

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	60-15-1, 60-15HB-1	MADISON	239	102
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 76635

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ON MAY 30, 2003 FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES. THIS PLAN HAS ALSO BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF NPDES PERMIT NUMBER ILR40 FOR DISCHARGES FROM SMALL MUNICIPAL SEWER SYSTEMS IF CHECKED BELOW.

NPDES PERMITS ASSOCIATED WITH THIS PROJECT:
 ILR10
 ILR40 PERMIT NO. 0493

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

MARY C. LAMIE
 PRINT NAME
 DEPUTY DIRECTOR OF HIGHWAYS
 REGION FIVE ENGINEER
 TITLE
 IL DEPT. OF TRANSPORTATION
 AGENCY

Mary C. Lamie
 SIGNATURE
 2-4-09
 DATE

I. SITE DESCRIPTION:

A. THE FOLLOWING IS A DESCRIPTION OF THE PROJECT LOCATION:
 THE PROPOSED PROJECT CONSISTS OF CONSTRUCTING DUAL STRUCTURES TO CARRY FAP RTE 310 OVER CH 4 AND REHABILITATING 1.17 KM OF CH 4, 0.31 KM OF SEILER ROAD, AND VARIOUS OTHER SIDE STREETS AND RAMPS.

B. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:
 GENERAL WORK INCLUDES THE CONSTRUCTION OF GRADE SEPARATED STRUCTURES CONSISTING OF DUAL SPAN CONTINUOUSLY WELDED PLATE GIRDER REINFORCED CONCRETE DECK SLAB SUPERSTRUCTURES ON VAULTED ABUTMENTS 65.76 METERS BACK TO BACK OF APPROACH BENTS. OTHER WORK ITEMS INCLUDE PIPE CULVERTS, DITCH CONSTRUCTION, GRADING, SEEDING, EROSION CONTROL, AND OTHER MISCELLANEOUS ITEMS.

C. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS GRUBBING, EXCAVATION AND GRADING:
DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

- TREE REMOVAL WILL BE COMPLETED.
- EXCAVATION WILL BE COMPLETED ALONG THE MAJORITY OF THE PROJECT TO GRADE OUT FOR PROPOSED ROADWAY DITCHES AND WATERWAYS.
- EMBANKMENT WILL BE COMPLETED TO FILL AREAS TO RAISE THE EXISTING GROUND ELEVATION TO MEET THE PROPOSED ROADWAY FORESLOPE AND BACKSLOPE.
- DRAINAGE STRUCTURES WILL BE INSTALLED BEFORE AND/OR DURING THE CONSTRUCTION OF THE EXCAVATION AND EMBANKMENT TO MAINTAIN ACCEPTABLE DRAINAGE.
- PLACEMENT, MAINTENANCE, REMOVAL, AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL, SUCH AS PERIMETER EROSION BARRIER, TEMPORARY DITCH CHECKS, TEMPORARY SEEDING, ETC.
- PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS RIPRAP DITCH LINING, RIPRAP STILLING BASINS, EXCELSIOR BLANKET, SEEDING, ETC.
- FINAL GRADING, CLEAN UP, AND OTHER MISCELLANEOUS ITEMS.

D. THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 20 HECTARES.
 THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS 4 HECTARES.

E. THE FOLLOWING IS A WEIGHTED AVERAGE OF THE RUNOFF COEFFICIENT FOR THIS PROJECT AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: 0.60

F. THE FOLLOWING IS A DESCRIPTION OF THE SOIL TYPES FOUND AT THE PROJECT SITE FOLLOWED BY INFORMATION REGARDING THEIR EROSIVITY:
 ONE SOIL TYPE IS LOCATED WITHIN THE PROJECT AREA. IT IS:
 CASEYVILLE SILT LOAM (267A) - A SOMEWHAT POORLY DRAINED SOIL WITH MODERATE PERMEABILITY. THIS SOIL HAS SLOPES BETWEEN ZERO AND TWO PERCENT.

G. THE FOLLOWING IS A DESCRIPTION OF POTENTIALLY EROSION AREAS ASSOCIATED WITH THIS PROJECT:
 THERE ARE NO POTENTIALLY CRITICAL EROSION AREAS WITHIN THE PROJECT AREA.

H. THE FOLLOWING IS A DESCRIPTION OF SOIL DISTURBING ACTIVITIES, THEIR LOCATIONS, AND THEIR EROSION FACTORS (E.G. STEEPNESS OF SLOPES, LENGTH OF SLOPES, ETC):
 THE NATURE AND PURPOSE OF LAND DISTURBING ACTIVITIES ON THIS PROJECT IS TO CONSTRUCT DUAL STRUCTURES TO CARRY FAP RTE 310 OVER CH 4 AND TO REHABILITATE PART OF CH 4, SEILER ROAD, AND OTHER SIDE STREETS AND RAMPS. PROPOSED RIGHT-OF-WAY WILL BE REQUIRED TO ACCOMMODATE CONSTRUCTION OF THE IMPROVEMENTS. THERE ARE NO SCHEDULED ACTIVITIES THAT WILL AFFECT THE SOIL EROSION AND SEDIMENT CONTROL PLANS AND NO OFF-SITE LAND DISTURBING ACTIVITIES.

