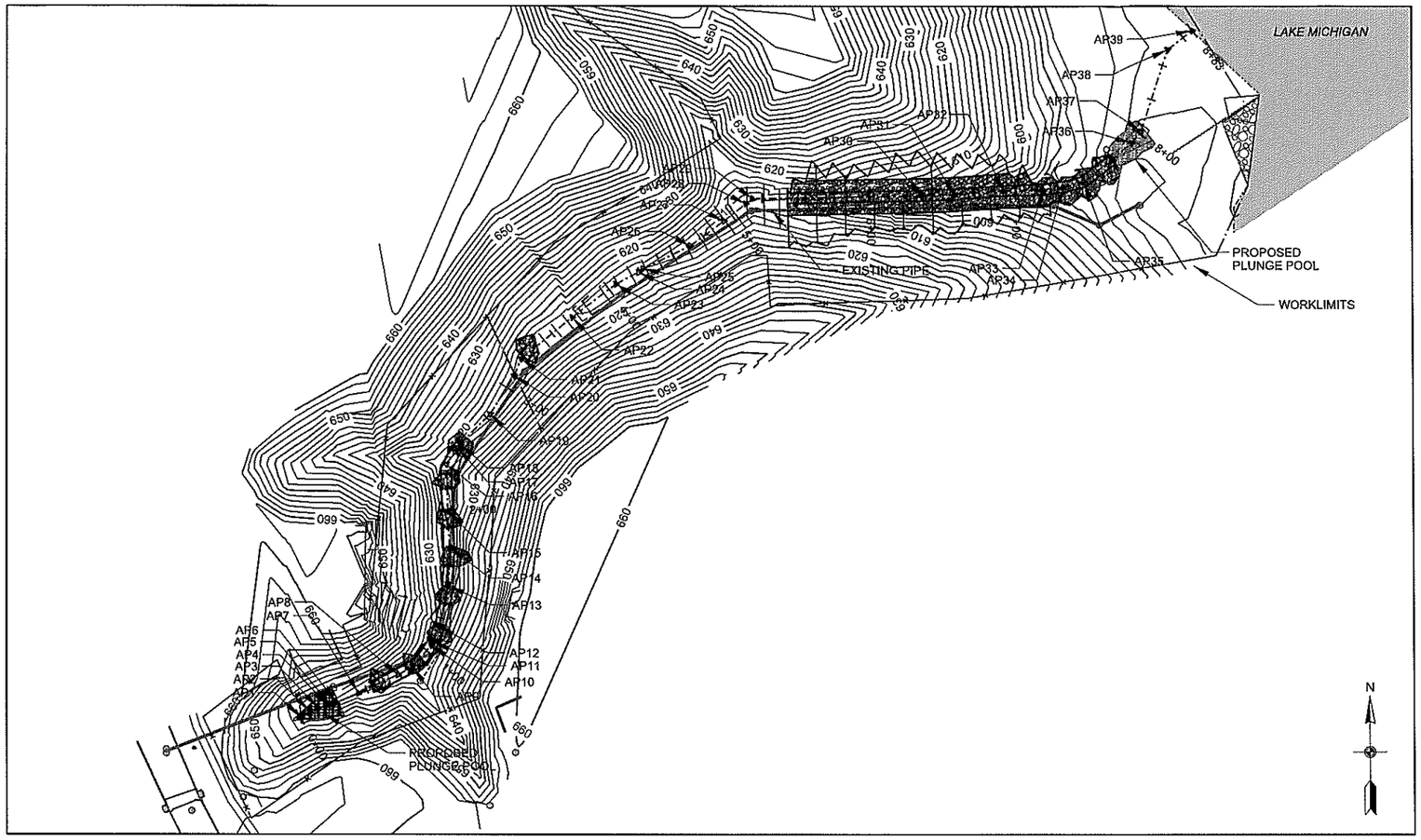
U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DWN BY: AK
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: N.T.S.
PLOT DATE: 9/3/2014
SIZE: ANSI D
FILE NAME: RAV8ER506PS-CE502.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P6-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAV8ER506PS

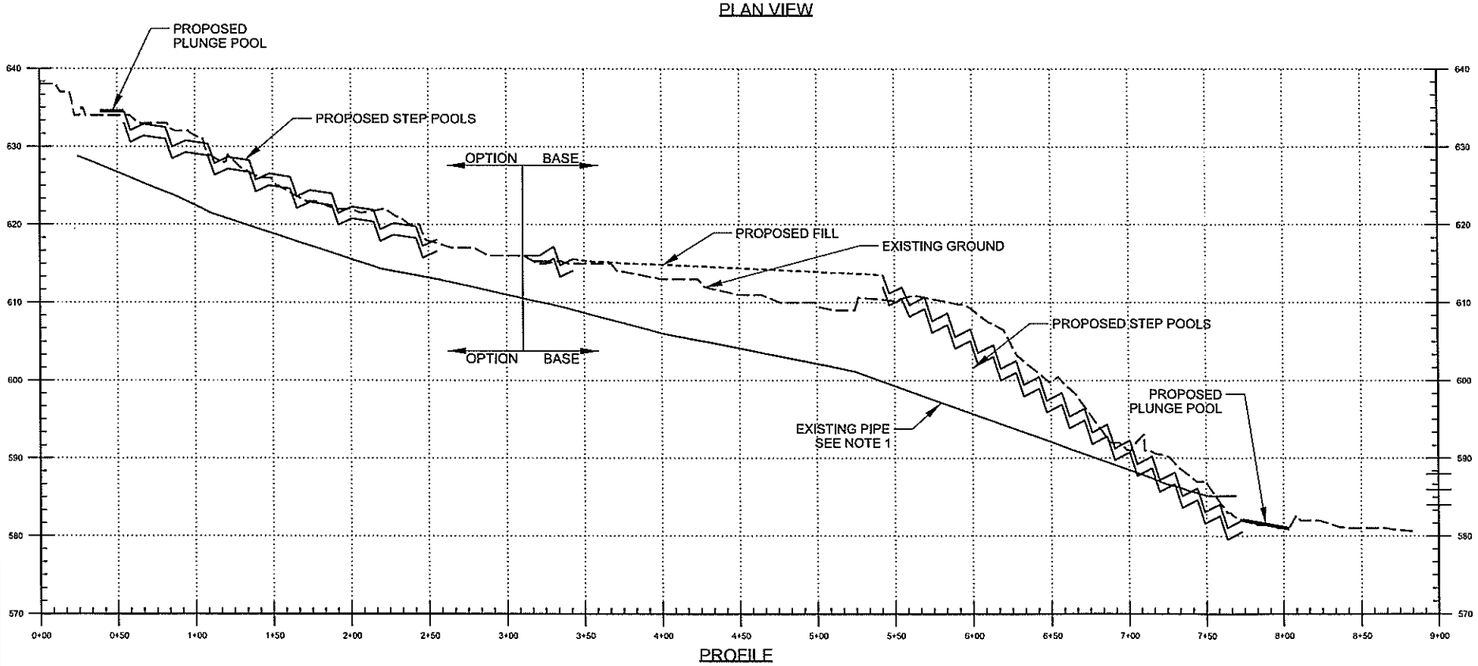
RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

CONSTRUCTION DETAILS - PLUNGE POOL

SHEET IDENTIFICATION
CE502
SHEET 13 OF 20



PLAN VIEW



PROFILE

LINE	SURFACE
- - -	EXISTING GROUND
———	PROPOSED POOLS
- · - ·	PROPOSED FILL

Scaled 5.0000 Times Ver.
Scaled 1.0000 Times Hor.

ALIGNMENT POINTS			
POINT	STATION	NORTHING	EASTING
AP1	0+00.00	2010947.21	1131975.89
AP2	0+07.82	2010951.17	1131982.64
AP3	0+13.99	2010953.22	1131988.45
AP4	0+20.50	2010955.07	1131994.70
AP5	0+22.56	2010955.53	1131996.70
AP6	0+27.25	2010957.02	1132001.15
AP7	0+43.87	2010963.57	1132016.42
AP8	0+73.99	2010976.33	1132043.71
AP9	0+85.30	2010981.95	1132053.53
AP10	1+04.86	2010996.57	1132066.52
AP11	1+07.52	2010998.76	1132068.03
AP12	1+19.13	2011009.82	1132071.54
AP13	1+47.95	2011037.84	1132078.30
AP14	1+74.34	2011064.22	1132079.21
AP15	1+99.26	2011089.10	1132077.94
AP16	2+31.88	2011121.71	1132076.93
AP17	2+45.67	2011132.93	1132084.93
AP18	2+48.82	2011135.78	1132086.29
AP19	2+78.42	2011156.46	1132107.46
AP20	3+09.60	2011182.81	1132124.12
AP21	3+22.22	2011194.45	1132129.01
AP22	3+67.84	2011223.25	1132164.39
AP23	4+05.83	2011246.17	1132194.69
AP24	4+23.64	2011254.41	1132210.47
AP25	4+27.50	2011256.81	1132213.50
AP26	4+63.99	2011272.72	1132246.35
AP27	4+93.26	2011290.09	1132269.90
AP28	5+12.64	2011301.92	1132285.25
AP29	5+18.37	2011305.30	1132289.88
AP30	6+35.88	2011307.47	1132407.37
AP31	6+58.03	2011308.37	1132429.50
AP32	6+91.61	2011310.98	1132462.98
AP33	7+19.32	2011311.80	1132490.67
AP34	7+33.64	2011313.59	1132504.89
AP35	7+48.50	2011317.27	1132519.28
AP36	7+91.74	2011343.96	1132553.30
AP37	8+02.02	2011352.19	1132559.46
AP38	8+61.47	2011408.64	1132578.11
AP39	8+82.91	2011421.97	1132594.90