THE EXISTING SOIL - CASEYVILLE SILT LOAM (267A) - DOES NOT HAVE EROSION CHARACTERISTICS.

I. SEE THE EROSION CONTROL PLANS AND/OR DRAINAGE PLANS FOR THIS CONTRACT FOR INFORMATION REGARDING DRAINAGE PATTERNS, APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFF SITE SEDIMENT TRACKING (TO BE ADDED AFTER CONTRACTOR IDENTIFIES LOCATIONS), AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS) AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO SURFACE WATER INCLUDING WETLANDS.

J. THE FOLLOWING IS A LIST OF RECEIVING WATER(S) AND THE ULTIMATE RECEIVING WATER(S), AND AERIAL EXTENT OF WETLAND ACREAGE AT THE SITE. THE LOCATION OF THE RECEIVING WATERS CAN BE FOUND ON THE EROSION AND SEDIMENT CONTROL PLANS:
 1. ROCK CREEK 3. WOOD RIVER
 2. PLASA CREEK 4. TRIBUTARIES OF THE ABOVE

- K. THE FOLLOWING POLLUTANTS OF CONCERN WILL BE ASSOCIATED WITH THIS CONSTRUCTION PROJECT: (CHECK ALL THAT APPLY)
- | | |
|---|--|
| <input checked="" type="checkbox"/> SOIL SEDIMENT | <input checked="" type="checkbox"/> PETROLEUM (GAS, DIESEL, OIL, KEROSENE, HYDRAULIC OIL/FLUIDS) |
| <input checked="" type="checkbox"/> CONCRETE | <input checked="" type="checkbox"/> ANTIFREEZE / COOLANTS |
| <input checked="" type="checkbox"/> CONCRETE TRUCK WASTE | <input checked="" type="checkbox"/> WASTE WATER FROM CLEANING CONSTRUCTION EQUIPMENT |
| <input checked="" type="checkbox"/> CONCRETE CURING COMPOUNDS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input checked="" type="checkbox"/> SOLID WASTE DEBRIS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> PAINTS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> SOLVENTS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> FERTILIZERS / PESTICIDES | <input type="checkbox"/> OTHER (SPECIFY)..... |

II. CONTROLS
 THIS SECTION OF THE PLAN ADDRESSES THE CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN I.C. ABOVE AND FOR ALL USE AREAS, BORROW SITES, AND WASTE SITES. FOR EACH MEASURE DISCUSSED, THE CONTRACTOR WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION AS INDICATED. THE CONTRACTOR SHALL PROVIDE TO THE RESIDENT ENGINEER A PLAN FOR THE IMPLEMENTATION OF THE MEASURES INDICATED. THE CONTRACTOR, AND SUBCONTRACTORS, WILL NOTIFY THE RESIDENT ENGINEER OF ANY PROPOSED CHANGES, MAINTENANCE, OR MODIFICATIONS TO KEEP CONSTRUCTION ACTIVITIES COMPLIANT WITH THE PERMIT. EACH SUCH CONTRACTOR HAS SIGNED THE REQUIRED CERTIFICATION ON FORMS WHICH WILL BE PROVIDED AT THE PRE-CONSTRUCTION CONFERENCE, AND ARE A PART OF, THIS PLAN:

A. EROSION AND SEDIMENT CONTROL
 1. STABILIZED PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES, INCLUDING SITE SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SODDING, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES. EXCEPT AS PROVIDED BELOW IN II(A)(1)(a) AND II(A)(1)(b), STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF 21 OR MORE CALENDAR DAYS.

a. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

- THE FOLLOWING STABILIZATION PRACTICES WILL BE USED FOR THIS PROJECT: (CHECK ALL THAT APPLY)
- | | |
|---|--|
| <input type="checkbox"/> PRESERVATION OF MATURE VEGETATION | <input checked="" type="checkbox"/> EROSION CONTROL BLANKET / MULCHING |
| <input type="checkbox"/> VEGETATED BUFFER STRIPS | <input type="checkbox"/> SODDING |
| <input checked="" type="checkbox"/> PROTECTION OF TREES | <input type="checkbox"/> GEOTEXTILES |
| <input checked="" type="checkbox"/> TEMPORARY EROSION CONTROL SEEDING | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> TEMPORARY TURF (SEEDING, CLASS 7) | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> TEMPORARY MULCHING | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input checked="" type="checkbox"/> PERMANENT SEEDING | <input type="checkbox"/> OTHER (SPECIFY)..... |

DESCRIBE HOW THE STABILIZATION PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. TEMPORARY EROSION CONTROL SEEDING - THIS ITEM WILL BE APPLIED TO ALL BARE AREAS EVERY SEVEN DAYS TO MINIMIZE THE AMOUNT OF EXPOSED SURFACE AREAS.
 EARTH STOCKPILES SHALL BE TEMPORARILY SEEDDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.

WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.