VERTICAL ALIGNMENT POINTS			
POINT	TYPE	STATION	ELEVATION
VP1	POB	0+00.00	638.87
VP2	PVI	0+07.82	637.35
VP3	PVI	0+13.99	636.95
VP4	PVI	0+22.56	633.90
VP5	PVI	0+27.25	634.04
VP6	PVI	0+43.87	633.73
VP7	PVI	0+73.99	632.62
VP8	PVI	0+85.30	632.13
VP9	PVI	1+04.86	630.81
VP10	PVI	1+07.52	629.07
VP11	PVI	1+19.13	627.83
VP12	PVI	1+47.95	625.33
VP13	PVI	1+74.34	622.71
VP14	PVI	1+99.26	621.51
VP15	PVI	2+31.88	620.69
VP16	PVI	2+31.88	620.69
VP17	PVI	2+45.67	619.11
VP18	PVI	2+48.82	617.86
VP19	PVI	2+55.21	618.05
VP20	PVI	3+20.56	617.18
VP21	PVI	3+24.69	614.78
VP22	PVI	3+32.94	615.58
VP23	PVI	5+42.54	613.55
VP24	PVI	5+46.67	611.15
VP25	PVI	5+54.92	611.95
VP26	PVI	5+59.78	609.69
VP27	PVI	5+69.50	610.69
VP28	PVI	5+74.28	607.64
VP29	PVI	5+88.94	605.60
VP30	PVI	5+98.66	606.60
VP31	PVI	6+03.52	603.55
VP32	PVI	6+13.24	604.55
VP33	PVI	6+18.10	601.51
VP34	PVI	6+27.82	602.51
VP35	PVI	6+32.68	599.46
VP36	PVI	6+42.40	600.46
VP37	PVI	6+47.26	597.41
VP38	PVI	6+56.98	598.41
VP39	PVI	6+61.84	595.37
VP40	PVI	6+71.56	596.37
VP41	PVI	6+76.42	593.32
VP42	PVI	6+86.02	594.32
VP43	PVI	6+91.00	591.27
VP44	PVI	7+00.72	592.27
VP45	PVI	7+05.58	589.23
VP46	PVI	7+15.30	590.23
VP47	PVI	7+20.16	587.18
VP48	PVI	7+29.88	588.18
VP49	PVI	7+34.74	585.14
VP50	PVI	7+44.46	586.14
VP51	PVI	7+49.22	583.10
VP52	PVI	7+59.04	584.10
VP53	PVI	7+63.90	581.06
VP54	PVI	7+73.62	582.06
VP55	PVI	8+03.62	581.09
VP56	PVI	8+10.65	580.53
VP57	PVI	8+70.11	580.68
VP58	POE	8+91.55	580.68

NOTES:

1. EXISTING 6" SANITARY SEWER PROJECTED TO ALIGNMENT. MANHOLES AND SHEET PILE WALL NOT SHOWN FOR CLARITY.

0 50' 100'

US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALLEN
DWN BY: A
CKD BY: DRS
SUBMITTED BY: JOHN A. GROBOSKI, P.E.
PLOT SCALE: 1" = 50'
PLOT DATE: 9/2/2014
FILE NAME: RAVINE8CG01.dgn
SIZE: ANSI D
DATE: JULY 2014
SOLICITATION NO.: W912P5-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAVINE8CG01

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

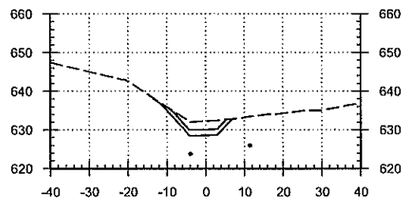
RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

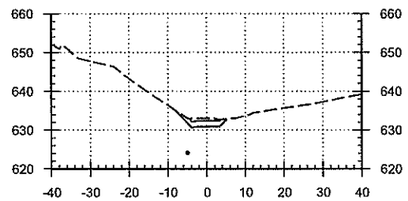
GRADING, ALIGNMENT AND PROFILE

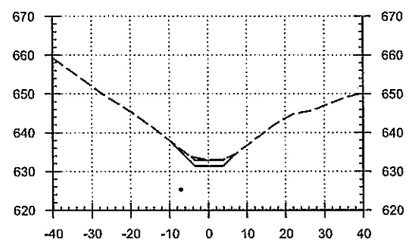
SHEET IDENTIFICATION
CG101
SHEET 14 OF 20

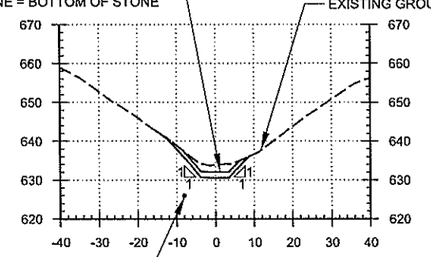
NOTES:

1. EXISTING FEATURES BELOW ELEVATION RANGE IN CROSS SECTIONS NOT SHOWN FOR CLARITY.
2. PLACE AND COMPACT FILL MATERIAL IN THE RAVINE BETWEEN THE FINISHED GRADE OF POOL 8 TO THE FINISHED GRADE OF POOL 9 (STA. 2+55 TO STA. 5+43), AS SHOWN IN THE CROSS SECTIONS. FILL MATERIAL TO BE OBTAINED FROM EXCAVATION SHOWN IN THE CROSS SECTIONS.
3. THE CROSS SECTIONS OF POOLS WERE TAKEN AT AN AVERAGE WIDTH OF 6'. ACTUAL WIDTH OF POOLS SHALL VARY WITHIN THE PARAMETERS SHOWN IN THE TYPICAL SECTIONS ON SHEET CE501.

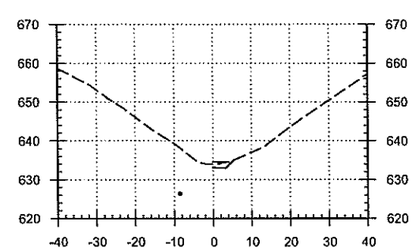

STA. 0+85

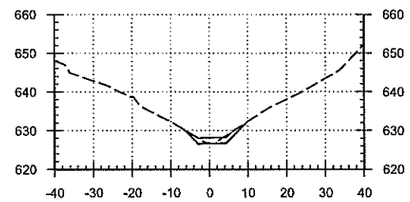

STA. 0+81

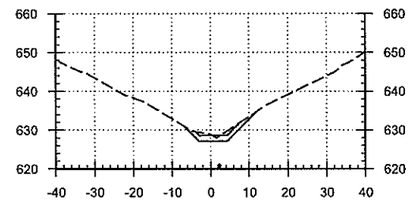

STA. 0+67

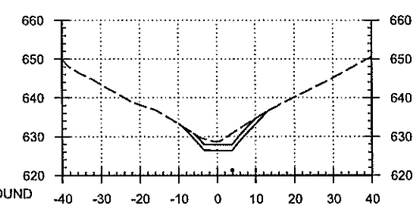


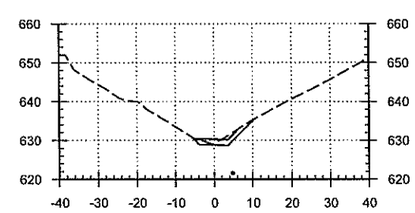
STA. 0+59

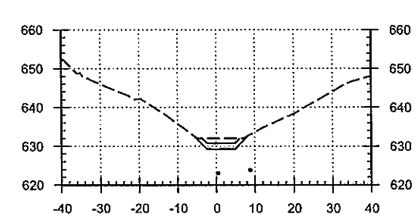

STA. 0+54

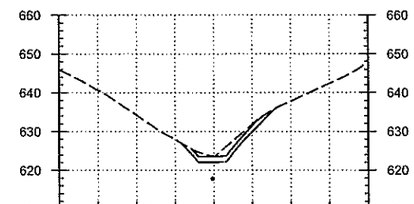

STA. 1+35

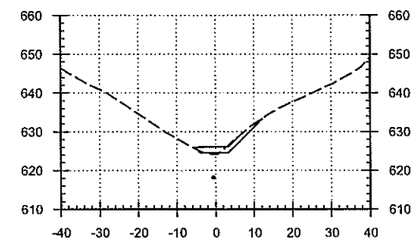

STA. 1+21

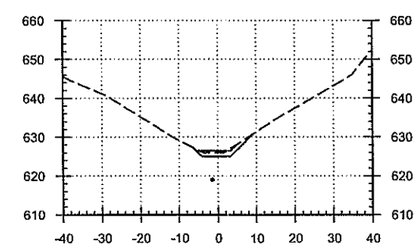

STA. 1+12

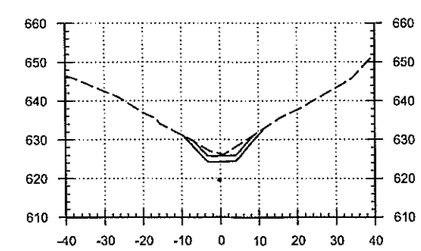

STA. 1+08

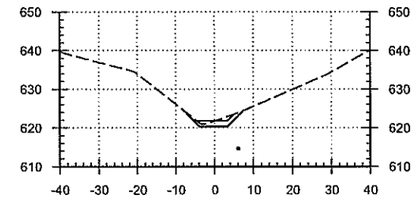

STA. 0+94


STA. 1+66


STA. 1+61


STA. 1+48


STA. 1+39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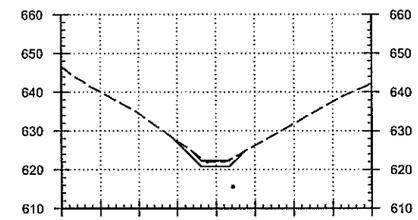
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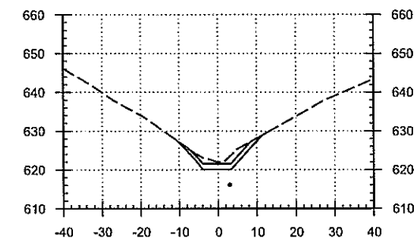
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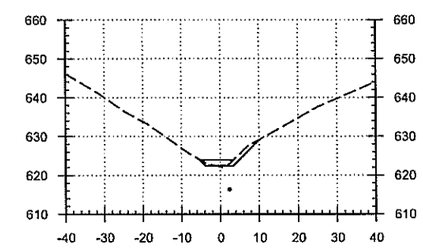
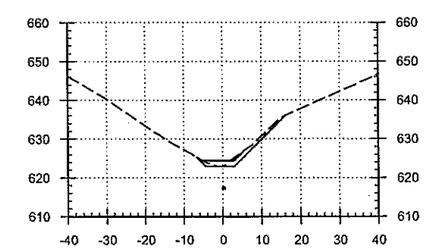