2. PERMANENT SEEDING - SEEDING, CLASS 2 WILL BE INSTALLED PER IDOT SPECIFICATIONS.

3. EROSION CONTROL BLANKETS/MULCHING - EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES AND IN HIGH VELOCITY AREAS (I.E. DITCHES) THAT HAVE BEEN BROUGHT TO FINAL GRADE AND SEEDDED TO PROTECT SLOPES FROM EROSION AND ALLOW SEEDS TO GERMINATE. MULCH, METHOD 2 WILL BE APPLIED IN RELATIVELY FLAT AREAS TO PROTECT THE DISTURBED AREAS AND PREVENT FURTHER EROSION.

MULCH AS APPLIED TO TEMPORARY EROSION CONTROL SEEDING SHALL BE BY THE METHOD SPECIFIED IN THE CONTRACT AND AT THE DIRECTION OF THE ENGINEER. MULCH WILL BE PAID SEPARATELY AND SHALL CONFORM TO SECTION 251 OF THE STANDARD SPECIFICATIONS.

4. PERMANENT STABILIZATION - ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING THE FINISHED GRADING. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND ALLOW SEED TO GERMINATE PROPERLY. MULCH, METHOD 2 WILL BE USED ON RELATIVELY FLAT AREAS.

2. STRUCTURAL PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF STRUCTURAL PRACTICES THAT WILL BE IMPLEMENTED, TO THE DEGREE ATTAINABLE, TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SUCH PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: PERIMETER EROSION BARRIER, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, DITCH CHECKS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, ROCK OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

- THE FOLLOWING STRUCTURAL PRACTICES WILL BE USED FOR THIS PROJECT:(CHECK ALL THAT APPLY)
- | | |
|--|--|
| <input checked="" type="checkbox"/> PERIMETER EROSION BARRIER | <input type="checkbox"/> ROCK OUTLET PROTECTION |
| <input checked="" type="checkbox"/> TEMPORARY DITCH CHECK | <input checked="" type="checkbox"/> RIPRAP |
| <input checked="" type="checkbox"/> STORM DRAIN INLET PROTECTION | <input type="checkbox"/> GABIONS |
| <input type="checkbox"/> SEDIMENT TRAP | <input type="checkbox"/> SLOPE MATTRESS |
| <input type="checkbox"/> TEMPORARY PIPE SLOPE DRAIN | <input type="checkbox"/> RETAINING WALLS |
| <input type="checkbox"/> TEMPORARY SEDIMENT BASIN | <input type="checkbox"/> SLOPE WALLS |
| <input type="checkbox"/> TEMPORARY STREAM CROSSING | <input type="checkbox"/> CONCRETE REVETMENT MATS |
| <input type="checkbox"/> STABILIZED CONSTRUCTION EXITS | <input type="checkbox"/> LEVEL SPREADERS |
| <input type="checkbox"/> TURF REINFORCEMENT MATS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> PERMANENT CHECK DAMS | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> PERMANENT SEDIMENT BASIN | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> AGGREGATE DITCH | <input type="checkbox"/> OTHER (SPECIFY)..... |
| <input type="checkbox"/> PAVED DITCH | <input type="checkbox"/> OTHER (SPECIFY)..... |

DESCRIBE HOW THE STRUCTURAL PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. PERIMETER EROSION BARRIER - SILT FENCES WILL BE PLACED IN AN EFFORT TO CONTAIN SILT AND RUNOFF FROM LEAVING THE SITE.

CONSTRUCT AT BEGINNING OF CONSTRUCTION. REMOVE AT END OF CONSTRUCTION.

2. STORM DRAIN INLET PROTECTION - INLET AND PIPE PROTECTION WILL BE PROVIDED FOR STORM SEWERS AND CULVERTS. SEDIMENT FILTERS WILL BE PLACED IN ALL INLETS, CATCH BASINS AND MANHOLES DURING CONSTRUCTION AND WILL BE CLEANED ON A REGULAR BASIS.

3. TEMPORARY DITCH CHECKS - DITCH CHECKS WILL BE PLACED IN SWALES WHERE RUNOFF VELOCITY IS HIGH. ALL STRUCTURAL PRACTICES ARE SHOWN IN DETAIL ON THE EROSION CONTROL PLANS.

TEMPORARY DITCH CHECKS SHALL BE LOCATED AT EVERY 2 FT. FALL/RISE IN DITCH GRADE.

TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3- REMOVE AT END OF CONSTRUCTION.

STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SILT FENCE WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE (IF SPECIFIED), ENVIROBERM, TRIANGULAR SILT DIKES, GEORIDGE AND ROLLED EXCELSIOR.

4. RIPRAP - STONE RIPRAP WITH FILTER FABRIC WILL BE USED AS PROTECTION AT THE DISCHARGE END OF ALL CULVERT END SECTIONS AND AS INLET/OUTLET PROTECTION TO PREVENT SCOURING AT THE END OF PIPES AND PREVENT DOWNSTREAM EROSION.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 STORM WATER POLLUTION PREVENTION PLAN
 FAP 310 (IL 255)
 SECTIONS 60-15-1, 60-15HB-1
 MADISON COUNTY
 DRAWN BY BGJ
 CHECKED BY

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