STA. 1+88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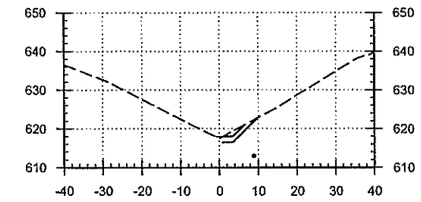
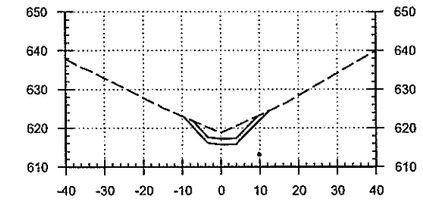

STA. 2+55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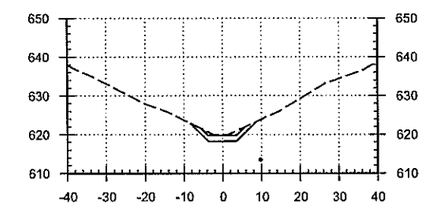
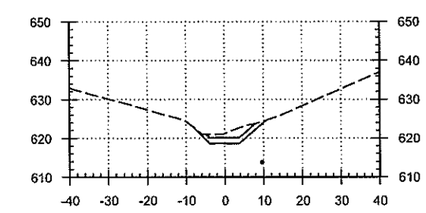
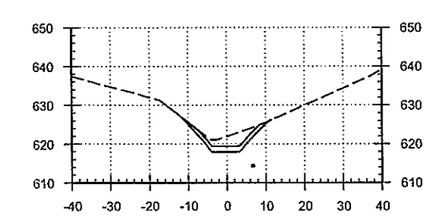

STA. 2+42


STA. 2+28


STA. 2+19

0 10' 20' 40'
HORZ. AND VERTICAL

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

DESIGNED BY: DAMIAN ALLEN
DATE: JULY 2014
DWN BY: A
CKD BY: DKS
SOLICITATION NO.: W912P6-14-R-0021
SUBMITTED BY: JOHN A. CROSOSKI, P.E.
CONTRACT NO.:
PLOT SCALE: 1" = 20'
PLOT DATE: 7/7/2014
FILE NUMBER: RAVIER50SPS
SIZE: ANSI D
FILE NAME: RAVIER50SPS-CC301.dgn

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

CROSS SECTIONS
STA. 0+54 TO STA. 2+55

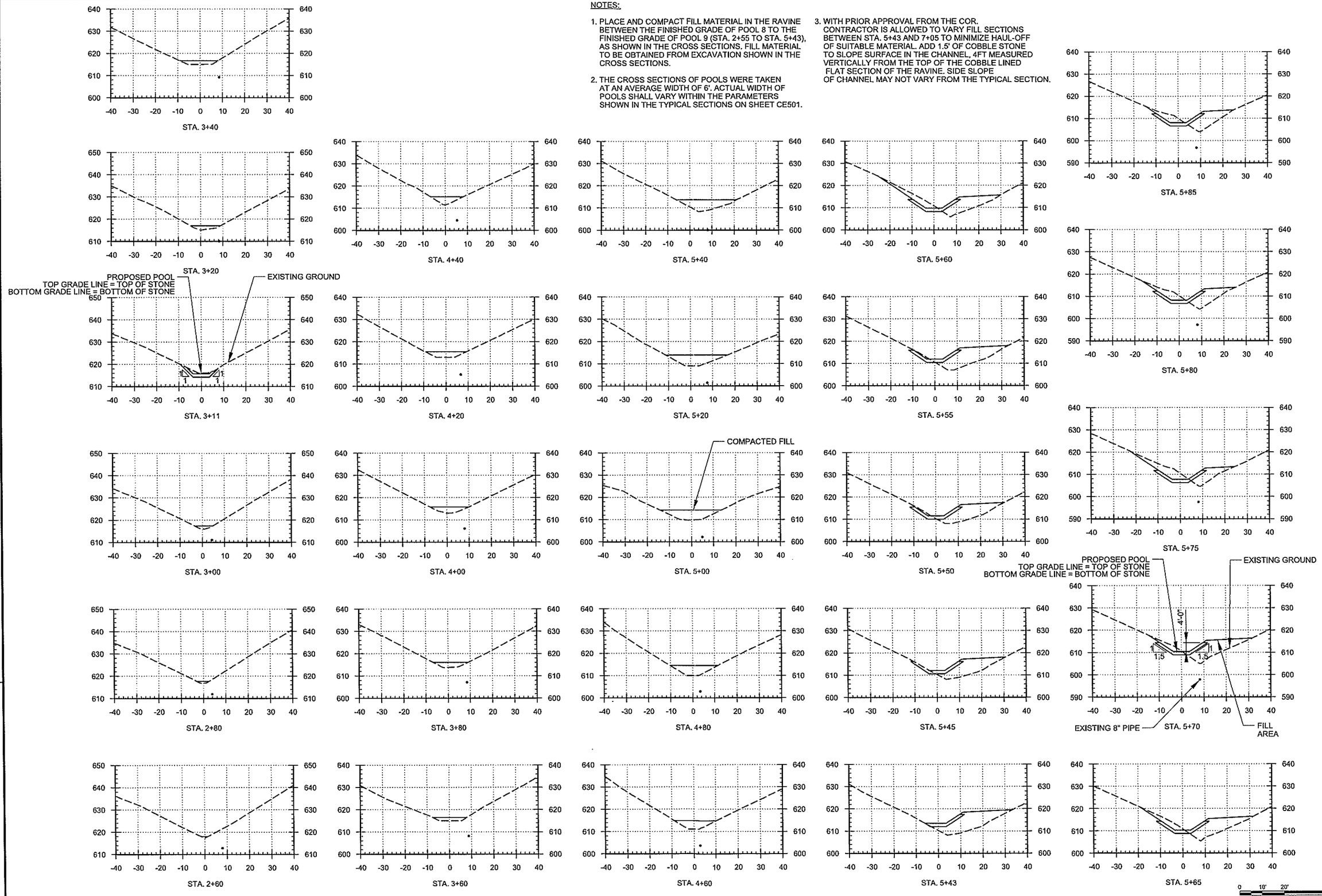
SHEET IDENTIFICATION
CG301
SHEET 15 OF 20

NOTES:

1. PLACE AND COMPACT FILL MATERIAL IN THE RAVINE BETWEEN THE FINISHED GRADE OF POOL 8 TO THE FINISHED GRADE OF POOL 9 (STA. 2+55 TO STA. 5+43), AS SHOWN IN THE CROSS SECTIONS. FILL MATERIAL TO BE OBTAINED FROM EXCAVATION SHOWN IN THE CROSS SECTIONS.

2. THE CROSS SECTIONS OF POOLS WERE TAKEN AT AN AVERAGE WIDTH OF 6'. ACTUAL WIDTH OF POOLS SHALL VARY WITHIN THE PARAMETERS SHOWN IN THE TYPICAL SECTIONS ON SHEET CE501.

3. WITH PRIOR APPROVAL FROM THE COR. CONTRACTOR IS ALLOWED TO VARY FILL SECTIONS BETWEEN STA. 5+43 AND 7+05 TO MINIMIZE HAUL-OFF OF SUITABLE MATERIAL. ADD 1.5' OF COBBLE STONE TO SLOPE SURFACE IN THE CHANNEL, 4FT MEASURED VERTICALLY FROM THE TOP OF THE COBBLE LINED FLAT SECTION OF THE RAVINE. SIDE SLOPE OF CHANNEL MAY NOT VARY FROM THE TYPICAL SECTION.



US Army Corps of Engineers® Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALEN
DATE: JULY 2014
DWN BY: A
CKD BY: DRS
SOLICITATION NO.: W912P5-14-R-0021
SUBMITTED BY: JOHN A. GROBOSKI
CONTRACT NO.:
PLOT SCALE: 1" = 20'
PLOT DATE: 9/2/2014
FILE NUMBER: RAVIEN3MFS
SIZE: ANSI D
FILE NAME: RAVIEN3MFS-CG302.dgn

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

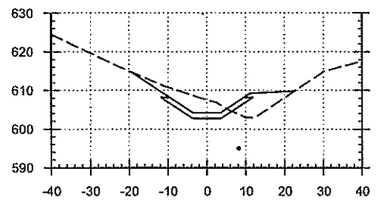
RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

CROSS SECTIONS
STA. 2+60 TO STA. 5+85

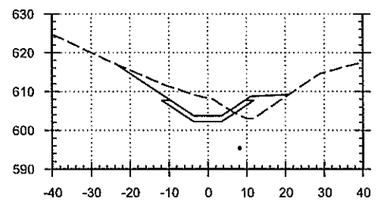
SHEET IDENTIFICATION
CG302
SHEET 16 OF 20

NOTES:

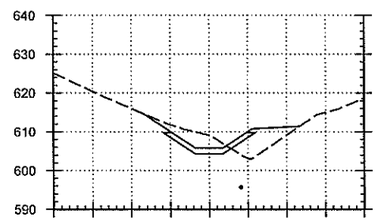
1. THE CROSS SECTIONS OF POOLS WERE TAKEN AT AN AVERAGE WIDTH OF 6'. ACTUAL WIDTH OF POOLS SHALL VARY WITHIN THE PARAMETERS SHOWN IN THE TYPICAL SECTIONS ON SHEET CE501.
2. WITH PRIOR APPROVAL FROM THE COR. CONTRACTOR IS ALLOWED TO VARY FILL SECTIONS BETWEEN STA. 5+43 AND 7+05 TO MINIMIZE HAUL-OFF OF SUITABLE MATERIAL. ADD 1.5' OF COBBLE STONE TO SLOPE SURFACE IN THE CHANNEL. SIDE SLOPE OF CHANNEL MAY NOT VARY FROM TYPICAL SECTION.
3. WITH PRIOR APPROVAL FROM THE COR. CONTRACTOR IS ALLOWED TO VARY FILL SECTIONS BETWEEN STA. 5+43 AND 7+05 TO MINIMIZE HAUL-OFF OF SUITABLE MATERIAL. ADD 1.5' OF COBBLE STONE TO SLOPE SURFACE IN THE CHANNEL, 4FT MEASURED VERTICALLY FROM THE TOP OF THE COBBLE LINED FLAT SECTION OF THE RAVINE. SIDE SLOPE OF CHANNEL MAY NOT VARY FROM THE TYPICAL SECTION.



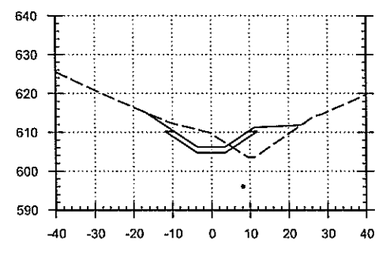
STA. 6+10



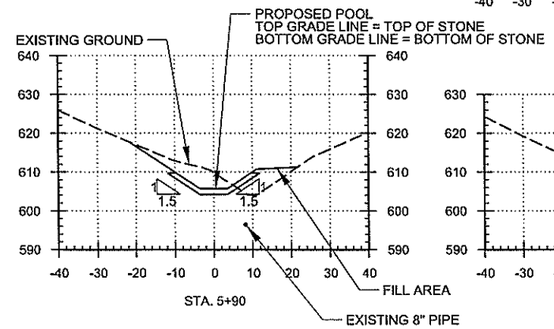
STA. 6+05



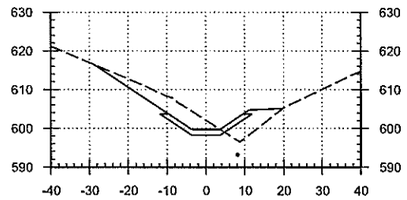
STA. 6+00



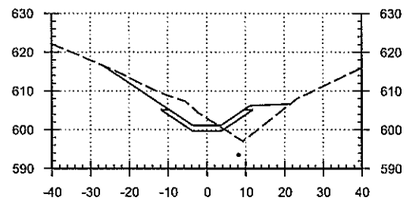
STA. 5+95



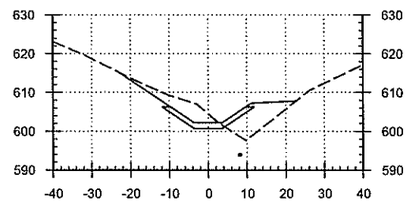
STA. 5+90



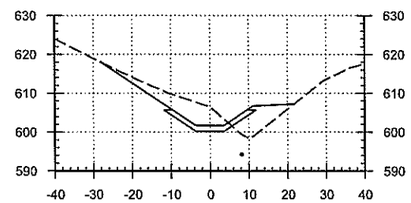
STA. 6+35



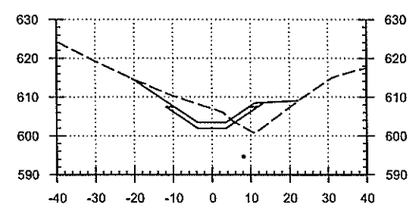
STA. 6+30



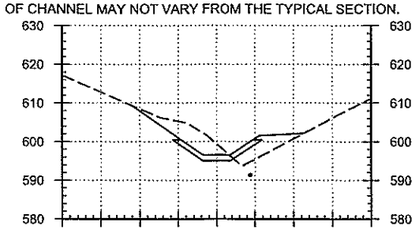
STA. 6+25



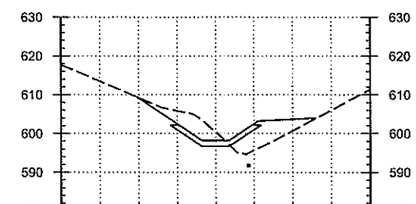
STA. 6+20



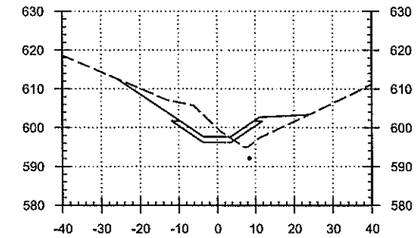
STA. 6+15



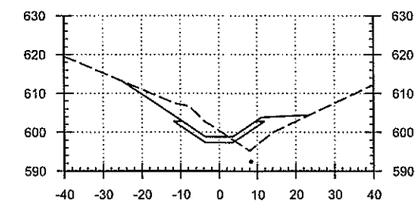
STA. 6+60



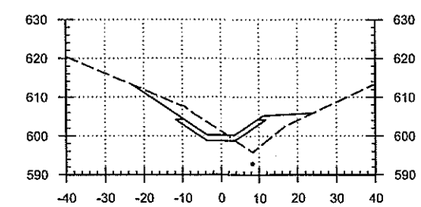
STA. 6+55



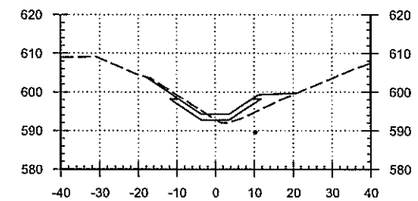
STA. 6+50



STA. 6+45



STA. 6+40



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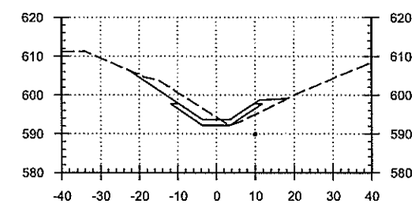
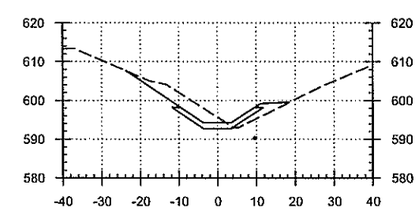
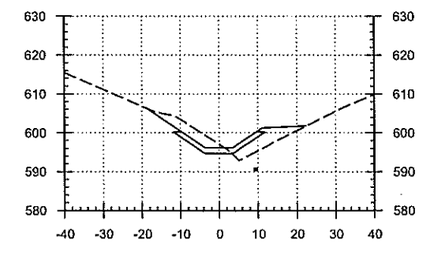


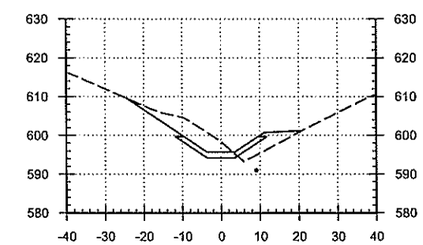
STA. 6+80



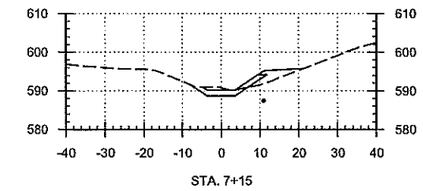
STA. 6+75



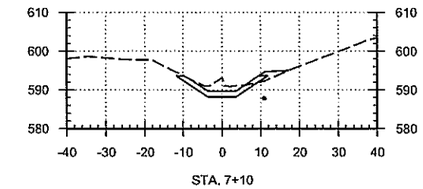
STA. 6+70



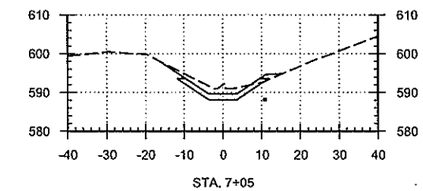
STA. 6+65



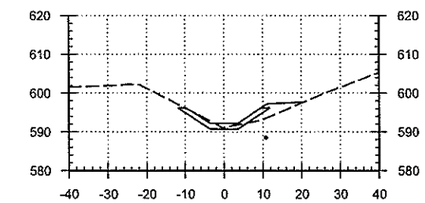
STA. 7+15



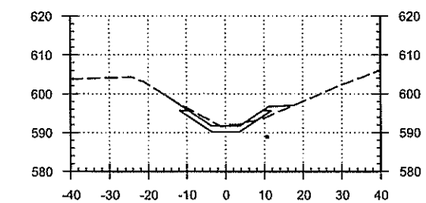
STA. 7+10



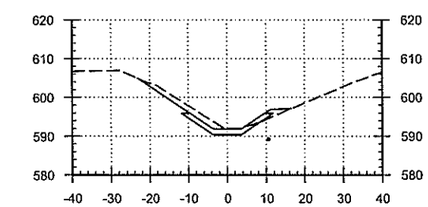
STA. 7+05



STA. 7+00



STA. 6+95



STA. 6+90

0 10' 20' 40'
HORZ. AND VERTICAL

US Army Corps of Engineers®
Chicago District

MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE	MARK	DESCRIPTION	TRACKING NO.	ACTION	DATE

DESIGNED BY: DAMIAN ALLEN
DWN BY: A
CKD BY: DRS
SUBMITTED BY: JOHN A. GROSSSOL, P.E.
PLOT SCALE: 1" = 20'
PLOT DATE: 10/20/2014
FILE NAME: RAVIER25GRP5-CG303.dgn
DATE: JULY 2014
SOLICITATION NO.: W912P8-14-R-0021
CONTRACT NO.:
FILE NUMBER: RAVIER25GRP5
ANSI D

U.S. ARMY CORPS OF ENGINEERS
CHICAGO DISTRICT
CHICAGO, IL

RAVINE 8 ECOSYSTEM RESTORATION
GLFER - SECTION 506
HIGHLAND PARK, IL

CROSS SECTIONS
STA. 5+90 TO STA. 7+15

SHEET IDENTIFICATION
CG303
SHEET 17 OF 20